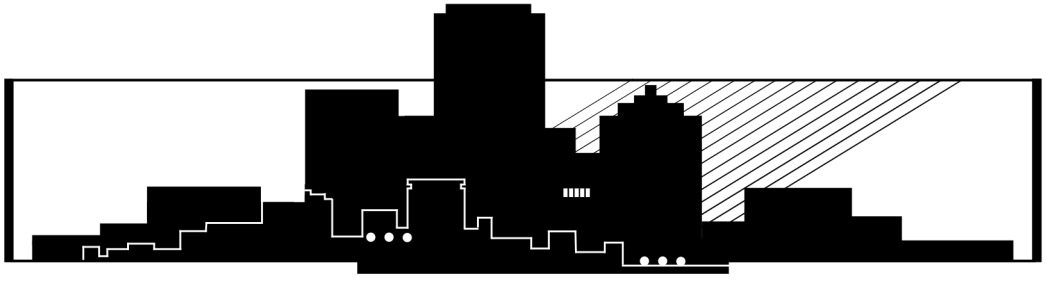
Hybrid Committee of Adjustment Meeting
December 10, 2025 at 5:30 pm

AGENDA



CITY OF Burlington

COMMITTEE OF ADJUSTMENT AGENDA

Meeting 22 **Meeting Date: December 10, 2025**

TIME OF MEETING:	**5:30 P.M.**
PLACE OF MEETING:	**Council Chambers and Zoom**

1. **DECLARATION OF INTEREST:**
2. **ADDENDUMS:**
3. **REQUEST FOR DEFERRALS:**
4. **CONSENT ITEMS:**

HEARING NO.	TIME	FILE NO. 540-02-	APPLICATION ADDRESS
4.1)	5:30 P.M.	A-062/25	Re: 517 Mayzel Rd., Burlington Ward 2 Pages 4-48
4.2)	5:30 P.M.	A-072/25	Re: 2380 Sinclair Cir., Burlington Ward 3 Pages 49-100

5. **REGULAR ITEMS:**

HEARING NO.	TIME	FILE NO. 540-02-	APPLICATION ADDRESS
5.1)	5:30 P.M.	A-058/23	Re: 4903 Thomas Alton Blvd. Burlington Ward 6 Pages 101-364
5.2)	5:30 P.M.	A-046/25	Re: 2160 Lakeshore Rd., Burlington Ward 2 Pages 365-409

6. **OTHER BUSINESS**:

6.1 Correspondence

6.2 Items for Discussion

6.3 Date of Next Meeting

6.4 Motion to Approve Minutes of the previous Committee of Adjustment Meeting:

7. ADJOURNMENT:

COMMITTEE OF ADJUSTMENT

Meeting 22 **AGENDA** **DECEMBER 10, 2025**

HEARING NO. 4.1 - 5:30 P.M.

File
540-02-A-062/25

APPLICANT: Scott Ryan Andrew Tilley and Lauren Michelle Tilley

PROPERTY: 517 Mayzel Road
PLAN 594 LOT 18
City of Burlington - Regional Municipality of Halton.

PROPOSAL: The applicant is proposing the construction of a second storey addition onto an existing one storey dwelling with attached garage.

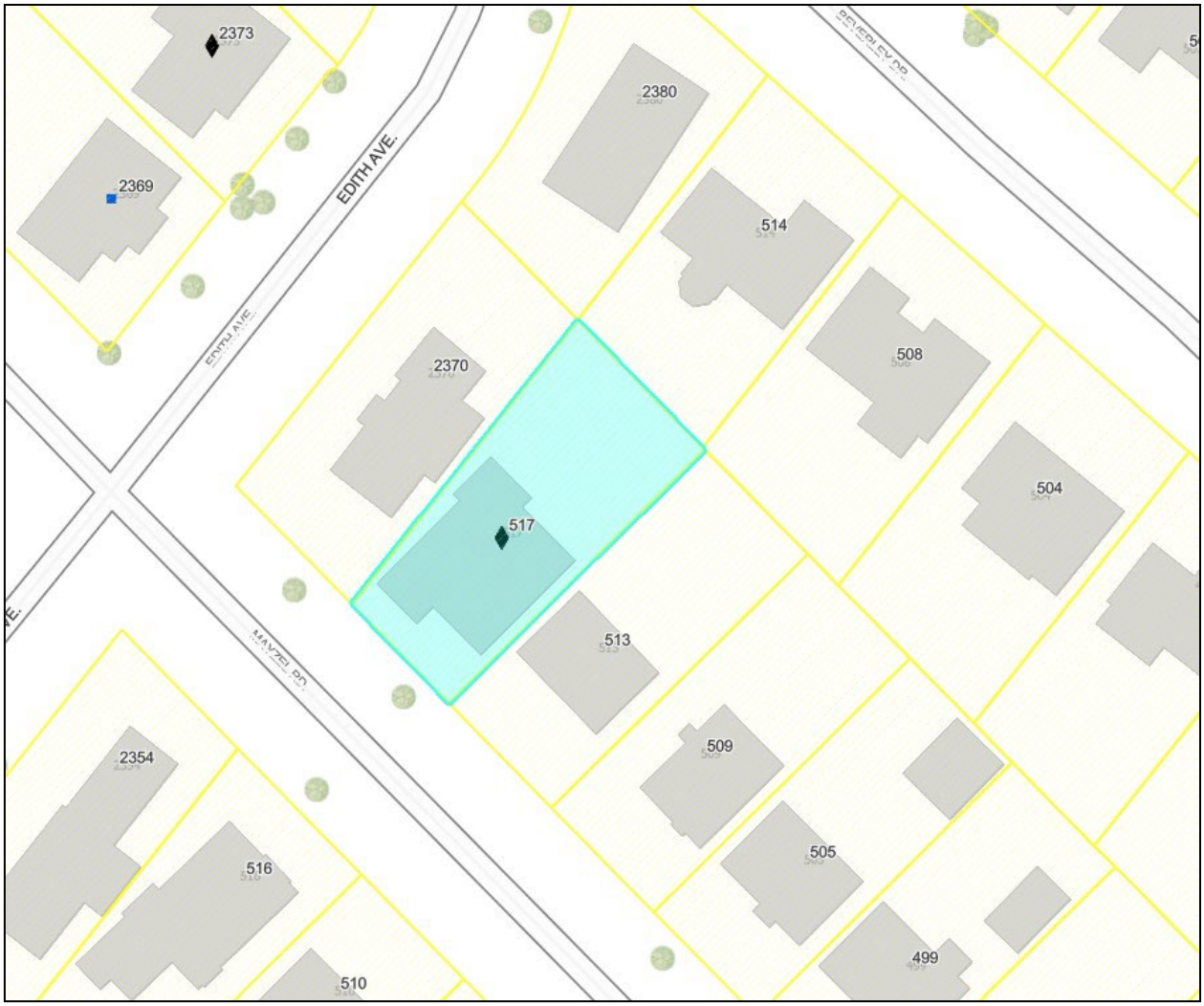
VARIANCES:

1. To permit a south side yard of 1.6 m instead of the minimum required 1.8 m for a proposed second addition.

2. To permit lot coverage of 29% instead of the maximum permitted 25% for a proposed second storey addition onto an existing detached dwelling with attached garage.

COMMITTEE OF ADJUSTMENT
MINOR VARIANCE
STAFF REPORTS

Owner(s): Scott Ryan Andrew Tilley and Lauren Michelle Tilley
Address: 517 Mayzel Rd. Burlington
File No. **A-062/25**
Ward: 2



Staff Comments

Committee of Adjustment

There are no previous land division or minor variance applications on record for this property.

Date: August 5, 2025 Prepared By: E. Shacklette

Zoning

1) **Background information:**

The subject property is zoned R2.3, Low Density Residential, under Zoning By-Law 2020, as amended, and is located in the designated area for lot coverage and floor area ratio. The R2.3 zone requires, among other things, the following:

4.1 LOT WIDTH, AREA, YARDS

Table 2.4.1

Zone	Lot Width	Lot Area	Front Yard	Rear Yard	Side Yard	Street Side Yard
R2 ZONES						
R2.3	18 m	680 m^2	7.5 m	9 m **(c)**	**(b)**	4.5 m

Footnotes to Table 2.4.1

With attached garage or carport:
(i) One or one and a half storey side: 1.2 m
(ii) **Two or more storey side:** **1.8 m**

4.2 MAXIMUM LOT COVERAGE

Table 2.4.3

Dwelling Type	Dwelling with Attached Garage	Dwelling without Attached Garage
All Dwellings in Designated Areas (b) (c)	35% for one storey dwellings including accessory buildings 30% for one and a half storey dwellings including accessory buildings **25% for all other dwelling types including accessory buildings**	27% for one storey dwellings plus 8% for accessory buildings 22% for one and a half storey dwellings plus 8% for accessory buildings 17% for all other dwelling types plus 8% for accessory buildings

2) **Proposal:**

The applicant is proposing the construction of a second storey addition onto an existing one storey dwelling with attached garage. Variances for side yard and lot coverage are required.

COMMITTEE OF ADJUSTMENT
MINOR VARIANCE
STAFF REPORTS

3) **Variances required:**

1. To permit a south side yard of 1.6 m instead of the minimum required 1.8 m for a proposed second addition.

2. To permit lot coverage of 29% instead of the maximum permitted 25% for a proposed second storey addition onto an existing detached dwelling with attached garage.

4) **Notes and conditions**:

Condition:

1. The applicant shall apply for a Pre-Building Approval Application.

Notes:

1. The plans indicate exterior main floor walls will remain. If the exterior walls are removed during construction the applicant is advised the proposal would be considered a new dwelling.

2. Variances have been identified based on the plans submitted for zoning review. If any changes to the plans result in additional variances identified when a Pre-Building Approval Application is made, they will be the responsibility of the applicant to obtain.

3. The zoning review is based on the portion of the site affected by the proposed development only.

4. The application has been reviewed under Section 45(1) of the Planning Act.

Date: October 7, 2025 Prepared By: S. Boich

Site Planning

Site Characteristics	
Lot Frontage (m)	15.24 m
Lot Area (m^2)	700.8 m^2
Existing Land Uses *(ex. buildings, structures, driveways, fences, etc…)*	Single storey detached dwelling with an attached garage; existing driveway; in ground pool in the rear; board fence along

	the sides and rear
Site Grading *(ex. Flat and level, significant grade differences)*	Flat and level
Notable Site Features	N/A
Surrounding Land Uses *(ex. Adjacent building relationships, natural features, notable adjacencies)*	Low-rise Residential
Nearest Major Intersection	Guelph Line and New Street
Neighbourhood Boundaries* *Based on OP, 1997 *residential neighbourhood* definition	North: Central Park East: Guelph Line South: New Street West: Central Park

Neighbourhood Characteristics:

- The prevailing form consists of one-storey and one-and-a-half-storey detached dwellings with a mix of original bungalows and newer, two-storey dwellings (465, 468, 486 and 490 Mayzel Road);
- Varied architectural character, characterized by a different pitched roofs, gable and hip designs, and a combination of brick and siding materials dominate the façades
- Lots along the street are generally rectangular and uniform in size, maintaining consistent front yard setbacks and side yard separations that provide a sense of openness and rhythm between dwellings.
- Driveways are predominantly single-width and lead to attached or front-facing garages, similar to the configuration of the subject property.
- The streetscape is mature, featuring continuous landscaped front yards, tree canopies, and soft landscaping that buffer the transition between buildings and the street.

A site visit was conducted on October 24, 2025, and existing on-site conditions are summarized in site photos included in Attachment No. 1 (Site Photos).

1) City of Burlington Official Plan:

Does the proposed minor variance(s) from the zoning by-law maintain the general intent and purpose of the Official Plan?

Yes

Regional Official Plan (2022):

The proposal meets the general intent and purpose of the Regional Official Plan, 2022 (ROP, 2022) for the following reasons:

- Section 76 of the ROP indicates that the range of permitted uses and the creation of new lots within the Urban Area will be in accordance with Local Official Plans and Zoning By-laws. Given that the addition of a second storey is permitted by the City's Zoning By-law, staff are of the opinion that the requested variances meet the general intent and purpose of the ROP.

Regional Staff have also reviewed this application and have no objections to the Minor Variance application.

Official Plan, 1997 & 2020

Parts of Burlington Official Plan, 2020 (BOP, 2020) are not in-force due to ongoing Ontario Land Tribunal Appeals, so applications are reviewed against a combination of in-force policies under BOP, 2020 and the older Burlington Official Plan 1997 (BOP, 1997).

The proposal/variances meet the general intent and purpose of the Official Plan for the following reasons:

- The site is designated 'Low-Rise Neighbourhoods I' according to Schedule 'C'/Schedule 'B' (Land Use - Urban Area/Comprehensive Land Use Plan- Urban Planning Area) of the BOP, 1997/BOP, 2020, as amended, which permits ground-oriented, low-density housing, and where compatible infill, small-scale additions, and renovations are encouraged.
- Whereas Part II, Section 8.3.2(1)(a)–(d) of the BOP, 2020 (Low-Rise Neighbourhoods I) directs that new development and additions shall be compatible with the surrounding context and maintain the predominant character of the neighbourhood with respect to height, massing, and setbacks, the proposal is consistent with these objectives in the following ways:
    - The proposed partial second-storey addition is situated over the existing dwelling footprint, maintaining the established front and side yard setbacks and preserving the existing building orientation to the street.
    - The massing and height are consistent with the pattern of nearby dwellings, several of which feature second-storey or one-and-a-half-storey designs with similar roof pitches and proportions (see photos of 468 Mayzel Road, 462 Mayzel Road, and adjacent infill examples).
    - The overall design maintains a human-scale street presence, with the existing single-storey elements and covered porch continuing to frame the streetscape and provide visual transition to adjacent bungalows.
- Whereas *compatible* is defined as "Development or re-development that is capable of co-existing in harmony with, and that will not have an undue physical (including form) or functional adverse impact on, existing or proposed development in the area or pose an unacceptable risk to environmental and/or human health", which is evaluated in accordance with measurable/objective standards, the planner notes the following:

- The proposed lot coverage of 29% represents a modest increase that allows reinvestment in the existing dwelling without overbuilding the lot or compromising landscaped open space. The resulting dwelling will remain within the range of built form and site coverage present along the street.
- The design employs complementary architectural features, materials, and rooflines that are consistent with newer homes in the area while maintaining visual continuity with original one-storey dwellings.
- The proposed side yard reduction from 1.8 m to 1.6 m does not adversely affect the adjacent property, as adequate separation is maintained for light, privacy, and access.
- There are no anticipated adverse effects related to shadowing, noise, or overlook. The addition respects the established neighbourhood scale and supports the ongoing pattern of gradual residential reinvestment.

2) City of Burlington Zoning By-law 2020:

Does the proposed minor variance(s) from the zoning by-law maintain the general intent and purpose of the Zoning By-law?

Yes – (South Side Yard (Section 4.1, Table 2.4.1))

The general intent and purpose of the side yard setback provision of Burlington Zoning By-law 2020 is to ensure adequate separation between buildings for access, maintenance, drainage, privacy, and the provision of light and air between neighbouring dwellings. The proposed minor variance to permit a south side yard of 1.6 m instead of the minimum required 1.8 m maintains the general intent and purpose of this provision for the following reasons:

- The proposed reduction of 0.2 m is minimal and does not materially affect the ability to access or maintain the building, nor does it impede drainage or snow storage.
- The existing dwelling is already positioned with similar setbacks to neighbouring dwellings, and the addition follows the same building line, maintaining a consistent separation pattern along the street.
- The adjacent dwelling on the south side is well separated and will continue to receive adequate sunlight and ventilation.
- No negative privacy, overlook, or shadow impacts are anticipated due to the small magnitude of the variance and the partial second-storey design being within the existing footprint.
- The variance reflects the established built form along the block, where several dwellings exhibit similar or slightly reduced side yards that function compatibly within the neighbourhood context.

Yes – (Coverage (Section 4.2, Table 2.4.3))

The general intent and purpose of the lot coverage provision of Burlington Zoning By-law 2020 is to ensure that the scale and massing of development remain compatible

with the character of the surrounding neighbourhood, while maintaining adequate space for landscaping, amenity areas, drainage, and stormwater management. The regulation is intended to prevent overbuilding on lots, ensuring that built form does not dominate the site or detract from the open, low-density character of residential neighbourhoods.
The proposed minor variance to permit lot coverage of 29% instead of the maximum permitted 25% maintains the general intent and purpose of this provision for the following reasons:

- One-storey homes with attached garages, such as the existing, are permitted a maximum coverage of 35%, whereas two-storey homes are limited to a maximum coverage of 25%. The partial second storey addition does not increase the ground floor footprint or replicate the full extent of the building envelope at the second storey, thereby maintaining the same building siting and setbacks.
- Ample landscaped open space will remain at the front, side, and rear yards, ensuring sufficient opportunities for infiltration, soft landscaping, and outdoor amenity area consistent with the intent of the coverage regulation.
- The overall height, massing, and scale of the dwelling will remain compatible with nearby properties, several of which include similar or larger two-storey built forms within comparable lot dimensions (e.g., 462, 468, and 472 Mayzel Road).
- The increase in lot coverage will not result in adverse effects related to drainage, overshadowing, or loss of privacy.
- The variance supports appropriate neighbourhood reinvestment and is reflective of a gradual transition in built form occurring within the surrounding Low-Rise Neighbourhood.

3) Desirability:

Is the proposed minor variance from the zoning by-law desirable for the appropriate development or use of the land, building or structure?

Yes

The proposed variances are desirable for the appropriate development of the land because:

- They facilitate residential reinvestment that supports the ongoing renewal and gradual evolution of the surrounding Low-Rise Neighbourhood.
- The partial second-storey addition allows for additional living space within the existing building footprint, maintaining efficient land use while preserving existing setbacks, landscaped areas, and mature vegetation.
- The proposed design respects the scale and rhythm of the streetscape, providing a built form that transitions compatibly between original one-storey dwellings and newer two-storey homes observed within the neighbourhood (e.g., 462, 468, and 472 Mayzel Road).
- The variance to reduce the south side yard setback by 0.2 m (from 1.8 m to 1.6 m) does not create any adverse functional or visual impacts:

- The variances maintain adequate separation between buildings for access, maintenance, privacy, and light penetration.
- The increase in lot coverage to 29% supports the addition without overdeveloping the lot or compromising open space
- The site continues to provide front yard landscaping and rear amenity space, maintaining the low-density residential character envisioned by the Zoning By-law and Official Plan.

4) Minor in Nature:

Is the proposed minor variance(s) from the zoning by-law considered minor in nature?

Yes

The proposed variances are considered minor in nature for the following reasons:

- Magnitude of deviation: The requested reductions are small in numerical terms and represent only a 0.2 m reduction to the required side yard setback and a 4% increase in lot coverage;
- No unacceptable adverse impacts: The proposed addition will not result in any negative effects on adjacent properties in terms of shadowing, overlook, drainage, or privacy. The partial second-storey addition is positioned within the existing building footprint and maintains generous open space at the front and rear of the lot, ensuring continued compatibility with the surrounding neighbourhood.
- Contextual compatibility: The proposed massing, roofline, and overall design are consistent with the established built form along the street, which includes a mix of one-storey and two-storey dwellings.
- Functional performance: The reduced side yard continues to provide adequate access for building maintenance and emergency purposes, and sufficient separation between dwellings remains to ensure light, air circulation, and privacy.

In summary, while the variances represent measurable deviations from the standards, they are minor in both magnitude and impact, do not undermine the intent of the Zoning By-law, and result in a form of development that is compatible, appropriate, and desirable for the property and the neighbourhood.

Cumulative Effects of Multiple Variances and Other Planning Matters:

The cumulative effect is minor, and staff are supportive for the following reasons:

- The two requested variances — a reduction to the south side yard setback and a modest increase in lot coverage — work together to facilitate a small-scale addition that remains well within the limits of the existing building footprint and maintains the overall low-rise residential character of the area.
- When considered together, the variances do not create any unacceptable cumulative impacts related to massing, scale, privacy, or shadowing. The

proposed addition maintains the same side and rear yard relationships as the existing dwelling and preserves sufficient open space for drainage, landscaping, and amenity.

Recommendation:

Staff has reviewed the proposed variances in accordance with the Planning Act, the policies of the Official Plan and the requirements of the Zoning By-law and has no objection.

Date: November 11, 2025 Prepared By: Melissa Gasic, MCIP RPP

Report Schedules & Attachments:
Attachment No. 1 (Site Photos)

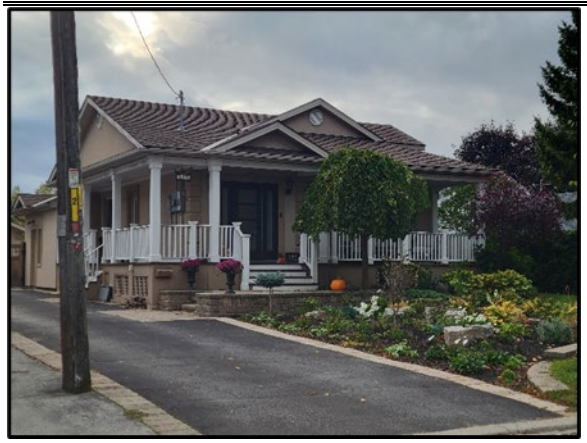
View from the front

View of the opposite side of the road

View of the abutting property

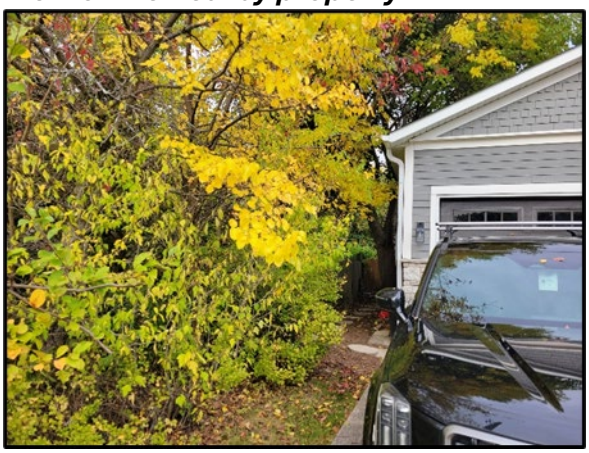
View of the nearby property

COMMITTEE OF ADJUSTMENT
MINOR VARIANCE
STAFF REPORTS



View of the nearby property

View from the driveway



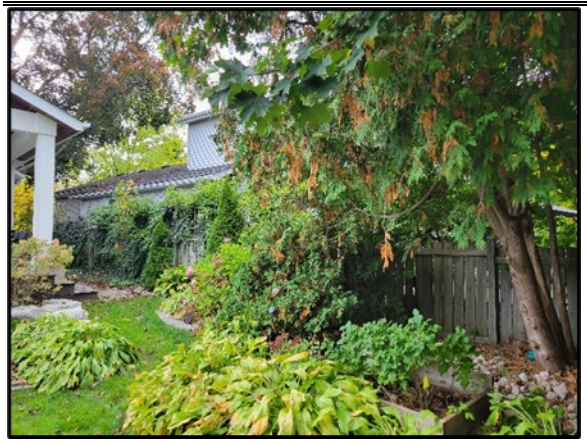
View of the north sideyard

View of the existing covered patio in the rear

View of the existing pool and the rear of the dwelling

View of the rear

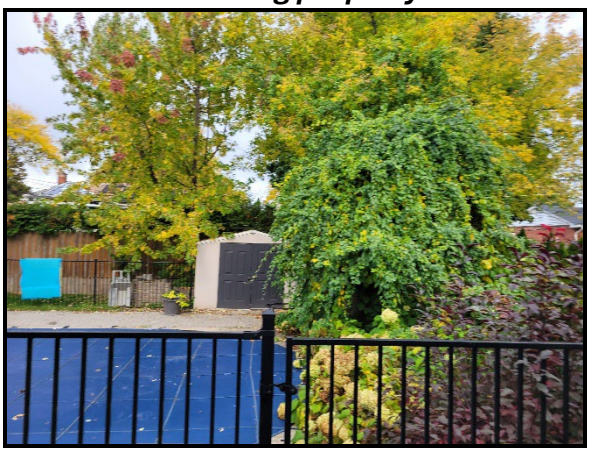
COMMITTEE OF ADJUSTMENT
MINOR VARIANCE
STAFF REPORTS



View of the north side yard from the rear

View of the abutting property from the rear

View of the south side yard from the rear



View of the rear yard

View of 464 Mayzel Road

View of 468 Mayzel Road

View of 486 Mayzel Road

View of 490 Mayzel Road

Development Engineering

Development Engineering has no objection to the second story addition variance requested. Revisions to the plans may be required through the Grading and Drainage Clearance Certificate process if any at grade work is to take place.

Date: November 3, 2025 Prepared By: Robert Bardaloo

Forestry

Forestry has reviewed the application and has no objection to the proposed minor variance(s) and provides the following advisory comment(s) to the applicant:

- A tree permit(s) will be required for any and all work around regulated trees in accordance with the City's Tree By-laws.
- Revisions to plans and/or reports may be required through the tree permit application process

Date: October 21, 2025 Prepared By: J. Lee

Building

1. A Building Permit is required for all building construction;

2. Permit application drawings are to be prepared by a qualified designer as per Div. C., Section 3.2 - Qualifications of Designers and OBC 2024.

Date: November 5, 2025 Prepared By: Q. Tan

Transportation Planning

Deemed Road Width Analysis

Mayzel Road is under the authority of the City of Burlington and the deemed right-of-way width is 20 metres. The right-of-way adjacent to the subject site is approximately 20 metres therefore no additional lands are required.

Date: August 14 2025 Prepared By: Taylor Kirchknopf

Finance

Notice regarding Development Charges:
The owner, its successors and assigns, are hereby notified that City Development Charges may be payable in accordance with the applicable By-law 72-2004, as may be amended, upon issuance of a building permit, at the rate in effect on the date issued. For further information, the owner is advised to contact the City Building Department (905) 335-7731.

Tax
All property taxes including penalty and interest must be paid. This includes all outstanding balances plus current year taxes that have been billed but are not yet due. Local improvements must be commuted.

Date: October 9, 2025 Prepared By: L. Bray

Halton Region

Regional Contaminated Sites Database:

In order to maintain the Region's Contaminated Sites Database, Regional staff request final copies of all environmental reports (if applicable) including: Geotechnical Studies, Hydrogeological Studies, Phase One and/or Two Environmental Site Assessments, Remediation Reports, Risk Assessments, Record of Site Condition (RSC), and/or Certificate of Property Use (CPU).

Regional Staff have reviewed the Minor Variance application proposing the construction of a second storey addition onto an existing one storey dwelling with

attached garage. Variances are requested to the maximum permitted lot coverage and the minimum required side yard.

- Due to Provincial legislation, as of July 1, 2024, the Halton Region's role in land use planning and development matters has changed. The Region is no longer responsible for the Regional Official Plan – as this has become the responsibility of Halton's four local municipalities. As a result of this change, a Memorandum of Understanding (MOU) between the Halton municipalities and Conservation Authorities has been signed that identifies the local municipality as the primary authority on matters of land use planning and development. The MOU also defines the continued scope of interests for the Region and the Conservation Authorities in these matters.
- Staff have reviewed the application from the Region's Source Water Protection requirements. In accordance with the MOU and to ensure protection of groundwater sources, Halton Region provides the following comments:
    - The property is located within the jurisdiction of the Halton-Hamilton Source Protection Plan (SPP). The Halton-Hamilton SPP can be accessed online at: http://www.protectingwater.ca/
    - The property is located in an Intake Protection Zone 2 (VS= 6.3) and Highly Vulnerable Aquifer (VS=6).
    - Based on the information provided by the applicant, this application is not subject to Section 59 under the Clean Water Act, 2006. Therefore, this application can proceed from a Source Water Protection perspective and Section 59 notice will not be required.
    - Attached to these comments is a factsheet for the applicant, regarding the Source Water Protection program and the important role landowners play in protecting drinking water sources.
- Regional staff have no objections to the Minor Variance application.

Date: November 4, 2025 Prepared By: Navjot Kaur

Burlington Hydro

Please see attached document for Burlington Hydro Comments.

Date: November 6, 2025 Prepared By: Carlos Galviria

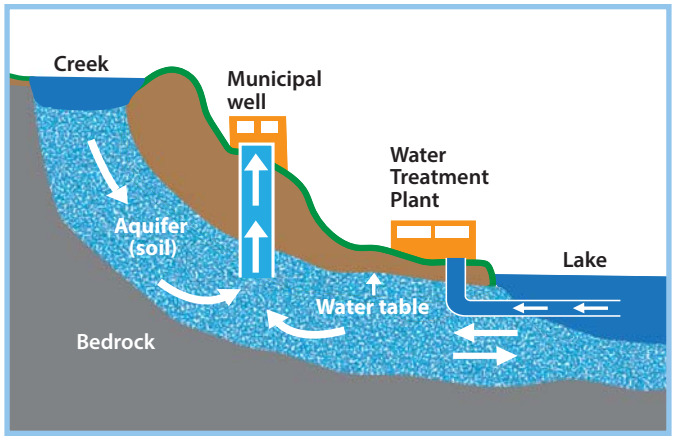
Source Water Protection Factsheet

halton.ca

Planning and Building Applications

Sources of drinking water

Sources of drinking water include groundwater from underground aquifers and surface water from streams, rivers and lakes. These water sources are used to supply municipal drinking water systems and private wells in Halton Region, as illustrated below.



Protecting Halton's drinking water

To ensure the consistent delivery of safe and high quality drinking water to our residents and businesses, Halton Region uses a proactive multi-barrier approach to safeguard our municipal drinking water. Under the *Clean Water Act, 2006*, the very first barrier in this approach is **Source Protection.**

Source water protection and Planning/Building Applications

Under the *Clean Water Act, 2006*, additional protection of these drinking water sources from potential contamination or overuse is provided through the mandatory implementation of approved Source Protection Plans. These Plans contain policies to protect municipal sources of drinking water in certain **vulnerable areas**.

Planning/building applications on properties located within **vulnerable areas** may be subject to Source Protection Plan policies if they propose activities identified as significant drinking water threats that may potentially contaminate or overuse municipal drinking water sources such as:

- Applying, handling and storing road salt and snow storage.
- Handling and storing fuels, solvents, hazardous waste and other related chemicals.
- Activities that reduce return of water into the ground.
- Applying, handling, and storing pesticides, fertilizers, agricultural and non-agricultural materials.
- Activities that take water without returning it to the same water source.
- Installing or modifying septic and other sewage systems.
- Use of land for livestock yards and/or pasturing.

Is my property in a vulnerable area?

Applicants can contact their local municipal Planning and Building Departments or Halton Region's Source Protection Office to obtain this information prior to submitting an application. To find out if your property falls within a vulnerable area, such as a wellhead protection area or surface water treatment plant intake zone, visit **halton.ca** or call 311.

Did you know? Compliance with Source Protection Plans is applicable law in the Planning Act and the Ontario Building Code when the property is located in a vulnerable area.

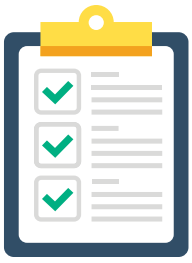
How is my application reviewed?

Municipalities have developed tools to determine whether your application may be subject to Source Protection Plan policies, such as the **Source Protection Checklist** (available at local municipal building/ planning service desks). If the subject property is located in a vulnerable area, applicants will be requested to complete and submit this single page checklist along with other supporting documentation (drawings, details, etc.).

Staff will review the submission and communicate any Source Water Protection requirements to the applicant. In some cases, additional information regarding the proposed activity may be requested to complete the review process.

Step 1

Local municipal staff circulate applications (including Source Protection Checklist) within vulnerable areas to Halton Region's Source Protection Office



Step 2

Halton Region staff will communicate results of Source Protection assessment to applicant and local municipal staff

What do I need to do to comply with Source Water Protection?

Some activities will be managed through traditional methods such as Environmental Compliance Approvals, Permits-To-Take-Water, Nutrient Management Plans and Nutrient Management Strategies. However, depending on the level of risk associated with the proposed activities, some may be prohibited as proposed or require other supporting documents such as:

- Risk Management Plans (see Risk Management Plan fact sheet)
- Site-Specific Salt Management Plans
- Water Balance Assessments
- Hydrogeological Assessments

Where proposed activities are prohibited or regulated through Source Water Protection, municipal staff will provide applicants with detailed feedback regarding what is required.

Did you know? For planning/ building applications located in vulnerable areas, a notice to proceed is required from Halton Region's Risk Management Official before applications are processed.

For more information, visit **halton.ca**, email sourcewater@halton.ca or call 311.

RETHINK WATER

Enjoy Conserve Protect

Halton REGION

PW-1813334

Burlington*hydro* inc.

November 6, 2025

517 Mayzel Rd,
Burlington, ON

Attention: Scott and Lauren,

Re: Proposed second storey addition onto an existing one

Dear Scott and Lauren,

This letter serves as confirmation that Burlington Hydro Incorporated ("BHI") has reviewed the proposed second storey addition designs forming part of building permit file number **540-02-A-062/25** submitted to the City of Burlington's Building Department.

Upon reviewing the submitted permit application drawings, and through review of BHI records, the proposed second storey addition is not in conflict with the existing overhead secondary wire along the property line, it is meeting the minimum clearance requirements from the proposed addition at this property.

Please ensure you also check with communication companies (Bell and Cogeco) and other commodity companies for clearances.

Before you begin demolition or construction, we would like to stipulate the following conditions:

- Relocation, modification or removal of existing hydro facilities, if required, shall be at the customer's expense. BHI will refer to the latest BHI standards, if possible, if issues arise between existing hydro facilities and proposed building structures.
- Hydro easement (if any) is to remain clear of heavy vehicle traffic. Construction shall not encroach any easement.
- Customer is to ensure that BHI has access to the hydro facilities.
- Customer to acquire any easement for Burlington Hydro, if required.
- Project must meet City of Burlington Standards.
- Machine excavation within one meter of underground plant is not permitted.
- Do not excavate within two meters of Hydro poles and anchors except for the termination pole where the duct structure shall be terminated by the customer under the supervisor of BHI inspector.
- Please arrange for underground hydro cable locates, prior to beginning construction, by contacting Ontario One call at (800) 400-2255.
- To ensure safety, maintain a minimum working clearance of 1 meter (3 feet) from any secondary wire (120V/240V) and a 3-meter (10 feet) minimum clearance from any primary wire (exceeding 750V).
- Please refer to the latest edition of the Occupational Health and Safety Act ("OHSA") and Regulations for Construction Projects when construction is planned to be performed in the proximity of hydro distribution system.

1340 Brant Street, Burlington, ON · L7R 3Z7 **burlingtonhydro.com** 905-332-1851

GridSmartCity renewing energy

RP

Partner since **2009**

Burlington hydro inc.

- Arrange for disconnect and isolation of the power supply if a person or equipment is to encroach on the minimum distance permitted under the OHSA and OESC.

I may be contacted at (905) 332 1851 ext. 347 should you have additional questions or concerns

Regards,

Carlos Gaviria C.E.T.
Engineering Services Technician

Rosso Parra, P.Eng.
Engineering Manager
Customer Connections & Key Accounts

NOV. 06/2021
RP

1340 Brant Street, Burlington, ON · L7R 3Z7 burlingtonhydro.com 905-332-1851

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Partner since 2009

(905) 335-7629
committeeofadjustment@burlington.ca
FILE NO. 540-02-**A-062/25**
Committee of Adjustment
Date of Mailing: November 24, 2025

NOTICE OF PUBLIC HEARING

Scott Ryan Andrew Tilley and Lauren Michelle Tilley, the owners of 517 Mayzel Rd. Burlington have applied to the Committee of Adjustment for a Minor Variance to the requirements of Zoning By-law 2020, as amended. The property in question is **517 Mayzel Rd. Burlington** (see map).

The applicant is proposing the construction of a second storey addition onto an existing one storey dwelling with attached garage. This results in the following variances:

1. To permit a south side yard of 1.6 m instead of the minimum required 1.8 m for a proposed second addition.

2. To permit lot coverage of 29% instead of the maximum permitted 25% for a proposed second storey addition onto an existing detached dwelling with attached garage.

You have received this notice as stipulated by the *Planning Act* because your property is within 60 metres of the property noted above. The application materials are available on request by contacting Committee of Adjustment staff by one of the methods listed above. A copy of the Agenda, containing staff reports and drawings, can be viewed online under the Meeting Agenda tab at **Burlington.ca\coa on or after November 24, 2025**.

Committee of Adjustment Hearings will be hybrid-conducted in person and virtually. All members of the public, applicants and their agents will now have the option to participate in the public meeting process in person at City Hall in Council Chambers, or remotely via Zoom Webinar Video Conferencing Technology. The Committee of Adjustment will meet to consider the above application under Section 45 of the *Planning Act*, 1990, as amended on:

WEDNESDAY DECEMBER 10, 2025,
This application is scheduled to be heard at or after 5:30 pm.

How to participate if I have comments or concerns?

Written Submissions

Members of the public who would like to participate in a Committee of Adjustment meeting are able to send written comments regarding the application by e-mail to committeeofadjustment@burlington.ca with the subject line to read “Comments_Your Name_File No._Address of the Property”.

Alternatively, written comments can be sent by regular mail addressed to the Secretary-Treasurer. Include your name, address, application number and address of the property for which you are providing comments.

City of Burlington Committee of Adjustment - Community Planning
426 Brant Street P.O. Box 5013 Burlington, Ontario, L7R 3Z6
committeeofadjustment@burlington.ca

To allow all Committee of Adjustment members the opportunity to review and consider your comments, please provide your written submissions to be received no later than noon the day before the hearing date.

Oral Submissions

Members of the public are also able to provide oral comments regarding Committee of Adjustment Hearing items by participating virtually through Zoom via computer or phone, or by attending the Hearing in-person. Participation virtually requires pre-registration in advance. Please contact staff for instructions if you wish to make a presentation containing visual materials.

1. Virtual Oral Submissions
   To register as a delegate, please contact the Secretary-Treasurer no later than 12:00 p.m. (noon) the day before the hearing date. The following information is required to register; Committee of Adjustment file number, hearing date, name, and mailing address of each person wishing to speak, if participation will be by phone or video. All requests to delegate must contain a copy of your intended remarks which will be circulated to all members of Committee in advance.

2. In person Oral Submissions
   Interested members of the public, agents, and owners who wish to participate in person may attend Council Chambers on the date and time listed on the Notice of Public Hearing. Please note that you will be required to provide your name and address for the record. It is advised that you arrive no less than 10 minutes before the time of the Public Hearing as noted on the Notice of Public Hearing.

Attend or View the Committee of Adjustment Hearing:

If you do not wish to participate, but would like to follow along, the hearing will be held in person at City Hall in Council Chambers and live through a Zoom Webinar. Instructions, links and phone numbers for joining the meeting will be posted on the Committee of Adjustment webpage the day prior to the scheduled meeting. The link will be active at **4:30 p.m.**

If you wish to be notified of the decision of the Committee of Adjustment in respect to this application, you must submit a written request to the Secretary-Treasurer. This will also entitle you to be advised of a possible Ontario Land Tribunal Hearing. In accordance with the Planning Act, the Committee of Adjustment decision may be appealed to the Ontario Land Tribunal by the owner, the Minister of Municipal Affairs and Housing, a specified person or public body that has an interest in the matter.

The applicant is advised that it is **mandatory** that either the applicant or an authorized agent of the applicant must be present at the hearing either in person or virtual.

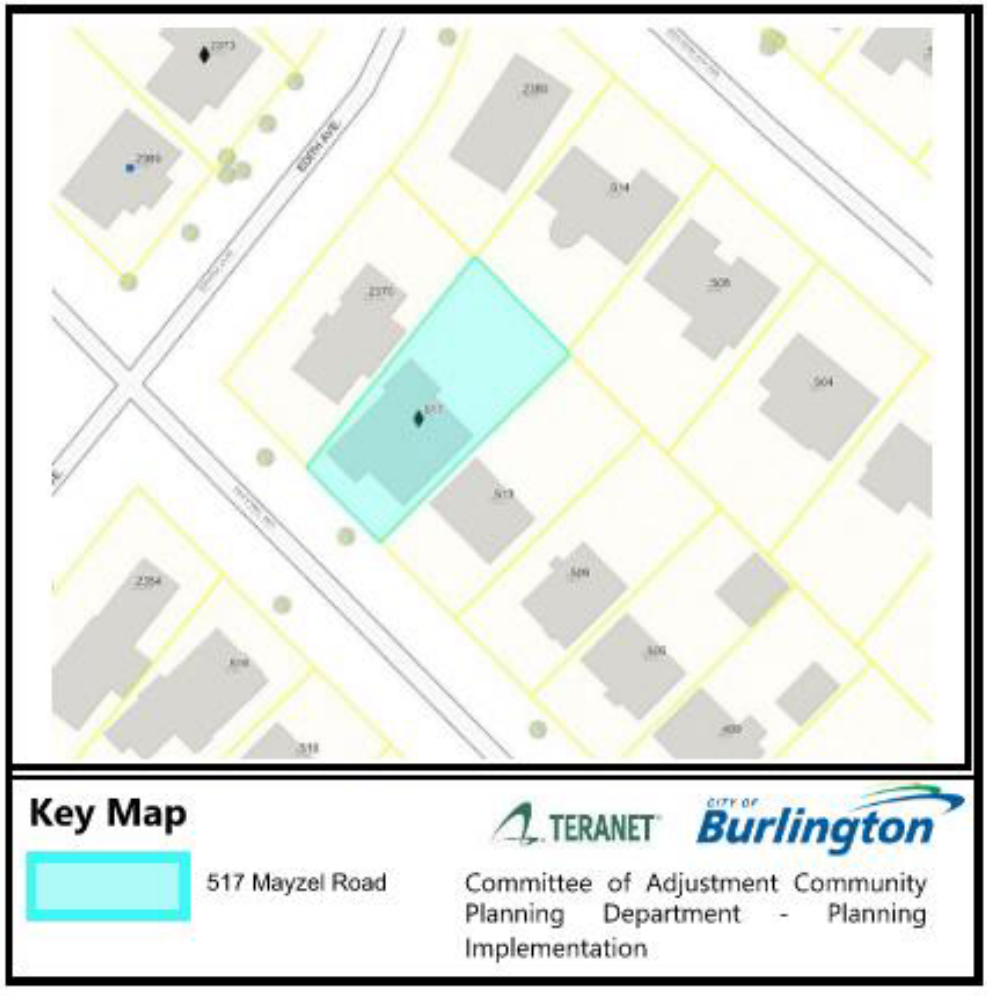
For more information about this matter, contact Catherine Susidko-Petriczko at committeeofadjustment@burlington.ca

Yours truly,

Catherine Susidko-Petriczko
Secretary-Treasurer
Committee of Adjustment

Personal information including comments and public feedback, is collected under the legal authority of the Planning Act, R.S.O. 1990, Chapter c. P.13, as amended, and the Municipal Freedom of Information and Protection of Privacy Act, R.S.O. 1990, as amended, which will be used to process the application and in the decision making process and becomes the property of the City of Burlington, and is considered to be a public record and will be disclosed to any individual (including being posted on the internet) upon request. Questions about this collection should be directed to the Secretary-Treasurer, Burlington Committee of Adjustment, Community Planning Department, 426 Brant Street, P.O. Box 5013, Burlington, Ontario; L7R 3Z6 (905) 335-7629.

Key Map



CITY OF Burlington

MINOR VARIANCE – 2025

Committee of Adjustment
Department of Community Planning
426 Brant Street, Burlington ON
committeeofadjustment@burlington.ca

PLANNING ACT, R.S.O. 1990, C.P. 13
APPLICATION FOR MINOR VARIANCE OR FOR PERMISSION

THE UNDERSIGNED HEREBY APPLIES TO THE COMMITTEE OF ADJUSTMENT FOR THE CITY OF BURLINGTON UNDER SECTION 45 OF THE PLANNING ACT, R.S.O. 1990, C.P.13, AS DESCRIBED IN THIS APPLICATION, FROM BY-LAW NO. 2020. (AS AMENDED)

Application made under:
☑ Section 45 (1) of the Planning Act ☐ Section 45 (2) of the Planning Act

Discussed the application with a City Zoning Examiner and Development Planner Y ☑ or N ☐
Name of Planner: Jennifer Parker Name of Zoning Examiner: _____

PROPERTY INFORMATION
Municipal Address(es) of property:
517 Mayzel Road, Burlington, ON, L7R 3C4

Legal Description of property: PART OF LOT 18, PLAN 594

Official Plan Designation: Residential - Low Density Current Zoning Designation Low Density Residential

OWNER(S) INFORMATION:
Legal Name (as it appears on the title for the property):
Scott Ryan Andrew Tilley & Lauren Michelle Tilley

Mailing Address: 517 Mayzel Road City: Burlington

Postal Code: L7R 3C4 Home Phone: _____ Mobile Phone: _____

Work Phone: _____ E-Mail: rtilley@tandet.com

AGENT INFORMATION (if applicable): (This person will be the primary point of contact if provided)

Name: Jordan Heckman

Business Address: 3836 Main Street City: Jordan, Ontario

Postal Code: L0R 1S0 Home Phone: _____ Mobile Phone: 365-299-5345

Work Phone: 289-668-4588 E-Mail: info@jordanstationdesignco.ca

CITY OF Burlington

MINOR VARIANCE – 2025
Committee of Adjustment
Department of Community Planning
426 Brant Street, Burlington ON
committeeofadjustment@burlington.ca

PROPOSED DEVELOPMENT Please outline in detail your proposed development and list each variance you are requesting, as well as the Zoning By-law Requirements. Attach a separate sheet if required.

SEE APPLICATION REPORT DOCUMENT BY NPG

Variance(s) Requested	Zoning Bylaw Requirement

In your own words, please explain why you are unable to comply with the provisions of the Zoning By-law and how the minor variance(s) meet the four (4) tests under the Planning Act:

1. Why is the variance(s) minor in nature?

2. Why are the variance(s) desirable for the appropriate use of the land?

3. Do the variance(s) meet the intent and purpose of the Official Plan?

4. Do the variance(s) meet the intent and purpose of the Zoning By-law?

CITY OF Burlington

MINOR VARIANCE – 2025

Committee of Adjustment
Department of Community Planning
426 Brant Street, Burlington ON
committeeofadjustment@burlington.ca

PROPERTY DETAILS (please complete all fields):

Date property purchased:	Date property first built on:	Date of proposed construction:
04/2016 (mmm/dd/yyyy)	1956 (mmm/dd/yyyy)	ASAP - 09/2025 (mmm/dd/yyyy)

Existing Use of the Subject Property (check one):

Detached Dwelling ☑ Semi-Detached Dwelling ☐
Townhouse Dwelling ☐ Street Townhouse
Dwelling ☐ Stacked Townhouse Dwelling ☐
Apartment ☐ Mixed Use ☐ Hi Rise ☐
Commercial ☐ Industrial ☐ Vacant ☐
Other ☐ _____

Length of time the existing uses of the subject property have continued: Always

Proposed Use of the Land: Residential

Existing Uses of Abutting Properties (check all that apply)

Residential ☑ Commercial ☐ Industrial ☐ Multi-Residential ☐ Vacant ☐ Hydro right of-way ☐
Railway right-of-way ☐ Provincial Highway ☐ Park ☐ Other ☐ _____
Conservation Halton Lands: Lake Ontario ☐ Creek ☐ Storm Water Management Pond/Channel ☐
Ravine ☐

Additional Information

Is liquor sold on site? Y ☐ or N ☑

Is the property on the Municipal Cultural Heritage Register for the City of Burlington? Y ☐ N ☑
Unknown ☐

Type of Access to the Subject Lands

Provincial Highway ☐	Municipal Road ☑	Private Road ☐	Water ☐	Other(specify) ☐

Municipal Services Provided

Water ☑ If not available, by what means is it provided:
Sanitary Sewers ☑ If not available, by what means is it provided:
Storm Sewers ☑ If not available, by what means is it provided:

IS THE SUBJECT LAND(S) THE SUBJECT OF ANY OF THE FOLLOWING DEVELOPMENT APPLICATIONS: ☐ Official Plan Amendment ☐ Zoning By-law Amendment ☑ Building Permit
☐ Site Development Plan ☐ Plan of Subdivision ☒ Previous Minor Variance ☐ Consent

RETRACTED - NO PREVIOUS MINOR VARIANCE

CITY OF Burlington

MINOR VARIANCE – 2025

Committee of Adjustment
Department of Community Planning
426 Brant Street, Burlington ON
committeeofadjustment@burlington.ca

FOR RESIDENTIAL DETACHED OR SEMI-DETACHED DWELLINGS

Dimensions of Property			Street Width (see first page of application for how to obtain)				
Frontage	Depth	Area	Actual	Deemed	Required	Lot Coverage	Corner Lot?
15.24m	39.88m	700.8 sq.m	20m	20m	No Widening	31.4%	Y ☐ N ☑

Particulars of all buildings and structures on or proposed for the subject lands
(attach additional page if required)

EXISTING (Dwelling/Building)		PROPOSED (Dwelling/Building/Addition)	
Ground Floor Area (incl. attached garage)	198.1 M^2	Ground Floor Area (incl. attached garage)	198.1 M^2
Gross Floor Area:	198.1 M^2	Gross Floor Area:	305.4 M^2
Number of Storeys:	1	Number of Storeys:	2
Width:	13.88 M	Width:	Overall: 13.88m, Addition: 8.57 M
Length:	18 M	Length	Overall: 18m, Addition: 12.48 M
Height:	5.67 M	Height	Overall: 7.89m, Addition: 4.4 M
Garage/Car Port		**Garage/Car Port** N/A - No Proposed Work	
Detached?	Y ☐ N ☑	Detached?	Y ☐ N ☐
Gross Floor Area:	32.8 M^2	Gross Floor Area:	M^2
Width:	5.38 M	Width:	M
Length:	6.69 M	Length:	M
Height:	4.91 M	Height:	M
Accessory Structures (Shed, Gazebo, etc)		**Accessory Structures** N/A - No Proposed Work	
Gross Floor Area:	7.5 M^2	Gross Floor Area:	M^2
Width:	2.28 M	Width:	M
Length:	3.13 M	Length:	M
Height:	Unknown M	Height:	M
Other (pool, additional sheds, decks, driveways, etc.)		**Other** N/A - No Proposed Work	
Gross Floor Area:	13.3 M^2	Gross Floor Area:	M^2
Width:	3.6 M	Width:	M
Length:	3.63 M	Length:	M
Height:	Unknown M	Height:	M

LOCATION of all existing and proposed buildings and structures

EXISTING		PROPOSED	
Front:	4.06 M	Front:	AS EXISTING M
Rear:	13.49 M	Rear:	AS EXISTING M
Side/Street Side:	N/A M	Side/Street Side:	N/A M
Side/Other Side:	1.22m / 1.67 M	Side/Other Side:	AS EXISTING M

CITY OF Burlington

MINOR VARIANCE – 2025

Committee of Adjustment
Department of Community Planning
426 Brant Street, Burlington ON
committeeofadjustment@burlington.ca

FOR COMMERCIAL, MIXED USE, INDUSTRIAL AND OTHER

Dimensions of Property			Street Width (see first page of application for how to obtain)				
Frontage	Depth	Area	Actual	Deemed	Required	Density	Have you applied for Site Plan Approval? Y ☐ N ☐ File #:

Particulars of all buildings and structures on or proposed for the subject lands
(attach additional page if required)

EXISTING (Building)		**PROPOSED (Building/Addition)**	
Ground Floor Area:	M^2	Ground Floor Area:	M^2
Gross Floor Area:	M^2	Gross Floor Area:	M^2
Number of Storeys:		Number of Storeys:	
Width:	M	Width:	M
Length:	M	Length	M
Height:	M	Height	M
Floor Area: Office Space	M^2	Floor Area: Office Space	M^2
Floor Area: Warehouse/Retail/Other:	M^2	Floor Area: Warehouse/Retail/Other	M^2
# of Existing Units:		# of Proposed Units:	
Floor Area Ratio:		Floor Area Ratio:	
Required Parking Spaces:		Proposed Parking Spaces:	
Existing Parking Spaces:			

EXISTING (Other)		**PROPOSED (Other)**	
Ground Floor Area:	M^2	Ground Floor Area:	M^2
Gross Floor Area:	M^2	Gross Floor Area:	M^2
Number of Storeys:		Number of Storeys:	
Width:	M	Width:	M
Length:	M	Length	M
Height:	M	Height:	M

LOCATION of all existing and proposed buildings and structures

EXISTING (Building)		**PROPOSED (Building)**	
Front:	M	Front:	M
Rear:	M	Rear:	M
Side:	M	Side:	M
Side:	M	Side:	M

OTHER		**OTHER**	
Front:	M	Front:	M
Rear:	M	Rear:	M
Side:	M	Side:	M
Side:	M	Side:	M

CITY OF Burlington

MINOR VARIANCE – 2025

Committee of Adjustment
Department of Community Planning
426 Brant Street, Burlington ON
committeeofadjustment@burlington.ca

MULTI-RESIDENTIAL
(STREET TOWNHOUSE, HI-RISE, STACKED TOWNHOUSES, DUPLEXES, etc)

Dimensions of Property			Street Width (see first page of application for how to obtain)				
Frontage	Depth	Area	Actual	Deemed	Required	Density	Have you applied for Site Plan Approval? Y ☐ N ☐ File #:

Particulars of all buildings and structures on or proposed for the subject lands
(attach additional page if required)

EXISTING (Building)		PROPOSED (Building/Addition)	
Ground Floor Area:	M^2	Ground Floor Area:	M^2
Gross Floor Area:	M^2	Gross Floor Area:	M^2
Number of Storeys:		Number of Storeys:	
Width:	M	Width:	M
Length:	M	Length	M
Height:	M	Height	M
# of Existing Units:	M^2	# of Proposed Units:	M^2
Floor Area Ratio:	M^2	Floor Area Ratio:	M^2
Required Parking Spaces:		Proposed Parking Spaces:	
Existing Parking Spaces:			

EXISTING (Other)		PROPOSED (Other)	
Ground Floor Area:	M^2	Ground Floor Area:	M^2
Gross Floor Area:	M^2	Gross Floor Area:	M^2
Number of Storeys:		Number of Storeys:	
Width:	M	Width:	M
Length:	M	Length	M
Height:		Height:	M

LOCATION of all existing and proposed buildings and structures

EXISTING (Building)		PROPOSED (Building)	
Front:	M	Front:	M
Rear:	M	Rear:	M
Side:	M	Side:	M
Side:	M	Side:	M

OTHER		OTHER	
Front:	M	Front:	M
Rear:	M	Rear:	M
Side:	M	Side:	M
Side:	M	Side:	M

CITY OF Burlington

MINOR VARIANCE – 2025
Committee of Adjustment
Department of Community Planning
426 Brant Street, Burlington ON
committeeofadjustment@burlington.ca

EXEMPTION FROM NEW SURVEY REQUIREMENT

Minor additions to an existing dwelling or for a proposed accessory building or structure (i.e., deck, driveway, pergola, shed), may be exempt from having to provide a new survey. Please refer to Page 3 of this application package for more details. Minor Variances with concurrent Consent applications require a new survey.

Applicant/Owner:	Property Address:

1. I, Jordan Heckman (Print Name) In my capacity as Agent. (Owner or agent) do attest to the following:

Please complete Section A, B, or C

A. The OLS survey/sketch of survey dated _____ (mmm/dd/yyyy)

has been revised by: _____ (Person or Company Name)

OR

B. The site plan, architect's plan or engineer's plan dated _____ (mmm/dd/yyyy)

has been revised by: _____ (Person or Company Name)

OR

C. The sketch or plot plan** dated Jan/04/2021 (mmm/dd/yyyy)

**Accepted for applications involving variances for Uses only.

was prepared by: MMP. (Person or Company Name)

2. All structures, measurements, setbacks and boundaries of the property are shown accurately as of: Jul/22/2025. (mmm/dd/yyyy)

3. The material submitted shows all measurements in metric, as calculated/converted by: MMP (Person or Company Name)

4. Should the need arise during application processing for an new OLS survey, the applicant/agent agree to provide the survey as required by Committee or city staff in order to receive a decision on the application.

Signature of Owner/Applicant — Jul/22/2025. Date (mmm/dd/yyyy)

CITY OF Burlington

MINOR VARIANCE – 2025
Committee of Adjustment
Department of Community Planning
426 Brant Street, Burlington ON
committeeofadjustment@burlington.ca

POSTING OF ADVISORY SIGN

This will confirm the requirement of the Committee of Adjustment for a sign to be posted by all applicants or agents on each property under application.

A sign will be made available to you after completion of the zoning review of your application(s) and you are directed to post each sign in a prominent location that will enable the public to observe the sign.

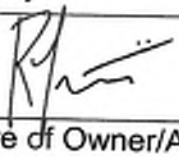
The location of each sign will depend on the lot and location of structures on it, however, the sign should be placed so as to be legible from the roadway in order that the public can see the sign and make note of the telephone number should they wish to make inquiries. In most cases, please post the sign on a stake as you would a real estate sign. For commercial or industrial buildings it may be appropriate to post the sign on the front wall of the building at its entrance. Please contact the undersigned if you have any queries on the sign location.

DO NOT POST THE SIGN INSIDE THE BUILDING BY A WINDOW. The sign must be outdoors by the roadway in order to be visible and readable.

Each sign must remain posted beginning 10 days prior to the hearing, until the day following the hearing. Please fill in the form below indicating your agreement to post the sign(s) as required. This form must be submitted with the application so that it may be placed on file as evidence that you have met the committee's requirements. Failure to post the sign as required will result in deferral of the application.

I UNDERSTAND THAT EACH SIGN MUST BE POSTED AT LEAST 10 DAYS BEFORE THE HEARING, AND WILL REMAIN POSTED AND BE REPLACED, IF NECESSARY, UNTIL THE DAY FOLLOWING THE HEARING.

Owner Name: Ryan Tilley



Signature of Owner/Applicant

Property Address: 517 Mayzel Road

7/8/2025
Date (mmm/dd/yyyy)

CITY OF Burlington

MINOR VARIANCE – 2025
Committee of Adjustment
Department of Community Planning
426 Brant Street, Burlington ON
committeeofadjustment@burlington.ca

AFFIDAVIT

*Please fill out at time of submission of application

I have the authority to bind the Corporation (check if applicable) ☑ Signature of Applicant or Authorized Agent: Jordan Heckman (Jordan Station Design Co.)

I, Jordan Heckman (print name) of the Niagara (Region/City/County) of _____ in the ~~Jordan Station~~ Town (City/Town/Township)

of Jordan Station solemnly declare that all the statements contained in this application are true and I make this solemn declaration conscientiously believing it to be true and knowing it is of the same force and effect as if made under oath and by virtue of the Canada Evidence Act.

Declared before me at the City (Region/City/County) of Burlington in the _____ (City/Town/Township)

this 22 day of July 2025.

Suzanne Gillies, Committee Clerk
The Corporation of the City of
Burlington, Region of Halton
A Commissioner of Oaths pursuant
to s.228(4) of the Municipal Act

S. Gillies
Signature of Commissioner, etc.

Signature of Applicant or Authorized Agent

PERMISSION TO ENTER

IMPORTANT This MUST be completed for all applications and signed by the OWNER.

Municipal Address of Subject Lands: 517 Mayzel Road

I hereby authorize the Committee of Adjustment members, City of Burlington and Region of Halton staff to enter onto the above-noted property for the limited purposes of evaluating the merits of this application.

Signature of Owner

Ryan Tilley
Print Name

OWNERS AUTHORIZATION

If using an agent, the owner must also complete the following form:

I, Ryan Tilley (print name) being the registered owner of the subject lands, hereby

Authorize Jordan Heckman (print agent name) to prepare, submit and act on my behalf with respect to this

application for a Minor Variance.

Signature of Owner

7/8/2025
Date (mmm/dd/yyyy)

Notice of collection of personal information

Personal information contained on this form is collected under the authority of the Planning Act, RSO 1990, c. P.13, to process applications and make decisions. Applications made under the Planning Act, are considered part of the public record and shall be made available to the public. Questions about this collection can be directed to the Manager of Development Planning, City of Burlington, 426 Brant Street, Burlington, Ontario, L7R 3Z6, 905-335-7600.

The applicant acknowledges that an application, all supporting information and materials, including studies and drawings, submitted under the Planning Act, pursuant to s. 1.0.1 of the Planning Act, RSO 1990, c.P.13, as amended, shall be made available to the public.

Committee of Adjustment
Department of Community Planning
426 Brant Street, Burlington ON
committeeofadjustment@burlington.ca

Minor Variance Application Checklist Please add a check mark beside the items you have provided with your application. Illegible drawings or those missing required details will be returned to applicant.	**Select (✓)**
LEGAL SURVEY (must be prepared and signed and dated by an Ontario Land Surveyor) *** For new development, a Proposed Building Plan stamped by an Ontario Land Surveyor or Professional Engineer may be required.**	✓
OR	
DETAILED SITE PLAN (must be prepared and stamped by Professional Engineer, Ontario Land Surveyor or Professional Architect). A legal survey may still be required at the discretion of staff.	
AND	
PLAN and ELEVATION DRAWINGS which include the following as applicable: (Missing details or illegible drawings will be sent back to the applicant for correction)	✓

SITE PLAN

- ☑ Metric Scale
- ☑ North Arrow
- ☑ Frontage
- ☑ Depth
- ☑ Lot Area
- ☑ Lot Coverage
- ☑ Deemed Street Line
- ☑ Existing Front Yard Setbacks
- ☑ Existing Rear Yard Setbacks
- ☑ Existing Side Yard Setbacks
- ☐ Existing Street Side Yard Setbacks
- ☑ Existing Porch, Stairs and Overhang Setbacks
- ☑ Proposed Front Yard Setbacks
- ☑ Proposed Rear Yard Setbacks
- ☑ Proposed Side Yard Setbacks
- ☐ Proposed Street Side Yard Setbacks
- ☑ Proposed Porch, Stairs and Overhang Setbacks
- ☑ Streets (Public and Private)
- ☑ Street Names
- ☑ Parking (Dimensioned spaces, Driveway Width, Arrangement)
- ☐ Railways (Location of them and setbacks to structures)
- ☐ All Watercourses and/or Conservation Halton Areas(creeks, lakes, etc)

Committee of Adjustment
Department of Community Planning
426 Brant Street, Burlington ON
committeeofadjustment@burlington.ca

Minor Variance Application Checklist

Please add a check mark beside the items you have provided with your application.
Illegible drawings or those missing required details will be returned to applicant.

LOCATION AND MEASUREMENTS OF SHED, DECK OR OTHER STRUCTURES

- ☑ Setbacks
- ☐ Height
- ☑ Area
- ☑ Length
- ☑ Width

ELEVATIONS

- ☑ Metric
- ☑ Front
- ☑ Rear
- ☑ Side 1
- ☑ Side 2

FLOOR PLANS

- ☑ Metric
- ☑ North Arrow
- ☑ Gross Floor Area Calculation
- ☑ Ground Floor Area Calculation
- ☑ Floor Area Ratio (where applicable)

I have reviewed the minor variance checklist and ensure all the applicable information is shown on the drawings submitted as part of this application.

Signature of Owner/Agent

July 2, 2025
Date (mmm/dd/yyy)

July 3, 2025

Secretary Treasurer
Committee of Adjustment
426 Brant Street, PO Box 5013
Burlington, ON
L7R 3Z6

RE: 517 Mayzel Road – Application for Minor Variance

Dear Secretary Treasurer,

NPG Planning Solutions Inc. has been retained by Jordan Station Design Co. to provide independent professional planning advice regarding an application for Minor Variance (the "Application") on the lands municipally known as 517 Mayzel Road, City of Burlington. The Subject Lands currently contain a one-storey residential dwelling, in ground pool and accessory structures. The Subject Lands are zoned R2.3 in accordance with City of Burlington Zoning By-law 2020.

The proposal seeks to facilitate the development of a partial second-storey addition within the footprint of the existing dwelling. The partial addition is proposed near the southerly interior lot line and is generally oriented toward the rear of the building, with a setback of approximately 8.28 metres from the front property line with an interior side yard setback of 1.67 metres. It will have a floor area of 106.9 square metres, representing approximately 54% of the existing dwelling's floor area. The remaining portions of the dwelling will remain unchanged at one storey.

To facilitate the development the Application requests the following variances:

1. Permit a reduced side yard for a two or more storey building with attached garage or carport (Part 2 – Residential Zones, Section 4.1 of Zoning By-law).
    - 1.2 m required for one or one and a half storey side
    - 1.8 metres required for two or more storey side
    - 1.67 metres (two storey side), 1.22 metres (other side, one storey); proposed
2. Permit an increased lot coverage (Part 2 – Residential Zones, Section 4.2 of Zoning By-law).
    - 35% for one storey dwellings (and accessory structures), 30% for one and a half storey dwellings (and accessory structures), 25% for all other dwelling types (and accessory structures),
    - 31.4% for a two storey dwelling (and accessory structures) proposed

Included as part of this submission are as follows:

1. Minor Variance Application Form;
2. Site Plan Drawing, Architectural Elevations and Floor Plans;
3. Planning Letter addressing the requested Variances;
4. City of Burlington Minor Variance Application Fee for Additions over 75 sqm: $6,665.00
5. Region of Halton Review Fee: $40.89

1.0 Subject Lands and Neighbourhood Context

The Subject Lands have an area of approximately 700.8 square metres, and a frontage of 16.32 metres on Mayzel Road. The Subject Lands are located in the Urban Area of the City of Burlington and are designated as Residential - Low Density in Schedule C – Land Use in the City's 2020 Official Plan. The Subject Lands are zoned Residential R2.3 in the City's Zoning By-law 2020.

The Subject Lands are located within an established residential neighbourhood, approximately 25 metres south of the intersection of Mayzel Road and Edith Avenue. The surrounding lands predominantly consist of low-rise single detached dwellings (1 storey, 2 storey, and split level dwellings). The Subject Lands abut single detached dwellings on all sides.

The Subject Lands are located in proximity to a range of amenities, including the Burlington Library – Central Branch, Central Park, Central Recreation Centre, Ron Edwards Family YMCA, and a range of commercial uses concentrated at the intersection of Guelph Line and New Street. The Subject Lands are also in proximity to a range of transit infrastructure with existing cycling infrastructure and transit stops on New Street and Guelph Line.

2.0 Proposed Variance and Analysis of Four Tests

Section 45(1) of the *Planning Act* provides that:

> *The committee of adjustment, upon the application of the owner of any land, building or structure affected by any by-law that is passed under section 34 or 38, or a predecessor of such sections, or any person authorized in writing by the owner, may, despite any other Act, authorize such minor variance from the provisions of the by-law, in respect of the land, building or structure or the use thereof, as in its opinion is desirable for the appropriate development or use of the land, building or structure, if in the opinion of the committee the general intent and purpose of the by-law and of the official plan, if any, are maintained. R.S.O. 1990, c. P.13, s. 45 (1); 2006, c. 23, s. 18 (1); 2009, c. 33, Sched. 21, s. 10 (11).*

The following is an analysis of the Application for Minor Variance in relation to the four tests for Minor Variance relating to the lands located at 517 Mayzel Road in the City of Burlington.

Variance 1: Permit a reduced side yard for a two or more storey building with garage (Part 2 – Residential Zones, Section 4.1 of Zoning By-law).

Proposed: 1.67 metres (two storey side), 1.22 metres (other side, one storey)
Required: 1.8 metres required for two or more storey side, 1.2 m required for one or one and a half storey side

Table 1: 4 Part Test Analysis Table – Variance to permit a reduced interior side yard

Test	Analysis
1. Is the requested variance minor in nature?	The proposed variance reflects 12 centimeter or 6% reduction in the required side yard setback for a two storey dwelling. The proposed partial second storey addition occupies approximately 54% of the existing building area does not extend beyond the existing building footprint. The partial addition has been oriented closer to the rear of the dwelling, aligning with the placement of the adjacent dwelling to mitigate overlook or privacy impacts on adjacent lands. This minor reduction is not anticipated to result in any significant negative impacts on adjacent lands and can therefore be considered minor
2. Is the requested variance desirable for the appropriate development or use of the land, building, or structure?	The requested variance is desirable for the appropriate development of the land as it will allow for the development of a partial second storey addition to the existing dwelling, facilitating an efficient use of land and a compact built form in a manner that respects the existing character of the neighbourhood.
3. Does the requested variance maintain the general intent and purposes of the By-law?	The primary intent of side yard requirements within the City's Zoning By-law is to ensure sufficient space for building maintenance, drainage, access, privacy, and separation between neighbouring structures. The Zoning By-law provides separate setback provisions for single-storey and two-storey dwellings to ensure greater separation where building height increases, helping to mitigate potential shadowing, massing impacts, and privacy concerns on adjacent properties. A reduction from 1.8 metres to 1.68 metres maitains a reasonable separation which achieves these purposes without compromising the low-density character of the neighbourhood.
4. Does the requested variance maintain the	The proposed variance maintains the general intent and purpose of the Official Plan by supporting a form of

Test	Analysis
general intent and purpose of the Official Plan?	residential development that is compatible with the surrounding neighbourhood and contributes to the efficient use of land and infrastructure.

Variance 2: Permit an increased lot coverage (Part 2 – Residential Zones, Section 4.2 of Zoning By-law

Proposed: 31.4% for a two storey dwelling (and accessory structures),
Required: 35% for one storey dwellings (and accessory structures), 30% for one and a half storey dwellings (and accessory structures), 25% for all other dwelling types (and accessory structures)

Table 2: 4 Part Test Analysis Table – Variance to permit an increased lot coverage

Test	Analysis
1. Is the requested variance minor in nature?	The Zoning By-law establishes maximum lot coverage based on building height, permitting up to 35% coverage for one-storey dwellings and 25% for two-storey dwellings. This provision is intended to ensure that taller buildings maintain adequate space for landscaping and amenity areas, while also minimizing visual massing. The proposed second-storey addition is contained within the existing footprint of the dwelling, thereby preserving all existing landscaping and amenity areas. Moreover, the addition is limited to one portion of the structure and is located to the rear of the existing footprint, further reducing potential massing impacts. As such, the 6.4% increase in lot coverage can be considered minor in nature
2. Is the requested variance desirable for the appropriate development or use of the land, building, or structure?	The requested variance is desirable for the appropriate development of the land as it will allow for the efficient use of land within an established neighbourhood, while maintaining compatibility with adjacent lands. As the proposed addition is within the footprint of the existing building, all amenity and landscaped areas will be protected, maintaining the character of the neighbourhood.
3. Does the requested variance maintain the general intent and purposes of the By-law?	The intent of the lot coverage provision within the City's Zoning By-law is to ensure an appropriate balance between built form and open space, while mitigating massing impacts on the neighbourhood. The second-storey addition is proposed within the existing footprint, maintaining all functional open space on the lot. The proposed coverage does not compromise privacy nor does it introduce a form of development that is out of scale with the neighbourhood.

Test	Analysis
	As such, the requested variance maintains the general intent and purpose of the Zoning By-law.
4. Does the requested variance maintain the general intent and purpose of the Official Plan?	The general intent of the Official Plan is maintained as the requested variance will facilitate efficient use of land via compatible residential intensification within an established residential neighbourhood. The proposed second-storey addition facilitates the continued residential use of the property without altering the building footprint or negatively impacting adjacent properties.

3.0 Conclusion

This letter provides planning justification for the approval of the variances requested for 517 Mayzel Road in Burlington. As assessed above, the Application complies with Section 45(1) of the *Planning Act*, as the variances are minor in nature, appropriate for the development of the Subject Lands, and maintain the general intent and purpose of both the Zoning By-law and the Official Plan.

Please provide notice of all meetings and decisions regarding the variance to the undersigned.

Brief prepared by:

Max Fedchyshak, MCIP, RPP
Senior Planner
NPG Planning Solutions Inc.

PLAN BEING PART 1
MUST BE READ IN CONJUNCTION WITH SURVEY REPORT (PART 2)

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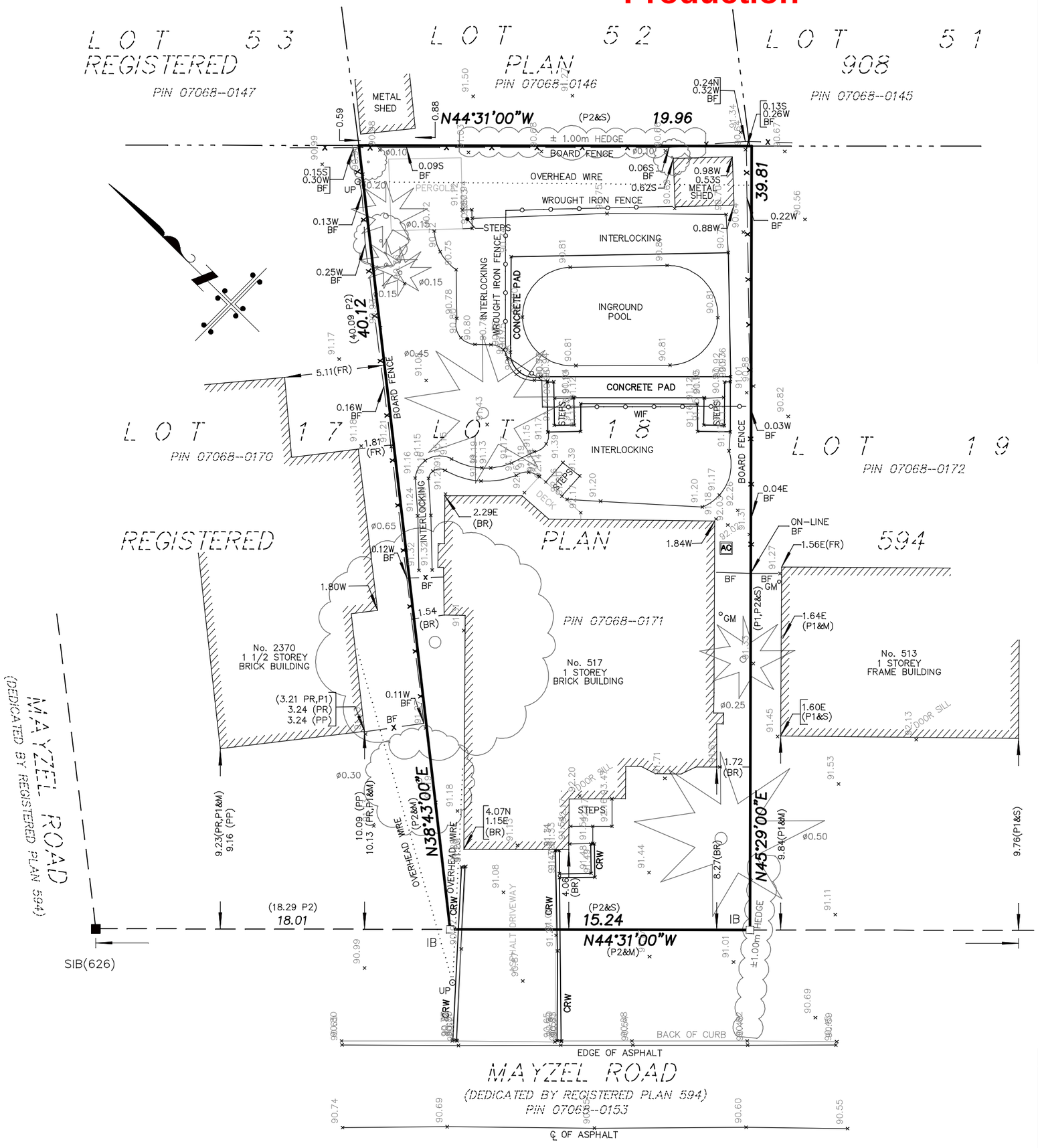

SURVEYOR'S REAL PROPERTY REPORT
PLAN OF SURVEY SHOWING TOPOGRAPHY OF
LOT 18
REGISTERED PLAN 594
IN THE
CITY OF BURLINGTON
REGIONAL MUNICIPALITY OF HALTON

SCALE 1 : 200

0 5 10 20 metres

MacKAY, MacKAY & PETERS LIMITED – ONTARIO LAND SURVEYORS
© 2020

KNOWN AS MUNICIPAL No. 517 MAYZEL ROAD

REPORT SUMMARY (PART 2) (to be read in conjunction with Part 1)

LAND REGISTRY OFFICE TITLE INFORMATION ON SUBJECT PROPERTY INCLUDING BOUNDARIES, EASEMENTS AND RIGHT OF WAYS – SEPTEMBER 23, 2020

REGISTERED EASEMENTS AND/OR RIGHTS–OF–WAY:
NONE

ADDITIONAL REMARKS:
REFER TO PART 1 OF SURVEY FOR THE LOCATION OF BUILDINGS, STRUCTURES, FENCES AND UTILITIES

Note

MacKAY, MacKAY & PETERS LIMITED grants JORDAN HECKMAN ["The Client(s)"], their solicitor and other related parties permission to use "Original Copies" of the Surveyor's Real Property Report in transactions involving "The Client(s)"

"METRIC" DISTANCES SHOWN HEREON ARE IN METRES AND CAN BE CONVERTED TO FEET BY DIVIDING BY 0.3048

Legend

■	DENOTES	A SURVEY MONUMENT FOUND
□	DENOTES	A SURVEY MONUMENT PLANTED
SIB	DENOTES	STANDARD IRON BAR
P1	DENOTES	PLAN BY H.D. SEWELL DATED NOVEMBER 7, 1955
P2	DENOTES	REGISTERED PLAN 594
PIN	DENOTES	PROPERTY IDENTIFICATION NUMBER
(BR)	DENOTES	BRICK
(FR)	DENOTES	FRAME
BF	DENOTES	BOARD FENCE
CRW	DENOTES	CONCRETE RETAINING WALL
UP	DENOTES	UTILITY POLE
AC	DENOTES	AIR CONDITIONER
GM	DENOTES	GAS METER
WIF	DENOTES	WROUGHT IRON FENCE
℄	DENOTES	CENTER LINE
ø	DENOTES	ROUND
PR	DENOTES	PRODUCTION
PP	DENOTES	PERPENDICULAR
	DENOTES	DECIDUOUS TREE SCALED TO CANOPY, TRUNK SIZE SHOWN IN METRES
	DENOTES	CONIFEROUS TREE SCALED TO CANOPY, TRUNK SIZE SHOWN IN METRES

Benchmark Note

CITY OF BURLINGTON BENCHMARK No. 360
ELEVATION = 87.949 METRES CGVD 1928:1978 ADJUSTMENT

BRASS CAP SET IN CONCRETE MONUMENT IN THE BOULEVARD ON THE NORTH SIDE OF NEW STREET OPPOSITE DELAWARE AVENUE, MONUMENT LOCATED 0.8 METRES FROM BACK OF CURB, 2.5 METRES FROM THE FACE OF A HYDRO POLE AND 25 METRES FROM THE SOUTH WEST CORNER OF THE CONCRETE BASE TO THE CENTRAL LIBRARY SIGN

Bearing Reference

BEARINGS ARE ASTRONOMIC AND ARE REFERRED TO THE NORTH EASTERLY LIMIT OF MAYZEL ROAD AS SHOWN ON REGISTERED PLAN 594 HAVING A BEARING OF N44°31'00"W

Surveyor's Certificate

I CERTIFY THAT:
1. THIS SURVEY AND PLAN ARE CORRECT AND IN ACCORDANCE WITH THE SURVEYS ACT, THE SURVEYORS ACT AND THE REGULATIONS MADE UNDER THEM.
2. THE SURVEY WAS COMPLETED ON THE 4th DAY OF JANUARY, 2021.

JANUARY 4, 2021
DATE

ROY C. MAYO
ONTARIO LAND SURVEYOR
FOR MACKAY, MACKAY & PETERS LIMITED

ASSOCIATION OF ONTARIO LAND SURVEYORS
PLAN SUBMISSION FORM
2146300

THIS PLAN IS NOT VALID UNLESS IT IS AN EMBOSSED ORIGINAL COPY ISSUED BY THE SURVEYOR
In accordance with Regulation 1026, Section 29(3)

CAD FILE: E:\(20) Halton\Registered Plans\RP0594\LOT 18\20–235\20–235.dwg

MMP
MacKay, MacKay & Peters Limited
LAND SURVEYORS & MAPPERS
SINCE 1906

3380 South Service Road
Unit 101
Burlington, ON
L7N 3J5
(905) 639-1375

halton@mmplimited.com
mmplimited.com

DRAWN BY:	S.S
PARTY CHIEF:	M.A.
CHECKED BY:	
PROJECT NO.:	20–235

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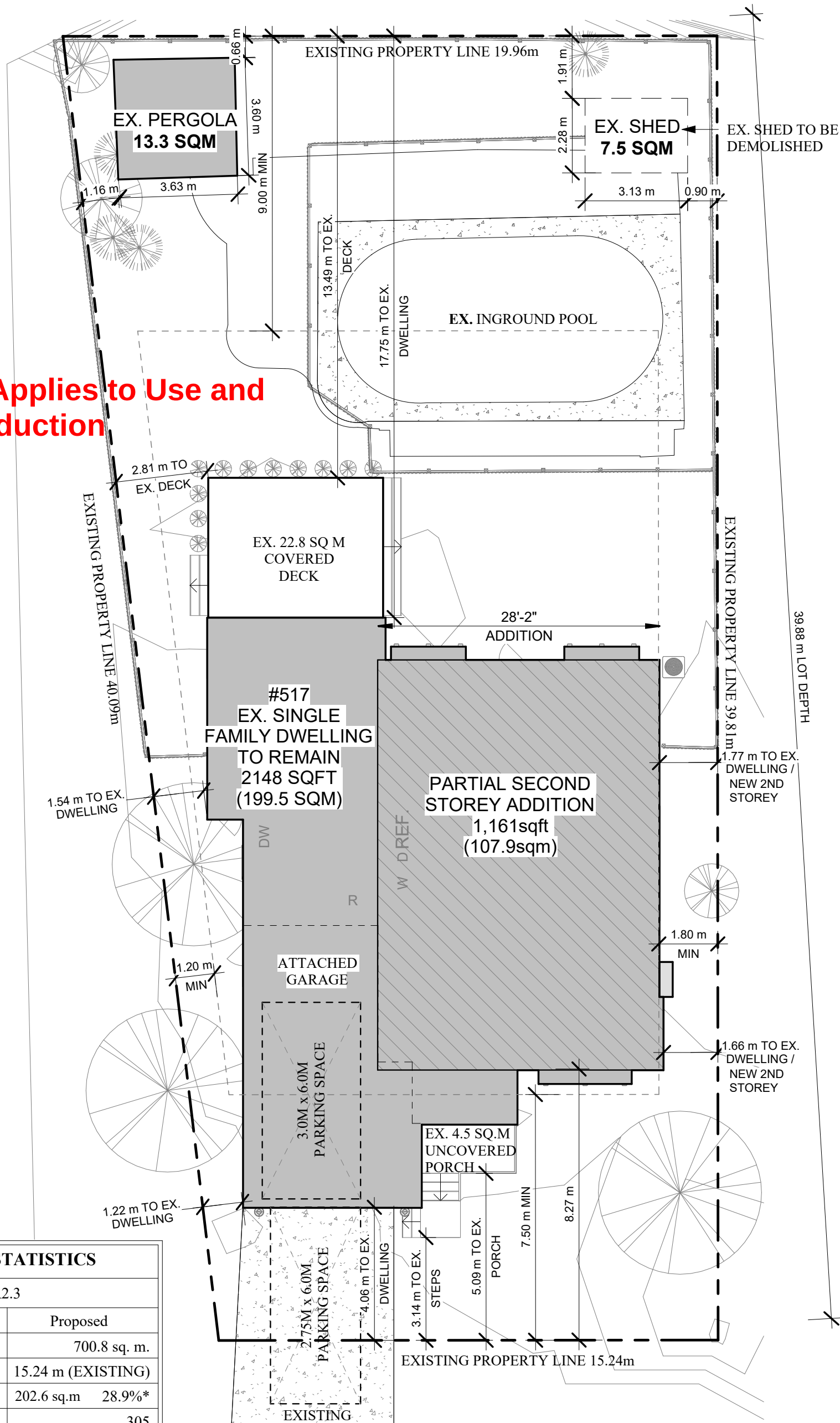

SITE PLAN AND BUILDING STATISTICS		
Zoning	R2.3	
	Existing / Required	Proposed
Lot Area	680 sq. m.	700.8 sq. m.
Lot Frontage	18.0 m	15.24 m (EXISTING)
Lot Coverage	25%*	202.6 sq.m 28.9%*
Total Floor Area	198.2	305
Building Area	198.2	198.2
Front Yard Setback	7.5 m	4.06 m (EXISTING)
Rear Yard Setback	9.0 m	17.75 m
Int. Side Yard Setback	1.2m / 1.8m**	1.22 m/1.66 m
Ext. Side Yard Setback	n/a	n/a
Building Height	10 m	7.89 m
Landscaped Open Space	n/a	n/a

* DESIGNATED AREA FOR A 2 STOREY DWELLING IS REDUCED FROM 35% TO 25% PER 4.2 TABLE 2.4.3
** DESIGNATED LARGER SETBACK FOR 2 STOREY
***DESIGNATED FLOOR AREA REQUIREMENT 0.45:1 ACTUAL: 0.43:1 (305sm/700.8sm)

MAYZEL ROAD

1 SKA SITE PLAN
3/32" = 1'-0"

JORDAN STATION DESIGN CO
info@jordanstationdesignco.ca

RESIDENTIAL RENOVATION

517 Mayzel Road, Burlington, ON L7R 3C4

2025-09-15 11:30:52 AM

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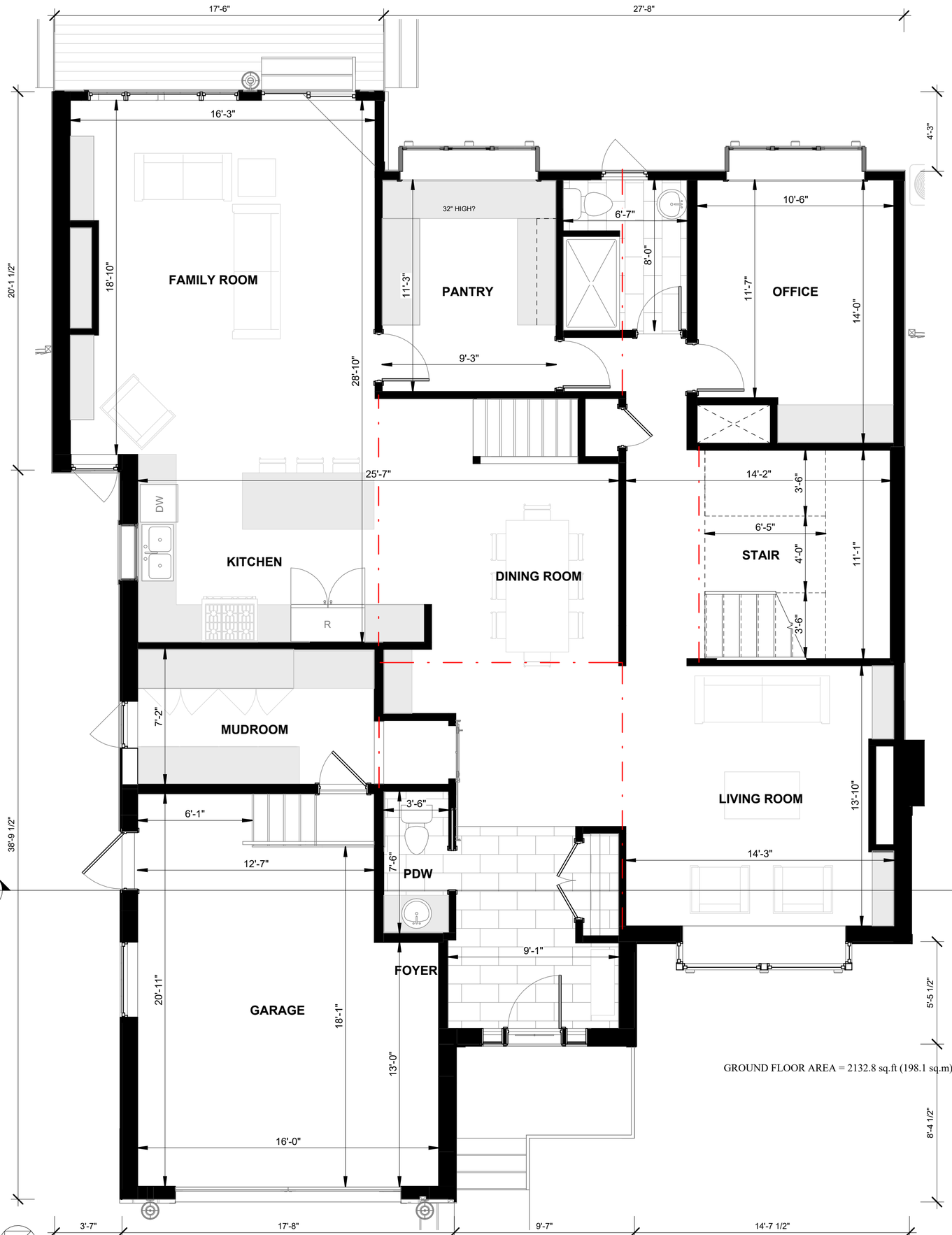
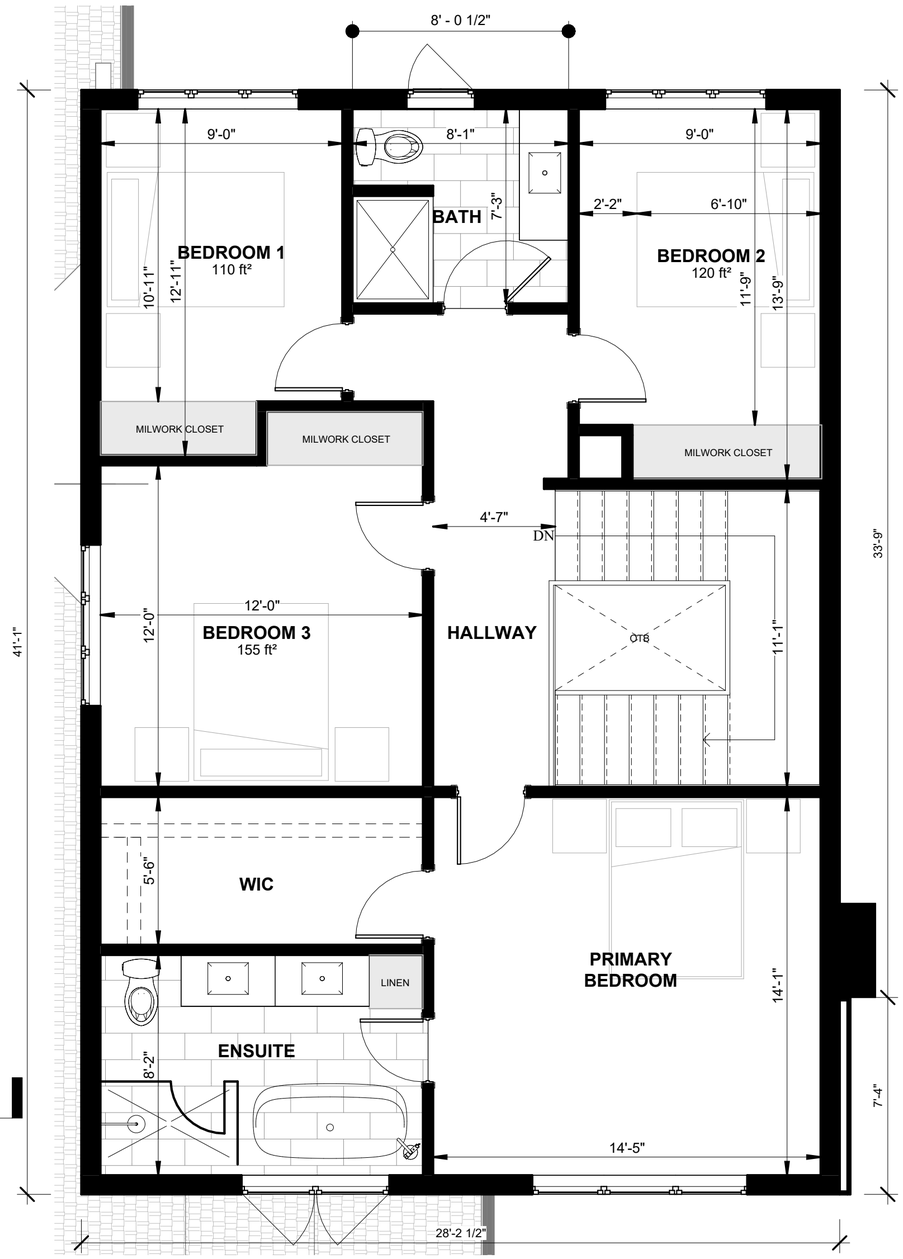


1 PROPOSED GROUND FLOOR PLAN
1/4" = 1'-0"

GROUND FLOOR AREA = 2132.8 sq.ft (198.1 sq.m)



2 NEW 2ND FLOOR
1/4" = 1'-0"

SECOND FLOOR AREA = 1150.7 sq.ft (106.9 sq.m)
GROSS FLOOR AREA = 3283.5 sq.ft (305.4 sq.m)

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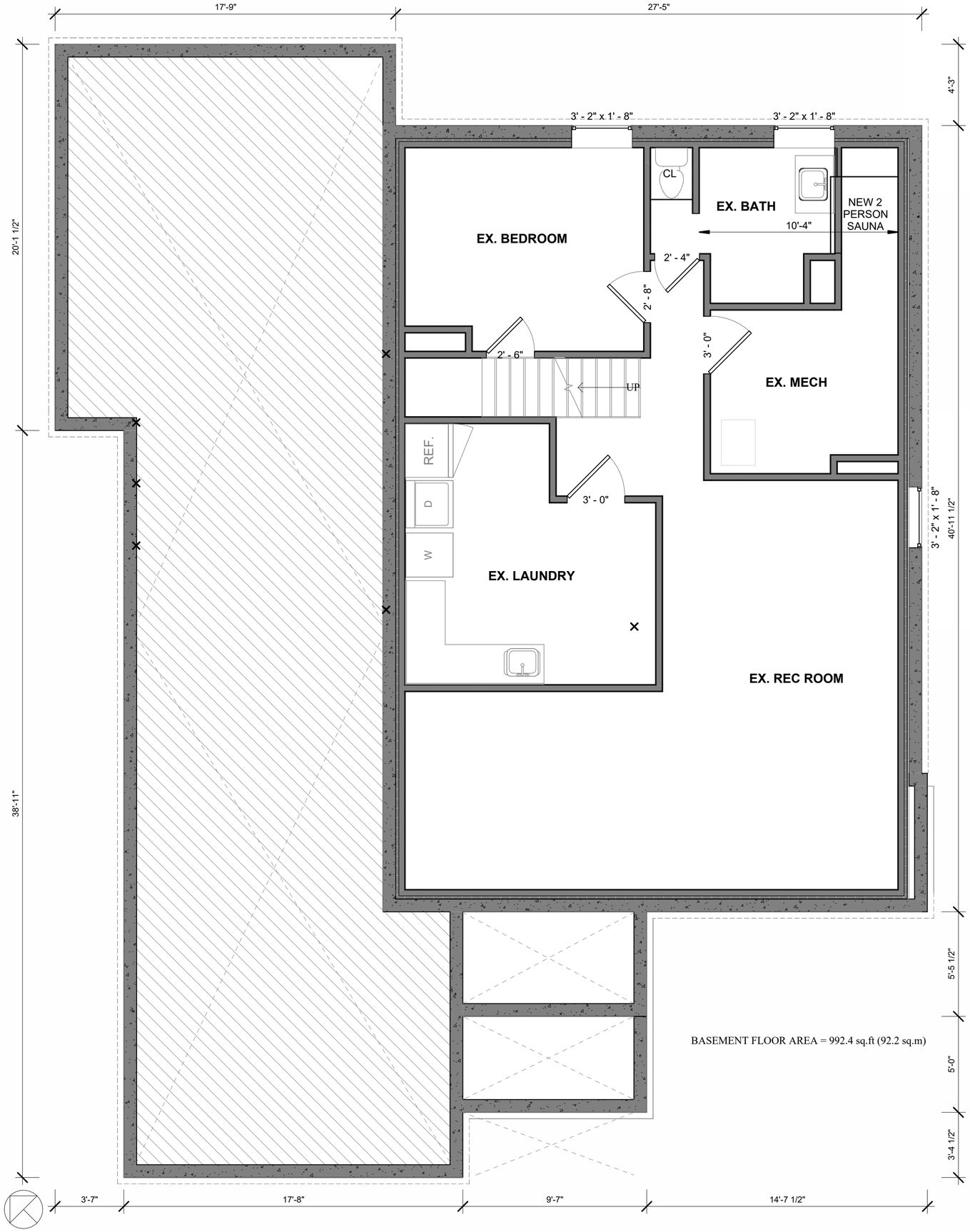

1 PROPOSED BASEMENT PLAN PHASE 3
1/4" = 1'-0"

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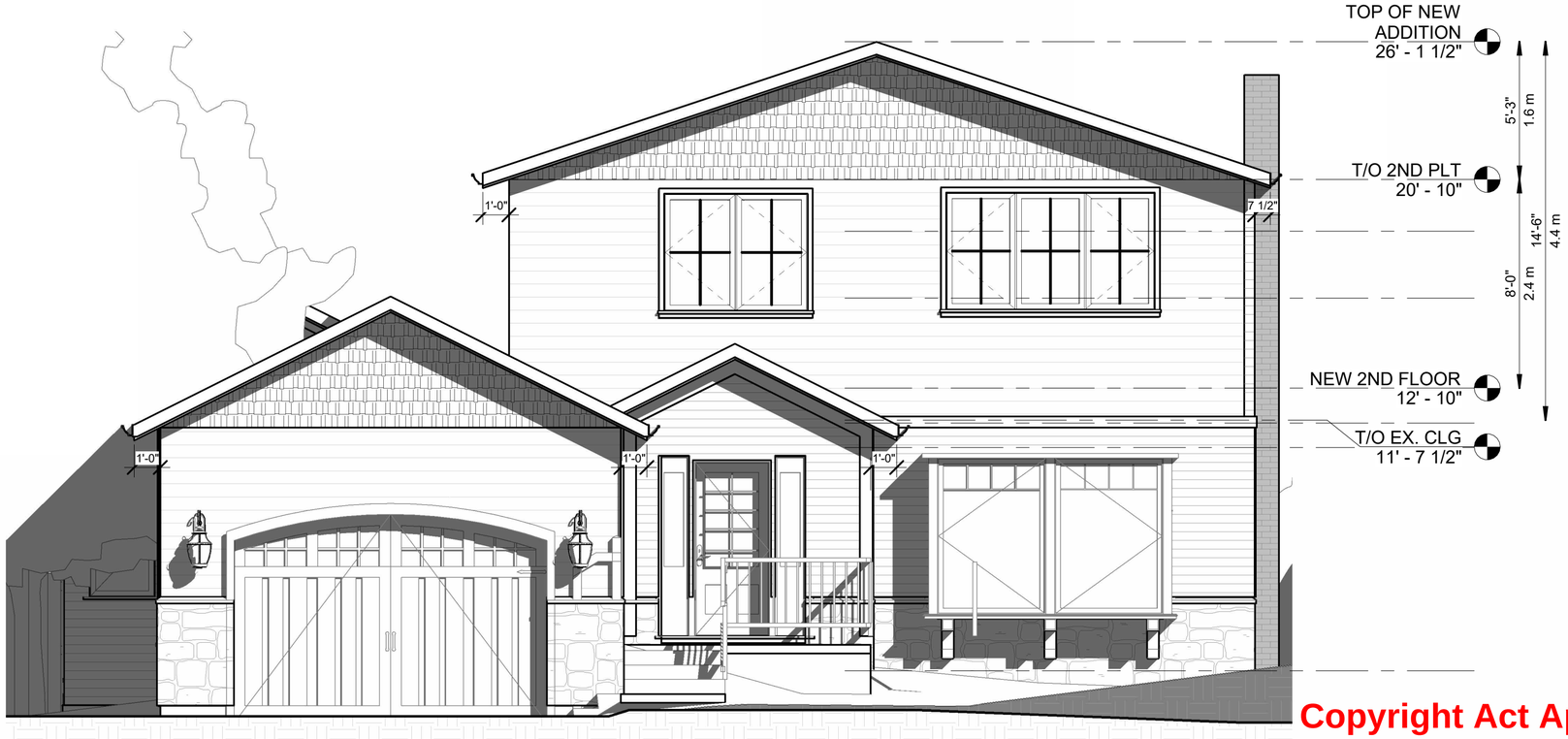

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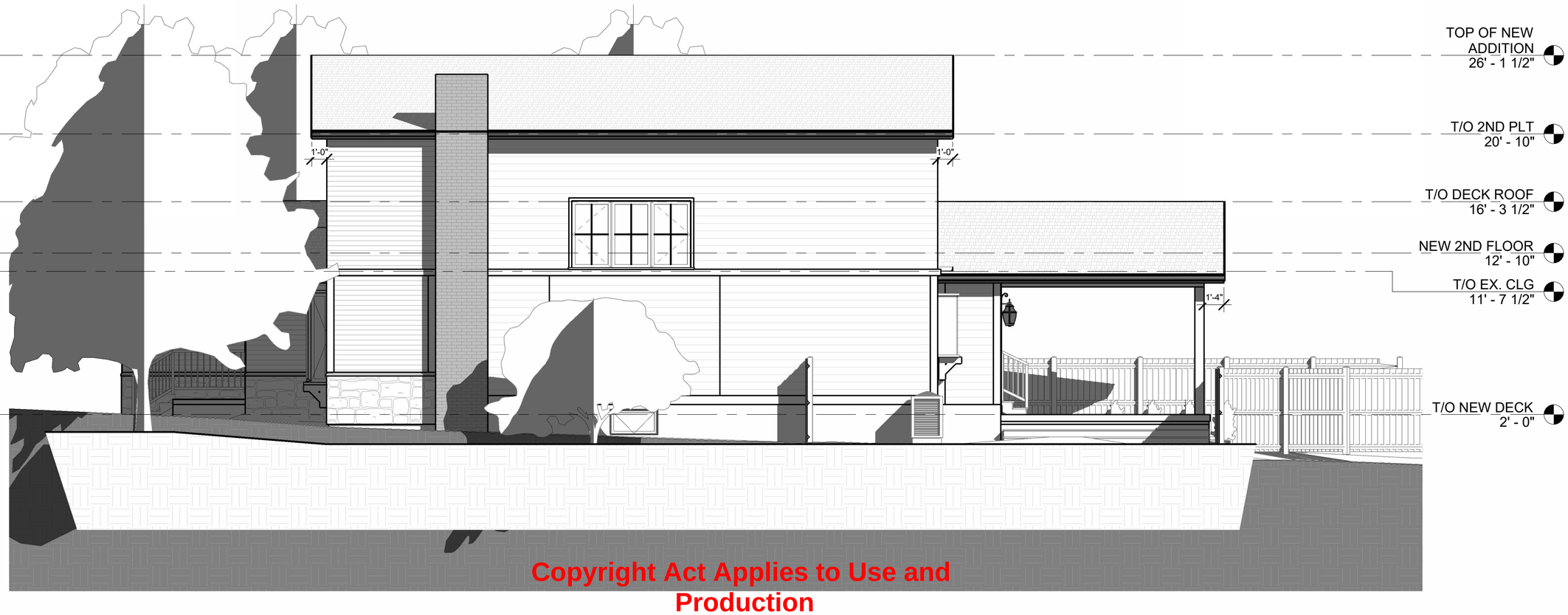

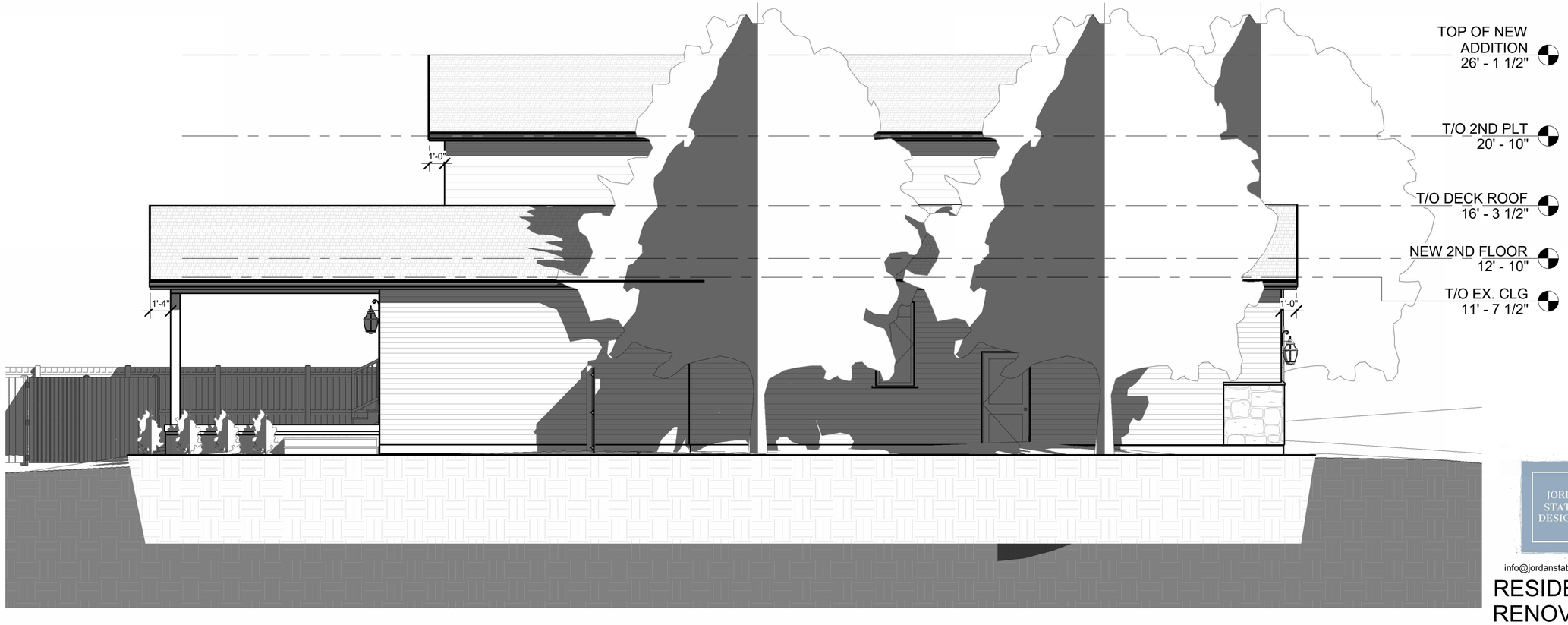

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COMMITTEE OF ADJUSTMENT

Meeting 22 **AGENDA** **DECEMBER 10, 2025**

HEARING NO. 4.2 - 5:30 P.M.

File
540-02-A-072/25

APPLICANT: Trevor McCalpin and Erin Michelle McCalpin

PROPERTY: 2380 Sinclair Circle
PLAN 1525 LOT 216
City of Burlington - Regional Municipality of Halton.

PROPOSAL: The applicant is proposing the construction of a one-storey addition to an existing two-storey detached dwelling with an attached garage.

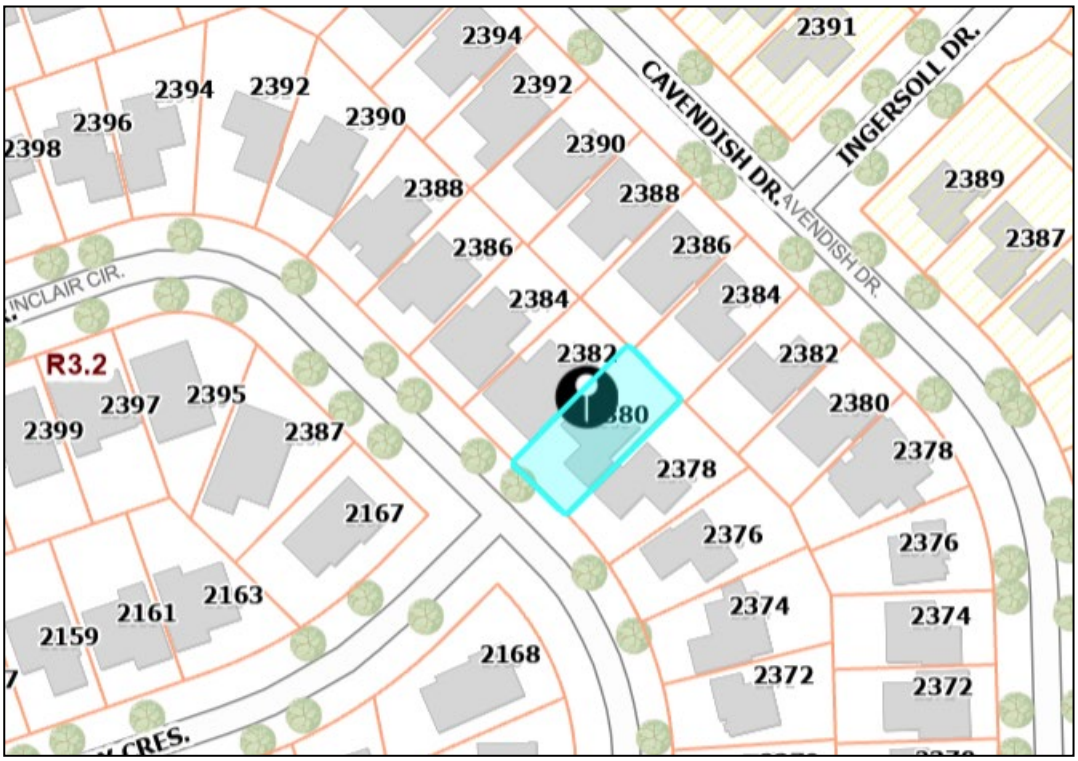
VARIANCES:

1. To permit a rear yard of 6.5 m instead of the minimum required 9 m for a proposed addition to a detached dwelling with attached garage.

2. To permit a dwelling depth of 19.3 m instead of the maximum permitted 18 m measured from building wall closest to front lot line to the building wall closest to the rear lot line for a proposed addition to a two-storey dwelling with attached garage.

COMMITTEE OF ADJUSTMENT
MINOR VARIANCE
STAFF REPORTS

Owner(s): Trevor McCalpin and Erin Michelle McCalpin
Address: 2380 Sinclair Cir. Burlington
File No. **A-072/25**
Ward: 3



Staff Comments

Committee of Adjustment

There are no previous land division or minor variance applications on record for this property.

Date: September 18, 2025 Prepared By: E. Shacklette

COMMITTEE OF ADJUSTMENT
MINOR VARIANCE
STAFF REPORTS

Zoning

1) **Background information:**

The subject property is zoned R3.2, Low Density Residential, under Zoning By-Law 2020, as amended. The R3.2 zone requires, among other things, the following:

4.1 LOT WIDTH, AREA, YARDS

Table 2.4.1

Zone	Lot Width	Lot Area	Front Yard	Rear Yard	Side Yard	Street Side Yard
R3.2	15 m	425 m^2	6 m	**9 m**	**(b)**	4.5 m

Footnotes to Table 2.4.1

(b) With attached garage or carport:
(i) One or one and a half storey side: 1.2 m
(ii) Two or more storey side: 1.8 m

4.6 DWELLING DEPTH

(a) Maximum depth of a dwelling shall be **18m** measured from building wall closest to front lot line to building wall closest to rear lot line.

2) **Proposal:**

The applicant is proposing the construction of a one-storey addition to an existing two-storey detached dwelling with an attached garage.

3) **Variances required:**

1. To permit a rear yard of 6.5 m instead of the minimum required 9 m for a proposed addition to a detached dwelling with attached garage.

2. To permit a dwelling depth of 19.3 m instead of the maximum permitted 18 m measured from building wall closest to front lot line to the building wall closest to the rear lot line for a proposed addition to a two-storey dwelling with attached garage.

4) **Notes and conditions**:

Condition:

1. The applicant shall apply for a Pre-Building Approval Application.

Notes:

1. Variances have been identified based on the plans submitted for zoning review. If additional variances are identified when a Pre-Building Approval Application is made, they will be the responsibility of the applicant to obtain.

2. The zoning review is based on the portion of the site affected by the proposed development only.

3. The variances are being reviewed under Section 45(1) of the *Planning Act*.

Date: October 3, 2025 Prepared By: J. Parker

Site Planning

Site Characteristics	
Lot Frontage (m)	15.24 m
Lot Area (m^2)	513 m^2
Existing Land Uses *(ex. buildings, structures, driveways, fences, etc…)*	Two storey detached-dwelling with attached garage accessed via driveway from Sinclair Circle
Site Grading *(ex. Flat and level, significant grade differences)*	Flat and level
Notable Site Features	n/a
Surrounding Land Uses *(ex. Adjacent building relationships, natural features, notable adjacencies)*	Low-density residential with a mix of one and two-storey dwellings
Nearest Major Intersection	Dundas Street / Guelph Line
Neighbourhood Boundaries* *Based on OP, 1997 *residential neighbourhood* definition	North: Dundas St East: 407 South: Upper Middle Rd West: Cavendish Park

Neighbourhood Characteristics:

- Brant Hills is an established neighbourhood developed in the 1980s
- Predominantly detached dwellings in a variety of styles
- Protruding garages are common
- Tree-lined streets with pedestrian sidewalks on both sides
- Fairly even lotting pattern and setbacks

A site visit was conducted on November 10th, 2025 and existing on-site conditions are summarized in site photos included in Attachment No. 1 (Site Photos).

1) City of Burlington Official Plan:

Do the proposed minor variances from the zoning by-law maintain the general intent and purpose of the Official Plan?

Yes

Regional Official Plan (2022):

The proposal meets the general intent and purpose of the Regional Official Plan, 2022 (ROP, 2022) for the following reasons:

- The subject lands are identified within the Urban Area (Map 1) and within the Built Boundary (Map 1h). The Urban Area (Section 72) policies of the ROP identify that the goal of the Urban Area and the Regional Urban Structure is to manage growth in a manner that fosters complete communities, enhances mobility across Halton, addresses climate change, and improves housing affordability, sustainability and economic prosperity.
- Section 76 of the ROP indicates that the range of permitted uses and the creation of new lots within the Urban Area will be in accordance with Local Official Plans and Zoning By-laws. Given that detached dwellings are permitted by the City's Zoning By-law, staff are of the opinion that the requested variances meet the general intent and purpose of the ROP.

Regional Staff have also reviewed this application and have no objections to the Minor Variance application.

Official Plan, 1997 & 2020

Parts of Burlington Official Plan, 2020 (BOP, 2020) are not in-force due to ongoing Ontario Land Tribunal Appeals, so applications are reviewed against a combination of in-force policies under BOP, 2020 and the older Burlington Official Plan 1997 (BOP, 1997).

The proposal meets the general intent and purpose of the Official Plan for the following reasons:

- The site is designated 'Low-Rise Neighbourhoods I' according to Schedule 'C' (Land Use - Urban Area) of the BOP, 2020, as amended, which permits single-detached dwellings. The proposed sunroom addition is a permitted use.
- Whereas Part 8, Section 8.3.1 a) states that the General Objectives are "to encourage new residential development and residential intensification within the

Residential Neighbourhood Area in accordance with Provincial, Regional and City growth management objectives, while…also ensuring that new development achieves compatibility and integration within existing residential neighbourhoods."
    - The proposed one-storey sunroom addition is a minor form of intensification and is well integrated within the existing low-rise neighbourhood
- Whereas *compatible* is defined as "Development or re-development that is capable of co-existing in harmony with, and that will not have an undue physical (including form) or functional adverse impact on, existing or proposed development in the area or pose an unacceptable risk to environmental and/or human health", which is evaluated in accordance with measurable/objective standards, the planner notes the following:
    - The proposed rear addition has a small footprint of only 22 square metres, which decreases rear yard open space by only 13%. It is also inset 3.67 metres and 2.57 metres from the side walls of the house, limiting impact on neighbours and making it more compatible with the neighbourhood development pattern
    - The proposed flat roof helps mitigate massing impacts
    - The proposed vinyl siding and scale of windows is consistent with the existing dwelling and character of the neighbourhood
    - Generous side yard setbacks allow for undistributed grading and drainage patterns and eliminate potential for any overlook / sun-shadowing
    - Engineering has reviewed the proposal for potential drainage impacts affecting neighbouring properties and does not object.
    - Forestry staff have reviewed the proposal for potential tree impacts and do not object.

2) City of Burlington Zoning By-law 2020:

Do the proposed minor variances from the zoning by-law maintain the general intent and purpose of the Zoning By-law?

<u>Yes – Variance No. 1 (Rear Yard)</u>

The general intent and purpose of the rear yard provision of Burlington Zoning Bylaw 2020 is to provide adequate outdoor amenity space for residents, ensure access to light and air and maintain privacy for both the subject property and adjacent lots. The proposed minor variance is consistent with this intent for the following reasons:

- The existing rear yard is 10.5 metres and exceeds the minimum 9.0 m required
- The requested rear yard reduction to 6.5 metres is not uniform since the proposed addition is only 4.55 metres in width
- The remaining 10.69 metres, or 70 % of the lot width (15.24 metres), continues to maintain the function of outdoor amenity space in the rear yard

- Although openings are proposed at the sides of the addition, no impacts to privacy or overlook are anticipated since the addition is tucked in from the sidewalls of the dwelling and considerably exceeds the minimum side yard requirement of 1.8 metres
- No tree removals or changes to grading and drainage patterns are proposed
- The addition is single-storey and combined with the flat roof design, will not contribute to unwanted massing or sun-shadowing

Yes – Variance No. 2 (Dwelling Depth)

The general intent and purpose of the dwelling depth provision of Burlington Zoning Bylaw 2020 is to ensure that residential buildings do not become excessively long resulting in an uninterrupted building mass that may appear out of scale with surrounding dwellings.
The proposed minor variance is consistent with this intent for the following reasons:

- The zoning bylaw instructs dwelling depth measurement to be taken from the wall closest to the front lot line to the wall closest to the rear lot line
- The proposed dwelling depth is 19.3 metres where a maximum of 18 metres is permitted
- Due to the design of the proposed addition along the central axis of the building, the actual dwelling depth is non-uniform and the length of the walls directly abutting the adjacent properties remain unchanged
- As previously stated, the proposed one-storey sunroom addition is inset 3.67 metres and 2.57 metres from the side walls of the house ensuring adequate spatial separation and compatibility between dwellings on adjacent lots
- Existing variation in height and building materials combined with wall articulations on the side of the attached garage break up the massing and further reduce the perception of overly long walls

3) Desirability:

Is the proposed minor variance from the Zoning By-law desirable for the appropriate development or use of the land, building or structure?

Yes

The proposed minor variances are desirable for the appropriate development and use of the building for the following reasons:

- Enhances the usability of the existing dwelling and provide safe access into the rear yard via new stair and landing, at the side of the proposed addition
- Eliminates disruption to grading and drainage patterns by incorporating a helical pile design (vs. full foundation)

- Preserves the existing front yard and streetscape without modifying the functional elements such as landscaped open space, driveway and amenity space
- Supports an appropriate scale and massing with minimal impacts to adjacent properties
- Existing board fencing, trees and foliage mitigate any privacy concerns
- Development Engineering and Urban Forestry and Landscaping staff have reviewed the application and have indicated no objection to the requested variances.

4) Minor in Nature:

Is the proposed minor variance from the Zoning By-law considered minor in nature?

Yes

The proposed minor variances are minor in nature for the following reasons:

- The proposed sunroom addition is inset from the sidewalls and does not extend across the full width of the dwelling. Rather, it is only 4.55 metres wide and positioned along the central axis of the existing building
- Maintains substantial setbacks to the side yards and allows for continuity of grading and drainage patterns
- The existing rear yard is approximately 10.5 metres for most of the lot width and exceeds the minimum required 9 metres. This configuration remains except for the proposed addition which accounts for only 30% of the lot width, measured at 15.24 metres along the rear lot line
- The additional dwelling depth of 1.3 metres is both quantitatively and qualitatively minor, particularly when considering it is single-storey and with a flat roof
- The proposal also maintains compatibility and orderly development by complying with lot coverage requirements

Cumulative Effects of Multiple Variances and Other Planning Matters:

The cumulative effect of the variances is minor and staff are supportive for the following reasons:

- Due to the varied building footprint with varying side and rear yard setbacks, the proposed variances do not result in overdevelopment of the site, nor do they compromise the intent of the Zoning By-law or Official Plan
- Collectively, the variances facilitate a modest sunroom addition (22.4m2) which preserves the existing tree canopy and usability of the rear yard open space
- The single-storey sunroom addition is appropriately scaled and situated ensuring that any visual and massing impacts are mitigated

Recommendation:

Staff has reviewed the proposed variances in accordance with the Planning Act, the policies of the Official Plan and the requirements of the Zoning By-law and have no objection.

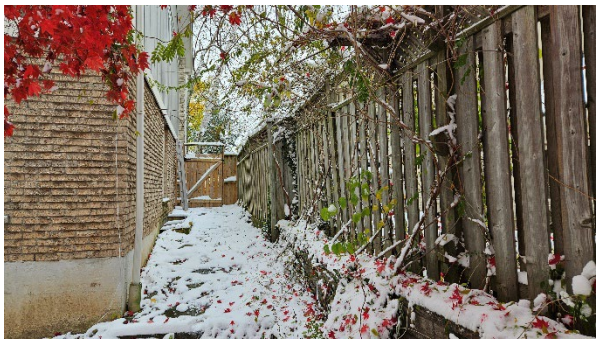
Date: November 16, 2025 Prepared By: Magda Rusin-Hynek

Report Schedules & Attachments:

Attachment No. 1 (Site Photos)

Front view of the subject property

Existing side yard abutting 2382 Sinclair Circle (looking toward the rear yard)

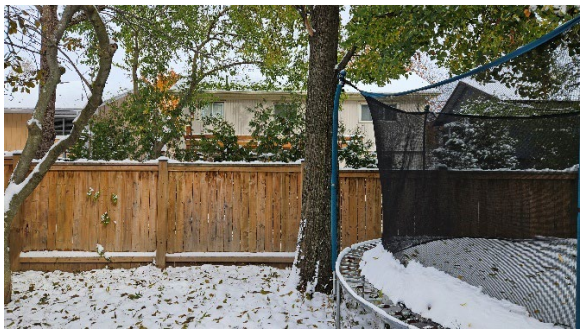


Existing side yard abutting 2382 Sinclair Circle (looking towards the front)

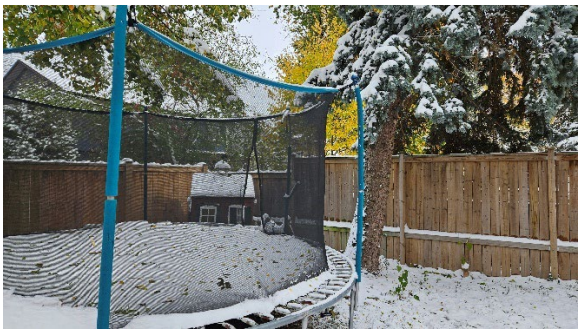
Existing side yard abutting 2378 Sinclair Circle (looking towards the front)

View of the dwelling from the rear yard

View from approximate edge of addition toward rear at 2386 Cavendish Dr



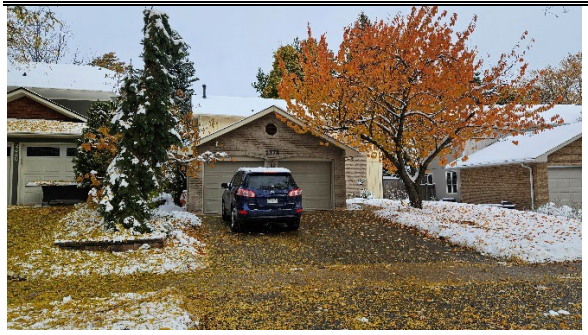
View from approximate edge of addition toward rear at 2384 Cavendish Dr



View from approximate edge of addition toward rear at 2382 Cavendish Dr

View from approximate edge of addition toward abutting 2382 Sinclair Circle

View from approximate edge of addition toward abutting 2378 Sinclair Circle



Nearby dwelling at 2378 Sinclair Circle

Nearby dwellings at 2376, 2374 and 2372 Sinclair Circle

Nearby dwelling at 2167 Sinclair Circle

Nearby dwelling at 2168 Sinclair Circle

Development Engineering

Development Engineering has reviewed the proposed minor variances and has no objections.

Date: October 14, 2025 Prepared By: D. Savelli

Forestry

Forestry has no objection to the proposed minor variance(s) and provides the following advisory note(s) to the applicant:

1. A tree permit will be required for any and all work around regulated trees in accordance with the City's Tree By-laws.

2. Revisions to the report and/or plans may be required through the tree permit process.

Date: October 22, 2025 Prepared By: R. Shaw-Lukavsky

COMMITTEE OF ADJUSTMENT
MINOR VARIANCE
STAFF REPORTS

Building

1. A Building Permit is required for all building construction;

2. Permit application drawings are to be prepared by a qualified designer as per Div. C., Section 3.2 - Qualifications of Designers and OBC 2024.

Date: Nov. 4, 2025 Prepared By: A. Kuzmichuk

Transportation Planning

Deemed Road Width Analysis
Sinclair Circle is under the authority of the City of Burlington and the deemed right-of-way width is 20 metres. The right of-way adjacent to the subject site is approximately 20 metres therefore no additional lands are required.

Date: September 26, 2025 Prepared By: E. Chen

Finance

Notice regarding Development Charges:
The owner, its successors and assigns, are hereby notified that City Development Charges may be payable in accordance with the applicable By-law 72-2004, as may be amended, upon issuance of a building permit, at the rate in effect on the date issued. For further information, the owner is advised to contact the City Building Department (905) 335-7731.

Tax
All property taxes including penalty and interest must be paid. This includes all outstanding balances plus current year taxes that have been billed but are not yet due. Local improvements must be commuted.

Date: October 10, 2025 Prepared By: L. Bray

Halton Region

Regional Staff have reviewed the Minor Variance application proposing the construction of a one-storey addition to an existing two-storey detached dwelling with an attached garage. Variances are requested to the minimum required rear yard and the maximum permitted dwelling depth.

- Due to Provincial legislation, as of July 1, 2024, the Halton Region's role in land use planning and development matters has changed. The Region is no longer responsible for the Regional Official Plan – as this has become the responsibility of Halton's four local municipalities. As a result of this change, a Memorandum

of Understanding (MOU) between the Halton municipalities and Conservation Authorities has been signed that identifies the local municipality as the primary authority on matters of land use planning and development. The MOU also defines the continued scope of interests for the Region and the Conservation Authorities in these matters.

- Regional Staff have no objections to the Minor Variance application.

Date: November 4, 2025 Prepared By: Navjot Kaur

Burlington Hydro

Please see Burlington Hydro comments at the end of this report.

Date: October 17, 2025 Prepared By: Zakariya Al-Doori

Burlington**hydro** inc.

October 15, 2025

Applicant: Trevor Mccalpin, Erin Michelle Mccalpin
Subject: Minor Variance.
File NO: 540-02-A-072/25.
Location: 2380 Sinclair Cir, Burlington, ON.

In response to your correspondence(s), a member of our Engineering Department has reviewed the information and has the following comments.

We have **no objections** to the proposed construction of a sunroom at the rear of the property.

Please note the following stipulations:

- ☑ Customers and their agents planning and designing for electricity service must refer to all applicable Provincial and Canadian electrical codes, all applicable federal, provincial, municipal laws, regulations, codes, and by-laws to ensure compliance.
- ☑ All work on the BHI distribution system shall be conducted in accordance with the latest edition of the Ontario Occupational Health and Safety Act (OSHA), the Regulations for Construction Projects, the Regulations for Industrial Establishments and the Electrical Utility safety Rules published by the Infrastructure Health and Safety Association (IHSA).
- ☑ **Service is available under BHI's latest Standard Service Conditions (http://www.burlingtonhydro.com).**
- ☑ Relocation, modification, or removal of existing hydro facilities, if required, shall be at the customer's expense. BHI will refer to the latest Standards and Regulations if possible issues with the clearances arise between existing BHI facilities and existing/proposed building structures.
- ☑ BHI easement (if any) is to remain clear of heavy vehicle traffic, and the customer is responsible for keeping the easement lands free and clear of any trees, fences, buildings, structures, or obstructions unless any of the foregoing is approved in writing by Burlington Hydro Inc. Further, the Customer shall remove the same at the request of Burlington Hydro Inc.
- ☑ The customer is to ensure that Burlington Hydro Inc. (BHI) has access to the hydro facilities.
- ☑ The customer is to acquire any easements for BHI if required.
- ☑ The project must meet City of Burlington Standards.
- ☑ Machine excavation within one meter of the underground plant is not permitted.

1340 Brant street, Burlington, ON · L7R 3Z7 **burlingtonhydro.com** (905)·332·1851

GridSmartCity renewing energy partner since **2009**

Burlington**hydro** inc.

- ☑ Do not excavate within two meters of BHI's transformer, poles and anchors.
- ☑ **Please arrange for underground hydro cable locate(s), prior to beginning construction, by contacting Ontario One Call @ (800) 400-2255.**
- ☑ Please refer to the latest edition of the Occupational Health and Safety Act ("OHSA") and Regulations for Construction Projects when work is planned to be performed in proximity to the hydro distribution system.
- ☑ Arrange for the disconnect and isolation of the power supply if a person or equipment is to encroach on the minimum distance permitted under the OHSA and OESC.
- ☑ Please arrange for a site meeting with a BHI representative by sending an email to Eng. Desk Engineering@burlingtonhydro.com, prior to beginning any construction/demolition near existing overhead or underground hydro facilities, to get approved BHI service layout/consent and avoid any possible service complications or safety issues.

Regards,
Zakariya Al-Doori
Engineering Services Technician

Oct. 16/2025

Cc: Rosso Parra, P. Eng
Engineering Manager, Customer Connections & Key Accounts

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Guideline for

Working near Overhead Electrical Powerlines & Equipment on Construction Projects

Working near overhead powerlines can be dangerous—even deadly—if proper safety precautions are not taken. Being aware of the hazards and keeping a safe distance from electrical powerlines and equipment are the best means of protection.

Powerline Technicians need specialized training and equipment to protect themselves when working on or near powerlines. Construction workers may also have to work near powerlines. However, they may not know the hazards of working around powerlines or have the knowledge, training, and experience to protect themselves.

This guideline can help construction workers protect themselves and their co-workers from electrical hazards when working near powerlines.

STEP 1 Identify Electrical Hazards

The first step is to recognize where electrical hazards exist and identify the precautions that need to be taken to avoid contact. Ideally, this should be done at the planning stage before work begins. Look around the work area to see if powerlines are close by. Then, consider whether the type of work being done or the type of equipment being used may come close enough to powerlines to present an electrical hazard.

Table 1 shows the minimum safe distances to powerlines based on their voltage. The distance for 750 volts and above is taken from the Construction Projects regulation (O. Reg. 213/91, s. 188(2)) under the OHSA. A distance of 1 metre (3.3 ft) is recommended for less than 750 volts.

Table 1: Minimum Distances to Powerlines

Voltage Rating	Minimum Distance
Less than 750 volts	1 metre (3.3 feet)*
750 to 150,000 volts	3 metres (10 feet)†
More than 150,000 volts, but no more than 250,000 volts	4.5 metres (15 feet)†
More than 250,000 volts	6 metres (20 feet)†

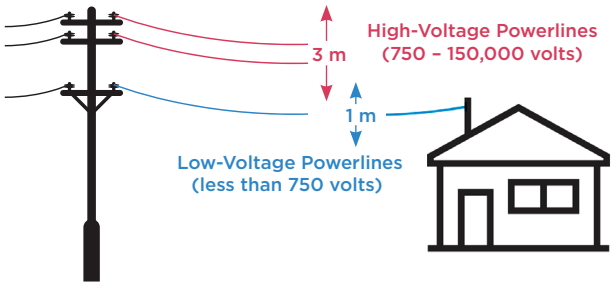
**Recommendation from the Working Group*

†Source: O. Reg. 213/91, s. 188 (2)

Employers must take every reasonable precaution to prevent hazards to workers from energized electrical equipment, installations, and conductors (O. Reg. 213/91, s. 183). This means keeping the minimum distance as required by Table 1.

Powerlines or electrical equipment rated at less than 750 volts are considered **low voltage**, while those rated at 750 volts or above are considered **high voltage**. Workers must keep a safe distance of at least 1 metre (3.3 feet) from low-voltage powerlines to be protected from exposure to electrical shock or arc flash burn. For high-voltage powerlines, the distance is 3 metres (10 feet) or more, depending on the voltage (Figure 1).

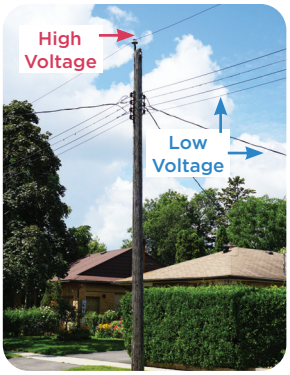
Figure 1



Maintain a safe distance from powerlines in all directions

High-voltage powerlines are usually located higher on a pole than low-voltage powerlines (Figure 2). However, some high-voltage lines can look like low-voltage lines and can be located below low-voltage lines on a pole.

Figure 2



Misidentifying the voltage of powerlines can cause workers to go beyond the minimum safe distance and lead to an electrical incident. In addition, workers have been known to focus on maintaining their distance from low-voltage lines, only to make contact with high-voltage lines.

If you are uncertain of the voltage, get help from an electrically qualified person or contact the owner.

Respect Electricity!

Every wire that brings ELECTRICITY to a business, home, or area CAN KILL YOU. No matter the voltage, keep a safe distance from powerlines to avoid electrical contact, shock, and burns.

The type of equipment being used when working near overhead powerlines may indicate that precautions need to be taken to prevent electrical injury. This includes tall or long-reach equipment such as:

- Cement trucks, concrete pumps, hydro-vac trucks (Figure 3)
- Excavators, backhoes, front-end loaders
- Cranes, drill rigs, boom trucks, bucket trucks
- Ladders, scaffolds
- Dump trucks, waste material/recycling trucks, material delivery trucks
- Swing stages, scissor lifts, forklifts, zoom booms
- Snow-removal equipment, paving machines, farm machinery (including augers).

Figure 3

In addition to the type of equipment being used, the type of work being done near overhead powerlines may indicate that electrical hazards need to be identified and assessed. This type of work can include:

- Siding and painting (Figure 4)
- Roofing and eavestroughing
- Framing
- Stucco and brick work
- Window cleaning and balcony work
- Tree pruning, tree removal, and landscaping.

Figure 4

STEP 2 Complete a Hazard Assessment

Electrical incidents can result in serious injuries or fatalities caused by:

- direct contact from touching energized equipment
- contact with an electrical arc
- exposure to an arc flash.

Completing a **Job Safety Analysis** (JSA) or a **Hazard Risk Assessment** (HRA) is a good way to ensure that hazards have been identified and safe work procedures have been put in place to prevent electrical incidents.

Keep the following points in mind when doing a hazard assessment on overhead powerlines:

- Electrical hazards can sometimes be hard to identify. Electricity is invisible in its usual state and any wire that contains electricity looks exactly the same as a wire without electricity.
- Electricity can jump through the air and into objects and people nearby. Direct contact is not required to make it an electrical hazard.
- Wind and weather can cause wires to swing and heat, ice, or changing electrical demand can cause them to sag. Higher-voltage wires have been known to sag as much as three metres in one hour from heating up during high-demand conditions.
- Long building materials and equipment such as ladders, boards, poles, or scaffold members can be extended or repositioned to the point where they may contact or come near enough to electrical equipment to cause an electrical arc.
- A slip or a fall can move a worker or their tools, equipment, and materials closer than the recommended distance to an electrical hazard.
- Electricity is not only carried by the wires on an electric pole but also by other electrical equipment such as transformers, which can be shaped like a box (Figure 5) or a steel barrel (Figure 6).

Figure 5

Figure 6

A JSA or HRA can also help when estimating the costs associated with a project. Early detection of the hazards and pre-planning control options to prevent these hazards can affect the quote because health and safety concerns must always be taken into consideration. Before work begins, consideration should be given to questions such as:

- How will materials be brought in or removed from the site?
- How will workers access the work location?
- Will wires have to be moved or disconnected for work to be completed safely?
- Are workers knowledgeable/qualified or will assistance be needed to determine voltage/proper clearance distances, etc.?

Don't Guess. Do it Right!

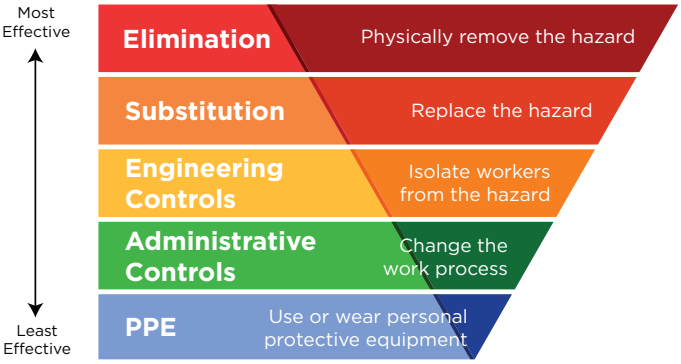
Always contact the owner of the overhead powerline to verify the correct voltage.

STEP 3 Eliminate or Control the Hazards

Once the electrical hazards have been identified and the workers have been made aware of them, the hazards need to be eliminated. If this is not possible, the hazards should be controlled. This means using barriers or other controls to reduce the possibility of a hazard or lessen its severity as much as possible.

Before putting controls in place to address health and safety hazards, consideration should also be given to their effectiveness. Figure 7 below shows the **hierarchy of controls**, which ranks control options from most effective to least effective.

Figure 7



Hierarchy of Controls

Eliminating the hazards of working near overhead powerlines is most effective because the hazard no longer exists. This can be done by:

- Relocating the work to another location that is farther away from overhead powerlines.
- Having a **qualified** person (e.g., a Powerline Technician) who has been **authorized** by the owner of the powerline shut the electricity off, verify that it is off, and ensure that all stored energy is removed.

If the hazard cannot be eliminated, **engineering controls** may be put in place to isolate the worker from the hazard. This can include asking the owner of the powerline to raise or move them, making it more difficult to go beyond the minimum safe work distance.

The utility owner may provide additional assistance, such as installing powerline coverups to protect workers from accidental contact with energized components (Figure 8).

Figure 8

If engineering controls are not practicable, the next best option is putting **administrative controls** in place to change the work process. This may include the following:

- Taking additional precautions to ensure workers keep a safe distance away from powerlines (i.e., the minimum distance shown in Table 1 and Figure 1).
- Designating a signaller (Figure 9) to make sure that workers, loads, and equipment do not go beyond the minimum safe distance from powerlines. (Refer to the requirements of a signaller in O. Reg. 213/91, s. 188(8)).

Figure 9

- Ensuring that all workers are aware of the location of overhead electrical hazards, know how to protect themselves, and are familiar with the safe work procedures.
- Installing warning signs (Figure 10) or flags to remind workers about the dangers of working near powerlines.
- Ensuring that the emergency response plan deals with treating electrical injuries and that proper first aid supplies are available.

Figure 10

Although using or wearing **PPE** (personal protective equipment) is not the most effective method of injury prevention according to the Hierarchy of Controls (Figure 7), it can still minimize exposure to a hazard or reduce its severity.

Some PPE is required by law. Depending on the possible hazards workers may encounter, this can include:

- A Class E hard hat
- Grade 1 work boots with dielectric protection (i.e., an Omega tag)
- CSA-approved safety glasses with side shields
- A high-visibility safety vest
- Protective work gloves
- Hearing protection devices.

As best practice, always consider electricity to be on and electrical wires to be live unless a qualified electrical worker who is authorized by the owner of the electrical equipment confirms that it is off.

STEP 4 Ensure that All Legal Requirements Are Met

Under Ontario's *Occupational Health and Safety Act* (OHSA) and its associated regulations, employers and supervisors have a legal duty to identify hazards (including electrical hazards), inform workers about these hazards, and protect workers from them.

Employers and supervisors must ensure that their legal duties under the OHSA and the requirements of the Construction Projects regulation (213/91) are met

Duties of Employers and Supervisors under the OHSA

Section 25 of the OHSA requires the **employer** to:

- Acquaint a worker or a person in authority with any hazard in the work
- Provide information, instruction, and supervision to workers to protect their health or safety
- Ensure the equipment, materials, and protective devices prescribed by law are provided, are used as prescribed, and are maintained in good condition
- Ensure the measures and procedures prescribed by law are carried out
- Take every reasonable precaution to protect workers.

Section 27 requires the **supervisor** to:

- Advise workers if they are aware of potential or actual danger to their health or safety
- Where prescribed by the health and safety legislation, provide workers with written instructions on protective measures and procedures
- Ensure that workers follow protective measures and procedures and use the required protective devices.

Regulatory Requirements for Employers and Supervisors

Additional requirements are found in the Construction Projects regulation (O. Reg. 213/91):

- The **supervisor** will inspect all machinery and equipment, including electrical installations, at least once a week (s. 14).
- The **employer** will ensure that workers wear and use protective clothing, equipment, and devices, and be trained in their care and use (s. 21). This includes protective headwear (s. 22), protective footwear (s. 23), and eye protection when there is a risk of eye injury to the worker (s. 24).
- Do not store material or equipment moved by a crane or hoisting device near an energized overhead electrical conductor (s. 37 (2)).
- Post a sign where there is a potential hazard from an energized overhead electrical conductor at more than 750 volts (s. 44 (3)).
- The **employer** will ensure that the site-specific work plan for a suspended work platform system or boatswain's chair includes identification of electrical hazards (s. 141.5).
- The **constructor** and **employer** will take every reasonable precaution to prevent hazards from energized electrical equipment (s. 183).
- The **supervisor** will authorize any person who is permitted to enter a room or enclosure containing exposed energized electrical parts (s. 184 (1)).
- Do not store tools, equipment, or materials capable of conducting electricity so close to energized electrical equipment that they can make electrical contact (s. 187).
- Do not bring any object closer to an energized overhead electrical conductor than the minimum distances in Table 1 (s. 188 (2)).
- Designate a competent worker as a signaller to warn the equipment operator if part of the equipment or its load may encroach on the minimum distance to powerlines (s. 188 (8)).

***NOTE**: This is not a complete list of relevant legislation. Always consult a current version of the OHSA and its associated regulations.*

Developed by a collaborative working group from IHSA's Labour-Management Network in partnership with IHSA

Labour Management Network

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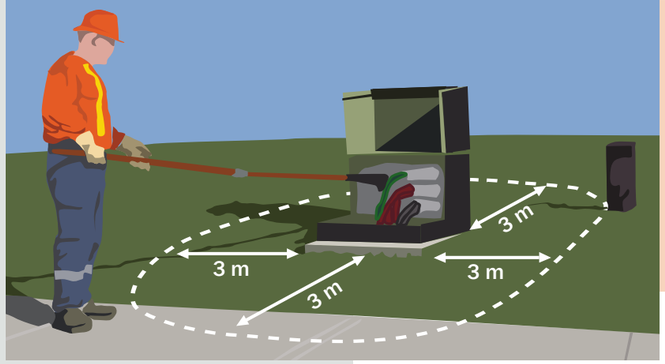
Figure 2: Pad Mount Clearance Concerns

Clearances to Underground Electrical Infrastructure

Clearances around underground (UG) electrical infrastructure as per Burlington Hydro's specifications and standards must be met by planners, architects, developers / contractors, municipalities, and property owners.

Electrical workers must be able to safely access equipment to operate, maintain or replace it, see **Figure 1**. The property owner will be responsible for any costs related to removing an obstruction, or if power restoration is delayed due to the obstruction.

Figure 1: Clearances to Pad Mounted Equipment



The following clearances around pad mounted electrical equipment mitigate all risks associated with working space and hazards related to the ground grid. This area must remain free of any structures, obstructions, or plantings:

3 m (10 ft) on all sides

Figure 3: Pad Mount Clearance Concerns

Other UG Utilities

Burlington Hydro Inc. and all other UG utility stakeholder infrastructure including communications, water, wastewater, and gas facilities must meet the clearances to UG electrical infrastructure as per CSA C22.3 No.7 Underground Systems.

In order to meet these requirements, coordination of all facilities within proximity of other UG equipment is essential.

Contact: Engineering Clerk
Email: Permits@BurlingtonHydro.com
www.BurlingtonHydro.com

Burlington hydro inc.

Municipalities & Property Owners

Above ground obstructions or hiding the electrical equipment is not permitted, see **Figures 2 and 3**. Municipalities and property owners must be aware of the clearances for the safety of its assets in proximity to UG electrical infrastructure, including but not limited to:

Municipalities: bus shelters, traffic signs

Property Owners: decks or patio blocks, retaining walls, pool equipment, hot tubs, storage sheds, metallic objects like mail-boxes, flag posts, outdoor patio seating (temporary and permanent)

Locates

It is important to know where UG electrical infrastructure and other utilities are located before work begins, regardless of the project size. Examples include but are not limited to:

Contractors: excavating for an addition, new building, sidewalks, or repairing buried infrastructure

Property Owners: planting a tree, landscaping, installing a fence, deck, driveway, or repairing buried infrastructure (pools, heated driveways, irrigation and sprinkler systems)

To protect the project from unnecessary damage, injuries, and financial penalties, contractors and property owners involved in the above activities must contact Ontario One Call at:

Request a locate
Ontario One Call or 1-800-400-2255
www.ontarioonecall.ca

The various utilities will mark the location of buried UG infrastructure so the dig can be done safely.

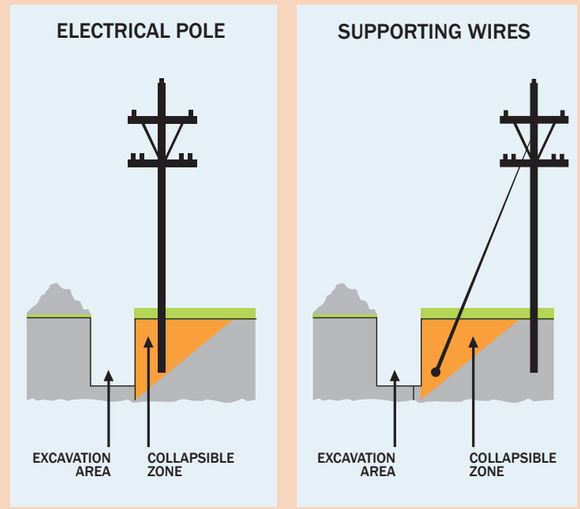


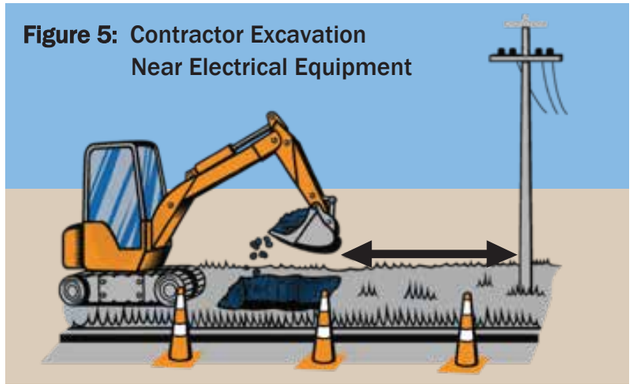
Figure 4: Excavation Near Electrical Equipment

Excavating & Digging

Extreme caution should be used when digging near the marked UG infrastructure or electrical pole (including guy wires, ground grid) see **Figures 4 and 5**. Contact with a sharp shovel or excavation equipment could easily damage electrical infrastructure and could result in harmful electrical current.

See ESA's "Guideline for Excavating in the Proximity of UG Distribution Lines" www.esasafe.com and contact Burlington Hydro Inc. for guidance before excavation in the proximity of electrical infrastructure.

Figure 5: Contractor Excavation Near Electrical Equipment



Clearances to Overhead Electrical Infrastructure

Communication between all parties involved in the design, construction, renovation, for the use and maintenance of buildings near overhead (OH) electrical infrastructure is key. Planners, architects, developers / contractors, and property owners must be informed and work together to ensure all laws, regulations and local requirements are met for the safety of workers and occupants.

New Buildings or Additions to Buildings

It is essential that Burlington Hydro Inc. is notified on proposed projects early in the design phase to review and provide feedback. Site plan applications should be provided, including the drawings, to capture any conflicts before any permit is issued by the municipality. Ideally, Burlington Hydro Ince. will be asked to provide pre-design input.

For any new building or additions to existing buildings, there are a number of codes and regulations that govern the proximity to overhead electrical infrastructure that must be adhered to by all stakeholders. The Ontario Building Code (OBC), Ontario Electrical Safety Code (OESC), Ontario Occupational Health and Safety Act (OHSA), and Ontario Regulation 22/04 all have the same requirements regarding clearances. These clearances take into account the conductor swing as per the OBC and apply to the outermost part of the building, which includes the balconies, fire escapes, flat roofs, or other projections beyond the face of the building **as shown in Figure 1.**

The OBC regulates the design and construction of all new buildings and for additions, alterations and change of use of existing buildings. Applying Article 3.1.19.1, Above Ground Electrical Conductors; Clearances to Buildings, minimum horizontal clearances to OH electrical infrastructure are as follows:

Clearance from the OH Power Line	<750V	>750V
Radial to conductor	3 m (10 ft)	5 m (16.5 ft)
Along the OH pole line (from a vertical line drawn from power line to ground level)	2 m (6.5 ft)	5 m (16.5 ft)

Contact: Engineering Clerk
Email: Permits@BurlingtonHydro.com
www.BurlingtonHydro.com

Burlington**hydro** inc.

All stakeholders should contact Burlington Hydro Inc. to determine the requirements for the specific design scenario.

According to CSA C22.3 No. 1, permanent or temporary structures / buildings or their extensions, should not be over or underneath overhead electrical infrastructure.

Examples of instances when these clearances become necessary for workers and occupants:

- **Workers** – using scaffolding during construction, putting up signs and lighting, or other equipment to maintain the building, i.e. resurfacing, window washing or use of cranes.
- **Occupants** – using clothes lines, business signs, flags, or general reach from a balcony

Burlington Hydro Inc. should be contacted prior to any activity within 3 m of the OH electrical infrastructure, such as tree trimming or working on the sides of a building. According to the Ministry of Labour's Occupational Health and Safety Act and the Electrical Safety Code, only Burlington Hydro's employees or approved contractors can work in proximity to these lines.

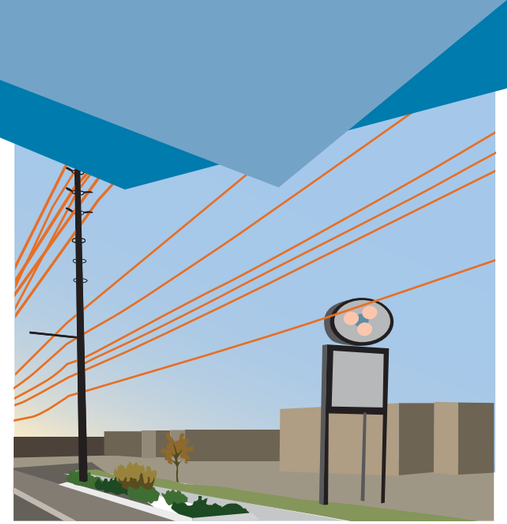
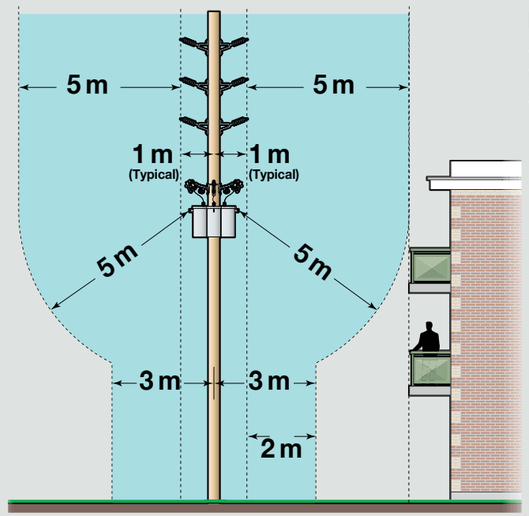
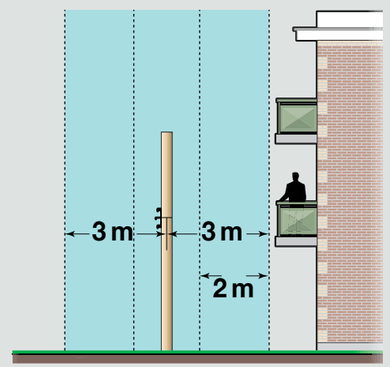


Figure 1: Ontario Building Code Clearance Requirements



Clearance from Medium Voltage (>750V)

Maximum swing: The greatest horizontal displacement of any point on a power line, from its position at rest. In other words, the maximum swing is the distance a wire strung on a pole can potentially swing in any direction.



Clearance from Low Voltage (<750V)

Burlington Hydro Inc

33-116
R0 (NOV 2005)

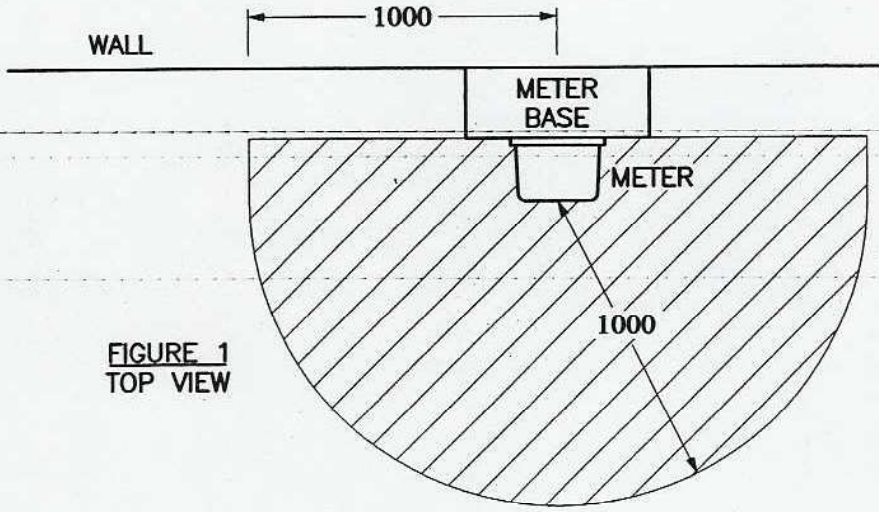


FIGURE 1
TOP VIEW

NOTES

1. HATCHED AREA TO BE KEPT CLEAR OF ANY OBSTRUCTION TO ALLOW FOR SAFE WORKING CLEARANCE.
2. WHERE MULTIPLE METERS ARE INSTALLED, CLEARANCES ARE REQUIRED AROUND EACH METER.
3. WHERE METERS ARE INSTALLED IN CABINETS, ALL DOORS MUST BE ABLE TO BE OPENED 100 DEGREES.

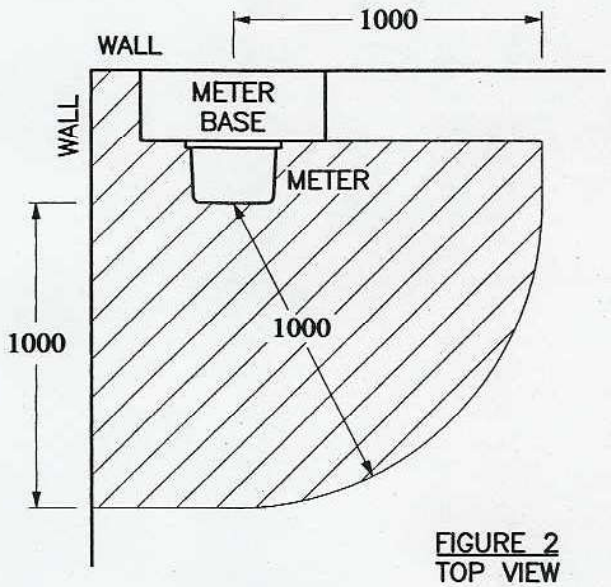


FIGURE 2
TOP VIEW

REQUIRED WORKING CLEARANCE AROUND METERS

METRIC
LINEAR DIMENSIONS SHOWN IN MILLIMETRES

(905) 335-7629
committeeofadjustment@burlington.ca
FILE NO. 540-02-**A-072/25**
Committee of Adjustment
Date of Mailing: November 24, 2025

NOTICE OF PUBLIC HEARING

Trevor McCalpin and Erin Michelle McCalpin, the owners of 2380 Sinclair Cir. Burlington, have applied to the Committee of Adjustment for a Minor Variance to the requirements of Zoning By-law 2020, as amended. The property in question is **2380 Sinclair Cir. Burlington** (see map).

The applicant is proposing the construction of a one-storey addition to an existing two-storey detached dwelling with an attached garage. This proposal results in the following variances:

1. To permit a rear yard of 6.5 m instead of the minimum required 9 m for a proposed addition to a detached dwelling with attached garage.

2. To permit a dwelling depth of 19.3 m instead of the maximum permitted 18 m measured from building wall closest to front lot line to the building wall closest to the rear lot line for a proposed addition to a two-storey dwelling with attached garage.

You have received this notice as stipulated by the *Planning Act* because your property is within 60 metres of the property noted above. The application materials are available on request by contacting Committee of Adjustment staff by one of the methods listed above. A copy of the Agenda, containing staff reports and drawings, can be viewed online under the Meeting Agenda tab at **Burlington.ca\coa on or after November 24, 2025**.

Committee of Adjustment Hearings will be hybrid-conducted in person and virtually. All members of the public, applicants and their agents will now have the option to participate in the public meeting process in person at City Hall in Council Chambers, or remotely via Zoom Webinar Video Conferencing Technology. The Committee of Adjustment will meet to consider the above application under Section 45 of the *Planning Act*, 1990, as amended on:

WEDNESDAY DECEMBER 10, 2025,
This application is scheduled to be heard at or after 5:30 pm.

How to participate if I have comments or concerns?

Written Submissions

Members of the public who would like to participate in a Committee of Adjustment meeting are able to send written comments regarding the application by e-mail to committeeofadjustment@burlington.ca with the subject line to read “Comments_Your Name_File No._Address of the Property”.

Alternatively, written comments can be sent by regular mail addressed to the Secretary-Treasurer. Include your name, address, application number and address of the property for which you are providing comments.

City of Burlington Committee of Adjustment - Community Planning
426 Brant Street P.O. Box 5013 Burlington, Ontario, L7R 3Z6
committeeofadjustment@burlington.ca

To allow all Committee of Adjustment members the opportunity to review and consider your comments, please provide your written submissions to be received no later than noon the day before the hearing date.

Oral Submissions

Members of the public are also able to provide oral comments regarding Committee of Adjustment Hearing items by participating virtually through Zoom via computer or phone, or by attending the Hearing in-person. Participation virtually requires pre-registration in advance. Please contact staff for instructions if you wish to make a presentation containing visual materials.

1. Virtual Oral Submissions
   To register as a delegate, please contact the Secretary-Treasurer no later than 12:00 p.m. (noon) the day before the hearing date. The following information is required to register; Committee of Adjustment file number, hearing date, name, and mailing address of each person wishing to speak, if participation will be by phone or video. All requests to delegate must contain a copy of your intended remarks which will be circulated to all members of Committee in advance.

2. In person Oral Submissions
   Interested members of the public, agents, and owners who wish to participate in person may attend Council Chambers on the date and time listed on the Notice of Public Hearing. Please note that you will be required to provide your name and address for the record. It is advised that you arrive no less than 10 minutes before the time of the Public Hearing as noted on the Notice of Public Hearing.

Attend or View the Committee of Adjustment Hearing:

If you do not wish to participate, but would like to follow along, the hearing will be held in person at City Hall in Council Chambers and live through a Zoom Webinar. Instructions, links and phone numbers for joining the meeting will be posted on the Committee of Adjustment webpage the day prior to the scheduled meeting. The link will be active at **4:30 p.m.**

If you wish to be notified of the decision of the Committee of Adjustment in respect to this application, you must submit a written request to the Secretary-Treasurer. This will also entitle you to be advised of a possible Ontario Land Tribunal Hearing. In accordance with the Planning Act, the Committee of Adjustment decision may be appealed to the Ontario Land Tribunal by the owner, the Minister of Municipal Affairs and Housing, a specified person or public body that has an interest in the matter.

The applicant is advised that it is **mandatory** that either the applicant or an authorized agent of the applicant must be present at the hearing either in person or virtual.

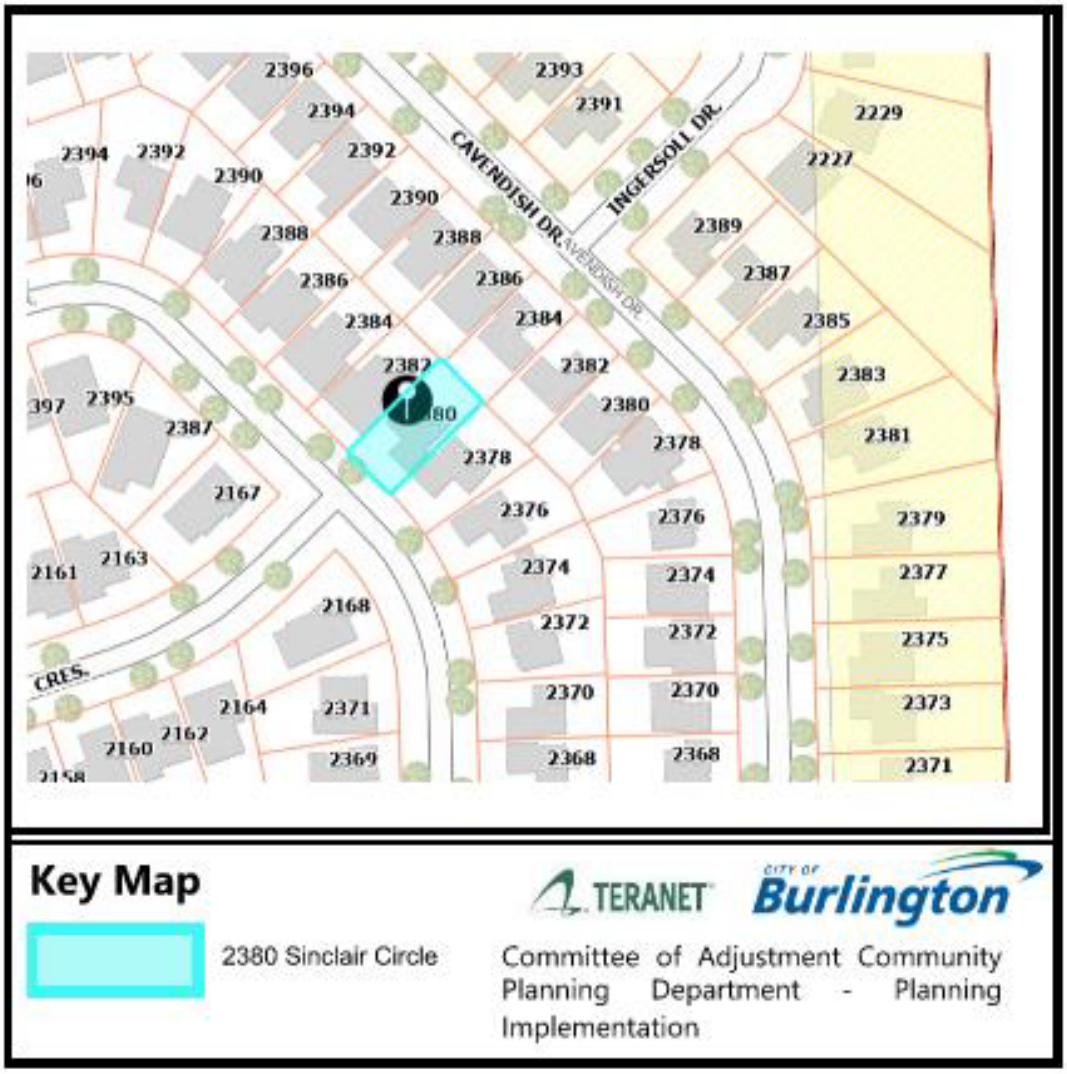
For more information about this matter, contact Catherine Susidko-Petriczko at committeeofadjustment@burlington.ca

Yours truly,

Catherine Susidko-Petriczko
Secretary-Treasurer
Committee of Adjustment

Personal information including comments and public feedback, is collected under the legal authority of the Planning Act, R.S.O. 1990, Chapter c. P.13, as amended, and the Municipal Freedom of Information and Protection of Privacy Act, R.S.O. 1990, as amended, which will be used to process the application and in the decision making process and becomes the property of the City of Burlington, and is considered to be a public record and will be disclosed to any individual (including being posted on the internet) upon request. Questions about this collection should be directed to the Secretary-Treasurer, Burlington Committee of Adjustment, Community Planning Department, 426 Brant Street, P.O. Box 5013, Burlington, Ontario; L7R 3Z6 (905) 335-7629.

Key Map



MINOR VARIANCE – 2025
Committee of Adjustment
Department of Community Planning
426 Brant Street, Burlington ON
committeeofadjustment@burlington.ca

PLANNING ACT, R.S.O. 1990, C.P. 13
APPLICATION FOR MINOR VARIANCE OR FOR PERMISSION

THE UNDERSIGNED HEREBY APPLIES TO THE COMMITTEE OF ADJUSTMENT FOR THE CITY OF BURLINGTON UNDER SECTION 45 OF THE PLANNING ACT, R.S.O. 1990, C.P.13, AS DESCRIBED IN THIS APPLICATION, FROM BY-LAW NO. 2020. (AS AMENDED)

Application made under:
☑ Section 45 (1) of the Planning Act ☐ Section 45 (2) of the Planning Act

Discussed the application with a City Zoning Examiner and Development Planner Y ☑ or N ☐
Name of Planner: _____ Name of Zoning Examiner: Jennifer Parker

PROPERTY INFORMATION
Municipal Address(es) of property:
2380 Sinclair Circle

Legal Description of property:

Official Plan Designation: Residential Current Zoning Designation R3 - Residential

OWNER(S) INFORMATION:
Legal Name (as it appears on the title for the property):
Erin McCalpin & Trevor McCalpin

Mailing Address: 2380 Sinclair Circle City: Burlington

Postal Code: L7P3C3 Home Phone: _____ Mobile Phone: (905) 6163746

Work Phone: _____ E-Mail: erinmccalpin@gmail.com

AGENT INFORMATION (if applicable)**:** (This person will be the primary point of contact if provided)

Name: Khashayar Lotfalian

Business Address: 17817 Leslie St. City: Newmarket

Postal Code: L3Y 8C6 Home Phone: _____ Mobile Phone: (416) 80 90 100

Work Phone: (416) 80 90 100 E-Mail: info@parsways.ca

PROPOSED DEVELOPMENT Please outline in detail your proposed development and list each variance you are requesting, as well as the Zoning By-law Requirements. Attach a separate sheet if required.

The proposal is to construct a single-storey sunroom addition at the rear of the existing dwelling located at 2380 Sinclair Cir,Burlington. The sunroom is intended as enclosed living space for year-round use, designed in a manner that is compatible with the existing house and consistent with the residential character of the neighbourhood. The addition will be modest in scale and finished with materials complementary to the dwelling.

Variance(s) Requested	Zoning Bylaw Requirement
Reduction 2.42m	Minimum 9.0 m (BY-LAW R3.2)
Proposed: 6.58 m	Zoning Provision: Rear Yard Setback

In your own words, please explain why you are unable to comply with the provisions of the Zoning By-law and how the minor variance(s) meet the four (4) tests under the Planning Act:

1. Why is the variance(s) minor in nature? The proposed rear yard setback reduction of 2.42m is minor in nature because it represents a small portion of the overall lot depth. The addition has been carefully designed to maintain sufficient open space, sunlight, and privacy for adjacent properties. No negative impacts on neighboring properties or the street scape are anticipated.

2. Why are the variance(s) desirable for the appropriate use of the land? The variance is desirable because it allows for the construction of a sun-room addition that provides functional, year-round living space for the homeowners. The addition makes efficient use of the rear yard while maintaining the character and scale of the neighborhood. The development is compatible with surrounding properties and supports the residential use of the land.

3. Do the variance(s) meet the intent and purpose of the Official Plan? Yes. The proposed sunroom addition is consistent with the objectives of the Official Plan, which encourages compatible residential development and the efficient use of land. The addition supports functional living space without negatively impacting the character, amenity, or streetscape of the neighbourhood.

4. Do the variance(s) meet the intent and purpose of the Zoning By-law? Yes. The addition maintains adequate separation, light, and privacy for neighbouring properties, respecting the intent of the Zoning By-law while allowing compatible residential development.

PROPERTY DETAILS (please complete all fields):

Date property purchased:	Date property first built on:	Date of proposed construction:
May/15/2019	1974	2025
mmm/dd/yyyy	mmm/dd/yyyy	mmm/dd/yyyy

Existing Use of the Subject Property (check one):

Detached Dwelling ☑ Semi-Detached Dwelling ☐
Townhouse Dwelling ☐ Street Townhouse Dwelling ☐ Stacked Townhouse Dwelling ☐
Apartment ☐ Mixed Use ☐ Hi Rise ☐
Commercial ☐ Industrial ☐ Vacant ☐
Other ☐ _____

Length of time the existing uses of the subject property have continued: 51 years

Proposed Use of the Land:
Residential – Addition to Existing Detached Dwelling (Sunroom)

Existing Uses of Abutting Properties (check all that apply)

Residential ☑ Commercial ☐ Industrial ☐ Multi-Residential ☐ Vacant ☐ Hydro right of-way ☐
Railway right-of-way ☐ Provincial Highway ☐ Park ☐ Other ☐ _____
Conservation Halton Lands: Lake Ontario ☐ Creek ☐ Storm Water Management Pond/Channel ☐
Ravine ☐

Additional Information

Is liquor sold on site? Y ☐ or N ☑

Is the property on the Municipal Cultural Heritage Register for the City of Burlington? Y ☐ N ☑
Unknown ☐

Type of Access to the Subject Lands

Provincial Highway ☐	Municipal Road ☑	Private Road ☐	Water ☐	Other(specify) ☐

Municipal Services Provided

Water ☑ If not available, by what means is it provided: _____
Sanitary Sewers ☑ If not available, by what means is it provided: _____
Storm Sewers ☑ If not available, by what means is it provided: _____

IS THE SUBJECT LAND(S) THE SUBJECT OF ANY OF THE FOLLOWING DEVELOPMENT APPLICATIONS: ☐ Official Plan Amendment ☐ Zoning By-law Amendment ☐Building Permit ☐Site Development Plan ☐Plan of Subdivision ☐Previous Minor Variance ☐Consent

CITY OF Burlington

MINOR VARIANCE – 2025
Committee of Adjustment
Department of Community Planning
426 Brant Street, Burlington ON
committeeofadjustment@burlington.ca

FOR RESIDENTIAL DETACHED OR SEMI-DETACHED DWELLINGS

Dimensions of Property			Street Width (see first page of application for how to obtain)				
Frontage	Depth	Area	Actual	Deemed	Required	Lot Coverage	Corner Lot?
15.24 m	33.53 m	161.8 m²	20 m	20 m	20 m		Y ☐ N ☑

Particulars of all buildings and structures on or proposed for the subject lands
(attach additional page if required)

EXISTING (Dwelling/Building)		PROPOSED (Dwelling/Building/Addition)	
Ground Floor Area (incl. attached garage)	139.4 M²	Ground Floor Area (incl. attached garage)	22.4 M²
Gross Floor Area:	247.4 M²	Gross Floor Area:	22.4 M²
Number of Storeys:		Number of Storeys:	
Width:	10.78 M	Width:	4.55 M
Length:	15.32 M	Length	3.94 M
Height:	6.25 M	Height	3.51 M
Garage/Car Port		**Garage/Car Port**	
Detached?	Y ☐ N ☑	Detached?	Y ☐ N ☑
Gross Floor Area:	M²	Gross Floor Area:	– M²
Width:	M	Width:	– M
Length:	M	Length:	– M
Height:	M	Height:	– M
Accessory Structures (Shed, Gazebo, etc)		**Accessory Structures**	
Gross Floor Area: Shed	2.65 M²	Gross Floor Area:	– M²
Width:	1.00 M	Width:	– M
Length:	2.60 M	Length:	– M
Height:	2.13 M	Height:	– M
Other (pool, additional sheds, decks, driveways, etc.)		**Other**	
Gross Floor Area: Driveways	42.50 M²	Gross Floor Area:	– M²
Width:	5.52 M	Width:	– M
Length:	7.70 M	Length:	– M
Height:	– M	Height:	– M

LOCATION of all existing and proposed buildings and structures

EXISTING		PROPOSED	
Front:	7.70 M	Front:	7.70 M
Rear:	10.55 M	Rear:	6.58 M
Side/Street Side:	2.42 M	Side/Street Side:	2.42 M
Side/Other Side:	2.04 M	Side/Other Side:	2.04 M

FOR COMMERCIAL, MIXED USE, INDUSTRIAL AND OTHER

Dimensions of Property			Street Width (see first page of application for how to obtain)				
Frontage	Depth	Area	Actual	Deemed	Required	Density	Have you applied for Site Plan Approval? Y ☐ N ☐ File #:

Particulars of all buildings and structures on or proposed for the subject lands
(attach additional page if required)

EXISTING (Building)		**PROPOSED (Building/Addition)**	
Ground Floor Area:	M^2	Ground Floor Area:	M^2
Gross Floor Area:	M^2	Gross Floor Area:	M^2
Number of Storeys:		Number of Storeys:	
Width:	M	Width:	M
Length:	M	Length	M
Height:	M	Height	M
Floor Area: Office Space	M^2	Floor Area: Office Space	M^2
Floor Area: Warehouse/Retail/Other:	M^2	Floor Area: Warehouse/Retail/Other	M^2
# of Existing Units:		# of Proposed Units:	
Floor Area Ratio:		Floor Area Ratio:	
Required Parking Spaces:		Proposed Parking Spaces:	
Existing Parking Spaces:			
EXISTING (Other)		**PROPOSED (Other)**	
Ground Floor Area:	M^2	Ground Floor Area:	M^2
Gross Floor Area:	M^2	Gross Floor Area:	M^2
Number of Storeys:		Number of Storeys:	
Width:	M	Width:	M
Length:	M	Length	M
Height:	M	Height:	M

LOCATION of all existing and proposed buildings and structures

EXISTING (Building)		**PROPOSED (Building)**	
Front:	M	Front:	M
Rear:	M	Rear:	M
Side:	M	Side:	M
Side:	M	Side:	M
OTHER		**OTHER**	
Front:	M	Front:	M
Rear:	M	Rear:	M
Side:	M	Side:	M
Side:	M	Side:	M

MULTI-RESIDENTIAL

(STREET TOWNHOUSE, HI-RISE, STACKED TOWNHOUSES, DUPLEXES, etc)

Dimensions of Property			Street Width (see first page of application for how to obtain)				
Frontage	Depth	Area	Actual	Deemed	Required	Density	Have you applied for Site Plan Approval? Y ☐ N ☐ File #:

Particulars of all buildings and structures on or proposed for the subject lands
(attach additional page if required)

EXISTING (Building)		**PROPOSED (Building/Addition)**	
Ground Floor Area:	M^2	Ground Floor Area:	M^2
Gross Floor Area:	M^2	Gross Floor Area:	M^2
Number of Storeys:		Number of Storeys:	
Width:	M	Width:	M
Length:	M	Length	M
Height:	M	Height	M
# of Existing Units:	M^2	# of Proposed Units:	M^2
Floor Area Ratio:	M^2	Floor Area Ratio:	M^2
Required Parking Spaces:		Proposed Parking Spaces:	
Existing Parking Spaces:			
EXISTING (Other)		**PROPOSED (Other)**	
Ground Floor Area:	M^2	Ground Floor Area:	M^2
Gross Floor Area:	M^2	Gross Floor Area:	M^2
Number of Storeys:		Number of Storeys:	
Width:	M	Width:	M
Length:	M	Length	M
Height:		Height:	M

LOCATION of all existing and proposed buildings and structures

EXISTING (Building)		**PROPOSED (Building)**	
Front:	M	Front:	M
Rear:	M	Rear:	M
Side:	M	Side:	M
Side:	M	Side:	M
OTHER		**OTHER**	
Front:	M	Front:	M
Rear:	M	Rear:	M
Side:	M	Side:	M
Side:	M	Side:	M

EXEMPTION FROM NEW SURVEY REQUIREMENT

Minor additions to an existing dwelling or for a proposed accessory building or structure (i.e., deck, driveway, pergola, shed), may be exempt from having to provide a new survey. Please refer to Page 3 of this application package for more details. Minor Variances with concurrent Consent applications require a new survey.

Applicant/Owner: Khashayar Lotfalian	Property Address: 2380SinclairCir,

1. I, Khashayar Lotfalian (Print Name) In my capacity as agent (Owner or agent) do attest to the following:

Please complete Section A, B, or C

A. The OLS survey/sketch of survey dated 07/09/2025 (mmm/dd/yyyy)

has been revised by: Polar surveying (Person or Company Name)

OR

B. The site plan, architect's plan or engineer's plan dated 05/09/2025 (mmm/dd/yyyy)

has been revised by: Parsways Inc. (Person or Company Name)

OR

C. The sketch or plot plan** dated _____ (mmm/dd/yyyy)

**Accepted for applications involving variances for Uses only.

was prepared by: _____ (Person or Company Name)

2. All structures, measurements, setbacks and boundaries of the property are shown accurately as of: 05/09/2025 (mmm/dd/yyyy)

3. The material submitted shows all measurements in metric, as calculated/converted by: Parsways Inc. (Person or Company Name)

4. Should the need arise during application processing for an new OLS survey, the applicant/agent agree to provide the survey as required by Committee or city staff in order to receive a decision on the application.

Signature of Owner/Applicant — Date (mmm/dd/yyyy): 03/09/2025

POSTING OF ADVISORY SIGN

This will confirm the requirement of the Committee of Adjustment for a sign to be posted by all applicants or agents on each property under application.

A sign will be made available to you after completion of the zoning review of your application(s) and you are directed to post each sign in a prominent location that will enable the public to observe the sign.

The location of each sign will depend on the lot and location of structures on it, however, the sign should be placed so as to be legible from the roadway in order that the public can see the sign and make note of the telephone number should they wish to make inquiries. In most cases, please post the sign on a stake as you would a real estate sign. For commercial or industrial buildings it may be appropriate to post the sign on the front wall of the building at its entrance. Please contact the undersigned if you have any queries on the sign location.

DO NOT POST THE SIGN INSIDE THE BUILDING BY A WINDOW. The sign must be outdoors by the roadway in order to be visible and readable.

Each sign must remain posted beginning 10 days prior to the hearing, until the day following the hearing. Please fill in the form below indicating your agreement to post the sign(s) as required. This form must be submitted with the application so that it may be placed on file as evidence that you have met the committee's requirements. Failure to post the sign as required will result in deferral of the application.

I UNDERSTAND THAT EACH SIGN MUST BE POSTED AT LEAST 10 DAYS BEFORE THE HEARING, AND WILL REMAIN POSTED AND BE REPLACED, IF NECESSARY, UNTIL THE DAY FOLLOWING THE HEARING.

Owner Name	Trevor McCalpin Erin McCalpin	Property Address	2380SinclairCir,
Signature of Owner/Applicant		Date (mmm/dd/yyyy)	03/09/2025

AFFIDAVIT

*Please fill out at time of submission of application

I have the authority to bind the Corporation (check if applicable) ☑ Signature of Applicant or Authorized

Agent:_____

I, _____of the _____ of _____in the _____
(print name) (Region/City/County) (City/Town/Township)

of _____ solemnly declare that all the statements contained in this application are true and I make this solemn declaration conscientiously believing it to be true and knowing it is of the same force and effect as if made under oath and by virtue of the Canada Evidence Act.

Declared before me at the_____ of_____ in the _____
(Region/City/County) (City/Town/Township)

this _____day of_____ 20_____.

_____ _____
Signature of Commissioner, etc. Signature of Applicant or Authorized Agent

PERMISSION TO ENTER

IMPORTANT This MUST be completed for all applications and signed by the OWNER.

Municipal Address of Subject Lands: 2380SinclairCir, _____

I hereby authorize the Committee of Adjustment members, City of Burlington and Region of Halton staff to enter onto the above-noted property for the limited purposes of evaluating the merits of this application.

Signature of Owner

Erin McCalpin
Print Name

OWNERS AUTHORIZATION

If using an agent, the owner must also complete the following form:

I, Erin McCalpin (print name) being the registered owner of the subject lands, hereby

Authorize Khashayar Lotfalian on behalf of Parsways Inc. (print agent name) to prepare, submit and act on my behalf with respect to this

application for a Minor Variance.

E McCalpin
Signature of Owner

Sep/02/2025
Date (mmm/dd/yyyy)

Notice of collection of personal information

Personal information contained on this form is collected under the authority of the Planning Act, RSO 1990, c. P.13, to process applications and make decisions. Applications made under the Planning Act, are considered part of the public record and shall be made available to the public. Questions about this collection can be directed to the Manager of Development Planning, City of Burlington, 426 Brant Street, Burlington, Ontario, L7R 3Z6, 905-335-7600.

The applicant acknowledges that an application, all supporting information and materials, including studies and drawings, submitted under the Planning Act, pursuant to s. 1.0.1 of the Planning Act, RSO 1990, c.P.13, as amended, shall be made available to the public.

MINOR VARIANCE – 2025
Committee of Adjustment
Department of Community Planning
426 Brant Street, Burlington ON
committeeofadjustment@burlington.ca

AFFIDAVIT

*Please fill out at time of submission of application

I have the authority to bind the Corporation (check if applicable) ☑ Signature of Applicant or Authorized Agent: Khashayar Lotfalian

I, Khashayar Lotfalian (print name) of the Region (Region/City/County) of York in the Town (City/Town/Township)

of East Gwillimbury solemnly declare that all the statements contained in this application are true and I make this solemn declaration conscientiously believing it to be true and knowing it is of the same force and effect as if made under oath and by virtue of the Canada Evidence Act.

Declared before me at the County (Region/City/County) of Simcoe in the City of Barrie (City/Town/Township)

this 18th day of September 2025.

Solemnly declared and subscribed remotely via videoconference by Khashayar Lotfalian stated as being located in East Gwillimbury, Ontario, before the duly noted Commissioner for Oaths in Barrie, Ontario on September 18, 2025 in accordance with O Reg 431/20, Administering Oath or Declaration Remotely.

A COMMISSIONER FOR OATHS
JAZMIN ROCIO MAGANA GARCIA
LICENSED PARALEGAL
LSO# P16200
PROVINCE OF ONTARIO

er

A COMMISSIONER ETC.
JAZMIN ROCIO MAGANA GARCIA
WHILE BEING A LICENSED PARALEGAL
LSO #P16200
PROVINCE OF ONTARIO

Signature of Applicant or Authorized Agent

PERMISSION TO ENTER

IMPORTANT This MUST be completed for all applications and signed by the OWNER.

Municipal Address of Subject Lands: 2380SinclairCir,

I hereby authorize the Committee of Adjustment members, City of Burlington and Region of Halton staff to enter onto the above-noted property for the limited purposes of evaluating the merits of this application.

Signature of Owner

Erin McCalpin
Print Name

Xodo Sign Document Hash: 8046ea9fa1b642ad8b72c476bacafb34

Minor Variance Application Checklist Please add a check mark beside the items you have provided with your application. Illegible drawings or those missing required details will be returned to applicant.	**Select (✓)**
LEGAL SURVEY (must be prepared and signed and dated by an Ontario Land Surveyor) *** For new development, a Proposed Building Plan stamped by an Ontario Land Surveyor or Professional Engineer may be required.**	✓
OR	
DETAILED SITE PLAN (must be prepared and stamped by Professional Engineer, Ontario Land Surveyor or Professional Architect). A legal survey may still be required at the discretion of staff.	✓
AND	
PLAN and ELEVATION DRAWINGS which include the following as applicable: (Missing details or illegible drawings will be sent back to the applicant for correction)	✓

SITE PLAN

- ☑ Metric Scale
- ☑ North Arrow
- ☑ Frontage
- ☑ Depth
- ☑ Lot Area
- ☑ Lot Coverage
- ☐ Deemed Street Line
- ☑ Existing Front Yard Setbacks
- ☑ Existing Rear Yard Setbacks
- ☑ Existing Side Yard Setbacks
- ☑ Existing Street Side Yard Setbacks
- ☑ Existing Porch, Stairs and Overhang Setbacks
- ☑ Proposed Front Yard Setbacks
- ☑ Proposed Rear Yard Setbacks
- ☑ Proposed Side Yard Setbacks
- ☑ Proposed Street Side Yard Setbacks
- ☑ Proposed Porch, Stairs and Overhang Setbacks
- ☑ Streets (Public and Private)
- ☑ Street Names
- ☑ Parking (Dimensioned spaces, Driveway Width, Arrangement)
- ☐ Railways (Location of them and setbacks to structures)
- ☐ All Watercourses and/or Conservation Halton Areas(creeks, lakes, etc)

Minor Variance Application Checklist

Please add a check mark beside the items you have provided with your application.
Illegible drawings or those missing required details will be returned to applicant.

LOCATION AND MEASUREMENTS OF SHED, DECK OR OTHER STRUCTURES

- ☑ Setbacks
- ☑ Height
- ☑ Area
- ☑ Length
- ☑ Width

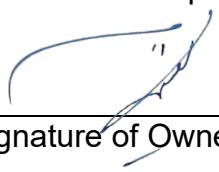
ELEVATIONS

- ☑ Metric
- ☑ Front
- ☑ Rear
- ☑ Side 1
- ☑ Side 2

FLOOR PLANS

- ☑ Metric
- ☑ North Arrow
- ☑ Gross Floor Area Calculation
- ☑ Ground Floor Area Calculation
- ☐ Floor Area Ratio (where applicable)

I have reviewed the minor variance checklist and ensure all the applicable information is shown on the drawings submitted as part of this application.



Signature of Owner/Agent

03/09/2025

Date (mmm/dd/yyy)

Copyright Act Applies to Use and Production

CAVENDISH DRIVE
(DEDICATED BY REGISTERED PLAN 1525)
PIN 07148–0407(LT)

LOT 195 | LOT 196 | LOT 204 | LOT 202

PART 201, PLAN 20R–489
SUBJECT TO EASEMENT AS IN INST. NO. 353788

LOT 200
PIN 07153–0125(LT)

LOT 201
PIN 07153–0126(LT)

LOT 216
PIN 07153–0141(LT)

LOT 217
PIN 07153–0142(LT)

LOT 215
PIN 07153–0140(LT)

LOT 218 | LOT 220

NO. 2382
2 STOREY
FRAME DWELLING
(STONE FRONT)

NO. 2380
2 STOREY
FRAME DWELLING

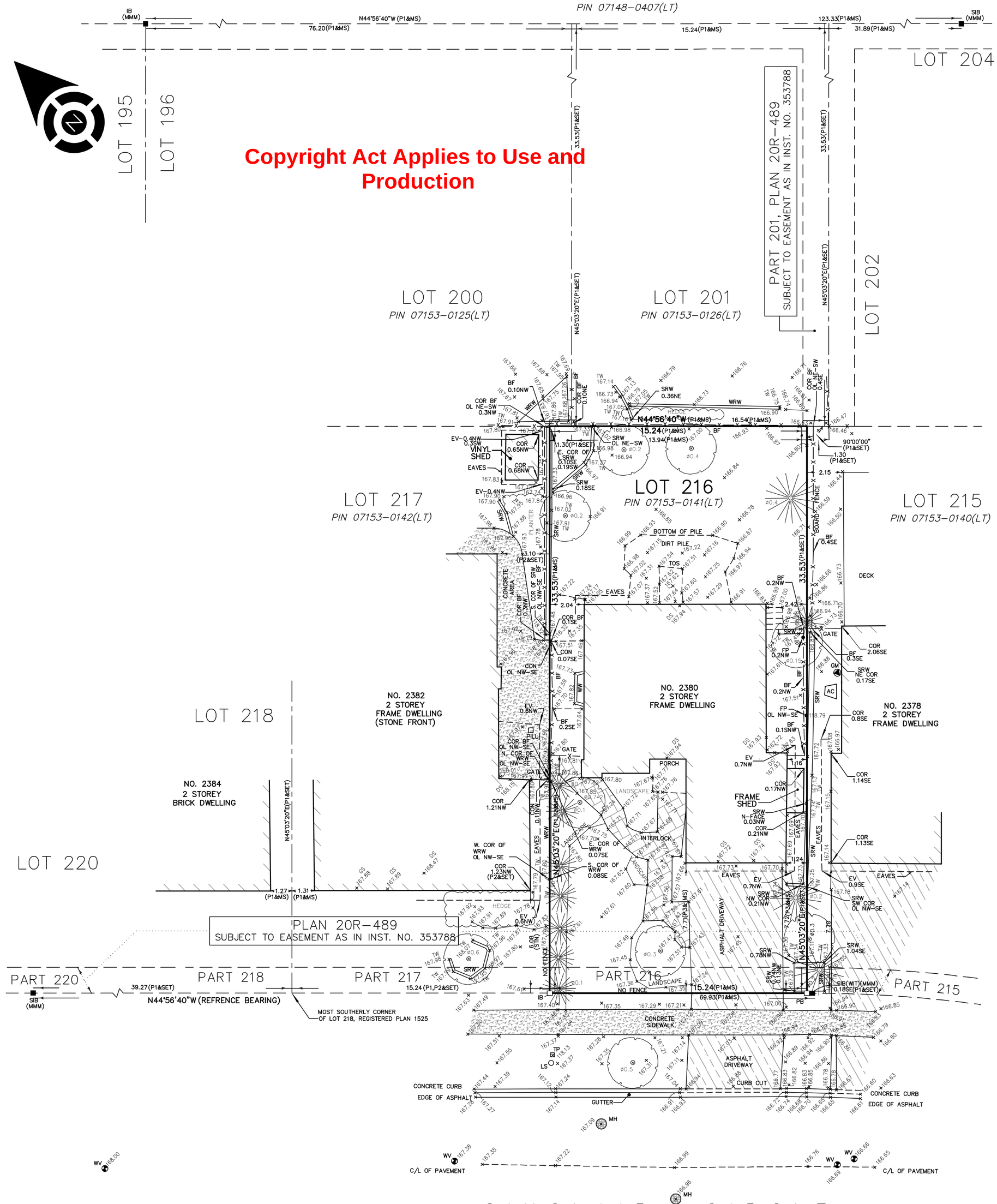
NO. 2378
2 STOREY
FRAME DWELLING

NO. 2384
2 STOREY
BRICK DWELLING

PLAN 20R–489
SUBJECT TO EASEMENT AS IN INST. NO. 353788

PART 220 | PART 218 | PART 217 | PART 216 | PART 215

SINCLAIR CIRCLE
(DEDICATED BY REGISTERED PLAN 1525)
PIN 07153–0162(LT)



SURVEYOR'S REAL PROPERTY REPORT
PART 1 – PLAN OF SURVEY OF
LOT 216
REGISTERED PLAN 1525
CITY OF BURLINGTON
REGIONAL MUNICIPALITY OF HALTON

5 0 5 10metres

SCALE = 1:150 m

POLAR SURVEYING LTD.

© COPYRIGHT 2025

METRIC: DISTANCES AND COORDINATES SHOWN HEREON ARE IN METRES AND CAN BE CONVERTED TO FEET BY DIVIDING BY 0.3048.

PART 2 – REPORT SUMMARY

MUNICIPALLY KNOWN AS NO. 2380 SINCLAIR CIRCLE
LOT 216, REGISTERED PLAN 1525
CITY OF BURLINGTON
REGIONAL MUNICIPALITY OF HALTON

EASEMENTS OR RIGHT OF WAY

SUBJECT TO EASEMENT AS IN INSTRUMENT No. 353788 – OVER PART 216, PLAN 20R–489.

COMPLIANCE WITH MUNICIPAL ZONING BY–LAWS

NO INVESTIGATION WITH RESPECT TO MUNICIPAL ZONING REQUIREMENT HAS BEEN MADE IN CONNECTION WITH THIS REPORT.

ADDITIONAL REMARKS

- MONUMENTS SHOWN AS "WIT" ARE WITNESS MONUMENTS AND ARE NOT AT THE PROPERTY CORNER.
- THE FENCES ARE AS SHOWN ON THE SURVEY PLAN.
- STONE RETAINING WALL ALONG THE SOUTHEASTERLY LIMIT OF THE SUBJECT PROPERTY IS PARTIALLY LOCATED ON THE SUBJECT PROPERTY AND PARTIALLY ON THE PROPERTY TO THE SOUTHEAST, BEING NO. 2378 SINCLAIR CIRCLE.
- STONE RETAINING WALL ALONG THE NORTHWESTERLY LIMIT OF THE SUBJECT PROPERTY IS PARTIALLY LOCATED ON THE SUBJECT PROPERTY AND PARTIALLY ON THE PROPERTY TO THE NORTHWEST, BEING NO. 2382 SINCLAIR CIRCLE.

LEGEND:

■	DENOTES	SURVEY MONUMENT FOUND
□	DENOTES	SURVEY MONUMENT PLANTED
SIB	DENOTES	STANDARD IRON BAR
IB	DENOTES	IRON BAR
MS	DENOTES	MEASURED
MMM	DENOTES	MARSHALL MACKLIN MONAGHAN LIMITED, O.L.S.
P1	DENOTES	REGISTERED PLAN 1525
P2	DENOTES	PLAN OF SURVEY BY McCONNELL – JACKSON, O.L.S. DATED AUGUST 26, 1974 (FILE NO. 234–74)
P3	DENOTES	PLAN OF SURVEY BY McCONNELL – JACKSON, O.L.S. DATED JULY 3, 1974 (FILE NO. 120–74)
N,S,E,W	DENOTES	NORTH, SOUTH, EAST, WEST
AC	DENOTES	AIR CONDITIONER
BF	DENOTES	BOARD FENCE
BOS	DENOTES	BOTTOM OF SLOPE
BR	DENOTES	BRICK
COR	DENOTES	CORNER
C/L	DENOTES	CENTRELINE
CLF	DENOTES	CHAIN LINK FENCE
CON	DENOTES	CONCRETE
DS	DENOTES	DOOR SILL
EV	DENOTES	EAVES
FP	DENOTES	FENCE POST
GM	DENOTES	GAS METER
GS	DENOTES	GARAGE SILL
LS	DENOTES	LIGHT STANDARD
MH	DENOTES	MANHOLE
OL	DENOTES	ON LINE
PILL	DENOTES	PILLAR
SRW	DENOTES	STONE RETAINING WALL
STN	DENOTES	STONE
TOS	DENOTES	TOP OF SLOPE
TW	DENOTES	TOP OF WALL
WRW	DENOTES	WOOD RETAINING WALL
WV	DENOTES	WATER VALVE
WW	DENOTES	WINDOW WELL
ø	DENOTES	DIAMETER
	DENOTES	DECIDUOUS TREE
	DENOTES	CONIFEROUS TREE

GEODETIC:

ELEVATIONS SHOWN ON THIS PLAN ARE GEODETIC AND ARE DERIVED FROM THE CITY OF BURLINGTON BENCH MARK NO. BM1064(043921465) HAVING A PUBLISHED ELEVATION OF 164.783 METRES (CGVD28–78 ADJUSTMENT).

NOTE

BEARINGS ARE ASTRONOMIC AND ARE REFERRED TO THE NORTH EAST LIMIT OF SINCLAIR CIRCLE AS SHOWN ON REGISTERED PLAN 1525, AS HAVING A BEARING OF N44°56'40"W.

ALL BUILDING TIES TO CONCRETE FOUNDATION UNLESS OTHERWISE NOTED.

THIS REPORT REFLECTS CONDITIONS AT TIME OF SURVEY. UPDATING MAY BE REQUIRED TO ISSUE ADDITIONAL COPIES SUBSEQUENT TO DATE OF THE SURVEYOR'S CERTIFICATE.

SURVEYOR'S CERTIFICATE

I CERTIFY THAT:

1. THIS SURVEY AND PLAN ARE CORRECT AND IN ACCORDANCE WITH THE SURVEYS ACT, THE SURVEYORS ACT AND THE REGULATIONS MADE UNDER THEM.
2. THE SURVEY WAS COMPLETED ON JULY 8, 2025.

JULY 9, 2025
DATE

ARMIN ASADI
ONTARIO LAND SURVEYOR

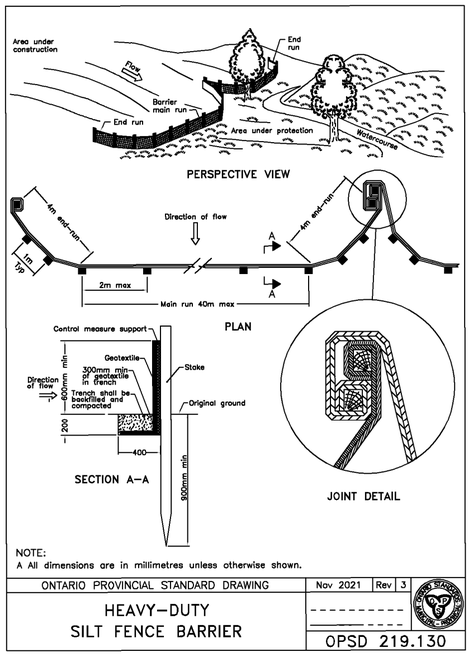
THE PLAN OF SURVEY RELATES TO AOLS PLAN SUBMISSION FORM NUMBER V-106996

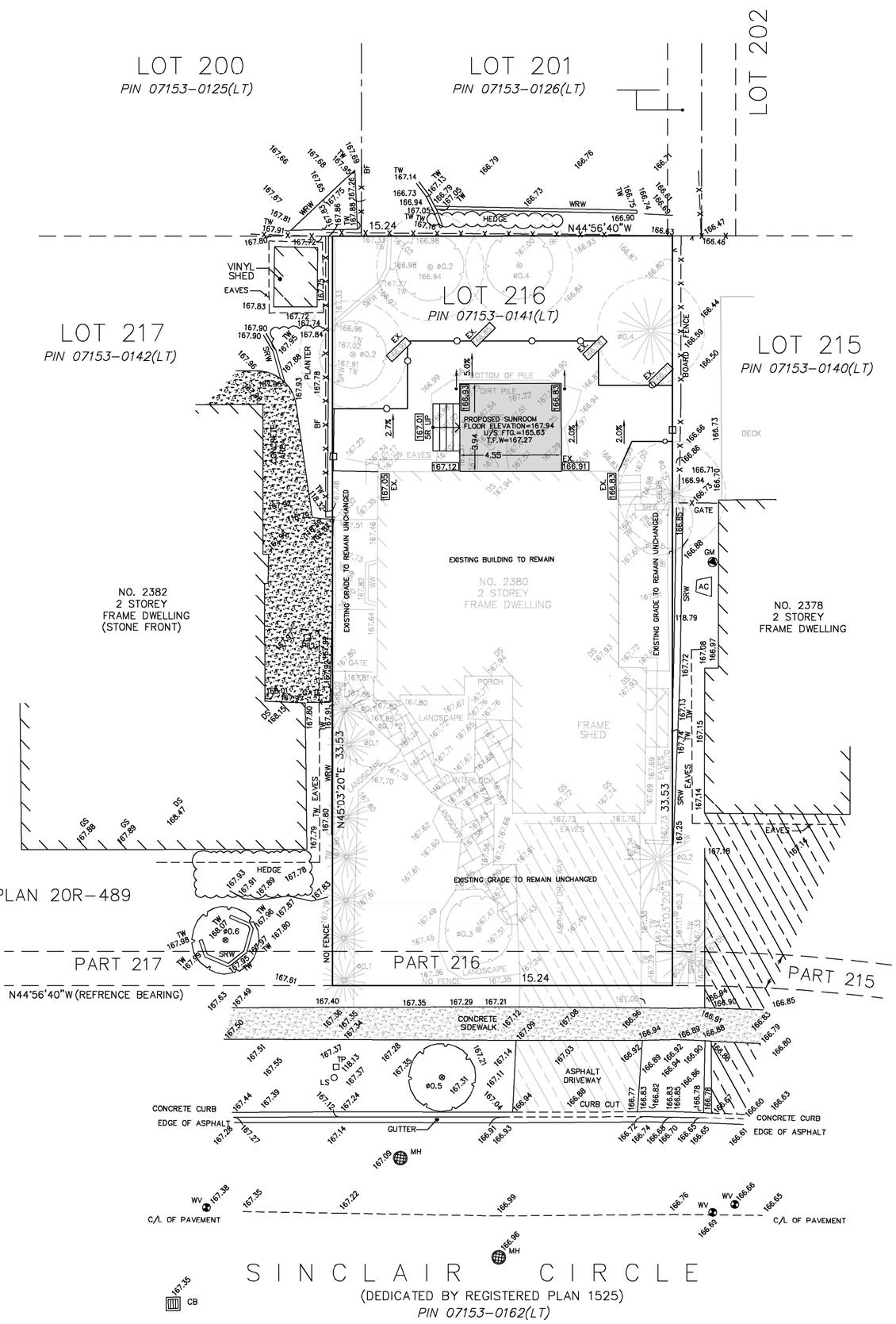
NOTE

THIS PLAN HAS BEEN PREPARED FOR THE LIMITED USE OF "PARSWAYS INC." AND CANNOT BE USED BY OTHER PARTIES. THIS PLAN IS TO REMAIN CONFIDENTIAL, IS PREPARED UNDER COPYRIGHT AND MUST NOT BE USED WITHOUT THE PERMISSION OF THE SIGNING SURVEYOR OR THE COMPANY RESPONSIBLE FOR THE PLAN.

POLAR SURVEYING LTD.
559 KLEINBURG SUMMIT WAY, VAUGHAN, ON L4H 4T5
(416) 999-5137 www.polarsurveying.com
(416) 388-4114 info@polarsurveying.com

DRAWN BY:	CHECKED BY:	REFERENCE NO.:
M.N.	A.A/V.A.	25-01-160-00





NOTE:
ALL EXCAVATION WORK WITHIN TPZ FOR TREES MUST OCCUR BY HAND AND SUPERVISED BY CERTIFIED ARBORIST. EXPOSED ROOTS TO BE PRUNED IN ACCORDANCE WITH GOOD ARBORICULTURAL STANDARD.

NOTE:
PROPOSED ROOF DOWNSPOUT LOCATIONS AND DIRECTION OF FLOW, MUST BE DIRECTED TO THE FRONT OR REAR OF THE PROPERTY AND AWAY FROM DWELLING OF NEIGHBOURING PROPERTIES.

EROSION AND SEDIMENT CONTROL

1. GENERAL NOTES:

A) SILTATION CONTROL MEASURES SHALL BE IMPLEMENTED BY THE CONTRACTOR PRIOR TO THE COMMENCEMENT OF SITE GRADING WORKS TO SATISFACTION OF THE CITY AND HALTON CONSERVATION

B) IF CONSTRUCTION IS INTERRUPTED AND/OR INACTIVITY EXCESS 30 DAYS, STRIPPED/ BASE AREAS SHALL BE STABILIZED BY SEEDING.

C) THE SEDIMENT CONTROL DEVICES SHALL BE INSPECTED AFTER EVERY RAINFALL AND/OR EVERY WEEK

D) THE SEDIMENT CONTROL DEVICES MUST BE REPAIRED, CLEANED AND; OR REPLACED IF NECESSARY OR AS DIRECTED BY THE ENGINEER. CONSERVATION AUTHORITY OR THE CITY

E) ALL SEDIMENT CONTROL DEVICES SHALL REMAIN IN PLACE UNTIL ALL CONSTRUCTION, GRADING, TOP SOILING AND SODDING ARE COMPLETE

F) WHEN ALL CONSTRUCTION, GRADING AND SODDING ARE COMPLETED, THE SEDIMENT CONTROL DEVICES SHALL BE REMOVED AND THE DISTURBED AREAS REINSTATED.

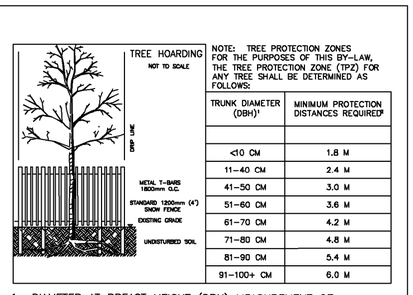
2 ALL CATCH BASINS ON SITE SHALL HAVE PROPER SEDIMENT CONTROLS AS NOTED HEREON

3. THE EROSION AND SEDIMENT CONTROL FENCE SHALL BE AS DETAILED

4. CONTRACTOR TO OBTAIN ALL NECESSARY ROAD OCCUPANCY PERMITS FOR PROPOSED WORK WITHIN THE MUNICIPAL ROAD ALLOWANCES.

TREE PROTECTION NOTE:

1. ALL EXISTING TREES WHICH ARE TO REMAIN SHALL BE FULLY PROTECTED WITH HOARDING, ERECTED BEYOND THEIR DRIP LINE PRIOR TO THE ISSUANCE OF THE BUILDING PERMIT. GROUPS OF TREES AND OTHER EXISTING PLANTINGS TO BE PROTECTED, SHALL BE TREATED IN A LIKE MANNER, WITH THE HOARDING AROUND THE ENTIRE CLUMP(S). AREAS WITHIN THE PROTECTIVE FENCING SHALL REMAIN UNDISTURBED AND SHALL NOT BE USED FOR THE STORAGE OF THE BUILDING MATERIAL AND EQUIPMENT.
2. NO RIGGING CABLES SHALL BE WRAPPED AROUND OR INSTALLED IN TREES AND SURPLUS SOIL, EQUIPMENT, DEBRIS OR MATERIALS SHALL NOT BE PLACED OVER ROOT SYSTEMS OF THE TREES WITHIN THE PROTECTIVE FENCING. NO CONTAMINANTS WILL BE DUMPED OR FLUSHED WHERE FEEDER ROOTS OF TREES EXIST.
3. THE DEVELOPER OR HIS/HER/ITS AGENTS SHALL TAKE EVERY PRECAUTION NECESSARY TO PREVENT DAMAGE TO TREES OR SHRUBS TO BE RETAINED.
4. WHERE LIMBS OR PORTIONS OF TREES ARE REMOVED TO ACCOMODATE CONSTRUCTION WORK, THEY WILL BE REMOVED CAREFULLY IN ACCORDANCE WITH ACCEPTED ARBORICULTURAL PRACTICE.
5. WHERE ROOT SYSTEMS OF PROTECTED TREES ARE EXPOSED DIRECTLY TO, OR DAMAGED BY CONSTRUCTION WORK, THEY SHALL BE TRIMMED NEATLY AND THE AREA BACKFILLED WITH APPROPRIATE MATERIAL TO PREVENT DESICCATION.
6. WHERE NECESSARY, THE TREES WILL BE GIVEN AN OVERALL PRUNING TO RESTORE THE BALANCE BETWEEN ROOTS AND TOP GROWTH OR TO RESTORE THE PPEARANCE OF THE TREES.
7. IF GRADES AROUND TREES TO BE PROTECTED ARE LIKELY TO CHANGE, THE OWNER SHALL BE REQUIRED TO TAKE SUCH PRECAUTIONS AS DRY WELLING, RETAINING WALLS AND ROOT FEEDING TO THE SATISFACTION OF THE PLANNING AND BUILDING DEPARTMENT OF THE TOWN OF OAKVILLE.
8. GRADE CHANGES WILL NOT OCCUR WITHIN THE TREE PROTECTION ZONE (TPZ)
9. UTILITY ACCESS CORRIDOR MUST BE OUTSIDE THE TPZ AND/OR NO OPEN TRENCH METHOD OF CONSTRUCTION BELOW–GROUND AS WELL AS NO ABOVE–GROUND LINES WITHIN THE TPZ.



NOTE: TREE PROTECTION ZONES FOR THE PURPOSES OF THIS BY–LAW, THE TREE PROTECTION ZONE (TPZ) FOR ANY TREE SHALL BE DETERMINED AS FOLLOWS:

TRUNK DIAMETER (DBH)[1]	MINIMUM PROTECTION DISTANCES REQUIRED[2]
<10 CM	1.8 M
11–40 CM	2.4 M
41–50 CM	3.0 M
51–60 CM	3.6 M
61–70 CM	4.2 M
71–80 CM	4.8 M
81–90 CM	5.4 M
91–100+ CM	6.0 M

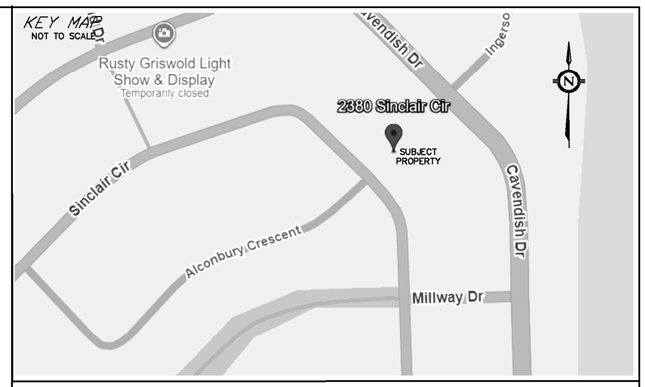
1 DIAMETER AT BREAST HEIGHT (DBH) MEASUREMENT OF TREE TRUNK TAKEN 1.4 METERS ABOVE GROUND

2 TREE PROTECTION ZONE DISTANCES ARE TO BE MEASURED FROM THE OUTSIDE EDGE OF THE TREE BASE TOWARDS THE DRIP LINE AND MAY BE LIMITED BY AN EXISTING PAVED SURFACE, PROVIDED THAT SURFACE REMAINS INTACT THROUGHOUT SITE ALTERATION

AS PER OBC 9.14.6.1.(1) I CERTIFY THAT THE BUILDING WILL BE LOCATED AND THE SITE GRADING HAS BEEN DESIGNED SO THAT IT WILL NOT ADVERSELY AFFECT ADJACENT PROPERTIES

JULY 30 ,2025 MEHRDAD HAJI HANIFEHA P.ENG

CB	DENOTES CATCH BASIN
DT	DENOTES DECIDUOUS TREE
CT	DENOTES CONIFEROUS TREE
IB	DENOTES IRON BAR
	DENOTES SERVICE VALVE
	DENOTES SUBJECT LANDS BOUNDARY
	DENOTES DEED LINE
	DENOTES LOT LINE
	DENOTES LIMIT OF STREET
—x—x—x—x—	DENOTES FENCE LINE
	DENOTES TREE TO BE REMOVED
N–E–S–W	DENOTES NORTH–EAST–SOUTH–WEST
100.00	DENOTES EXISTING ELEVATION
100.00	DENOTES PROPOSED ELEVATION
TW 100.00	DENOTES PROPOSED SWALE ELEVATION
	DENOTES PROPOSED TREE PROTECTION
	DENOTES PROPOSED SILT FENCE
	DENOTES DOWNSPOUT WITH SPLASH PAD
HP	DENOTES HIGH POINT
T/C	DENOTES TOP OF CURB
B/C	DENOTES BOTTOM OF CURB
T/W	DENOTES TOP OF RETAINING WALL
B/W	DENOTES BOTTOM OF RETAINING WALL
WW	DENOTES PROPOSED WINDOW WELL
FD	DENOTES PROPOSED FLOOR DRAIN
(S)	DENOTES PROPOSED SUMP PUMP
(E)	DENOTES PROPOSED EJECTOR



REGIONAL APPROVAL

REGION DESIGN OF WATER AND/OR WASTEWATER SERVICES APPROVAL SUBJECT TO DETAIL CONSTRUCTION CONFORMING TO HALTON REGION STANDARDS AND SPECIFICATIONS AND LOCAL APPROVAL FROM AREA MUNICIPALITY.

SIGNED _____ DATED _____
Development Services

Copyright Act Applies to Use and Production

The approval of the water system on private property is the responsibility of the Local Municipality, regardless, the Applicant must ensure that the Region of Halton's standards and specifications are met, (the Water and Wastewater Linear Design Manual may be obtained on Halton.ca or by calling 311) all water quality tests must be completed to the Region of Halton's satisfaction before the water supply can be turned on.

REV.	REGION OF HALTON	

PROJECT:
2380 SINCLAIR CIR

PART 1
PLAN OF
LOT 216
REGISTERED PLAN 1525

IN THE
CITY OF BURLINGTON
(REGIONAL MUNICIPALITY OF HALTON)

DWN BY: MH

CHK BY: MH

SCALE
5 0 5 10metres
SCALE = 1:150 m

DATE : JULY 30, 2025

JOB No. : 25–7305

GRADING PLAN

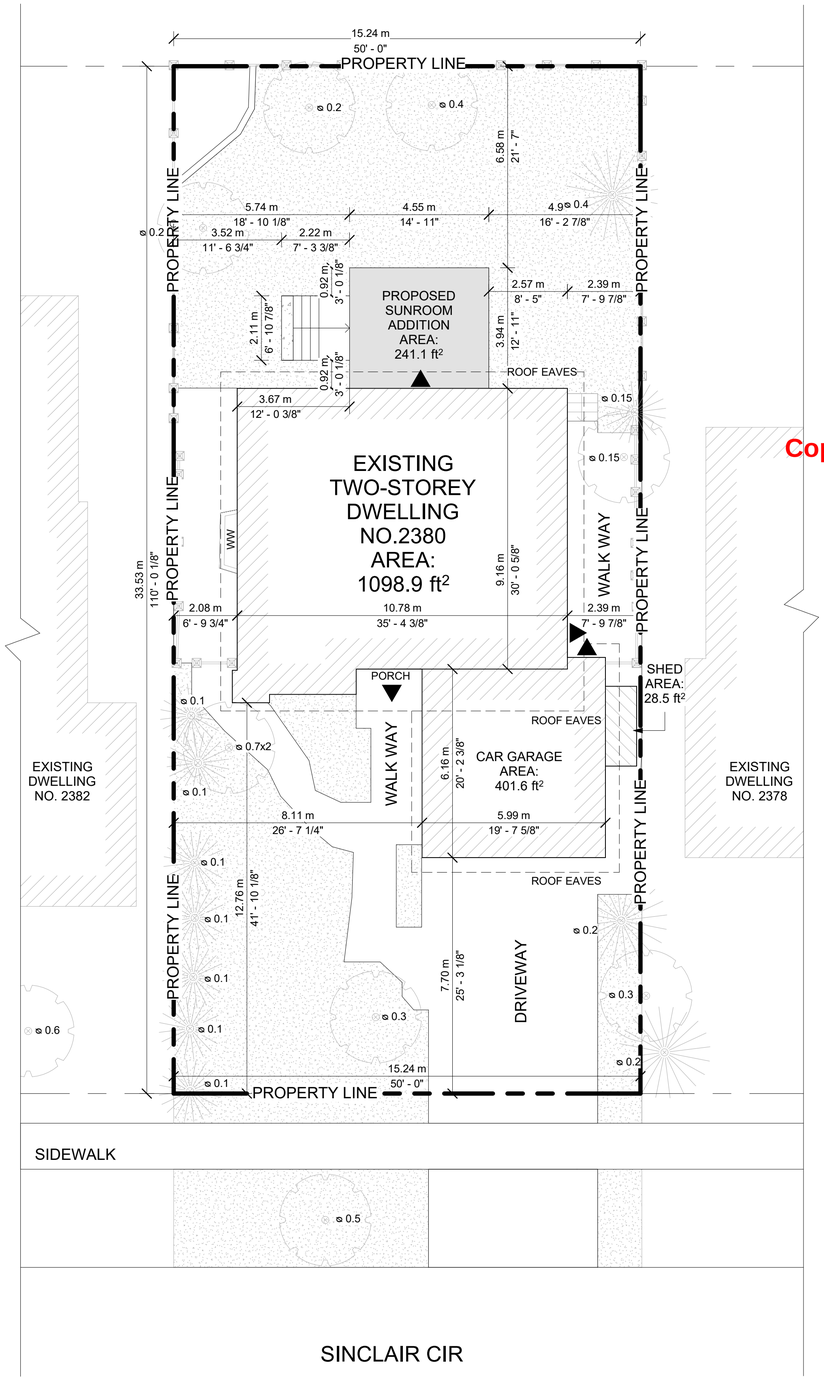
SHEET NO:

01

GEODETIC:
ELEVATIONS SHOWN ON THIS PLAN ARE GEODETIC AND ARE DERIVED FROM THE CITY OF BURLINGTON BENCH MARK NO. BM1064(043921465) HAVING A PUBLISHED ELEVATION OF 164.783 METRES (CGVD28–78 ADJUSTMENT).

NOTES:

1. EXISTING ELEVATIONS AND DISTANCES SHOWN ON THIS PLAN ARE BASED ON TOPOGRAPHIC SURVEY DATED JULY 9TH, 2025 POLAR SURVEYING LTD.
2. SOME DISTANCES SHOWN ON THE SITE PLAN ARE APPROXIMATE AND SHALL NOT BE CONSIDERED AS A LEGALLY RECOGNIZED SURVEY.
3. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT DRAWINGS AND THE LATEST REVISION. ALL PREVIOUS REVISIONS ARE SUPERSEDED.



1 SITE PLAN
1 : 100

PROJECT STATISTICS

ADDRESS:	2380 Sinclair Cir, Burlington
ZONING:	R3-RESIDENTIAL

BY-LAW R3.2

SITE STATISTICS	sq / m	sq / ft	MAX LOT COVERAGE
LOT AREA	513.0 m²	5521.8 ft²	35%

GROSS FLOOR AREA (GFA)

SITE STATISTICS	sq / m	sq / ft	% OF LOT
EXISTING DWELLING (INCL. GARAGE & SHED)	142.5 m²	1533.8 ft²	27.7 %
PROPOSED SUNROOM ADDITION	22.4 m²	241.1 ft²	4.11 %
TOTAL GFA	161.8 m²	1741.6 ft²	31.8 %

DRAWING LIST	
G101	GENERAL NOTES
S101	SITE PLAN
S201	EXISTING BASEMENT FLOOR PLAN
S202	EXISTING GROUND FLOOR PLAN
S203	EXISTING SECOND FLOOR PLAN
S301	PROPOSED FOUNDATION PLAN
S302	PROPOSED GROUND FLOOR PLAN
S401	PROPOSED NORTH ELEVATION
S402	PROPOSED EAST ELEVATION
S403	PROPOSED WEST ELEVATION
S501	SECTIONS A
S502	SECTIONS & DETAILS

Copyright Act Applies to Use and Production

PARSWAYS
ENGINEERING DESIGN STUDIO
www.parsways.ca

Parsways Inc.
49-17817 Leslie St.,
New market ON L3Y 8C6
(416) 809-0100
info@parsways.ca

LICENSED PROFESSIONAL ENGINEER
K. LOTFALIAN
100506544
08/09/2025
PROVINCE OF ONTARIO

Revision

REV.	Description	Date
1	ISSUED FOR CLIENT REVIEW	09/05/2025
2	ISSUED FOR PERMIT	04/07/2025
3	REVISED FOR PERMIT	21/07/2025
4	REVISED FOR PERMIT	08/09/2025

PROJECT TITLE:
PROPOPSED SUNROOM ADDITION
CLIENT:
Nguyen (Lee) Le
OWNER:
Erin McCalpin & Trevor McCalpin
PROJECT ADDRESS:
2380 Sinclair Cir, Burlington

SITE PLAN

PROJECT NO.	SD02569
DATE	15/04/2025
DESIGNED BY	PARSWAYS INC.
DRAWN BY	Y.DAVARI
CHECKED BY	K.LOTFALIAN

S101

Scale 1 : 100

NOTES:

1. NO CHANGES OR ALTERATIONS ARE PERMITTED ON THE BASEMENT FLOOR. IF ANY CHANGES ARE PLANNED, PLEASE NOTIFY THE ENGINEER FOR A DESIGN REVISION.

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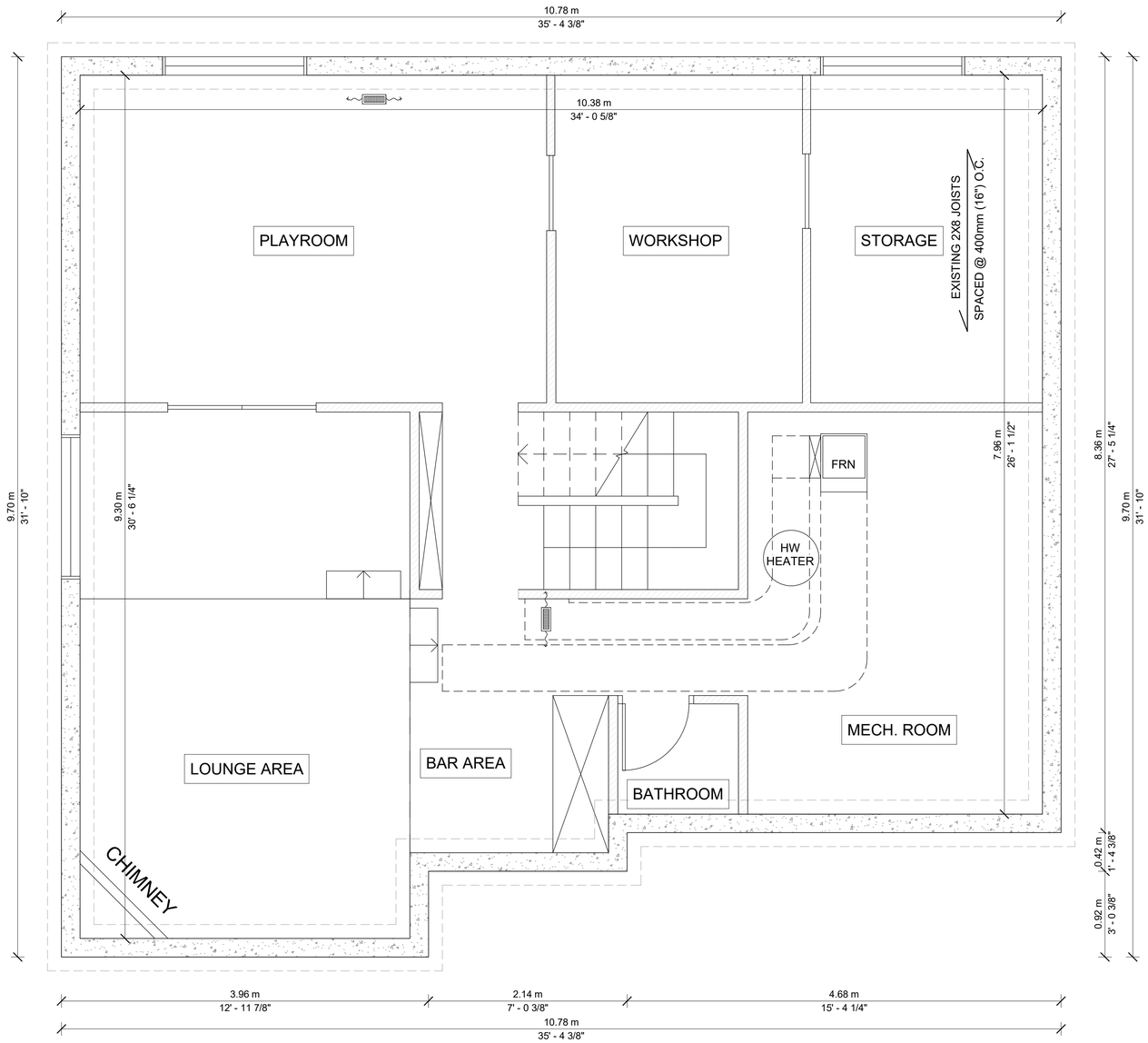

1 EXISTING BASEMENT PLAN
1 : 30

LEGEND:	
INTERCONNECTED SMOKE ALARM	SA
SUPPLY OUTLET (CEILING MOUNTED)	
EXHAUST FAN DUCTED DIRECTLY OUTSIDE	

PARSWAYS
ENGINEERING DESIGN STUDIO
www.parsways.ca

Parsways Inc.

49-17817 Leslie St.,
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LICENSED PROFESSIONAL ENGINEER
K. LOTFALIAN
100506544
23/07/2025
PROVINCE OF ONTARIO

Revision

REV.	Description	Date
1	ISSUED FOR CLIENT REVIEW	09/05/2025
2	ISSUED FOR PERMIT	04/07/2025
3	REVISED FOR PERMIT	21/07/2025

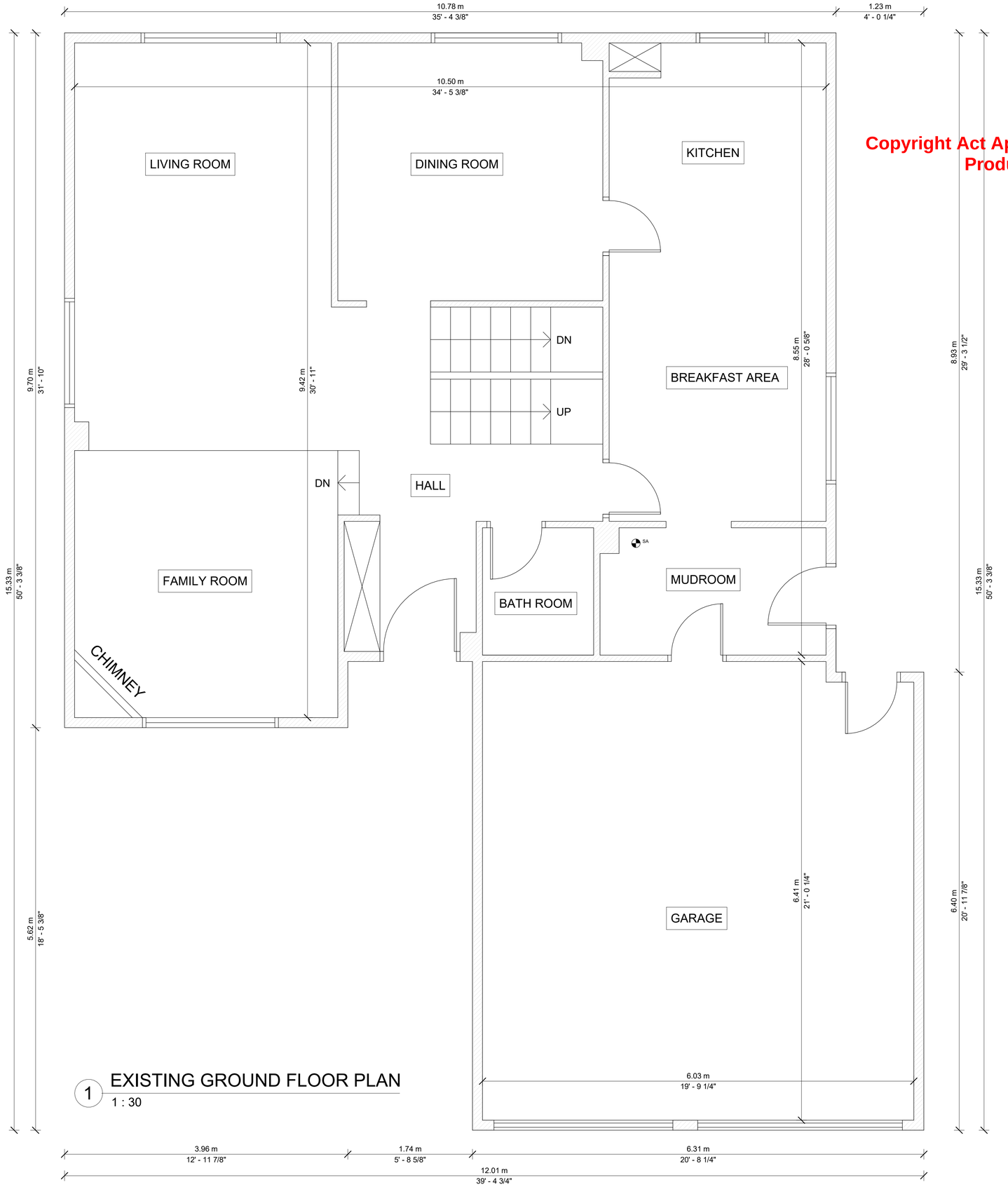
PROJECT TITLE:
PROPOPSED SUNROOM ADDITION
CLIENT:
Nguyen (Lee) Le
OWNER:
Erin McCalpin & Trevor McCalpin
PROJECT ADDRESS:
2380 Sinclair Cir, Burlington

EXISTING
BASMENT PLAN

PROJECT NO.	SD02569
DATE	15/04/2025
DESIGNED BY	PARSWAYS INC.
DRAWN BY	Y.DAVARI
CHECKED BY	K.LOTFALIAN

S201

Scale: As indicated



1 EXISTING GROUND FLOOR PLAN
1 : 30

Copyright Act Applies to Use and Production

PARSWAYS
ENGINEERING DESIGN STUDIO
www.parsways.ca

Parsways Inc.
49-17817 Leslie St.,
New market ON L3Y 8C6
(416) 809-0100
info@parsways.ca

LICENSED PROFESSIONAL ENGINEER
K. LOTFALIAN
100506544
23/07/2025
PROVINCE OF ONTARIO

Revision

REV.	Description	Date
1	ISSUED FOR CLIENT REVIEW	09/05/2025
2	ISSUED FOR PERMIT	04/07/2025
3	REVISED FOR PERMIT	21/07/2025

PROJECT TITLE:
PROPOPSED SUNROOM ADDITION
CLIENT:
Nguyen (Lee) Le
OWNER:
Erin McCalpin & Trevor McCalpin
PROJECT ADDRESS:
2380 Sinclair Cir, Burlington

EXISTING GROUND FLOOR PLAN

PROJECT NO.	SD02569
DATE	15/04/2025
DESIGNED BY	PARSWAYS INC.
DRAWN BY	Y.DAVARI
CHECKED BY	K.LOTFALIAN

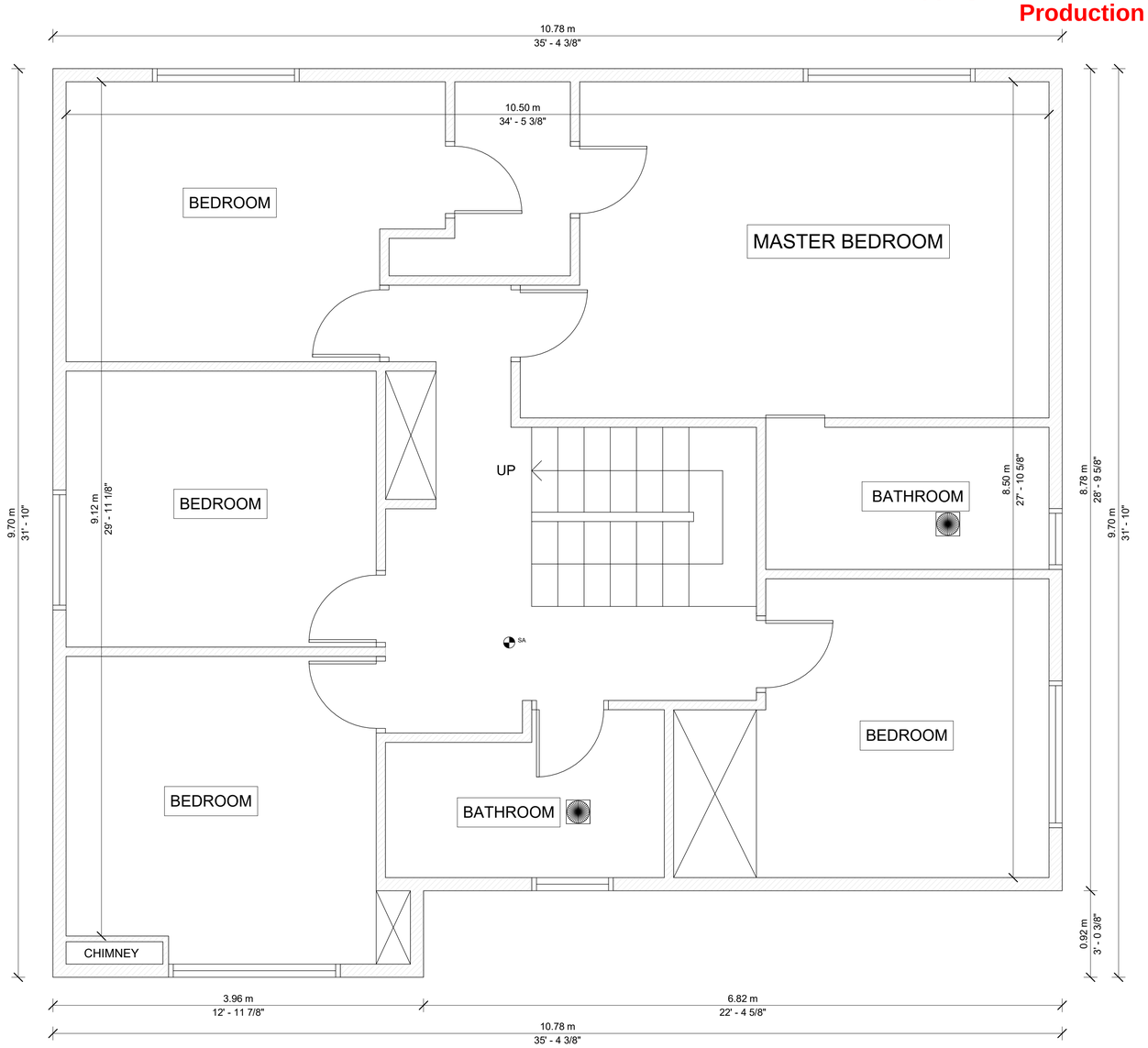
S202

Scale 1 : 30

NOTES:

1. NO CHANGES OR ALTERATIONS ARE PERMITTED ON THE SECOND FLOOR. IF ANY CHANGES ARE PLANNED, PLEASE NOTIFY THE ENGINEER FOR A DESIGN REVISION.

Copyright Act Applies to Use and Production



1 EXISTING SECOND FLOOR PLAN
1 : 30

LEGEND:	
INTERCONNECTED SMOKE ALARM	SA
SUPPLY OUTLET (CEILING MOUNTED)	
EXHAUST FAN DUCTED DIRECTLY OUTSIDE	

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New market ON L3Y 8C6

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LICENSED PROFESSIONAL ENGINEER
K. LOTFALIAN
100506544
23/07/2025
PROVINCE OF ONTARIO

Revision

REV.	Description	Date
1	ISSUED FOR CLIENT REVIEW	09/05/2025
2	ISSUED FOR PERMIT	04/07/2025
3	REVISED FOR PERMIT	21/07/2025

PROJECT TITLE:
PROPOPSED SUNROOM ADDITION

CLIENT:
Nguyen (Lee) Le

OWNER:
Erin McCalpin & Trevor McCalpin

PROJECT ADDRESS:
2380 Sinclair Cir, Burlington

EXISTING SECOND FLOOR PALN

PROJECT NO.	SD02569
DATE	15/04/2025
DESIGNED BY	PARSWAYS INC.
DRAWN BY	Y.DAVARI
CHECKED BY	K.LOTFALIAN

S203

Scale: As indicated

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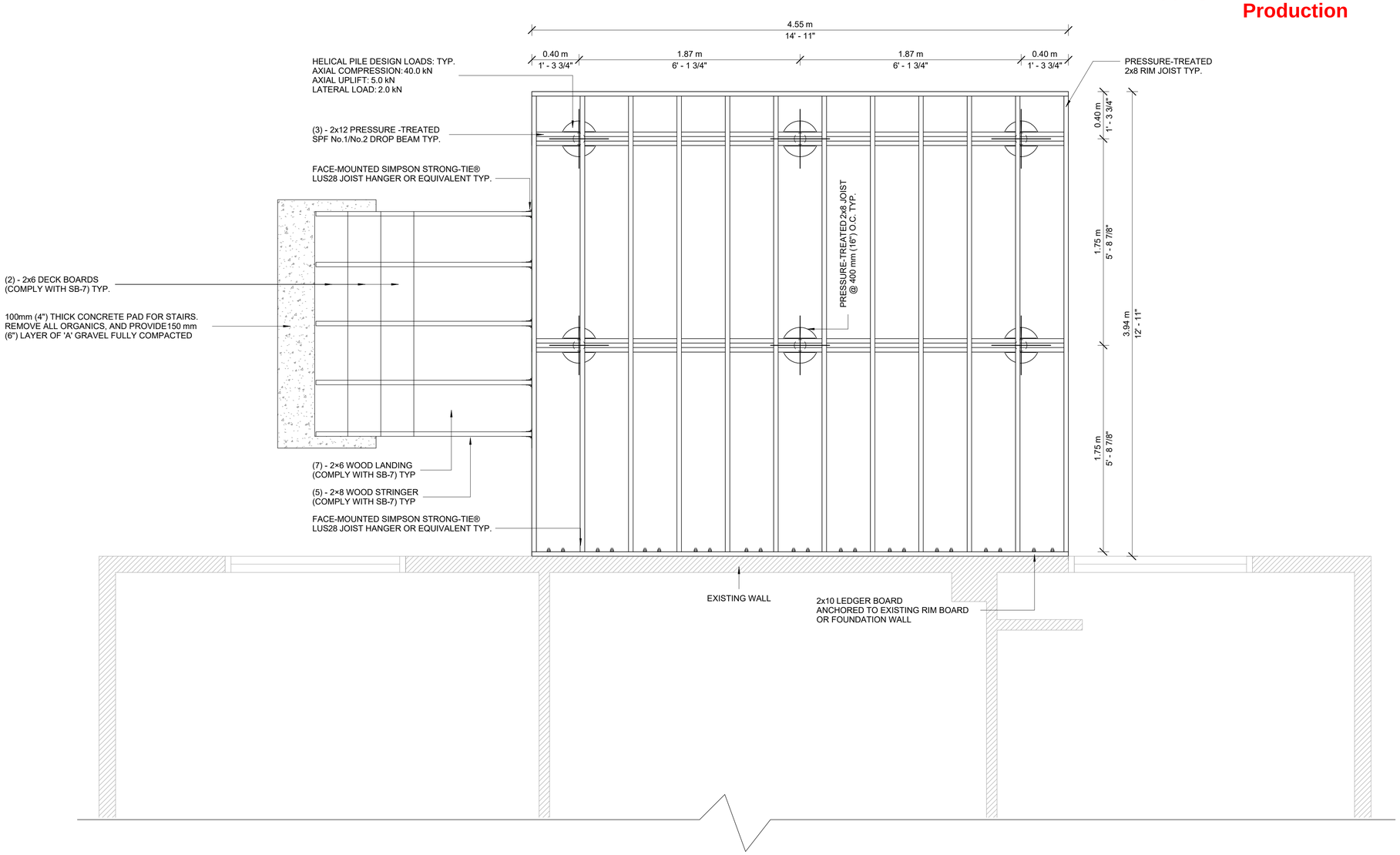

1 PROPOSED FOUNDATION PLAN
1 : 20

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New market ON L3Y 8C6

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LICENSED PROFESSIONAL ENGINEER
K. LOTFALIAN
100506544
08/09/2025
PROVINCE OF ONTARIO

Revision

REV.	Description	Date
1	ISSUED FOR CLIENT REVIEW	09/05/2025
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4	REVISED FOR PERMIT	08/09/2025

PROJECT TITLE:
PROPOPSED SUNROOM ADDITION
CLIENT:
Nguyen (Lee) Le
OWNER:
Erin McCalpin & Trevor McCalpin
PROJECT ADDRESS:
2380 Sinclair Cir, Burlington

PROPOSED FOUNDATION PLAN

PROJECT NO.	SD02569
DATE	15/04/2025
DESIGNED BY	PARSWAYS INC.
DRAWN BY	Y.DAVARI
CHECKED BY	K.LOTFALIAN

S301

Scale 1 : 20

NOTES:

1. FLOOR INSULATION:

   MINIMUM R-30 (RSI 5.3) INSULATION. PROVIDE AIR AND VAPOR BARRIER AS PER OBC CODE. SEAL ALL EDGES AND PENETRATIONS FOR CONTINUOUS INSULATION.

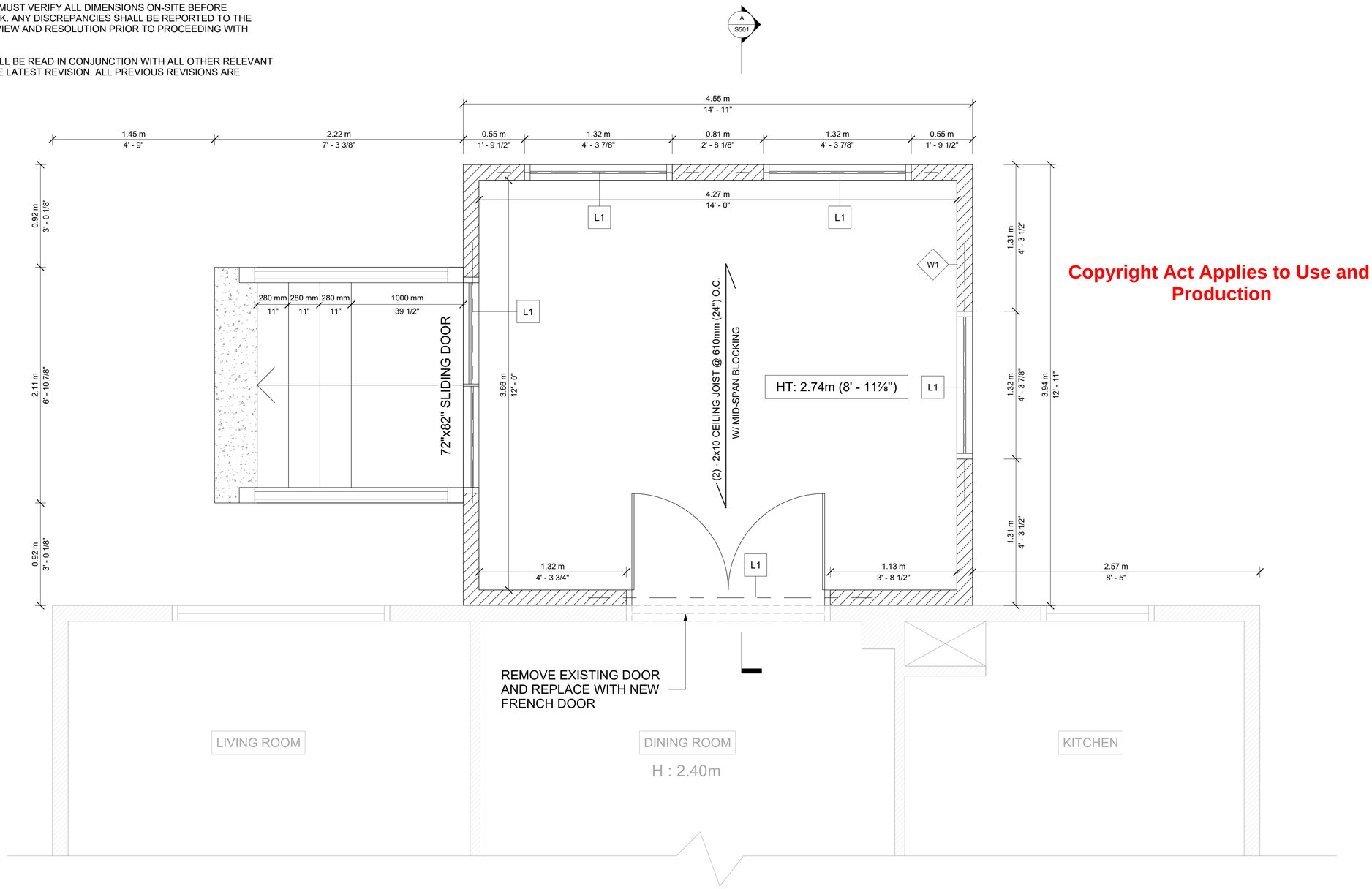
2. STRUCTURAL LINTEL SCHEDULE:

   - L1: (3) - 2x8 SPF No.1/No.2

3. PROVIDE MINIMUM 76mm (3") ON EACH SIDE OF THE OPENING. ENSURE ADEQUATE SUPPORTE AT BOTH ENDS OF THE LINTEL.

4. THE CONTRACTOR MUST VERIFY ALL DIMENSIONS ON-SITE BEFORE COMMENCING WORK. ANY DISCREPANCIES SHALL BE REPORTED TO THE ENGINEER FOR REVIEW AND RESOLUTION PRIOR TO PROCEEDING WITH CONSTRUCTION.

5. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT DRAWINGS AND THE LATEST REVISION. ALL PREVIOUS REVISIONS ARE SUPERSEDED.



1 PROPOSED GROUND FLOOR PLAN
1 : 20

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LICENSED PROFESSIONAL ENGINEER
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100506544
08/09/2025
PROVINCE OF ONTARIO

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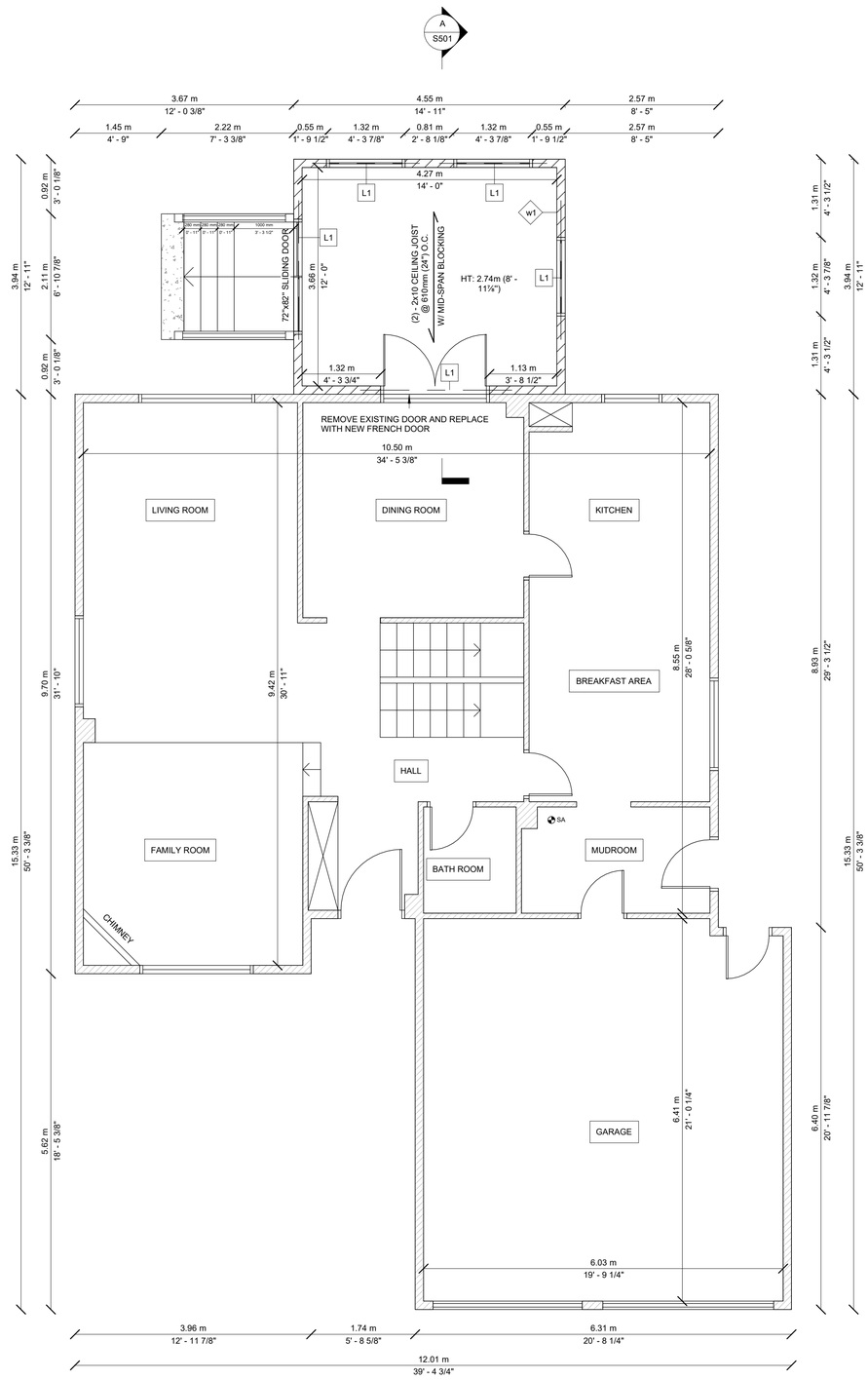
PROJECT TITLE:
PROPOPSED SUNROOM ADDITION
CLIENT:
Nguyen (Lee) Le
OWNER:
Erin McCalpin & Trevor McCalpin
PROJECT ADDRESS:
2380 Sinclair Cir, Burlington

PROPOSED GROUND FLOOR PLAN

PROJECT NO.	SD02569
DATE	15/04/2025
DESIGNED BY	PARSWAYS INC.
DRAWN BY	Y.DAVARI
CHECKED BY	K.LOTFALIAN

S302

Scale 1 : 20



1 FULL GROUND FLOOR PLAN (EXISTING + PROPOSED ADDITION)

1 : 50

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K. LOTFALIAN
100506544
08/09/2025
PROVINCE OF ONTARIO

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2	REVISED FOR PERMIT	08/09/2025

PROJECT TITLE:
PROPOPSED SUNROOM ADDITION

CLIENT:
Nguyen (Lee) Le

OWNER:
Erin McCalpin & Trevor McCalpin

PROJECT ADDRESS:
2380 Sinclair Cir, Burlington

FULL GROUND FLOOR PLAN

PROJECT NO.	SD02569
DATE	15/04/2025
DESIGNED BY	PARSWAYS INC.
DRAWN BY	Y.DAVARI
CHECKED BY	K.LOTFALIAN

S303

Scale 1 : 50

NOTES:

1. BOTTOM OF FOOTING MUST BE FREE OF DEBRIS AND RESTT ON UNDISTURBED SOIL.
2. ALL OPENING SIZES ON DRAWINGS REFER TO FINISHED DIMENSIONS. ROUGH OPENING SIZES SHALL CONFORM TO THE MANUFACTURER'S SPECIFICATIONS.
3. SPATIAL SEPARATION CALCULATIONS IN NORTH ELEVATION AS PER OBC TABLE 9.10.14.4:

   TOTAL AREA OF PROPOSED ADDITION WALL = 12.5 m^2

   TOTAL AREA OF PROPOSED UNPROTECTED OPENINGS = 4.8 m^2

   LIMITING DISTANCE = 6.6 m

   PROPOSED PERCENTAGE OF UNPROTECTED OPENINGS = 38%

   ALLOWABLE PERCENTAGE OF UNPROTECTED OPENINGS = 100%

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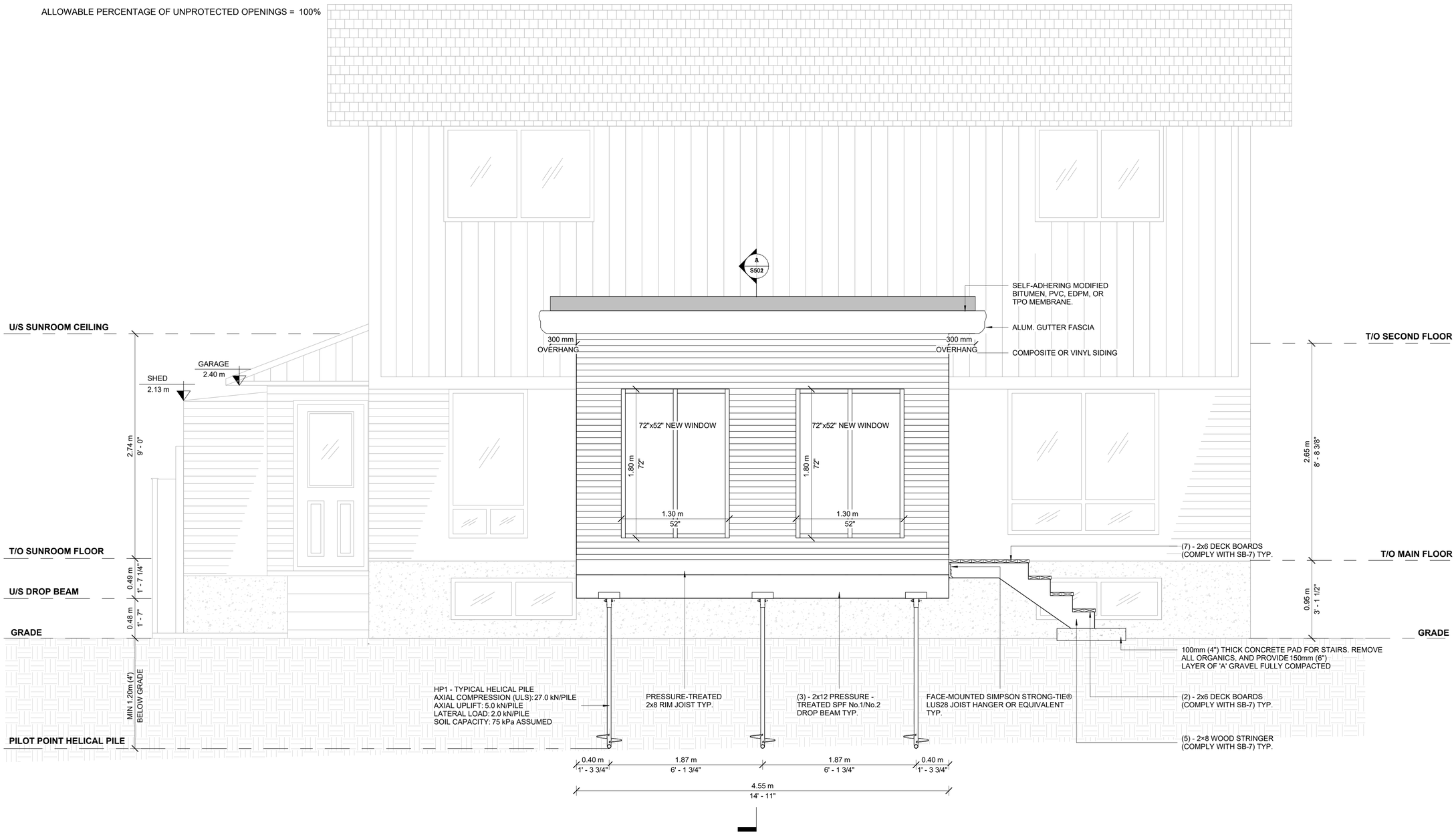

1 EXISTING NORTH ELEVATION

1 : 25

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K. LOTFALIAN
100506544
08/09/2025
PROVINCE OF ONTARIO

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CLIENT:
Nguyen (Lee) Le

OWNER:
Erin McCalpin & Trevor McCalpin

PROJECT ADDRESS:
2380 Sinclair Cir, Burlington

PROPOSED NORTH ELEVATION

PROJECT NO.	SD02569
DATE	15/04/2025
DESIGNED BY	PARSWAYS INC.
DRAWN BY	Y.DAVARI
CHECKED BY	K.LOTFALIAN

S401

Scale 1 : 25

NOTES:

1. BOTTOM OF FOOTING MUST BE FREE OF DEBRIS AND RESTT ON UNDISTURBED SOIL.
2. ALL OPENING SIZES ON DRAWINGS REFER TO FINISHED DIMENSIONS. ROUGH OPENING SIZES SHALL CONFORM TO THE MANUFACTURER'S SPECIFICATIONS.
3. SPATIAL SEPARATION CALCULATIONS IN WEST ELEVATION AS PER OBC TABLE 9.10.14.4:

   TOTAL AREA OF PROPOSED ADDITION WALL = 10.9 m^2

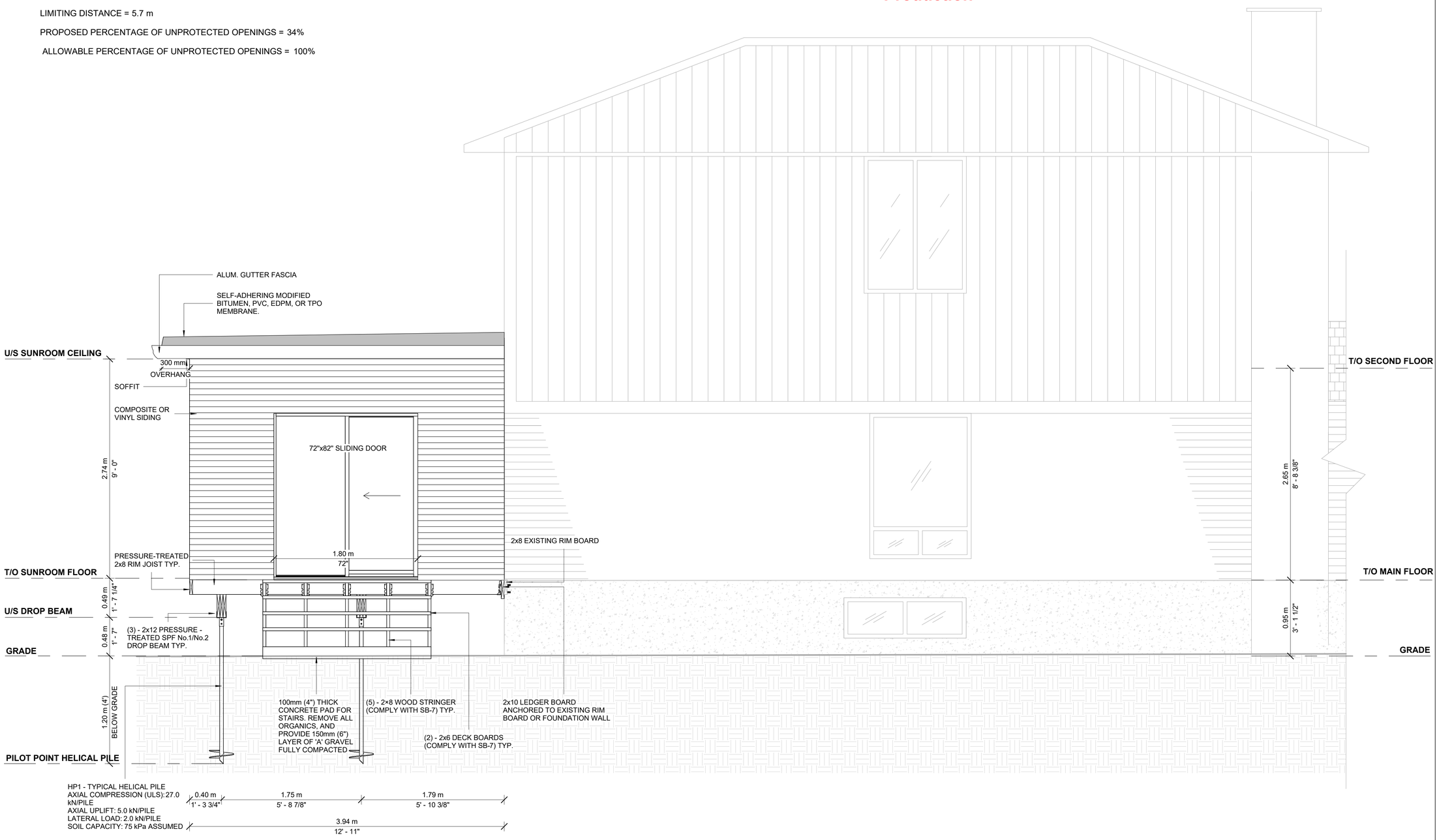
   TOTAL AREA OF PROPOSED UNPROTECTED OPENINGS = 3.7 m^2

   LIMITING DISTANCE = 5.7 m

   PROPOSED PERCENTAGE OF UNPROTECTED OPENINGS = 34%

   ALLOWABLE PERCENTAGE OF UNPROTECTED OPENINGS = 100%

Copyright Act Applies to Use and Production



1 EXISTING WEST ELEVATION

1 : 25

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New market ON L3Y 8C6

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LICENSED PROFESSIONAL ENGINEER
K. LOTFALIAN
100506544
08/09/2025
PROVINCE OF ONTARIO

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4	REVISED FOR PERMIT	08/09/2025

PROJECT TITLE:
PROPOPSED SUNROOM ADDITION

CLIENT:
Nguyen (Lee) Le

OWNER:
Erin McCalpin & Trevor McCalpin

PROJECT ADDRESS:
2380 Sinclair Cir, Burlington

PROPOSED WEST ELEVATION

PROJECT NO.	SD02569
DATE	15/04/2025
DESIGNED BY	PARSWAYS INC.
DRAWN BY	Y.DAVARI
CHECKED BY	K.LOTFALIAN

S402

Scale 1 : 25

NOTES:

1. BOTTOM OF FOOTING MUST BE FREE OF DEBRIS AND RESTT ON UNDISTURBED SOIL.
2. ALL OPENING SIZES ON DRAWINGS REFER TO FINISHED DIMENSIONS. ROUGH OPENING SIZES SHALL CONFORM TO THE MANUFACTURER'S SPECIFICATIONS.
3. SPATIAL SEPARATION CALCULATIONS IN EAST ELEVATION AS PER OBC TABLE 9.10.14.4:

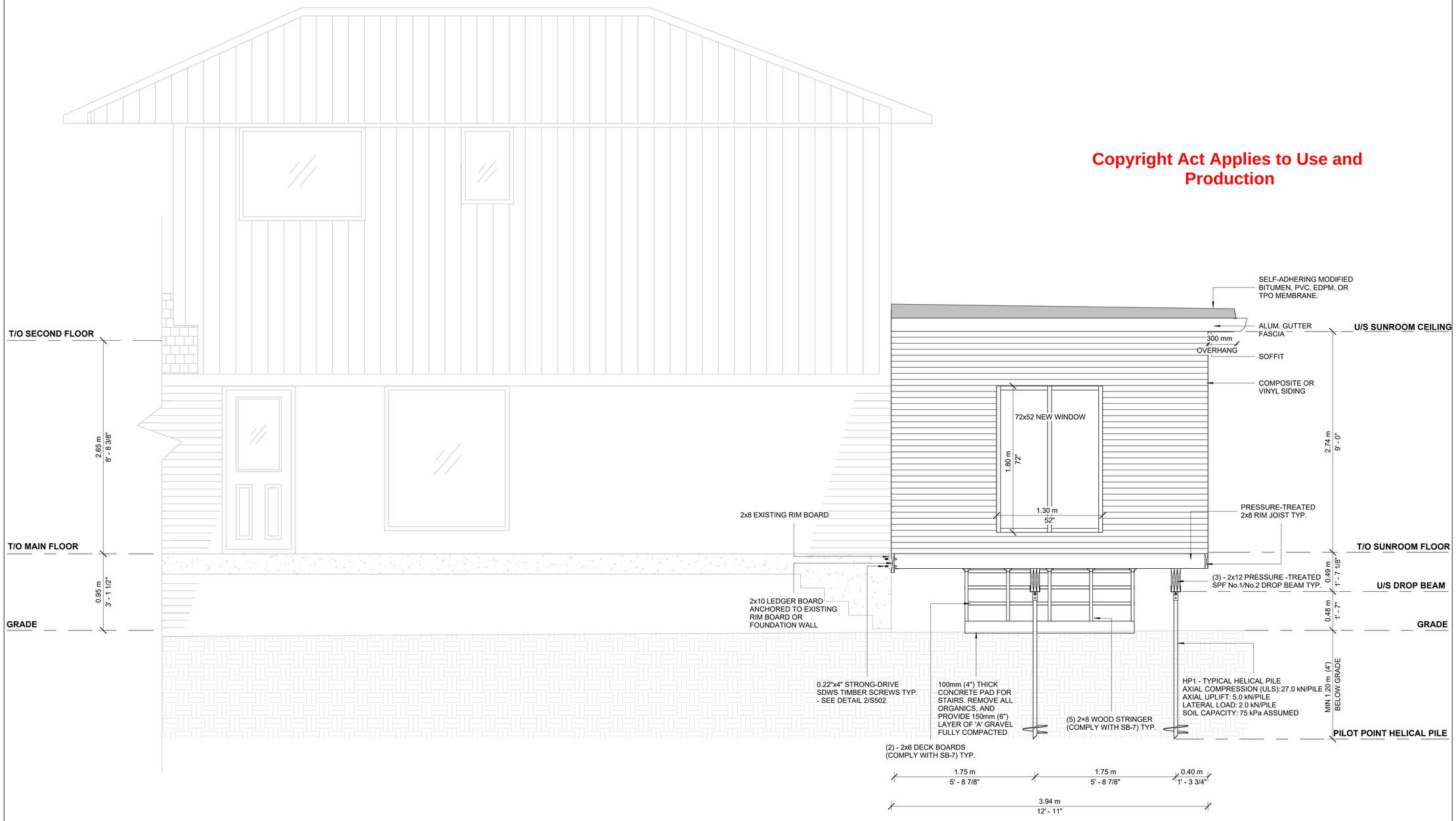
   TOTAL AREA OF PROPOSED ADDITION WALL = 10.9 m^2

   TOTAL AREA OF PROPOSED UNPROTECTED OPENINGS = 2.4 m^2

   LIMITING DISTANCE = 5.3 m

   PROPOSED PERCENTAGE OF UNPROTECTED OPENINGS = 22%

   ALLOWABLE PERCENTAGE OF UNPROTECTED OPENINGS = 100%



1 EXISTING EAST ELEVATION

1 : 25

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100506544
08/09/2025
PROVINCE OF ONTARIO

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4	REVISED FOR PERMIT	08/09/2025

PROJECT TITLE:
PROPOPSED SUNROOM ADDITION

CLIENT:
Nguyen (Lee) Le

OWNER:
Erin McCalpin & Trevor McCalpin

PROJECT ADDRESS:
2380 Sinclair Cir, Burlington

PROPOSED EAST ELEVATION

PROJECT NO.	SD02569
DATE	15/04/2025
DESIGNED BY	PARSWAYS INC.
DRAWN BY	Y.DAVARI
CHECKED BY	K.LOTFALIAN

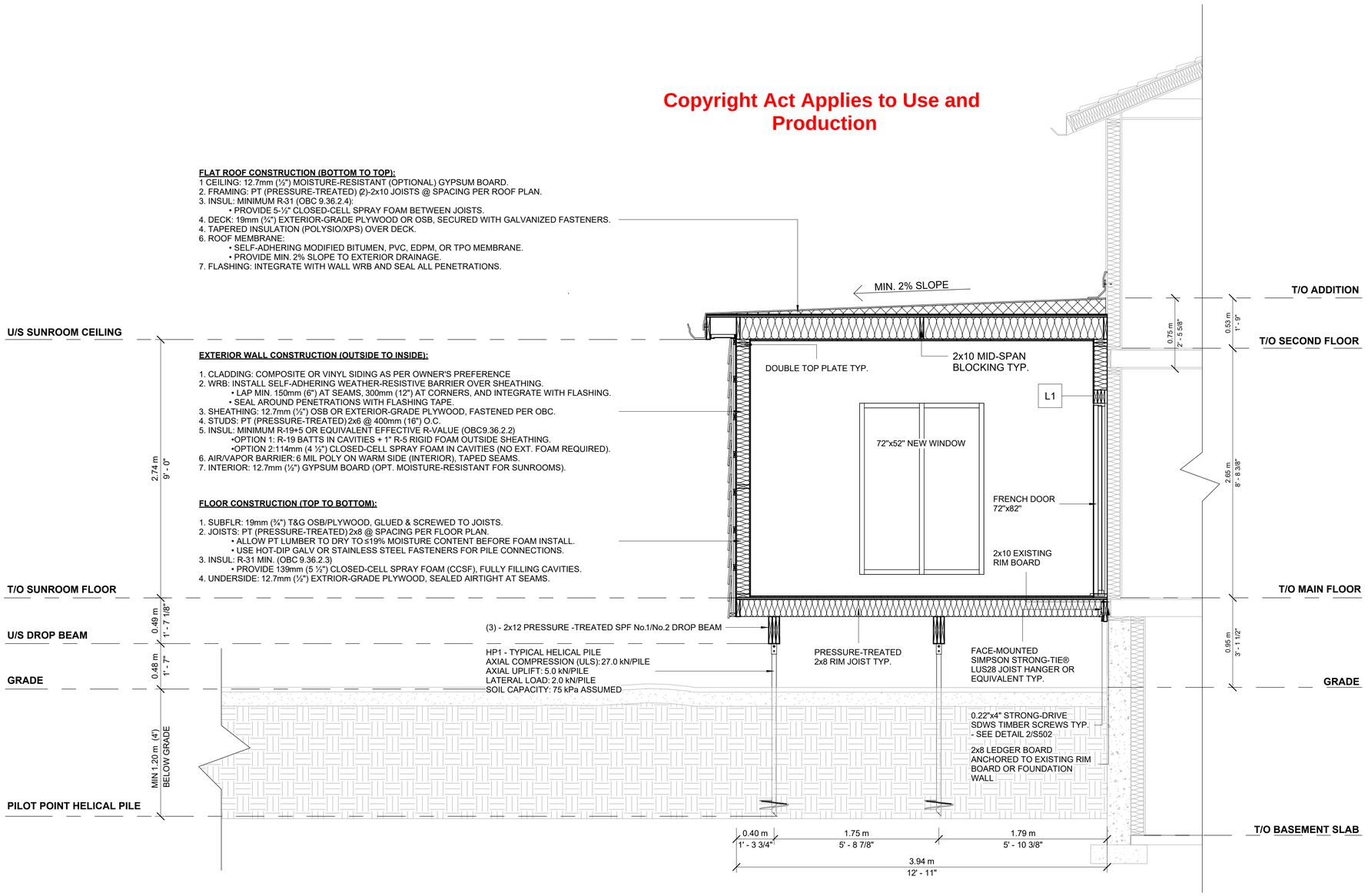
S403

Scale 1 : 25

NOTES:

1. BOTTOM OF FOOTING MUST BE FREE OF DEBRIS AND RESTT ON UNDISTURBED SOIL.
2. ALL OPENING SIZES ON DRAWINGS REFER TO FINISHED DIMENSIONS. ROUGH OPENING SIZES SHALL CONFORM TO THE MANUFACTURER'S SPECIFICATIONS.
3. STRUCTURAL LINTEL SCHEDULE:
   - L1: (3) - 2x8 SPF No.1/No.2

Copyright Act Applies to Use and Production



A SECTION A
1 : 25

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100506544
08/09/2025
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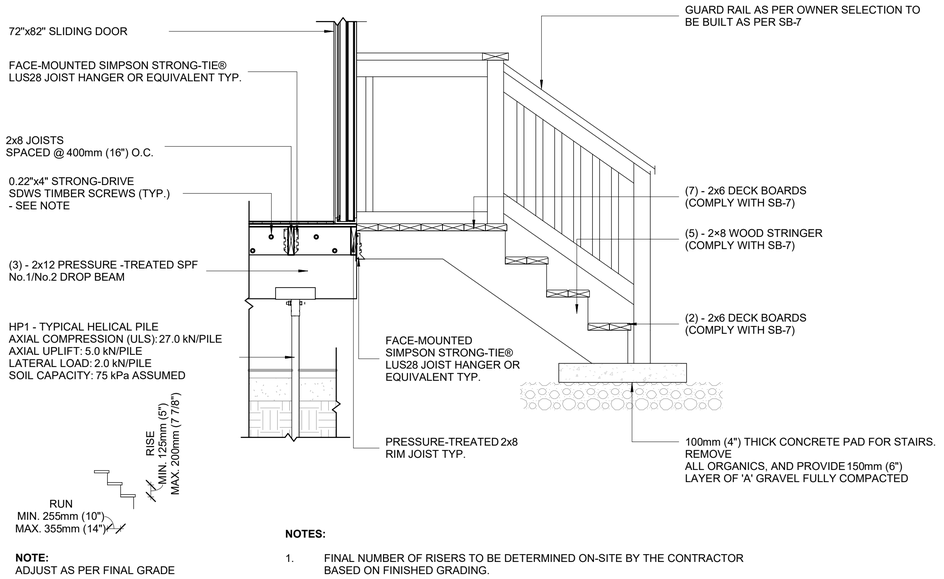
PROJECT TITLE:
PROPOPSED SUNROOM ADDITION
CLIENT:
Nguyen (Lee) Le
OWNER:
Erin McCalpin & Trevor McCalpin
PROJECT ADDRESS:
2380 Sinclair Cir, Burlington

SECTION A

PROJECT NO.	SD02569
DATE	15/04/2025
DESIGNED BY	PARSWAYS INC.
DRAWN BY	Y.DAVARI
CHECKED BY	K.LOTFALIAN

S501

Scale 1 : 25



NOTE:
ADJUST AS PER FINAL GRADE

NOTES:

1. FINAL NUMBER OF RISERS TO BE DETERMINED ON-SITE BY THE CONTRACTOR BASED ON FINISHED GRADING.

1 STAIR DETAILS
1 : 20

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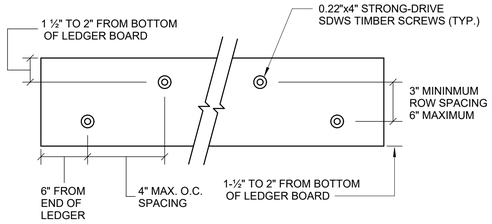
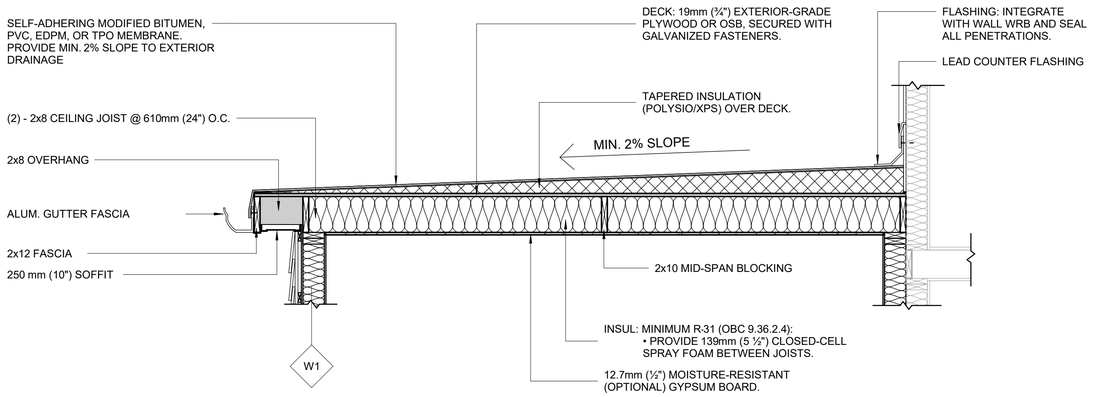


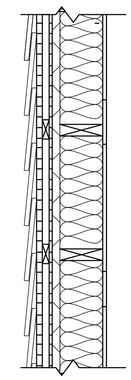
NOTES:

1. LEDGER BOARD SHALL NOT BE SUPPORTED ON STONE OR MASONRY VENEER. IT SHALL BE SUPPORTED ON RIM BOARD ONLY USING APPROVED FASTENERS: SIMPSON SDWS22400DB. ANY SUBSTITUTION FOR FASTENERS MUST BE REVIEWED AND APPROVED BY THE ENGINEER.
2. SHOULD THE EXISTING RIM BOARD SHOW SIGNS OF SIGNIFICANT DECAY OR LARGE CRACKS, THE CONTRACTOR IS TO REPLACE IT WITH A NEW, SOUND RIM BOARD AND NOTIFY THE ENGINEER TO PROVIDE ADDITIONAL REHABILITATION SOLUTIONS AS NECESSARY.
3. CONNECT JOISTS WITH SIMPSON STRONG-TIE® LUS28 JOIST HANGERS OR EQUIVALENT.
4. THE END OF EACH JOIST SHALL HAVE AT LEAST 38mm (1 ½") OF BEARING ON WOOD OR METAL.
5. FASTENERS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.

2 LEDGER BOARD FASTENER
1 : 10



3 FLAT ROOF DETAILS
1 : 20



W1: EXTERIOR 2x6 STUD WALL ASSEMBLY:

1. COMPOSITE OR VINYL SIDING
2. 1x3 WOOD STRAPPING @ 400mm (16") O.C.
3. WEATHER-RESISTIVE BARRIER OVER SHEATHING
4. 12.7mm (½") EXTERIOR PLYWOOD SHEATHING
5. 2x6 STUD WALL @ 400mm (16") O.C.
6. MIN. R-19 CAVITY INSULATION + R-5 CI
7. 6 MIL POLY VAPOR BARRIER ON WARM SIDE
8. 12.7mm (½") GYPSUM BOARD

NOTES:

1. AS AN ALTERNATIVE, 114mm (4 $^{31}/_{64}$") OF CLOSED-CELL SPRAY FOAM WITHIN STUD CAVITIES MAY BE USED TO ACHIEVE EQUIVALENT OR HIGHER R-VALUE PERFORMANCE.
2. MOISTURE-RESISTANT GYPSUM BOARD IS RECOMMENDED FOR SUNROOM APPLICATIONS.

4 EXTERIOR WALL DETAIL
1 : 10

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LICENSED PROFESSIONAL ENGINEER
K. LOTFALIAN
100506544
08/09/2025
PROVINCE OF ONTARIO

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PROPOPSED SUNROOM ADDITION
CLIENT:
Nguyen (Lee) Le
OWNER:
Erin McCalpin & Trevor McCalpin
PROJECT ADDRESS:
2380 Sinclair Cir, Burlington

SECTIONS & DETAILS

PROJECT NO.	SD02569
DATE	15/04/2025
DESIGNED BY	PARSWAYS INC.
DRAWN BY	Y.DAVARI
CHECKED BY	K.LOTFALIAN

S502

Scale: As indicated

COMMITTEE OF ADJUSTMENT

Meeting 22 **AGENDA** **DECEMBER 10, 2025**

HEARING NO. 5.1 - 5:30 P.M.

File
540-02-A-015/25

APPLICANT: CJJ Holdings Limited

PROPERTY: 4903 Thomas Alton Blvd.
PLAN M1034 BLK 24
City of Burlington - Regional Municipality of Halton.

PROPOSAL: The applicant submitted a Site Plan Pre-Consultation Application, under file PRCN-SP-031/24, for the construction of a new one storey multi-tenant retail/service commercial building (Building C). The proposed development of Building C will remove 57 existing parking spaces, with 64 additional spaces provided for a total of 255 parking spaces. The new building is proposed to include a Day Care Centre use in units 1 and 2.

VARIANCES:

1. To permit a 61m maximum yard abutting Thomas Alton Blvd instead of the maximum permitted 6m for proposed Building C.

2. To permit a 77m maximum yard abutting Appleby Line instead of the maximum permitted 6m for proposed Building C.

3. To permit a 12m maximum yard abutting Palladium Way instead of the maximum permitted 6m for proposed Building C.

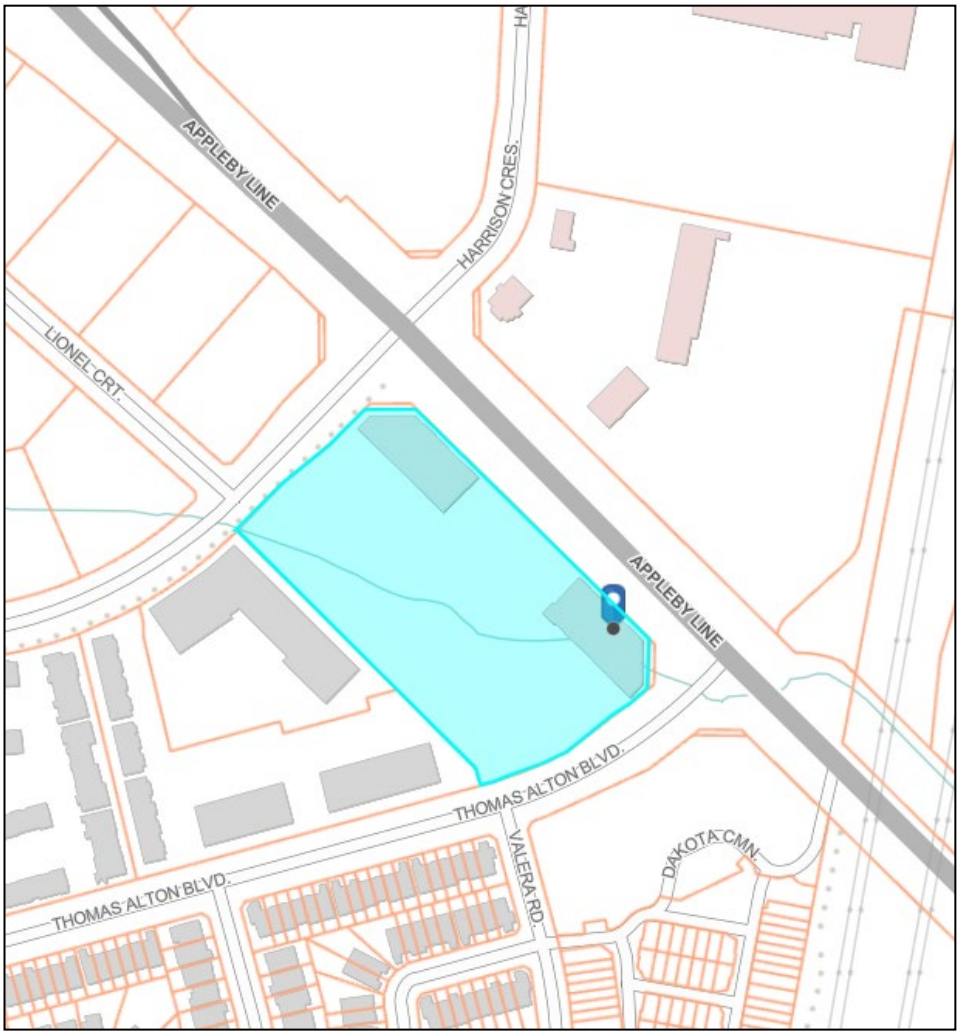
4. To permit 3.65 parking spaces per $100m^2$ of gross floor area instead of the minimum required 5 parking spaces per 100m2 of gross floor area for a retail centre.

5. Notwithstanding Part 5, Section 4.13, to permit a building elevation facing a street (Thomas Alton Blvd) without pedestrian accessible doors associated with Building C, whereas Zoning By-Law 2020 requires a pedestrian accessible door on a building elevation facing a street for every building located within 60 metres of a street with a deemed width of 26 m or greater.

6. Notwithstanding Part 5, Section 4.13, to permit a building elevation facing a street (Palladium Way) without pedestrian accessible doors associated with Building C, whereas Zoning By-Law 2020 requires a pedestrian accessible door on a building elevation facing a street for every building located within 60 metres of a street with a deemed width of 26 m or greater.

COMMITTEE OF ADJUSTMENT
MINOR VARIANCE
STAFF REPORTS

Owner(s): CJJ Holdings Limited
Address: 4903 Thomas Alton Boulevard
File No. **A-015/25**
Ward: 6



Staff Comments

Committee of Adjustment
This application was deferred at the September 3 2025 Committee Meeting.

Date: October 1, 2025 Prepared By: E. Shacklette

This application was deferred at the October 22, 2025 Committee Meeting.

Date: November 10, 2025 Prepared By: E. Shacklette

There is one previous minor variance application on record for this property.

File No. A064/2011 – Approved

- To permit canopies and sidewalks associated with proposed buildings A and B to encroach into the required 3m landscape areas abutting a street along Appleby Line, Palladium Way and Thomas Alton Boulevard.

Date: February 20, 2025 Prepared By: C. Kabel

Zoning

The subject property is zoned MXE-322, Mixed Use Employment Corridor, under Zoning By-Law 2020, as amended. The MXE-322 zone requires, among other things, the following:

Exception 322	Zone MXE	Map 25	Amendment 2020.184 2020.176 2020.373	Enacted Apr 25/05 May 23/06 Nov 28/16

1. **Yard abutting a street:** **6 metres maximum**
2. Additional Permitted Use: Day Care Centre
3. Notwithstanding PART 1, section 2.2.2, the maximum yard requirement for a principal building shall not apply to accessory buildings or structures associated with an outdoor play area of a day care centre.
4. A minimum setback of 30 m from Appleby Line is required for an outdoor play area associated with a day care centre.
5. A minimum setback of 30 m from a Business Corridor zone is required for an outdoor play area associated with a day care centre.

Except as amended herein, all other provisions of this By-law, as amended, shall apply.

2.25 OFF-STREET PARKING AND LOADING REQUIREMENTS

2.25.4 The number of parking spaces required for permitted uses in all zones shall be in accordance with Table 1.2.6, unless otherwise specified in the respective zones. Where more than one use specified in Table 1.2.6 is provided on the same lot or in the same building, the parking spaces required shall be in respect of each use.

Table 1.2.6: Off-Street Parking Standards

USE	PARKING STANDARD
Retail Centre	**5 spaces per 100 m^2 gross floor area**

Required:	**Required Calculation for Building A, B, C:**	**Proposed Parking for entire development**	**Proposed Calculation for Building A, B, C:**
Retail Centre: 5/100 m^2 GFA	6969m^2/100x5 = 349 parking spaces	259 spaces	**6969m^2/100X3.65= 255 parking spaces**

4.13 DOORS

Every building located within 60 metres of a street with a deemed width of 26 metres or greater shall provide a pedestrian accessible door on the building elevation facing the street.

Background:

The property is currently developed with two multi-tenant buildings (Buildings A and B) and associated surface parking, which were approved through Site Plan Approval file 535-04/11.

Proposal:

The applicant submitted a Site Plan Pre-Consultation Application, under file PRCN-SP-031/24, for the construction of a new one storey multi-tenant retail/service commercial building (Building C). The proposed development of Building C will remove 57 existing parking spaces, with 64 additional spaces provided for a total of 255 parking spaces. The new building is proposed to include a Day Care Centre use in units 1 and 2.

Variances are required to permit an increase to the maximum yards abutting a street, and to permit a reduction in required parking for a retail centre for the entire development. Additional variances are required to permit building elevations facing a street and within 60m of a right-of-way to not provide pedestrian doors based on the proposed function of the street fronting end units.

Variances required:

1. To permit a 61m maximum yard abutting Thomas Alton Blvd instead of the maximum permitted 6m for proposed Building C.

2. To permit a 77m maximum yard abutting Appleby Line instead of the maximum permitted 6m for proposed Building C.

3. To permit a 12m maximum yard abutting Palladium Way instead of the maximum permitted 6m for proposed Building C.

4. To permit 3.65 parking spaces per $100m^2$ of gross floor area instead of the minimum required 5 parking spaces per 100m2 of gross floor area for a retail centre.

5. Notwithstanding Part 5, Section 4.13, to permit a building elevation facing a street (Thomas Alton Blvd) without pedestrian accessible doors associated with Building C, whereas Zoning By-Law 2020 requires a pedestrian accessible door on a building elevation facing a street for every building located within 60 metres of a street with a deemed width of 26 m or greater.

6. Notwithstanding Part 5, Section 4.13, to permit a building elevation facing a street (Palladium Way) without pedestrian accessible doors associated with Building C, whereas Zoning By-Law 2020 requires a pedestrian accessible door on a building elevation facing a street for every building located within 60 metres of a street with a deemed width of 26 m or greater.

Condition:

1. The applicant shall apply for a zoning clearance certificate.

Note:

1. The application was reviewed under Section 45(1) of The Planning Act

Date: November 12, 2025 Prepared By: Nathan Dart, CPT

Site Planning

KLM Planning Partners Inc. has submitted a revised Committee of Adjustment application proposing six minor variances from the zoning bylaw, whereas the previous iteration proposed seven. The variance to permit garbage storage in a yard abutting Palladium Way has been eliminated. The variances would facilitate construction of a new 13-unit commercial building containing a daycare centre, two standard restaurants and eight retail units at the rear of a property municipally known as 4903 Thomas Alton Boulevard (the “Site”).

Existing Land Uses and Surrounding Context

The Site is currently developed with a pair of two-storey commercial buildings at the northeast and southeast corners of the site:

1. 4900 Palladium Way (Building “A”)
2. 4903 Thomas Alton Boulevard (Building “B”)

The existing two buildings are positioned close to Appleby Line, Thomas Alton Boulevard and Palladium Way, less than six metres from each property line. Although they have primary elevations facing Appleby Line, they were also designed to engage the pedestrian realm along Thomas Alton Boulevard and Palladium Way. Both buildings have pedestrian-accessible entrances, canopies and other architectural detailing meant to create visual interest along all street frontages. The buildings are separated from one another by a parking area containing 46-spaces. Behind buildings “A” and “B” are an additional 202 parking spaces, for a combined total of 248 spaces on the Site. West of the main parking lot are three vacant areas, two of which are proposed to be developed with the new Building “C”. At the edge of the site is a private road identified on the survey plan as “Valera Road”. The Site is located at the east edge of a newer, master-planned, mixed-use neighbourhood known as “Alton Village”, whose boundaries are Highway 407 to the north and west, Bronte Creek to the east and Dundas Street to the south. The properties immediately surrounding the Site to the south and west are developed or under development with medium and high-density residential uses including townhouses, back-to-back townhouses, and apartment buildings. Further west are low-rise residential areas of the neighbourhood that were developed in the mid-2000s. Adjacent land uses include:

North: The lands on the north side of Palladium Way and surrounding Lionel Court Lands are designated and zoned for employment uses, including industrial uses. 3301 Lionel Court, directly across the street from the site, is approved for redevelopment with a 1-storey office building (the Argo Development Corporation headquarters) with a floor area of approx. 1,478 m.
East: Retail uses including a home building supply store and a pair of fast-food restaurants
South: A 10-storey apartment building with 344 units is located across Thomas Alton Boulevard from the Site, municipally known as 3200 and 3210 Dakota Common
West: A high-rise residential development consisting of two 17-storey apartment buildings is under construction directly west of the site, municipally known as 4853 Thomas Alton Boulevard.

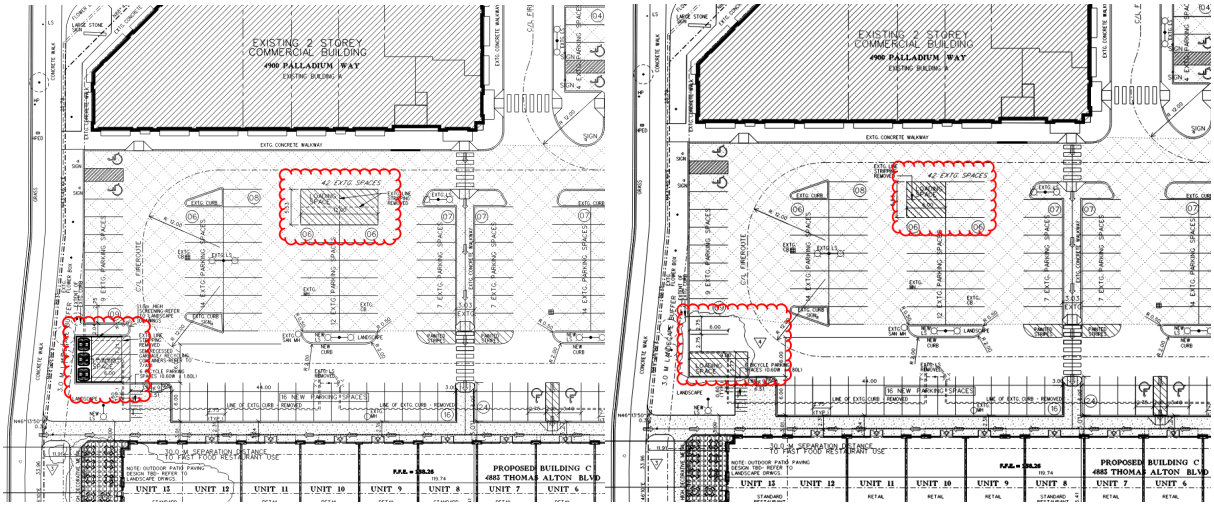
Application History

The first version of this application was scheduled for the September 3, 2025 Committee of Adjustment hearing, but staff were not supportive of all variances. The applicant met with staff in early September and mutually agreed on a series of revisions

to address the concerns. The revised application was presented to Committee of Adjustment on October 22, 2025, where Committee members identified additional concerns. After meeting staff on November 5th, the applicant made two further revisions. Staff have listed the revisions below:

Revision/Change	**Effect of the Change**
The applicant originally proposed a deep collection waste disposal system located between Building "A" and Building "C" and facing Palladium Way. The applicant has eliminated the waste disposal system, which eliminates variance #4 *"To permit garbage storage to be located within a yard abutting Palladium Way whereas Zoning By-law 2020 does not permit garbage storage to be located in the front or street side lot line"*. The applicant has clarified that buildings A and B have existing garbage rooms of sufficient size for all three buildings.	The change addresses a member's comments at the October 22 hearing that the garbage bins are positioned too close to the restaurant. The elimination of the waste disposal area also creates two additional parking spaces, reducing the magnitude of the parking deficiency.
Four parking spaces have been added to the site through the elimination of the deep collection waste disposal system, and reducing the size of one of the proposed loading spaces. 259 parking spaces are now proposed compared with 255 in the former application. The four extra parking spaces reduces the magnitude of the parking deficiency (variance #4), without compromising the loading facilities on site. None of the variances relate to the number or size of loading spaces.	The increase in parking spaces reduces the magnitude of the proposed parking deficiency, although the variance to permit a reduced parking ratio remains the same. Although Committee members did not specifically discuss parking quantity at the previous meeting, members had a general concern about the site plan not being finalized, more particularly about the fire route through the parking lot and the ability of a delivery truck or fire truck to maneuver and successfully access key areas of the site. Staff note that the site and parking area was developed in 2011/2012 and has existing, approved and fully functional fire routes and loading areas. The development infills a vacant area of the site, without a significant reconfiguration of the parking lot. The only change in the fire route is the elimination of one of two driveways to Valera Road. The applicant can demonstrate the functionality of loading spaces in the future site plan application and a "swept path analysis".

Old Oct 22 Site Plan (left) vs New Dec 10 Site Plan (right)



Timing of Minor Variance Application

The minor variance application for building “C” has been submitted in advance of a site plan application. Some applicants prefer this sequence to avoid a situation where the Committee of Adjustment declines the variances, triggering costly changes to the site plan application. Staff are not opposed to reviewing the minor variance application at this stage and note that the site plan included in the application has been informed by some technical input from City departments and outside agencies. An early version of this proposal was reviewed through a pre-consultation application submitted in August 2024. In the 2024 concept plan, building “C” was positioned on the opposite side of the Site next to Thomas Alton Drive (See below). The applicant received comments, requests for additional information, and a list of study requirements from planning, zoning, forestry and engineering staff. Engineering staff noted that the original proposed building was *“above existing storm and sanitary services. Revisions are required to either redirect the existing services or change the building footprint”.* This comment influenced the change in building location to the north side of the site. An image of the original approved 2011 site plan (File 535-004/11) is included below, with servicing locations highlighted. Stormwater and sanitary service lines for the entire development were installed under the most southerly access to Valera Road.

COMMITTEE OF ADJUSTMENT
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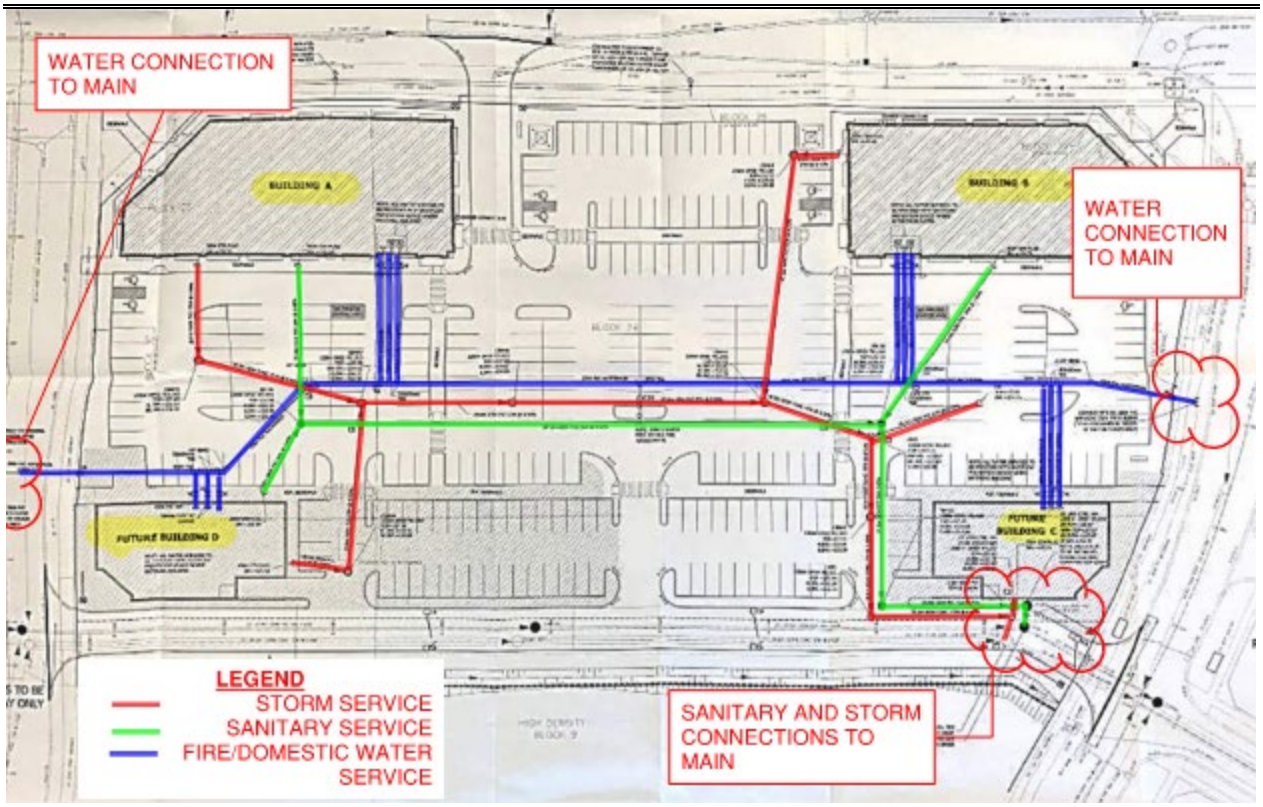
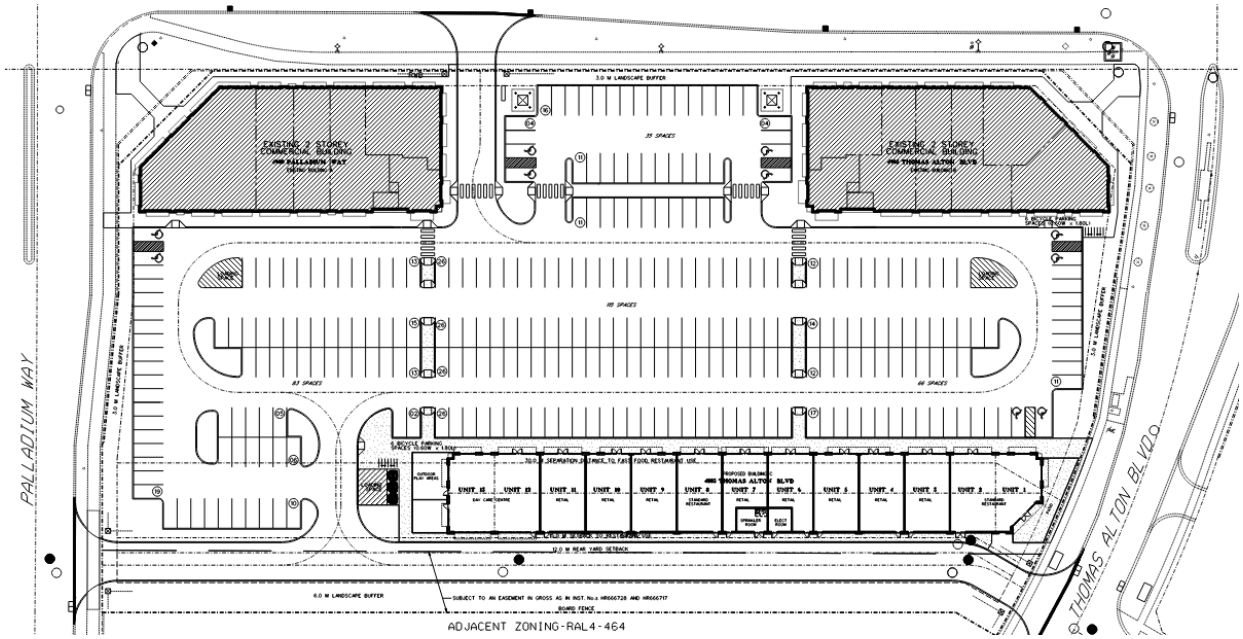


Initial Pre-consultation plan submitted September 2024



COMMITTEE OF ADJUSTMENT
MINOR VARIANCE
STAFF REPORTS

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1) Official Plan Designation:

Does the proposed minor variance from the Zoning By-law maintain the general intent and purpose of the Official Plan?

Regional Official Plan 1995

Yes

- The Site is part of the Urban Area and the construction of an additional commercial building generally meets policies under section 72 of the Regional Official Plan (ROP, 1995), which include the goal "to manage growth in a manner that fosters complete communities, enhances mobility across Halton, addresses climate change, and improves housing affordability, sustainability and economic prosperity". The inclusion of a daycare use somewhere on the site supports the goal of complete communities, because the Site is within walking distance from a cluster of medium and high-density residential developments.
- The ROP, 1995 indicates under section 76 that detailed land use planning such as the "range of permitted uses and the creation of new lots within the Urban Area will be in accordance with Local Official Plans and Zoning By-laws." Detailed site design is also not addressed by the ROP, 1995 and is delegated to local plans and bylaws.
- In accordance with section 148 of the ROP, it is an objective of the Region to implement an integrated and sustainable waste management plan. Further, it is the Region's interest to ensure the safe and efficient collection of solid waste as part of the design and development approval. The Region provided the following comments on waste collection as part of the pre-consultation:
    - The proposed development is not eligible for Waste collection provided by Halton Region.
    - Industrial developments and commercial developments must be designed to accommodate for containerized waste collection specific to the development's operational waste collection needs and should include waste diversion.
    - Each Commercial Unit must have provision for adequate waste storage.

Burlington Official Plan 1997

According to BOP, 1997, Schedule B- Comprehensive Land Use Plan, the Site is designated "Mixed Use Corridor – Employment", which is one of three sub-types of mixed-use corridors in the City. The mixed-use corridor land use designation has three objectives, all of which indicate that mixed-use development is encouraged to concentrate "high density residential, retail, service commercial, office, entertainment, community facilities and institutions, and open space uses." (objective a), to support transit and pedestrian activity through high density and compact urban form while retaining *compatibility* with nearby land uses (objective b) and to permit mixed use

developments near other sides where retail and residential uses are already present (objective c).

The more specific objective of the Mixed Use Corridor – Employment designation is to permit higher intensity, transit and pedestrian oriented employment development such as a broad range of office uses, a limited range of retail, service commercial and personal service uses…" "…and other community facilities such as libraries and day care centres and motor vehicle dealerships." (policy 5.3.4(b))

Compatible is defined as – Development or re-development that is capable of co-existing in harmony with, and that will not have an undue physical (including form) or functional adverse impact on, existing or proposed development in the area or pose an unacceptable risk to environmental and/or human health. Compatibility should be evaluated in accordance with measurable/objective standards where they exist, based on criteria such as aesthetics, noise, vibration, dust, odours, traffic, safety and sun-shadowing, and the potential for serious adverse health impacts on humans or animals.

Strictly from a land use standpoint, the proposed variances would facilitate additional service commercial uses on a Site that is close to high-density residential uses and close to an arterial road with transit. Staff believe that the variances meet the general intent and purpose of objectives a-c of the mixed-use corridor designation.

The Site is also subject to the Alton Central East Community Urban Design Study and Guidelines, 2004.

Yes- Variances 1-3 Reductions to required maximum yards abutting Thomas Alton Blvd, Appleby Line and Palladium Way

Variance #'s 1 and 3 seek to vary the maximum required setback between the proposed building "C" and Thomas Alton Boulevard and Palladium Way. The general intent and purpose of the Official Plan in directing that the zoning bylaw establish a *maximum* setback is to "provide a sense of human comfort and pedestrian scale" and to "be in close proximity to transit services" (Part III, section 5.3.2 (g) Site Plan Considerations).

The general intent of being close to transit services is met, and the site plan has been revised to provide a sense of human comfort or pedestrian scale relative to both streets. The setback from Palladium Way has been reduced from 16 metres in the first proposal to 12 metres. A restaurant patio is also now proposed within 6 metres of the property line. The patio is a pedestrian-scale use, highly visible from the sidewalk along Palladium Way, which will add animation and visual interest to the building frontage.

On the opposite side of the building, the proposed setback of 61m from Thomas Alton Boulevard is significantly greater than the 6m required by the Zoning Bylaw, but a pergola feature with benches has been added to this frontage to meet the general intent and purpose of achieving human comfort and pedestrian scale.

Variance #3 meets the general intent of the Alton Central East Community Urban Design Study and Guidelines, 2004, specifically guidelines for Street A (Palladium Way), which is envisioned as a major employment collector road, characterized by employment uses and a parkway-like streetscape. Staff note that building "A" is already positioned less than 6 metres from the property line facing Palladium Way. The combination of the existing building and the new building meet key guidelines found under section 3.1.1, which include:

1. Buildings should be sited close to the front property line to reinforce the street edge,
2. On the employment side, building setbacks along Street 'A' shall be combined with a 6.0m wide continuous and fully landscaped buffer.
5. The scale, massing and design of buildings along Street 'A' should be based on pedestrian scaled elements and details.
10. Loading, service, garbage and storage areas shall be located away from Street A. Similarly their visual impact should be mitigated through their configuration, the use of landscaping and grading. Sideyards should be considered as priority locations for these elements.

Street B (Thomas Alton Boulevard) is characterized as the major Residential Collector within the community. A 6-metre setback was envisioned for street B. Existing building "B" is positioned less than 6-metres from Thomas Alton Boulevard and conforms to this guideline. In addition, staff believe the pergola feature with benches at the rear is a landscape architecture feature that enhances pedestrian comfort at the rear corner of the site and improves the streetscape. The combination of Building "B" and the pergola feature meet the general intent and purpose of the design guidelines for Street "B".

Variance # 2 seeks to vary the maximum required setback between the proposed building "C" and Appleby Line. Staff believe that variance #2 is technical in nature, since it would apply to any proposed building located at the rear of the site. Refusal of variance #2 would sterilize the rear of the site and mean that phase 2 of the original site plan approval could never be built. The general intent and purpose of the Official Plan respecting the maximum setback to Appleby Line is met by buildings "A" and "B", both of which are located close to Appleby Line and provide a sense of human comfort and pedestrian scale.

Yes- Variance #4 - Reduced Parking Rate

The Zoning Bylaw requires 349 parking spaces for the site, whereas 259 are provided. This translates to a 90-space shortfall. The applicant has prepared a parking study to justify the parking reduction. Transportation staff have reviewed the study and have no objection to the proposed variance.

BOP, 1997, Part III, policy 5.3.2 (d)(v) states that "off-street parking needs may be reduced for sites with transit supportive designs or shared parking arrangements." In this case, the Site is adjacent to two bus stops located on Thomas Alton Boulevard,

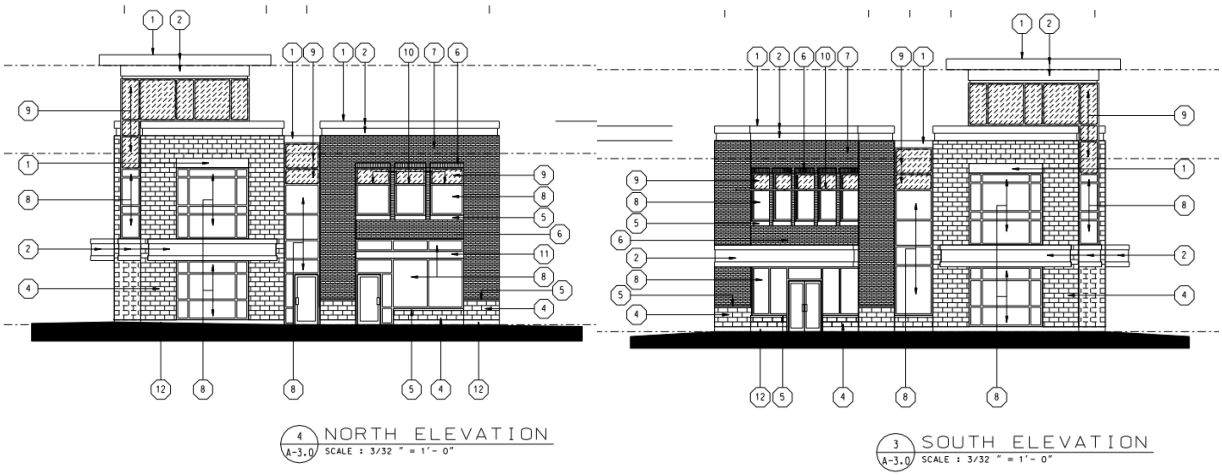
which are serviced by the #11 bus route, which arrives every 15 minutes at peak periods and every 30 minutes during off-peak periods. Although the proposed development includes walkways surrounding building “C”, there are only two direct connections between the public sidewalk next to the bus stop and the Site’s internal walkway system. To address this, the applicant has added a third sidewalk connection between the sidewalk and the walkway system around building “B”, which staff believe helps meet the general intent and purpose of this OP policy.

The daycare has also been relocated approximately 100 metres closer to the bus stop than in the previous plan, which staff consider to be a transit supportive measure.

Staff also note that nine new bicycle parking spaces are proposed on the site, which would increase the total number of bicycle parking spaces to 12, which could offset some parking demand.

Yes - Variances 5 & 6- To permit no pedestrian accessible doors in Building Elevations facing Thomas Alton Boulevard and Palladium Way

The general intent and purpose of the BOP, 1997 with respect to Mixed Use Corridor developments is to include “features that integrate the development with surrounding uses” (Part III, section 5.3.2 (g) (ii) Site Plan Considerations) and to promote “Transit-supportive and pedestrian-oriented urban design…”. (Part III, section 5.3.2 (h)). Staff believe the design of the north and south side elevations meets this general intent and purpose. The north elevation features two doors, and the south elevation features a double door, which could be made pedestrian accessible in future as tenancies change. The side elevations have not been designed as blank walls, but feature windows, brick cladding, cornices, recesses, projections and other building articulations. The elevations look inviting and like a continuation of the front elevation facing into the site.



2) Zoning By-law Designation:

Does the proposed minor variance from the Zoning By-law maintain the general intent and purpose of the Zoning By-law?

Yes- Variances 1-3 Reductions to required maximum yards abutting Thomas Alton Blvd, Appleby Line and Palladium Way

The general intent and purpose of establishing maximum yard requirements for Thomas Alton Boulevard and Palladium Way is to facilitate good urban design where buildings engage with the street and encourage and invite pedestrian activity and non-vehicle modes of travel. When buildings are close to the street, they contribute to a feeling of pedestrian safety and comfort and create visual interest for people on the sidewalk. The combination of existing and proposed buildings on site achieves these objectives. Existing building “A” is less than 6 metres from the street and conforms to the zoning requirement. The side elevation of Building “C” facing Palladium Way is 11 metres tall, almost the height of a four-storey building. The larger scale of the building will help frame the street and sidewalk, while the restaurant patio is an engaging feature that will add visual interest to the frontage. Staff believe that when the site is reviewed altogether, considering the closeness of building “A” to the street, and considering the restaurant patio and tall height of Building “C”, variance #3 meets the general intent and purpose of the Zoning Bylaw.

Similar to building “A”, existing building “B” is located less than 6-metres from the Thomas Alton Boulevard property line and includes architectural features and pedestrian-accessible entrances to activate the frontage. To address the rear corner of the site, a pergola feature with benches has been introduced within 6 metres of the property line facing Thomas Alton Boulevard, to mitigate the 61m setback between the street and building “C”. Staff believe this feature enhances pedestrian comfort and represents good urban design.

The general intent and purpose of the maximum yard requirement abutting Appleby Line is met when the Site is looked at in its entirety. Both existing buildings “A” and “B” are located close to Appleby Line and create an engaging streetscape along this frontage. It is not possible for any building situated behind buildings A and B to meet the maximum yard requirement and staff view this variance as technical in nature.

Yes- Variance #4 - Reduced Parking Rate

The intent of the minimum parking rate is to ensure that adequate parking is provided on the property to avoid a scenario where there is insufficient parking for customers of the commercial plaza park, causing them to park in the surrounding area and become a nuisance to nearby businesses and residents. In this case, the applicant has justified the reduced parking rate through a parking study, and the City’s Transportation planning staff are supportive of the variance.

The applicant has also modified their site plan to provide an additional pedestrian sidewalk connection and has relocated the daycare over 100-metres closer to the bus stop. Twelve bicycle parking spaces (3 existing, 9 proposed) support bicycle transportation.

Yes- Variances 5 & 6- To permit no pedestrian accessible doors in Building Elevations facing Thomas Alton Boulevard and Palladium Way

The intent of requiring pedestrian accessible doors on side elevations is to avoid the appearance of blank elevations and to improve the way buildings engage public streets. Staff believe the current design meets the general intent of this zoning provision by providing a high level of architectural design on the side elevations, and multiple doorways, which could one day be made pedestrian accessible.

3) Desirability:

Is the proposed minor variance from the Zoning By-law desirable for the appropriate development or use of the land, building or structure?

Yes

The variances are desirable because they facilitate development of the rear of the Site in general accordance with the 2011 site plan approval and related zoning provisions. No adverse impacts are anticipated and development of the rear of the site will enhance the Palladium Way and Thomas Alton Boulevard streetscapes. Approval of these variances would facilitate additional service commercial and community institutional uses in walking distance to two high-density residential developments.

4) Minor in Nature:

Is the proposed minor variance from the Zoning By-law considered minor in nature?

Yes

The variances are minor in nature because there are no adverse impacts resulting from their approval. There are no aesthetic impacts resulting from building “C” not being located adjacent to Appleby Line, since Buildings “A” and “B” already engage with the Appleby streetscape. The building’s side elevations are attractive and feature usable doors, which could be made publicly accessible in future. The building is close to Palladium Way and designed at a substantial scale that will appropriate frame this street. The restaurant patio will activate the frontage and is located within the required 6 metre setback from the street, mitigating the distance from the building wall to the sidewalk. The proposed pergola and benches will enhance Thomas Alton Boulevard, supplementing the streetscape engagement already achieved by building “B”, which conforms to the neighbourhood urban design guidelines.

Cumulative Effects of Multiple Variances and Other Planning Matters:

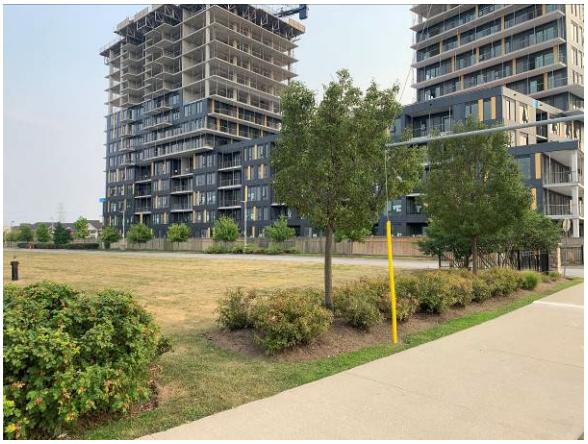
N/A

Recommendation:

Staff has reviewed the proposed variances in accordance with the Planning Act, the policies of the Official Plan and the requirements of the Zoning By-law and recommends support of the application.

Date: November 24, 2025 Prepared By: John O'Reilly

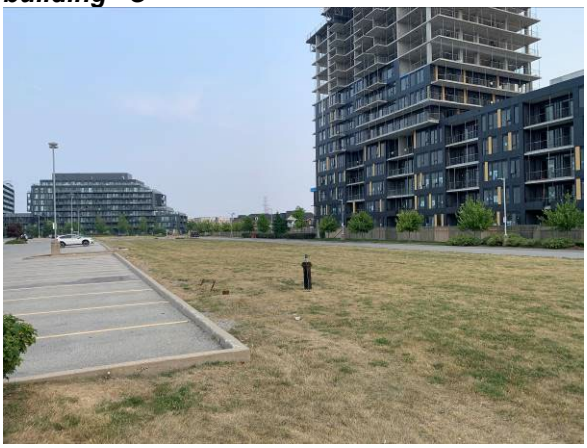
Photos



View from Palladium Way looking south west toward the proposed restaurant patio area and building "C"

View from Palladium Way looking south toward the proposed restaurant patio area and building "C"

View of future proposed location of northwest corner of Building C from Palladium Way



View of development area looking south from Palladium Way

View of rear side of Building B

View of south end of Building A and main driveway entrance into the site from Appleby Line

Approximate location of new daycare play area adjacent to the most southerly parking lot driveway entrance from Valera Road. The open grassy area would also be redeveloped as an extension of the parking lot.

View of entrance from Thomas Alton Boulevard into Valera Road showing location of new pergola, benches and sidewalk into the site.

View of development site looking north along Valera Road toward Building "A". This driveway entrance would be eliminated under the current proposal

View of development site looking north along Valera Road toward Building "A"

View of entrance from Thomas Alton Boulevard onto Valera Road

View of sidewalk, bus stop along Thomas Alton Boulevard

View of Building B looking north along Appleby Line

Appleby Line Streetscape, Building A at right

Development Engineering

Development Engineering has no comments.

Date: November 13, 2025 Prepared By: Andre Papineau

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Forestry

1. Forestry has no objections to the proposed development.

2. The applicant may require a tree application permit and attendant documentation such as an arborist report and tree protection plan should any regulated trees be impacted following our public tree by-law.

3. Any impacts to private trees will be dealt with through the site plan process and public trees will require a permit should there be any impacts.

Date: November 14, 2025 Prepared By: R. Shaw-Lukavsky

Building

1. A Building Permit is required for all building construction;

2. Permit application drawings are to be prepared by a qualified designer as per Div. C., Section 3.2 - Qualifications of Designers and OBC 2024.

3. Compliance with OBC Section 3.2.3 must be verified to ensure existing buildings remain in compliance, as the proposed property line impacts the limiting distance, which in turn affects spatial separation requirements.

4. Compliance with OBC Section 3.2.5 must be verified to ensure existing buildings remain in compliance, particularly where the proposed property line intersects or affects the existing fire route.

Date: November 25, 2025 Prepared By: Ebtessam Mahrous

Transportation Planning

Thomas Alton Boulevard is under the authority of the City of Burlington and the deemed right-of-way width is 26 metres. The right of-way adjacent to the subject site is approximately 26 metres therefore no additional lands are required.

Date: February 26, 2025 Prepared By: Derek Napoli

Variance 6
Transportation Planning have reviewed the proposed minor variance application and offer the following comments on Variance 6: To permit 3.65 parking spaces per 100m2

of gross floor area instead of the minimum required 5 parking spaces per 100m2 of gross floor area for a retail centre.

Variance 6 Comments: Transportation Planning support the minor variance. Transportation Planning have reviewed the submitted Parking Justification Report (PJR) which was required by staff to ensure the 94-space deficiency is justifiable and supportable for the intended use for this site.

Sufficient justification is provided based on a proxy site, 1960 Appleby Line, which is directly opposite the subject site and has similar land use and characteristics. The PJR included on-site parking surveys in May 2025 of the proxy site during known peak hours. The 2025 data confirmed similar results from survey of the same proxy site from summer 2015.

Transportation Planning support the minor variance.

Date: November 21 2025 Prepared By: Taylor Kirchknopf

Finance

Notice regarding Development Charges:
The owner, its successors and assigns, are hereby notified that City Development Charges may be payable in accordance with the applicable By-law 72-2004, as may be amended, upon issuance of a building permit, at the rate in effect on the date issued. For further information, the owner is advised to contact the City Building Department (905) 335-7731.

Tax
All property taxes including penalty and interest must be paid. This includes all outstanding balances plus current year taxes that have been billed but are not yet due. Local improvements must be commuted.

Date: September 10, 2025 Prepared By: L. Bray

Halton Region

Regional staff have reviewed the revised submission for Minor Variance application – A-015-2025 – 4903 Alton Blvd, Burlington, and note that Regional comments provided on July 29, 2025 still stand.

Regional Staff have reviewed the Minor Variance application proposing the construction of a new one storey multi-tenant retail/service commercial building (Building C).

Variances are requested to the maximum permitted yard depths, permitted location for garbage storage, minimum required setbacks, minimum required parking spaces, and the requirement to have pedestrian accessible doors on street facing facades.

- Due to Provincial legislation, as of July 1, 2024, the Halton Region's role in land use planning and development matters has changed. The Region is no longer responsible for the Regional Official Plan – as this has become the responsibility of Halton's four local municipalities. As a result of this change, a Memorandum of Understanding (MOU) between the Halton municipalities and Conservation Authorities has been signed that identifies the local municipality as the primary authority on matters of land use planning and development. The MOU also defines the continued scope of interests for the Region and the Conservation Authorities in these matters.
- Regional Transportation staff acknowledge the submission of the TIS and note that Regional comments on the TIS will be provided at the time of Site Plan application.
- Regional Staff have no objections to the Minor Variance application.

Date: November 13, 2025 Prepared By: Navjot Kaur

Burlington Hydro

Please see attached comments at the end of this staff report.

Date: August 12, 2025 Prepared By: Rossa Parra

Burlington*hydro* inc.

August 12, 2025

ATTENTION: ERIN SHACKLETTE
SUBJECT: *NEW* Staff Circulation for Comment – File # A-015-2025
Location: 4883 Thomas Alton Blvd, Burlington, ON

In response to your correspondence(s), a member of our Engineering Department has reviewed circulated information and has the following comments:

Project Specific Comments:

The Developer's requirements are not limited to the following mentioned items. Burlington Hydro will provide all applicable standards, guidelines, and specifications in the Offer to Connect package that will be provided by Burlington Hydro, following the Developer's formal request for hydro service and submission of approved site plan drawings to Burlington Hydro.

1. New hydro service to proposed development at 4883 Thomas Alton Blvd (Building C) is to be fed from our existing 27.6kV, 3-phase underground primary system 4903 Thomas Alton Blvd.

2. Additional information is required from the customer for electrical service of the site such as service size, voltage, electrical room location, proposed transformer location and load schedule for proposed buildings, if available.

3. The Developer shall submit to Burlington Hydro the pertinent site plan information, electrical loading requirements, single line diagrams and other required documentation. An Offer to Connect will be prepared outlining the responsibilities of the Developer and Burlington Hydro.

4. All modifications to the existing system shall be at customer's expense. System Expansion may be required to make the required capacity available for this proposed building.

5. If applicable, the proposed Burlington Hydro transformers shall be located externally away from the building. Transformer location is to be approved by Burlington Hydro. The demarcation point is the secondary spades of the transformer.

6. Details of the clearance between the transformer and the property line as well as details of the proposed fencing or barriers are to be provided for final approval. Transformer is to be located 2 meters from the nearest edge of the pad to the back of each curb. The transformer shall be protected by bollards when the edge of the transformer is within 2 meters (but not less than 1.5m) of a curb (due to space restrictions) or if the curb is not installed. Curb or bollards to be installed prior to energization of the transformer.

7. Burlington Hydro primary duct structure and transformer foundation cannot be installed above any parking garage or any other underground infrastructure.

1340 Brant Street, Burlington, ON · L7R 3Z7 **burlingtonhydro.com** 905-332-1851

GridSmartCity renewing energy
Partner since **2009**

8. Note that lead times for requisitioning and receiving transformers can be as long as 10 to 12 months. Early engagement with Burlington Hydro to provide the required documents to prepare a design and Offer to Connect is essential.

9. Planting shrubs, trees, or flowers, or building fences or walls in the obstruction free zone around the Transformer is not allowed; also, the obstruction free zone cannot be used as snow storage. Please see attached BHI Standard # 37-145.

10. The Developer shall incur all costs associated with servicing the new Development including any perimeter adjustments and modifications to existing Hydro infrastructure to accommodate the final service connection. Burlington Hydro must complete all work that lies within the Municipal right of way at the Developer's expense and will obtain the necessary permits.

11. Detailed electrical room dwgs. must be prepared by the Developer in accordance with applicable building and electrical codes, and in accordance with Burlington Hydro's standards and specifications. Electrical Room shall have a minimum size of 1.83m by 2.44m and having immediate access from the outside (required for safe operation in the metering area). The electrical room access door must be locked and accessible by key, which must be provided by the customer and delivered to BHI prior to the service being energized.

12. A meeting (conference call) with Burlington Hydro representative to go over the supply points and transformer locations is recommended. Please, contact our Engineering Service Technician, Harpreet Singh at hsingh@burlingtonhydro.com or 289-962-2131 to arrange for the meeting.

General Comments:

In addition, we want to stipulate the following:

Customers and their agents planning and designing for electricity service must refer to all applicable Provincial and Canadian electrical codes, all applicable federal, provincial, municipal laws, regulations, codes, and by-laws to ensure compliance. All work, on the BHI distribution system, shall be conducted in accordance with the latest edition of the Ontario Occupational Health and Safety Act (OSHA), the Regulations for Construction Projects, the Regulations for Industrial Establishments and the Electrical Utility safety Rules published by the Infrastructure Health and Safety Association (IHSA).

☑ Service is available under BHI latest Condition of Service at this link –

https://burlingtonhydro.com/conditions-of-service.html?highlight=WyJjb25kaXRpb24iLCJvZiIsInNlcnZpY2UiLCJzZXJ2aWNlJyIsImNvbmRpdGlvbiBvZiIsImNvbmRpdGlvbiBvZiBzZXJ2aWNlIiwib2Ygc2VydmljZSJd

☑ Hydro easement (if any) is to remain clear of heavy vehicle traffic and customer is responsible to keep the easement lands free and clear of any trees, fences, buildings, structures, or obstructions unless any of forgoing are approved in writing by Burlington Hydro Inc. Further the Customer shall remove the same upon request of Burlington Hydro Inc.

Burlington hydro inc.

- ☑ Relocation, modification, or removal of existing hydro facilities, if required, shall be at the customer's expense. We will refer to our latest Standards and Regulations to resolve issues that arise with clearances between existing hydro facilities and existing/proposed building structures
- ☑ Customer to acquire any easements for Burlington Hydro, if requires.
- ☑ Customer is to ensure that BHI has proper access to the hydro facilities.
- ☑ Project must meet City of Burlington Standards.
- ☑ Machine excavation within one meter of underground plant is not permitted.
- ☑ Do not excavate within two meters of hydro poles and anchors except for the termination pole where the duct structure shall be terminated by the customer under the supervision of BHI Civil Inspector.
- ☑ Please arrange for underground hydro cable locate(s), prior to beginning construction, by contacting Ontario One Call @ (800) 400-2255.
- ☑ Please refer to the latest edition of the Occupational Health and Safety Act ("OHSA") and Regulations for Construction Projects when a work is planned to be performed in the proximity of hydro distribution system.
- ☑ Arrange for disconnect and isolation of the power supply if a person or an equipment is to encroach on the minimum distance permitted under the OHSA and OESC.
- ☑ Please arrange for a site meeting with BHI representative, emailing Eng. Desk at Engineering@burlingtonhydro.com, prior to beginning any construction/demolition near to existing overhead or underground hydro facilities to get approved hydro service layout/consent and avoid any possible service delays or safety issues.

Be advised that the above information represents only a portion of the servicing requirements that is expected of the Developer. Further details and requirements will be provided when the Developer makes contact with Burlington Hydro.

Sincerely,

Rosso Parra, P.Eng. Aug. 12/2025 AP

Engineering Manager, Customer Connections and Key Accounts

cc. Harpreet Singh, Engineering Services Technician

1340 Brant Street, Burlington, ON · L7R 3Z7 **burlingtonhydro.com** 905-332-1851

GridSmartCity renewing energy Partner since **2009**

64 JARDIN DRIVE, UNIT 1B
CONCORD, ONTARIO L4K 3P3

T 905.669.4055

KLMPLANNING.COM

KLM file: P-3536

November 7, 2025

City of Burlington
Committee of Adjustment - Community Planning
426 Brant Street P.O. Box 5013
Burlington, Ontario
L7R 3Z6
committeeofadjustment@burlington.ca

Attention: **Erin Shacklette, CPT, ACST-A**
Secretary Treasurer

Re: **Application for Minor Variance – Revisions to Site Plan**
Owner: CJJ Holdings Limited
Address: 4903 Thomas Alton Blvd.
File Number: A-015-2025

Dear Ms. Shacklette,

KLM Planning Partners Inc. is the land use planning firm retained on behalf of our client, CJJ Holdings Limited., owner of the lands located at the corners of Palladium Way and Appleby Line, and Thomas Alton Boulevard and Appleby line, municipally known as 4903 Thomas Alton Boulevard in the City of Burlington, Region of Halton (the "Subject Lands"). On behalf of our client, we made a first submission in support of a Minor Variance Application to the Committee of Adjustment on February 13, 2025, to vary the City of Burlington Zoning By-law 2020 ("the Zoning By-law"). Following this, subsequent resubmissions were made on June 16th, July 14th, and September 10th.

The application was heard at the October 22, 2025, Committee of Adjustment Hearing. The result was deferral in order to provide additional information and consider revisions to the site plan with regard to issues raised by Committee members. Following the CoA hearing, a meeting was held with John O'Reilly of the Planning department on November 5, 2025th to discuss potential revisions to the site plan and related information for discussion at a return date to resume this matter with the Committee. The following letter provides an update on the site plan and revised proposed variances.

1.0 Proposed Development and Revised Variances

The proposed development on the Subject Lands continues to involve the development of one commercial building (Building C) consisting of 13 units which together with the two existing commercial buildings on the site (Buildings A and B) will complete the overall development of the currently vacant portion of the site.

Further revisions to the site plan have been made since the Committee of Adjustment hearing on October 22, 2025. A notable revision involves the removal of the variance related to the location of garbage storage. This minor variance is no longer required, as the Owner is intending to utilize the existing garbage rooms contained within Buildings A & B that have sufficient capacity for all three

buildings. As a result of this revision, the loading space has been re-configured which has created four (4) additional parking spaces which we are hopeful will assist increasing the supply beyond the variance requested. We have not proposed an amendment to the parking variance in order to provide for some flexibility in the event minor revisions are needed as part of site plan approval.

2.0 Required Variances

Therefore, the revised application eliminates the need for the variance associated with the garbage enclosure, which has further reduced the proposed variances from originally eight (8) to the following six (6) variances:

Variance 1

To permit a 61m maximum yard abutting Thomas Alton Blvd instead of the maximum permitted 6m for proposed Building C.

Variance 2

To permit a 77m maximum yard abutting Appleby Line instead of the maximum permitted 6m for proposed Building C.

Variance 3

To permit a 12m maximum yard abutting Palladium Way instead of the maximum permitted 6m for proposed Building C.

Variance 4 (Previously Variance 5)

To permit 3.65 parking spaces per 100m2 of gross floor area instead of the minimum required 5 parking spaces per 100m2 of gross floor area for a retail centre

Variance 5 (Previously Variance 6)

Notwithstanding Part 5, Section 4.13, to permit a building elevation facing a street (Thomas Alton Blvd) without pedestrian accessible doors associated with Building C, whereas Zoning By-Law 2020 requires a pedestrian accessible door on a building elevation facing a street for every building located within 60 metres of a street with a deemed width of 26 m or greater.

Variance 6 (Previously Variance 7)

Notwithstanding Part 5, Section 4.13, to permit a building elevation facing a street (Palladium Way) without pedestrian accessible doors associated with Building C, whereas Zoning By-Law 2020 requires a pedestrian accessible door on a building elevation facing a street for every building located within 60 metres of a street with a deemed width of 26 m or greater.

3.0 Submission

In support of this Minor Variance Application, please find enclosed:

1. Cover Letter prepared by KLM Planning Partners Inc. dated November 6, 2025;
2. Minor Variance Application Form;
3. Site Plan prepared by Global Architect Inc. dated November 6, 2025.

4.0 Conclusion

We have taken the feedback from Committee members and staff and have revised the Site Plan. As part of our presentation at a future hearing we will address in more detail issues that were of concern. KLM Planning Partners Inc. remain of the opinion that the remaining requested variances maintain the general intent and purpose of the Official Plan and the Zoning By-law, are desirable for the appropriate development or use of the lands and are minor in nature. Furthermore, it is not anticipated that the proposed minor variances will have any adverse impacts to municipal servicing, parking, or any abutting lands. It is for these reasons that we believe the proposed minor variances represent good land use planning in the public interest.

Should you have any questions with respect to the enclosed, please do not hesitate to contact the undersigned. We look forward to working with the City of Burlington and all other applicable external public agencies with regard to the processing and approval of the Minor Variance Application.

Yours truly,

KLM PLANNING PARTNERS INC.

Lauren Dynes, BURPI, MCIP, RPP
Senior Planner

Copy to: Mark Yarranton, President, KLM Planning Partners Inc.
Donna Bravo, Director, Land Development, Rothman Real Estate Investments Limited

(905) 335-7629
committeeofadjustment@burlington.ca
FILE NO. 540-02-**A-015/25**
Committee of Adjustment
Date of Mailing: November 24, 2025

NOTICE OF PUBLIC HEARING

CJJ Holdings Limited of 222 Bay St. Suite 2500, Toronto, have applied to the Committee of Adjustment for a Minor Variance to the requirements of Zoning By-law 2020, as amended. The property in question is **4903 Thomas Alton Blvd. Burlington** (see map).

The applicant submitted a Site Plan Pre-Consultation Application, under file PRCN-SP-031/24, for the construction of a new one storey multi-tenant retail/service commercial building (Building C). The proposed development of Building C will remove 57 existing parking spaces, with 64 additional spaces provided for a total of 255 parking spaces. The new building is proposed to include a Day Care Centre use in units 1 and 2. This proposal results in the following variances:

1. To permit a 61m maximum yard abutting Thomas Alton Blvd instead of the maximum permitted 6m for proposed Building C.

2. To permit a 77m maximum yard abutting Appleby Line instead of the maximum permitted 6m for proposed Building C.

3. To permit a 12m maximum yard abutting Palladium Way instead of the maximum permitted 6m for proposed Building C.

4. To permit 3.65 parking spaces per 100m^2 of gross floor area instead of the minimum required 5 parking spaces per 100m2 of gross floor area for a retail centre.

5. Notwithstanding Part 5, Section 4.13, to permit a building elevation facing a street (Thomas Alton Blvd) without pedestrian accessible doors associated with Building C, whereas Zoning By-Law 2020 requires a pedestrian accessible door on a building elevation facing a street for every building located within 60 metres of a street with a deemed width of 26 m or greater.

6. Notwithstanding Part 5, Section 4.13, to permit a building elevation facing a street (Palladium Way) without pedestrian accessible doors associated with Building C, whereas Zoning By-Law 2020 requires a pedestrian accessible door on a building elevation facing a street for every building located within 60 metres of a street with a deemed width of 26 m or greater.

You have received this notice as stipulated by the *Planning Act* because your property is within 60 metres of the property noted above. The application materials are available on request by contacting Committee of Adjustment staff by one of the methods listed above. A copy of the Agenda, containing staff reports and drawings, can be viewed online under the Meeting Agenda tab at **Burlington.ca\coa on or after November 24, 2025**.

Committee of Adjustment Hearings will be hybrid-conducted in person and virtually. All members of the public, applicants and their agents will now have the option to participate in the public meeting process in person at City Hall in Council Chambers, or remotely via Zoom Webinar Video Conferencing Technology. The Committee of Adjustment will meet to consider the above application under Section 45 of the *Planning Act*, 1990, as amended on:

WEDNESDAY DECEMBER 10, 2025,
This application is scheduled to be heard at or after 5:30 pm.

How to participate if I have comments or concerns?

Written Submissions

Members of the public who would like to participate in a Committee of Adjustment meeting are able to send written comments regarding the application by e-mail to committeeofadjustment@burlington.ca with the subject line to read "Comments_Your Name_File No._Address of the Property".

Alternatively, written comments can be sent by regular mail addressed to the Secretary-Treasurer. Include your name, address, application number and address of the property for which you are providing comments.

City of Burlington Committee of Adjustment - Community Planning
426 Brant Street P.O. Box 5013 Burlington, Ontario, L7R 3Z6
committeeofadjustment@burlington.ca

To allow all Committee of Adjustment members the opportunity to review and consider your comments, please provide your written submissions to be received no later than noon the day before the hearing date.

Oral Submissions

Members of the public are also able to provide oral comments regarding Committee of Adjustment Hearing items by participating virtually through Zoom via computer or phone, or by attending the Hearing in-person. Participation virtually requires pre-registration in advance. Please contact staff for instructions if you wish to make a presentation containing visual materials.

1. Virtual Oral Submissions
   To register as a delegate, please contact the Secretary-Treasurer no later than 12:00 p.m. (noon) the day before the hearing date. The following information is required to register; Committee of Adjustment file number, hearing date, name, and mailing address of each person wishing to speak, if participation will be by phone or video. All requests to delegate must contain a copy of your intended remarks which will be circulated to all members of Committee in advance.

2. In person Oral Submissions
   Interested members of the public, agents, and owners who wish to participate in person may attend Council Chambers on the date and time listed on the Notice of Public Hearing. Please note that you will be required to provide your name and address for the record. It is advised that you arrive no less than 10 minutes before the time of the Public Hearing as noted on the Notice of Public Hearing.

Attend or View the Committee of Adjustment Hearing:

If you do not wish to participate, but would like to follow along, the hearing will be held in person at City Hall in Council Chambers and live through a Zoom Webinar. Instructions, links and phone numbers for joining the meeting will be posted on the Committee of Adjustment webpage the day prior to the scheduled meeting. The link will be active at **4:30 p.m.**

If you wish to be notified of the decision of the Committee of Adjustment in respect to this application, you must submit a written request to the Secretary-Treasurer. This will also entitle you to be advised of a possible Ontario Land Tribunal Hearing. In accordance with the Planning Act, the Committee of Adjustment decision may be appealed to the Ontario Land Tribunal by the owner, the Minister of Municipal Affairs and Housing, a specified person or public body that has an interest in the matter.

The applicant is advised that it is **mandatory** that either the applicant or an authorized agent of the applicant must be present at the hearing either in person or virtual.

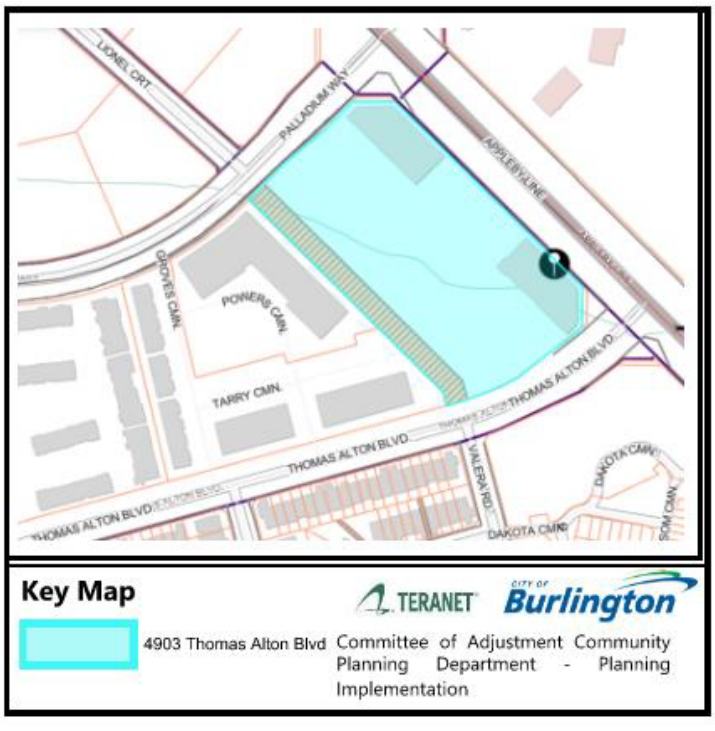
For more information about this matter, contact Catherine Susidko-Petriczko at committeeofadjustment@burlington.ca

Yours truly,

Catherine Susidko-Petriczko
Secretary-Treasurer
Committee of Adjustment

Personal information including comments and public feedback, is collected under the legal authority of the Planning Act, R.S.O. 1990, Chapter c. P.13, as amended, and the Municipal Freedom of Information and Protection of Privacy Act, R.S.O. 1990, as amended, which will be used to process the application and in the decision making process and becomes the property of the City of Burlington, and is considered to be a public record and will be disclosed to any individual (including being posted on the internet) upon request. Questions about this collection should be directed to the Secretary-Treasurer, Burlington Committee of Adjustment, Community Planning Department, 426 Brant Street, P.O. Box 5013, Burlington, Ontario; L7R 3Z6 (905) 335-7629.

Key Map



CITY OF Burlington

MINOR VARIANCE – 2025

Committee of Adjustment
Department of Community Planning
426 Brant Street, Burlington ON
committeeofadjustment@burlington.ca

PLANNING ACT, R.S.O. 1990, C.P. 13
APPLICATION FOR MINOR VARIANCE OR FOR PERMISSION

THE UNDERSIGNED HEREBY APPLIES TO THE COMMITTEE OF ADJUSTMENT FOR THE CITY OF BURLINGTON UNDER SECTION 45 OF THE PLANNING ACT, R.S.O. 1990, C.P.13, AS DESCRIBED IN THIS APPLICATION, FROM BY-LAW NO. 2020. (AS AMENDED)

Application made under:
☑Section 45 (1) of the Planning Act ☐ Section 45 (2) of the Planning Act

Discussed the application with a City Zoning Examiner and Development Planner Y ☑ or N ☐
Name of Planner: Melissa Morgan & John O'Reilly Name of Zoning Examiner: Mark Dalrymple / Nathan Dart

PROPERTY INFORMATION
Municipal Address(es) of property:

4903 Palladium Way

Legal Description of property: _____

Block 24, Regisered Plan 20M-1034 City of Burlington Regional Municipality of Halton

Official Plan Designation: 'Mixed Use Activity Area' (Schedule A), 'Mixed Use Corridor – Employment' (Schedule B) - 1997 City OP Current Zoning Designation MXE-322 – Mixed Use Employment

OWNER(S) INFORMATION:
Legal Name (as it appears on the title for the property):

CJJ Holdings Limited

Mailing Address: 620 Wilson Avenue, Suite 300 City: Toronto

Postal Code: M3K 1Z3 Home Phone: _____ Mobile Phone: 416-630-6955

Work Phone: _____ E-Mail: rgoldberg@rothmanrei.com

AGENT INFORMATION (if applicable): (This person will be the primary point of contact if provided)

Name: KLM Planning Partners Inc. Mark Yarranton / Lauren Dynes

Business Address: 64 Jardin Drive Unit 1B City: Concord

Postal Code: L4K 3P3 Home Phone: _____ Mobile Phone: 416-660-5655

Work Phone: 416-660-5655 E-Mail: ldynes@klmplanning.com

PROPOSED DEVELOPMENT Please outline in detail your proposed development and list each variance you are requesting, as well as the Zoning By-law Requirements. Attach a separate sheet if required.

The Subject Lands are currently developed with two two-storey commercial buildings and surface parking.

The proposed development on the Subject Lands proposes one additional commercial building consisting of 13 units and additional surface parking.

Variance(s) Requested	Zoning Bylaw Requirement
1. To permit a 61m maximum yard abutting Thomas Alton Blvd	6 metre maximum yard
2. To permit a 77m maximum yard abutting Appleby Line	6 metre maximum yard
3. To permit a 12m maximum yard abutting Palladium Way	6 metre maximum yard
4. To permit 3.65 parking spaces per 100m2 of gross floor area	5 parking spaces per 100m2 of gross floor area
5. To permit a building elevation facing a street (Thomas Alton Blvd) without pedestrian accessible doors associated with Building C	Zoning By-Law 2020 requires a pedestrian accessible door on a building elevation facing a street for every building located within 60 metres of a street with a deemed width of 26 m or greater.
6. To permit a building elevation facing a street (Thomas Alton Blvd) without pedestrian accessible doors associated with Building C	Zoning By-Law 2020 requires a pedestrian accessible door on a building elevation facing a street for every building located within 60 metres of a street with a deemed width of 26 m or greater.

In your own words, please explain why you are unable to comply with the provisions of the Zoning By-law and how the minor variance(s) meet the four (4) tests under the Planning Act:

1. Why is the variance(s) minor in nature? Please refer to the Minor Variance submission cover letter.

2. Why are the variance(s) desirable for the appropriate use of the land?

Please refer to the Minor Variance submission cover letter.

3. Do the variance(s) meet the intent and purpose of the Official Plan?

Please refer to the Minor Variance submission cover letter.

4. Do the variance(s) meet the intent and purpose of the Zoning By-law?

Please refer to the Minor Variance submission cover letter.

MINOR VARIANCE – 2025

Committee of Adjustment
Department of Community Planning
426 Brant Street, Burlington ON
committeeofadjustment@burlington.ca

PROPERTY DETAILS (please complete all fields):

Date property purchased:	Date property first built on:	Date of proposed construction:
Unknown (mmm/dd/yyyy)	Between 2010-2013 (mmm/dd/yyyy)	Unknown (mmm/dd/yyyy)

Existing Use of the Subject Property (check one):

Detached Dwelling ☐ Semi-Detached Dwelling ☐
Townhouse Dwelling ☐ Street Townhouse Dwelling ☐ Stacked Townhouse Dwelling ☐
Apartment ☐ Mixed Use ☐ Hi Rise ☐
Commercial ☑ Industrial ☐ Vacant ☐
Other ☐ _____

Length of time the existing uses of the subject property have continued:

Commercial uses built between 2010-2013.

Proposed Use of the Land:

Additional commercial building with 13 units.

Existing Uses of Abutting Properties (check all that apply)

Residential ☐ Commercial ☑ Industrial ☐ Multi-Residential ☐ Vacant ☐ Hydro right of-way ☐
Railway right-of-way ☐ Provincial Highway ☐ Park ☐ Other ☐ _____
Conservation Halton Lands: Lake Ontario ☐ Creek ☐ Storm Water Management Pond/Channel ☐
Ravine ☐

Additional Information

Is liquor sold on site? Y ☐ or N ☑

Is the property on the Municipal Cultural Heritage Register for the City of Burlington? Y ☐ N ☑ Unknown ☐

Type of Access to the Subject Lands

Provincial Highway ☐	Municipal Road ☑	Private Road ☐	Water ☐	Other(specify) ☐

Municipal Services Provided

Water ☑ If not available, by what means is it provided: _____
Sanitary Sewers ☑ If not available, by what means is it provided: _____
Storm Sewers ☑ If not available, by what means is it provided: _____

IS THE SUBJECT LAND(S) THE SUBJECT OF ANY OF THE FOLLOWING DEVELOPMENT APPLICATIONS: ☐ Official Plan Amendment ☐ Zoning By-law Amendment ☐ Building Permit ☑ Site Development Plan ☐ Plan of Subdivision ☐ Previous Minor Variance ☐ Consent

FOR RESIDENTIAL DETACHED OR SEMI-DETACHED DWELLINGS

Dimensions of Property			Street Width (see first page of application for how to obtain)				
Frontage	Depth	Area	Actual	Deemed	Required	Lot Coverage	Corner Lot? Y ☐ N ☐

Particulars of all buildings and structures on or proposed for the subject lands
(attach additional page if required)

EXISTING (Dwelling/Building)		**PROPOSED (Dwelling/Building/Addition)**	
Ground Floor Area (incl. attached garage)	M^2	Ground Floor Area (incl. attached garage)	M^2
Gross Floor Area:	M^2	Gross Floor Area:	M^2
Number of Storeys:		Number of Storeys:	
Width:	M	Width:	M
Length:	M	Length	M
Height:	M	Height	M
Garage/Car Port		**Garage/Car Port**	
Detached?	Y ☐ N ☐	Detached?	Y ☐ N ☐
Gross Floor Area:	M^2	Gross Floor Area:	M^2
Width:	M	Width:	M
Length:	M	Length:	M
Height:	M	Height:	M
Accessory Structures (Shed, Gazebo, etc)		**Accessory Structures**	
Gross Floor Area:	M^2	Gross Floor Area:	M^2
Width:	M	Width:	M
Length:	M	Length:	M
Height:	M	Height:	M
Other (pool, additional sheds, decks, driveways, etc.)		**Other**	
Gross Floor Area:	M^2	Gross Floor Area:	M^2
Width:	M	Width:	M
Length:	M	Length:	M
Height:	M	Height:	M

LOCATION of all existing and proposed buildings and structures

EXISTING		**PROPOSED**	
Front:	M	Front:	M
Rear:	M	Rear:	M
Side/Street Side:	M	Side/Street Side:	M
Side/Other Side:	M	Side/Other Side:	M

MINOR VARIANCE – 2025

Committee of Adjustment
Department of Community Planning
426 Brant Street, Burlington ON
committeeofadjustment@burlington.ca

FOR COMMERCIAL, MIXED USE, INDUSTRIAL AND OTHER

Dimensions of Property			Street Width (see first page of application for how to obtain)			Density	Have you applied for Site Plan Approval?
Frontage	Depth	Area	Actual	Deemed	Required		Y ☑ N ☐
+/- 89.88 m	+/- 203.24	21,143.11 m2	Appleby Line - 36 m Palladium Way - 26 m Thomas Alton Blvd - 26 m				File #: PRCN-SP-31-24

Particulars of all buildings and structures on or proposed for the subject lands
(attach additional page if required)

EXISTING (Building)		PROPOSED (Building/Addition)	
Ground Floor Area: 3,916.52	M^2	Ground Floor Area: 1,831.87	M^2
Gross Floor Area: 5,632.86	M^2	Gross Floor Area: 1,888.33	M^2
Number of Storeys: 2 storeys		Number of Storeys: 1 storey	
Width: 25.5 (each building)	M	Width: 16.41	M
Length: 61.09 (each building)	M	Length 119.74	M
Height: 12.8 maximum	M	Height 11.53 maximum	M
Floor Area: Office Space 2,961.10	M^2	Floor Area: Office Space N/A	M^2
Floor Area: Warehouse/Retail/Other: Retail: 242.62, Medical Office: 1,479.67, Service Commercial: 254.20	M^2	Floor Area: Warehouse/Retail/Other Retail: 1,115.94, Restaurant: 419.73, Day Care: 295.77	M^2
# of Existing Units: 22		# of Proposed Units: 13	
Floor Area Ratio: 0.319		Floor Area Ratio: 0.36	
Required Parking Spaces: 197		Proposed Parking Spaces: 255	
Existing Parking Spaces: 248			

EXISTING (Other)		PROPOSED (Other)	
Ground Floor Area:	M^2	Ground Floor Area:	M^2
Gross Floor Area:	M^2	Gross Floor Area:	M^2
Number of Storeys:		Number of Storeys:	
Width:	M	Width:	M
Length:	M	Length	M
Height:	M	Height:	M

LOCATION of all existing and proposed buildings and structures

EXISTING (Building)		PROPOSED (Building)	
Front:	M	Front:	M
Rear:	M	Rear:	M
Side:	M	Side:	M
Side:	M	Side:	M
OTHER		**OTHER**	
Front:	M	Front:	M
Rear:	M	Rear:	M
Side:	M	Side:	M
Side:	M	Side:	M

MULTI-RESIDENTIAL

(STREET TOWNHOUSE, HI-RISE, STACKED TOWNHOUSES, DUPLEXES, etc)

Dimensions of Property			Street Width (see first page of application for how to obtain)				
Frontage	Depth	Area	Actual	Deemed	Required	Density	Have you applied for Site Plan Approval? Y ☐ N ☐ File #:

Particulars of all buildings and structures on or proposed for the subject lands
(attach additional page if required)

EXISTING (Building)		**PROPOSED (Building/Addition)**	
Ground Floor Area:	M^2	Ground Floor Area:	M^2
Gross Floor Area:	M^2	Gross Floor Area:	M^2
Number of Storeys:		Number of Storeys:	
Width:	M	Width:	M
Length:	M	Length	M
Height:	M	Height	M
# of Existing Units:	M^2	# of Proposed Units:	M^2
Floor Area Ratio:	M^2	Floor Area Ratio:	M^2
Required Parking Spaces:		Proposed Parking Spaces:	
Existing Parking Spaces:			
EXISTING (Other)		**PROPOSED (Other)**	
Ground Floor Area:	M^2	Ground Floor Area:	M^2
Gross Floor Area:	M^2	Gross Floor Area:	M^2
Number of Storeys:		Number of Storeys:	
Width:	M	Width:	M
Length:	M	Length	M
Height:		Height:	M

LOCATION of all existing and proposed buildings and structures

EXISTING (Building)		**PROPOSED (Building)**	
Front:	M	Front:	M
Rear:	M	Rear:	M
Side:	M	Side:	M
Side:	M	Side:	M
OTHER		**OTHER**	
Front:	M	Front:	M
Rear:	M	Rear:	M
Side:	M	Side:	M
Side:	M	Side:	M

MINOR VARIANCE – 2025
Committee of Adjustment
Department of Community Planning
426 Brant Street, Burlington ON
committeeofadjustment@burlington.ca

EXEMPTION FROM NEW SURVEY REQUIREMENT

Minor additions to an existing dwelling or for a proposed accessory building or structure (i.e., deck, driveway, pergola, shed), may be exempt from having to provide a new survey. Please refer to Page 3 of this application package for more details. Minor Variances with concurrent Consent applications require a new survey.

Applicant/Owner:	Property Address:

1. I, _____ (Print Name) In my capacity as _____ (Owner or agent) do attest to the following:

Please complete Section A, B, or C

A. The OLS survey/sketch of survey dated _____ (mmm/dd/yyyy)

has been revised by: _____ (Person or Company Name)

OR

B. The site plan, architect's plan or engineer's plan dated _____ (mmm/dd/yyyy)

has been revised by: _____ (Person or Company Name)

OR

C. The sketch or plot plan** dated _____ (mmm/dd/yyyy)

**Accepted for applications involving variances for Uses only.

was prepared by: _____ (Person or Company Name)

2. All structures, measurements, setbacks and boundaries of the property are shown accurately as of: _____ (mmm/dd/yyyy)

3. The material submitted shows all measurements in metric, as calculated/converted by: _____ (Person or Company Name)

4. Should the need arise during application processing for an new OLS survey, the applicant/agent agree to provide the survey as required by Committee or city staff in order to receive a decision on the application.

_____ Signature of Owner/Applicant

_____ Date (mmm/dd/yyyy)

CITY OF Burlington

MINOR VARIANCE – 2025
Committee of Adjustment
Department of Community Planning
426 Brant Street, Burlington ON
committeeofadjustment@burlington.ca

POSTING OF ADVISORY SIGN

This will confirm the requirement of the Committee of Adjustment for a sign to be posted by all applicants or agents on each property under application.

A sign will be made available to you after completion of the zoning review of your application(s) and you are directed to post each sign in a prominent location that will enable the public to observe the sign.

The location of each sign will depend on the lot and location of structures on it, however, the sign should be placed so as to be legible from the roadway in order that the public can see the sign and make note of the telephone number should they wish to make inquiries. In most cases, please post the sign on a stake as you would a real estate sign. For commercial or industrial buildings it may be appropriate to post the sign on the front wall of the building at its entrance. Please contact the undersigned if you have any queries on the sign location.

DO NOT POST THE SIGN INSIDE THE BUILDING BY A WINDOW. The sign must be outdoors by the roadway in order to be visible and readable.

Each sign must remain posted beginning 10 days prior to the hearing, until the day following the hearing. Please fill in the form below indicating your agreement to post the sign(s) as required. This form must be submitted with the application so that it may be placed on file as evidence that you have met the committee's requirements. Failure to post the sign as required will result in deferral of the application.

I UNDERSTAND THAT EACH SIGN MUST BE POSTED AT LEAST 10 DAYS BEFORE THE HEARING, AND WILL REMAIN POSTED AND BE REPLACED, IF NECESSARY, UNTIL THE DAY FOLLOWING THE HEARING.

Owner Name: Richard Goldberg

Property Address: 4903 Thomas Alton Boulevard

Signature of Owner/Applicant

Date (mmm/dd/yyyy): Nov. 6, 2025

AFFIDAVIT

*Please fill out at time of submission of application

I have the authority to bind the Corporation (check if applicable) ☐ Signature of Applicant or Authorized Agent: KLM Planning Partners Inc.

I, Lauren Dynes (print name) of the Town (Region/City/County) of Aurora in the Region (City/Town/Township)

of York solemnly declare that all the statements contained in this application are true and I make this solemn declaration conscientiously believing it to be true and knowing it is of the same force and effect as if made under oath and by virtue of the Canada Evidence Act.

Declared before me at the City (Region/City/County) of Vaughan in the Region of York (City/Town/Township)

this 7th day of November 20 25.

Ruby Lyn Salas del Mando
a Commissioner, etc., Province of Ontario
for KLM Planning Partners Inc.
Expires September 9, 2027

Signature of Commissioner, etc.

L Dynes

Signature of Applicant or Authorized Agent

PERMISSION TO ENTER

IMPORTANT This MUST be completed for all applications and signed by the OWNER.

Municipal Address of Subject Lands: 4903 Thomas Alton Boulevard

I hereby authorize the Committee of Adjustment members, City of Burlington and Region of Halton staff to enter onto the above-noted property for the limited purposes of evaluating the merits of this application.

Signature of Owner

Richard Goldberg
Print Name

City of Burlington

MINOR VARIANCE – 2025
Committee of Adjustment
Department of Community Planning
426 Brant Street, Burlington ON
committeeofadjustment@burlington.ca

OWNERS AUTHORIZATION

If using an agent, the owner must also complete the following form:

I, Richard Goldberg (print name) being the registered owner of the subject lands, hereby

Authorize KLM Planning Partners Inc (print agent name) to prepare, submit and act on my behalf with respect to this

application for a Minor Variance.

Signature of Owner

NOV. 6, 2025
Date (mmm/dd/yyyy)

Notice of collection of personal information
Personal information contained on this form is collected under the authority of the Planning Act, RSO 1990, c. P.13, to process applications and make decisions. Applications made under the Planning Act, are considered part of the public record and shall be made available to the public. Questions about this collection can be directed to the Manager of Development Planning, City of Burlington, 426 Brant Street, Burlington, Ontario, L7R 3Z6, 905-335-7600.

The applicant acknowledges that an application, all supporting information and materials, including studies and drawings, submitted under the Planning Act, pursuant to s. 1.0.1 of the Planning Act, RSO 1990, c.P.13, as amended, shall be made available to the public.

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PLAN OF SURVEY ILLUSTRATING TOPOGRAPHY OF

BLOCK 24
REGISTERED PLAN 20M-1034
CITY OF BURLINGTON
REGIONAL MUNICIPALITY OF HALTON

SCALE 1 : 250

0 5 10 15 metres

THE INTENDED PLOT SIZE OF THIS PLAN IS 1306mm IN WIDTH BY 914mm IN HEIGHT WHEN PLOTTED AT A SCALE OF 1:250.

J.D. BARNES LIMITED

© COPYRIGHT

METRIC DISTANCES AND COORDINATES SHOWN ON THIS PLAN ARE IN METRES AND CAN BE CONVERTED TO FEET BY DIVIDING BY 0.3048.

NOTES

BEARINGS ARE UTM GRID, DERIVED FROM OBSERVED REFERENCE POINTS A AND B, BY REAL TIME NETWORK (RTN) OBSERVATIONS, UTM ZONE 17, NAD83 (CSRS) (2010.0).

DISTANCES ARE GROUND AND CAN BE CONVERTED TO GRID BY MULTIPLYING BY THE COMBINED SCALE FACTOR OF 0.999693.

INTEGRATION DATA

OBSERVED REFERENCE POINTS (ORPs): UTM ZONE 17, NAD83 (CSRS) (2010.0).

COORDINATES TO URBAN ACCURACY PER SECTION 14 (2) OF O.REG 216/10.

POINT ID	EASTING	NORTHING
ORP Ⓐ	595 837.82	4 807 127.38
ORP Ⓑ	595 964.13	4 806 999.78

COORDINATES CANNOT, IN THEMSELVES, BE USED TO RE-ESTABLISH CORNERS OR BOUNDARIES SHOWN ON THIS PLAN.

THE RESULTANT TIE BETWEEN ORP Ⓐ AND ORP Ⓑ IS 179.60 N44°42'25"W.

ELEVATION NOTE

ELEVATIONS SHOWN ON THIS PLAN ARE RELATED TO GEODETIC DATUM AND ARE DERIVED FROM THE CITY OF BURLINGTON BENCHMARKS:
No. 1047
ELEVATION=160.365m
No. 1050
ELEVATION=157.649m

LOCAL BENCHMARK

A CUTCROSS LOCATED ON CURB BEING APPROXIMATELY 43.3 METERS SOUTHWEST OF BUILDING #4903, AS SHOWN ON THE FACE OF PLAN.
ELEVATION= 157.38m

LEGEND

●	DENOTES	SURVEY MONUMENT FOUND
○	DENOTES	SURVEY MONUMENT SET
SSIB	DENOTES	STANDARD IRON BAR
SSIB	DENOTES	STANDARD IRON BAR
IB	DENOTES	IRON BAR
PB	DENOTES	PLASTIC BAR
WIT	DENOTES	WITNESS
MEAS	DENOTES	MEASURED
JDB	DENOTES	J.D. BARNES LIMITED
P1	DENOTES	PLAN 20R-22018
P2	DENOTES	PLAN 20M-1034

ALL SET SSIB MONUMENTS WERE USED DUE TO LACK OF OVERBURDEN AND/OR PROXIMITY OF UNDERGROUND UTILITIES IN ACCORDANCE WITH SECTION 11 (4) OF O.REG. 525/91.

TOPOGRAPHIC LEGEND

□	CB	DENOTES CATCHBASIN
⊡	HPED	DENOTES HYDRO PEDESTAL
◯	MH	DENOTES MANHOLE
◯	SAN MH	DENOTES SANITARY MANHOLE
◯	STM MH	DENOTES STORM MANHOLE
◯	WMH	DENOTES WATER MANHOLE
•	HP	DENOTES HYDRO POLE
•	LS	DENOTES LIGHT STANDARD
•	TP	DENOTES TELEPHONE POLE
•	TSC	DENOTES TRAFFIC SIGNAL CONTROL
H	H	DENOTES FIRE HYDRANT
WV	WV	DENOTES WATER VALVE
BM	BM	DENOTES LOCAL BENCH MARK
	CA	DENOTES CONCRETE AREA
	ICB	DENOTES IRRIGATION CONTROL BOX
	ICV	DENOTES IRRIGATION CONTROL VALVE
		DENOTES SHRUB
		DENOTES CONIFEROUS TREE DIA=DIAMETER OF TRUNK IN METRES
		DENOTES DECIDUOUS TREE DIA=DIAMETER OF TRUNK IN METRES

BEFORE DIGGING, UNDERGROUND SERVICES SHOULD BE LOCATED ON SITE BY THE RESPECTIVE AGENCIES.

IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THAT LOCAL BENCHMARKS HAVE NOT BEEN ALTERED OR DISTURBED AND THAT THE RELATIVE ELEVATIONS AGREE WITH THE INFORMATION SHOWN ON THIS PLAN.

PRIMARY CONTOURS ARE AT 1.00m INTERVALS.
SECONDARY CONTOURS ARE AT 0.25m INTERVALS.

SURVEYOR'S CERTIFICATE

I CERTIFY THAT:

1. THIS SURVEY AND PLAN ARE CORRECT AND IN ACCORDANCE WITH THE SURVEYS ACT, THE SURVEYORS ACT AND THE REGULATIONS MADE UNDER THEM.
2. THE SURVEY WAS COMPLETED ON OCTOBER 28th, 2024.

NOVEMBER 01, 2024
DATE

SUNIL PERERA
ONTARIO LAND SURVEYOR

THIS PLAN OF SURVEY RELATES TO AOLS PLAN SUBMISSION FORM NUMBER 2219787

J. D. BARNES LIMITED
SURVEYING MAPPING GIS
LAND INFORMATION SPECIALISTS
401 WHEELABRATOR WAY, SUITE A, MILTON, ON L9T 3C1
T: (905) 875-9955 F: (905) 875-9956 www.jdbarnes.com

DRAWN BY:	CHECKED BY:	REFERENCE NO.:
MA	AB/SP	24-30-204-00
PLOTTED: 11/1/2024		DATED: 05/31/2024

FILE: G:\24-30-204\00\Drawing\24-30-204-00.dgn

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ADJACENT ZONING - CR - 408

APPLEBY LINE

EXISTING 2 STOREY COMMERCIAL BUILDING
4900 PALLADIUM WAY
EXISTING BUILDING A

EXISTING 2 STOREY COMMERCIAL BUILDING
4905 THOMAS ALTON BLVD
EXISTING BUILDING B

PROPOSED BUILDING C
4883 THOMAS ALTON BLVD

ADJACENT ZONING - S

PALLADIUM WAY

ADJACENT ZONING - BC1 - 448

19.06 TO BC1 ZONE

19.10 TO BC1 ZONE

19.16 TO BC1 ZONE

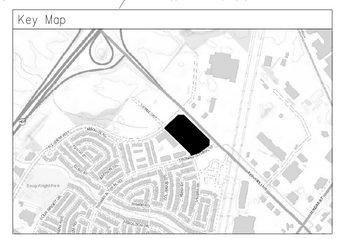
THOMAS ALTON BLVD

VALERA ROAD

ADJACENT ZONING - RAL4 - 493

ADJACENT ZONING - RAL4 - 464

Key Map



NOTES:

INFORMATION ON THIS PLAN TAKEN FROM:

PLAN OF SURVEY ILLUSTRATING TOPOGRAPHY OF BLOCK 24 REGISTERED PLAN 20M-1034 CITY OF BURLINGTON REGIONAL MUNICIPALITY OF HALTON

PREPARED BY: J.D. BARNES LIMITED ONTARIO LAND SURVEYORS FILE NO. 24-30-204-00

THE ARCHITECT IS NOT RESPONSIBLE FOR ANY ERRORS OR OMMISIONS IN THIS RESPECT

FOR SITE SERVICING AND GRADING INFORMATION REFER TO DWGS PREPARED BY: URBANTECH CONSULTING

FOR LANDSCAPING INFORMATION REFER TO DWGS PREPARED BY: NAK DESIGN STRATEGIES

LEGEND

	MAIN ENTRANCE FIREFIGHTERS ENTRANCE
BOL	STEEL BOLLARD
99.75	EXISTING ELEVATION
99.28	PROPOSED ELEVATION
CB	CATCH BASIN
H.P.	HYDRO POLE
MH	MANHOLE
F.H.	FIRE HYDRANT
L.S.	LIGHT STANDARD
	ACCESSIBLE PARKING
	EXISTING PARKING AREA
	CONCRETE WALKWAY
	PEDESTRIAN ROUTE (BARRIER-FREE ACCESSIBLE)

SITE STATISTICS

BY-LAW 2020	PROPOSED	BY-LAW REQUIREMENT
ZONING		MXE-322 (EMPLOYMENT CORRIDOR)
LOT WIDTH:	108.8 M	25.0 M
LOT AREA:	21,143.11 SM - 2.11 ha	1,000.0 SM - 0.1 ha
FRONT YARD (APPLEBY LINE):	3.0 M	MAXIMUM 6.0 M
REAR YARD (ABUTS RESIDENTIAL ZONE):	15.74 M	MINIMUM 12.0 M
YARD ABUTTING STREET (PALLADIUM WAY):	15.76 M	MAXIMUM 6.0 M
YARD ABUTTING STREET (THOMAS ALTON BLVD):	51.37 M	MAXIMUM 6.0 M
YARD ABUTTING STREET (APPLEBY LINE):	76.51 M	MAXIMUM 6.0 M
BUILDING HEIGHTS: INDUSTRIAL/AUTOMOTIVE USES OTHER USES	1 STOREY	MAXIMUM 2 STOREYS MAXIMUM 6 STOREYS
LANDSCAPE BUFFER: ABUTTING A STREET ABUTTING RESIDENTIAL ZONE	3.00 M 6.00 M	MINIMUM 3.0 M MINIMUM 6.0 M
SEPARATION DISTANCE: STANDARD RESTAURANT	15.74 M	15.0 M BETWEEN THE USE AND A RESIDENTIAL ZONE
SEPARATION DISTANCE: DAYCARE PLAY AREA TO RAL4-493 ZONE	42.01 M TO CENTRE LINE OF ROAD	

AREA CALCULATIONS FOR EXISTING BUILDINGS A & B AND PROPOSED BUILDING C

GROSS FLOOR AREA BUILDING:		
EXISTING BUILDING A		
GROUND FLOOR		1,399.10 SM (15,060 SF)
SECOND FLOOR		1,413.39 SM (15,214 SF)
TOTAL		2,812.49 SM (30,274 SF)
EXISTING BUILDING B		
GROUND FLOOR		1,403.10 SM (15,103 SF)
SECOND FLOOR		1,417.27 SM (15,255 SF)
TOTAL		2,820.37 SM (30,358 SF)
TOTAL EXTG. GFA BUILDING FOR A & B		5,632.86 SM (60,632 SF)
PROPOSED BUILDING C		1,888.33 SM (20,327 SF)
TOTAL GFA BUILDING FOR A, B & C		7,521.19 SM (80,959 SF)
GROSS FLOOR AREA W/PERMITTED DEDUCTIONS		
EXISTING BUILDING A		
GROUND FLOOR		1,399.10 SM (15,060 SF)
AREA DEDUCTIONS GROUND FLOOR		MINUS 114.62 SM (1,234 SF)
LOBBY:	71.06 SM	1,284.48 SM (13,826 SF) GFA
ELEVATOR:	6.61 SM	
ELEV. MACH. RM: 5.21 SM		
2 STAIRS:	31.74 SM	
TOTAL DEDUCTIONS:	114.62 SM	
SECOND FLOOR		1,413.39 SM (15,214 SF)
AREA DEDUCTIONS SECOND FLOOR		MINUS 169.04 SM (1,820 SF)
HALLWAY:	71.82 SM	1,244.35 SM (13,394 SF) GFA
ELEVATOR:	6.61 SM	
WASHROOMS:	52.38 SM	
2 STAIRS:	25.06 SM	
AIR HANDLING EQUIP.:	13.17 SM	
TOTAL DEDUCTIONS:	169.04 SM	
EXISTING BUILDING B		
GROUND FLOOR		1,403.10 SM (15,103 SF)
AREA DEDUCTIONS GROUND FLOOR		MINUS 114.79 SM (1,236 SF)
LOBBY:	73.12 SM	1,288.31 SM (13,867 SF) GFA
ELEVATOR:	6.61 SM	
ELEV. MACH. RM: 5.59 SM		
2 STAIRS:	31.87 SM	
TOTAL DEDUCTIONS:	114.79 SM	
SECOND FLOOR		1,417.27 SM (15,256 SF)
AREA DEDUCTIONS SECOND FLOOR		MINUS 153.74 SM (1,655 SF)
HALLWAY:	67.44 SM	1,263.53 SM (13,601 SF) GFA
ELEVATOR:	6.61 SM	
WASHROOMS:	42.37 SM	
2 STAIRS:	25.05 SM	
AIR HANDLING EQUIP.:	12.27 SM	
TOTAL DEDUCTIONS:	153.74 SM	
TOTAL GFA FOR EXTG. A & B		5,080.67 SM (54,688 SF)
GFA PROPOSED C		1,888.33 SM (20,326 SF)
TOTAL GFA FOR A & B AND C		6,969.00 SM (75,014 SF)

COVERAGE	4,718.99 SM-22.32 %
SITE FLOOR AREA RATIO	7,521.19 SM - 0.36:1 MAXIMUM 1.0:1

PARKING SPACES		REQUIRED SPACES	PROVIDED SPACES	BY-LAW 2020 BY-LAW REQUIREMENT
REQUIRED PARKING:				
EXISTING BUILDING A				
EXTG. GROUND FLOOR GFA	1,284.48 SM	64.22		RETAIL CENTRE: 5.0 SPACES/100 SM GFA
EXTG. SECOND FLOOR GFA	1,244.35 SM	62.22		
EXISTING BUILDING B				
EXTG. GROUND FLOOR GFA	1,288.31 SM	64.42		RETAIL CENTRE: 5.0 SPACES/100 SM GFA
EXTG. SECOND FLOOR GFA	1,263.53 SM	63.18		
TOTAL REQUIRED PARKING SPACES FOR EXTG. A & B		254.04		
TOTAL PARKING SPACES PROVIDED			248	
REQUIRED PARKING BUILDING C:				
PROPOSED GROUND FLOOR GFA	1,888.33 SM	94.42		RETAIL CENTRE: 5.0 SPACES/100 SM GFA
TOTAL PARKING SPACES REQ'D A, B, C		(348.46) 349		NUMBER OF SPACES LOST TO PROPOSED DEVELOPMENT: 57 SPACES DELETED (191 EXISTING SPACES RETAINED) NUMBER OF NEW SPACES CONSTRUCTED: 64 SPACES
TOTAL PARKING SPACES PROVIDED FOR A, B, C			255	2.75mx6.0m(TYP. STALL) - MIN. STALL AREA: 16.5 SM
ACCESSIBLE PARKING: TYPICAL STALL WIDTH: TYPE "A" VAN ACCESSIBLE 3.40 M + 2.0 M WALKWAY ASLE TYPE "B" 2.75 M + 2.0 M WALKWAY ASLE				7 SPACES 3X OF REQUIRED PARKING
EXISTING:		8 SPACES		
PROPOSED		2 SPACES		
TOTAL REQUIRED		10 SPACES		
TOTAL PROVIDED			10 SPACES	THESE ARE INCLUDED IN THE TOTAL PROVIDED
BICYCLE PARKING: TYPICAL STALL SIZE: 0.60M x 1.8 M				RETAIL-RETAIL CENTRE, SERVICE COMMERCIAL OFFICE, INSTITUTIONAL USES 2.0 SPACES + 1.0 / 1000 SM GFA
EXISTING		3 SPACES		9 SPACES
PROPOSED		9 SPACES		
TOTAL REQUIRED		12 SPACES		
TOTAL PROVIDED			12 SPACES	
LOADING SPACES REQUIRED		3 SPACES		1 SPACE PER BUILDING
LOADING SPACES PROVIDED			3 SPACES	

CONTRACTOR MUST CHECK AND VERIFY ALL DIMENSIONS AND BE RESPONSIBLE FOR SAME. REPORTING ANY DISCREPANCIES TO THE ARCHITECT BEFORE COMMENCING WORK.

ALL DRAWINGS, PRINTS AND SPECIFICATIONS ARE THE PROPERTY OF THE ARCHITECT AND MUST BE RETURNED TO HIM ON COMPLETION OF WORK.

LATEST APPROVED DRAWINGS ONLY TO BE USED FOR CONSTRUCTION.

PRINTS ARE NOT TO BE SCALED.

No	Date Plotted	Revisions	Date Plotted	Issued for:
7	NOV 06 2025	REVISIONS PER PLANNING COMMENTS		
6	AUG 29 2025	REVISIONS PER PLANNING COMMENTS		
5	JUL 10 2025	ADDITIONAL DIMENSION PER R60.	FEB 12 2025	SITE PLAN APPROVAL SUBMISSION
4	MAR 27 2025	PER PLANNING COMMENTS	FEB 11 2025	COMMITTEE OF ADJUSTMENT APP.

Commercial Development
4883 Thomas Alton Blvd

4900 Palladium Way, 4903 & 4883 Thomas Alton Blvd Burlington, Ontario
Block 24, RP 20M-1034, City of Burlington, Regional Municipality of Halton

CJJ Holdings Limited
620 Wilson Avenue, Suite 300
Toronto, Ontario, M3K 1Z3
tel (416)630-6927

SITE PLAN – SCHEME 10

CONSTRUCTION NORTH

ONTARIO ASSOCIATION OF ARCHITECTS
ANDREW POSSAMAI
LICENCE 5061

SPA APPL.# PRCN-SP-31-24

GLOBAL ARCHITECT INC.
6 Leswyn Road
Toronto, Ontario, M6A 1K2
tel (416)256-4440

DRAWN BY	: J. DeCicco/P. Pivetta
DATE	: November 22, 2024
SCALE	: 1:300
PROJECT NO.:	24-04
DRAWING NO.:	A-1.0

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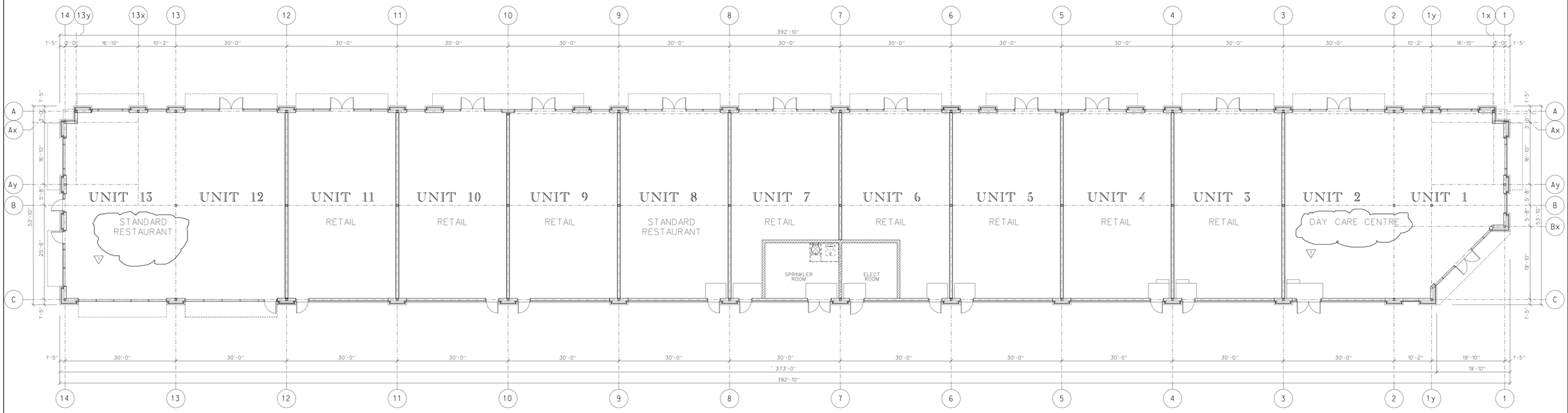

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PRINTS ARE NOT TO BE SCALED.

No	Date Plotted	Revisions	Date Plotted	Issued for:
			FEB 12 2025	SITE PLAN APPROVAL SUBMISSION
▽	AUG 29 2025	REVISIONS PER PLANNING COMMENT	FEB 11 2025	COMMITTEE OF ADJUSTMENT APP.

Commercial Development
4883 Thomas Alton Blvd

4900 Palladium Way,4903 & 4883 Thomas Alton Blvd Burlington, Ontario
Block 24, RP 20M–1034, City of Burlington, Regional Municipality of Halton

CJJ Holdings Limited
620 Wilson Avenue, Suite 300
Toronto, Ontario, M3K 1Z3
tel (416)630–6927

FLOOR PLAN – BUILDING C

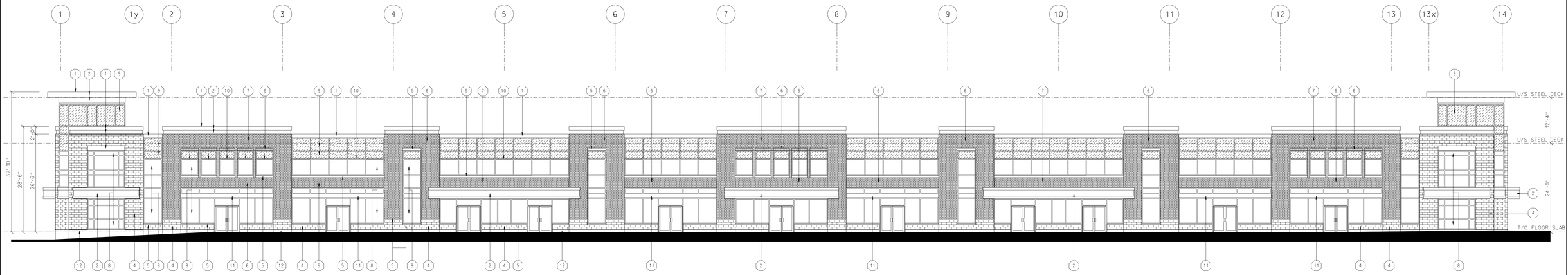
CONSTRUCTION NORTH

ONTARIO ASSOCIATION OF ARCHITECTS INC. HUGH POSSAMAI LICENCE 5061

SPA APPL.# PRCN–SP–31–24

GLOBAL ARCHITECT INC.
6 Leswyn Road
Toronto, Ontario, M6A 1K2
tel (416)256–4440

DRAWN BY : J. DeCicco/P. Pivetta
DATE : November 22, 2024
SCALE : $\frac{3}{32}$"=1'-0"
PROJECT NO.: 24-04
DRAWING NO.: A-2.0



1 A-3.0 EAST ELEVATION
SCALE : 3/32 " = 1'- 0"

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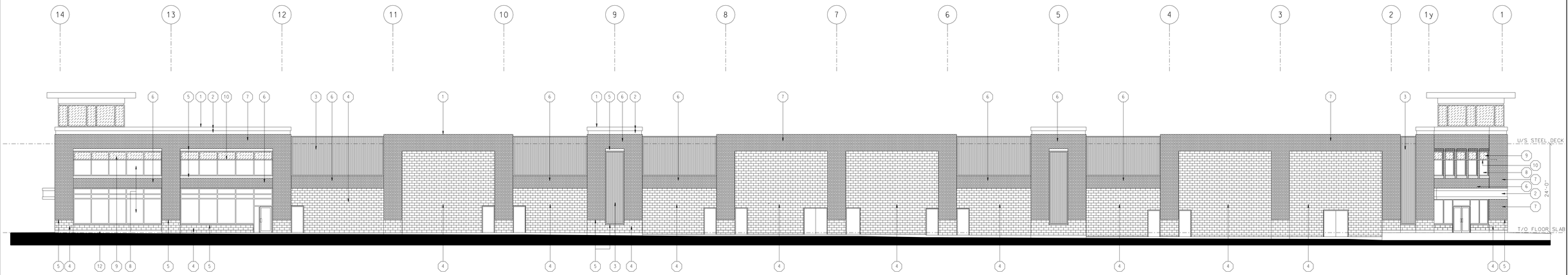
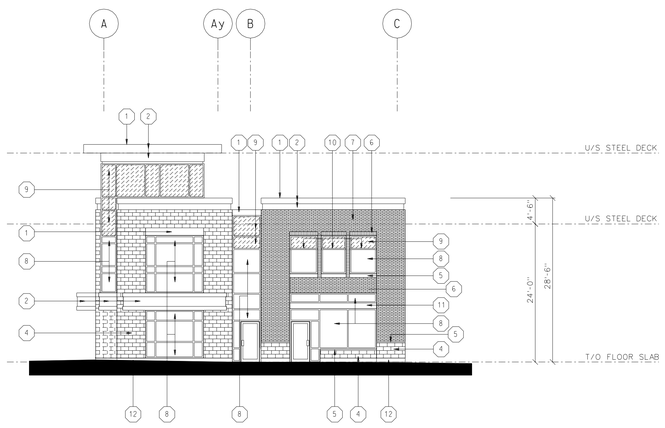


2 A-3.0 WEST ELEVATION
SCALE : 3/32 " = 1'- 0"



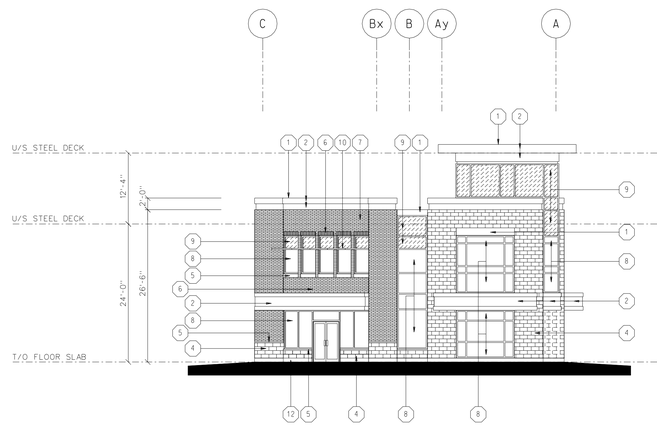
4 A-3.0 NORTH ELEVATION
SCALE : 3/32 " = 1'- 0"

COLOUR/MATERIAL LEGEND

1. PREFINISHED METAL FLASHINGS
   COLOUR : SILVER TO MATCH EXISTING
2. PREFINISHED METAL PANELS
   COLOUR : SILVER TO MATCH EXISTING
3. PREFINISHED VERTICAL METAL PANELS
   C/W TRIM AND FLASHINGS SECURED TO VERTICAL INSULATED METAL PANELS
   PROFILE: CL. 7040
   COLOUR : BRIGHT SILVER
4. PREFINISHED CONCRETE BLOCK
   PROFILE: MATCH EXISTING
   COLOUR : BEIGE TO MATCH EXISTING
5. PREFINISHED STONE COPING/SILL TO MATCH EXISTING
   COLOUR : GREY TO MATCH EXISTING
6. PREFINISHED FACE BRICK
   PROFILE/SIZE: MATCH EXISTING
   COLOUR : RED TO MATCH EXISTING
7. PREFINISHED FACE BRICK
   PROFILE/SIZE: MATCH EXISTING
   COLOUR : YELLOW TO MATCH EXISTING
8. TINTED (SOLARBAN 70 XL) DOUBLE GLAZED SEALED WINDOW UNITS (COLOUR TO MATCH EXISTING) IN THERMALLY BROKEN PREFINISHED ANODIZED ALUMINUM FRAMES (DURANAR XL FINISH) LOW E AND ARGON FILLED
9. TINTED (SOLARBAN 70 XL) SINGLE GLAZED INSULATED (R-20 MIN.) SPANDRAL PANELS (COLOUR TO MATCH EXISTING) IN THERMALLY BROKEN PREFINISHED ANODIZED ALUMINUM FRAMES (DURANAR XL FINISH)
10. PREFINSHED WINDOW SHADES TO MATCH EXISTING
11. PREFINSHED METAL FLASHINGS ON STEEL BEAM CANOPY TO MATCH EXISTING
12. POURED CONCRETE WALL

SPANDREL PANELS

PAINT ALL EXTERIOR H.M. DOORS AND FRAMES BEIGE TO MATCH CONCRETE BLOCK



3 A-3.0 SOUTH ELEVATION
SCALE : 3/32 " = 1'- 0"

CONTRACTOR MUST CHECK AND VERIFY ALL DIMENSIONS AND BE RESPONSIBLE FOR SAME. REPORTING ANY DISCREPANCIES TO THE ARCHITECT BEFORE COMMENCING WORK.

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No	Date Plotted	Revisions	Date Plotted	Issued for:
			FEB 11 2025	COMMITTEE OF ADJUSTMENT APP.

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PROJECT NO.:	24-04
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Project: 240651

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RE: 4900 PALLADIUM WAY AND 4883 & 4903 THOMAS ALTON BOULEVARD, PARKING STUDY, PROPOSED MULTI-USE BUSINESS PARK

Rothman Real Estate Investments Limited retained Paradigm Transportation Solutions Limited (Paradigm) to prepare a **Parking Study** to consider the appropriateness of a proposed parking variance for 4900 Palladium Way and 4883 & 4903 Thomas Alton Boulevard in the City of Burlington. **Figure 1** (attached) illustrates the site location.

Site Description

The site currently contains two two-storey commercial buildings with a total of approximately 5,081 m^2 (54,688 sq. ft.) of Gross Floor Area (GFA). The buildings are located near the Appleby Line frontage.

The development concept proposes a third, single-storey building containing 13 retail units on the site. A total of approximately 1,888 m^2 (20,326 sq. ft.) of GFA is proposed for retail uses. City of Burlington Zoning staff considers the land use for the site to be "Retail Centre."

Vehicle access will be maintained via the existing three driveways serving the site and will remain unchanged after construction. **Figure 2** (attached) illustrates the site plan.

Site Context

The subject lands are located in the Alton Village neighbourhood, which offers a variety of transportation options and easy access to employment, educational, and institutional land uses, as well as other local amenities. The site has a Walk Score[1] of 71 out of 100. This location is “Very Walkable,” so most errands can be accomplished on foot.

Pedestrian travel within the study area is accommodated by sidewalks on both sides of Palladium Way, Thomas Alton Boulevard, Appleby Line, Valera Road and Lionel Court, and on

[1] Walk Score, last updated 2025-04-01, https://www.walkscore.com/score/4883-thomas-alton-blvd-burlington-on-canada

the south side of Harrison Court. East of Appleby Line, sidewalks are not provided on Thomas Alton Boulevard. Pedestrian signal heads, with push buttons and delineated crosswalks are provided at the signalized intersections in the study area.

The existing cycling infrastructure includes painted bike lanes along Appleby Line, Palladium Way, and Thomas Alton Boulevard. Multi-use paths are provided on the south side of Palladium Way and south of Thomas Alton Boulevard through the existing hydro corridor. A bike repair station is located on the southwest corner of the Appleby Line and Palladium Way/Harrison Court intersection next to the subject site.

Two Burlington Transit routes operate nearby along Thomas Alton Boulevard and Appleby Line. Weekday and weekend headways operate in the order of approximately 15 to 60 minutes

Site Statistics

The development lands will retain the existing retail centre uses on 4900 Palladium Way and 4903 Thomas Alton Boulevard, and proposes additional retail uses on 4883 Thomas Alton Boulevard.

Table 1 summarizes the land use summary for the subject site. It is noted that the areas follow the definition of Floor Area, Gross with the permitted deductions as per the City of Burlington By-law 2020.[2]

TABLE 1: DEVELOPMENT SUMMARY

Building	Address	GFA
Existing - Building A	4900 Palladium Way	2,529 m^2
Existing - Building B	4903 Thomas Alton Boulevard	2,552 m^2
Proposed - Building C	4883 Thomas Alton Boulevard	1,888 m^2
Total		**6,969 m^2**

Parking Supply

Parking for all buildings is provided via the existing surface parking lot. Currently, the site has 248 parking spaces (4.88 spaces per 100 m^2). The additional development will remove 57, retain 191, and add 64, for a total of 255 parking spaces (3.66 spaces per 100 m^2).

The existing site has a total of three bicycle parking spaces, nine additional spaces are proposed for a total of twelve bicycle parking spaces. Short-term bicycle parking is located at grade near the building entrances at the northwest and southeast corners of the site.

[2] City of Burlington Zoning By-law 2020, § part 16.

Parking Analysis

Zoning By-law 2020

In Zoning By-law 2020, the site is identified as MXE-322, a Mixed-Use Employment Corridor Zone[3]. The following vehicular parking rates for retail centre uses apply for the site: 5 spaces per 100 m^2 of gross floor area.[4]

Based on these rates, the Zoning By-law mandates a parking supply of 349 spaces for the development. **Table 2** summarizes the required and proposed parking supply. The proposed vehicular parking supply is deficient by 94 parking spaces compared to the Zoning By-law requirements.

TABLE 2: ZONING BY-LAW 2020 VEHICULAR PARKING SUMMARY

Land Use	GFA	Rate	Total (Spaces)
Retail Centre	**6,969 m^2**	5 spaces / 100 m^2 GFA	349 spaces
Supply			**255 spaces**
Surplus/Deficit			**-94 spaces**

Based on the foregoing, a variance to the Zoning By-law is proposed as follows: To permit a variance to the minimum Retail Centre parking requirement of 3.65 spaces per 100 m^2 of GFA, or 254 spaces for the entire development, whereas the by-law requires 5.00 spaces per 100 m^2 or 349 spaces.

Bicycle parking is required to be provided at a rate of 2 spaces plus 1 space per 1,000 m^2 ground floor area. Based on this requirement, nine bicycle parking spaces are required for the site. Twelve spaces are proposed, exceeding the Zoning By-law requirements.

Forecast Parking Demand – ITE Parking Data

The Institute of Transportation Engineers (ITE) *Parking Generation Manual*[5] was referenced to estimate the peak hour vehicular parking demands generated by the development. Specifically, the parking demand rates for Land Use Code 821 – Shopping Plaza (40-150k) was used to estimate the parking demand.

Table 3 summarizes the estimated parking demand for the development. The higher of the average parking rate and the fitted parking rate was used to remain conservative.

[3] City of Burlington Zoning By-law 2020, § part 15.
[4] City of Burlington Zoning By-law 2020, § part 1.
[5] Institute of Transportation Engineers, *Parking Generation Manual, 6th ed.*, (Washington DC: ITE, 2023).

The proposed vehicular parking supply exceeds the forecast parking requirements based on the ITE rates. A surplus of 22 spaces and 75 spaces is noted in the weekday and Saturday periods, respectively

TABLE 3: ITE VEHICULAR PARKING SUMMARY

Land Use	GFA	Weekday	Saturday
LUC 821	75.01 k sq. ft.	233 spaces	180 spaces
Total	**75.01 k sq. ft.**	**233 spaces**	**180 spaces**
Supply			**255 spaces**
Surplus/Deficit		**+22 spaces**	**+75 spaces**

LUC 821: Weekday – P = 3.11(X) | Saturday – P = 2.23(X) + 14.13

Forecast Parking Demand – Proxy Survey

Paradigm originally completed a parking generation study at 1960 Appleby Line in the City of Burlington on Wednesday, June 24, 2015, and Saturday July 11, 2015. The site is a commercial plaza of similar size and use. A weekday parking rate of 3.62 spaces per 100 m^2 and a Saturday parking rate of 1.38 spaces per 100 m^2 were observed.[6]

Applying the peak parking demand rate to the proposed development, the forecast parking demand is 253 spaces during weekdays and 97 on Saturday. With 255 spaces provided, the supply exceeds the forecast demand by two spaces.

Paradigm completed an updated parking generation study at 1960 Appleby Line on Tuesday May 20, 2025, Wednesday May 21, 2025, and Thursday May 22, 2025. A weekday parking rate ranging between 3.56 to 3.65 spaces per 100 m^2 was observed.

Applying the peak parking demand rate to the proposed development, the forecast parking demand is 254 spaces. With 255 spaces provided, the supply exceeds the forecast demand by one space.

Similarly, 1960 Upper Appleby Line was reviewed in the *Burlington City-Wide Parking Standards Review.* This study found that the peak parking demand for the site was 3.32 spaces per 100 m^2.[7]

Applying the peak parking demand rate, measured by the City's consultant, to the proposed development, the forecast parking demand is 232 spaces. With 255 spaces provided, the supply exceeds the forecast demand by 23 spaces.

[6] Paradigm Transportation Solutions Limited, *Upper Appleby Developments Parking Study, Burlington, ON*, (Cambridge: Paradigm Transportation Solutions Limited, 2015).
[7] IBI Group. *Burlington City-Wide Parking Standards Review*, (Burlington: IBI Group, 2017).

Table 4 summarizes the parking demand calculations based on the proxy studies.

TABLE 4: PROXY STUDY VEHICULAR PARKING SUMMARY

Study	Rate	Forecast Demand	Surplus/Deficit
Paradigm Study – Weekday 2015	3.62 spaces per 100 m^2 GFA	253 spaces	**+2 spaces**
Paradigm Study – Weekday 2025	3.56 to 3.65 spaces per 100 m^2 GFA	254 spaces	**+1 space**
City-Wide Parking Standards Review	3.32 spaces per 100 m^2 GFA	232 spaces	**+23 spaces**

Summary

The proposed development introduces a third, single-story building with 13 non-residential retail units, adding approximately 1,888 m^2 (20,322 sq. ft.) of gross floor area to the existing site. The total site GFA following development of the proposed building is 6,969 m^2 (75,014 sq. ft.). City of Burlington Zoning staff considers the land use for the site to be "Retail Centre."

The site parking supply will increase from 248 parking spaces to 255 spaces, resulting in approximately 3.66 spaces per 100 m^2. Twelve bicycle parking spaces are proposed.

The Zoning By-law mandates a total of 349 parking spaces. The proposed parking supply results in a deficit of 94 spaces compared to the Zoning By-law requirements. The bicycle parking supply exceeds the Zoning By-law requirements.

Actual parking demand for the development is anticipated to be lower than the Zoning By-law requirements based on ITE published data, local proxy site data collected by Paradigm and local proxy site data collected by the City's consultant for the *Burlington City-Wide Parking Standards Review.* Based on the parking demand forecasts, the planned parking supply should adequately serve the demand with a surplus ranging from 1 space to 23 spaces.

Based on the findings of the study, the proposed variance to the Zoning By-law is supportable. The City of Burlington should recognize the conclusions drawn above and permit the proposed development to proceed as planned with the proposed parking supply of 255 spaces and twelve bicycle parking spaces.

We trust that the foregoing meets your requirements. Please do not hesitate to contact us if we can be of further assistance.

Yours very truly,

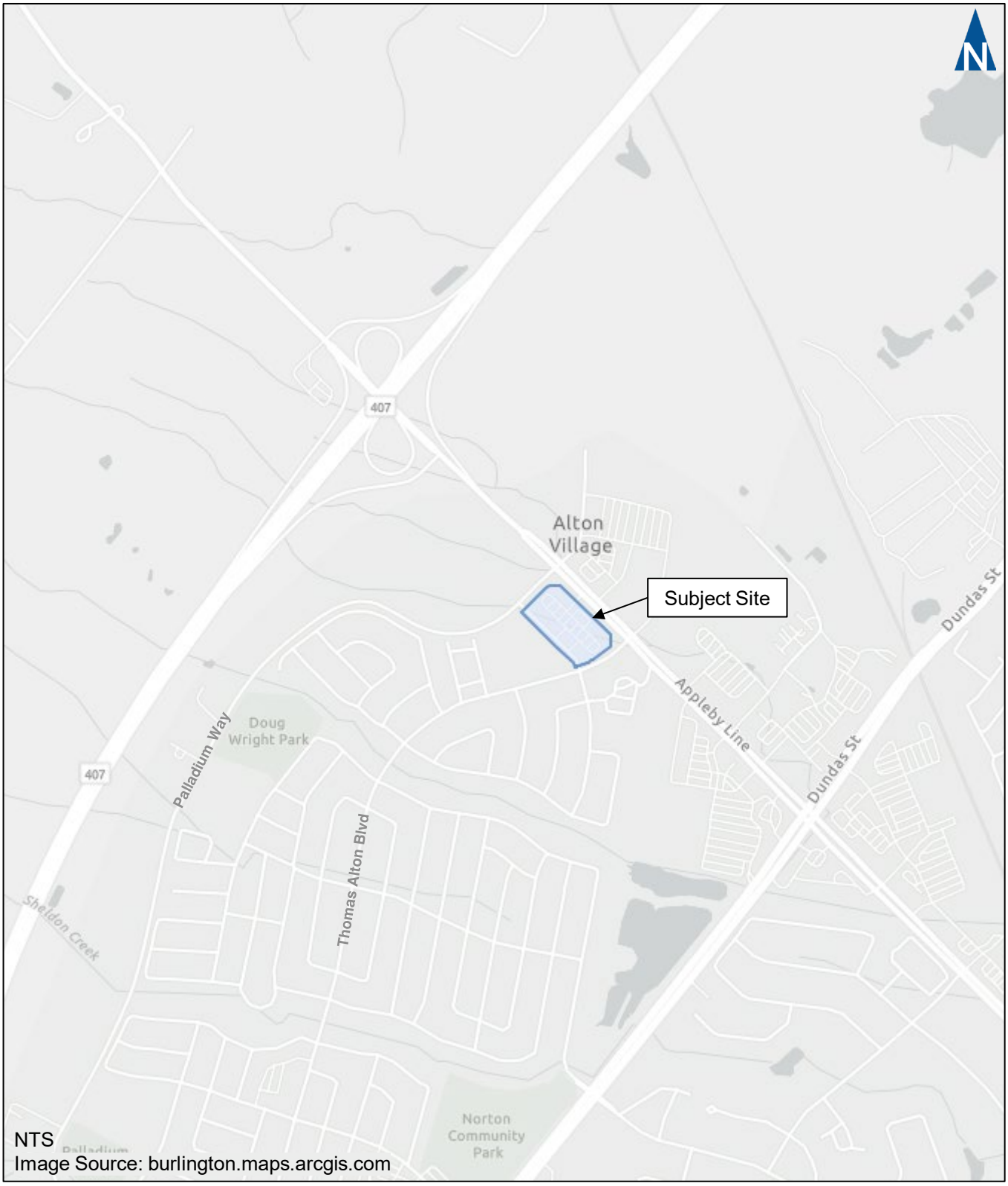
<< Original Signed By >>

Scott Catton, C.E.T.
Senior Project Manager, Associate

<< Original Signed By >>

Stew Elkins, B.E.S.
Vice President and CRO, Principal

Attachments



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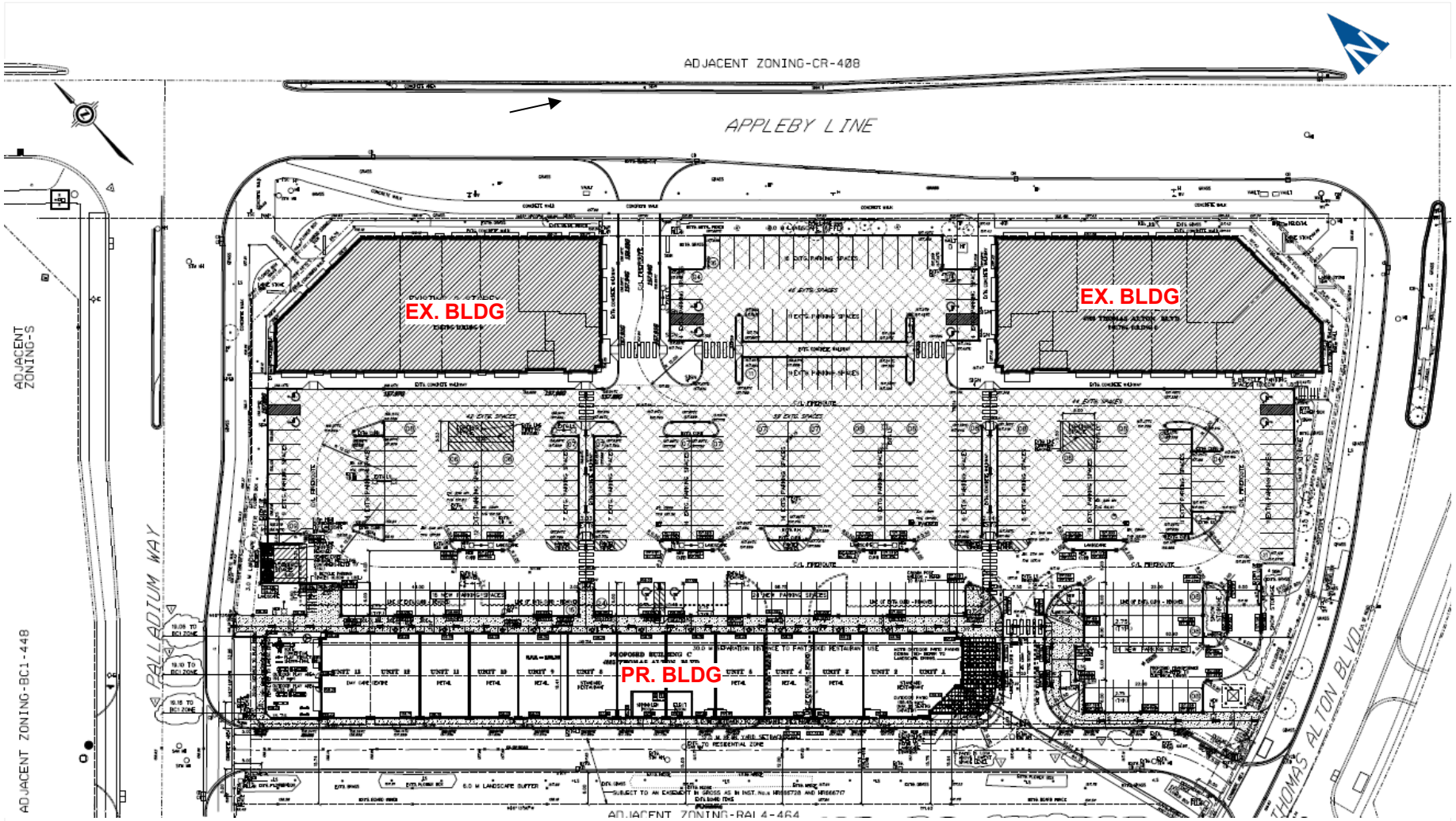
Site Location

4900 Palladium Way and 4883 & 4903 Thomas Alton Boulevard, City of Burlington, PS 240651

Figure 1



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Site Concept Plan

4900 Palladium Way and 4883 & 4903 Thomas Alton Boulevard, City of Burlington, PS 240651

Figure 2

4883 Thomas Alton Boulevard
City of Burlington

Transportation Impact Study

Paradigm Transportation Solutions Limited

2025-06
240651

ptsl.com

Project Summary

Project Number:

240651

Date and Version:

2025-06
2.0.0

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Executive Summary

Content

Rothman Real Estate Investments Limited retained Paradigm Transportation Solutions Limited (Paradigm) to conduct this Transportation Impact Study (TIS) for a proposed multi-use business park building located at 4900 Palladium Way and 4883 & 4903 Thomas Alton Boulevard in the City of Burlington.

This study determines the impacts of the development traffic on the surrounding road network and identifies the recommended improvements to accommodate the site generated traffic, if any.

Development Concept

The subject site is located at 4900 Palladium Way, 4883 & 4903 Thomas Alton Boulevard in the City of Burlington. The site currently contains two commercial buildings with three driveways. The buildings are located near the Appleby Line Frontage.

The development concept proposes a third, single-storey building containing 13 non-residential units on the site. A total of 1,888 m^2 (20,322 sq. ft.) of gross floor area is proposed for restaurant, retail, and day care centre uses, served by a total parking supply of 255 vehicular spaces (3.66 spaces per 100 m^2 GFA) for the entire 6,969 m^2 (75,014 sq. ft.) site. The site will be served by a total bicycling parking supply of twelve spaces, an increase of nine spaces from the existing three spaces.

Vehicle access will be maintained via the three driveways serving the existing site:

- **Site Driveway 1** to Palladium Way is a full movement driveway 115 metres west of the Appleby Line and Palladium Way/Harrison Court intersection, opposite of Lionel Court. The driveway has a clear throat length of approximately 135 m.
- **Site Driveway 2** to Appleby Line is right-in/right-out driveway located approximately 85 metres south of the Appleby Line and Palladium Way/Harrison Court intersection. Left turns are restricted by the existing centre raised median on Appleby Line. The driveway has a clear throat length of approximately 25 m.
- **Site Driveway 3** to Thomas Alton Boulevard is a full movement driveway 135 metres west of the Appleby Line and Thomas Alton Boulevard intersection, opposite of Valera Road. The driveway has approximately 28 m of clear throat length.

The site driveways will remain unchanged after construction.

Build-out is anticipated to occur within five years (2029), timing is subject to market conditions.

Conclusion

The main findings and conclusions of this study are as follows:

- **Existing Traffic Operations:** The study area intersections are operating at acceptable levels of service with all movements within capacity during the AM and PM peak hours.
- **Site Generated Traffic:** The subject site is forecast to generate approximately 119 and 165 new vehicle trips during the AM and PM peak hours, respectively.
- **2029 Background Traffic Operations:** Accounting for background growth and other area site traffic contributions, the study area intersections are forecast to continue to operate at acceptable level of service with all movements within capacity during the AM and PM peak hours.
- **2029 Total Traffic Operations:** With the addition of site generated traffic, the study area intersections are forecast to operate similarly to background conditions. One new critical movement is identified during the AM peak hour. At the Appleby Line and Thomas Alton Boulevard intersection, the eastbound right-turn movement is forecast to exceed the current available storage (40 m) by approximately 2 m. The queue can be contained by the existing width of the driving lane.
- **Remedial Measures:** Signals are not warranted at the Palladium Way and Lionel Court/Site Driveway 1 or Thomas Alton Boulevard and Valera Road/Site Driveway 3 intersections.
- **Transportation Demand Management:** The proposed development includes TDM measures such as bicycle parking to encourage cycling and pedestrian facilities to provide accessibility to and from development.
- **MMLOS Assessment:** The existing study area segments and intersections meet most of the level of service targets. Improved transit facilities, wider sidewalks, enhanced pedestrian measures, and protected cycling facilities should be explored to address the deficient modes.

Recommendations

Based on the findings of this study, it is recommended that:

- The City should explore reallocating street space along Thomas Alton Boulevard to enhance pedestrian and cycling facilities, including wider sidewalks and protected cycling lanes, to meet MMLOS targets; and
- If transit service expanded to Palladium Way, the City should explore reallocating street space to provide transit passenger amenities such as shelters, seating, or shade trees, to meet MMLOS targets.

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1 Introduction

1.1 Overview

Rothman Real Estate Investments Limited retained Paradigm Transportation Solutions Limited (Paradigm) to conduct this Transportation Impact Study (TIS) for a proposed multi-use business park building located at 4900 Palladium Way and 4883 & 4903 Thomas Alton Boulevard in the City of Burlington. **Figure 1.1** illustrates the site location.

The scope of the study includes:

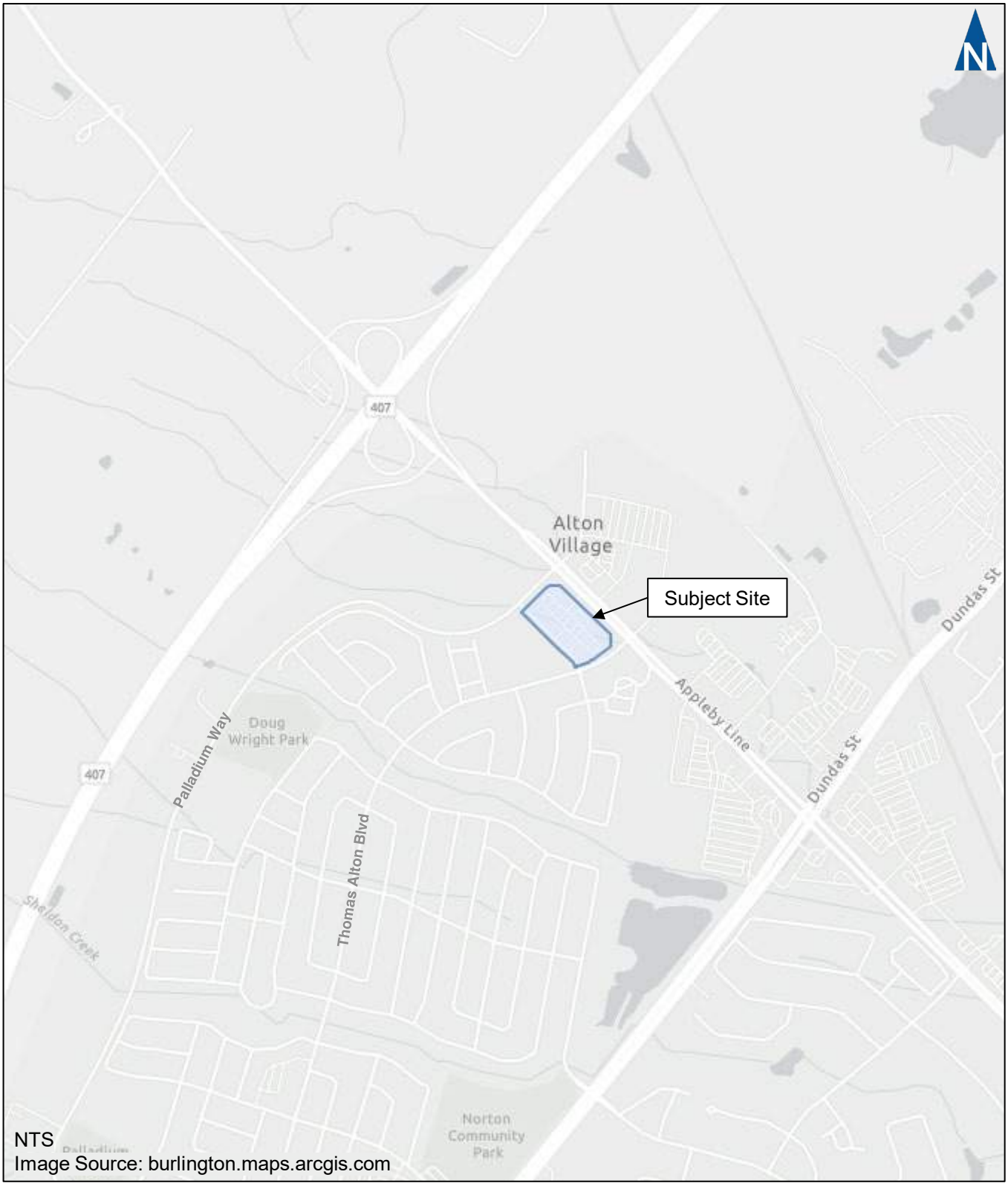
- An assessment of the current traffic and site conditions within the study area;
- Estimates of background traffic growth;
- Estimates of additional traffic generated by the subject site;
- Analyses of the impact of the future traffic on the surrounding road network;
- A transportation demand management (TDM) assessment;
- A multimodal level of service (MMLOS) assessment; and
- Recommendations to mitigate the site generated traffic in a satisfactory manner, if required.

Appendix A contains the pre-study consultation material and responses from the City of Burlington and Halton Region. The Ministry of Transportation Ontario (MTO) noted the site is outside their permit control area with no further comments. The study generally follows Halton Region *Transportation Impact Study Guidelines*.[1]

The study area intersections assessed in this study include:

- Appleby Line and Thomas Alton Boulevard (signalized);
- Appleby Line and Palladium Way/Harrison Court (signalized);
- Palladium Way and Lionel Court/Site Driveway 1 (unsignalized);
- Appleby Line and Site Driveway 2 (right-in/right-out, unsignalized); and
- Thomas Alton Boulevard and Valera Road/Site Driveway 3 (unsignalized).

[1] *Transportation Impact Study Guidelines*, Halton Region, January 2015.



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Site Location

4883 Thomas Alton Boulevard, City of Burlington, TIS
240651

Figure 1.1

2 Existing Conditions

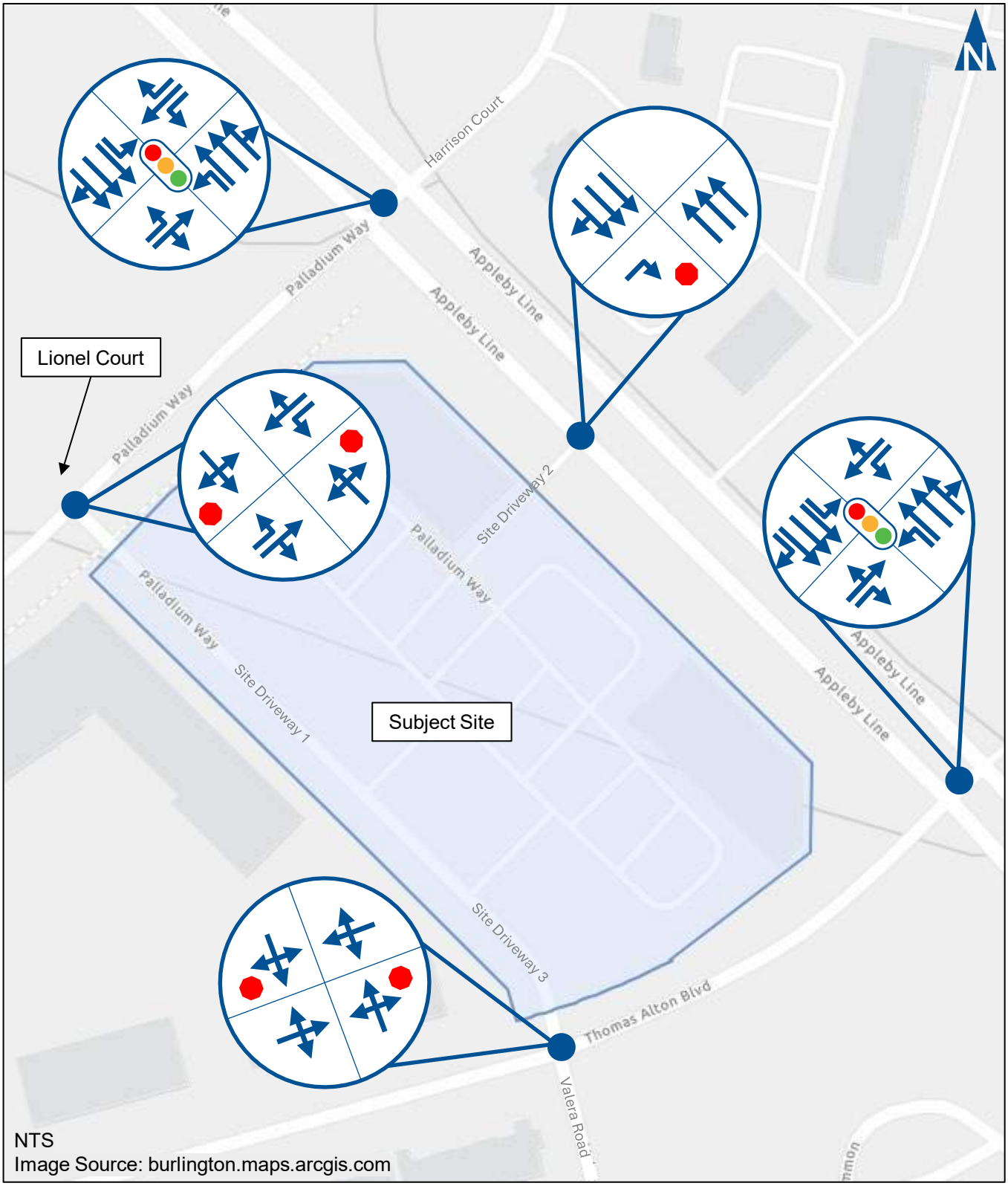
2.1 Road Network

The characteristics of the roads and intersections in the study area are described below. Reference was made to the City of Burlington *Official Plan, Schedule O-1 Transportation Facilities – Urban Area*.[2]

- **Appleby Line** is a north-south major arterial road with a six-lane urban cross-section, providing three travel lanes in each direction and a centre median. The road has a posted speed limit of 70 km/h north, and 60 km/hr south, of the intersection with Palladium Way/Harrison Court. The intersections with Palladium Way/Harrison Court, and Thomas Alton Boulevard are signalized and operate with auxiliary left-turn lanes on all approaches.
- **Palladium Way** is an east-west industrial collector with a three-lane urban cross-section, providing one travel lane in each direction and a centre two-way left-turn lane. The road has a posted speed limit of 60 km/h.
- **Harrison Court** is an east-west local road with a two-lane urban cross-section, providing one travel lane in each direction. The road has a statutory speed limit of 50 km/h.
- **Lionel Court** is a north-south local road that terminates as a cul-de-sac approximately 200 metres north of Palladium Way. The road has a two-lane urban cross-section, providing one travel lane in each direction. The road has a statutory speed limit of 50 km/h.
- **Thomas Alton Boulevard** is an east-west neighbourhood collector with a two-lane urban cross-section, providing one travel lane in each direction. The road has a posted speed limit of 40 km/h designated by an area speed limit sign.
- **Valera Road** is a north-south local road with a two-lane urban cross-section, providing one travel lane in each direction. The road has a speed limit of 40 km/h designated by an area speed limit sign.

Figure 2.1 illustrates the existing lane configurations and traffic control at the study area intersections.

[2] City of Burlington, *Burlington's Official Plan: Schedule O-1 Classification of Transportation Facilities – Urban Area,* (Burlington: City of Burlington, 2020).



Existing Lane Configuration and Traffic Control

2.2 Pedestrian and Cycling Network

Pedestrian travel within the study area is facilitated by sidewalks on both sides of Palladium Way, Thomas Alton Boulevard, Appleby Line, Valera Road and Lionel Court, and on the south side of Harrison Court. East of Appleby Line, sidewalks are not provided on Thomas Alton Boulevard. Pedestrian signal heads, with push buttons and delineated crosswalks are provided at the signalized intersections in the study area.

The existing cycling infrastructure includes painted bike lanes along Appleby Line, Palladium Way, and Thomas Alton Boulevard. Multi-use paths are provided on the south side of Palladium Way and south of Thomas Alton Boulevard through the existing hydro corridor.[3] A bike repair station is located on the southwest corner of the Appleby Line and Palladium Way/Harrison Court intersection next to the subject site.

Figure 2.2 illustrates the existing cycling network for the area.

The City of Burlington *Cycling Master Plan's Proposed Network* identifies Palladium Way as part of the spine network with a protected bikeway, Thomas Alton Boulevard as a connector route with a painted bike lane, and intersection improvements are shown at the Appleby Line and Palladium Way/Harrison Court intersection.[4]

Figure 2.3 illustrates the proposed cycling network for the area.

[3] City of Burlington*, Cycling Plan,* (Burlington: City of Burlington, 2018).
[4] Ibid.

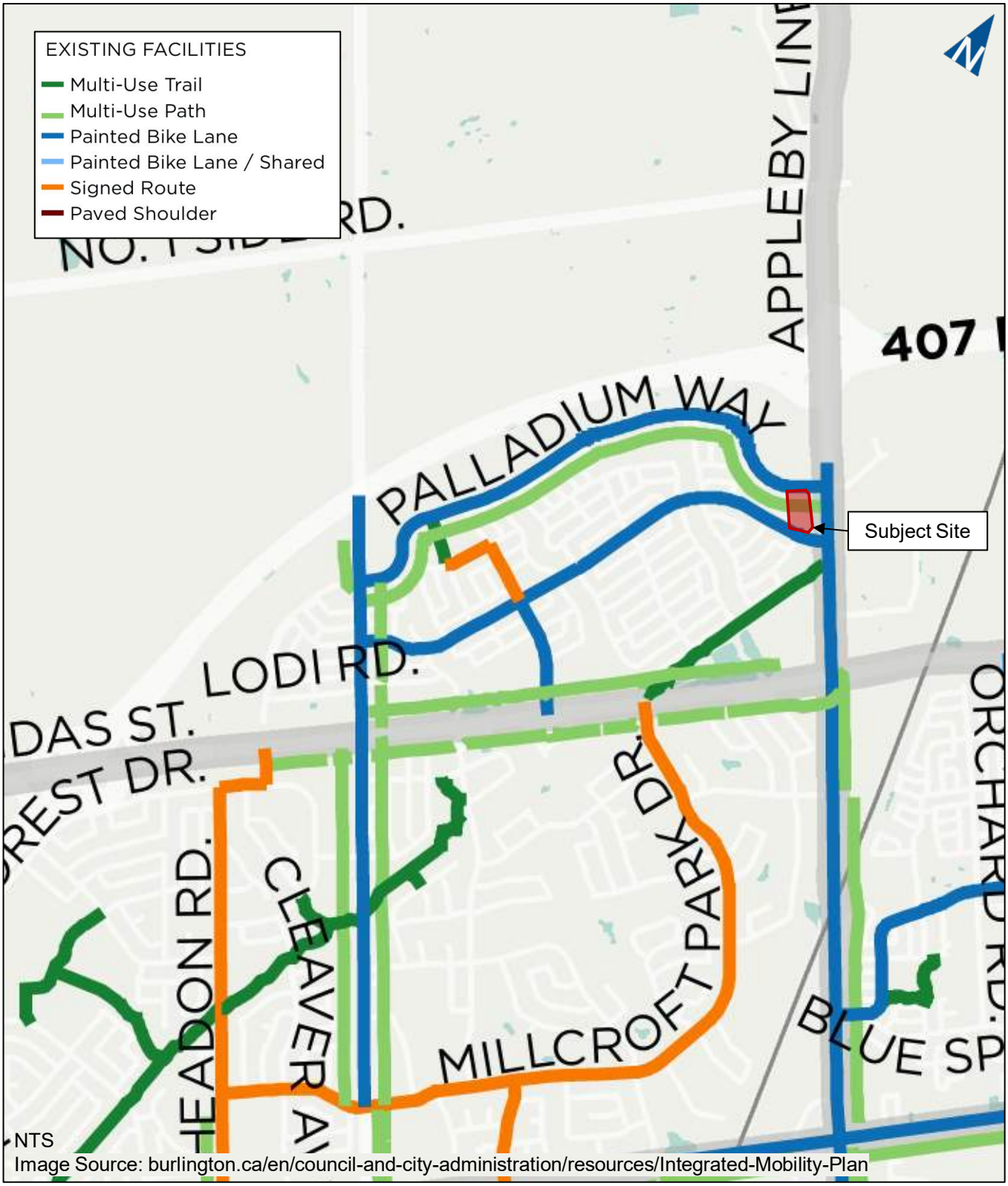


Image Source: burlington.ca/en/council-and-city-administration/resources/Integrated-Mobility-Plan

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Existing Cycling Network

Image Source: burlington.ca/en/council-and-city-administration/resources/Integrated-Mobility-Plan-

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Proposed Cycling Network

2.3 Transit Service

Burlington Transit operates the public transit system in the City. **Figure 2.4** illustrates the existing transit network[5] near the subject site. Two transit routes serve the subject site:

- **Route 11 – Sutton-Alton** travels from the Appleby GO Station to the Highway 407 GO Carpool parking lot. This route operates on weekdays and Saturdays from the early morning until late evening. Weekday and weekend headways operate in the order of approximately 15 to 30 minutes. This route operates along Appleby Line and Thomas Alton Boulevard, south of the site.
- **Route 51 – Burlington Northeast** travels from the Burlington GO Station to northeast Burlington. This route operates on weekdays and Saturdays with three evening routes per day. Weekday and weekend headways operate in the order of approximately 60 minutes.

Figure 2.5 illustrates the four bus stops within a 500-metre radius of the subject site. The closest bus stops are located along Thomas Alton Boulevard, south of the site.[6] The walking time to these stops is less than five minutes and can be accessed using the existing sidewalk infrastructure.

2.4 Traffic Volumes

Pyramid Traffic Inc. collected turning movement counts (TMCs) at the study area intersections on Wednesday, November 13, 2024. **Figure 2.6** and **Figure 2.7** illustrate the existing weekday AM and PM peak hour volumes, respectively.

Appendix B contains the raw traffic data and signal timing plans for reference.

[5] " Schedules and Maps", Burlington Transit, 2024, www.burlington.ca/en/transit/schedules-and-maps.aspx.

[6] "Plan your route in the Greater Toronto and Hamilton Area," Triplinx, https://www.triplinx.ca/en/stop-finder/145/NearBy/search?Place=798488_7.

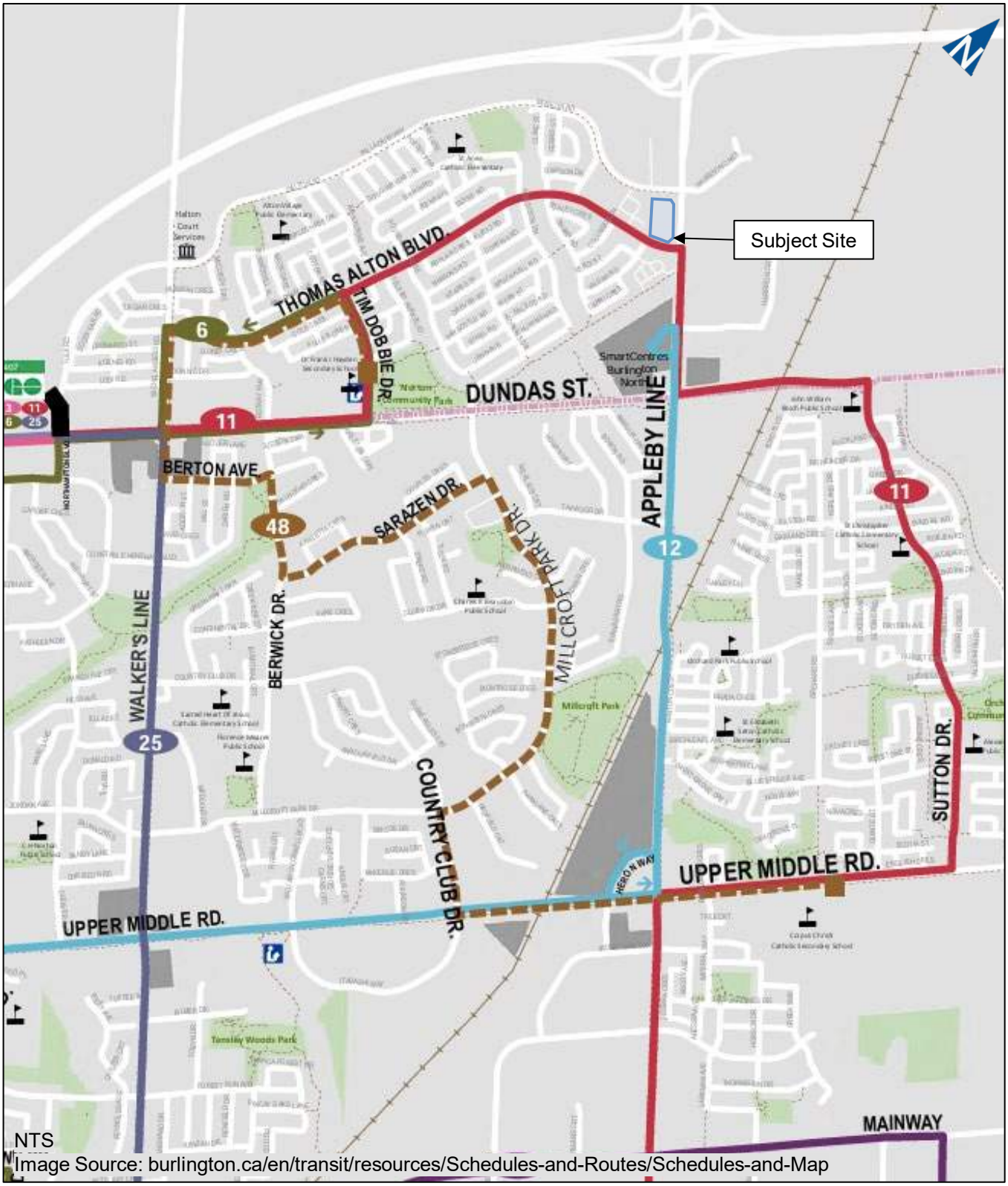

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Image Source: burlington.ca/en/transit/resources/Schedules-and-Routes/Schedules-and-Map

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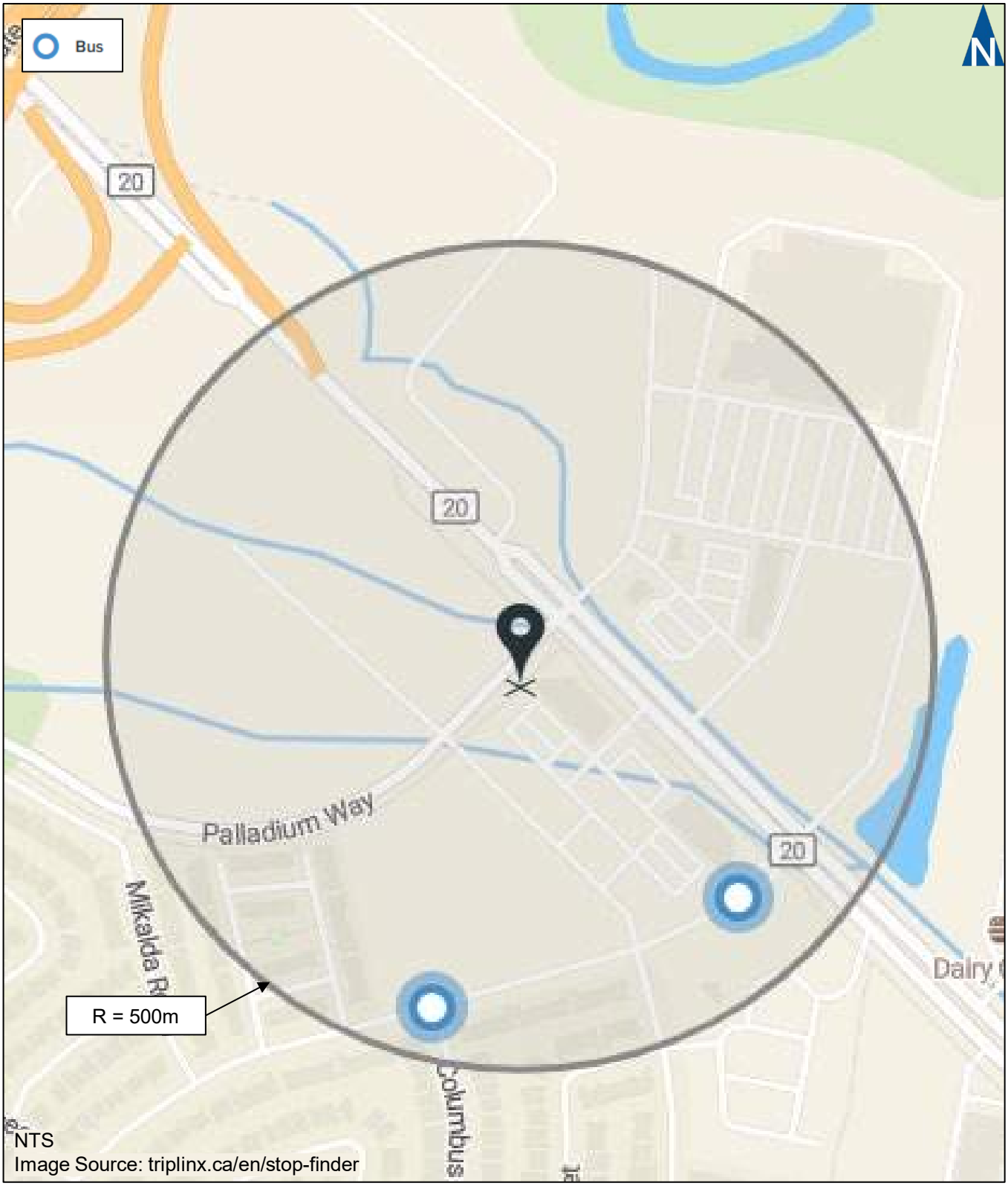
Existing Transit Network

4883 Thomas Alton Boulevard, City of Burlington, TIS
240651

Figure 2.4

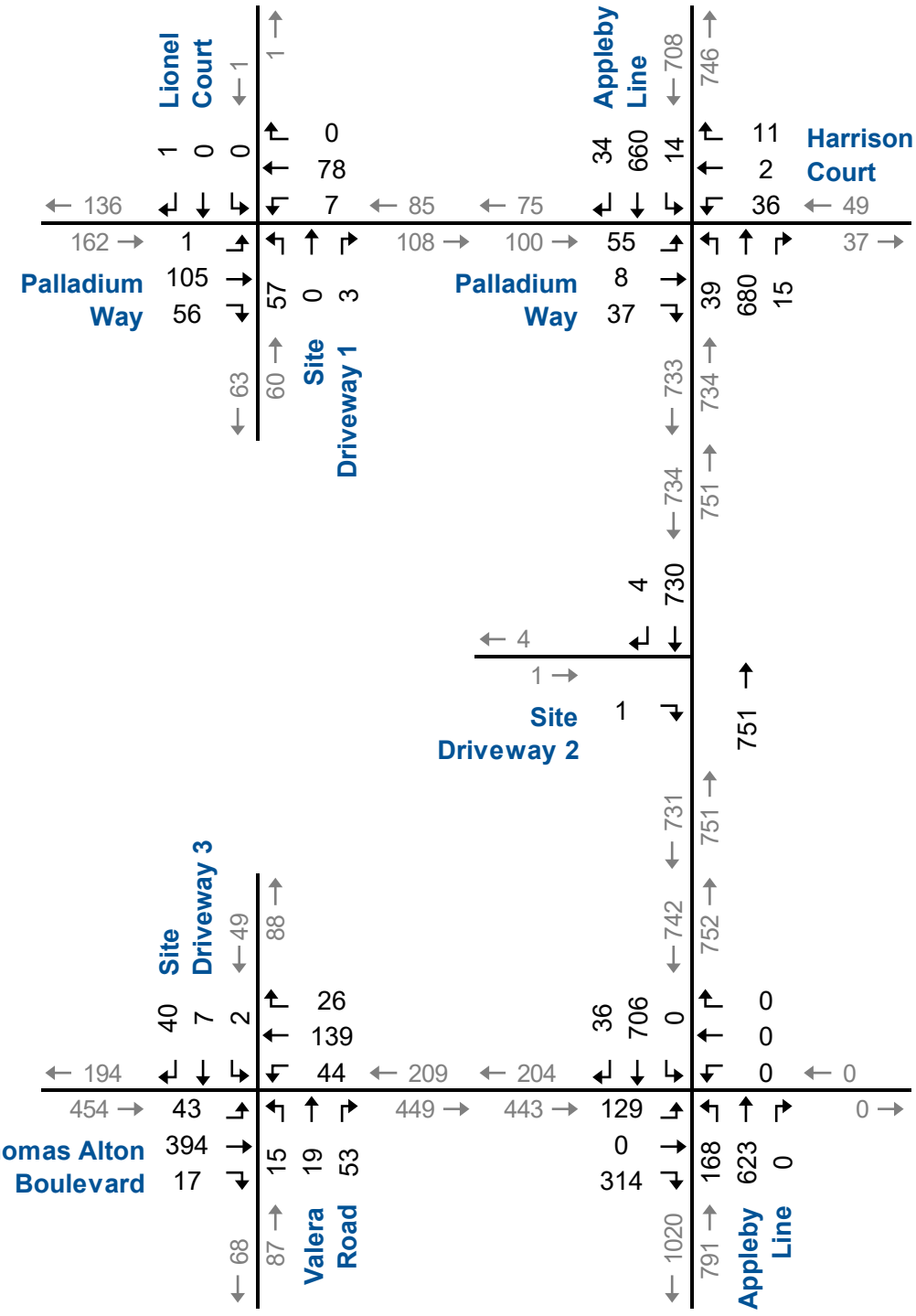


paradigm TRANSPORTATION SOLUTIONS LIMITED

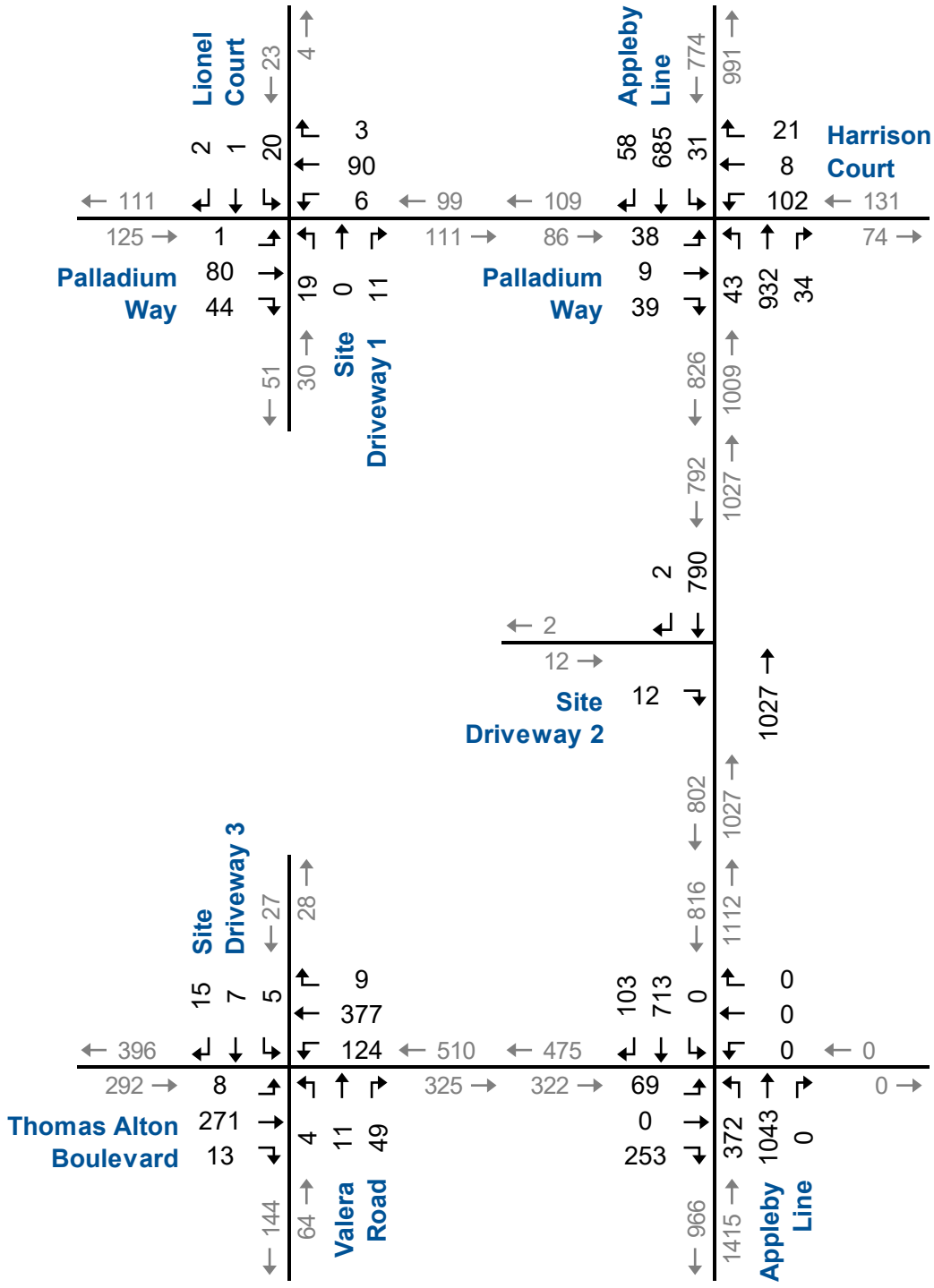
Existing Transit Stops

4883 Thomas Alton Boulevard, City of Burlington, TIS
240651

Figure 2.5



Existing Traffic Volumes AM Peak Hour



Existing Traffic Volumes
PM Peak Hour

2.5 Traffic Operations

Intersection level of service (LOS) is a recognized method of quantifying the efficiency of traffic flow at intersections. It is based on the delay experienced by individual vehicles executing the various movements. The delay is related to the number of vehicles wanting to make a movement, compared to the estimated capacity for that movement. The capacity is based on several criteria related to the opposing traffic flows.

The highest possible rating is LOS A, under which the average total delay is equal or less than 10 seconds per vehicle. When the average delay exceeds 80 seconds at signalized intersections (50 seconds at unsignalized intersections), the movement is considered to have a LOS F, and remedial measures are usually implemented if they are feasible.

The intersection analysis considered three separate measures of performance:

- The LOS for each turning movement. LOS is based on the average control delay per vehicle;
- The volume to capacity (v/c) ratio for movements and overall intersection; and
- 95th percentile queue length (metres), which are estimated using five 60-minute simulations with 15-minute seeding from the SimTraffic module.

Under the Region's TIS Guidelines, the operational analysis must identify signalized and unsignalized intersections where:

- v/c ratios for through or shared through/turning movements that exceed 0.85 at a signalized intersection;
- v/c ratios for exclusive turning movements that exceed 0.95 at a signalized intersection;
- The 95th percentile queues for an individual movement that are projected to exceed the available turning lane storage; and
- LOS, based on average delay per vehicle on individual movements, which exceeds at LOS D for unsignalized intersections.

The evaluation criteria used to analyze signalized and unsignalized intersections are based on the Highway Capacity Manual (HCM)[7] 2000 procedures output from Synchro 12 software.

The operations of the intersections in the study area were evaluated using the existing lane configuration, signal timings, and traffic control along with the existing traffic volumes, including the calculated intersection peak hour factors, crossing pedestrians, and heavy vehicle percentages.

Table 2.1 summarizes the operational analysis results including the LOS, average delay in seconds, v/c ratios, and 95th percentile queue lengths in metres for the weekday AM and PM peak hours. The results of the analysis indicate the study area intersections are operating at acceptable level of service with all movements within capacity during the AM and PM peak hours. No critical movements are noted.

Appendix C contains the detailed Synchro 12 and SimTraffic reports.

[7] Transportation Research Board, *Highway Capacity Manual*, Washington, D.C. 2003.

TABLE 2.1: EXISTING TRAFFIC OPERATIONS SUMMARY

Analysis Period	Intersection	Control Type	MOE	Direction/Movement/Approach																
				Eastbound				Westbound				Northbound				Southbound				Overall
				Left	Through	Right	Approach	Left	Through	Right	Approach	Left	Through	Right	Approach	Left	Through	Right	Approach	
AM Peak Hour	Palladium Way & Lionel Court/Site Driveway 1	TWSC	LOS	A	A	>	**A**	A	A	>	**A**	<	B	>	**B**	<	A	>	**A**	**A**
			Delay	7	0	>	**0**	8	0	>	**1**	<	4	>	**10**	<	9	>	**9**	**2**
			V/C	0.00	0.13	>		0.01	0.06	>		<	0.11	>		<	0.00	>		
			Q	0	0	>		0	0	>		<	3	>		<	0	>		
	Appleby Line & Palladium Way/Harrison Court	TCS	LOS	D	D	>	**D**	D	C	>	**D**	A	A	>	**A**	A	A	>	**A**	**A**
			Delay	39	36	>	**37**	37	35	>	**37**	3	3	>	**3**	5	6	>	**6**	**8**
			V/C	0.44	0.09	>		0.30	0.02	>		0.09	0.20	>		0.03	0.22	>		**0.44**
			Q	19	10	>		14	5	>		3	14	>		4	26	>		
			Stor.	45	-	>		60	-	>		95	-	>		70	-	>		
			Avail.	26	-	>		46	-	>		92	-	>		66	-	>		
	Appleby Line & Site Driveway 2	TWSC	LOS			A	**A**						A		**A**		A	>	**A**	**A**
			Delay			9	**9**						0		**0**		0	>	**0**	**0**
			V/C			0.00							0.12				0.18	>		
			Q			0							0				0	>		
	Thomas Alton Boulevard & Valera Road/Site Driveway 3	TWSC	LOS	<	A	>	**A**	<	A	>	**A**	<	C	>	**C**	<	B	>	**B**	**A**
			Delay	<	1	>	**1**	<	2	>	**2**	<	19	>	**19**	<	12	>	**12**	**4**
			V/C	<	0.04	>		<	0.05	>		<	0.29	>		<	0.1	>		
			Q	<	1	>		<	1	>		<	9	>		<	3	>		
	Appleby Line & Thomas Alton Boulevard	TCS	LOS	<	D	C	**C**	A	A	>	**A**	A	A	>	**A**	A	A	A	**A**	**B**
			Delay	<	38	33	**34**	0	0	>	**0**	5	5	>	**5**	0	11	10	**10**	**13**
			V/C	<	0.61	0.37		0	0	>		0.37	0.21	>		0	0.29	0.03		**0.61**
			Q	<	35	28		0	0	>		19	22	>		0	45	2		
			Stor.	<	-	40		30	-	>		130	-	>		30	-	60		
			Avail.	<	-	12		30	-	>		111	-	>		30	-	58		
PM Peak Hour	Palladium Way & Lionel Court/Site Driveway 1	TWSC	LOS	A	A	>	**A**	A	A	>	**A**	<	A	>	**A**	<	A	>	**A**	**A**
			Delay	8	0	>	**0**	8	0	>	**1**	<	16	>	**10**	<	10	>	**10**	**2**
			V/C	0.00	0.11	>		0.01	0.08	>		<	0.06	>		<	0.04	>		
			Q	0	0	>		0	0	>		<	1	>		<	1	>		
	Appleby Line & Palladium Way/Harrison Court	TCS	LOS	C	C	>	**C**	D	C	>	**D**	A	A	>	**A**	A	A	>	**A**	**A**
			Delay	34	33	>	**33**	44	33	>	**41**	4	4	>	**4**	8	8	>	**8**	**9**
			V/C	0.25	0.07	>		0.65	0.05	>		0.1	0.30	>		0.12	0.27	>		**0.65**
			Q	14	10	>		31	8	>		5	29	>		8	35	>		
			Stor.	45	-	>		60	-	>		95	-	>		70	-	>		
			Avail.	31	-	>		29	-	>		90	-	>		62	-	>		
	Appleby Line & Site Driveway 2	TWSC	LOS			A	**A**						A		**A**		A	>	**A**	**A**
			Delay			9	**9**						0		**0**		0	>	**0**	**0**
			V/C			0.01							0.17				0.21	>		
			Q			0							0				0	>		
	Thomas Alton Boulevard & Valera Road/Site Driveway 3	TWSC	LOS	<	A	>	**A**	<	A	>	**A**	<	B	>	**B**	<	C	>	**C**	**B**
			Delay	<	0	>	**0**	<	3	>	**3**	<	14	>	**14**	<	17	>	**17**	**3**
			V/C	<	0.01	>		<	0.1	>		<	0.15	>		<	0.09	>		
			Q	<	0	>		<	3	>		<	4	>		<	2	>		
	Appleby Line & Thomas Alton Boulevard	TCS	LOS	<	D	C	**C**	A	A	>	**A**	A	A	>	**A**	A	B	B	**B**	**B**
			Delay	<	36	34	**34**	0	0	>	**0**	5	4	>	**5**	0	12	11	**11**	**11**
			V/C	<	0.42	0.17		0	0	>		0.64	0.3	>		0	0.29	0.07		**0.64**
			Q	<	22	19		0	0	>		32	29	>		0	45	10		
			Stor.	<	-	40		30	-	>		130	-	>		30	-	60		
			Avail.	<	-	21		30	-	>		98	-	>		30	-	50		

MOE - Measure of Effectiveness
LOS - Level of Service
Delay - Average Delay per Vehicle in Seconds
V/C - Volume to Capacity Ratio
Q - 95th Percentile Queue Length (m)
Stor. - Existing Storage (m)
Avail. - Available Storage (m)
TWSC - Two-Way Stop Control
TCS - Traffic Control Signal
< / > - Shared with through movement

3 Development Concept

3.1 Description

The subject site is located at 4900 Palladium Way, 4883 & 4903 Thomas Alton Boulevard in the City of Burlington. The site currently contains two commercial buildings with three driveways. The buildings are located near the Appleby Line Frontage.

The development concept proposes a third, single-storey building containing 13 non-residential units on the site. A total of 1,888 m^2 (20,322 sq. ft.) of gross floor area is proposed for restaurant, retail, and day care centre uses, served by a total parking supply of 255 vehicular spaces (3.66 spaces per 100 m^2 GFA) for the entire 6,969 m^2 (75,014 sq. ft.) site. The site will be served by a total bicycling parking supply of twelve spaces, an increase of nine spaces from the existing three spaces.

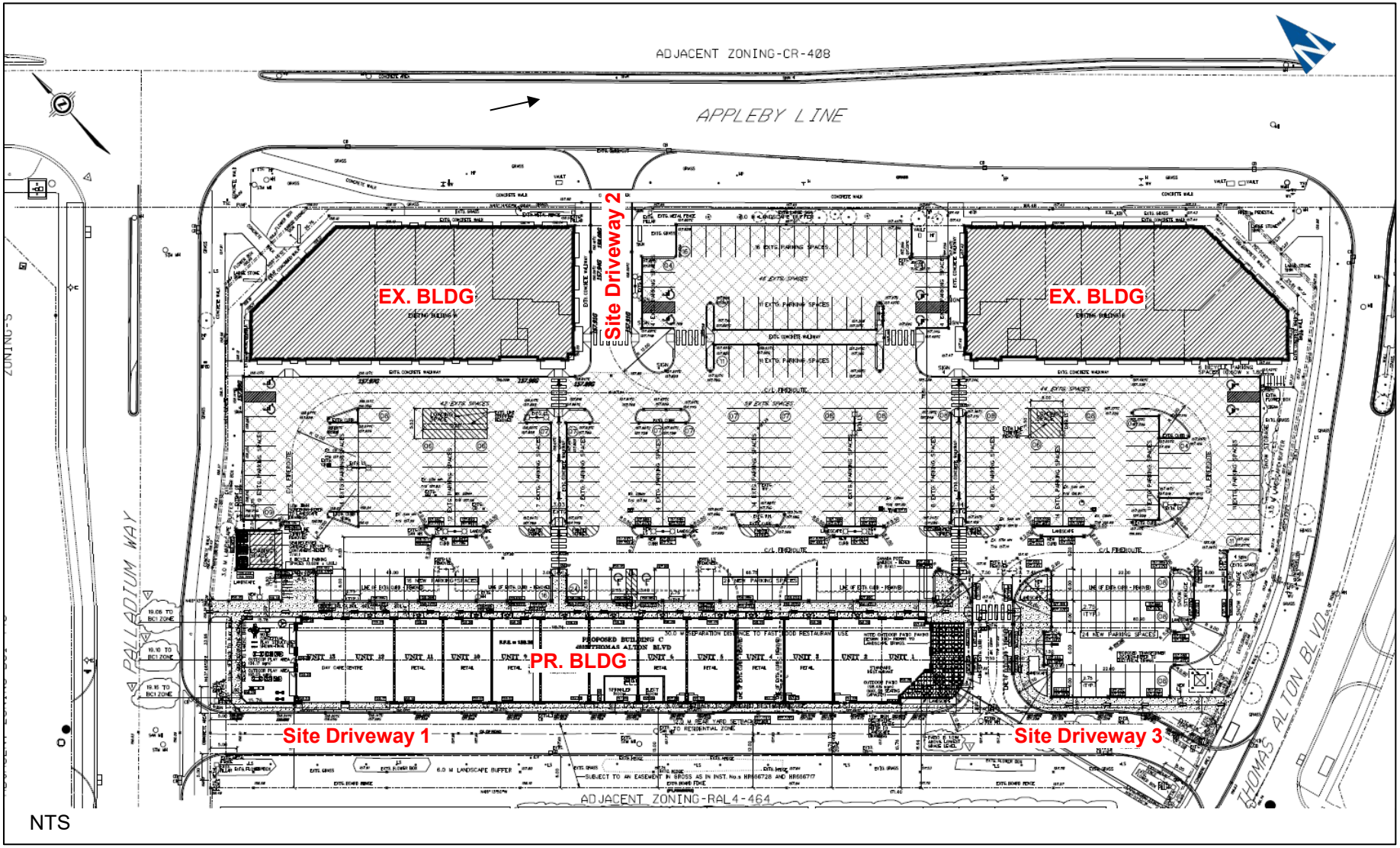
Vehicle access will be maintained via the three driveways serving the existing site:

- **Site Driveway 1** to Palladium Way is a full movement driveway 115 metres west of the Appleby Line and Palladium Way/Harrison Court intersection, opposite of Lionel Court. The driveway has a clear throat length of approximately 135 m.
- **Site Driveway 2** to Appleby Line is right-in/right-out driveway located approximately 85 metres south of the Appleby Line and Palladium Way/Harrison Court intersection. Left turns are restricted by the existing centre raised median on Appleby Line. The driveway has a clear throat length of approximately 25 m.
- **Site Driveway 3** to Thomas Alton Boulevard is a full movement driveway 135 metres west of the Appleby Line and Thomas Alton Boulevard intersection, opposite of Valera Road. The driveway has approximately 28 m of clear throat length.

The site driveways will remain unchanged after construction.

Build-out is anticipated to occur within five years (2029), timing is subject to market conditions.

Figure 3.1 illustrates the site concept plan.



Site Concept Plan

4883 Thomas Alton Boulevard, City of Burlington, TIS
240651

Figure 3.1

3.2 Transportation Demand Management

Transportation Demand Management (TDM) refers to ways of making the capacity of our roads more efficient by reducing vehicle demands. TDM approaches consider how people's choices of travel mode are affected by land use patterns, development design, parking availability, parking cost, and the relative cost, convenience, and availability of alternative modes of travel.

The following TDM measures are included in the site plan (for example, bicycle parking) or will be provided by the site operator (for example, Smart Commute Halton) as part to the development program:

- Walking
  - Safe, attractive, and direct walkways are provided throughout the site for pedestrians. linking building entrances with public sidewalks, through the parking lot, and connecting to the existing pedestrian walkways; and
  - All on-site sidewalks conform to City of Burlington and Accessibility for Ontarians with Disabilities Act (AODA) design standards.
- Cycling
  - Twelve (12) bicycle parking spaces are provided exceeding the number of spaces recommended in the City of Burlington Zoning By-law for residential and retail uses;[8]
  - Short-term bicycle parking is located at grade near the building entrances at the northwest and southeast corners of the site; and
  - A bike repair station is located on the southwest corner of the Appleby Line and Palladium Way/Harrison Court intersection in the public right-of-way adjacent to the subject site.
- Transit Infrastructure
  - Sidewalks connect directly to the municipal sidewalk which will enable walking trips to/from the existing transit stops on Thomas Alton Boulevard.
- Wayfinding, Travel Planning, Education/Promotion
  - Employees should be provided with an information package that outlines the available transit routes and active

[8] City of Burlington Zoning by-law 2020, § Section 1.

transportation options. A travel plan will engage and educate employees on the available sustainable modes of travel (for example, carpooling, cycling, or transit) and how to overcome obstacles that maybe perceived.

- The site operator(s) should consider joining Smart Commute Halton to promote sustainable transportation modes.
- Wayfinding signage will be provided on site.

The above TDM measures will assist in mitigating the site's transportation and parking impacts on the adjacent road network, promote a strong and vibrant economy, and create a livable community that has a balanced transportation network.

3.3 Site Trip Generation

The Institute of Transportation Engineers (ITE) *Trip Generation Manual*[9] was referenced to estimate the peak hour vehicular traffic volumes generated by the proposed development. Specifically, the trip rates for Land Use Code (LUC) 565 – Day Care Centre, LUC 822 – Strip Retail Plaza, and LUC 932 – High Turnover (Sit-Down) Restaurant were used to estimate the vehicle trips generated.

No modal split adjustments have been applied to the trip generation estimate to account for active transportation or transit-oriented trips.

Table 3.1 summarizes the estimated trip generation for the development. The subject site is forecast to generate approximately 119 and 165 new vehicle trips during the AM and PM peak hours, respectively.

TABLE 3.1: ESTIMATED SITE GENERATED TRAFFIC

Land Use	AM Peak Hour			PM Peak Hour		
	In	Out	Total	In	Out	Total
LUC 565 – 3.2k sq. ft	19	16	**35**	16	19	**35**
LUC 822 – 12.0k sq. ft.	19	13	**32**	45	44	**89**
LUC 932 – 4.5k sq. ft.	29	23	**52**	25	16	**41**
Total Generation	**67**	**52**	**119**	**86**	**79**	**165**

LUC 565: AM – T = 11.00(X) | PM – T = 11.12(X)
LUC 822: AM – Ln(T) = 0.66 Ln(X) + 1.84 | PM – Ln(T) = 0.71 Ln(X) + 2.72
LUC 932: AM – T = 11.61(X) | PM – T = 9.05(X)

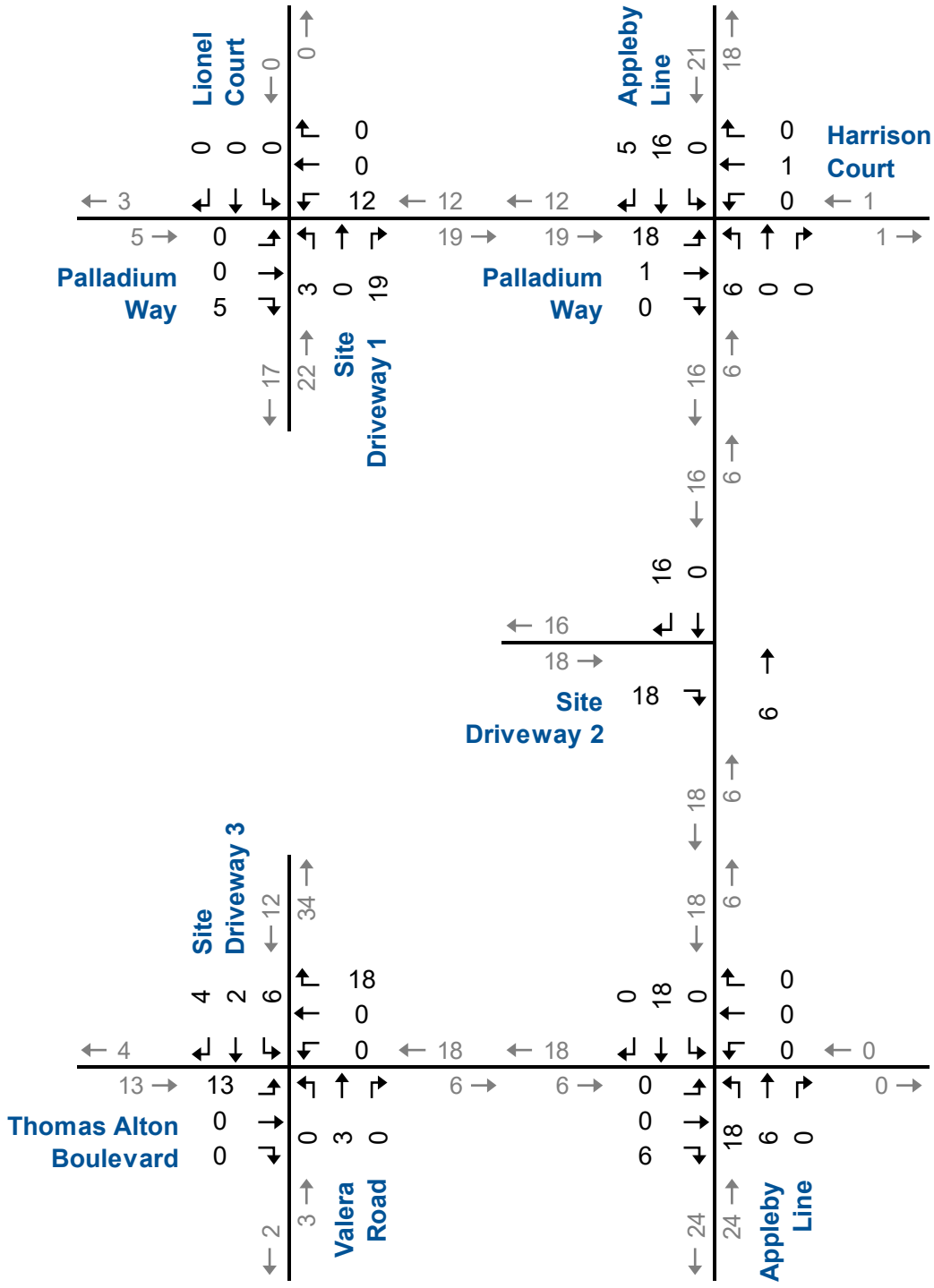
[9] Institute of Transportation Engineers, *Trip Generation Manual, 11th ed.*, (Washington DC: ITE, 2021).

Table 3.2 summarizes the estimated trip distribution. The distribution is based on a review of existing travel patterns. The patterns capture the typical commuter patterns reflective of the surrounding residential and commercial area. The methodology was confirmed during pre-consultation with City staff. The distribution to each origin/destination has been rounded to the nearest five percent.

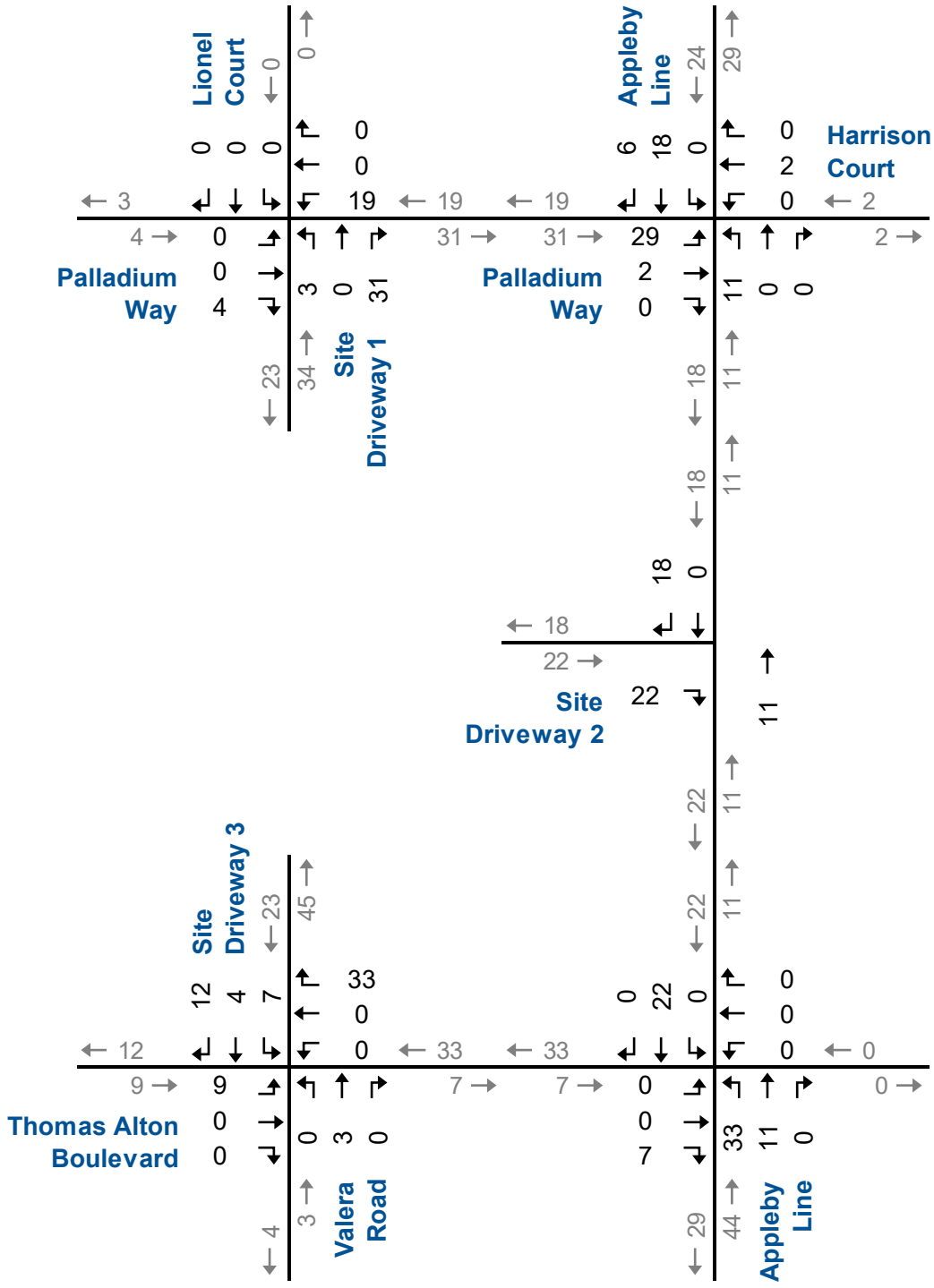
Figure 3.2 and **Figure 3.3** illustrate the site generated traffic for the AM and PM peak hours, respectively.

TABLE 3.2: ESTIMATED TRIP DISTRIBUTION

Origin/Destination	AM Peak Hour		PM Peak Hour	
	In	Out	In	Out
North via Appleby Line	30%	35%	30%	35%
East via Harrison Court	< 5%	< 5%	5%	5%
South via Appleby Line	35%	45%	50%	35%
South via Valera Road	5%	5%	< 5%	5%
West via Thomas Alton Boulevard	20%	10%	10%	15%
West via Palladium Way	10%	5%	5%	5%
Total	**100%**	**100%**	**100%**	**100%**



Site Generated Traffic Volumes AM Peak Hour



Site Generated Traffic Volumes PM Peak Hour

4 Future Traffic Conditions

The assessment of future conditions in this section includes the following components:

- Future background traffic estimates;
- Operational analysis of background traffic conditions (pre-development);
- Future total traffic estimates; and
- Operational analysis of total traffic conditions (post-development).

4.1 Forecast Traffic

A five-year horizon (2029) representing five years from study submission has been assessed. The likely future traffic volumes near the subject site are estimated to consist of:

- Increased non-site traffic (generalized background traffic growth);
- Traffic generated by adjacent instream developments; and
- Traffic generated by the subject site.

During pre-study consultation, Region staff confirmed a generalized background growth rate of 2% per annum applied to all movements that were not to, nor from the site driveways.

At the time of writing, the east leg of the Appleby Line and Thomas Alton Boulevard intersection is closed. To account for the reopening of this leg, turning movement data collected by Paradigm on Thursday, September 28, 2017, was utilized. This data was scaled up to the five-year horizon using the generalized growth rate of 2% per annum. **Appendix B** contains the existing count data.

Additionally, five nearby developments were identified for inclusion in the traffic forecast. These developments include:

- **3399 Appleby Line**, a proposed industrial building with a total floor area of approximately 17,652 m^2. The site traffic volumes are based on the TIS[10] for the site;

[10] Paradigm Transportation Solutions Limited, *3399 Appleby Line, City of Burlington, Transportation Impact Study*, (Cambridge, October 2022)

- **3402-3416 Appleby Line**, a proposed industrial building with a total floor area of approximately 30,234 m^2. The site traffic volumes are based on the TIS[11] for the site;
- **4103 Palladium Way**, a proposed retirement home with 115 units, a long-term care facility with 256 beds, a medical office with approximately 150 m^2 of GFA, a pharmacy with approximately 100 m^2 GFA, and a day care with approximately 705 m^2 GFA. The site traffic volumes are based on the TIS[12] for the site;
- **4721 Palladium Way**, a proposed Islamic Place of Worship with a small office component. The site traffic volumes are based on the TIS[13] for the site; and
- **4853 Palladium Way**, a proposed set of 10 employment blocks with approximately 24,498 m^2 of GFA. The site traffic volumes are based on the TIS[14] for the site

Appendix D contains the forecast traffic volumes.

Figure 4.1 and **Figure 4.2** illustrate the forecast 2029 background traffic volumes for the AM and PM peak hours, respectively.

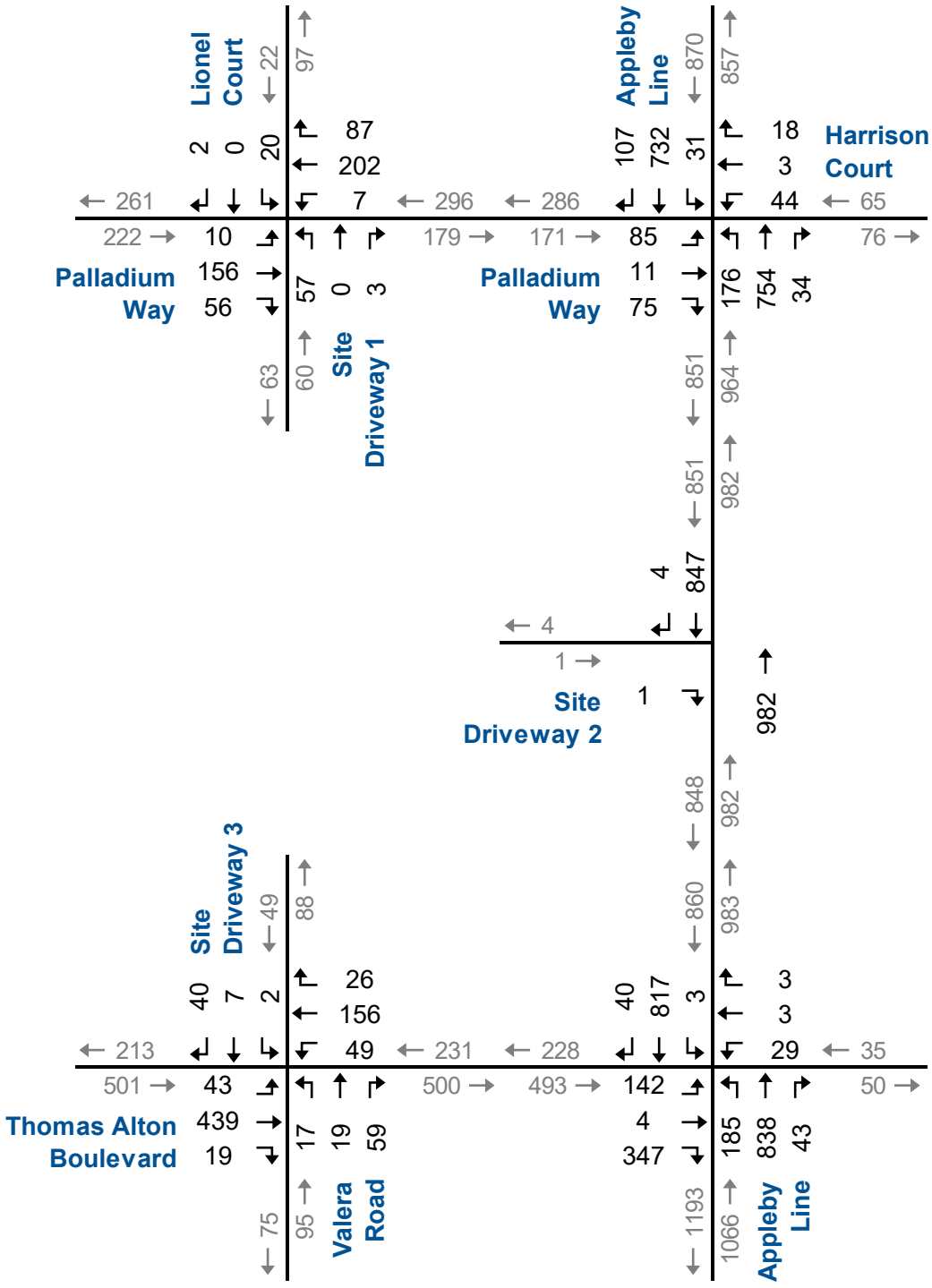
The total traffic volumes consist of the background traffic volumes and the site-generated traffic. **Figure 4.3** and **Figure 4.4** illustrate the forecast 2029 total traffic volumes for the AM and PM peak hour, respectively.

11 JD Northcote Engineering Inc., *3402-3416 Appleby Line, City of Burlington, Traffic Impact and TDM Study*, (Barrie, February 2023)

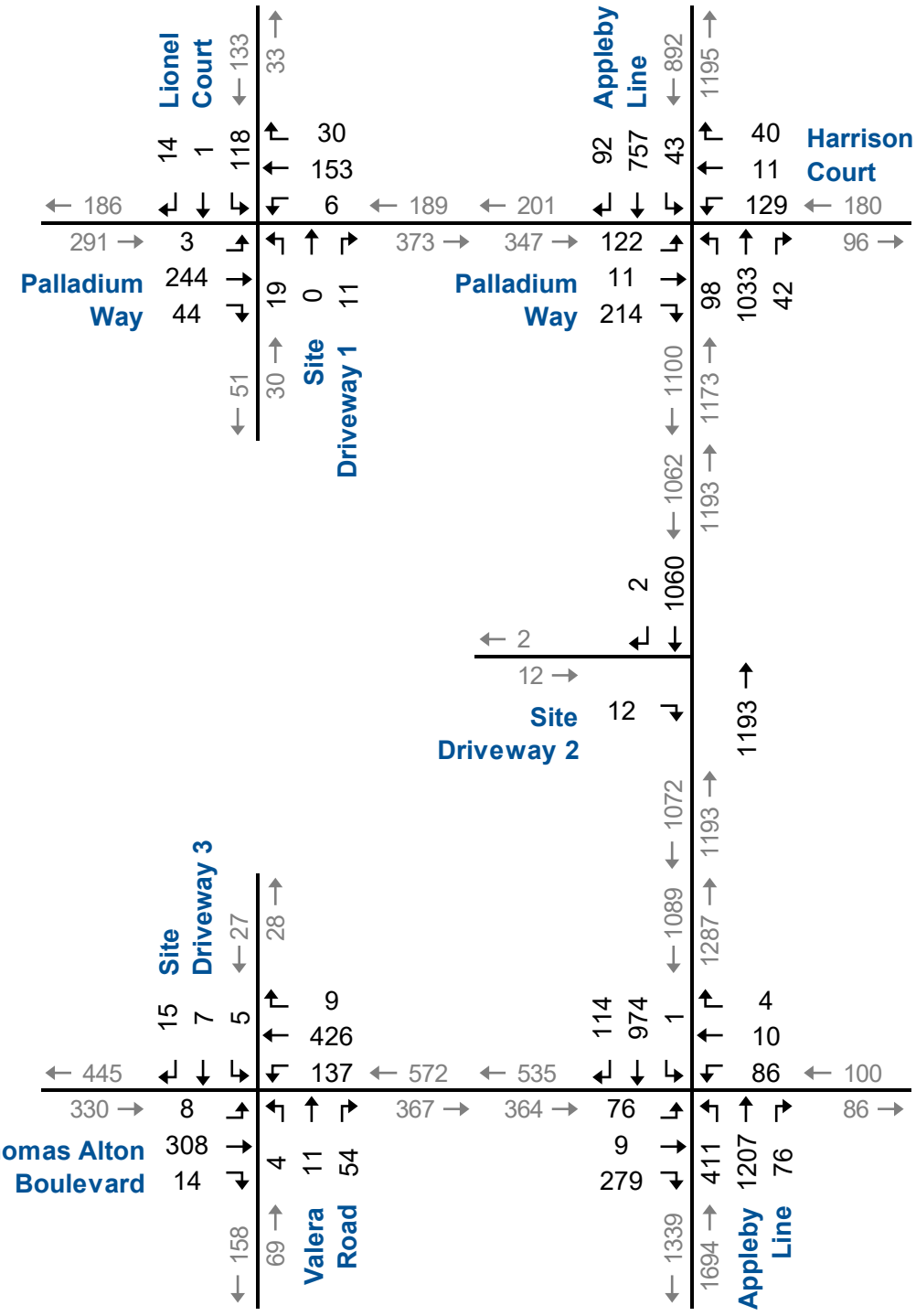
12 GHD Limited, *Proposed Long Term Care Facility, Traffic Impact Study, 4103 Palladium Way, City of Burlington*, (Mississauga, April 2022)

13 Paradigm Transportation Solutions Limited, *4721 Palladium Way, Transportation Impact Study & TDM Options Report*, (Cambridge, September 2017)

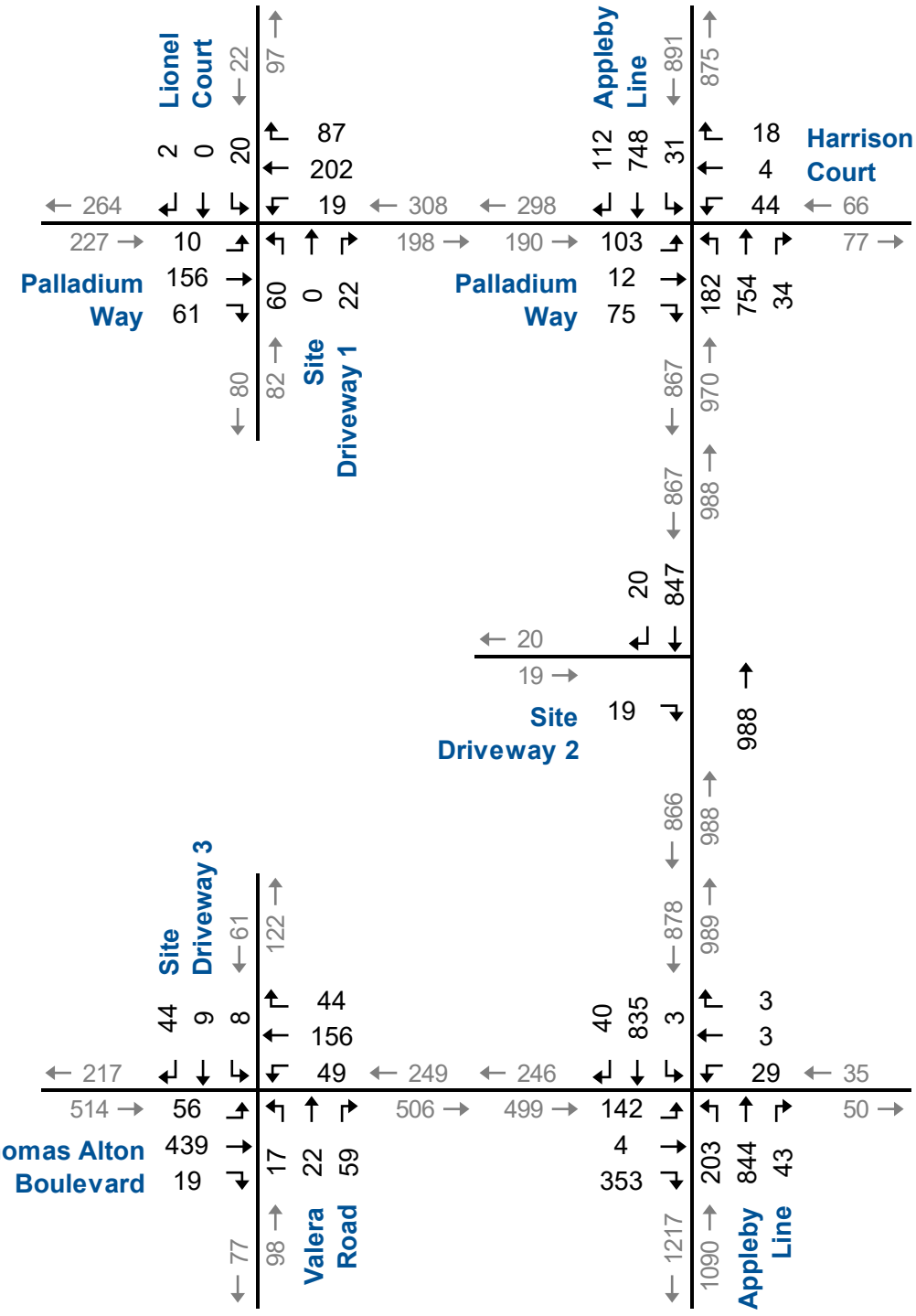
14 Paradigm Transportation Solutions Limited, *Block 23 20M-1034, 4853 Palladium Way, Transportation Impact Study*, (Cambridge, June 2016)



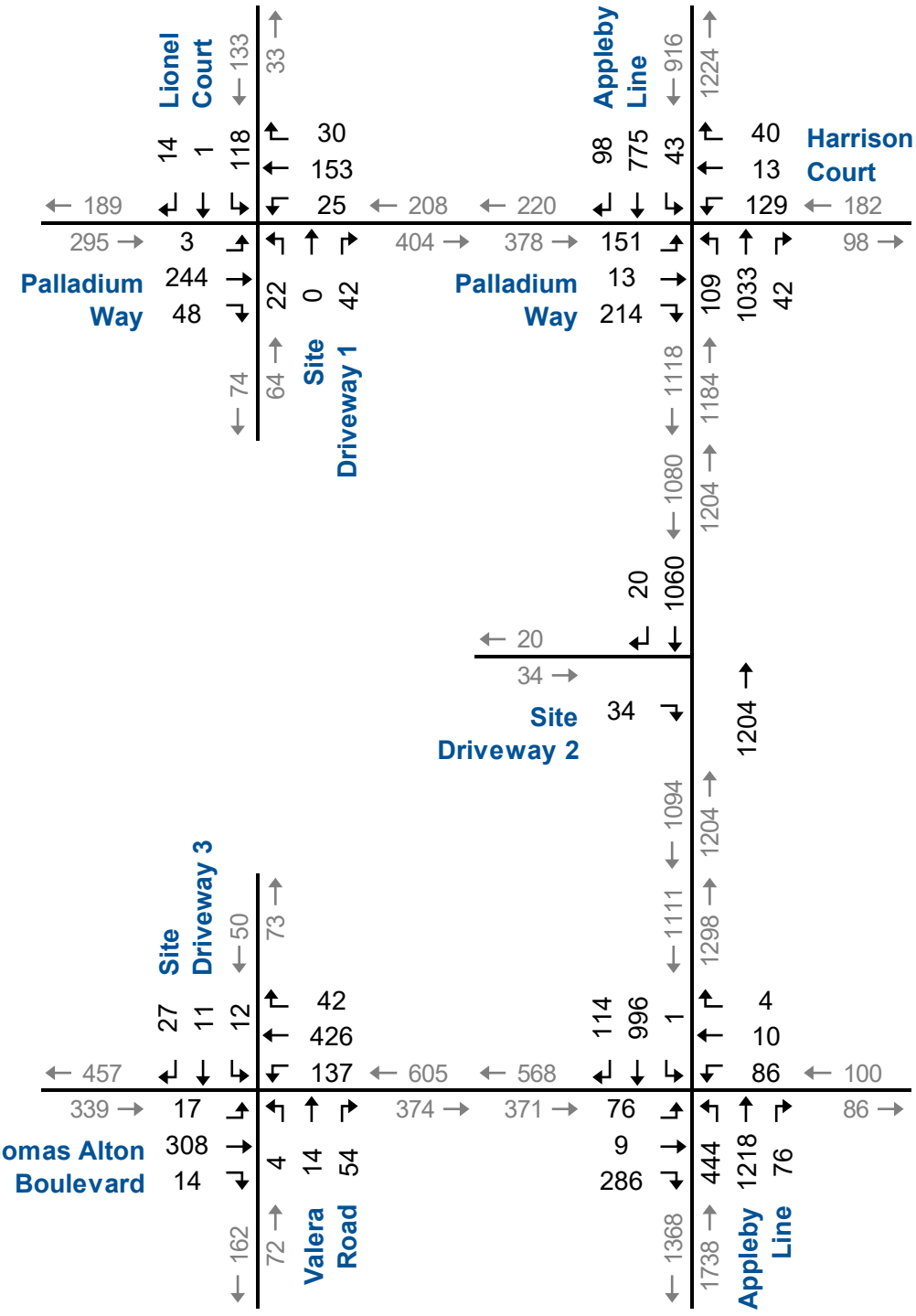
Five-Year (2029) Background Traffic AM Peak Hour



Five-Year (2029) Background Traffic PM Peak Hour



Five-Year (2029) Total Traffic AM Peak Hour



Five-Year (2029) Total Traffic PM Peak Hour

4.2 Background Traffic Operations

The study area intersection operational analyses for the background traffic forecasts followed the same methodology used for existing conditions. No changes to the existing lane configurations or signal timings were made.

Table 4.1 summarizes the results of the operational analysis for the 2029 background conditions. The study area intersections are forecast to operate at acceptable level of service with all movements within capacity during the AM and PM peak hours.

Appendix E contains the detailed Synchro 12 and SimTraffic reports.

TABLE 4.1: BACKGROUND TRAFFIC OPERATIONS SUMMARY

Analysis Period	Intersection	Control Type	MOE	Direction/Movement/Approach																	
				Eastbound				Westbound				Northbound				Southbound				Overall
				Left	Through	Right	Approach	Left	Through	Right	Approach	Left	Through	Right	Approach	Left	Through	Right	Approach	
AM Peak Hour	Palladium Way & Lionel Court/Site Driveway 1	TWSC	LOS	A	A	>	A	A	A	>	A	<	B	>	B	<	B	>	B	A
			Delay	8	0	>	0	8	0	>	0	<	4	>	12	<	12	>	12	2
			V/C	0.01	0.18	>		0.01	0.24	>		<	0.14	>		<	0.05	>		
			Q	0	0	>		0	0	>		<	4	>		<	1	>		
	Appleby Line & Palladium Way/Harrison Court	TCS	LOS	D	C	>	D	D	C	>	D	A	A	>	A	A	A	>	A	B
			Delay	40	35	>	37	36	34	>	35	9	3	>	4	9	10	>	10	10
			V/C	0.57	0.14	>		0.32	0.03	>		0.43	0.23	>		0.09	0.31	>		0.57
			Q	26	14	>		16	6	>		28	18	>		8	40	>		
			Stor.	45	-	>		60	-	>		95	-	>		70	-	>		
			Avail.	19	-	>		44	-	>		67	-	>		62	-	>		
	Appleby Line & Site Driveway 2	TWSC	LOS			A	A						A		A		A	>	A	A
			Delay			9	9						0		0		0	>	0	0
			V/C			0.00							0.15				0.21	>		
			Q			0							0				0	>		
	Thomas Alton Boulevard & Valera Road/Site Driveway 3	TWSC	LOS	<	A	>	A	<	A	>	A	<	C	>	C	<	B	>	B	A
			Delay	<	1	>	1	<	2	>	2	<	23	>	23	<	13	>	13	4
			V/C	<	0.04	>		<	0.06	>		<	0.36	>		<	0.11	>		
			Q	<	1	>		<	1	>		<	12	>		<	3	>		
	Appleby Line & Thomas Alton Boulevard	TCS	LOS	<	D	C	C	C	C	>	C	A	A	>	A	A	A	B	A	B
			Delay	<	38	34	35	29	29	>	29	6	6	>	7	10	12	10	9	14
			V/C	<	0.64	0.54		0.14	0.01	>		0.46	0.30	>		0.01	0.35	0.03		0.64
			Q	<	38	40		11	3	>		23	35	>		1	53	2		
			Stor.	<	-	40		30	-	>		130	-	>		30	-	60		
			Avail.	<	-	0		19	-	>		107	-	>		30	-	58		
PM Peak Hour	Palladium Way & Lionel Court/Site Driveway 1	TWSC	LOS	A	A	>	A	A	A	>	A	<	B	>	B	<	B	>	B	A
			Delay	8	0	>	0	8	0	>	0	<	16	>	12	<	14	>	14	4
			V/C	0.00	0.25	>		0.01	0.16	>		<	0.08	>		<	0.33	>		
			Q	0	0	>		0	0	>		<	2	>		<	11	>		
	Appleby Line & Palladium Way/Harrison Court	TCS	LOS	C	C	>	C	E	C	>	D	A	A	>	A	B	B	>	B	B
			Delay	32	28	>	30	58	28	>	50	7	7	>	7	14	13	>	13	15
			V/C	0.52	0.19	>		0.82	0.06	>		0.28	0.38	>		0.22	0.37	>		0.82
			Q	33	17	>		39	9	>		12	33	>		14	49	>		
			Stor.	45	-	>		60	-	>		95	-	>		70	-	>		
			Avail.	12	-	>		21	-	>		83	-	>		56	-	>		
	Appleby Line & Site Driveway 2	TWSC	LOS			A	A						A		A		A	>	A	A
			Delay			9	9						0		0		0	>	0	0
			V/C			0.01							0.2				0.28	>		
			Q			0							0				0	>		
	Thomas Alton Boulevard & Valera Road/Site Driveway 3	TWSC	LOS	<	A	>	A	<	A	>	A	<	C	>	C	<	C	>	C	B
			Delay	<	0	>	0	<	3	>	3	<	16	>	16	<	20	>	20	3
			V/C	<	0.01	>		<	0.12	>		<	0.18	>		<	0.1	>		
			Q	<	0	>		<	3	>		<	5	>		<	3	>		
	Appleby Line & Thomas Alton Boulevard	TCS	LOS	<	D	C	C	D	C	>	D	B	A	>	A	B	B	A	B	B
			Delay	<	36	34	35	36	32	>	36	11	5	>	8	15	19	15	16	15
			V/C	<	0.47	0.35		0.50	0.05	>		0.72	0.38	>		0.01	0.5	0.08		0.72
			Q	<	25	27		26	6	>		85	42	>		0	54	3		
			Stor.	<	-	40		30	-	>		130	-	>		30	-	60		
			Avail.	<	-	13		4	-	>		45	-	>		30	-	57		

MOE - Measure of Effectiveness
LOS - Level of Service
Delay - Average Delay per Vehicle in Seconds
V/C - Volume to Capacity Ratio
Q - 95th Percentile Queue Length (m)
Stor. - Existing Storage (m)
Avail. - Available Storage (m)
TWSC - Two-Way Stop Control
TCS - Traffic Control Signal
< / > - Shared with through movement

4.3 Total Traffic Operations

The study area intersection operational analyses for the total traffic forecasts followed the same methodology used for existing conditions and background conditions. No changes to the existing lane configurations or signal timings were made.

Table 4.2 summarizes the results of the operational analysis for the 2029 total traffic conditions. The intersections are forecast to operate similarly to the background traffic operations with the addition of site traffic. Minor increases in delays, v/c ratios and queues are noted.

One new critical movement is triggered by the addition of site generated traffic during the AM peak hour. At the Appleby Line and Thomas Alton Boulevard intersection, the eastbound right-turn movement is forecast to exceed the current available storage (40 m) by approximately 2 m. The queue can be accommodated by the existing width of the driving lane and therefore poses no operation concern.

The site driveways to Palladium Way, Appleby Line, and Thomas Alton Boulevard are forecast to operate at acceptable levels of service. Delays on the driveway approach are forecast to be in the LOS A to C range with v/c ratios of less than 0.20. Queues on the driveway approaches are minimal (less than 1 car length) and are not expected to spill back into any of the internal drive aisle intersections.

Main line delays at the site driveway are forecast to operate at acceptable levels of service. Delays on the Palladium Way, Appleby Line, and Thomas Alton Boulevard approaches are forecast to be in the LOS A range with v/c ratios of less than 0.25.

Appendix F contains the detailed Synchro 12 and SimTraffic reports.

TABLE 4.2: TOTAL TRAFFIC OPERATIONS SUMMARY

Analysis Period	Intersection	Control Type	MOE	Direction/Movement/Approach																	
				Eastbound				Westbound				Northbound				Southbound				Overall
				Left	Through	Right	Approach	Left	Through	Right	Approach	Left	Through	Right	Approach	Left	Through	Right	Approach	
AM Peak Hour	Palladium Way & Lionel Court/Site Driveway 1	TWSC	LOS	A	A	>	A	A	A	>	A	<	B	>	B	<	B	>	B	A
			Delay	8	0	>	0	8	0	>	1	<	31	>	12	<	12	>	12	2
			V/C	0.01	0.18	>		0.02	0.24	>		<	0.19	>		<	0.06	>		
			Q	0	0	>		1	0	>		<	5	>		<	1	>		
	Appleby Line & Palladium Way/Harrison Court	TCS	LOS	D	C	>	C	C	C	>	C	B	A	>	A	A	B	>	B	B
			Delay	37	32	>	35	33	31	>	33	11	4	>	5	10	11	>	11	11
			V/C	0.54	0.13	>		0.25	0.03	>		0.47	0.24	>		0.1	0.33	>		0.54
			Q	30	14	>		15	6	>		31	20	>		9	43	>		
			Stor.	45	-	>		60	-	>		95	-	>		70	-	>		
			Avail.	15	-	>		45	-	>		64	-	>		61	-	>		
	Appleby Line & Site Driveway 2	TWSC	LOS			A	A						A		A		A	>	A	A
			Delay			9	9						0		0		0	>	0	0
			V/C			0.02							0.15				0.21	>		
			Q			1							0				0	>		
	Thomas Alton Boulevard & Valera Road/Site Driveway 3	TWSC	LOS	<	A	>	A	<	A	>	A	<	D	>	D	<	C	>	C	A
			Delay	<	1	>	1	<	2	>	2	<	25	>	25	<	17	>	17	5
			V/C	<	0.05	>		<	0.06	>		<	0.39	>		<	0.19	>		
			Q	<	1	>		<	1	>		<	14	>		<	5	>		
	Appleby Line & Thomas Alton Boulevard	TCS	LOS	<	D	C	D	C	C	>	C	A	A	>	A	A	A	B	A	B
			Delay	<	37	35	35	29	29	>	29	6	6	>	7	10	13	11	9	13
			V/C	<	0.63	0.57		0.14	0.01	>		0.52	0.3	>		0.01	0.36	0.03		0.63
			Q	<	38	42		10	3	>		26	36	>		1	54	1		
			Stor.	<	-	40		30	-	>		130	-	>		30	-	60		
			Avail.	<	-	-2		20	-	>		104	-	>		30	-	59		
PM Peak Hour	Palladium Way & Lionel Court/Site Driveway 1	TWSC	LOS	A	A	>	A	A	A	>	A	<	B	>	B	<	C	>	C	A
			Delay	8	0	>	0	8	0	>	1	<	61	>	12	<	17	>	17	5
			V/C	0.00	0.25	>		0.03	0.16	>		<	0.16	>		<	0.39	>		
			Q	0	0	>		1	0	>		<	4	>		<	14	>		
	Appleby Line & Palladium Way/Harrison Court	TCS	LOS	D	C	>	C	E	C	>	D	A	A	>	A	B	B	>	B	B
			Delay	37	29	>	32	61	28	>	51	7	7	>	7	14	13	>	13	15
			V/C	0.65	0.2	>		0.84	0.07	>		0.32	0.38	>		0.22	0.38	>		0.84
			Q	40	18	>		40	10	>		13	33	>		14	50	>		
			Stor.	45	-	>		60	-	>		95	-	>		70	-	>		
			Avail.	5	-	>		20	-	>		82	-	>		56	-	>		
	Appleby Line & Site Driveway 2	TWSC	LOS			A	A						A		A		A	>	A	A
			Delay			9	9						0		0		0	>	0	0
			V/C			0.04							0.2				0.28	>		
			Q			1							0				0	>		
	Thomas Alton Boulevard & Valera Road/Site Driveway 3	TWSC	LOS	<	A	>	A	<	A	>	A	<	C	>	C	<	D	>	D	C
			Delay	<	1	>	1	<	3	>	3	<	17	>	17	<	25	>	25	4
			V/C	<	0.02	>		<	0.12	>		<	0.21	>		<	0.23	>		
			Q	<	0	>		<	3	>		<	6	>		<	7	>		
	Appleby Line & Thomas Alton Boulevard	TCS	LOS	<	D	C	C	D	C	>	D	C	A	>	A	B	B	A	B	B
			Delay	<	35	34	35	36	32	>	35	14	5	>	9	15	19	15	16	15
			V/C	<	0.46	0.38		0.49	0.05	>		0.79	0.39	>		0.01	0.51	0.08		0.79
			Q	<	25	29		26	6	>		102	44	>		0	55	3		
			Stor.	<	-	40		30	-	>		130	-	>		30	-	60		
			Avail.	<	-	11		4	-	>		28	-	>		30	-	57		

MOE - Measure of Effectiveness
LOS - Level of Service
Delay - Average Delay per Vehicle in Seconds
V/C - Volume to Capacity Ratio
Q - 95th Percentile Queue Length (m)
Stor. - Existing Storage (m)
Avail. - Available Storage (m)
TWSC - Two-Way Stop Control
TCS - Traffic Control Signal
< / > - Shared with through movement

5 Remedial Measures

5.1 Traffic Signal Control

The need for traffic control improvements is assessed using the Ontario Traffic Manual (OTM Book 12) signal warrant[15] procedures. To warrant the consideration for installation of traffic signal control with forecast traffic volumes (average hourly volumes), at least one warrant must be fulfilled by 120% for an existing intersection or 150% for a proposed new intersection.

Table 5.1 summarizes the OTM signal warrants for the intersections of Palladium Way and Lionel Court/Site Driveway 1, and Thomas Alton Boulevard and Valera Road/Site Driveway 3. Based on the volume warrant analysis, signals are not warranted at these locations.

Appendix G contains the warrant analysis.

TABLE 5.1: OTM WARRANT SUMMARY

Intersection	OTM Warrant				Warranted
	1A	1B	2A	2B	
Palladium Way & Lionel Court/ Site Driveway 1	46%	44%	36%	74%	**No**
Thomas Alton Boulevard & Valera Road/ Site Driveway 3	69%	41%	59%	26%	**No**

[15] Ontario Ministry of Transportation, *Ontario Traffic Manual Book 12: Traffic Signals,* (Toronto: Queen's Printer for Ontario, 2012).

6 MMLOS Assessment

Intersection LOS is a recognized metric for categorizing the delay experienced by drivers at intersections. The term “Level of Service” denotes how well a traffic movement operates under given traffic demands, lane arrangements, and traffic controls. It converts average delay at intersections into a scale from A to F, where A indicates the least delay and F indicates the greatest delay. The metric is extensively used in transportation planning, but it is limited to the experience of car drivers.

Multi-modal Level of Service (MMLOS) extends this concept to incorporate the experience of modes beyond car drivers. It converts a variety of factors into a scale from A to F for each mode; A indicates the best experience for users of that mode, and F shows the worst experience. As the output is a *set* of indicators, it reveals where changes have different (or opposite) effects on each mode.

The Ontario Traffic Council (OTC) *MMLOS Guidelines*[16] were published in February 2022 to provide a methodology to assess the performance of all travel modes. The guidelines identify nine general street types for analysis. **Table 6.1** outlines the street type classification assumed for the study area roadways.

TABLE 6.1: MMLOS STREET TYPE CLASSIFICATION

Roadway	Classification	MMLOS Applicable Classification
Palladium Way	Industrial Connector	Industrial Connector
Thomas Alton Boulevard	Neighbourhood Connector	Neighbourhood Connector

6.1 Level of Service Targets

Based on the street type, the MMLOS guidelines provide base LOS targets, ultimately identifying which modes should be prioritized. **Table 6.2** summarizes the base and adjusted LOS target (used in the analysis), as directed by the City of Burlington. The LOS for each user is based on the following criteria:

- Pedestrian LOS criteria includes facility width, buffer width and maximum distance between controlled crossings.

[16] Dillion Consulting. *Multi-Modal Level of Service Guidelines*. (Toronto: Ontario Traffic Council, 2022)

- Cycling LOS criteria includes facility width, buffer width and conflicts with other modes (in-lane conflicts and crossing point conflicts).
- Transit LOS criteria includes the facility type, passenger amenities, and pedestrian level of service. Level of service for trucks is based on the width of the curb lane and the car level of service.
- Car LOS criteria relates to the mid-block v/c ratio and curb lane conflicts.

TABLE 6.2: MMLOS TARGETS

Street Classification	Walking	Cycling	Transit	Trucks	Cars
Industrial Connector	E	D	D	B	E
Adjusted Industrial Connector	D	C	D	D	E
Neighbourhood Connector	D	D	D	N/A	E
Adjusted Neighbourhood Connector	C	B	D	D	D

6.2 MMLOS Segment Analysis

Table 6.3 summarizes the MMLOS analysis for the corridor roadway. The existing and future conditions for the segments lengths are assumed to be the same and are considered in a single row.

Pedestrian MMLOS along Palladium Way is assessed to be in the D range, meeting the target grade. Along Thomas Alton Boulevard, it was assessed to be in the D range, below the target of LOS C. Pedestrian MMLOS can be improved by widening the pedestrian facility width or by adding additional controlled crossings to reduce the maximum distance between crossings. There are currently zero controlled crossing points between Appleby Line and Walkers Line as the lands are slowly being built out. There are several active transportation connections to the Alton Community that may be locations for pedestrian crossover should demand increase.

Cycling MMLOS along Palladium Way is assessed to be in the B range, meeting and exceeding the target grade. Along Thomas Alton Boulevard, it was assessed to be in the F range, below the target of

LOS B. Cycling MMLOS can be improved by increasing the bicycle facility and buffer widths. The City of Burlington *Cycling Master Plan's Proposed Network* does not identify any improvements along Thomas Alton Boulevard.[17]

Transit MMLOS along Palladium Way is assessed to be in the E range, below the target grade of LOS D. Along Thomas Alton Boulevard, it was assessed to be in the D range, meeting the target grade. Transit MMLOS can be increased by improving transit passenger amenities (for example, adding seating, shelters, or shade trees) and by improving pedestrian level of service. It is noted that transit does not currently use Palladium Way, thus the lack of transit amenities is expected.

Truck MMLOS along Palladium Way and Thomas Alton Boulevard is in the C range, meeting and exceeding the target grade.

Car MMLOS along Palladium Way is in the B range, meeting and exceeding the target grade. Along Thomas Alton Boulevard, it was assessed to be in the C range, also meeting and exceeding the target grade.

Appendix H contains the detailed MMLOS assessment.

TABLE 6.3: MMLOS SEGMENT ANALYSIS

Segment	Walking	Cycling	Transit	Trucks	Cars
Palladium Way	D	B	E	C	B
Thomas Alton Boulevard	D	F	D	C	C

[17] City of Burlington, *Cycling Plan,* (Burlington: City of Burlington, 2018).

7 Conclusions and Recommendations

7.1 Conclusions

The main findings and conclusions of this study are as follows:

- **Existing Traffic Operations:** The study area intersections are operating at acceptable levels of service with all movements within capacity during the AM and PM peak hours.
- **Site Generated Traffic:** The subject site is forecast to generate approximately 119 and 165 new vehicle trips during the AM and PM peak hours, respectively.
- **2029 Background Traffic Operations:** Accounting for background growth and other area site traffic contributions, the study area intersections are forecast to continue to operate at acceptable level of service with all movements within capacity during the AM and PM peak hours.
- **2029 Total Traffic Operations:** With the addition of site generated traffic, the study area intersections are forecast to operate similarly to background conditions. One new critical movement is identified during the AM peak hour. At the Appleby Line and Thomas Alton Boulevard intersection, the eastbound right-turn movement is forecast to exceed the current available storage (40 m) by approximately 2 m. The queue can be contained by the existing width of the driving lane.
- **Remedial Measures:** Signals are not warranted at the Palladium Way and Lionel Court/Site Driveway 1 or Thomas Alton Boulevard and Valera Road/Site Driveway 3 intersections.
- **Transportation Demand Management:** The proposed development includes TDM measures such as bicycle parking to encourage cycling and pedestrian facilities to provide accessibility to and from development.
- **MMLOS Assessment:** The existing study area segments and intersections meet most of the level of service targets. Improved transit facilities, wider sidewalks, enhanced pedestrian measures, and protected cycling facilities should be explored to address the deficient modes.

7.2 Recommendations

Based on the findings of this study, it is recommended that:

- The City should explore reallocating street space along Thomas Alton Boulevard to enhance pedestrian and cycling facilities,

including wider sidewalks and protected cycling lanes, to meet MMLOS targets; and

- If transit service expanded to Palladium Way, the City should explore reallocating street space to provide transit passenger amenities such as shelters, seating, or shade trees, to meet MMLOS targets.

Appendix A

Pre-Study Consultation

From:	Scattolon, Walter
To:	Drew Cobean
Cc:	Scott Catton; smeeta.adiga@burlington.ca; Krusto, Matt
Subject:	FW: (240651) 4883 Thomas Alton Boulevard, City of Burlington (TIS Scope of Work for 4883 & 4903 Thomas Alton Boulevard)
Date:	November 7, 2024 11:59:12 AM
Attachments:	image001.png image002.png Conceptual Site Plan.pdf

---

Hello Drew,

Halton Region responses to the TIS Scope of Work for **4883 & 4903 Thomas Alton Boulevard**, City of Burlington, have been inserted in the provided scope, in light blue font.

Overall, the scope of work is Acceptable.

Thank you for providing the Scope of Work for comment,

Walter Scattolon
Project Manager - Transportation Development Review
Development Services
Halton Region

PROPOSED TERMS OF REFERENCE

Study Area Intersections:

- Appleby Line & Palladium Way (signalized);
- Appleby Line & Existing Site Driveway (right-in/right-out – unsignalized);
- Appleby Line & Thomas Alton Boulevard (signalized);
- Palladium Way & Lionel Court / Existing Site Driveway (unsignalized); and
- Thomas Alton Boulevard & Valera Road / Existing Site Driveway (unsignalized).

Analysis Periods:

- Weekday AM peak hour; and
- Weekday PM peak hour.

Existing Data:

- TMCs to be collected by Paradigm; and
- Existing signal timings.

Traffic Data:

- For all general inquiries regarding traffic data availability (Signal Timing Plans, TMC's) from Halton Region roads and intersections, please contact accesshalton@halton.ca to receive the traffic data from **Traffic Operations & Safety.**

Horizon Year:

- Existing Conditions; and
- Five years from the date of the study – Year 2029.

Capacity Analysis:

- Synchro 11, HCM 2000 analysis.

Background Traffic:

- Background traffic annual growth rate. 2% **Please confirm** - Acceptable @ 2%
- Background Developments
  - 4721 Palladium Way (Halton Islamic Association);
  - 3416 Appleby Line (Appleby 407 Limited Partnership);
  - 4853 Palladium Way (Emery Investments -1621158 Ontario Ltd);
  - 4853 Thomas Alton Boulevard (Adi Developments);
  - 3399 Appleby Line (Summit Industrial Income Operating LP); and
  - 4103 Palladium Way (Better Life Retirement Residence).
- Any additional developments identified by the City.

Trip Generation:

- ITE Trip Generation Data 11th Edition estimates for the AM and PM peak hours with appropriate land use codes based on assumed land uses and no modal split reductions.

Site Traffic Distribution:

- Existing Traffic Patterns

Remedial Measures:

- Left-turn lane warrants,
- Signal warrants,
- Optimized signal timings (remedial measure only).

Report:

- Report documenting the study methodologies, findings, conclusions, and recommendations.

General Comments:

TIS Report Requirements:

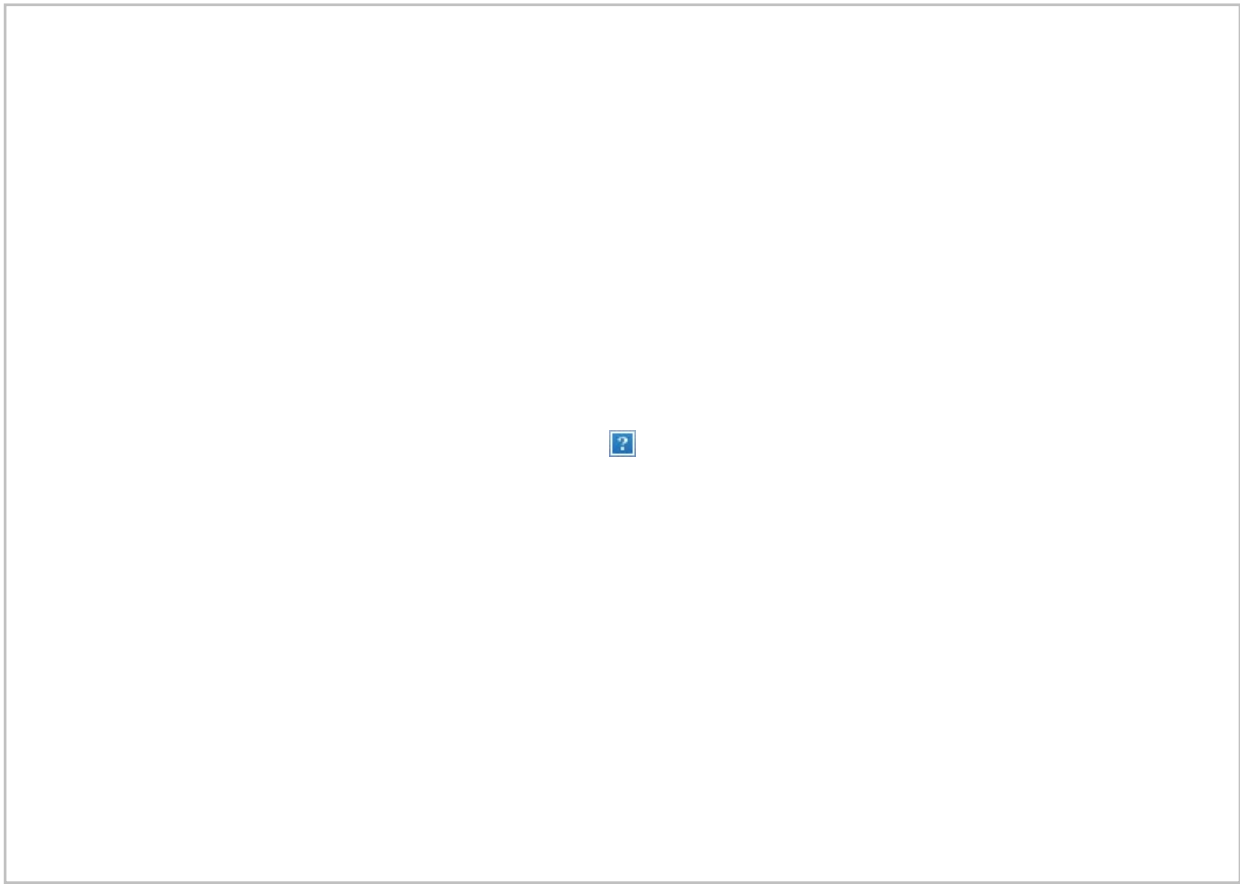
Please note, for the most up to date TIS Guidelines for Halton Region, these can now be found at the following updated web link:
https://www.halton.ca/Repository/Transportation-Impact-Study-Guidelines

The TIS report shall include:

- Site Plan and Map,
- Size & Number of Development Phases,
- Existing Conditions (Study Area Intersections, Road Network, Pedestrian Routes, Cycling Routes, Transit Services),
- Existing Traffic Conditions (Site Operating Characteristics, Data Collection/Traffic Counts, Analysis Periods (5 years Ahead),
- Future Background Conditions (Horizon Years, Horizon Year Volumes)
- Background Traffic Demand (with TMC's < 2 years old),
- Background Traffic Demand Forecast (with acceptable growth rates)
- Site Generated Traffic (Transit Modal Split, Trip Generation/Distribution/Assignment)
- Future Total Traffic Demand,
- Capacity Analysis (by Intersection, with LOS, Avg. Delay, V/C ratios),
- Traffic Impacts (Tables – Total Traffic with/without Mitigation)

- Access Considerations – Existing, Proposed, Geometrics (turn lanes, sight lines),
- Recommendations - Identify required/recommended road improvements either as a result of the development impacts, or general non-development improvements.
- TDM recommendations (Transit, Pedestrian & Cycling Facilities Analysis)
- Conclusions

-END-



Walter Scattolon, BASc (Eng.), PMP
Project Manager I – Transportation Development Review
Development Services
Public Works
Halton Region
905-825-6000, ext. 2687 | 1-866-442-5866

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From: Drew Cobean <dcobean@ptsl.com>
Sent: Monday, November 4, 2024 1:17 PM
To: devapptransportationplanning@burlington.ca; Krusto, Matt <Matt.Krusto@halton.ca>
Cc: Scott Catton <scatton@ptsl.com>; smeeta.adiga@burlington.ca
Subject: (240651) 4883 Thomas Alton Boulevard, City of Burlington

CAUTION: This email originated from outside the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe. If you are unsure or need assistance please contact the IT Service Desk.

Greetings,

Paradigm has been retained to conduct a Transportation Impact Study for a proposed commercial development located at 4900 Palladium Way, 4883 & 4903 Thomas Alton Boulevard in the City of Burlington.

The site currently contains two existing commercial buildings and proposes a third, single storey building containing 13 non-residential units. 1,888 m^2 of gross floor area is proposed for restaurant, retail, and day care centre uses. Vehicle access is proposed by the site's existing driveways to Appleby Line (right-in/right-out), Palladium Way, and Thomas Alton Boulevard. Build-out and occupancy is TBD.

We'd like to prepare our report based on the following scope, subject to your comments:

PROPOSED TERMS OF REFERENCE

Study Area Intersections:

- Appleby Line & Palladium Way (signalized);
- Appleby Line & Existing Site Driveway (right-in/right-out – unsignalized);
- Appleby Line & Thomas Alton Boulevard (signalized);
- Palladium Way & Lionel Court / Existing Site Driveway (unsignalized); and
- Thomas Alton Boulevard & Valera Road / Existing Site Driveway (unsignalized).

Analysis Periods:

- Weekday AM peak hour; and
- Weekday PM peak hour.

Existing Data:

- TMCs to be collected by Paradigm; and
- Existing signal timings.

Horizon Year:

- Existing Conditions; and
- Five years from the date of the study – Year 2029.

Capacity Analysis:

- Synchro 11, HCM 2000 analysis.

Background Traffic:

- Background traffic annual growth rate. 2% **Please confirm**
- Background Developments
    - 4721 Palladium Way (Halton Islamic Association);
    - 3416 Appleby Line (Appleby 407 Limited Partnership);
    - 4853 Palladium Way (Emery Investments -1621158 Ontario Ltd);

    - 4853 Thomas Alton Boulevard (Adi Developments);
    - 3399 Appleby Line (Summit Industrial Income Operating LP); and
    - 4103 Palladium Way (Better Life Retirement Residence).
- Any additional developments identified by the City.

Trip Generation:

- ITE Trip Generation Data 11th Edition estimates for the AM and PM peak hours with appropriate land use codes based on assumed land uses and no modal split reductions.

Site Traffic Distribution:

- Existing Traffic Patterns

Remedial Measures:

- Left-turn lane warrants,
- Signal warrants,
- Optimized signal timings (remedial measure only).

Report:

- Report documenting the study methodologies, findings, conclusions, and recommendations.

Drew Cobean
Transportation Consultant

Paradigm Transportation Solutions Limited
5A-150 Pinebush Road, Cambridge ON N1R 8J8
p: 519.896.3163 x304
e: dcobean@ptsl.com
w: www.ptsl.com

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From: Adiga, Smeeta
To: Drew Cobean
Cc: Lucas, Sandra
Subject: RE: 4900 Palladium Way and 4883 Thomas Alton Boulevard - TOR
Date: November 21, 2024 10:32:06 AM
Attachments: image001.jpg
image002.png

Hello Drew,

Transportation Planning have reviewed the Terms of Reference (TOR) for 4900 Palladium Way and 4883 Thomas Alton Boulevard. Please find the comments regarding the submission below, highlighted in blue.

As part of the TIS, an MMLOS analysis will also be required, as outlined below.

Please ensure that comments from the MTO and the Region are considered, if applicable.

Thanks,

Smeeta Adiga (she/her)
Transportation Planning Technologist
Transportation Services Department

P. 905 335 7600, ext 7691
smeeta.adiga@burlington.ca

426 Brant Street P.O. Box 5013, Burlington, Ontario, L7R 3Z6

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Our working hours may be different. You are not obligated to reply outside of your typical working hours.

From: Drew Cobean <dcobean@ptsl.com>
Sent: Monday, November 4, 2024 1:17 PM
To: Mailbox, Transportation Planning <devapptransportationplanning@burlington.ca>; Krusto, Matt <Matt.Krusto@halton.ca>
Cc: Scott Catton <scatton@ptsl.com>; Adiga, Smeeta <Smeeta.Adiga@burlington.ca>
Subject: (240651) 4883 Thomas Alton Boulevard, City of Burlington

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Greetings,

Paradigm has been retained to conduct a Transportation Impact Study for a proposed

commercial development located at 4900 Palladium Way, 4883 & 4903 Thomas Alton Boulevard in the City of Burlington.

The site currently contains two existing commercial buildings and proposes a third, single storey building containing 13 non-residential units. 1,888 m^2 of gross floor area is proposed for restaurant, retail, and day care centre uses. Vehicle access is proposed by the site's existing driveways to Appleby Line (right-in/right-out), Palladium Way, and Thomas Alton Boulevard. Build-out and occupancy is TBD.

We'd like to prepare our report based on the following scope, subject to your comments:

PROPOSED TERMS OF REFERENCE

Study Area Intersections:

- Appleby Line & Palladium Way (signalized);
- Appleby Line & Existing Site Driveway (right-in/right-out – unsignalized);
- Appleby Line & Thomas Alton Boulevard (signalized);
- Palladium Way & Lionel Court / Existing Site Driveway (unsignalized); and
- Thomas Alton Boulevard & Valera Road / Existing Site Driveway (unsignalized).

Analysis Periods:

- Weekday AM peak hour; and
- Weekday PM peak hour.

Existing Data:

- TMCs to be collected by Paradigm; and
- Existing signal timings.

Please contact the Traffic Operations Supervisor, Josip Kafadar, at Josip.kafadar@burlington.ca for any recent traffic data on City roads. If data is not available from the City, it is recommended that a traffic consultant conduct an eight-hours weekday count at the relevant intersections.

Horizon Year:

- Existing Conditions; and
- Five years from the date of the study – Year 2029.

Capacity Analysis:

- Synchro 11, HCM 2000 analysis.

Background Traffic:

- Background traffic annual growth rate. 2% **Please confirm –** Region of Halton to confirm
- Background Developments

- 4721 Palladium Way (Halton Islamic Association);
- 3416 Appleby Line (Appleby 407 Limited Partnership);
- 4853 Palladium Way (Emery Investments -1621158 Ontario Ltd);
- 4853 Thomas Alton Boulevard (Adi Developments);
- 3399 Appleby Line (Summit Industrial Income Operating LP); and
- 4103 Palladium Way (Better Life Retirement Residence).

- Any additional developments identified by the City.

Please check website: https://www.burlington.ca/en/inc/current-development-projects.aspx

Trip Generation:

- ITE Trip Generation Data 11th Edition estimates for the AM and PM peak hours with appropriate land use codes based on assumed land uses and no modal split reductions.

Site Traffic Distribution:

- Existing Traffic Patterns

Intersection Analysis:

- A detailed evaluation of intersections in the study area, focusing on parameters such as queue lengths, v/c ratios, level of service, and delay times to predict how the development will impact intersection performance. The queuing assessment, including levels of service and queuing distances, is to be based on micro-simulations using Sim-Traffic, or similar software analysis.

Remedial Measures:

- Left-turn lane warrants,
- Signal warrants,
- Optimized signal timings (remedial measure only).

MMOLS Analysis:

- Since the location is within an Enhanced Pedestrian Realm, a Multimodal Level of service (MMLOS) analysis is required. The analysis must evaluate the benefits of the "Complete Streets" design option on Palladium Way and Thomas Alton Boulevard. Additionally, the MMLOS analysis shall identify areas where the transportation system needs improvement, prioritize investments in transportation infrastructure and inform transportation planning and policy decisions.

LOS Target

Street Name	Street Type	LOS Per Mode Type				
		Pedestrian	Bikes	Transit	Trucks	Cars

Palladium Way	Industrial Connector	E	D	D	B	E
	Adjusted Targets	D	C	D	D	E
Thomas Alton Blvd	Neighbourhood Connector	D	B	D	N/A	E
	Adjusted Targets	C	B	D	D	D

TDM recommendations:

- Transit, Pedestrian and Cycling Facilities Analysis

Report:

- Report documenting the study methodologies, findings, conclusions, and recommendations.

Drew Cobean
Transportation Consultant

Paradigm Transportation Solutions Limited
5A-150 Pinebush Road, Cambridge ON N1R 8J8
p: 519.896.3163 x304
e: dcobean@ptsl.com
w: www.ptsl.com

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Appendix B

Traffic Data

Palladium Way @ Lionel Crt

Morning Peak Diagram

Specified Period
From: 7:00:00
To: 9:00:00

One Hour Peak
From: 8:00:00
To: 9:00:00

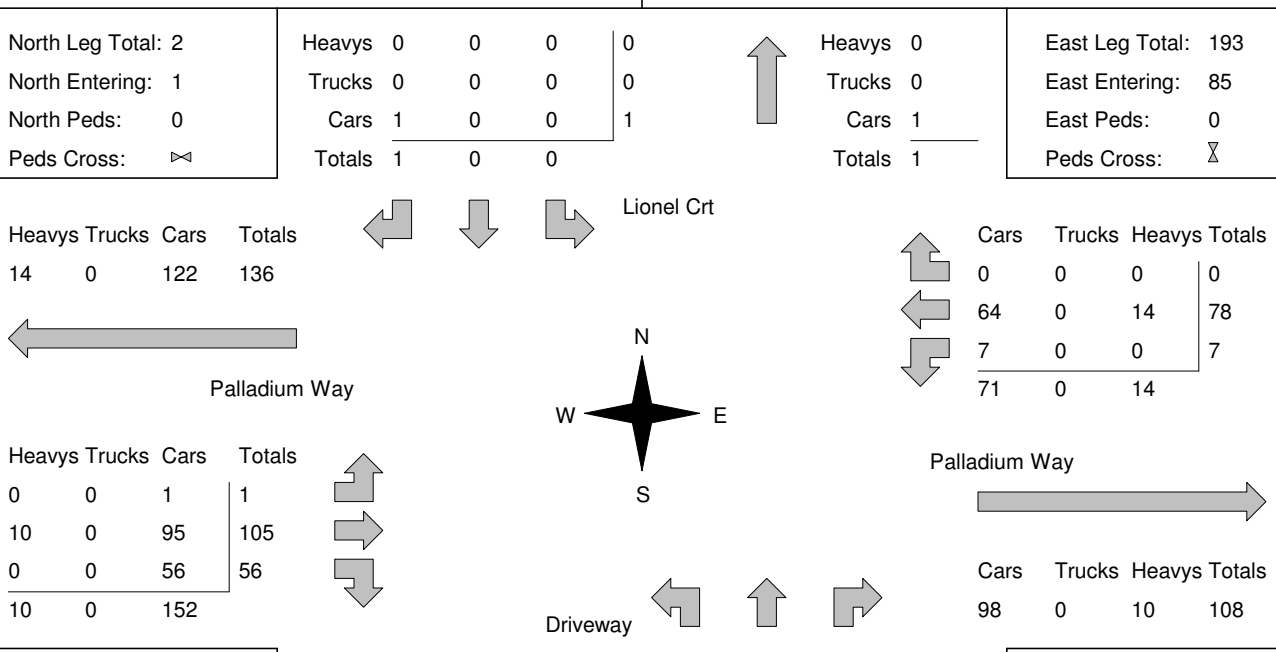
Municipality: Burlington
Site #: 0000000001
Intersection: Palladium Way & Lionel Crt
TFR File #: 1
Count date: 13-Nov-2024

Weather conditions:
Clear/Dry

Person(s) who counted:
Pyramid Traffic Inc

**** Non-Signalized Intersection ****

Major Road: Palladium Way runs W/E



Comments

Palladium Way @ Lionel Crt

Mid-day Peak Diagram

Specified Period
From: 11:00:00
To: 14:00:00

One Hour Peak
From: 12:00:00
To: 13:00:00

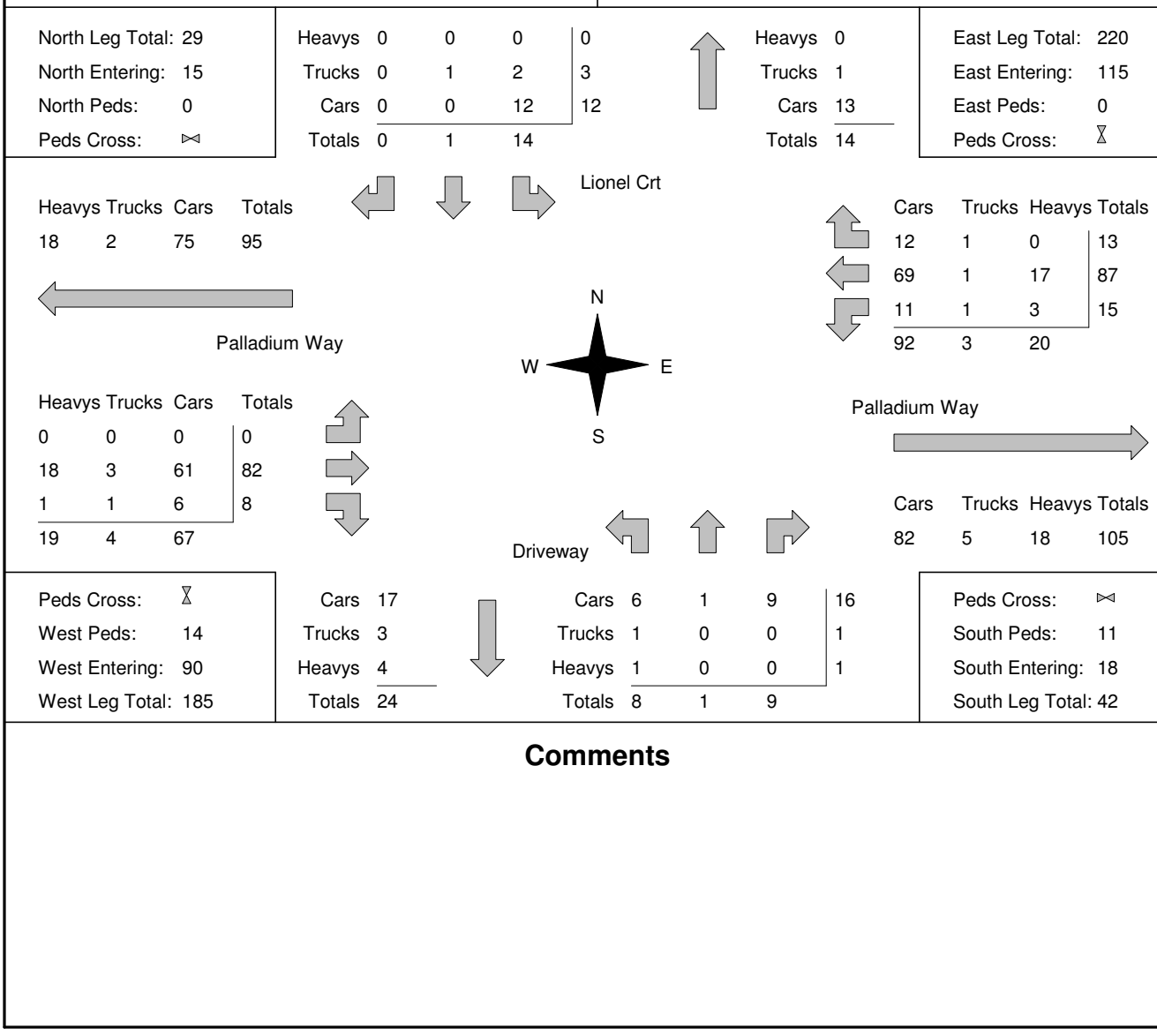
Municipality: Burlington
Site #: 0000000001
Intersection: Palladium Way & Lionel Crt
TFR File #: 1
Count date: 13-Nov-2024

Weather conditions:
Clear/Dry

Person(s) who counted:
Pyramid Traffic Inc

**** Non-Signalized Intersection ****

Major Road: Palladium Way runs W/E



Comments

Palladium Way @ Lionel Crt

Afternoon Peak Diagram

Specified Period
From: 15:00:00
To: 18:00:00

One Hour Peak
From: 15:00:00
To: 16:00:00

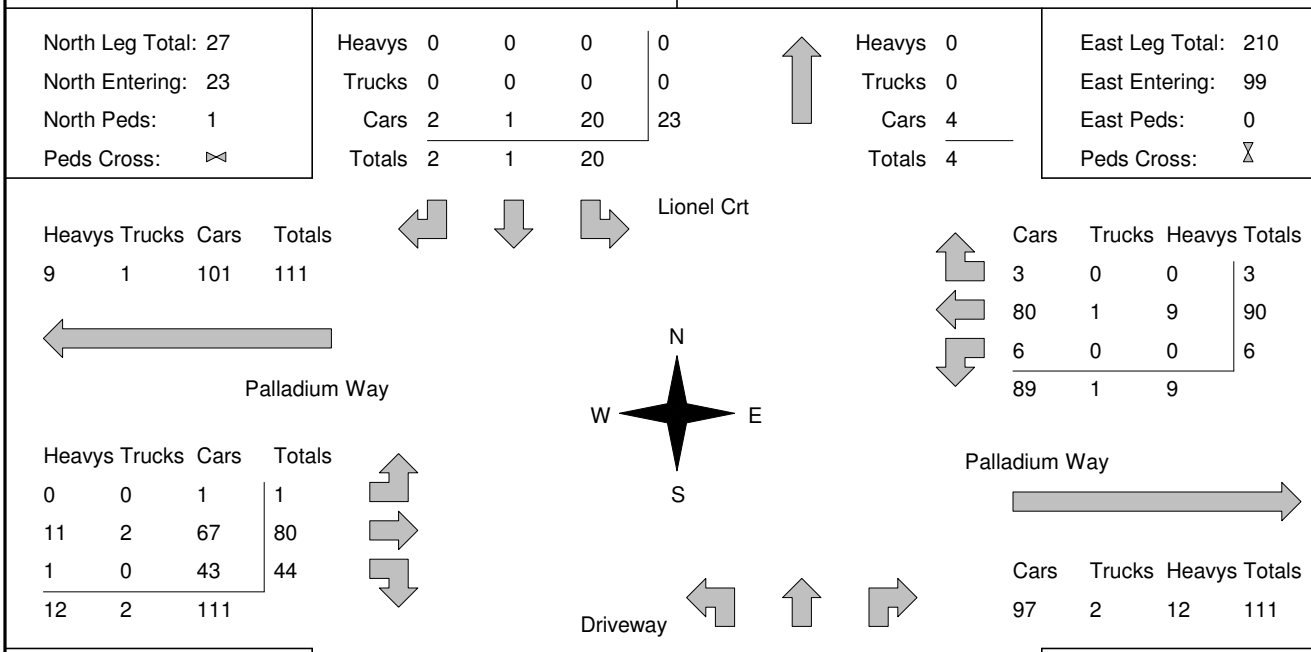
Municipality: Burlington
Site #: 0000000001
Intersection: Palladium Way & Lionel Crt
TFR File #: 1
Count date: 13-Nov-2024

Weather conditions:
Clear/Dry

Person(s) who counted:
Pyramid Traffic Inc

**** Non-Signalized Intersection ****

Major Road: Palladium Way runs W/E



Comments

Palladium Way @ Lionel Crt

Total Count Diagram

Municipality: Burlington
Site #: 0000000001
Intersection: Palladium Way & Lionel Crt
TFR File #: 1
Count date: 13-Nov-2024

Weather conditions:
Clear/Dry

Person(s) who counted:
Pyramid Traffic Inc

**** Non-Signalized Intersection ****

Major Road: Palladium Way runs W/E

North Leg Total:	91			
North Entering:	55			
North Peds:	3			
Peds Cross:	⋈			

Heavys	0	0	2	2
Trucks	0	1	3	4
Cars	6	1	42	49
Totals	6	2	47	

Heavys	4			
Trucks	2			
Cars	30			
Totals	36			

East Leg Total:	1426			
East Entering:	734			
East Peds:	0			
Peds Cross:	⧖			

Lionel Crt

Heavys	Trucks	Cars	Totals
85	8	713	806

Cars	Trucks	Heavys	Totals
26	2	4	32
559	7	83	649
49	1	3	53
634	10	90	

Palladium Way

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Heavys	Trucks	Cars	Totals
0	0	3	3
82	8	503	593
2	4	163	169
84	12	669	

Palladium Way

Cars	Trucks	Heavys	Totals
595	12	85	692

Driveway

Peds Cross:	⧖			
West Peds:	21			
West Entering:	765			
West Leg Total:	1571			

Cars	213			
Trucks	6			
Heavys	5			
Totals	224			

Cars	148	1	50	199
Trucks	1	0	1	2
Heavys	2	0	1	3
Totals	151	1	52	

Peds Cross:	⋈			
South Peds:	26			
South Entering:	204			
South Leg Total:	428			

Comments

Appleby Line @ Palladium Way

Morning Peak Diagram

Specified Period
From: 7:00:00
To: 9:00:00

One Hour Peak
From: 7:45:00
To: 8:45:00

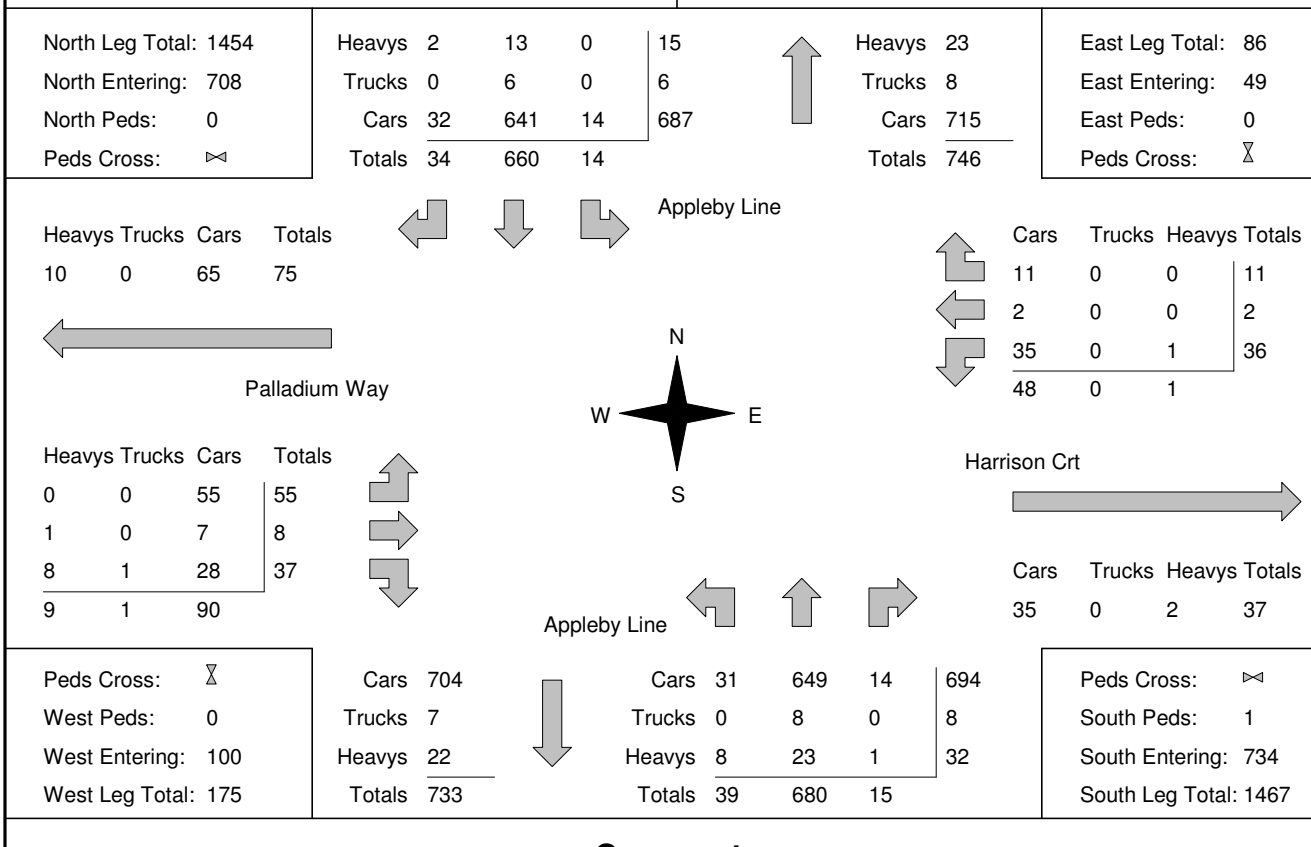
Municipality: Burlington
Site #: 0000000003
Intersection: Appleby Line & Palladium Way
TFR File #: 3
Count date: 13-Nov-2024

Weather conditions:
Clear/Dry

Person(s) who counted:
Pyramid Traffic Inc

**** Signalized Intersection ****

Major Road: Appleby Line runs N/S



Comments

Appleby Line @ Palladium Way

Mid-day Peak Diagram

Specified Period
From: 11:00:00
To: 14:00:00

One Hour Peak
From: 12:00:00
To: 13:00:00

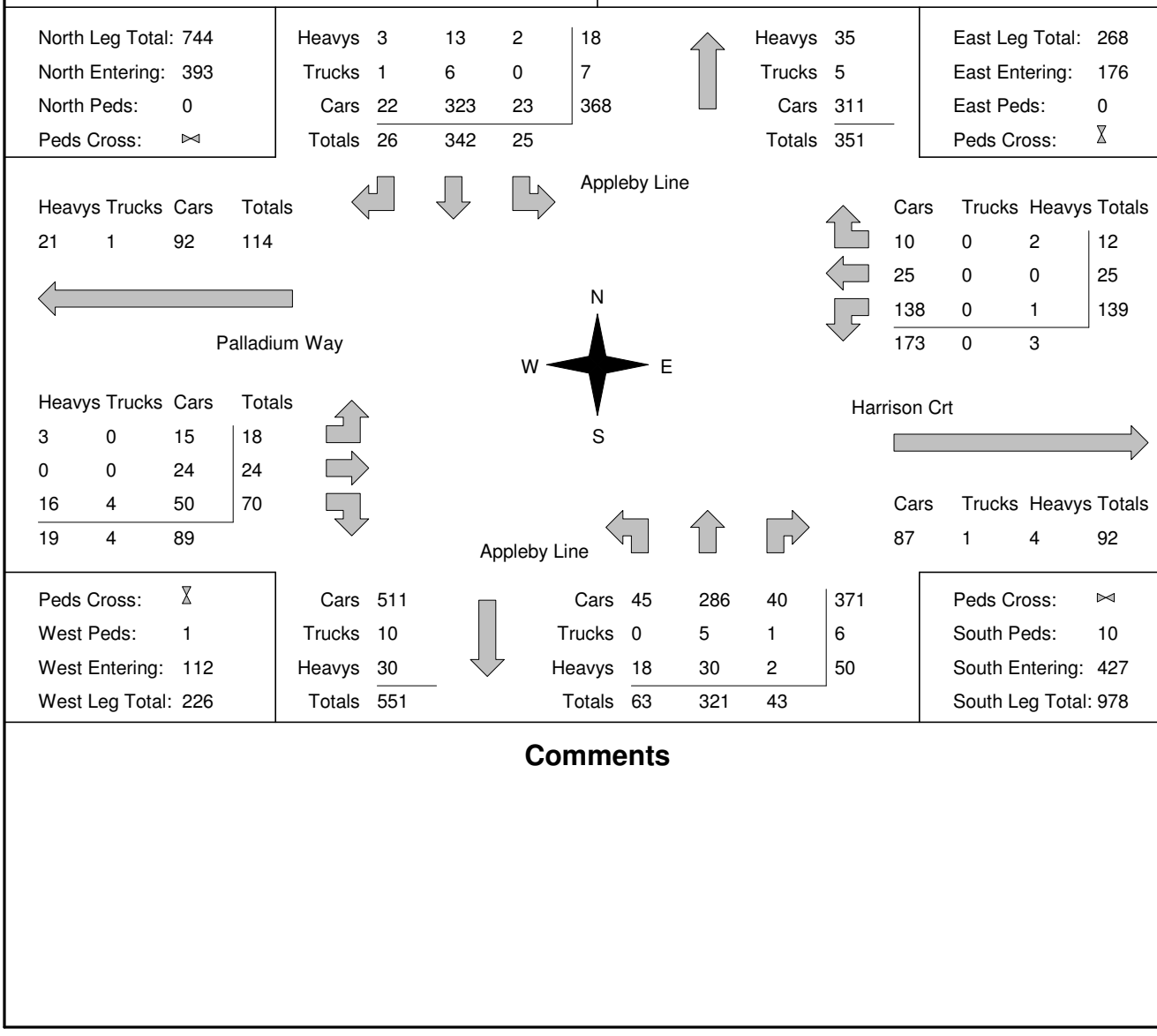
Municipality: Burlington
Site #: 0000000003
Intersection: Appleby Line & Palladium Way
TFR File #: 3
Count date: 13-Nov-2024

Weather conditions:
Clear/Dry

Person(s) who counted:
Pyramid Traffic Inc

**** Signalized Intersection ****

Major Road: Appleby Line runs N/S



Comments

Appleby Line @ Palladium Way

Afternoon Peak Diagram

Specified Period
From: 15:00:00
To: 18:00:00

One Hour Peak
From: 16:30:00
To: 17:30:00

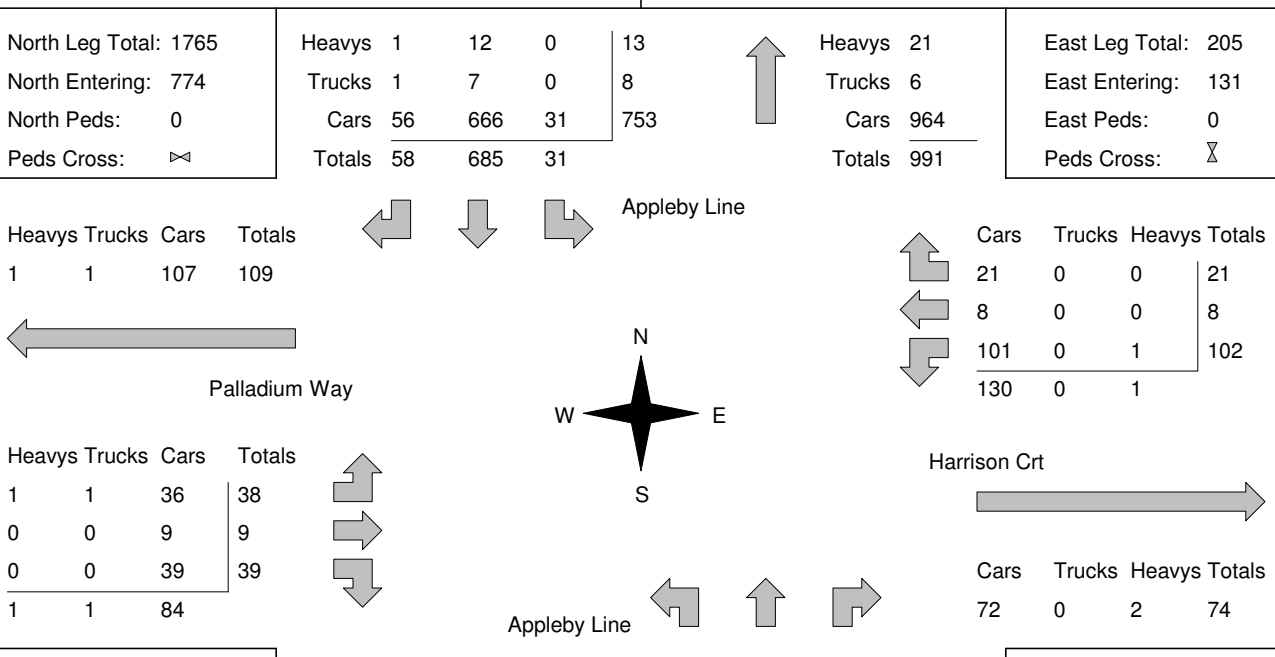
Municipality: Burlington
Site #: 0000000003
Intersection: Appleby Line & Palladium Way
TFR File #: 3
Count date: 13-Nov-2024

Weather conditions:
Clear/Dry

Person(s) who counted:
Pyramid Traffic Inc

**** Signalized Intersection ****

Major Road: Appleby Line runs N/S



Comments

Appleby Line @ Palladium Way

Total Count Diagram

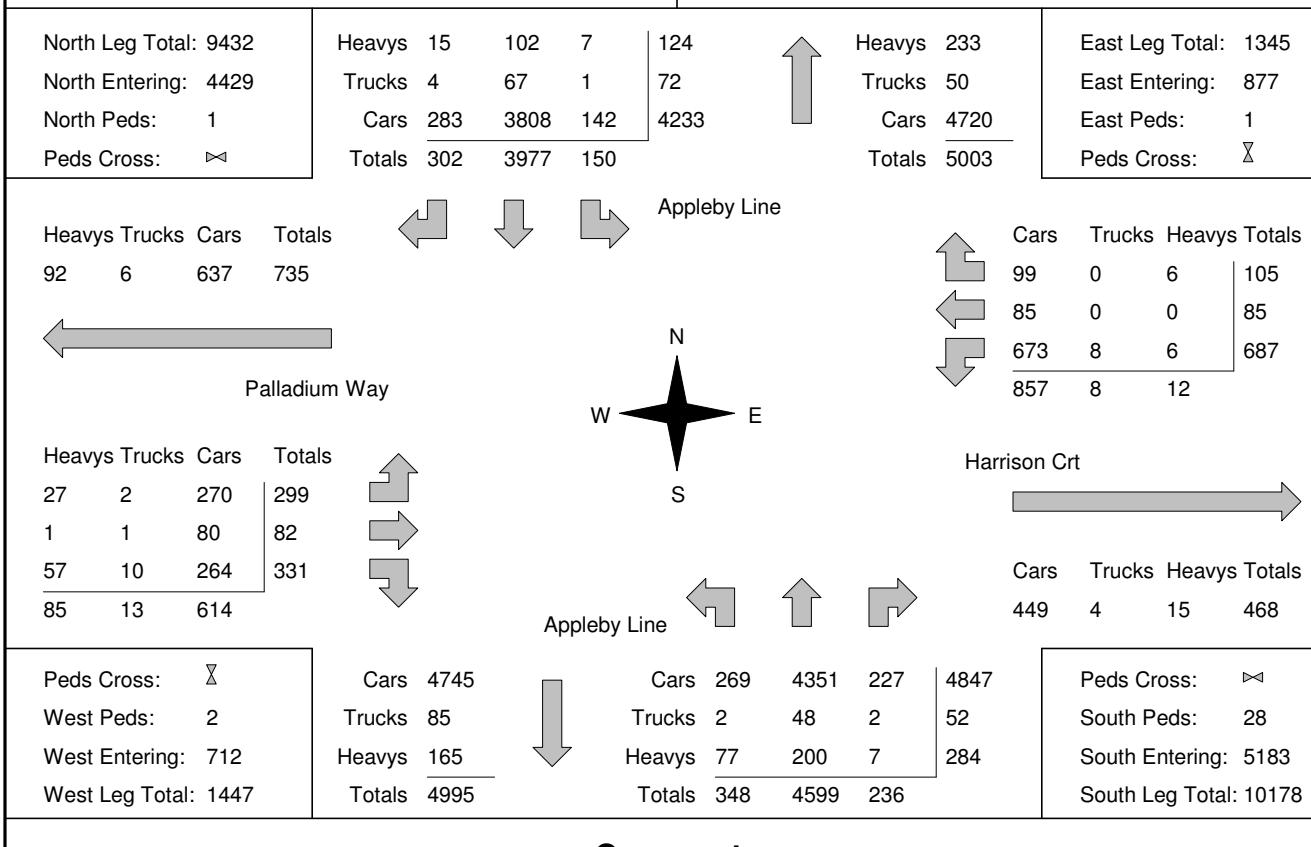
Municipality: Burlington
Site #: 0000000003
Intersection: Appleby Line & Palladium Way
TFR File #: 3
Count date: 13-Nov-2024

Weather conditions:
Clear/Dry

Person(s) who counted:
Pyramid Traffic Inc

**** Signalized Intersection ****

Major Road: Appleby Line runs N/S



Comments

4900 Appleby Line

Morning Peak Diagram

Specified Period
From: 7:00:00
To: 9:00:00

One Hour Peak
From: 7:45:00
To: 8:45:00

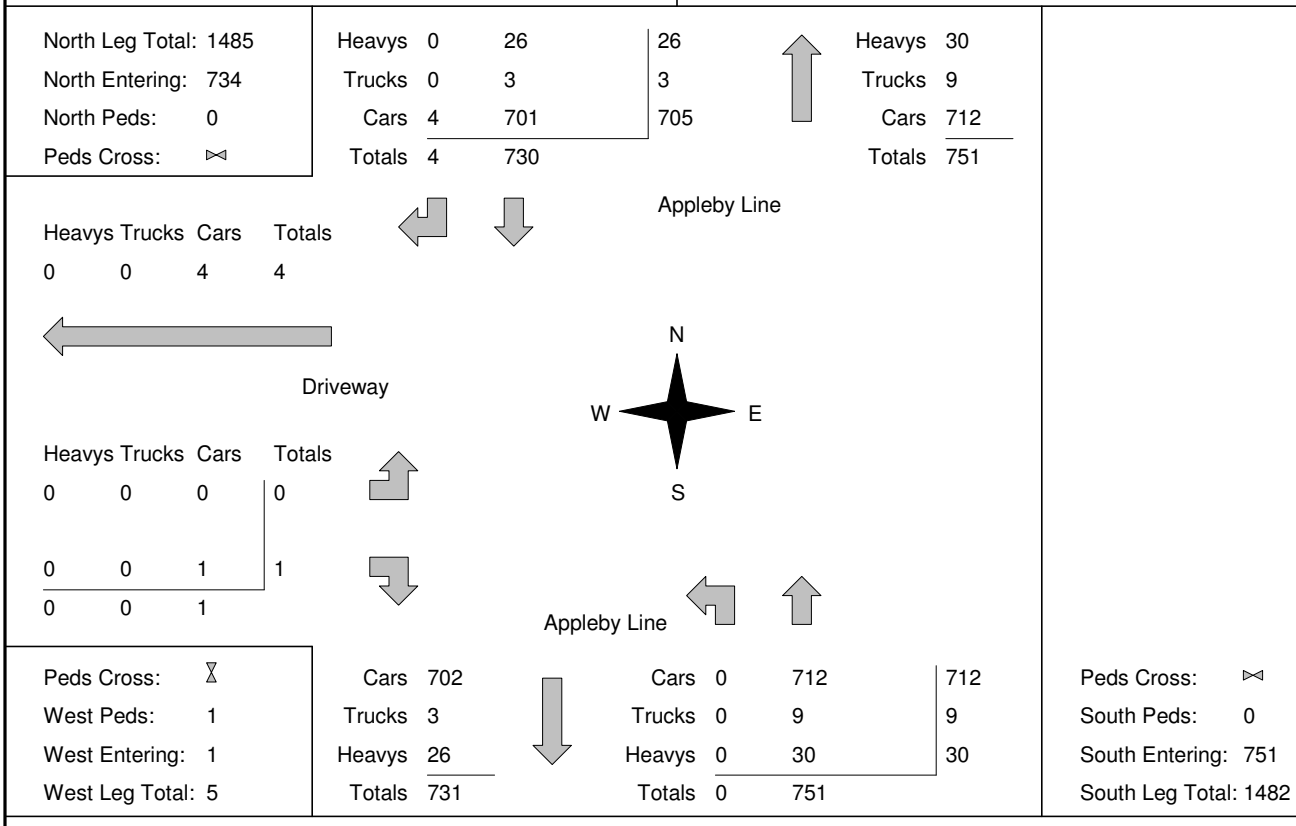
Municipality: Burlington
Site #: 0000000004
Intersection: Appleby Line & Driveway
TFR File #: 4
Count date: 13-Nov-2024

Weather conditions:
Clear/Dry

Person(s) who counted:
Pyramid Traffic Inc

**** Non-Signalized Intersection ****

Major Road: Appleby Line runs N/S



Comments

4900 Appleby Line

Mid-day Peak Diagram

Specified Period
From: 11:00:00
To: 14:00:00

One Hour Peak
From: 12:45:00
To: 13:45:00

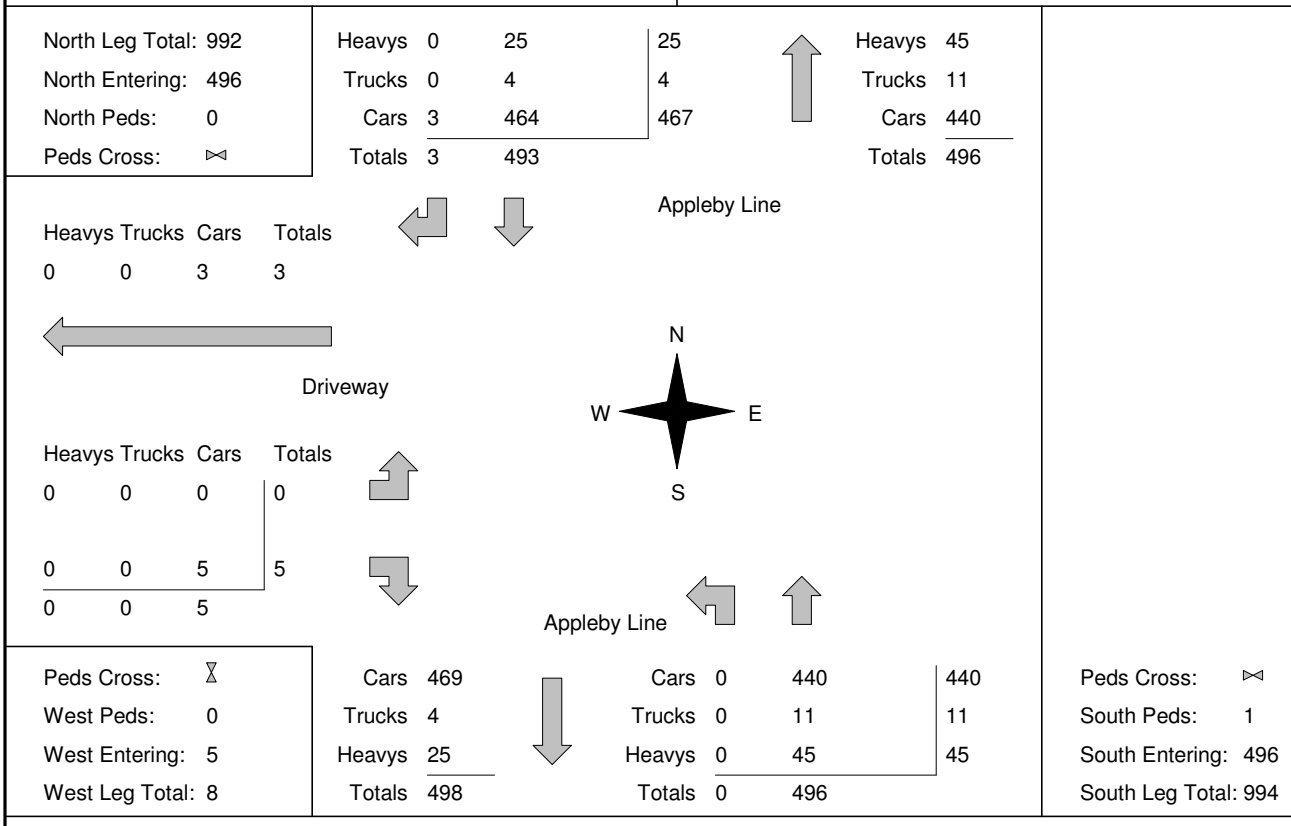
Municipality: Burlington
Site #: 0000000004
Intersection: Appleby Line & Driveway
TFR File #: 4
Count date: 13-Nov-2024

Weather conditions:
Clear/Dry

Person(s) who counted:
Pyramid Traffic Inc

**** Non-Signalized Intersection ****

Major Road: Appleby Line runs N/S



Comments

4900 Appleby Line

Afternoon Peak Diagram

Specified Period
From: 15:00:00
To: 18:00:00

One Hour Peak
From: 16:30:00
To: 17:30:00

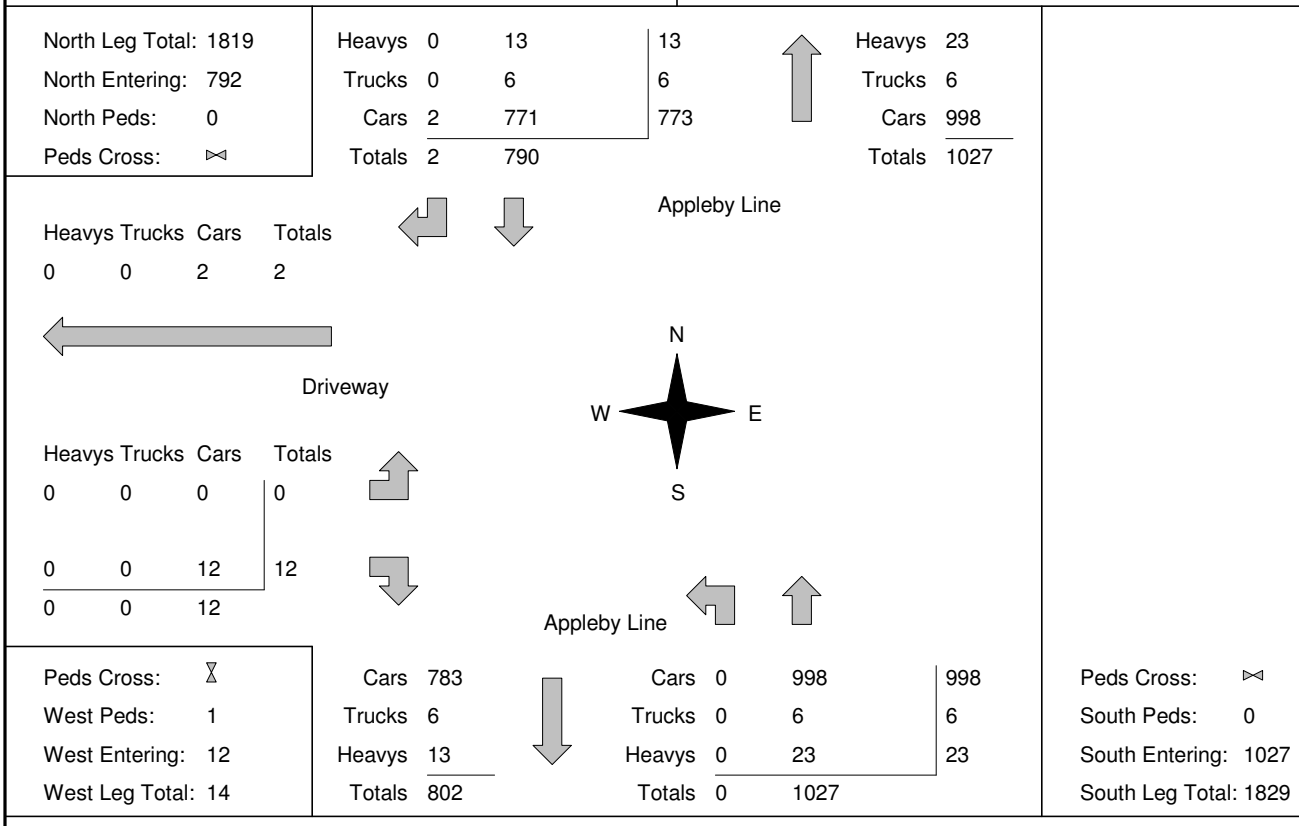
Municipality: Burlington
Site #: 0000000004
Intersection: Appleby Line & Driveway
TFR File #: 4
Count date: 13-Nov-2024

Weather conditions:
Clear/Dry

Person(s) who counted:
Pyramid Traffic Inc

**** Non-Signalized Intersection ****

Major Road: Appleby Line runs N/S



Comments

4900 Appleby Line

Total Count Diagram

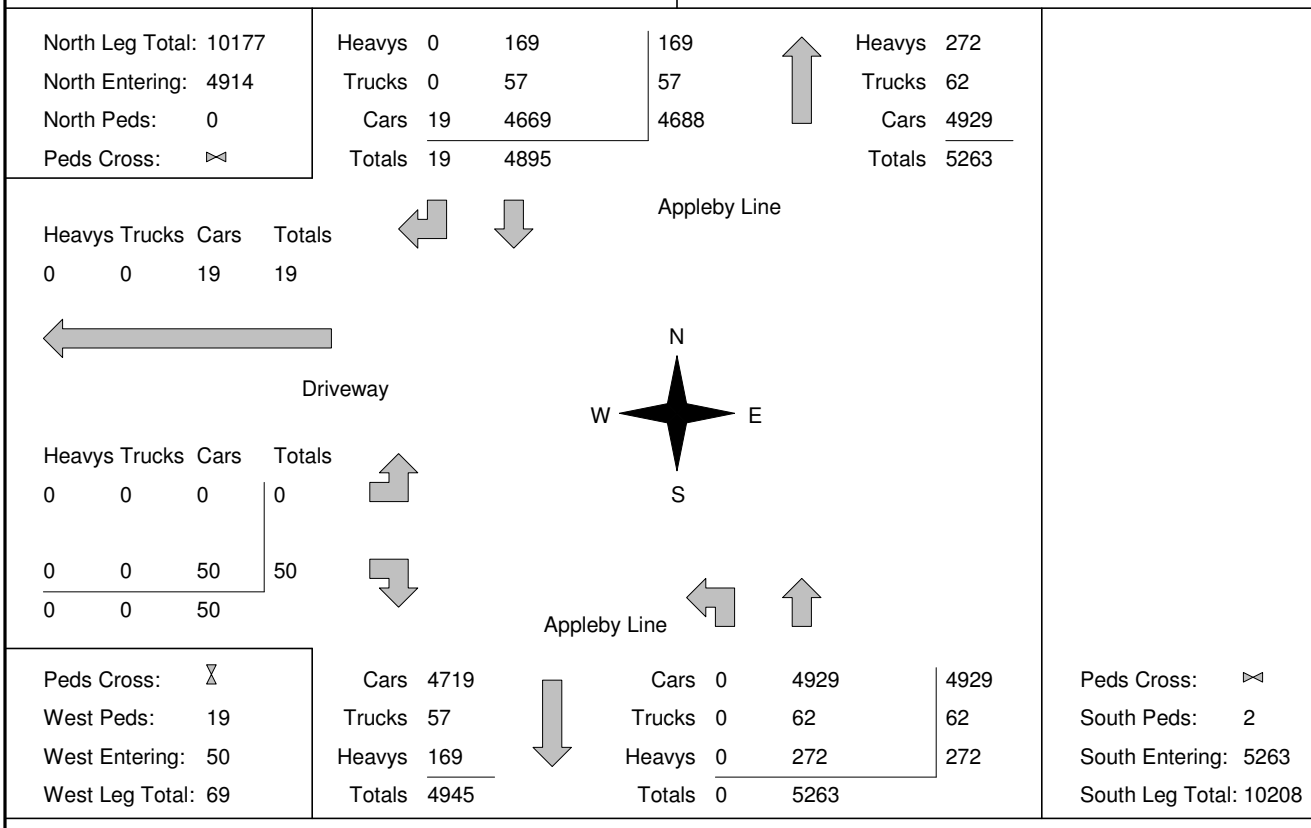
Municipality: Burlington
Site #: 0000000004
Intersection: Appleby Line & Driveway
TFR File #: 4
Count date: 13-Nov-2024

Weather conditions:
Clear/Dry

Person(s) who counted:
Pyramid Traffic Inc

**** Non-Signalized Intersection ****

Major Road: Appleby Line runs N/S



Comments

Thomas Alton Blvd @ Valera Rd

Morning Peak Diagram

Specified Period
From: 7:00:00
To: 9:00:00

One Hour Peak
From: 8:00:00
To: 9:00:00

Municipality: Burlington
Site #: 0000000002
Intersection: Thomas Alton Blvd & Valera Rd
TFR File #: 2
Count date: 13-Nov-2024

Weather conditions:
Clear/Dry

Person(s) who counted:
Pyramid Traffic Inc

**** Non-Signalized Intersection ****

Major Road: Thomas Alton Blvd runs W/E

North Leg Total: 137
North Entering: 49
North Peds: 9
Peds Cross: ⋈

Heavys	1	0	0	1
Trucks	0	0	0	0
Cars	39	7	2	48
Totals	40	7	2	

Heavys	0
Trucks	0
Cars	88
Totals	88

East Leg Total: 658
East Entering: 209
East Peds: 1
Peds Cross: ⧖

Driveway

Heavys	Trucks	Cars	Totals
14	2	178	194

	Cars	Trucks	Heavys	Totals
	26	0	0	26
	125	2	12	139
	44	0	0	44
	195	2	12	

Thomas Alton Blvd

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Heavys	Trucks	Cars	Totals
0	0	43	43
7	0	387	394
1	0	16	17
8	0	446	

Thomas Alton Blvd

Cars	Trucks	Heavys	Totals
441	0	8	449

Valera Rd

Peds Cross: ⧖
West Peds: 0
West Entering: 454
West Leg Total: 648

Cars	67			
Trucks	0			
Heavys	1			
Totals	68			

Cars	14	19	52	85
Trucks	0	0	0	0
Heavys	1	0	1	2
Totals	15	19	53	

Peds Cross: ⋈
South Peds: 18
South Entering: 87
South Leg Total: 155

Comments

Thomas Alton Blvd @ Valera Rd

Mid-day Peak Diagram

Specified Period
From: 11:00:00
To: 14:00:00

One Hour Peak
From: 12:00:00
To: 13:00:00

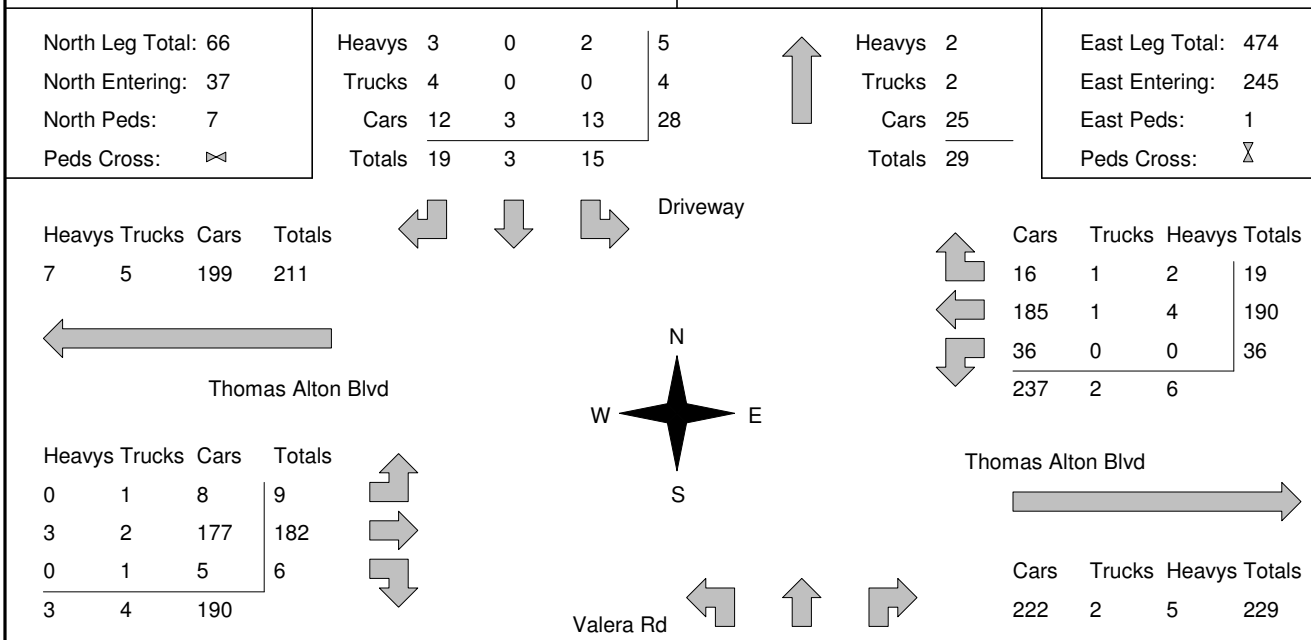
Municipality: Burlington
Site #: 0000000002
Intersection: Thomas Alton Blvd & Valera Rd
TFR File #: 2
Count date: 13-Nov-2024

Weather conditions:
Clear/Dry

Person(s) who counted:
Pyramid Traffic Inc

**** Non-Signalized Intersection ****

Major Road: Thomas Alton Blvd runs W/E



Comments

Thomas Alton Blvd @ Valera Rd

Afternoon Peak Diagram

Specified Period
From: 15:00:00
To: 18:00:00

One Hour Peak
From: 17:00:00
To: 18:00:00

Municipality: Burlington
Site #: 0000000002
Intersection: Thomas Alton Blvd & Valera Rd
TFR File #: 2
Count date: 13-Nov-2024

Weather conditions:
Clear/Dry

Person(s) who counted:
Pyramid Traffic Inc

**** Non-Signalized Intersection ****

Major Road: Thomas Alton Blvd runs W/E

North Leg Total: 55
North Entering: 27
North Peds: 4
Peds Cross: ⋈

Heavys	0	0	0	0
Trucks	1	0	0	1
Cars	14	7	5	26
Totals	15	7	5	

Heavys	0
Trucks	0
Cars	28
Totals	28

East Leg Total: 835
East Entering: 510
East Peds: 0
Peds Cross: ⧖

Driveway

Heavys	Trucks	Cars	Totals
3	1	392	396

	Cars	Trucks	Heavys	Totals
	9	0	0	9
	374	0	3	377
	124	0	0	124
	507	0	3	

Thomas Alton Blvd

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Heavys	Trucks	Cars	Totals
0	0	8	8
3	0	268	271
0	0	13	13
3	0	289	

Thomas Alton Blvd

Cars	Trucks	Heavys	Totals
322	0	3	325

Valera Rd

Peds Cross: ⧖
West Peds: 0
West Entering: 292
West Leg Total: 688

Cars	144
Trucks	0
Heavys	0
Totals	144

Cars	4	11	49	64
Trucks	0	0	0	0
Heavys	0	0	0	0
Totals	4	11	49	

Peds Cross: ⋈
South Peds: 9
South Entering: 64
South Leg Total: 208

Comments

Thomas Alton Blvd @ Valera Rd

Total Count Diagram

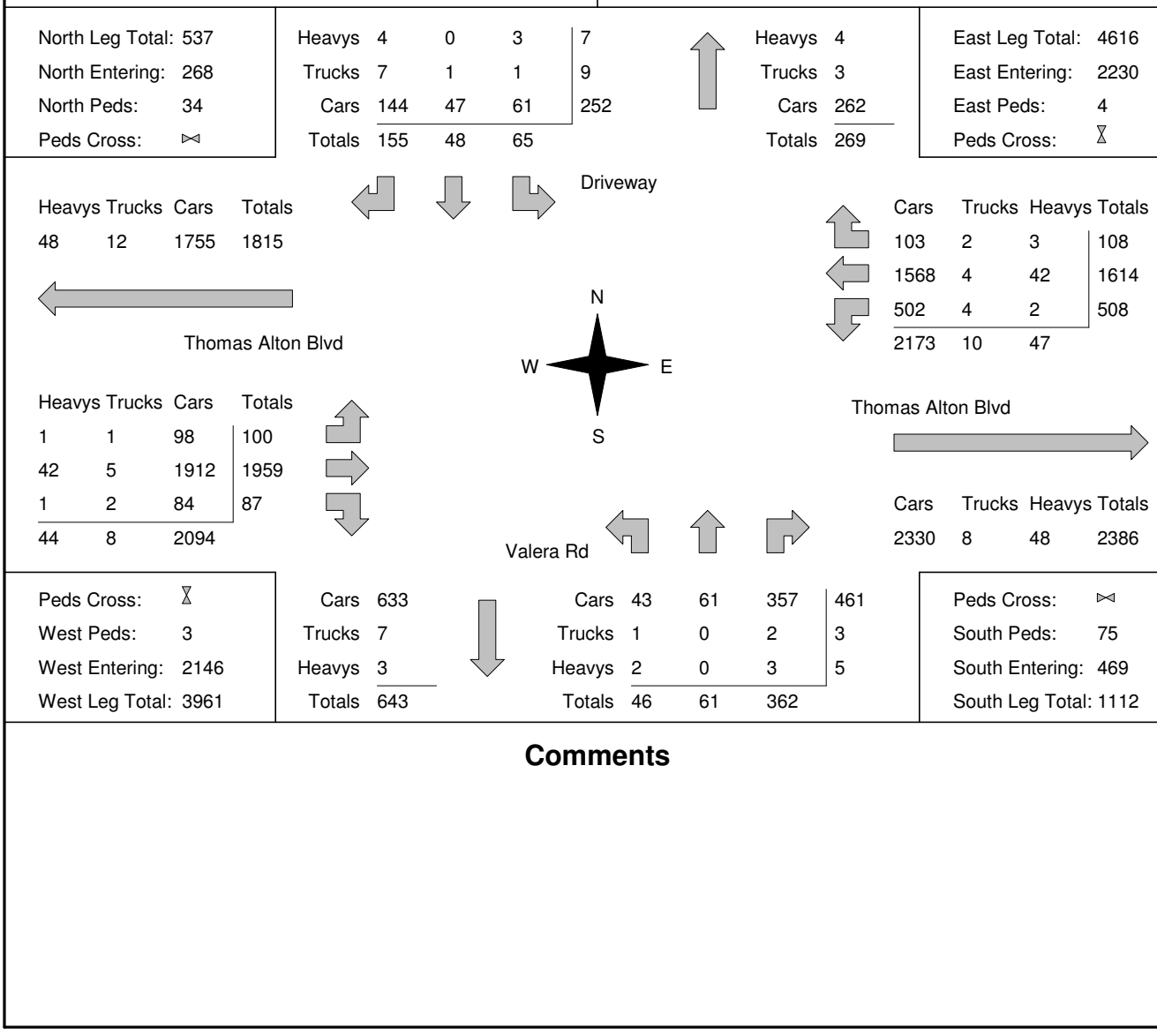
Municipality: Burlington
Site #: 0000000002
Intersection: Thomas Alton Blvd & Valera Rd
TFR File #: 2
Count date: 13-Nov-2024

Weather conditions:
Clear/Dry

Person(s) who counted:
Pyramid Traffic Inc

**** Non-Signalized Intersection ****

Major Road: Thomas Alton Blvd runs W/E



Comments

Appleby Line @ Thomas Alton Blvd

Morning Peak Diagram

Specified Period
From: 7:00:00
To: 9:00:00

One Hour Peak
From: 8:00:00
To: 9:00:00

Municipality: Burlington
Site #: 0000000005
Intersection: Appleby Line & Thomas Alton Blvd
TFR File #: 5
Count date: 13-Nov-2024

Weather conditions:
Clear/Dry

Person(s) who counted:
Pyramid Traffic Inc

**** Signalized Intersection ****

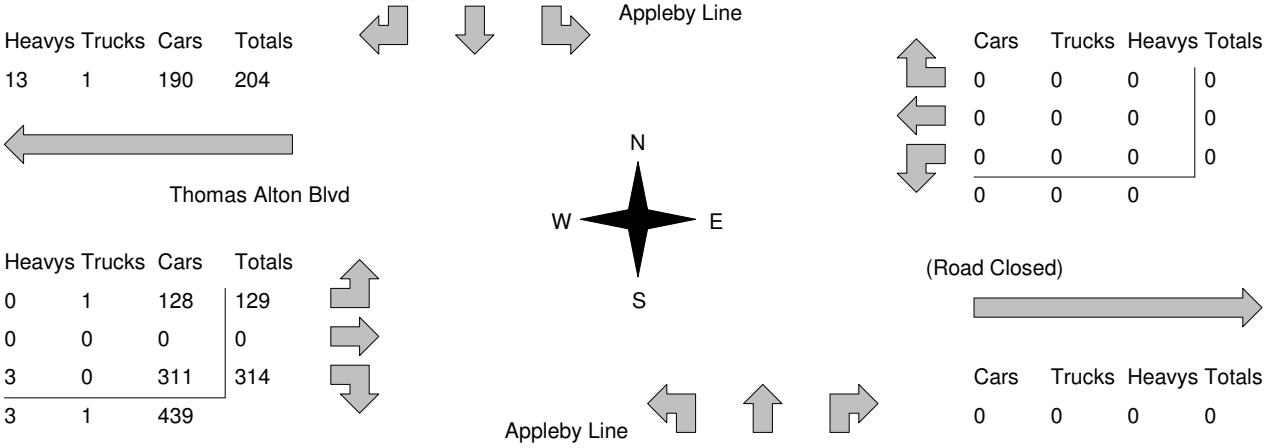
Major Road: Appleby Line runs N/S

North Leg Total: 1494
North Entering: 742
North Peds: 0
Peds Cross: ⋈

Heavys	3	23	0	26
Trucks	0	5	0	5
Cars	33	678	0	711
Totals	36	706	0	

Heavys	42
Trucks	8
Cars	702
Totals	752

East Leg Total: 0
East Entering: 0
East Peds: 0
Peds Cross: ⧖



Peds Cross: ⧖
West Peds: 2
West Entering: 443
West Leg Total: 647

Cars	989			
Trucks	5			
Heavys	26			
Totals	1020			

Cars	157	574	0	731
Trucks	1	7	0	8
Heavys	10	42	0	52
Totals	168	623	0	

Peds Cross: ⋈
South Peds: 1
South Entering: 791
South Leg Total: 1811

Comments

Appleby Line @ Thomas Alton Blvd

Mid-day Peak Diagram

Specified Period
From: 11:00:00
To: 14:00:00

One Hour Peak
From: 12:00:00
To: 13:00:00

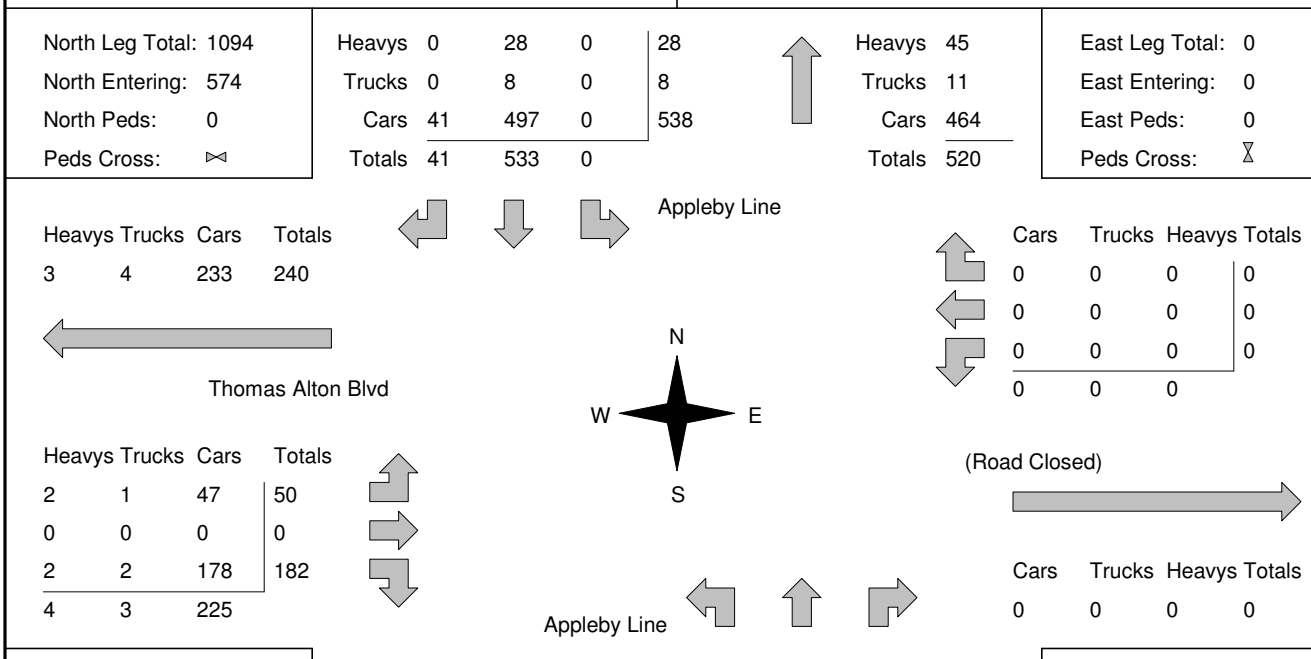
Municipality: Burlington
Site #: 0000000005
Intersection: Appleby Line & Thomas Alton Blvd
TFR File #: 5
Count date: 13-Nov-2024

Weather conditions:
Clear/Dry

Person(s) who counted:
Pyramid Traffic Inc

**** Signalized Intersection ****

Major Road: Appleby Line runs N/S



Comments

Appleby Line @ Thomas Alton Blvd

Afternoon Peak Diagram

Specified Period
From: 15:00:00
To: 18:00:00

One Hour Peak
From: 16:30:00
To: 17:30:00

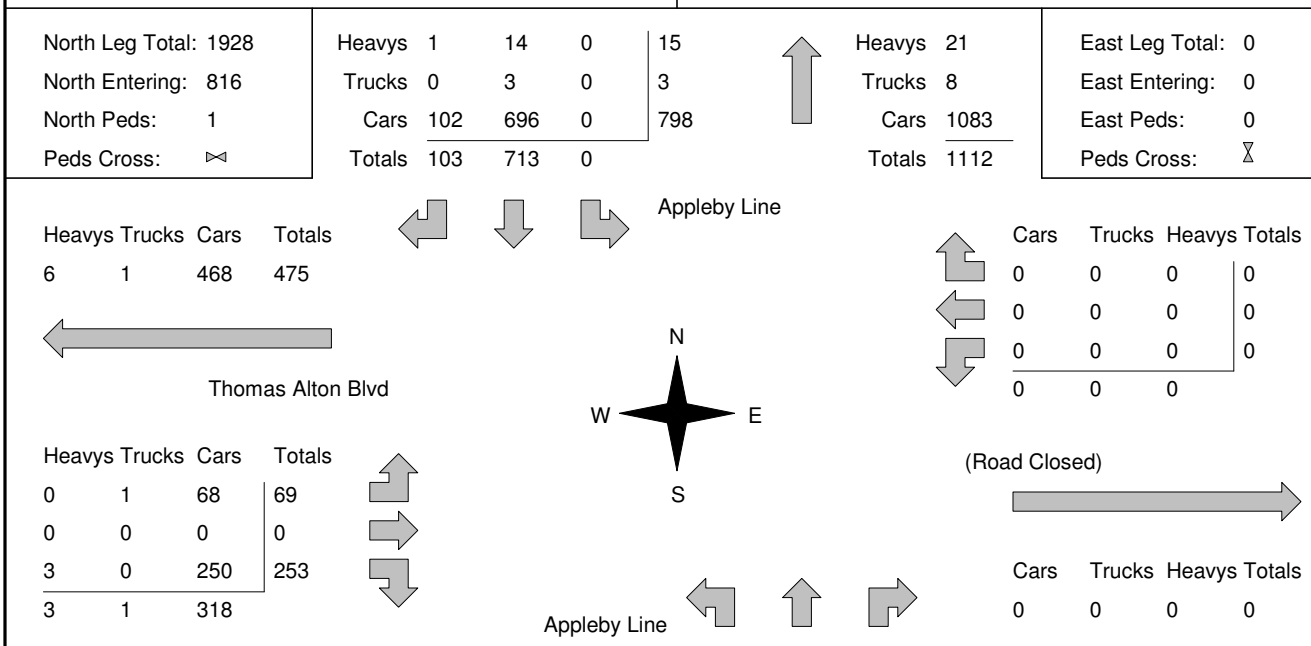
Municipality: Burlington
Site #: 0000000005
Intersection: Appleby Line & Thomas Alton Blvd
TFR File #: 5
Count date: 13-Nov-2024

Weather conditions:
Clear/Dry

Person(s) who counted:
Pyramid Traffic Inc

**** Signalized Intersection ****

Major Road: Appleby Line runs N/S



Comments

Appleby Line @ Thomas Alton Blvd

Total Count Diagram

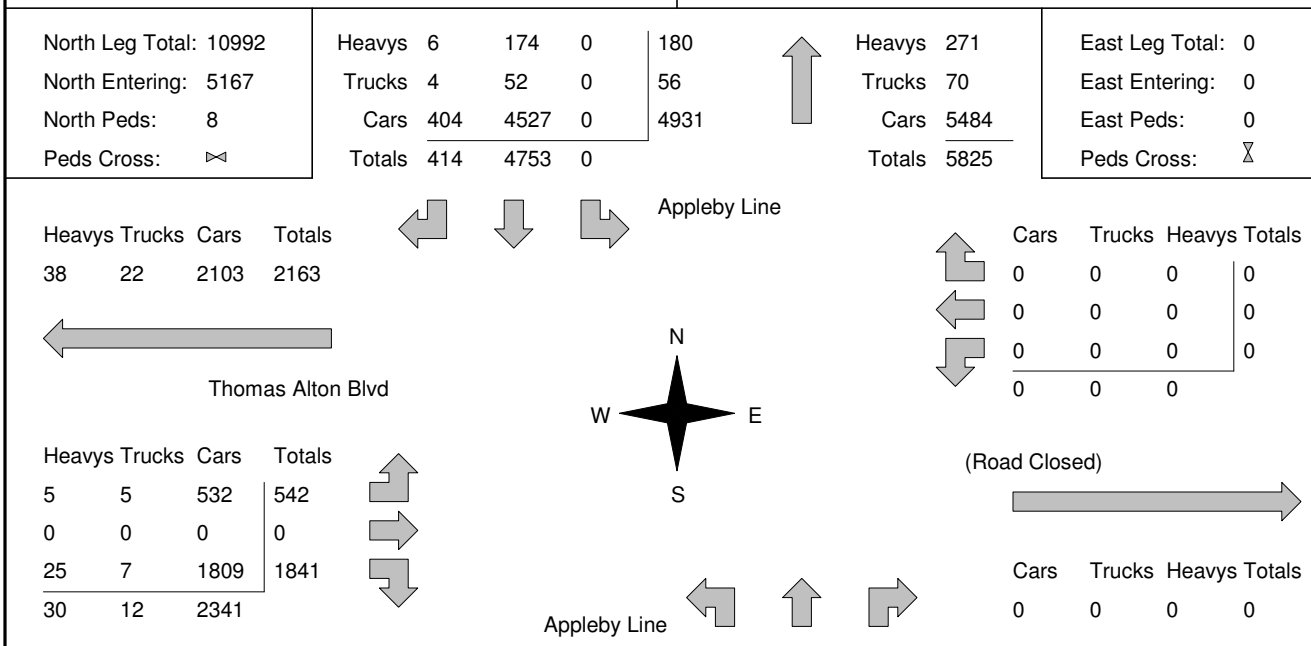
Municipality: Burlington
Site #: 0000000005
Intersection: Appleby Line & Thomas Alton Blvd
TFR File #: 5
Count date: 13-Nov-2024

Weather conditions:
Clear/Dry

Person(s) who counted:
Pyramid Traffic Inc

**** Signalized Intersection ****

Major Road: Appleby Line runs N/S



Comments

Intersection Name:	TS ID:	Line No:	Model:	IP address:	Controller Make:
Appleby Ln @ UMR	795	9	ACS/3	172.22.143.2	Econolite

Type of Operation: 8 Phase Semi-Actuated

*-Start from Main Menu

No	Date			Description	Prepared by
	Y	M	D		MA
1					
3	2017	2	3	Amber and All red Changed as per OTM12	

PHASE DESCRIPTION

Ph1		Ph5	NBLT - Appleby Ln
Ph2	NB - Appleby Ln	Ph6	SB - Appleby Ln
Ph3		Ph7	
Ph4	EB - Palladium Way	Ph8	WB - Harrison Cres

CONFIGURATION (PHASE SEQ): PHASE IN USE/EXCLUSIVE PED (MM) *- 1 - 2

Phase:	1	2	3	4	5	6	7	8
Phase in Use		X		X	X	X		X
Exclusive PED								

CONTROLLER TIMING DATA - VEHICLE TIMING * - 2 - 1

Timing Plan: 1	Phase: 1	2	3	4	5	6	7	8
Minimum Green		8		8	7	8		8
Walk		7		7		7		7
Ped. Clearance		19		27		19		27
Pedestrian Carry Over								
Vehicle Extension		3		3	3	3		3
MAX 1		45		30	15	45		30
MAX 2		45		30	15	45		30
Yellow Change		3.7		3.3	3	3.7		3.3
Red Clearance		2.7		3.8	1	2.7		3.8
Phase Minimum:	1	33.4	1	42.1	5	33.4	1	42.1

PHASE DATA - VEHICLE AND PEDESTRIAN RECALLS * - 2 - 8

Phase:	1	2	3	4	5	6	7	8
Lock Detector								
Vehicle Recall								
Pedestrian Recall		X				X		
MAX Recall		X				X		
Min Recall								

COORDINATION: COORDINATOR PATTERN, SPLIT PATTERN *** - 3 - 2, - 3 - 3**

Coordinator Pattern (CP)	Cycle Length	Offset (sec)	Timing Plan	Split Pattern	Phases (sec)							
					1	2	3	4	5	6	7	8
1	85	34	1	1		54		31	13	41		31
2	85	34	1	2		54		31	13	41		31
3	100	40	1	3		63		37	12	51		37
10	0	0	1	10		0		0	0	0		0

TIME BASE: ACTION PLAN, DAY PLAN *** - 5 - 2, - 5 - 3, -5 - 4**

Day Plan	Sched. #	Action Plan	Time Period	Pattern	Timing Plan
1	1	1	06:00	1	1
1	1	2	09:00	2	1
1	1	3	16:00	3	1
1	1	2	19:00	2	1
1	1	10	22:00	254	1
2	2	10	00:15	254	1
3	3	10	00:15	254	1

Schedule 1 = Day Plan 1
Schedule 2 = Day Plan 2
Schedule 3 = Day Plan 3

Day Plan 1 (Weekday)
Day Plan 2 (Saturday)
Day Plan 3 (Sunday, Holidays)

Action Plan 10 = free (254)

Special Programming:

TIME BASE DATA - TIME OF YEAR EVENTS *** - 5 - 5**

Events	Exception Day		MON/ MON	DOW/ DOW	WOM/ Year	Day Plan
New Year's Day	1	Fixed	1	1	0	3
Family Day	2	Float	2	2	3	3
Good Friday	3	Float	4	6	1	3
Victoria Day	4	Float	5	2	3	3
Canada Day	5	Fixed	7	1	0	3
Civic Day	6	Float	8	2	1	3
Labour Day	7	Float	9	2	1	3
Thanksgiving	8	Float	10	2	2	3
Christmas Day	9	Fixed	12	25	0	3

Intersection Name:	TS ID:	Line No:	Model:	IP address:	Controller Make:
Appleby Ln @ Thomas Alton E	793	9	ACS/3	172.22.142.2	Econolite

Type of Operation: 8 Phase Semi-Actuated

*-Start from Main Menu

No	Date			Description	Prepared by
	Y	M	D		MA
1					
3	2017	2	3	Amber and All red Changed as per OTM12	

PHASE DESCRIPTION

Ph1		Ph5	NBLT - Appleby Ln
Ph2	NB - Appleby Ln	Ph6	SB - Appleby Ln
Ph3		Ph7	
Ph4	EB - Thomas Alton Blvd	Ph8	WB - Harrison Cres

CONFIGURATION (PHASE SEQ): PHASE IN USE/EXCLUSIVE PED (MM) *- 1 - 2

Phase:	1	2	3	4	5	6	7	8
Phase in Use		X		X	X	X		X
Exclusive PED								

CONTROLLER TIMING DATA - VEHICLE TIMING * - 2 - 1

Timing Plan: 1	Phase: 1	2	3	4	5	6	7	8
Minimum Green		8		8	7	8		8
Walk		7		7		7		7
Ped. Clearance		19		27		19		27
Pedestrian Carry Over								
Vehicle Extension		3		3	3	3		3
MAX 1		45		30	15	45		30
MAX 2		45		30	15	45		30
Yellow Change		3.7		3.3	3	3.7		3.3
Red Clearance		2.7		3.8	1	2.7		3.8
Phase Minimum:	1	33.4	1	42.1	5	33.4	1	42.1

PHASE DATA - VEHICLE AND PEDESTRIAN RECALLS * - 2 - 8

Phase:	1	2	3	4	5	6	7	8
Lock Detector								
Vehicle Recall								
Pedestrian Recall		X				X		
MAX Recall		X				X		
Min Recall								

COORDINATION: COORDINATOR PATTERN, SPLIT PATTERN *** - 3 - 2, - 3 - 3**

Coordinator Pattern (CP)	Cycle Length	Offset (sec)	Timing Plan	Split Pattern	Phases (sec)							
					1	2	3	4	5	6	7	8
1	85	52	1	1		54		31	13	41		31
2	85	52	1	2		54		31	13	41		31
3	100	40	1	3		63		37	12	51		37
10	0	0	0	10		0		0	0	0		0

TIME BASE: ACTION PLAN, DAY PLAN *** - 5 - 2, - 5 - 3, -5 - 4**

Day Plan	Sched. #	Action Plan	Time Period	Pattern	Timing Plan
1	1	1	06:00	1	1
1	1	2	09:00	2	1
1	1	3	16:00	3	1
1	1	2	19:00	2	1
1	1	10	22:00	254	1
2	2	10	00:15	254	1
3	3	10	00:15	254	1

Schedule 1 = Day Plan 1
Schedule 2 = Day Plan 2
Schedule 3 = Day Plan 3

Day Plan 1 (Weekday)
Day Plan 2 (Saturday)
Day Plan 3 (Sunday, Holidays)

Action Plan 10 = free (254)

Special Programming:

TIME BASE DATA - TIME OF YEAR EVENTS *** - 5 - 5**

Events	Exception Day		MON/ MON	DOW/ DOW	WOM/ Year	Day Plan
New Year's Day	1	Fixed	1	1	0	3
Family Day	2	Float	2	2	3	3
Good Friday	3	Float	4	6	1	3
Victoria Day	4	Float	5	2	3	3
Canada Day	5	Fixed	7	1	0	3
Civic Day	6	Float	8	2	1	3
Labour Day	7	Float	9	2	1	3
Thanksgiving	8	Float	10	2	2	3
Christmas Day	9	Fixed	12	25	0	3

Paradigm Transportation Solutions Limited
5A-150 Pinebush Rd

Cambridge, Ontario, Canada N1R 8J8
519-896-3163 dcobean@ptsl.com

Count Name: Appleby Line & Thomas Alton Boulevard - Thursday
Site Code:
Start Date: 09-28-2017

Turning Movement Data

Start Time	Thomas Alton Boulevard Eastbound						Harrison Cres. Westbound						Appleby Line Northbound						Appleby Line Southbound						
	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Int. Total
7:00 AM	29	0	53	0	1	82	3	0	2	0	0	5	18	149	5	0	0	172	0	90	1	0	0	91	350
7:15 AM	45	1	92	0	0	138	4	0	0	0	0	4	19	178	3	0	0	200	1	98	3	0	0	102	444
7:30 AM	51	0	98	0	1	149	6	1	1	0	0	8	20	270	10	0	0	300	1	160	3	0	0	164	621
7:45 AM	57	2	102	0	0	161	8	1	0	0	0	9	29	214	13	0	0	256	0	155	5	0	0	160	586
Hourly Total	182	3	345	0	2	530	21	2	3	0	0	26	86	811	31	0	0	928	2	503	12	0	0	517	2001
8:00 AM	39	1	102	0	1	142	6	0	1	0	0	7	24	243	5	0	0	272	1	167	3	1	0	172	593
8:15 AM	30	0	79	0	1	109	3	0	0	0	0	3	37	192	6	0	0	235	0	176	5	0	0	181	528
8:30 AM	29	1	106	0	0	136	4	0	1	0	0	5	36	179	7	0	0	222	0	153	2	0	0	155	518
8:45 AM	22	0	83	0	2	105	9	0	0	0	0	9	38	155	12	0	0	205	1	142	5	0	0	148	467
Hourly Total	120	2	370	0	4	492	22	0	2	0	0	24	135	769	30	0	0	934	2	638	15	1	0	656	2106
9:00 AM	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hourly Total	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
11:00 AM	10	0	35	0	0	45	25	0	3	0	0	28	29	63	19	0	0	111	0	66	8	0	0	74	258
11:15 AM	7	2	45	0	0	54	13	3	3	0	0	19	32	86	24	1	1	143	0	89	3	0	0	92	308
11:30 AM	9	2	45	0	1	56	20	2	1	0	1	23	33	88	13	1	0	135	0	92	4	0	0	96	310
11:45 AM	5	0	38	0	0	43	18	1	0	0	0	19	38	90	29	0	0	157	0	89	4	0	0	93	312
Hourly Total	31	4	163	0	1	198	76	6	7	0	1	89	132	327	85	2	1	546	0	336	19	0	0	355	1188
12:00 PM	0	2	44	0	0	46	23	0	0	0	0	23	48	85	24	0	0	157	0	98	3	0	0	101	327
12:15 PM	9	2	34	0	0	45	25	1	0	0	0	26	46	88	20	1	0	155	0	108	3	0	0	111	337
12:30 PM	9	0	34	0	0	43	24	2	1	0	0	27	46	98	24	1	0	169	1	90	6	0	0	97	336
12:45 PM	2	0	47	0	1	49	17	3	1	0	0	21	50	92	31	0	0	173	0	77	4	0	0	81	324
Hourly Total	20	4	159	0	1	183	89	6	2	0	0	97	190	363	99	2	0	654	1	373	16	0	0	390	1324
1:00 PM	9	1	36	0	0	46	23	2	2	0	0	27	44	84	28	0	1	156	1	75	4	1	0	81	310
1:15 PM	4	3	30	0	0	37	25	1	1	0	0	27	42	93	17	1	0	153	0	85	2	0	0	87	304
1:30 PM	4	2	41	0	0	47	17	1	0	0	0	18	37	109	23	1	0	170	1	81	11	0	0	93	328
1:45 PM	4	3	33	0	0	40	10	3	3	0	0	16	45	91	21	1	0	158	0	91	7	0	0	98	312
Hourly Total	21	9	140	0	0	170	75	7	6	0	0	88	168	377	89	3	1	637	2	332	24	1	0	359	1254
2:00 PM	0	0	1	0	0	1	0	0	0	0	0	0	0	1	1	0	0	2	0	1	0	0	0	1	4
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hourly Total	0	0	1	0	0	1	0	0	0	0	0	0	0	1	1	0	0	2	0	1	0	0	0	1	4
3:00 PM	9	6	47	0	2	62	26	2	3	0	0	31	58	106	14	0	1	178	0	153	7	0	0	160	431
3:15 PM	11	0	69	0	0	80	19	2	1	0	1	22	51	129	22	0	0	202	1	147	15	0	1	163	467
3:30 PM	10	0	55	0	1	65	20	1	2	0	0	23	53	157	20	0	0	230	0	157	11	0	0	168	486
3:45 PM	7	0	45	0	3	52	21	3	2	0	1	26	61	165	22	0	1	248	0	151	20	0	0	171	497

Hourly Total	37	6	216	0	6	259	86	8	8	0	2	102	223	557	78	0	2	858	1	608	53	0	1	662	1881
4:00 PM	9	0	32	0	0	41	16	3	1	0	0	20	68	168	14	0	0	250	0	194	28	0	0	222	533
4:15 PM	7	0	49	0	0	56	5	0	3	0	0	8	73	223	19	1	0	316	0	216	22	0	0	238	618
4:30 PM	12	0	44	0	0	56	9	1	1	0	0	11	81	182	12	0	3	275	0	244	33	0	0	277	619
4:45 PM	6	3	60	0	1	69	16	0	1	0	0	17	96	232	14	0	0	342	0	252	37	0	0	289	717
Hourly Total	34	3	185	0	1	222	46	4	6	0	0	56	318	805	59	1	3	1183	0	906	120	0	0	1026	2487
5:00 PM	13	1	54	0	0	68	19	2	0	0	1	21	108	207	14	0	0	329	1	231	37	0	0	269	687
5:15 PM	14	0	64	0	0	78	19	2	1	0	1	22	108	198	17	0	0	323	0	219	37	0	1	256	679
5:30 PM	5	3	52	0	1	60	14	4	1	0	0	19	105	200	15	1	0	321	0	226	31	1	0	258	658
5:45 PM	11	0	60	0	0	71	11	0	1	0	1	12	100	193	20	0	1	313	0	216	39	0	1	255	651
Hourly Total	43	4	230	0	1	277	63	8	3	0	3	74	421	798	66	1	1	1286	1	892	144	1	2	1038	2675
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
Grand Total	488	35	1810	0	16	2333	478	41	37	0	6	556	1673	4808	538	9	8	7028	9	4590	403	3	3	5005	14922
Approach %	20.9	1.5	77.6	0.0	-	-	86.0	7.4	6.7	0.0	-	-	23.8	68.4	7.7	0.1	-	-	0.2	91.7	8.1	0.1	-	-	-
Total %	3.3	0.2	12.1	0.0	-	15.6	3.2	0.3	0.2	0.0	-	3.7	11.2	32.2	3.6	0.1	-	47.1	0.1	30.8	2.7	0.0	-	33.5	-
Lights	481	35	1762	0	-	2278	471	41	36	0	-	548	1628	4542	519	9	-	6698	9	4359	398	3	-	4769	14293
% Lights	98.6	100.0	97.3	-	-	97.6	98.5	100.0	97.3	-	-	98.6	97.3	94.5	96.5	100.0	-	95.3	100.0	95.0	98.8	100.0	-	95.3	95.8
Mediums	7	0	48	0	-	55	7	0	1	0	-	8	43	187	15	0	-	245	0	147	5	0	-	152	460
% Mediums	1.4	0.0	2.7	-	-	2.4	1.5	0.0	2.7	-	-	1.4	2.6	3.9	2.8	0.0	-	3.5	0.0	3.2	1.2	0.0	-	3.0	3.1
Articulated Trucks	0	0	0	0	-	0	0	0	0	0	-	0	2	79	4	0	-	85	0	84	0	0	-	84	169
% Articulated Trucks	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.1	1.6	0.7	0.0	-	1.2	0.0	1.8	0.0	0.0	-	1.7	1.1
Pedestrians	-	-	-	-	16	-	-	-	-	-	6	-	-	-	-	-	8	-	-	-	-	-	3	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-

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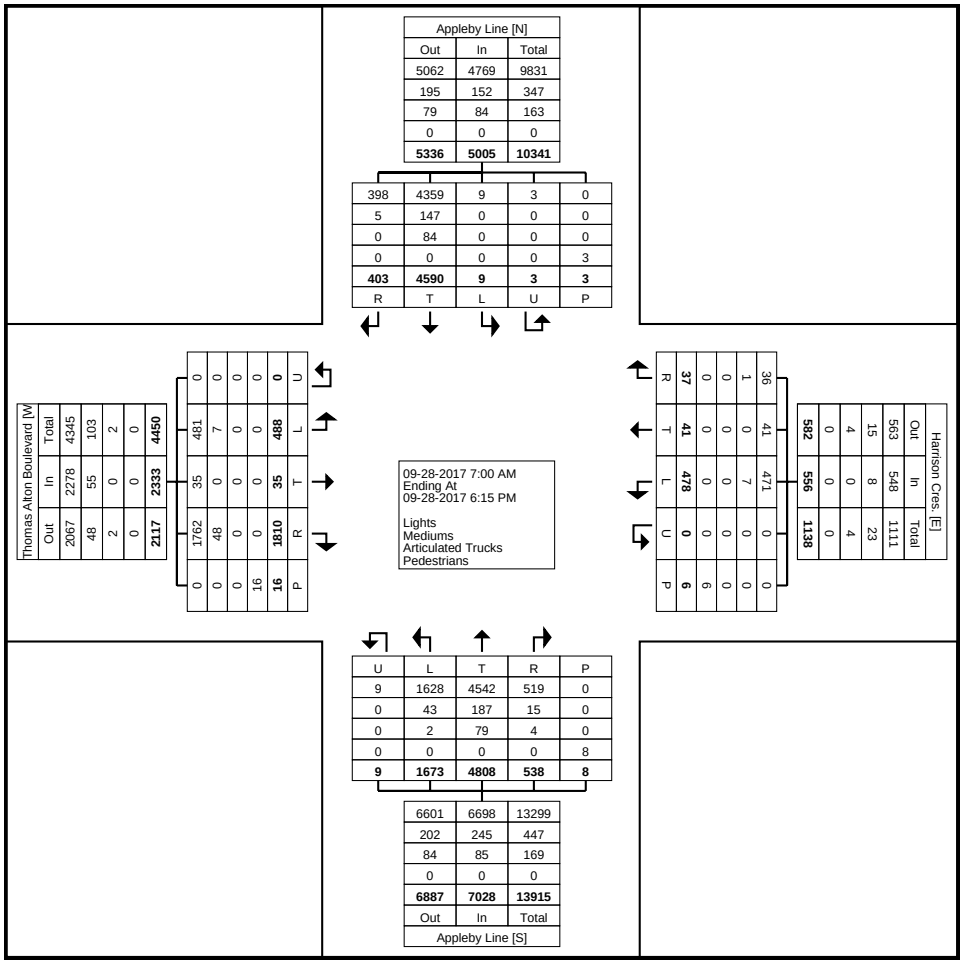
Start Date: 09-28-2017



Turning Movement Data Plot

Paradigm Transportation Solutions Limited
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Cambridge, Ontario, Canada N1R 8J8
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Count Name: Appleby Line & Thomas Alton Boulevard - Thursday
Site Code:
Start Date: 09-28-2017

Turning Movement Peak Hour Data (7:30 AM)

Start Time	Thomas Alton Boulevard Eastbound						Harrison Cres. Westbound						Appleby Line Northbound						Appleby Line Southbound						Int. Total
	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	
7:30 AM	51	0	98	0	1	149	6	1	1	0	0	8	20	270	10	0	0	300	1	160	3	0	0	164	621
7:45 AM	57	2	102	0	0	161	8	1	0	0	0	9	29	214	13	0	0	256	0	155	5	0	0	160	586
8:00 AM	39	1	102	0	1	142	6	0	1	0	0	7	24	243	5	0	0	272	1	167	3	1	0	172	593
8:15 AM	30	0	79	0	1	109	3	0	0	0	0	3	37	192	6	0	0	235	0	176	5	0	0	181	528
Total	177	3	381	0	3	561	23	2	2	0	0	27	110	919	34	0	0	1063	2	658	16	1	0	677	2328
Approach %	31.6	0.5	67.9	0.0	-	-	85.2	7.4	7.4	0.0	-	-	10.3	86.5	3.2	0.0	-	-	0.3	97.2	2.4	0.1	-	-	-
Total %	7.6	0.1	16.4	0.0	-	24.1	1.0	0.1	0.1	0.0	-	1.2	4.7	39.5	1.5	0.0	-	45.7	0.1	28.3	0.7	0.0	-	29.1	-
PHF	0.776	0.375	0.934	0.000	-	0.871	0.719	0.500	0.500	0.000	-	0.750	0.743	0.851	0.654	0.000	-	0.886	0.500	0.935	0.800	0.250	-	0.935	0.937
Lights	174	3	373	0	-	550	23	2	1	0	-	26	101	886	31	0	-	1018	2	628	15	1	-	646	2240
% Lights	98.3	100.0	97.9	-	-	98.0	100.0	100.0	50.0	-	-	96.3	91.8	96.4	91.2	-	-	95.8	100.0	95.4	93.8	100.0	-	95.4	96.2
Mediums	3	0	8	0	-	11	0	0	1	0	-	1	9	24	2	0	-	35	0	17	1	0	-	18	65
% Mediums	1.7	0.0	2.1	-	-	2.0	0.0	0.0	50.0	-	-	3.7	8.2	2.6	5.9	-	-	3.3	0.0	2.6	6.3	0.0	-	2.7	2.8
Articulated Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	9	1	0	-	10	0	13	0	0	-	13	23
% Articulated Trucks	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	1.0	2.9	-	-	0.9	0.0	2.0	0.0	0.0	-	1.9	1.0
Pedestrians	-	-	-	-	3	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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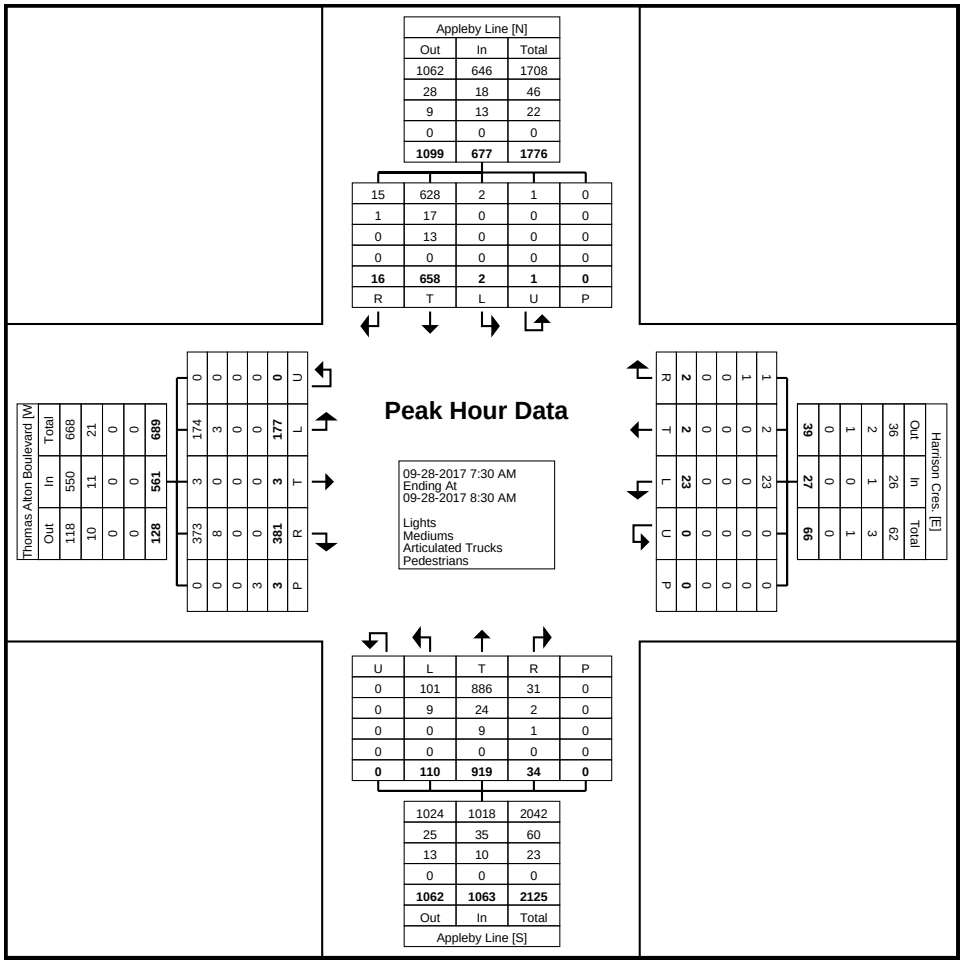
Site Code:
Start Date: 09-28-2017



Turning Movement Peak Hour Data Plot (7:30 AM)

Paradigm Transportation Solutions Limited
5A-150 Pinebush Rd

Cambridge, Ontario, Canada N1R 8J8
519-896-3163 dcobean@ptsl.com

Count Name: Appleby Line & Thomas Alton Boulevard - Thursday
Site Code:
Start Date: 09-28-2017

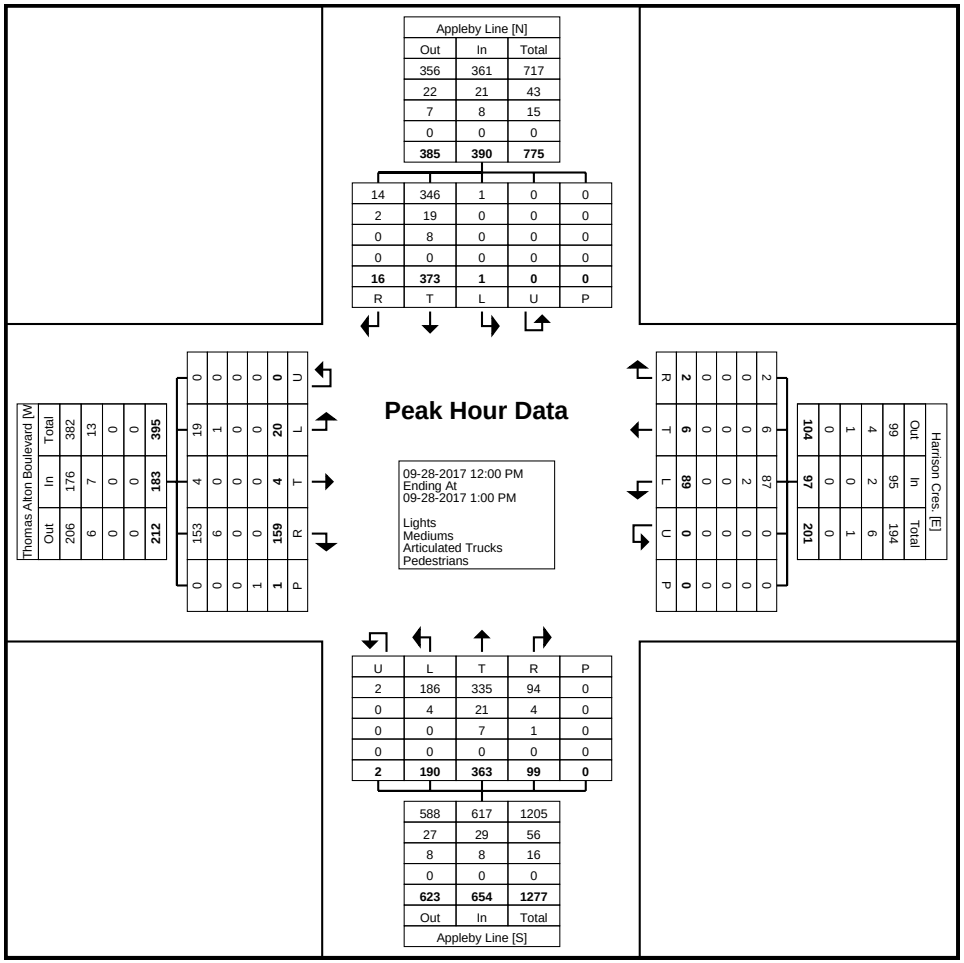
Turning Movement Peak Hour Data (12:00 PM)

Start Time	Thomas Alton Boulevard Eastbound						Harrison Cres. Westbound						Appleby Line Northbound						Appleby Line Southbound						
	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Int. Total
12:00 PM	0	2	44	0	0	46	23	0	0	0	0	23	48	85	24	0	0	157	0	98	3	0	0	101	327
12:15 PM	9	2	34	0	0	45	25	1	0	0	0	26	46	88	20	1	0	155	0	108	3	0	0	111	337
12:30 PM	9	0	34	0	0	43	24	2	1	0	0	27	46	98	24	1	0	169	1	90	6	0	0	97	336
12:45 PM	2	0	47	0	1	49	17	3	1	0	0	21	50	92	31	0	0	173	0	77	4	0	0	81	324
Total	20	4	159	0	1	183	89	6	2	0	0	97	190	363	99	2	0	654	1	373	16	0	0	390	1324
Approach %	10.9	2.2	86.9	0.0	-	-	91.8	6.2	2.1	0.0	-	-	29.1	55.5	15.1	0.3	-	-	0.3	95.6	4.1	0.0	-	-	-
Total %	1.5	0.3	12.0	0.0	-	13.8	6.7	0.5	0.2	0.0	-	7.3	14.4	27.4	7.5	0.2	-	49.4	0.1	28.2	1.2	0.0	-	29.5	-
PHF	0.556	0.500	0.846	0.000	-	0.934	0.890	0.500	0.500	0.000	-	0.898	0.950	0.926	0.798	0.500	-	0.945	0.250	0.863	0.667	0.000	-	0.878	0.982
Lights	19	4	153	0	-	176	87	6	2	0	-	95	186	335	94	2	-	617	1	346	14	0	-	361	1249
% Lights	95.0	100.0	96.2	-	-	96.2	97.8	100.0	100.0	-	-	97.9	97.9	92.3	94.9	100.0	-	94.3	100.0	92.8	87.5	-	-	92.6	94.3
Mediums	1	0	6	0	-	7	2	0	0	0	-	2	4	21	4	0	-	29	0	19	2	0	-	21	59
% Mediums	5.0	0.0	3.8	-	-	3.8	2.2	0.0	0.0	-	-	2.1	2.1	5.8	4.0	0.0	-	4.4	0.0	5.1	12.5	-	-	5.4	4.5
Articulated Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	7	1	0	-	8	0	8	0	0	-	8	16
% Articulated Trucks	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	1.9	1.0	0.0	-	1.2	0.0	2.1	0.0	-	-	2.1	1.2
Pedestrians	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Paradigm Transportation Solutions Limited
5A-150 Pinebush Rd

Cambridge, Ontario, Canada N1R 8J8
519-896-3163 dcobean@ptsl.com

Count Name: Appleby Line & Thomas Alton Boulevard - Thursday
Site Code:
Start Date: 09-28-2017



Turning Movement Peak Hour Data Plot (12:00 PM)

Paradigm Transportation Solutions Limited
5A-150 Pinebush Rd

Cambridge, Ontario, Canada N1R 8J8
519-896-3163 dcobean@ptsl.com

Count Name: Appleby Line & Thomas Alton Boulevard - Thursday
Site Code:
Start Date: 09-28-2017

Turning Movement Peak Hour Data (4:45 PM)

Start Time	Thomas Alton Boulevard Eastbound						Harrison Cres. Westbound						Appleby Line Northbound						Appleby Line Southbound						Int. Total
	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	
4:45 PM	6	3	60	0	1	69	16	0	1	0	0	17	96	232	14	0	0	342	0	252	37	0	0	289	717
5:00 PM	13	1	54	0	0	68	19	2	0	0	1	21	108	207	14	0	0	329	1	231	37	0	0	269	687
5:15 PM	14	0	64	0	0	78	19	2	1	0	1	22	108	198	17	0	0	323	0	219	37	0	1	256	679
5:30 PM	5	3	52	0	1	60	14	4	1	0	0	19	105	200	15	1	0	321	0	226	31	1	0	258	658
Total	38	7	230	0	2	275	68	8	3	0	2	79	417	837	60	1	0	1315	1	928	142	1	1	1072	2741
Approach %	13.8	2.5	83.6	0.0	-	-	86.1	10.1	3.8	0.0	-	-	31.7	63.7	4.6	0.1	-	-	0.1	86.6	13.2	0.1	-	-	-
Total %	1.4	0.3	8.4	0.0	-	10.0	2.5	0.3	0.1	0.0	-	2.9	15.2	30.5	2.2	0.0	-	48.0	0.0	33.9	5.2	0.0	-	39.1	-
PHF	0.679	0.583	0.898	0.000	-	0.881	0.895	0.500	0.750	0.000	-	0.898	0.965	0.902	0.882	0.250	-	0.961	0.250	0.921	0.959	0.250	-	0.927	0.956
Lights	38	7	225	0	-	270	68	8	3	0	-	79	415	813	60	1	-	1289	1	909	141	1	-	1052	2690
% Lights	100.0	100.0	97.8	-	-	98.2	100.0	100.0	100.0	-	-	100.0	99.5	97.1	100.0	100.0	-	98.0	100.0	98.0	99.3	100.0	-	98.1	98.1
Mediums	0	0	5	0	-	5	0	0	0	0	-	0	2	16	0	0	-	18	0	16	1	0	-	17	40
% Mediums	0.0	0.0	2.2	-	-	1.8	0.0	0.0	0.0	-	-	0.0	0.5	1.9	0.0	0.0	-	1.4	0.0	1.7	0.7	0.0	-	1.6	1.5
Articulated Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	8	0	0	-	8	0	3	0	0	-	3	11
% Articulated Trucks	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	1.0	0.0	0.0	-	0.6	0.0	0.3	0.0	0.0	-	0.3	0.4
Pedestrians	-	-	-	-	2	-	-	-	-	-	2	-	-	-	-	-	0	-	-	-	-	-	1	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-

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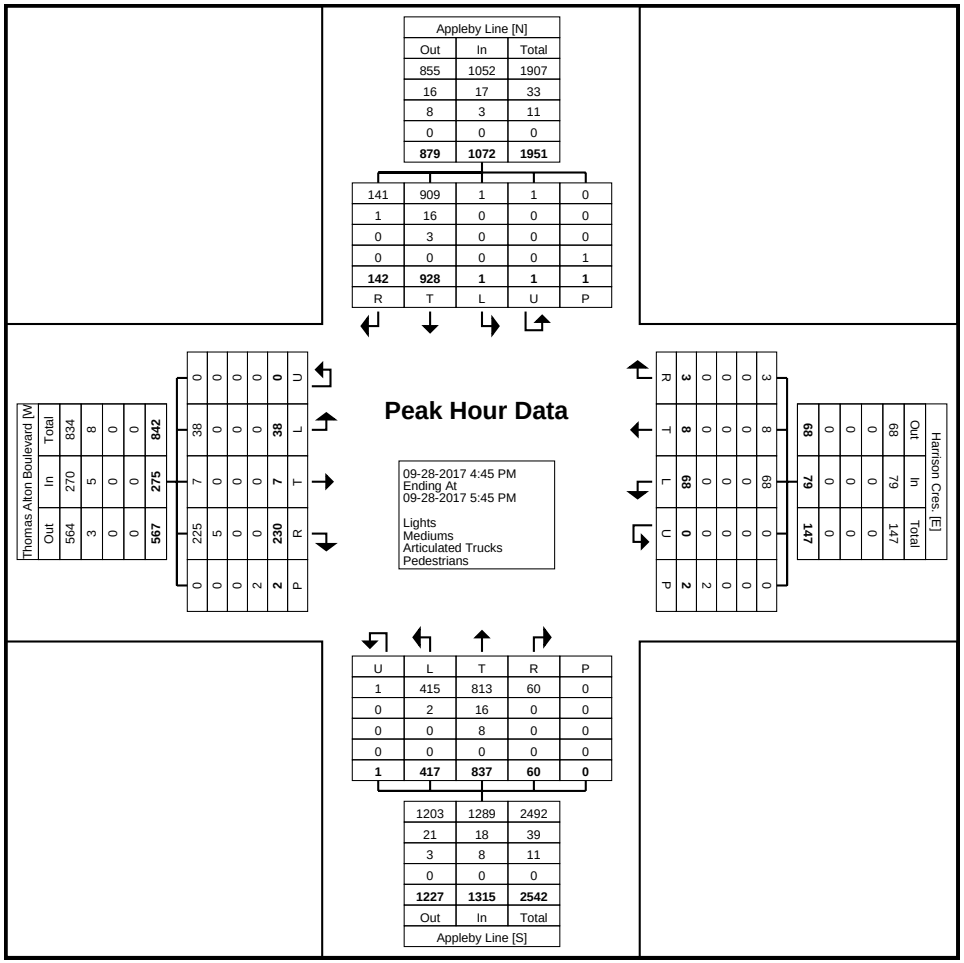


Turning Movement Peak Hour Data Plot (4:45 PM)

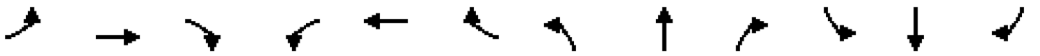
Paradigm Transportation Solutions Limited
5A-150 Pinebush Rd

Cambridge, Ontario, Canada N1R 8J8
519-896-3163 dcobean@ptsl.com

Count Name: Appleby Line & Thomas Alton Boulevard - Thursday
Site Code:
Start Date: 09-28-2017

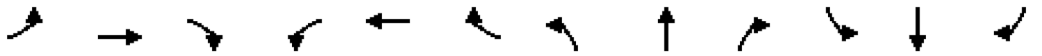
Appendix C

Existing Traffic Operations



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	105	56	7	78	0	57	0	3	0	0	1
Future Volume (vph)	1	105	56	7	78	0	57	0	3	0	0	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	15.0		0.0	20.0		0.0	0.0		0.0	0.0		0.0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (m)	7.5			7.5			7.5			7.5		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.948						0.994			0.865	
Flt Protected	0.950			0.950				0.955				
Satd. Flow (prot)	1805	1691	0	1805	1610	0	0	1804	0	0	1644	0
Flt Permitted	0.950			0.950				0.955				
Satd. Flow (perm)	1805	1691	0	1805	1610	0	0	1804	0	0	1644	0
Link Speed (k/h)		60			60			50			50	
Link Distance (m)		124.0			132.7			113.2			175.1	
Travel Time (s)		7.4			8.0			8.2			12.6	
Confl. Peds. (#/hr)			3	3			1					1
Peak Hour Factor	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71
Heavy Vehicles (%)	0%	10%	0%	0%	18%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	1	148	79	10	110	0	80	0	4	0	0	1
Shared Lane Traffic (%)												
Lane Group Flow (vph)	1	227	0	10	110	0	0	84	0	0	1	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.6			3.6			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane		Yes										
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Sign Control		Free			Free			Stop			Stop	

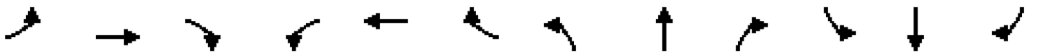
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 26.1%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	105	56	7	78	0	57	0	3	0	0	1
Future Volume (Veh/h)	1	105	56	7	78	0	57	0	3	0	0	1
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71
Hourly flow rate (vph)	1	148	79	10	110	0	80	0	4	0	0	1
Pedestrians		1						3				
Lane Width (m)		3.6						3.6				
Walking Speed (m/s)		1.2						1.2				
Percent Blockage		0						0				
Right turn flare (veh)												
Median type		TWLTL			None							
Median storage veh)		2										
Upstream signal (m)					133							
pX, platoon unblocked												
vC, conflicting volume	110			230			325	323	191	284	362	111
vC1, stage 1 conf vol							193	193		130	130	
vC2, stage 2 conf vol							132	130		154	232	
vCu, unblocked vol	110			230			325	323	191	284	362	111
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)							6.1	5.5		6.1	5.5	
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			99			89	100	100	100	100	100
cM capacity (veh/h)	1493			1346			746	688	854	771	660	947

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1
Volume Total	1	227	10	110	84	1
Volume Left	1	0	10	0	80	0
Volume Right	0	79	0	0	4	1
cSH	1493	1700	1346	1700	751	947
Volume to Capacity	0.00	0.13	0.01	0.06	0.11	0.00
Queue Length 95th (m)	0.0	0.0	0.2	0.0	2.8	0.0
Control Delay (s/veh)	7.4	0.0	7.7	0.0	10.4	8.8
Lane LOS	A		A		B	A
Approach Delay (s/veh)	0.0		0.6		10.4	8.8
Approach LOS					B	A

Intersection Summary				
Average Delay	2.2			
Intersection Capacity Utilization	26.1%	ICU Level of Service		A
Analysis Period (min)	15			



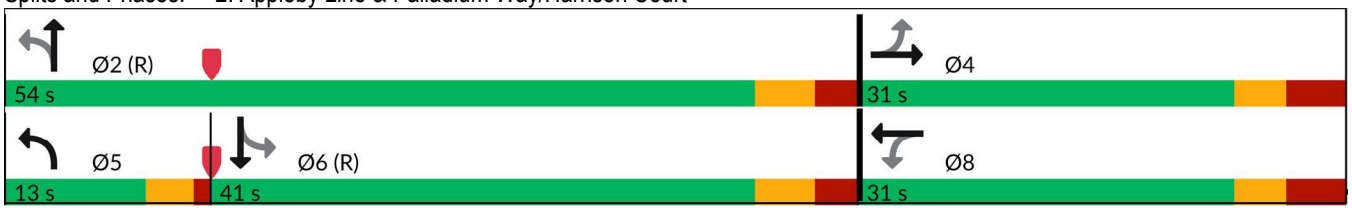
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	55	8	37	36	2	11	39	680	15	14	660	34
Future Volume (vph)	55	8	37	36	2	11	39	680	15	14	660	34
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	45.0		0.0	60.0		0.0	0.0		0.0	70.0		0.0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (m)	7.5			7.5			7.5			7.5		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	1.00	0.91	0.91
Ped Bike Factor		0.99		1.00								
Frt		0.876			0.871			0.997			0.993	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	1348	0	1752	1655	0	1492	4923	0	1805	4994	0
Flt Permitted	0.748			0.726			0.338			0.362		
Satd. Flow (perm)	1421	1348	0	1337	1655	0	531	4923	0	688	4994	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		39			12			6			11	
Link Speed (k/h)		60			50			60			60	
Link Distance (m)		132.7			140.4			91.2			346.3	
Travel Time (s)		8.0			10.1			5.5			20.8	
Confl. Peds. (#/hr)			1	1								
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	0%	13%	24%	3%	0%	0%	21%	5%	7%	0%	3%	6%
Adj. Flow (vph)	58	8	39	38	2	12	41	716	16	15	695	36
Shared Lane Traffic (%)												
Lane Group Flow (vph)	58	47	0	38	14	0	41	732	0	15	731	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		5.6			3.6			3.6			6.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (m)	2.0	10.0		2.0	10.0		2.0	10.0		2.0	10.0	
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Size(m)	2.0	0.6		2.0	0.6		2.0	0.6		2.0	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

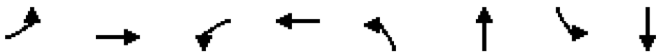
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		Perm	NA	
Protected Phases		4			8		5	2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		5	2		6	6	
Switch Phase												
Minimum Initial (s)	8.0	8.0		8.0	8.0		7.0	8.0		8.0	8.0	
Minimum Split (s)	31.0	31.0		31.0	31.0		11.0	33.4		41.0	41.0	
Total Split (s)	31.0	31.0		31.0	31.0		13.0	54.0		41.0	41.0	
Total Split (%)	36.5%	36.5%		36.5%	36.5%		15.3%	63.5%		48.2%	48.2%	
Maximum Green (s)	23.9	23.9		23.9	23.9		9.0	47.6		34.6	34.6	
Yellow Time (s)	3.3	3.3		3.3	3.3		3.0	3.7		3.7	3.7	
All-Red Time (s)	3.8	3.8		3.8	3.8		1.0	2.7		2.7	2.7	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	7.1	7.1		7.1	7.1		4.0	6.4		6.4	6.4	
Lead/Lag							Lead			Lag	Lag	
Lead-Lag Optimize?							Yes			Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		None	C-Max		C-Max	C-Max	
Walk Time (s)	7.0	7.0		7.0	7.0			7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0		10.0	10.0			19.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0		0	0			0		0	0	
Act Effct Green (s)	9.6	9.6		9.6	9.6		67.4	66.2		59.6	59.6	
Actuated g/C Ratio	0.11	0.11		0.11	0.11		0.79	0.78		0.70	0.70	
v/c Ratio	0.36	0.25		0.25	0.07		0.08	0.19		0.03	0.21	
Control Delay (s/veh)	40.9	17.2		38.0	19.1		2.8	2.8		8.0	6.6	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay (s/veh)	40.9	17.2		38.0	19.1		2.8	2.8		8.0	6.6	
LOS	D	B		D	B		A	A		A	A	
Approach Delay (s/veh)		30.3			32.9			2.8			6.7	
Approach LOS		C			C			A			A	

Intersection Summary

Area Type: Other
Cycle Length: 85
Actuated Cycle Length: 85
Offset: 34 (40%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 85
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.36
Intersection Signal Delay (s/veh): 7.2 Intersection LOS: A
Intersection Capacity Utilization 46.6% ICU Level of Service A
Analysis Period (min) 15

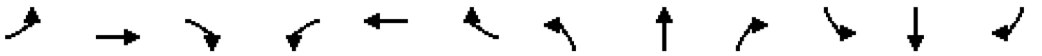
Splits and Phases: 2: Appleby Line & Palladium Way/Harrison Court





Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	58	47	38	14	41	732	15	731
v/c Ratio	0.36	0.25	0.25	0.07	0.08	0.19	0.03	0.21
Control Delay (s/veh)	40.9	17.2	38.0	19.1	2.8	2.8	8.0	6.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	40.9	17.2	38.0	19.1	2.8	2.8	8.0	6.6
Queue Length 50th (m)	8.8	1.2	5.7	0.3	1.0	8.5	0.9	17.5
Queue Length 95th (m)	19.1	10.1	14.0	5.2	3.2	13.7	3.5	26.3
Internal Link Dist (m)		108.7		116.4		67.2		322.3
Turn Bay Length (m)	45.0		60.0				70.0	
Base Capacity (vph)	399	407	375	473	522	3838	482	3507
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.15	0.12	0.10	0.03	0.08	0.19	0.03	0.21

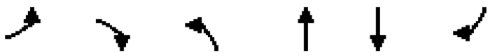
Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	55	8	37	36	2	11	39	680	15	14	660	34
Future Volume (vph)	55	8	37	36	2	11	39	680	15	14	660	34
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.1	7.1		7.1	7.1		4.0	6.4		6.4	6.4	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.91		1.00	0.91	
Frpb, ped/bikes	1.00	0.99		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.88		1.00	0.87		1.00	1.00		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1805	1347		1750	1656		1492	4922		1805	4992	
Flt Permitted	0.75	1.00		0.73	1.00		0.34	1.00		0.36	1.00	
Satd. Flow (perm)	1422	1347		1338	1656		530	4922		688	4992	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	58	8	39	38	2	12	41	716	16	15	695	36
RTOR Reduction (vph)	0	35	0	0	11	0	0	2	0	0	4	0
Lane Group Flow (vph)	58	12	0	38	3	0	41	730	0	15	727	0
Confl. Peds. (#/hr)			1	1								
Heavy Vehicles (%)	0%	13%	24%	3%	0%	0%	21%	5%	7%	0%	3%	6%
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		Perm	NA	
Protected Phases		4			8		5	2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	8.0	8.0		8.0	8.0		63.5	63.5		55.3	55.3	
Effective Green, g (s)	8.0	8.0		8.0	8.0		63.5	63.5		55.3	55.3	
Actuated g/C Ratio	0.09	0.09		0.09	0.09		0.75	0.75		0.65	0.65	
Clearance Time (s)	7.1	7.1		7.1	7.1		4.0	6.4		6.4	6.4	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	133	126		125	155		443	3677		447	3247	
v/s Ratio Prot		0.01			0.00		0.00	c0.15			c0.15	
v/s Ratio Perm	c0.04			0.03			0.06			0.02		
v/c Ratio	0.44	0.09		0.30	0.02		0.09	0.20		0.03	0.22	
Uniform Delay, d1	36.4	35.2		35.9	34.9		2.9	3.2		5.3	6.1	
Progression Factor	1.00	1.00		1.00	1.00		0.83	0.80		1.00	1.00	
Incremental Delay, d2	2.3	0.3		1.4	0.1		0.1	0.1		0.1	0.2	
Delay (s)	38.7	35.5		37.3	35.0		2.5	2.7		5.4	6.2	
Level of Service	D	D		D	C		A	A		A	A	
Approach Delay (s/veh)		37.2			36.7			2.7			6.2	
Approach LOS		D			D			A			A	

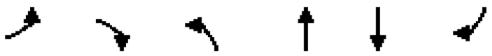
Intersection Summary			
HCM 2000 Control Delay (s/veh)	7.5	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.25		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	17.5
Intersection Capacity Utilization	46.6%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	1	0	751	730	4
Future Volume (vph)	0	1	0	751	730	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0	0.0	25.0			0.0
Storage Lanes	0	1	1			0
Taper Length (m)	7.5		7.5			
Lane Util. Factor	1.00	1.00	1.00	0.86	0.91	0.91
Ped Bike Factor						
Frt		0.865			0.999	
Flt Protected						
Satd. Flow (prot)	0	1644	0	6225	4984	0
Flt Permitted						
Satd. Flow (perm)	0	1644	0	6225	4984	0
Link Speed (k/h)	50			60	60	
Link Distance (m)	53.7			143.7	91.2	
Travel Time (s)	3.9			8.6	5.5	
Confl. Peds. (#/hr)			1			1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	5%	4%	0%
Adj. Flow (vph)	0	1	0	782	760	4
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1	0	782	764	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	0.0			6.6	6.6	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25	15	25			15
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 24.2%		ICU Level of Service A	
Analysis Period (min) 15			



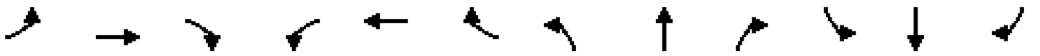
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	1	0	751	730	4
Future Volume (Veh/h)	0	1	0	751	730	4
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Hourly flow rate (vph)	0	1	0	782	760	4
Pedestrians	1					
Lane Width (m)	3.6					
Walking Speed (m/s)	1.2					
Percent Blockage	0					
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (m)				144	91	
pX, platoon unblocked	0.95	0.95	0.95			
vC, conflicting volume	959	256	765			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	781	43	578			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	100	100			
cM capacity (veh/h)	320	974	957			

Direction, Lane #	EB 1	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3
Volume Total	1	196	196	196	196	304	304	156
Volume Left	0	0	0	0	0	0	0	0
Volume Right	1	0	0	0	0	0	0	4
cSH	974	1700	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.00	0.12	0.12	0.12	0.12	0.18	0.18	0.09
Queue Length 95th (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (s/veh)	8.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	A							
Approach Delay (s/veh)	8.7	0.0				0.0		
Approach LOS	A							

Intersection Summary				
Average Delay	0.0			
Intersection Capacity Utilization	24.2%	ICU Level of Service		A
Analysis Period (min)	15			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	43	394	17	44	139	26	15	19	53	2	7	40
Future Volume (vph)	43	394	17	44	139	26	15	19	53	2	7	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.995			0.983			0.918			0.888	
Flt Protected		0.995			0.990			0.991			0.998	
Satd. Flow (prot)	0	1845	0	0	1734	0	0	1688	0	0	1643	0
Flt Permitted		0.995			0.990			0.991			0.998	
Satd. Flow (perm)	0	1845	0	0	1734	0	0	1688	0	0	1643	0
Link Speed (k/h)		40			40			40			50	
Link Distance (m)		200.7			141.3			98.5			71.1	
Travel Time (s)		18.1			12.7			8.9			5.1	
Confl. Peds. (#/hr)	9		18	18		9			1	1		
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Heavy Vehicles (%)	0%	2%	6%	0%	10%	0%	7%	0%	2%	0%	0%	3%
Adj. Flow (vph)	51	469	20	52	165	31	18	23	63	2	8	48
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	540	0	0	248	0	0	104	0	0	58	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		0.0			0.0			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	45.1%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	43	394	17	44	139	26	15	19	53	2	7	40
Future Volume (Veh/h)	43	394	17	44	139	26	15	19	53	2	7	40
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Hourly flow rate (vph)	51	469	20	52	165	31	18	23	63	2	8	48
Pedestrians					1			18			9	
Lane Width (m)					3.6			3.6			3.6	
Walking Speed (m/s)					1.2			1.2			1.2	
Percent Blockage					0			2			1	
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (m)					141							
pX, platoon unblocked												
vC, conflicting volume	205			507			936	908	498	950	903	190
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	205			507			936	908	498	950	903	190
tC, single (s)	4.1			4.1			7.2	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.6	4.0	3.3	3.5	4.0	3.3
p0 queue free %	96			95			91	91	89	99	97	94
cM capacity (veh/h)	1368			1052			200	248	563	182	250	843

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	540	248	104	58
Volume Left	51	52	18	2
Volume Right	20	31	63	48
cSH	1368	1052	353	581
Volume to Capacity	0.04	0.05	0.29	0.10
Queue Length 95th (m)	0.9	1.2	9.0	2.5
Control Delay (s/veh)	1.1	2.2	19.4	11.9
Lane LOS	A	A	C	B
Approach Delay (s/veh)	1.1	2.2	19.4	11.9
Approach LOS			C	B

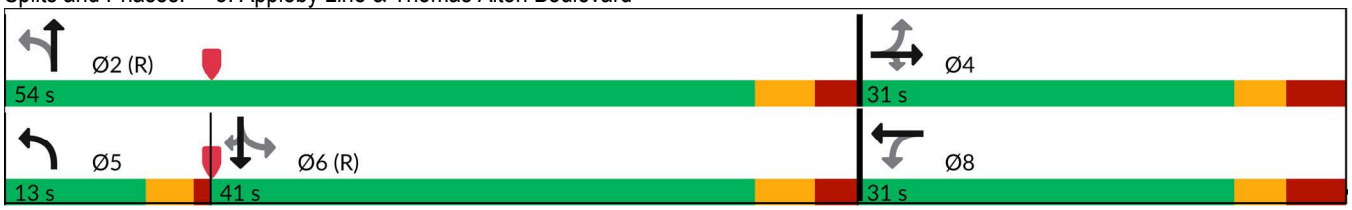
Intersection Summary			
Average Delay	4.0		
Intersection Capacity Utilization	45.1%	ICU Level of Service	A
Analysis Period (min)	15		

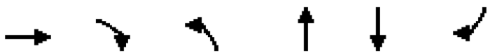
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	129	0	314	0	0	0	168	623	0	0	706	36
Future Volume (vph)	129	0	314	0	0	0	168	623	0	0	706	36
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		40.0	30.0		0.0	130.0		0.0	30.0		60.0
Storage Lanes	0		1	1		0	1		0	1		1
Taper Length (m)	7.5			7.5			7.5			7.5		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	1.00	0.91	1.00
Ped Bike Factor			0.99				1.00					0.98
Frt			0.850									0.850
Flt Protected		0.950					0.950					
Satd. Flow (prot)	0	1787	1599	1900	1900	0	1687	4803	0	1900	4988	1495
Flt Permitted		0.757					0.313					
Satd. Flow (perm)	0	1424	1577	1900	1900	0	555	4803	0	1900	4988	1458
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			295									104
Link Speed (k/h)		40			50			60			60	
Link Distance (m)		141.3			116.2			309.3			143.7	
Travel Time (s)		12.7			8.4			18.6			8.6	
Confl. Peds. (#/hr)			1	1			2					2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	1%	0%	1%	0%	0%	0%	7%	8%	0%	0%	4%	8%
Adj. Flow (vph)	140	0	341	0	0	0	183	677	0	0	767	39
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	140	341	0	0	0	183	677	0	0	767	39
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1	1	2		1	2		1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (m)	2.0	10.0	2.0	2.0	10.0		2.0	10.0		2.0	10.0	2.0
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Size(m)	2.0	0.6	2.0	2.0	0.6		2.0	0.6		2.0	0.6	2.0
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA	Perm	Perm			pm+pt	NA		Perm	NA	Perm
Protected Phases		4			8		5	2			6	
Permitted Phases	4		4	8			2			6		6
Detector Phase	4	4	4	8	8		5	2		6	6	6
Switch Phase												
Minimum Initial (s)	8.0	8.0	8.0	8.0	8.0		7.0	8.0		8.0	8.0	8.0
Minimum Split (s)	31.0	31.0	31.0	31.0	31.0		11.0	33.4		41.0	41.0	41.0
Total Split (s)	31.0	31.0	31.0	31.0	31.0		13.0	54.0		41.0	41.0	41.0
Total Split (%)	36.5%	36.5%	36.5%	36.5%	36.5%		15.3%	63.5%		48.2%	48.2%	48.2%
Maximum Green (s)	23.9	23.9	23.9	23.9	23.9		9.0	47.6		34.6	34.6	34.6
Yellow Time (s)	3.3	3.3	3.3	3.3	3.3		3.0	3.7		3.7	3.7	3.7
All-Red Time (s)	3.8	3.8	3.8	3.8	3.8		1.0	2.7		2.7	2.7	2.7
Lost Time Adjust (s)		0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)		7.1	7.1	7.1	7.1		4.0	6.4		6.4	6.4	6.4
Lead/Lag							Lead			Lag	Lag	Lag
Lead-Lag Optimize?							Yes			Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	3.0
Recall Mode	None	None	None	None	None		None	C-Max		C-Max	C-Max	C-Max
Walk Time (s)	7.0	7.0	7.0	7.0	7.0			7.0		7.0	7.0	7.0
Flash Don't Walk (s)	10.0	10.0	10.0	10.0	10.0			19.0		10.0	10.0	10.0
Pedestrian Calls (#/hr)	0	0	0	0	0			0		0	0	0
Act Effct Green (s)		13.8	13.8				60.1	57.7			44.7	44.7
Actuated g/C Ratio		0.16	0.16				0.71	0.68			0.53	0.53
v/c Ratio		0.61	0.68				0.36	0.21			0.29	0.05
Control Delay (s/veh)		43.2	13.4				6.9	5.8			10.7	3.1
Queue Delay		0.0	0.0				0.0	0.0			0.0	0.0
Total Delay (s/veh)		43.2	13.4				6.9	5.8			10.7	3.1
LOS		D	B				A	A			B	A
Approach Delay (s/veh)		22.1						6.0			10.3	
Approach LOS		C						A			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 85			
Actuated Cycle Length: 85			
Offset: 52 (61%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 85			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.68			
Intersection Signal Delay (s/veh): 11.3		Intersection LOS: B	
Intersection Capacity Utilization 45.4%		ICU Level of Service A	
Analysis Period (min) 15			

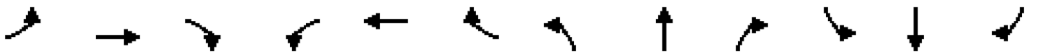
Splits and Phases: 5: Appleby Line & Thomas Alton Boulevard





Lane Group	EBT	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	140	341	183	677	767	39
v/c Ratio	0.61	0.68	0.36	0.21	0.29	0.05
Control Delay (s/veh)	43.2	13.4	6.9	5.8	10.7	3.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	43.2	13.4	6.9	5.8	10.7	3.1
Queue Length 50th (m)	21.2	6.5	8.0	12.6	27.2	0.0
Queue Length 95th (m)	35.4	28.3	18.9	22.1	44.5	2.4
Internal Link Dist (m)	117.3			285.3	119.7	
Turn Bay Length (m)		40.0	130.0			60.0
Base Capacity (vph)	400	655	522	3259	2625	816
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.35	0.52	0.35	0.21	0.29	0.05

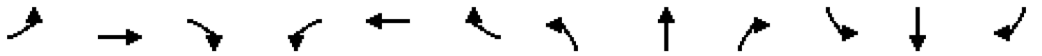
Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	129	0	314	0	0	0	168	623	0	0	706	36
Future Volume (vph)	129	0	314	0	0	0	168	623	0	0	706	36
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		7.1	7.1				4.0	6.4			6.4	6.4
Lane Util. Factor		1.00	1.00				1.00	0.91			0.91	1.00
Frpb, ped/bikes		1.00	0.99				1.00	1.00			1.00	0.98
Flpb, ped/bikes		1.00	1.00				1.00	1.00			1.00	1.00
Frt		1.00	0.85				1.00	1.00			1.00	0.85
Flt Protected		0.95	1.00				0.95	1.00			1.00	1.00
Satd. Flow (prot)		1787	1577				1686	4803			4988	1458
Flt Permitted		0.76	1.00				0.31	1.00			1.00	1.00
Satd. Flow (perm)		1424	1577				556	4803			4988	1458
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	140	0	341	0	0	0	183	677	0	0	767	39
RTOR Reduction (vph)	0	0	247	0	0	0	0	0	0	0	0	18
Lane Group Flow (vph)	0	140	94	0	0	0	183	677	0	0	767	21
Confl. Peds. (#/hr)			1	1			2					2
Heavy Vehicles (%)	1%	0%	1%	0%	0%	0%	7%	8%	0%	0%	4%	8%
Turn Type	Perm	NA	Perm	Perm			pm+pt	NA		Perm	NA	Perm
Protected Phases		4			8		5	2			6	
Permitted Phases	4		4	8			2			6		6
Actuated Green, G (s)		13.8	13.8				57.7	57.7			44.8	44.8
Effective Green, g (s)		13.8	13.8				57.7	57.7			44.8	44.8
Actuated g/C Ratio		0.16	0.16				0.68	0.68			0.53	0.53
Clearance Time (s)		7.1	7.1				4.0	6.4			6.4	6.4
Vehicle Extension (s)		3.0	3.0				3.0	3.0			3.0	3.0
Lane Grp Cap (vph)		231	256				495	3260			2628	768
v/s Ratio Prot							c0.04	0.14			0.15	
v/s Ratio Perm		c0.10	0.06				c0.21					0.01
v/c Ratio		0.61	0.37				0.37	0.21			0.29	0.03
Uniform Delay, d1		33.1	31.7				5.1	5.1			11.2	9.6
Progression Factor		1.00	1.00				1.00	1.00			0.84	1.00
Incremental Delay, d2		4.4	0.9				0.5	0.1			0.3	0.1
Delay (s)		37.5	32.6				5.6	5.2			9.7	9.7
Level of Service		D	C				A	A			A	A
Approach Delay (s/veh)		34.0			0.0			5.3			9.7	
Approach LOS		C			A			A			A	

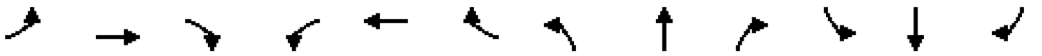
Intersection Summary					
HCM 2000 Control Delay (s/veh)	13.4	HCM 2000 Level of Service	B		
HCM 2000 Volume to Capacity ratio	0.43				
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	17.5		
Intersection Capacity Utilization	45.4%	ICU Level of Service	A		
Analysis Period (min)	15				

c Critical Lane Group



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	80	44	6	90	3	19	0	11	20	1	2
Future Volume (vph)	1	80	44	6	90	3	19	0	11	20	1	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	15.0		0.0	20.0		0.0	0.0		0.0	0.0		0.0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (m)	7.5			7.5			7.5			7.5		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.947			0.996			0.951			0.988	
Flt Protected	0.950			0.950				0.969			0.958	
Satd. Flow (prot)	1805	1621	0	1805	1710	0	0	1695	0	0	1798	0
Flt Permitted	0.950			0.950				0.969			0.958	
Satd. Flow (perm)	1805	1621	0	1805	1710	0	0	1695	0	0	1798	0
Link Speed (k/h)		60			60			50			50	
Link Distance (m)		124.0			132.7			113.2			175.1	
Travel Time (s)		7.4			8.0			8.2			12.6	
Confl. Peds. (#/hr)	1		2	2		1	2					2
Peak Hour Factor	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69
Heavy Vehicles (%)	0%	16%	2%	0%	11%	0%	0%	0%	9%	0%	0%	0%
Adj. Flow (vph)	1	116	64	9	130	4	28	0	16	29	1	3
Shared Lane Traffic (%)												
Lane Group Flow (vph)	1	180	0	9	134	0	0	44	0	0	33	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.6			3.6			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane		Yes										
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Sign Control		Free			Free			Stop			Stop	

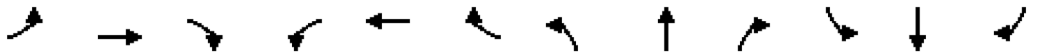
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 18.0%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	80	44	6	90	3	19	0	11	20	1	2
Future Volume (Veh/h)	1	80	44	6	90	3	19	0	11	20	1	2
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69
Hourly flow rate (vph)	1	116	64	9	130	4	28	0	16	29	1	3
Pedestrians		2						2			1	
Lane Width (m)		3.6						3.6			3.6	
Walking Speed (m/s)		1.2						1.2			1.2	
Percent Blockage		0						0			0	
Right turn flare (veh)												
Median type		TWLTL			None							
Median storage veh)		2										
Upstream signal (m)					133							
pX, platoon unblocked												
vC, conflicting volume	135			182			306	305	150	285	335	135
vC1, stage 1 conf vol							152	152		151	151	
vC2, stage 2 conf vol							154	153		134	184	
vCu, unblocked vol	135			182			306	305	150	285	335	135
tC, single (s)	4.1			4.1			7.1	6.5	6.3	7.1	6.5	6.2
tC, 2 stage (s)							6.1	5.5		6.1	5.5	
tF (s)	2.2			2.2			3.5	4.0	3.4	3.5	4.0	3.3
p0 queue free %	100			99			96	100	98	96	100	100
cM capacity (veh/h)	1461			1403			760	699	877	765	680	917

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1
Volume Total	1	180	9	134	44	33
Volume Left	1	0	9	0	28	29
Volume Right	0	64	0	4	16	3
cSH	1461	1700	1403	1700	799	774
Volume to Capacity	0.00	0.11	0.01	0.08	0.06	0.04
Queue Length 95th (m)	0.0	0.0	0.1	0.0	1.3	1.0
Control Delay (s/veh)	7.5	0.0	7.6	0.0	9.8	9.9
Lane LOS	A		A		A	A
Approach Delay (s/veh)	0.0		0.5		9.8	9.9
Approach LOS					A	A

Intersection Summary				
Average Delay	2.1			
Intersection Capacity Utilization	18.0%	ICU Level of Service		A
Analysis Period (min)	15			

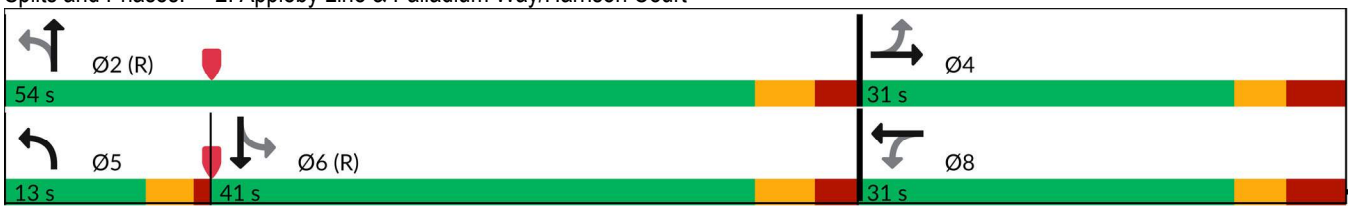


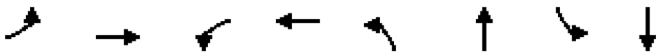
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	38	9	39	102	8	21	43	932	34	31	685	58
Future Volume (vph)	38	9	39	102	8	21	43	932	34	31	685	58
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	45.0		0.0	60.0		0.0	0.0		0.0	70.0		0.0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (m)	7.5			7.5			7.5			7.5		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	1.00	0.91	0.91
Ped Bike Factor		0.99		0.99								
Frt		0.878			0.891			0.995			0.988	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1719	1644	0	1787	1693	0	1805	5006	0	1805	4975	0
Flt Permitted	0.736			0.722			0.300			0.251		
Satd. Flow (perm)	1332	1644	0	1351	1693	0	570	5006	0	477	4975	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		44			24			10			19	
Link Speed (k/h)		60			50			60			60	
Link Distance (m)		132.7			140.4			91.2			346.3	
Travel Time (s)		8.0			10.1			5.5			20.8	
Confl. Peds. (#/hr)			4	4								
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	5%	0%	0%	1%	0%	0%	0%	3%	6%	0%	3%	3%
Adj. Flow (vph)	43	10	44	115	9	24	48	1047	38	35	770	65
Shared Lane Traffic (%)												
Lane Group Flow (vph)	43	54	0	115	33	0	48	1085	0	35	835	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		5.6			3.6			3.6			6.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (m)	2.0	10.0		2.0	10.0		2.0	10.0		2.0	10.0	
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Size(m)	2.0	0.6		2.0	0.6		2.0	0.6		2.0	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		Perm	NA	
Protected Phases		4			8		5	2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		5	2		6	6	
Switch Phase												
Minimum Initial (s)	8.0	8.0		8.0	8.0		7.0	8.0		8.0	8.0	
Minimum Split (s)	31.0	31.0		31.0	31.0		11.0	33.4		41.0	41.0	
Total Split (s)	31.0	31.0		31.0	31.0		13.0	54.0		41.0	41.0	
Total Split (%)	36.5%	36.5%		36.5%	36.5%		15.3%	63.5%		48.2%	48.2%	
Maximum Green (s)	23.9	23.9		23.9	23.9		9.0	47.6		34.6	34.6	
Yellow Time (s)	3.3	3.3		3.3	3.3		3.0	3.7		3.7	3.7	
All-Red Time (s)	3.8	3.8		3.8	3.8		1.0	2.7		2.7	2.7	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	7.1	7.1		7.1	7.1		4.0	6.4		6.4	6.4	
Lead/Lag							Lead			Lag	Lag	
Lead-Lag Optimize?							Yes			Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		None	C-Max		C-Max	C-Max	
Walk Time (s)	7.0	7.0		7.0	7.0			7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0		10.0	10.0			19.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0		0	0			0		0	0	
Act Effct Green (s)	12.7	12.7		12.7	12.7		64.2	63.1		56.4	56.4	
Actuated g/C Ratio	0.15	0.15		0.15	0.15		0.76	0.74		0.66	0.66	
v/c Ratio	0.22	0.19		0.57	0.12		0.09	0.29		0.11	0.25	
Control Delay (s/veh)	32.7	13.4		44.0	15.9		4.4	4.7		11.4	8.6	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay (s/veh)	32.7	13.4		44.0	15.9		4.4	4.7		11.4	8.6	
LOS	C	B		D	B		A	A		B	A	
Approach Delay (s/veh)		22.0			37.7			4.7			8.7	
Approach LOS		C			D			A			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 85			
Actuated Cycle Length: 85			
Offset: 34 (40%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 85			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.57			
Intersection Signal Delay (s/veh): 9.2		Intersection LOS: A	
Intersection Capacity Utilization 54.3%		ICU Level of Service A	
Analysis Period (min) 15			

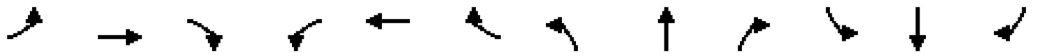
Splits and Phases: 2: Appleby Line & Palladium Way/Harrison Court





Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	43	54	115	33	48	1085	35	835
v/c Ratio	0.22	0.19	0.57	0.12	0.09	0.29	0.11	0.25
Control Delay (s/veh)	32.7	13.4	44.0	15.9	4.4	4.7	11.4	8.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	32.7	13.4	44.0	15.9	4.4	4.7	11.4	8.6
Queue Length 50th (m)	6.2	1.4	17.4	1.3	1.7	19.3	2.4	23.0
Queue Length 95th (m)	13.9	9.8	30.7	7.9	5.2	29.2	8.2	35.2
Internal Link Dist (m)		108.7		116.4		67.2		322.3
Turn Bay Length (m)	45.0		60.0				70.0	
Base Capacity (vph)	374	493	379	493	561	3718	316	3309
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.11	0.11	0.30	0.07	0.09	0.29	0.11	0.25

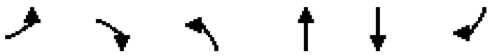
Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	38	9	39	102	8	21	43	932	34	31	685	58
Future Volume (vph)	38	9	39	102	8	21	43	932	34	31	685	58
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.1	7.1		7.1	7.1		4.0	6.4		6.4	6.4	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.91		1.00	0.91	
Frpb, ped/bikes	1.00	0.99		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		0.99	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.88		1.00	0.89		1.00	0.99		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1719	1643		1777	1693		1805	5004		1805	4977	
Flt Permitted	0.74	1.00		0.72	1.00		0.30	1.00		0.25	1.00	
Satd. Flow (perm)	1331	1643		1350	1693		571	5004		477	4977	
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	43	10	44	115	9	24	48	1047	38	35	770	65
RTOR Reduction (vph)	0	38	0	0	21	0	0	3	0	0	7	0
Lane Group Flow (vph)	43	16	0	115	12	0	48	1082	0	35	828	0
Confl. Peds. (#/hr)			4	4								
Heavy Vehicles (%)	5%	0%	0%	1%	0%	0%	0%	3%	6%	0%	3%	3%
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		Perm	NA	
Protected Phases		4			8		5	2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	11.1	11.1		11.1	11.1		60.4	60.4		52.1	52.1	
Effective Green, g (s)	11.1	11.1		11.1	11.1		60.4	60.4		52.1	52.1	
Actuated g/C Ratio	0.13	0.13		0.13	0.13		0.71	0.71		0.61	0.61	
Clearance Time (s)	7.1	7.1		7.1	7.1		4.0	6.4		6.4	6.4	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	173	214		176	221		468	3555		292	3050	
v/s Ratio Prot		0.01			0.01		0.01	c0.22			0.17	
v/s Ratio Perm	0.03			c0.09			0.07			0.07		
v/c Ratio	0.25	0.07		0.65	0.05		0.10	0.30		0.12	0.27	
Uniform Delay, d1	33.2	32.4		35.1	32.4		3.8	4.5		6.9	7.6	
Progression Factor	1.00	1.00		1.00	1.00		0.94	0.89		1.00	1.00	
Incremental Delay, d2	0.8	0.1		8.4	0.1		0.1	0.2		0.8	0.2	
Delay (s)	34.0	32.6		43.5	32.5		3.7	4.3		7.7	7.9	
Level of Service	C	C		D	C		A	A		A	A	
Approach Delay (s/veh)		33.2			41.1			4.2			7.9	
Approach LOS		C			D			A			A	

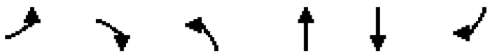
Intersection Summary			
HCM 2000 Control Delay (s/veh)	9.3	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.38		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	17.5
Intersection Capacity Utilization	54.3%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	12	0	1027	790	2
Future Volume (vph)	0	12	0	1027	790	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0	0.0	25.0			0.0
Storage Lanes	0	1	1			0
Taper Length (m)	7.5		7.5			
Lane Util. Factor	1.00	1.00	1.00	0.86	0.91	0.91
Ped Bike Factor						
Frt		0.865				
Flt Protected						
Satd. Flow (prot)	0	1644	0	6346	5086	0
Flt Permitted						
Satd. Flow (perm)	0	1644	0	6346	5086	0
Link Speed (k/h)	50			60	60	
Link Distance (m)	53.7			143.7	91.2	
Travel Time (s)	3.9			8.6	5.5	
Confl. Peds. (#/hr)			1			1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	0%	0%	0%	3%	2%	0%
Adj. Flow (vph)	0	13	0	1141	878	2
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	13	0	1141	880	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	0.0			6.6	6.6	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25	15	25			15
Sign Control	Stop			Free	Free	

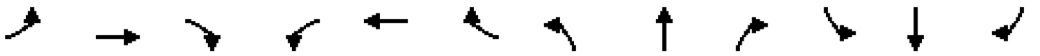
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 25.3%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	12	0	1027	790	2
Future Volume (Veh/h)	0	12	0	1027	790	2
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	0	13	0	1141	878	2
Pedestrians	1					
Lane Width (m)	3.6					
Walking Speed (m/s)	1.2					
Percent Blockage	0					
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (m)				144	91	
pX, platoon unblocked	0.95	0.94	0.94			
vC, conflicting volume	1165	295	881			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	747	19	643			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	99	100			
cM capacity (veh/h)	336	996	892			

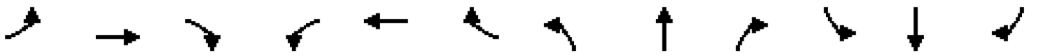
Direction, Lane #	EB 1	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3
Volume Total	13	285	285	285	285	351	351	178
Volume Left	0	0	0	0	0	0	0	0
Volume Right	13	0	0	0	0	0	0	2
cSH	996	1700	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.01	0.17	0.17	0.17	0.17	0.21	0.21	0.10
Queue Length 95th (m)	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (s/veh)	8.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	A							
Approach Delay (s/veh)	8.7	0.0				0.0		
Approach LOS	A							

Intersection Summary				
Average Delay	0.1			
Intersection Capacity Utilization	25.3%	ICU Level of Service		A
Analysis Period (min)	15			



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	271	13	124	377	9	4	11	49	5	7	15
Future Volume (vph)	8	271	13	124	377	9	4	11	49	5	7	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.994			0.998			0.897			0.923	
Flt Protected		0.999			0.988			0.997			0.991	
Satd. Flow (prot)	0	1869	0	0	1873	0	0	1699	0	0	1671	0
Flt Permitted		0.999			0.988			0.997			0.991	
Satd. Flow (perm)	0	1869	0	0	1873	0	0	1699	0	0	1671	0
Link Speed (k/h)		40			40			40			50	
Link Distance (m)		200.7			141.3			98.5			71.1	
Travel Time (s)		18.1			12.7			8.9			5.1	
Confl. Peds. (#/hr)	4		9	9		4						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	7%
Adj. Flow (vph)	8	285	14	131	397	9	4	12	52	5	7	16
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	307	0	0	537	0	0	68	0	0	28	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		0.0			0.0			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Sign Control		Free			Free			Stop			Stop	

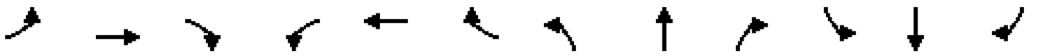
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 57.0%		ICU Level of Service B	
Analysis Period (min) 15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	8	271	13	124	377	9	4	11	49	5	7	15
Future Volume (Veh/h)	8	271	13	124	377	9	4	11	49	5	7	15
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	8	285	14	131	397	9	4	12	52	5	7	16
Pedestrians								9			4	
Lane Width (m)								3.6			3.6	
Walking Speed (m/s)								1.2			1.2	
Percent Blockage								1			0	
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (m)					141							
pX, platoon unblocked	0.93						0.93	0.93		0.93	0.93	0.93
vC, conflicting volume	410			308			1000	989	301	1034	992	406
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	334			308			965	953	301	1001	956	329
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.3
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.4
p0 queue free %	99			90			98	94	93	97	97	98
cM capacity (veh/h)	1152			1255			189	215	738	168	214	653

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	307	537	68	28
Volume Left	8	131	4	5
Volume Right	14	9	52	16
cSH	1152	1255	461	322
Volume to Capacity	0.01	0.10	0.15	0.09
Queue Length 95th (m)	0.2	2.6	3.9	2.1
Control Delay (s/veh)	0.3	2.9	14.2	17.2
Lane LOS	A	A	B	C
Approach Delay (s/veh)	0.3	2.9	14.2	17.2
Approach LOS			B	C

Intersection Summary				
Average Delay	3.3			
Intersection Capacity Utilization	57.0%	ICU Level of Service	B	
Analysis Period (min)	15			



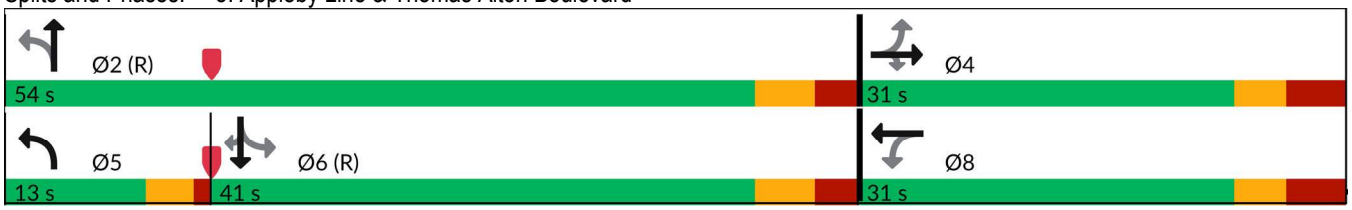
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	69	0	253	0	0	0	372	1043	0	0	713	103
Future Volume (vph)	69	0	253	0	0	0	372	1043	0	0	713	103
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		40.0	30.0		0.0	130.0		0.0	30.0		60.0
Storage Lanes	0		1	1		0	1		0	1		1
Taper Length (m)	7.5			7.5			7.5			7.5		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	1.00	0.91	1.00
Ped Bike Factor		1.00	0.98				1.00					0.98
Frt			0.850									0.850
Flt Protected		0.950					0.950					
Satd. Flow (prot)	0	1787	1599	1900	1900	0	1770	5036	0	1900	5085	1599
Flt Permitted		0.757					0.317					
Satd. Flow (perm)	0	1422	1568	1900	1900	0	590	5036	0	1900	5085	1559
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			266									108
Link Speed (k/h)		40			50			60			60	
Link Distance (m)		141.3			116.2			309.3			143.7	
Travel Time (s)		12.7			8.4			18.6			8.6	
Confl. Peds. (#/hr)	1		5	5		1	2					2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	1%	0%	1%	0%	0%	0%	2%	3%	0%	0%	2%	1%
Adj. Flow (vph)	73	0	266	0	0	0	392	1098	0	0	751	108
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	73	266	0	0	0	392	1098	0	0	751	108
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1	1	2		1	2		1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (m)	2.0	10.0	2.0	2.0	10.0		2.0	10.0		2.0	10.0	2.0
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Size(m)	2.0	0.6	2.0	2.0	0.6		2.0	0.6		2.0	0.6	2.0
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

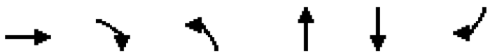
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA	Perm	Perm			pm+pt	NA		Perm	NA	Perm
Protected Phases		4			8		5	2			6	
Permitted Phases	4		4	8			2			6		6
Detector Phase	4	4	4	8	8		5	2		6	6	6
Switch Phase												
Minimum Initial (s)	8.0	8.0	8.0	8.0	8.0		7.0	8.0		8.0	8.0	8.0
Minimum Split (s)	31.0	31.0	31.0	31.0	31.0		11.0	33.4		41.0	41.0	41.0
Total Split (s)	31.0	31.0	31.0	31.0	31.0		13.0	54.0		41.0	41.0	41.0
Total Split (%)	36.5%	36.5%	36.5%	36.5%	36.5%		15.3%	63.5%		48.2%	48.2%	48.2%
Maximum Green (s)	23.9	23.9	23.9	23.9	23.9		9.0	47.6		34.6	34.6	34.6
Yellow Time (s)	3.3	3.3	3.3	3.3	3.3		3.0	3.7		3.7	3.7	3.7
All-Red Time (s)	3.8	3.8	3.8	3.8	3.8		1.0	2.7		2.7	2.7	2.7
Lost Time Adjust (s)		0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)		7.1	7.1	7.1	7.1		4.0	6.4		6.4	6.4	6.4
Lead/Lag							Lead			Lag	Lag	Lag
Lead-Lag Optimize?							Yes			Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	3.0
Recall Mode	None	None	None	None	None		None	C-Max		C-Max	C-Max	C-Max
Walk Time (s)	7.0	7.0	7.0	7.0	7.0			7.0		7.0	7.0	7.0
Flash Don't Walk (s)	10.0	10.0	10.0	10.0	10.0			19.0		10.0	10.0	10.0
Pedestrian Calls (#/hr)	0	0	0	0	0			0		0	0	0
Act Effct Green (s)		10.3	10.3				63.6	61.2			43.5	43.5
Actuated g/C Ratio		0.12	0.12				0.75	0.72			0.51	0.51
v/c Ratio		0.43	0.63				0.62	0.30			0.29	0.13
Control Delay (s/veh)		41.7	11.7				8.4	4.7			11.9	3.3
Queue Delay		0.0	0.0				0.0	0.0			0.0	0.0
Total Delay (s/veh)		41.7	11.7				8.4	4.7			11.9	3.3
LOS		D	B				A	A			B	A
Approach Delay (s/veh)		18.2						5.7			10.8	
Approach LOS		B						A			B	

Intersection Summary

Area Type: Other
Cycle Length: 85
Actuated Cycle Length: 85
Offset: 52 (61%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 85
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.63
Intersection Signal Delay (s/veh): 8.9 Intersection LOS: A
Intersection Capacity Utilization 60.4% ICU Level of Service B
Analysis Period (min) 15

Splits and Phases: 5: Appleby Line & Thomas Alton Boulevard





Lane Group	EBT	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	73	266	392	1098	751	108
v/c Ratio	0.43	0.63	0.62	0.30	0.29	0.13
Control Delay (s/veh)	41.7	11.7	8.4	4.7	11.9	3.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	41.7	11.7	8.4	4.7	11.9	3.3
Queue Length 50th (m)	11.1	0.0	15.6	18.4	29.3	1.6
Queue Length 95th (m)	22.3	19.3	31.6	29.3	44.9	10.0
Internal Link Dist (m)	117.3			285.3	119.7	
Turn Bay Length (m)		40.0	130.0			60.0
Base Capacity (vph)	399	632	632	3628	2601	850
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.18	0.42	0.62	0.30	0.29	0.13

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	69	0	253	0	0	0	372	1043	0	0	713	103
Future Volume (vph)	69	0	253	0	0	0	372	1043	0	0	713	103
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		7.1	7.1				4.0	6.4			6.4	6.4
Lane Util. Factor		1.00	1.00				1.00	0.91			0.91	1.00
Frpb, ped/bikes		1.00	0.98				1.00	1.00			1.00	0.98
Flpb, ped/bikes		1.00	1.00				1.00	1.00			1.00	1.00
Frt		1.00	0.85				1.00	1.00			1.00	0.85
Flt Protected		0.95	1.00				0.95	1.00			1.00	1.00
Satd. Flow (prot)		1784	1568				1769	5036			5085	1559
Flt Permitted		0.76	1.00				0.32	1.00			1.00	1.00
Satd. Flow (perm)		1422	1568				590	5036			5085	1559
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	73	0	266	0	0	0	392	1098	0	0	751	108
RTOR Reduction (vph)	0	0	234	0	0	0	0	0	0	0	0	53
Lane Group Flow (vph)	0	73	32	0	0	0	392	1098	0	0	751	55
Confl. Peds. (#/hr)	1		5	5		1	2					2
Heavy Vehicles (%)	1%	0%	1%	0%	0%	0%	2%	3%	0%	0%	2%	1%
Turn Type	Perm	NA	Perm	Perm			pm+pt	NA		Perm	NA	Perm
Protected Phases		4			8		5	2			6	
Permitted Phases	4		4	8			2			6		6
Actuated Green, G (s)		10.3	10.3				61.2	61.2			43.4	43.4
Effective Green, g (s)		10.3	10.3				61.2	61.2			43.4	43.4
Actuated g/C Ratio		0.12	0.12				0.72	0.72			0.51	0.51
Clearance Time (s)		7.1	7.1				4.0	6.4			6.4	6.4
Vehicle Extension (s)		3.0	3.0				3.0	3.0			3.0	3.0
Lane Grp Cap (vph)		172	190				616	3625			2596	796
v/s Ratio Prot							c0.10	0.22			0.15	
v/s Ratio Perm		c0.05	0.02				c0.35					0.04
v/c Ratio		0.42	0.17				0.64	0.30			0.29	0.07
Uniform Delay, d1		34.6	33.5				4.7	4.3			11.9	10.6
Progression Factor		1.00	1.00				1.00	1.00			0.90	0.94
Incremental Delay, d2		1.7	0.4				2.2	0.2			0.3	0.2
Delay (s)		36.3	33.9				6.8	4.5			11.1	10.1
Level of Service		D	C				A	A			B	B
Approach Delay (s/veh)		34.4			0.0			5.1			11.0	
Approach LOS		C			A			A			B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	10.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	17.5
Intersection Capacity Utilization	60.4%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Intersection: 1: Site Driveway/Lionel Court & Palladium Way

Movement	EB	WB	NB	SB
Directions Served	TR	L	LTR	LTR
Maximum Queue (m)	1.8	7.0	15.7	10.6
Average Queue (m)	0.1	0.3	6.2	4.8
95th Queue (m)	1.3	2.8	14.6	12.5
Link Distance (m)	115.4		102.7	164.8
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (m)		20.0		
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 2: Appleby Line & Palladium Way/Harrison Court

Movement	EB	EB	WB	WB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	L	TR	L	TR	L	T	T	TR	L	T	T	TR
Maximum Queue (m)	23.7	18.8	43.4	17.7	13.4	36.8	34.4	30.9	14.6	37.3	32.8	31.7
Average Queue (m)	8.0	6.6	18.7	4.2	4.9	15.1	16.1	10.8	4.6	17.9	9.3	9.5
95th Queue (m)	18.9	14.2	34.3	12.3	11.8	30.5	30.7	24.2	11.9	34.6	22.8	21.9
Link Distance (m)		104.6		119.7	66.5	66.5	66.5	66.5		334.4	334.4	334.4
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	45.0		60.0						70.0			
Storage Blk Time (%)			0									
Queuing Penalty (veh)			0									

Intersection: 3: Appleby Line & Site Driveway

Movement	EB
Directions Served	R
Maximum Queue (m)	10.0
Average Queue (m)	3.0
95th Queue (m)	9.8
Link Distance (m)	34.4
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (m)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 4: Valera Road/Site Driveway & Thomas Alton Boulevard

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (m)	13.3	33.2	13.4	14.6
Average Queue (m)	1.0	9.1	7.8	5.3
95th Queue (m)	6.8	23.7	13.5	12.4
Link Distance (m)	191.9	110.5	89.8	61.3
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (m)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 5: Appleby Line & Thomas Alton Boulevard

Movement	EB	EB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	LT	R	L	T	T	TR	T	T	T	R
Maximum Queue (m)	43.1	36.7	71.9	46.7	33.4	25.8	47.3	45.3	38.5	24.2
Average Queue (m)	12.6	16.2	30.9	17.6	13.7	6.8	24.1	22.6	14.9	8.8
95th Queue (m)	29.0	28.3	56.1	37.1	29.4	18.7	43.1	40.5	32.2	19.7
Link Distance (m)	110.5			295.2	295.2	295.2	126.2	126.2	126.2	
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (m)		40.0	130.0							60.0
Storage Blk Time (%)	0	0					4			
Queuing Penalty (veh)	1	0					0			

Network Summary

Network wide Queuing Penalty: 1

Intersection: 1: Site Driveway/Lionel Court & Palladium Way

Movement	EB	WB	NB	SB
Directions Served	TR	L	LTR	LTR
Maximum Queue (m)	1.8	7.0	14.8	3.5
Average Queue (m)	0.1	0.3	8.0	0.2
95th Queue (m)	1.3	3.1	14.5	2.5
Link Distance (m)	115.4		102.7	164.8
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (m)		20.0		
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 2: Appleby Line & Palladium Way/Harrison Court

Movement	EB	EB	WB	WB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	L	TR	L	TR	L	T	T	TR	L	T	T	TR
Maximum Queue (m)	25.2	23.1	20.3	10.8	23.2	28.6	28.4	19.2	10.7	37.5	24.4	19.1
Average Queue (m)	11.4	7.0	7.4	2.7	6.0	10.2	8.8	3.8	2.1	15.6	7.3	4.5
95th Queue (m)	22.4	18.6	16.8	8.4	16.3	22.6	21.3	13.1	7.6	31.7	18.6	13.5
Link Distance (m)		104.6		119.7	66.5	66.5	66.5	66.5		334.4	334.4	334.4
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	45.0		60.0						70.0			
Storage Blk Time (%)												
Queuing Penalty (veh)												

Intersection: 3: Appleby Line & Site Driveway

Movement	EB
Directions Served	R
Maximum Queue (m)	8.5
Average Queue (m)	0.4
95th Queue (m)	3.6
Link Distance (m)	34.4
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (m)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 4: Valera Road/Site Driveway & Thomas Alton Boulevard

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (m)	18.2	17.8	18.6	15.7
Average Queue (m)	2.8	4.3	9.5	6.9
95th Queue (m)	11.6	13.3	16.0	13.4
Link Distance (m)	191.9	110.5	89.8	61.3
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (m)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 5: Appleby Line & Thomas Alton Boulevard

Movement	EB	EB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	LT	R	L	T	T	TR	T	T	T	R
Maximum Queue (m)	65.6	47.0	41.3	44.7	33.0	17.5	45.0	40.3	33.7	15.4
Average Queue (m)	22.1	20.0	16.4	17.0	10.6	2.7	21.2	19.4	11.2	3.3
95th Queue (m)	45.1	36.1	30.8	32.8	24.6	10.0	40.6	38.4	28.4	11.5
Link Distance (m)	110.5			295.2	295.2	295.2	126.2	126.2	126.2	
Upstream Blk Time (%)	0									
Queuing Penalty (veh)	0									
Storage Bay Dist (m)		40.0	130.0							60.0
Storage Blk Time (%)	2	0					2			
Queuing Penalty (veh)	5	0					0			

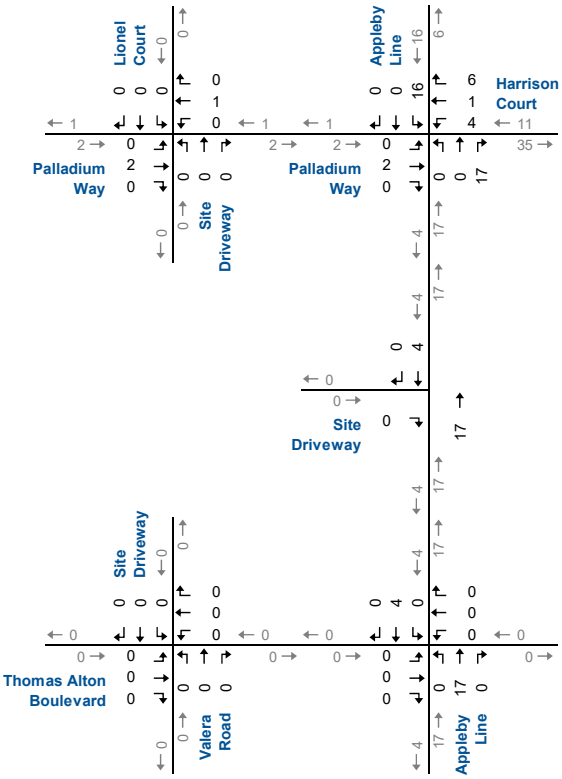
Network Summary

Network wide Queuing Penalty: 6

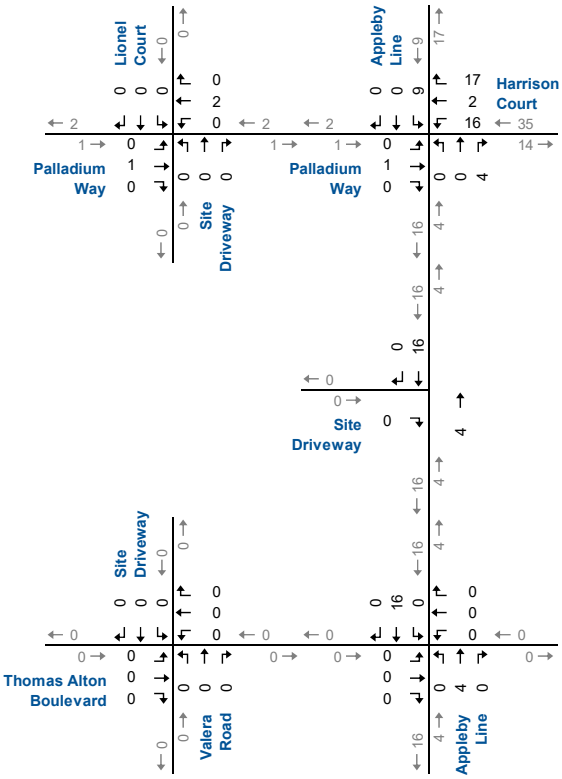
Appendix D

Background Development Traffic

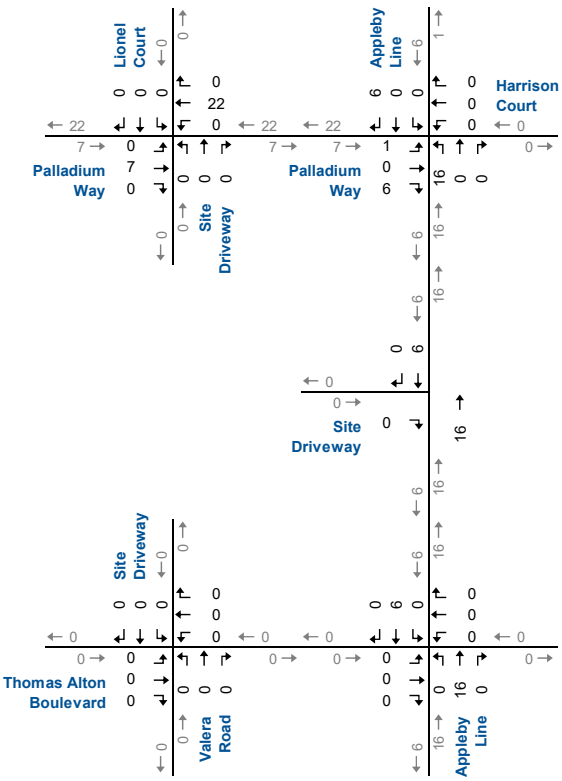
AM Peak Hour



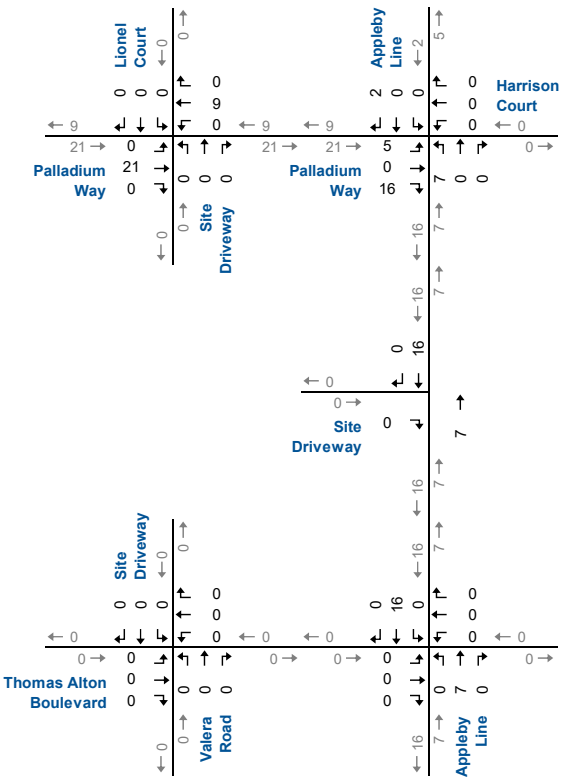
PM Peak Hour



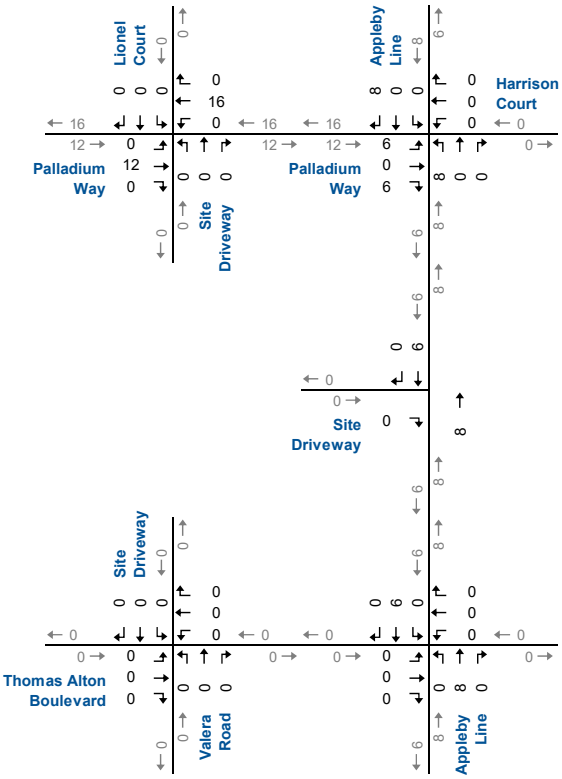
AM Peak Hour



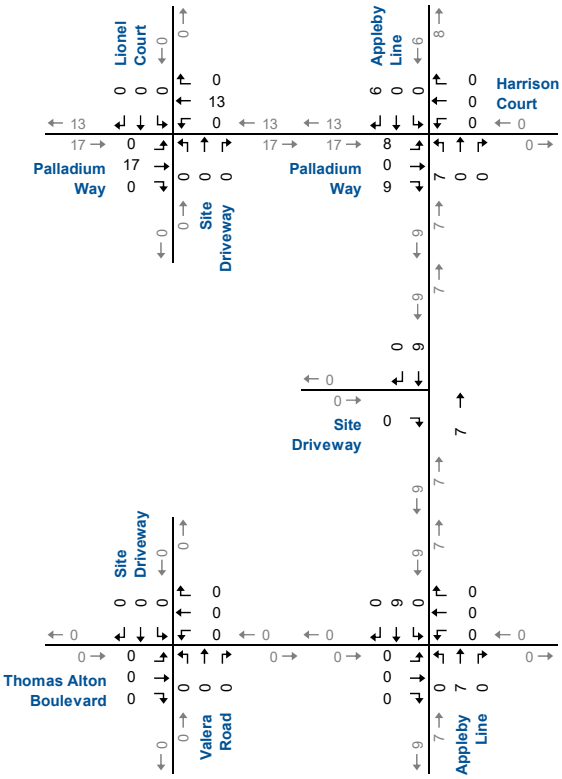
PM Peak Hour



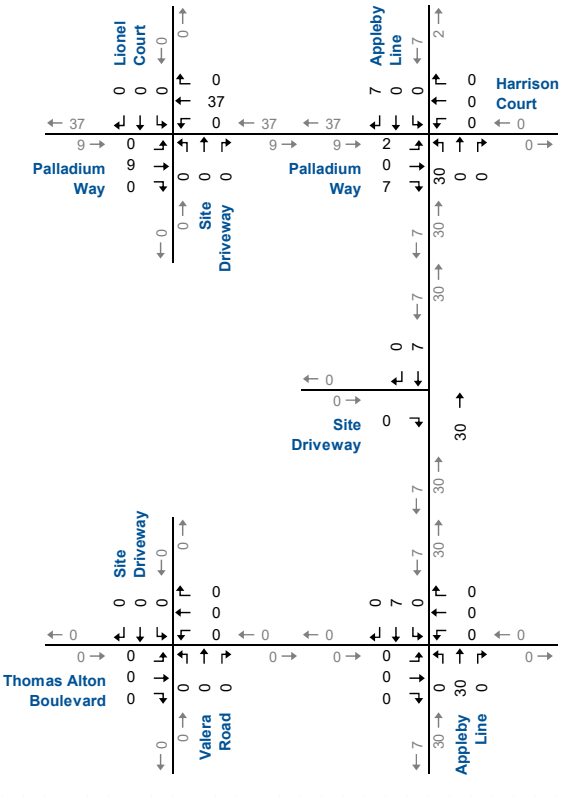
AM Peak Hour



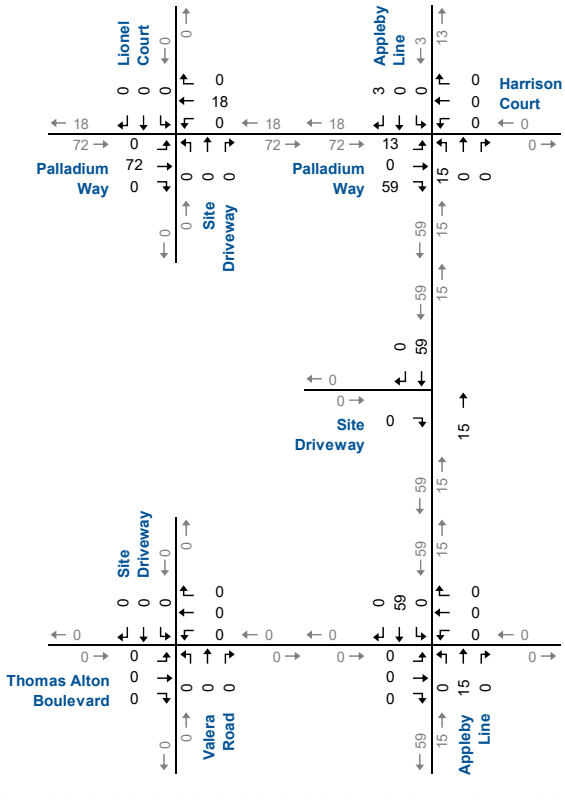
PM Peak Hour



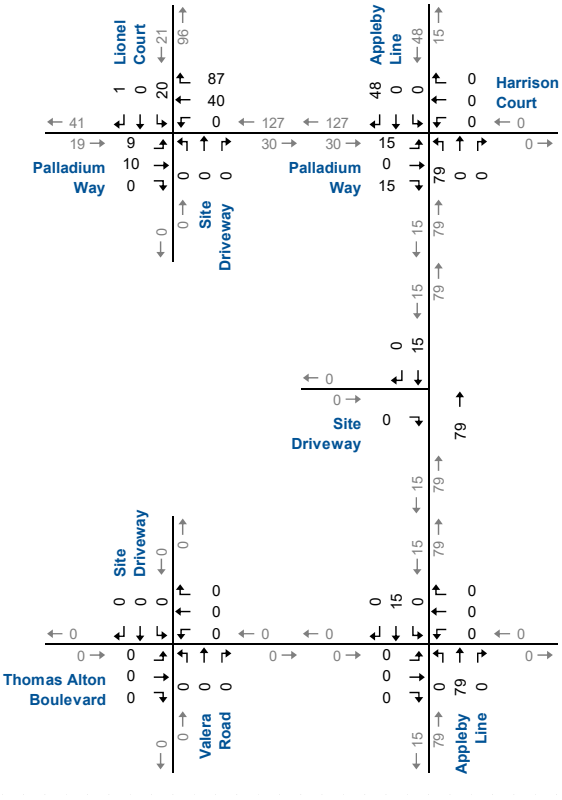
AM Peak Hour



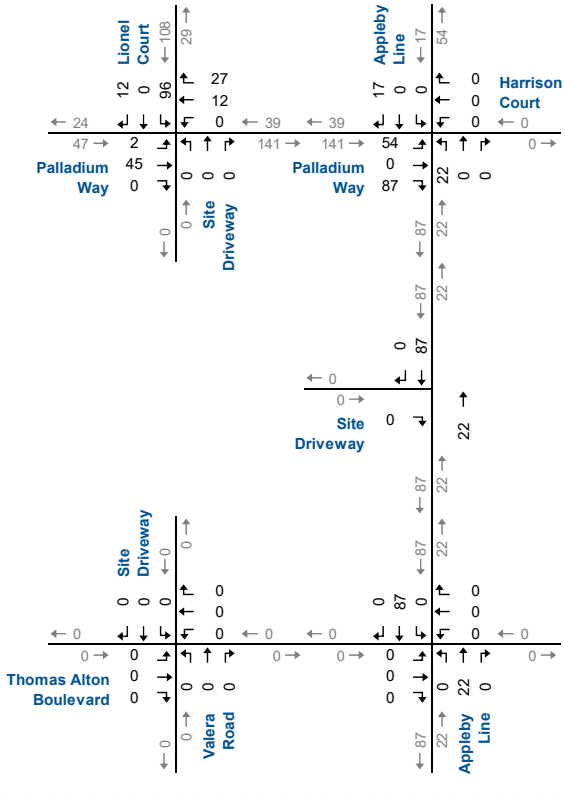
PM Peak Hour



AM Peak Hour

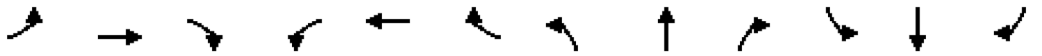


PM Peak Hour



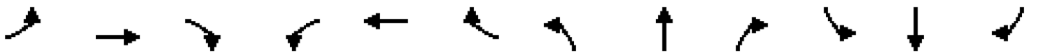
Appendix E

Background Traffic Operations



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	156	56	7	202	87	57	0	3	20	0	2
Future Volume (vph)	10	156	56	7	202	87	57	0	3	20	0	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	15.0		0.0	20.0		0.0	0.0		0.0	0.0		0.0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (m)	7.5			7.5			7.5			7.5		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.960			0.955			0.994			0.987	
Flt Protected	0.950			0.950				0.955			0.957	
Satd. Flow (prot)	1805	1699	0	1805	1612	0	0	1804	0	0	1795	0
Flt Permitted	0.950			0.950				0.955			0.957	
Satd. Flow (perm)	1805	1699	0	1805	1612	0	0	1804	0	0	1795	0
Link Speed (k/h)		60			60			50			50	
Link Distance (m)		124.0			132.7			113.2			175.1	
Travel Time (s)		7.4			8.0			8.2			12.6	
Confl. Peds. (#/hr)			3	3			1					1
Peak Hour Factor	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71
Heavy Vehicles (%)	0%	10%	0%	0%	18%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	14	220	79	10	285	123	80	0	4	28	0	3
Shared Lane Traffic (%)												
Lane Group Flow (vph)	14	299	0	10	408	0	0	84	0	0	31	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.6			3.6			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane		Yes										
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 26.3%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	156	56	7	202	87	57	0	3	20	0	2
Future Volume (Veh/h)	10	156	56	7	202	87	57	0	3	20	0	2
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71
Hourly flow rate (vph)	14	220	79	10	285	123	80	0	4	28	0	3
Pedestrians		1						3				
Lane Width (m)		3.6						3.6				
Walking Speed (m/s)		1.2						1.2				
Percent Blockage		0						0				
Right turn flare (veh)												
Median type		TWLTL			None							
Median storage veh)		2										
Upstream signal (m)					133							
pX, platoon unblocked	1.00						1.00	1.00		1.00	1.00	1.00
vC, conflicting volume	408			302			600	719	263	619	697	348
vC1, stage 1 conf vol							291	291		367	367	
vC2, stage 2 conf vol							309	428		252	330	
vCu, unblocked vol	407			302			599	718	263	618	696	346
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)							6.1	5.5		6.1	5.5	
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			99			86	100	99	95	100	100
cM capacity (veh/h)	1162			1267			585	508	779	575	524	700

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1
Volume Total	14	299	10	408	84	31
Volume Left	14	0	10	0	80	28
Volume Right	0	79	0	123	4	3
cSH	1162	1700	1267	1700	592	585
Volume to Capacity	0.01	0.18	0.01	0.24	0.14	0.05
Queue Length 95th (m)	0.3	0.0	0.2	0.0	3.7	1.3
Control Delay (s/veh)	8.1	0.0	7.9	0.0	12.1	11.5
Lane LOS	A		A		B	B
Approach Delay (s/veh)	0.4		0.2		12.1	11.5
Approach LOS					B	B

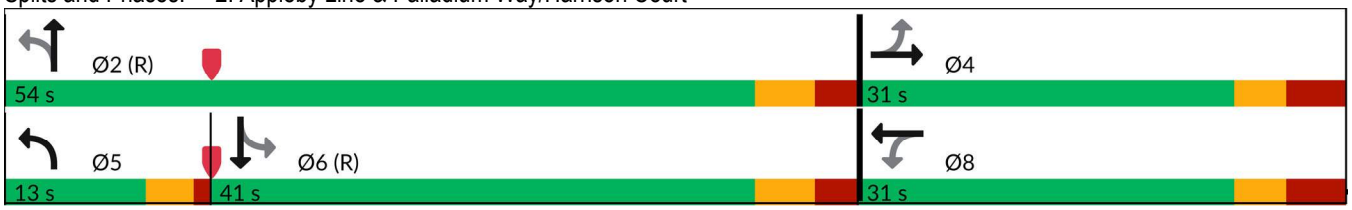
Intersection Summary				
Average Delay	1.8			
Intersection Capacity Utilization	26.3%	ICU Level of Service		A
Analysis Period (min)	15			

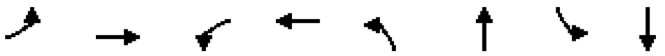
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	85	11	75	44	3	18	176	754	34	31	732	107
Future Volume (vph)	85	11	75	44	3	18	176	754	34	31	732	107
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	45.0		0.0	60.0		0.0	0.0		0.0	70.0		0.0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (m)	7.5			7.5			7.5			7.5		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	1.00	0.91	0.91
Ped Bike Factor		0.99		1.00								
Frt		0.870			0.870			0.993			0.981	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	1333	0	1752	1653	0	1492	4901	0	1805	4922	0
Flt Permitted	0.743			0.698			0.277			0.327		
Satd. Flow (perm)	1412	1333	0	1286	1653	0	435	4901	0	621	4922	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		79			19			13			38	
Link Speed (k/h)		60			50			60			60	
Link Distance (m)		132.7			140.4			91.2			346.3	
Travel Time (s)		8.0			10.1			5.5			20.8	
Confl. Peds. (#/hr)			1	1								
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	0%	13%	24%	3%	0%	0%	21%	5%	7%	0%	3%	6%
Adj. Flow (vph)	89	12	79	46	3	19	185	794	36	33	771	113
Shared Lane Traffic (%)												
Lane Group Flow (vph)	89	91	0	46	22	0	185	830	0	33	884	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		5.6			3.6			3.6			6.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (m)	2.0	10.0		2.0	10.0		2.0	10.0		2.0	10.0	
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Size(m)	2.0	0.6		2.0	0.6		2.0	0.6		2.0	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		Perm	NA	
Protected Phases		4			8		5	2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		5	2		6	6	
Switch Phase												
Minimum Initial (s)	8.0	8.0		8.0	8.0		7.0	8.0		8.0	8.0	
Minimum Split (s)	31.0	31.0		31.0	31.0		11.0	33.4		41.0	41.0	
Total Split (s)	31.0	31.0		31.0	31.0		13.0	54.0		41.0	41.0	
Total Split (%)	36.5%	36.5%		36.5%	36.5%		15.3%	63.5%		48.2%	48.2%	
Maximum Green (s)	23.9	23.9		23.9	23.9		9.0	47.6		34.6	34.6	
Yellow Time (s)	3.3	3.3		3.3	3.3		3.0	3.7		3.7	3.7	
All-Red Time (s)	3.8	3.8		3.8	3.8		1.0	2.7		2.7	2.7	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	7.1	7.1		7.1	7.1		4.0	6.4		6.4	6.4	
Lead/Lag							Lead			Lag	Lag	
Lead-Lag Optimize?							Yes			Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		None	C-Max		C-Max	C-Max	
Walk Time (s)	7.0	7.0		7.0	7.0			7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0		10.0	10.0			19.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0		0	0			0		0	0	
Act Effct Green (s)	11.1	11.1		11.1	11.1		65.8	64.7		50.4	50.4	
Actuated g/C Ratio	0.13	0.13		0.13	0.13		0.77	0.76		0.59	0.59	
v/c Ratio	0.48	0.38		0.28	0.09		0.41	0.22		0.09	0.30	
Control Delay (s/veh)	42.5	14.6		36.3	15.9		10.6	3.5		11.7	10.0	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay (s/veh)	42.5	14.6		36.3	15.9		10.6	3.5		11.7	10.0	
LOS	D	B		D	B		B	A		B	A	
Approach Delay (s/veh)		28.4			29.7			4.8			10.0	
Approach LOS		C			C			A			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 85			
Actuated Cycle Length: 85			
Offset: 34 (40%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 85			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.48			
Intersection Signal Delay (s/veh): 9.7		Intersection LOS: A	
Intersection Capacity Utilization 52.3%		ICU Level of Service A	
Analysis Period (min) 15			

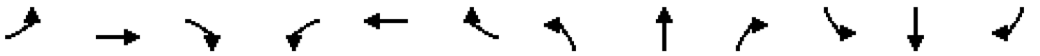
Splits and Phases: 2: Appleby Line & Palladium Way/Harrison Court





Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	89	91	46	22	185	830	33	884
v/c Ratio	0.48	0.38	0.28	0.09	0.41	0.22	0.09	0.30
Control Delay (s/veh)	42.5	14.6	36.3	15.9	10.6	3.5	11.7	10.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	42.5	14.6	36.3	15.9	10.6	3.5	11.7	10.0
Queue Length 50th (m)	13.5	1.7	6.8	0.4	5.9	11.3	2.2	23.9
Queue Length 95th (m)	25.8	13.6	15.5	6.3	27.7	18.3	8.0	39.5
Internal Link Dist (m)		108.7		116.4		67.2		322.3
Turn Bay Length (m)	45.0		60.0				70.0	
Base Capacity (vph)	397	431	361	478	458	3733	368	2936
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.22	0.21	0.13	0.05	0.40	0.22	0.09	0.30

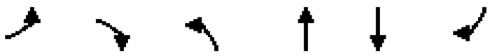
Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	85	11	75	44	3	18	176	754	34	31	732	107
Future Volume (vph)	85	11	75	44	3	18	176	754	34	31	732	107
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.1	7.1		7.1	7.1		4.0	6.4		6.4	6.4	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.91		1.00	0.91	
Frpb, ped/bikes	1.00	0.99		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.87		1.00	0.87		1.00	0.99		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1805	1333		1750	1654		1492	4904		1805	4921	
Flt Permitted	0.74	1.00		0.70	1.00		0.28	1.00		0.33	1.00	
Satd. Flow (perm)	1412	1333		1286	1654		435	4904		622	4921	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	89	12	79	46	3	19	185	794	36	33	771	113
RTOR Reduction (vph)	0	70	0	0	17	0	0	4	0	0	16	0
Lane Group Flow (vph)	89	21	0	46	5	0	185	826	0	33	868	0
Confl. Peds. (#/hr)			1	1								
Heavy Vehicles (%)	0%	13%	24%	3%	0%	0%	21%	5%	7%	0%	3%	6%
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		Perm	NA	
Protected Phases		4			8		5	2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	9.5	9.5		9.5	9.5		62.0	62.0		49.0	49.0	
Effective Green, g (s)	9.5	9.5		9.5	9.5		62.0	62.0		49.0	49.0	
Actuated g/C Ratio	0.11	0.11		0.11	0.11		0.73	0.73		0.58	0.58	
Clearance Time (s)	7.1	7.1		7.1	7.1		4.0	6.4		6.4	6.4	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	157	148		143	184		429	3577		358	2836	
v/s Ratio Prot		0.02			0.00		c0.05	0.17			0.18	
v/s Ratio Perm	c0.06			0.04			c0.27			0.05		
v/c Ratio	0.57	0.14		0.32	0.03		0.43	0.23		0.09	0.31	
Uniform Delay, d1	35.8	34.1		34.8	33.6		3.8	3.7		8.1	9.3	
Progression Factor	1.00	1.00		1.00	1.00		2.14	0.82		1.00	1.00	
Incremental Delay, d2	4.6	0.4		1.3	0.1		0.7	0.1		0.5	0.3	
Delay (s)	40.4	34.5		36.1	33.7		8.9	3.2		8.6	9.5	
Level of Service	D	C		D	C		A	A		A	A	
Approach Delay (s/veh)		37.4			35.3			4.3			9.5	
Approach LOS		D			D			A			A	

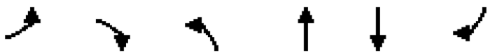
Intersection Summary			
HCM 2000 Control Delay (s/veh)	10.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.47		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	17.5
Intersection Capacity Utilization	52.3%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	1	0	982	847	4
Future Volume (vph)	0	1	0	982	847	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0	0.0	25.0			0.0
Storage Lanes	0	1	1			0
Taper Length (m)	7.5		7.5			
Lane Util. Factor	1.00	1.00	1.00	0.86	0.91	0.91
Ped Bike Factor						
Frt		0.865			0.999	
Flt Protected						
Satd. Flow (prot)	0	1644	0	6225	4983	0
Flt Permitted						
Satd. Flow (perm)	0	1644	0	6225	4983	0
Link Speed (k/h)	50			60	60	
Link Distance (m)	53.7			143.7	91.2	
Travel Time (s)	3.9			8.6	5.5	
Confl. Peds. (#/hr)			1			1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	5%	4%	0%
Adj. Flow (vph)	0	1	0	1023	882	4
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1	0	1023	886	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	0.0			6.6	6.6	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25	15	25			15
Sign Control	Stop			Free	Free	

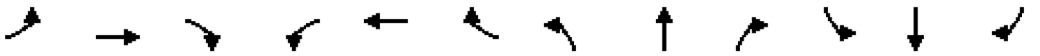
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 26.5%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	1	0	982	847	4
Future Volume (Veh/h)	0	1	0	982	847	4
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Hourly flow rate (vph)	0	1	0	1023	882	4
Pedestrians	1					
Lane Width (m)	3.6					
Walking Speed (m/s)	1.2					
Percent Blockage	0					
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (m)				144	91	
pX, platoon unblocked	0.93	0.93	0.93			
vC, conflicting volume	1141	297	887			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	821	0	594			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	100	100			
cM capacity (veh/h)	294	1008	917			

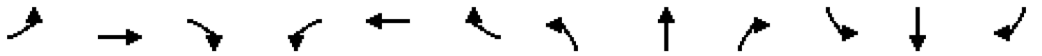
Direction, Lane #	EB 1	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3
Volume Total	1	256	256	256	256	353	353	180
Volume Left	0	0	0	0	0	0	0	0
Volume Right	1	0	0	0	0	0	0	4
cSH	1008	1700	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.00	0.15	0.15	0.15	0.15	0.21	0.21	0.11
Queue Length 95th (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (s/veh)	8.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	A							
Approach Delay (s/veh)	8.6	0.0				0.0		
Approach LOS	A							

Intersection Summary				
Average Delay	0.0			
Intersection Capacity Utilization	26.5%	ICU Level of Service		A
Analysis Period (min)	15			



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	43	439	19	49	156	26	17	19	59	2	7	40
Future Volume (vph)	43	439	19	49	156	26	17	19	59	2	7	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.995			0.985			0.916			0.888	
Flt Protected		0.996			0.990			0.991			0.998	
Satd. Flow (prot)	0	1846	0	0	1735	0	0	1683	0	0	1643	0
Flt Permitted		0.996			0.990			0.991			0.998	
Satd. Flow (perm)	0	1846	0	0	1735	0	0	1683	0	0	1643	0
Link Speed (k/h)		40			40			40			50	
Link Distance (m)		200.7			141.3			98.5			71.1	
Travel Time (s)		18.1			12.7			8.9			5.1	
Confl. Peds. (#/hr)	9		18	18		9			1	1		
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Heavy Vehicles (%)	0%	2%	6%	0%	10%	0%	7%	0%	2%	0%	0%	3%
Adj. Flow (vph)	51	523	23	58	186	31	20	23	70	2	8	48
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	597	0	0	275	0	0	113	0	0	58	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		0.0			0.0			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Sign Control		Free			Free			Stop			Stop	

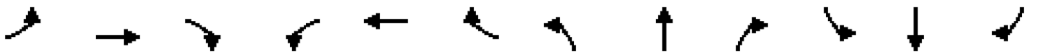
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	48.6%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	43	439	19	49	156	26	17	19	59	2	7	40
Future Volume (Veh/h)	43	439	19	49	156	26	17	19	59	2	7	40
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Hourly flow rate (vph)	51	523	23	58	186	31	20	23	70	2	8	48
Pedestrians					1			18			9	
Lane Width (m)					3.6			3.6			3.6	
Walking Speed (m/s)					1.2			1.2			1.2	
Percent Blockage					0			2			1	
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (m)					141							
pX, platoon unblocked	1.00						1.00	1.00		1.00	1.00	1.00
vC, conflicting volume	226			564			1024	997	554	1046	993	211
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	220			564			1022	994	554	1043	990	204
tC, single (s)	4.1			4.1			7.2	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.6	4.0	3.3	3.5	4.0	3.3
p0 queue free %	96			94			88	89	87	99	96	94
cM capacity (veh/h)	1345			1002			172	218	524	150	219	824

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	597	275	113	58
Volume Left	51	58	20	2
Volume Right	23	31	70	48
cSH	1345	1002	318	536
Volume to Capacity	0.04	0.06	0.36	0.11
Queue Length 95th (m)	0.9	1.4	11.7	2.7
Control Delay (s/veh)	1.1	2.3	22.4	12.5
Lane LOS	A	A	C	B
Approach Delay (s/veh)	1.1	2.3	22.4	12.5
Approach LOS			C	B

Intersection Summary				
Average Delay	4.3			
Intersection Capacity Utilization	48.6%	ICU Level of Service	A	
Analysis Period (min)	15			

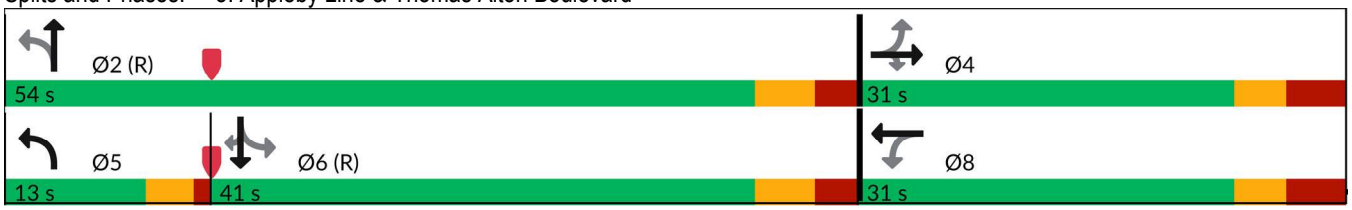


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	142	4	347	29	3	3	185	838	43	3	817	40
Future Volume (vph)	142	4	347	29	3	3	185	838	43	3	817	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		40.0	30.0		0.0	130.0		0.0	30.0		60.0
Storage Lanes	0		1	1		0	1		0	1		1
Taper Length (m)	7.5			7.5			7.5			7.5		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	1.00	0.91	1.00
Ped Bike Factor			0.99	1.00			1.00					0.98
Frt			0.850		0.925			0.993				0.850
Flt Protected		0.954		0.950			0.950			0.950		
Satd. Flow (prot)	0	1795	1599	1805	1758	0	1687	4787	0	1805	4988	1495
Flt Permitted		0.728		0.657			0.264			0.287		
Satd. Flow (perm)	0	1370	1577	1247	1758	0	468	4787	0	545	4988	1458
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			271		3			15				104
Link Speed (k/h)		40			50			60			60	
Link Distance (m)		141.3			116.2			309.3			143.7	
Travel Time (s)		12.7			8.4			18.6			8.6	
Confl. Peds. (#/hr)			1	1			2					2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	1%	0%	1%	0%	0%	0%	7%	8%	0%	0%	4%	8%
Adj. Flow (vph)	154	4	377	32	3	3	201	911	47	3	888	43
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	158	377	32	6	0	201	958	0	3	888	43
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1	1	2		1	2		1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (m)	2.0	10.0	2.0	2.0	10.0		2.0	10.0		2.0	10.0	2.0
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Size(m)	2.0	0.6	2.0	2.0	0.6		2.0	0.6		2.0	0.6	2.0
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA	Perm	Perm	NA		pm+pt	NA		Perm	NA	Perm
Protected Phases		4			8		5	2			6	
Permitted Phases	4		4	8			2			6		6
Detector Phase	4	4	4	8	8		5	2		6	6	6
Switch Phase												
Minimum Initial (s)	8.0	8.0	8.0	8.0	8.0		7.0	8.0		8.0	8.0	8.0
Minimum Split (s)	31.0	31.0	31.0	31.0	31.0		11.0	33.4		41.0	41.0	41.0
Total Split (s)	31.0	31.0	31.0	31.0	31.0		13.0	54.0		41.0	41.0	41.0
Total Split (%)	36.5%	36.5%	36.5%	36.5%	36.5%		15.3%	63.5%		48.2%	48.2%	48.2%
Maximum Green (s)	23.9	23.9	23.9	23.9	23.9		9.0	47.6		34.6	34.6	34.6
Yellow Time (s)	3.3	3.3	3.3	3.3	3.3		3.0	3.7		3.7	3.7	3.7
All-Red Time (s)	3.8	3.8	3.8	3.8	3.8		1.0	2.7		2.7	2.7	2.7
Lost Time Adjust (s)		0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)		7.1	7.1	7.1	7.1		4.0	6.4		6.4	6.4	6.4
Lead/Lag							Lead			Lag	Lag	Lag
Lead-Lag Optimize?							Yes			Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	3.0
Recall Mode	None	None	None	None	None		None	C-Max		C-Max	C-Max	C-Max
Walk Time (s)	7.0	7.0	7.0	7.0	7.0			7.0		7.0	7.0	7.0
Flash Don't Walk (s)	10.0	10.0	10.0	10.0	10.0			19.0		10.0	10.0	10.0
Pedestrian Calls (#/hr)	0	0	0	0	0			0		0	0	0
Act Effct Green (s)		15.5	15.5	15.5	15.5		58.4	56.0		43.1	43.1	43.1
Actuated g/C Ratio		0.18	0.18	0.18	0.18		0.69	0.66		0.51	0.51	0.51
v/c Ratio		0.63	0.74	0.14	0.02		0.45	0.30		0.01	0.35	0.05
Control Delay (s/veh)		42.4	18.5	27.8	19.7		9.1	7.1		8.0	10.3	1.6
Queue Delay		0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay (s/veh)		42.4	18.5	27.8	19.7		9.1	7.1		8.0	10.3	1.6
LOS		D	B	C	B		A	A		A	B	A
Approach Delay (s/veh)		25.6			26.5			7.4			9.9	
Approach LOS		C			C			A			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 85			
Actuated Cycle Length: 85			
Offset: 52 (61%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 85			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.74			
Intersection Signal Delay (s/veh): 12.2		Intersection LOS: B	
Intersection Capacity Utilization 61.2%		ICU Level of Service B	
Analysis Period (min) 15			

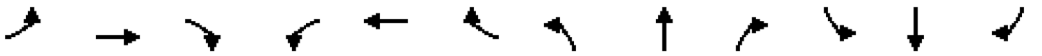
Splits and Phases: 5: Appleby Line & Thomas Alton Boulevard



Lane Group	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	158	377	32	6	201	958	3	888	43
v/c Ratio	0.63	0.74	0.14	0.02	0.45	0.30	0.01	0.35	0.05
Control Delay (s/veh)	42.4	18.5	27.8	19.7	9.1	7.1	8.0	10.3	1.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	42.4	18.5	27.8	19.7	9.1	7.1	8.0	10.3	1.6
Queue Length 50th (m)	23.8	15.1	4.4	0.4	9.6	20.2	0.1	33.7	0.4
Queue Length 95th (m)	38.1	39.7	10.5	3.1	23.0	35.2	m0.6	52.8	2.3
Internal Link Dist (m)	117.3			92.2		285.3		119.7	
Turn Bay Length (m)		40.0	30.0		130.0		30.0		60.0
Base Capacity (vph)	385	638	350	496	457	3156	276	2530	790
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.41	0.59	0.09	0.01	0.44	0.30	0.01	0.35	0.05

Intersection Summary

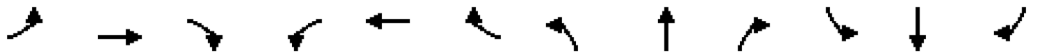
m Volume for 95th percentile queue is metered by upstream signal.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	142	4	347	29	3	3	185	838	43	3	817	40
Future Volume (vph)	142	4	347	29	3	3	185	838	43	3	817	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		7.1	7.1	7.1	7.1		4.0	6.4		6.4	6.4	6.4
Lane Util. Factor		1.00	1.00	1.00	1.00		1.00	0.91		1.00	0.91	1.00
Frpb, ped/bikes		1.00	0.99	1.00	1.00		1.00	1.00		1.00	1.00	0.98
Flpb, ped/bikes		1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00
Frt		1.00	0.85	1.00	0.93		1.00	0.99		1.00	1.00	0.85
Flt Protected		0.95	1.00	0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)		1794	1577	1803	1758		1686	4785		1805	4988	1458
Flt Permitted		0.73	1.00	0.66	1.00		0.26	1.00		0.29	1.00	1.00
Satd. Flow (perm)		1369	1577	1246	1758		468	4785		544	4988	1458
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	154	4	377	32	3	3	201	911	47	3	888	43
RTOR Reduction (vph)	0	0	222	0	2	0	0	5	0	0	0	21
Lane Group Flow (vph)	0	158	155	32	4	0	201	953	0	3	888	22
Confl. Peds. (#/hr)			1	1			2					2
Heavy Vehicles (%)	1%	0%	1%	0%	0%	0%	7%	8%	0%	0%	4%	8%
Turn Type	Perm	NA	Perm	Perm	NA		pm+pt	NA		Perm	NA	Perm
Protected Phases		4			8		5	2			6	
Permitted Phases	4		4	8			2			6		6
Actuated Green, G (s)		15.5	15.5	15.5	15.5		56.0	56.0		43.2	43.2	43.2
Effective Green, g (s)		15.5	15.5	15.5	15.5		56.0	56.0		43.2	43.2	43.2
Actuated g/C Ratio		0.18	0.18	0.18	0.18		0.66	0.66		0.51	0.51	0.51
Clearance Time (s)		7.1	7.1	7.1	7.1		4.0	6.4		6.4	6.4	6.4
Vehicle Extension (s)		3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)		249	287	227	320		434	3152		276	2535	741
v/s Ratio Prot					0.00		c0.05	0.20			0.18	
v/s Ratio Perm		c0.12	0.10	0.03			c0.26			0.01		0.01
v/c Ratio		0.63	0.54	0.14	0.01		0.46	0.30		0.01	0.35	0.03
Uniform Delay, d1		32.1	31.5	29.2	28.5		6.0	6.2		10.3	12.5	10.4
Progression Factor		1.00	1.00	1.00	1.00		1.00	1.00		0.56	0.72	1.00
Incremental Delay, d2		5.2	2.1	0.3	0.0		0.8	0.2		0.1	0.4	0.1
Delay (s)		37.3	33.6	29.4	28.5		6.8	6.4		5.9	9.4	10.5
Level of Service		D	C	C	C		A	A		A	A	B
Approach Delay (s/veh)		34.7			29.3			6.5			9.4	
Approach LOS		C			C			A			A	

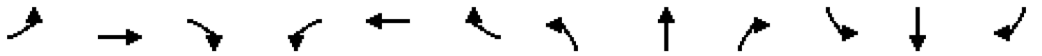
Intersection Summary			
HCM 2000 Control Delay (s/veh)	13.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	17.5
Intersection Capacity Utilization	61.2%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	3	244	44	6	153	30	19	0	11	118	1	14
Future Volume (vph)	3	244	44	6	153	30	19	0	11	118	1	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	15.0		0.0	20.0		0.0	0.0		0.0	0.0		0.0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (m)	7.5			7.5			7.5			7.5		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.977			0.976			0.951			0.986	
Flt Protected	0.950			0.950				0.969			0.957	
Satd. Flow (prot)	1805	1630	0	1805	1698	0	0	1695	0	0	1793	0
Flt Permitted	0.950			0.950				0.969			0.957	
Satd. Flow (perm)	1805	1630	0	1805	1698	0	0	1695	0	0	1793	0
Link Speed (k/h)		60			60			50			50	
Link Distance (m)		124.0			132.7			113.2			175.1	
Travel Time (s)		7.4			8.0			8.2			12.6	
Confl. Peds. (#/hr)	1		2	2		1	2					2
Peak Hour Factor	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69
Heavy Vehicles (%)	0%	16%	2%	0%	11%	0%	0%	0%	9%	0%	0%	0%
Adj. Flow (vph)	4	354	64	9	222	43	28	0	16	171	1	20
Shared Lane Traffic (%)												
Lane Group Flow (vph)	4	418	0	9	265	0	0	44	0	0	192	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.6			3.6			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane		Yes										
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 32.5%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	3	244	44	6	153	30	19	0	11	118	1	14
Future Volume (Veh/h)	3	244	44	6	153	30	19	0	11	118	1	14
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69
Hourly flow rate (vph)	4	354	64	9	222	43	28	0	16	171	1	20
Pedestrians		2						2			1	
Lane Width (m)		3.6						3.6			3.6	
Walking Speed (m/s)		1.2						1.2			1.2	
Percent Blockage		0						0			0	
Right turn flare (veh)												
Median type		TWLTL			None							
Median storage veh)		2										
Upstream signal (m)					133							
pX, platoon unblocked												
vC, conflicting volume	266			420			659	680	388	641	691	247
vC1, stage 1 conf vol							396	396		263	263	
vC2, stage 2 conf vol							263	284		378	428	
vCu, unblocked vol	266			420			659	680	388	641	691	247
tC, single (s)	4.1			4.1			7.1	6.5	6.3	7.1	6.5	6.2
tC, 2 stage (s)							6.1	5.5		6.1	5.5	
tF (s)	2.2			2.2			3.5	4.0	3.4	3.5	4.0	3.3
p0 queue free %	100			99			95	100	98	69	100	97
cM capacity (veh/h)	1308			1148			552	532	644	555	521	795

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1
Volume Total	4	418	9	265	44	192
Volume Left	4	0	9	0	28	171
Volume Right	0	64	0	43	16	20
cSH	1308	1700	1148	1700	582	573
Volume to Capacity	0.00	0.25	0.01	0.16	0.08	0.33
Queue Length 95th (m)	0.1	0.0	0.2	0.0	1.8	11.0
Control Delay (s/veh)	7.8	0.0	8.2	0.0	11.7	14.4
Lane LOS	A		A		B	B
Approach Delay (s/veh)	0.1		0.3		11.7	14.4
Approach LOS					B	B

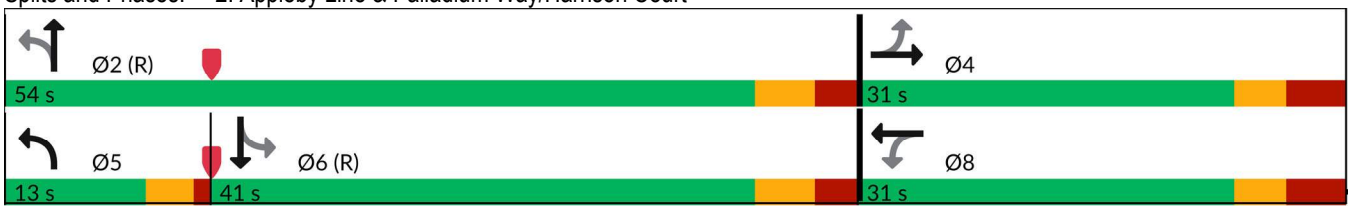
Intersection Summary				
Average Delay	3.6			
Intersection Capacity Utilization	32.5%	ICU Level of Service		A
Analysis Period (min)	15			

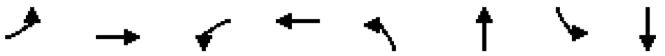
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	122	11	214	129	11	40	98	1033	42	43	757	92
Future Volume (vph)	122	11	214	129	11	40	98	1033	42	43	757	92
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	45.0		0.0	60.0		0.0	0.0		0.0	70.0		0.0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (m)	7.5			7.5			7.5			7.5		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	1.00	0.91	0.91
Ped Bike Factor		0.98		1.00								
Frt		0.857			0.882			0.994			0.984	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1719	1601	0	1787	1676	0	1805	5000	0	1805	4955	0
Flt Permitted	0.720			0.465			0.243			0.221		
Satd. Flow (perm)	1303	1601	0	871	1676	0	462	5000	0	420	4955	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		240			45			11			30	
Link Speed (k/h)		60			50			60			60	
Link Distance (m)		132.7			140.4			91.2			346.3	
Travel Time (s)		8.0			10.1			5.5			20.8	
Confl. Peds. (#/hr)			4	4								
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	5%	0%	0%	1%	0%	0%	0%	3%	6%	0%	3%	3%
Adj. Flow (vph)	137	12	240	145	12	45	110	1161	47	48	851	103
Shared Lane Traffic (%)												
Lane Group Flow (vph)	137	252	0	145	57	0	110	1208	0	48	954	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		5.6			3.6			3.6			6.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (m)	2.0	10.0		2.0	10.0		2.0	10.0		2.0	10.0	
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Size(m)	2.0	0.6		2.0	0.6		2.0	0.6		2.0	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		Perm	NA	
Protected Phases		4			8		5	2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		5	2		6	6	
Switch Phase												
Minimum Initial (s)	8.0	8.0		8.0	8.0		7.0	8.0		8.0	8.0	
Minimum Split (s)	31.0	31.0		31.0	31.0		11.0	33.4		41.0	41.0	
Total Split (s)	31.0	31.0		31.0	31.0		13.0	54.0		41.0	41.0	
Total Split (%)	36.5%	36.5%		36.5%	36.5%		15.3%	63.5%		48.2%	48.2%	
Maximum Green (s)	23.9	23.9		23.9	23.9		9.0	47.6		34.6	34.6	
Yellow Time (s)	3.3	3.3		3.3	3.3		3.0	3.7		3.7	3.7	
All-Red Time (s)	3.8	3.8		3.8	3.8		1.0	2.7		2.7	2.7	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	7.1	7.1		7.1	7.1		4.0	6.4		6.4	6.4	
Lead/Lag							Lead			Lag	Lag	
Lead-Lag Optimize?							Yes			Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		None	C-Max		C-Max	C-Max	
Walk Time (s)	7.0	7.0		7.0	7.0			7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0		10.0	10.0			19.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0		0	0			0		0	0	
Act Effct Green (s)	17.2	17.2		17.2	17.2		56.7	54.3		44.8	44.8	
Actuated g/C Ratio	0.20	0.20		0.20	0.20		0.67	0.64		0.53	0.53	
v/c Ratio	0.52	0.49		0.83	0.15		0.26	0.38		0.22	0.36	
Control Delay (s/veh)	36.1	7.7		65.7	11.1		7.4	7.2		18.4	13.6	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay (s/veh)	36.1	7.7		65.7	11.1		7.4	7.2		18.4	13.6	
LOS	D	A		E	B		A	A		B	B	
Approach Delay (s/veh)		17.7			50.3			7.2			13.8	
Approach LOS		B			D			A			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 85			
Actuated Cycle Length: 85			
Offset: 34 (40%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 85			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.83			
Intersection Signal Delay (s/veh): 13.9		Intersection LOS: B	
Intersection Capacity Utilization 71.4%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 2: Appleby Line & Palladium Way/Harrison Court





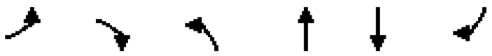
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	137	252	145	57	110	1208	48	954
v/c Ratio	0.52	0.49	0.83	0.15	0.26	0.38	0.22	0.36
Control Delay (s/veh)	36.1	7.7	65.7	11.1	7.4	7.2	18.4	13.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	36.1	7.7	65.7	11.1	7.4	7.2	18.4	13.6
Queue Length 50th (m)	19.6	1.6	22.3	1.6	5.2	27.6	4.1	31.6
Queue Length 95th (m)	32.6	17.1	38.9	9.4	11.6	33.0	13.6	48.9
Internal Link Dist (m)		108.7		116.4		67.2		322.3
Turn Bay Length (m)	45.0		60.0				70.0	
Base Capacity (vph)	366	622	244	503	450	3200	221	2626
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.37	0.41	0.59	0.11	0.24	0.38	0.22	0.36

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	122	11	214	129	11	40	98	1033	42	43	757	92
Future Volume (vph)	122	11	214	129	11	40	98	1033	42	43	757	92
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.1	7.1		7.1	7.1		4.0	6.4		6.4	6.4	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.91		1.00	0.91	
Frpb, ped/bikes	1.00	0.98		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.86		1.00	0.88		1.00	0.99		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1719	1601		1780	1675		1805	5001		1805	4954	
Flt Permitted	0.72	1.00		0.46	1.00		0.24	1.00		0.22	1.00	
Satd. Flow (perm)	1303	1601		871	1675		462	5001		419	4954	
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	137	12	240	145	12	45	110	1161	47	48	851	103
RTOR Reduction (vph)	0	191	0	0	36	0	0	4	0	0	14	0
Lane Group Flow (vph)	137	61	0	145	21	0	110	1204	0	48	940	0
Confl. Peds. (#/hr)			4	4								
Heavy Vehicles (%)	5%	0%	0%	1%	0%	0%	0%	3%	6%	0%	3%	3%
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		Perm	NA	
Protected Phases		4			8		5	2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	17.2	17.2		17.2	17.2		54.3	54.3		44.0	44.0	
Effective Green, g (s)	17.2	17.2		17.2	17.2		54.3	54.3		44.0	44.0	
Actuated g/C Ratio	0.20	0.20		0.20	0.20		0.64	0.64		0.52	0.52	
Clearance Time (s)	7.1	7.1		7.1	7.1		4.0	6.4		6.4	6.4	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	263	323		176	338		394	3194		216	2564	
v/s Ratio Prot		0.04			0.01		0.02	c0.24			0.19	
v/s Ratio Perm	0.11			c0.17			0.16			0.11		
v/c Ratio	0.52	0.19		0.82	0.06		0.28	0.38		0.22	0.37	
Uniform Delay, d1	30.2	28.1		32.5	27.4		6.3	7.3		11.2	12.2	
Progression Factor	1.00	1.00		1.00	1.00		0.96	0.85		1.00	1.00	
Incremental Delay, d2	1.9	0.3		25.7	0.1		0.4	0.3		2.4	0.4	
Delay (s)	32.1	28.4		58.2	27.5		6.5	6.6		13.5	12.6	
Level of Service	C	C		E	C		A	A		B	B	
Approach Delay (s/veh)		29.7			49.5			6.6			12.7	
Approach LOS		C			D			A			B	

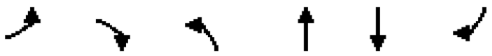
Intersection Summary			
HCM 2000 Control Delay (s/veh)	14.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	17.5
Intersection Capacity Utilization	71.4%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	12	0	1193	1060	2
Future Volume (vph)	0	12	0	1193	1060	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0	0.0	25.0			0.0
Storage Lanes	0	1	1			0
Taper Length (m)	7.5		7.5			
Lane Util. Factor	1.00	1.00	1.00	0.86	0.91	0.91
Ped Bike Factor						
Frt		0.865				
Flt Protected						
Satd. Flow (prot)	0	1644	0	6346	5085	0
Flt Permitted						
Satd. Flow (perm)	0	1644	0	6346	5085	0
Link Speed (k/h)	50			60	60	
Link Distance (m)	53.7			143.7	91.2	
Travel Time (s)	3.9			8.6	5.5	
Confl. Peds. (#/hr)			1			1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	0%	0%	0%	3%	2%	0%
Adj. Flow (vph)	0	13	0	1326	1178	2
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	13	0	1326	1180	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	0.0			6.6	6.6	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25	15	25			15
Sign Control	Stop			Free	Free	

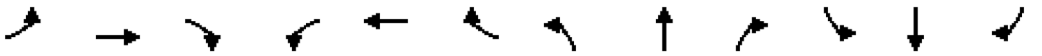
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 30.5%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	12	0	1193	1060	2
Future Volume (Veh/h)	0	12	0	1193	1060	2
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	0	13	0	1326	1178	2
Pedestrians	1					
Lane Width (m)	3.6					
Walking Speed (m/s)	1.2					
Percent Blockage	0					
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (m)				144	91	
pX, platoon unblocked	0.93	0.90	0.90			
vC, conflicting volume	1512	395	1181			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	834	0	824			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	99	100			
cM capacity (veh/h)	288	984	735			

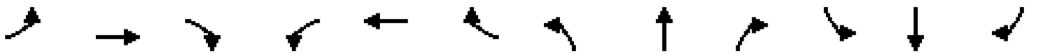
Direction, Lane #	EB 1	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3
Volume Total	13	332	332	332	332	471	471	238
Volume Left	0	0	0	0	0	0	0	0
Volume Right	13	0	0	0	0	0	0	2
cSH	984	1700	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.01	0.20	0.20	0.20	0.20	0.28	0.28	0.14
Queue Length 95th (m)	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (s/veh)	8.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	A							
Approach Delay (s/veh)	8.7	0.0				0.0		
Approach LOS	A							

Intersection Summary				
Average Delay	0.0			
Intersection Capacity Utilization	30.5%	ICU Level of Service		A
Analysis Period (min)	15			



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	308	14	137	426	9	4	11	54	5	7	15
Future Volume (vph)	8	308	14	137	426	9	4	11	54	5	7	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.994			0.998			0.895			0.923	
Flt Protected		0.999			0.988			0.997			0.991	
Satd. Flow (prot)	0	1869	0	0	1873	0	0	1695	0	0	1671	0
Flt Permitted		0.999			0.988			0.997			0.991	
Satd. Flow (perm)	0	1869	0	0	1873	0	0	1695	0	0	1671	0
Link Speed (k/h)		40			50			40			50	
Link Distance (m)		200.7			141.3			98.5			71.1	
Travel Time (s)		18.1			10.2			8.9			5.1	
Confl. Peds. (#/hr)	4		9	9		4						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	7%
Adj. Flow (vph)	8	324	15	144	448	9	4	12	57	5	7	16
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	347	0	0	601	0	0	73	0	0	28	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		0.0			0.0			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Sign Control		Free			Free			Stop			Stop	

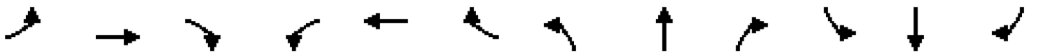
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 62.6%		ICU Level of Service B	
Analysis Period (min) 15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	8	308	14	137	426	9	4	11	54	5	7	15
Future Volume (Veh/h)	8	308	14	137	426	9	4	11	54	5	7	15
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	8	324	15	144	448	9	4	12	57	5	7	16
Pedestrians								9			4	
Lane Width (m)								3.6			3.6	
Walking Speed (m/s)								1.2			1.2	
Percent Blockage								1			0	
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (m)					141							
pX, platoon unblocked	0.91						0.91	0.91		0.91	0.91	0.91
vC, conflicting volume	461			348			1117	1106	341	1155	1109	457
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	356			348			1078	1066	341	1120	1069	351
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.3
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.4
p0 queue free %	99			88			97	93	92	96	96	97
cM capacity (veh/h)	1099			1213			151	176	701	131	175	617

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	347	601	73	28
Volume Left	8	144	4	5
Volume Right	15	9	57	16
cSH	1099	1213	415	269
Volume to Capacity	0.01	0.12	0.18	0.10
Queue Length 95th (m)	0.2	3.0	4.7	2.6
Control Delay (s/veh)	0.3	3.0	15.5	19.9
Lane LOS	A	A	C	C
Approach Delay (s/veh)	0.3	3.0	15.5	19.9
Approach LOS			C	C

Intersection Summary				
Average Delay	3.4			
Intersection Capacity Utilization	62.6%	ICU Level of Service	B	
Analysis Period (min)	15			

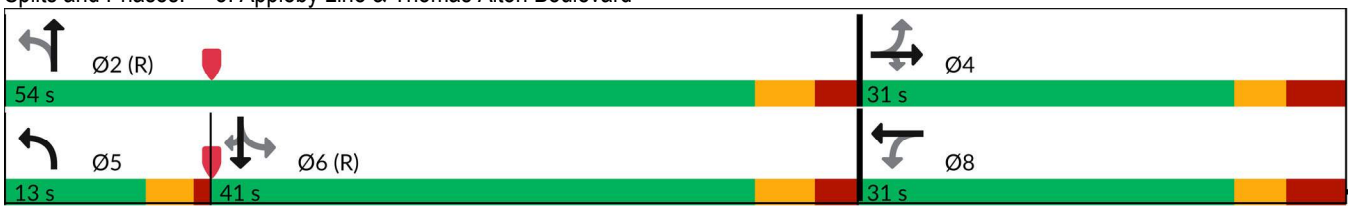


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	76	9	279	86	10	4	411	1207	76	1	974	114
Future Volume (vph)	76	9	279	86	10	4	411	1207	76	1	974	114
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		40.0	30.0		0.0	130.0		0.0	30.0		60.0
Storage Lanes	0		1	1		0	1		0	1		1
Taper Length (m)	7.5			7.5			7.5			7.5		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	1.00	0.91	1.00
Ped Bike Factor		1.00	0.98	0.99	1.00		1.00					0.98
Frt			0.850		0.960			0.991				0.850
Flt Protected		0.957		0.950			0.950			0.950		
Satd. Flow (prot)	0	1802	1599	1805	1817	0	1770	4999	0	1805	5085	1599
Flt Permitted		0.737		0.699			0.192			0.190		
Satd. Flow (perm)	0	1386	1568	1319	1817	0	357	4999	0	361	5085	1559
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			254		4			19				120
Link Speed (k/h)		40			50			60			60	
Link Distance (m)		141.3			116.2			309.3			143.7	
Travel Time (s)		12.7			8.4			18.6			8.6	
Confl. Peds. (#/hr)	1		5	5		1	2					2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	1%	0%	1%	0%	0%	0%	2%	3%	0%	0%	2%	1%
Adj. Flow (vph)	80	9	294	91	11	4	433	1271	80	1	1025	120
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	89	294	91	15	0	433	1351	0	1	1025	120
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1	1	2		1	2		1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (m)	2.0	10.0	2.0	2.0	10.0		2.0	10.0		2.0	10.0	2.0
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Size(m)	2.0	0.6	2.0	2.0	0.6		2.0	0.6		2.0	0.6	2.0
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA	Perm	Perm	NA		pm+pt	NA		Perm	NA	Perm
Protected Phases		4			8		5	2			6	
Permitted Phases	4		4	8			2			6		6
Detector Phase	4	4	4	8	8		5	2		6	6	6
Switch Phase												
Minimum Initial (s)	8.0	8.0	8.0	8.0	8.0		7.0	8.0		8.0	8.0	8.0
Minimum Split (s)	31.0	31.0	31.0	31.0	31.0		11.0	33.4		41.0	41.0	41.0
Total Split (s)	31.0	31.0	31.0	31.0	31.0		13.0	54.0		41.0	41.0	41.0
Total Split (%)	36.5%	36.5%	36.5%	36.5%	36.5%		15.3%	63.5%		48.2%	48.2%	48.2%
Maximum Green (s)	23.9	23.9	23.9	23.9	23.9		9.0	47.6		34.6	34.6	34.6
Yellow Time (s)	3.3	3.3	3.3	3.3	3.3		3.0	3.7		3.7	3.7	3.7
All-Red Time (s)	3.8	3.8	3.8	3.8	3.8		1.0	2.7		2.7	2.7	2.7
Lost Time Adjust (s)		0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)		7.1	7.1	7.1	7.1		4.0	6.4		6.4	6.4	6.4
Lead/Lag							Lead			Lag	Lag	Lag
Lead-Lag Optimize?							Yes			Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	3.0
Recall Mode	None	None	None	None	None		None	C-Max		C-Max	C-Max	C-Max
Walk Time (s)	7.0	7.0	7.0	7.0	7.0			7.0		7.0	7.0	7.0
Flash Don't Walk (s)	10.0	10.0	10.0	10.0	10.0			19.0		10.0	10.0	10.0
Pedestrian Calls (#/hr)	0	0	0	0	0			0		0	0	0
Act Effct Green (s)		11.7	11.7	11.7	11.7		62.2	59.8		34.6	34.6	34.6
Actuated g/C Ratio		0.14	0.14	0.14	0.14		0.73	0.70		0.41	0.41	0.41
v/c Ratio		0.47	0.68	0.50	0.06		0.71	0.38		0.01	0.50	0.17
Control Delay (s/veh)		40.8	15.2	42.6	25.3		18.7	5.8		11.0	17.2	2.6
Queue Delay		0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay (s/veh)		40.8	15.2	42.6	25.3		18.7	5.8		11.0	17.2	2.6
LOS		D	B	D	C		B	A		B	B	A
Approach Delay (s/veh)		21.1			40.1			8.9			15.6	
Approach LOS		C			D			A			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 85			
Actuated Cycle Length: 85			
Offset: 52 (61%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 85			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.71			
Intersection Signal Delay (s/veh): 13.5		Intersection LOS: B	
Intersection Capacity Utilization 68.0%		ICU Level of Service C	
Analysis Period (min) 15			

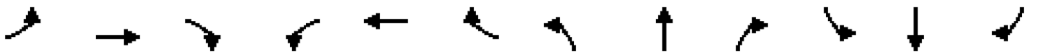
Splits and Phases: 5: Appleby Line & Thomas Alton Boulevard



Lane Group	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	89	294	91	15	433	1351	1	1025	120
v/c Ratio	0.47	0.68	0.50	0.06	0.71	0.38	0.01	0.50	0.17
Control Delay (s/veh)	40.8	15.2	42.6	25.3	18.7	5.8	11.0	17.2	2.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	40.8	15.2	42.6	25.3	18.7	5.8	11.0	17.2	2.6
Queue Length 50th (m)	13.4	5.8	13.8	1.6	28.1	25.9	0.1	49.4	3.3
Queue Length 95th (m)	25.2	27.0	25.9	6.1	#84.9	42.3	m0.1	53.9	m2.5
Internal Link Dist (m)	117.3			92.2		285.3		119.7	
Turn Bay Length (m)		40.0	30.0		130.0		30.0		60.0
Base Capacity (vph)	389	623	370	513	612	3520	146	2069	705
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.23	0.47	0.25	0.03	0.71	0.38	0.01	0.50	0.17

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	76	9	279	86	10	4	411	1207	76	1	974	114
Future Volume (vph)	76	9	279	86	10	4	411	1207	76	1	974	114
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		7.1	7.1	7.1	7.1		4.0	6.4		6.4	6.4	6.4
Lane Util. Factor		1.00	1.00	1.00	1.00		1.00	0.91		1.00	0.91	1.00
Frpb, ped/bikes		1.00	0.98	1.00	1.00		1.00	1.00		1.00	1.00	0.98
Flpb, ped/bikes		1.00	1.00	0.99	1.00		1.00	1.00		1.00	1.00	1.00
Frt		1.00	0.85	1.00	0.96		1.00	0.99		1.00	1.00	0.85
Flt Protected		0.96	1.00	0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)		1800	1568	1793	1817		1769	5000		1805	5085	1559
Flt Permitted		0.74	1.00	0.70	1.00		0.19	1.00		0.19	1.00	1.00
Satd. Flow (perm)		1386	1568	1320	1817		357	5000		361	5085	1559
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	80	9	294	91	11	4	433	1271	80	1	1025	120
RTOR Reduction (vph)	0	0	219	0	3	0	0	6	0	0	0	71
Lane Group Flow (vph)	0	89	75	91	12	0	433	1345	0	1	1025	49
Confl. Peds. (#/hr)	1		5	5		1	2					2
Heavy Vehicles (%)	1%	0%	1%	0%	0%	0%	2%	3%	0%	0%	2%	1%
Turn Type	Perm	NA	Perm	Perm	NA		pm+pt	NA		Perm	NA	Perm
Protected Phases		4			8		5	2			6	
Permitted Phases	4		4	8			2			6		6
Actuated Green, G (s)		11.7	11.7	11.7	11.7		59.8	59.8		34.6	34.6	34.6
Effective Green, g (s)		11.7	11.7	11.7	11.7		59.8	59.8		34.6	34.6	34.6
Actuated g/C Ratio		0.14	0.14	0.14	0.14		0.70	0.70		0.41	0.41	0.41
Clearance Time (s)		7.1	7.1	7.1	7.1		4.0	6.4		6.4	6.4	6.4
Vehicle Extension (s)		3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)		190	215	181	250		603	3517		146	2069	634
v/s Ratio Prot					0.01		c0.18	0.27			0.20	
v/s Ratio Perm		0.06	0.05	c0.07			c0.33			0.00		0.03
v/c Ratio		0.47	0.35	0.50	0.05		0.72	0.38		0.01	0.50	0.08
Uniform Delay, d1		33.8	33.2	34.0	31.8		11.2	5.1		15.0	18.7	15.4
Progression Factor		1.00	1.00	1.00	1.00		1.00	1.00		0.70	0.87	0.63
Incremental Delay, d2		1.8	1.0	2.2	0.1		4.1	0.3		0.1	0.8	0.2
Delay (s)		35.6	34.2	36.1	31.9		15.3	5.4		10.6	17.0	9.9
Level of Service		D	C	D	C		B	A		B	B	A
Approach Delay (s/veh)		34.5			35.5			7.8			16.3	
Approach LOS		C			D			A			B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	14.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	17.5
Intersection Capacity Utilization	68.0%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Intersection: 1: Site Driveway/Lionel Court & Palladium Way

Movement	EB	WB	NB	SB
Directions Served	L	L	LTR	LTR
Maximum Queue (m)	8.9	1.8	14.6	10.5
Average Queue (m)	0.7	0.1	8.6	5.1
95th Queue (m)	4.6	1.2	14.4	12.5
Link Distance (m)			102.7	164.8
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (m)	15.0	20.0		
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 2: Appleby Line & Palladium Way/Harrison Court

Movement	EB	EB	WB	WB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	L	TR	L	TR	L	T	T	TR	L	T	T	TR
Maximum Queue (m)	39.6	39.2	22.7	10.0	56.1	30.5	32.0	28.5	13.5	51.1	46.8	35.3
Average Queue (m)	17.6	12.1	8.8	3.4	22.2	14.3	13.0	8.9	4.6	27.8	18.4	11.3
95th Queue (m)	31.7	26.0	19.2	9.2	43.5	27.3	27.6	21.7	11.1	46.0	37.9	25.0
Link Distance (m)		104.6		119.7	66.5	66.5	66.5	66.5		334.4	334.4	334.4
Upstream Blk Time (%)					0							
Queuing Penalty (veh)					0							
Storage Bay Dist (m)	45.0		60.0						70.0			
Storage Blk Time (%)	0	0										
Queuing Penalty (veh)	0	0										

Intersection: 3: Appleby Line & Site Driveway

Movement	EB
Directions Served	R
Maximum Queue (m)	5.1
Average Queue (m)	0.2
95th Queue (m)	2.5
Link Distance (m)	34.4
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (m)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 4: Valera Road/Site Driveway & Thomas Alton Boulevard

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (m)	16.8	31.6	21.2	14.6
Average Queue (m)	2.7	7.3	10.7	6.9
95th Queue (m)	11.2	21.6	18.0	13.6
Link Distance (m)	191.9	110.5	89.8	61.3
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (m)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 5: Appleby Line & Thomas Alton Boulevard

Movement	EB	EB	WB	WB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	LT	R	L	TR	L	T	T	TR	L	T	T	T
Maximum Queue (m)	56.0	47.4	21.2	10.9	44.8	59.5	42.9	21.8	9.7	48.4	42.6	37.7
Average Queue (m)	24.0	24.6	6.0	1.3	20.6	25.6	13.4	6.1	0.6	17.0	17.7	14.5
95th Queue (m)	44.6	44.2	15.5	6.5	36.4	47.2	29.5	15.7	4.4	38.5	37.7	32.7
Link Distance (m)	110.5			98.0		295.2	295.2	295.2		126.2	126.2	126.2
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)		40.0	30.0		130.0				30.0			
Storage Blk Time (%)	1	2	0							2		
Queuing Penalty (veh)	4	2	0							0		

Intersection: 5: Appleby Line & Thomas Alton Boulevard

Movement	SB
Directions Served	R
Maximum Queue (m)	15.0
Average Queue (m)	3.0
95th Queue (m)	10.7
Link Distance (m)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (m)	60.0
Storage Blk Time (%)	
Queuing Penalty (veh)	

Network Summary

Network wide Queuing Penalty: 7

Intersection: 1: Site Driveway/Lionel Court & Palladium Way

Movement	EB	WB	NB	SB
Directions Served	L	L	LTR	LTR
Maximum Queue (m)	4.9	6.8	17.8	22.4
Average Queue (m)	0.2	0.5	6.9	12.4
95th Queue (m)	2.1	3.7	14.8	19.1
Link Distance (m)			102.7	164.8
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (m)	15.0	20.0		
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 2: Appleby Line & Palladium Way/Harrison Court

Movement	EB	EB	WB	WB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	L	TR	L	TR	L	T	T	TR	L	T	T	TR
Maximum Queue (m)	45.6	50.2	44.8	18.4	23.7	45.2	43.2	37.5	18.4	51.1	43.6	36.5
Average Queue (m)	21.4	16.6	20.1	7.0	10.5	20.6	21.9	17.0	6.6	26.2	16.9	13.6
95th Queue (m)	37.5	32.7	35.9	14.9	20.0	36.3	37.3	32.3	14.8	45.1	35.6	29.2
Link Distance (m)		104.6		119.7	66.5	66.5	66.5	66.5		334.4	334.4	334.4
Upstream Blk Time (%)						0						
Queuing Penalty (veh)						0						
Storage Bay Dist (m)	45.0		60.0						70.0			
Storage Blk Time (%)	0	0								0		
Queuing Penalty (veh)	1	0								0		

Intersection: 3: Appleby Line & Site Driveway

Movement	EB
Directions Served	R
Maximum Queue (m)	9.8
Average Queue (m)	3.1
95th Queue (m)	9.9
Link Distance (m)	34.4
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (m)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 4: Valera Road/Site Driveway & Thomas Alton Boulevard

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (m)	13.7	41.6	17.0	16.8
Average Queue (m)	0.9	13.3	8.1	5.4
95th Queue (m)	6.4	31.1	14.0	12.8
Link Distance (m)	191.9	110.5	89.8	61.3
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (m)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 5: Appleby Line & Thomas Alton Boulevard

Movement	EB	EB	WB	WB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	LT	R	L	TR	L	T	T	TR	L	T	T	T
Maximum Queue (m)	45.4	46.7	33.9	16.2	95.9	51.7	45.3	42.1	10.1	57.9	54.0	49.8
Average Queue (m)	14.6	21.5	15.8	3.7	42.4	24.8	20.9	14.4	0.4	29.3	32.9	27.8
95th Queue (m)	31.6	39.7	29.7	11.9	76.2	45.1	37.7	32.2	5.3	50.6	52.0	45.4
Link Distance (m)	110.5			98.0		295.2	295.2	295.2		126.2	126.2	126.2
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)		40.0	30.0		130.0				30.0			
Storage Blk Time (%)	0	1	2		0					6		
Queuing Penalty (veh)	1	1	0		0					0		

Intersection: 5: Appleby Line & Thomas Alton Boulevard

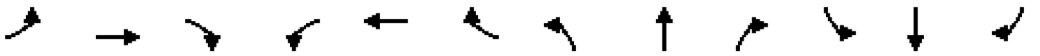
Movement	SB
Directions Served	R
Maximum Queue (m)	24.5
Average Queue (m)	10.1
95th Queue (m)	20.3
Link Distance (m)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (m)	60.0
Storage Blk Time (%)	
Queuing Penalty (veh)	

Network Summary

Network wide Queuing Penalty: 3

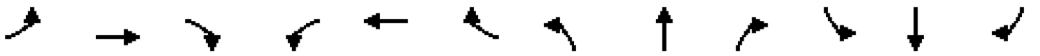
Appendix F

Total Traffic Operations



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	156	61	19	202	87	60	0	22	20	0	2
Future Volume (vph)	10	156	61	19	202	87	60	0	22	20	0	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	15.0		0.0	20.0		0.0	0.0		0.0	0.0		0.0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (m)	7.5			7.5			7.5			7.5		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.958			0.955			0.964			0.987	
Flt Protected	0.950			0.950				0.965			0.957	
Satd. Flow (prot)	1805	1698	0	1805	1612	0	0	1767	0	0	1795	0
Flt Permitted	0.950			0.950				0.965			0.957	
Satd. Flow (perm)	1805	1698	0	1805	1612	0	0	1767	0	0	1795	0
Link Speed (k/h)		60			60			50			50	
Link Distance (m)		124.0			132.7			113.2			175.1	
Travel Time (s)		7.4			8.0			8.2			12.6	
Confl. Peds. (#/hr)			3	3			1					1
Peak Hour Factor	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71
Heavy Vehicles (%)	0%	10%	0%	0%	18%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	14	220	86	27	285	123	85	0	31	28	0	3
Shared Lane Traffic (%)												
Lane Group Flow (vph)	14	306	0	27	408	0	0	116	0	0	31	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.6			3.6			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane		Yes										
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 27.1%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	156	61	19	202	87	60	0	22	20	0	2
Future Volume (Veh/h)	10	156	61	19	202	87	60	0	22	20	0	2
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71
Hourly flow rate (vph)	14	220	86	27	285	123	85	0	31	28	0	3
Pedestrians		1						3				
Lane Width (m)		3.6						3.6				
Walking Speed (m/s)		1.2						1.2				
Percent Blockage		0						0				
Right turn flare (veh)												
Median type		TWLTL			None							
Median storage veh)		2										
Upstream signal (m)					133							
pX, platoon unblocked	0.99						0.99	0.99		0.99	0.99	0.99
vC, conflicting volume	408			309			637	756	266	680	738	348
vC1, stage 1 conf vol							294	294		401	401	
vC2, stage 2 conf vol							343	462		279	337	
vCu, unblocked vol	402			309			632	752	266	675	733	341
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)							6.1	5.5		6.1	5.5	
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			98			85	100	96	95	100	100
cM capacity (veh/h)	1161			1260			562	487	776	528	500	702

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1
Volume Total	14	306	27	408	116	31
Volume Left	14	0	27	0	85	28
Volume Right	0	86	0	123	31	3
cSH	1161	1700	1260	1700	606	541
Volume to Capacity	0.01	0.18	0.02	0.24	0.19	0.06
Queue Length 95th (m)	0.3	0.0	0.5	0.0	5.3	1.4
Control Delay (s/veh)	8.1	0.0	7.9	0.0	12.3	12.1
Lane LOS	A		A		B	B
Approach Delay (s/veh)	0.4		0.5		12.3	12.1
Approach LOS					B	B

Intersection Summary				
Average Delay	2.4			
Intersection Capacity Utilization	27.1%	ICU Level of Service		A
Analysis Period (min)	15			

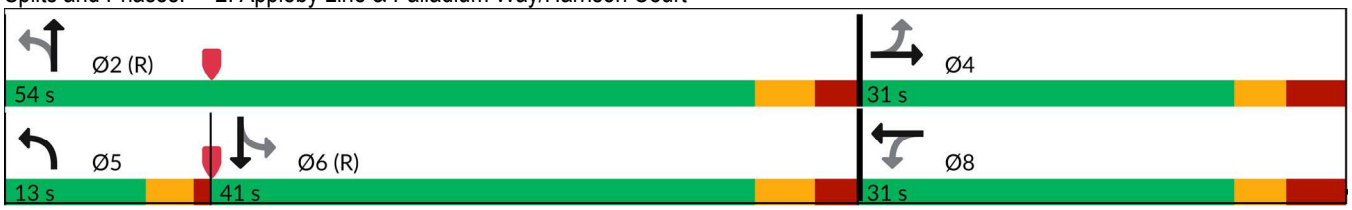
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	103	12	75	44	4	18	182	754	34	31	748	112
Future Volume (vph)	103	12	75	44	4	18	182	754	34	31	748	112
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	45.0		0.0	60.0		0.0	0.0		0.0	70.0		0.0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (m)	7.5			7.5			7.5			7.5		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	1.00	0.91	0.91
Ped Bike Factor		0.99		1.00								
Frt		0.871			0.876			0.993			0.980	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	1336	0	1752	1664	0	1492	4901	0	1805	4917	0
Flt Permitted	0.742			0.697			0.264			0.327		
Satd. Flow (perm)	1410	1336	0	1284	1664	0	415	4901	0	621	4917	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		79			19			13			39	
Link Speed (k/h)		60			50			60			60	
Link Distance (m)		132.7			140.4			91.2			346.3	
Travel Time (s)		8.0			10.1			5.5			20.8	
Confl. Peds. (#/hr)			1	1								
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	0%	13%	24%	3%	0%	0%	21%	5%	7%	0%	3%	6%
Adj. Flow (vph)	108	13	79	46	4	19	192	794	36	33	787	118
Shared Lane Traffic (%)												
Lane Group Flow (vph)	108	92	0	46	23	0	192	830	0	33	905	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		5.6			3.6			3.6			6.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (m)	2.0	10.0		2.0	10.0		2.0	10.0		2.0	10.0	
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Size(m)	2.0	0.6		2.0	0.6		2.0	0.6		2.0	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

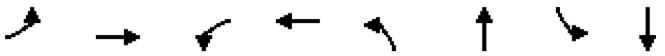
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		Perm	NA	
Protected Phases		4			8		5	2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		5	2		6	6	
Switch Phase												
Minimum Initial (s)	8.0	8.0		8.0	8.0		7.0	8.0		8.0	8.0	
Minimum Split (s)	31.0	31.0		31.0	31.0		11.0	33.4		41.0	41.0	
Total Split (s)	31.0	31.0		31.0	31.0		13.0	54.0		41.0	41.0	
Total Split (%)	36.5%	36.5%		36.5%	36.5%		15.3%	63.5%		48.2%	48.2%	
Maximum Green (s)	23.9	23.9		23.9	23.9		9.0	47.6		34.6	34.6	
Yellow Time (s)	3.3	3.3		3.3	3.3		3.0	3.7		3.7	3.7	
All-Red Time (s)	3.8	3.8		3.8	3.8		1.0	2.7		2.7	2.7	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	7.1	7.1		7.1	7.1		4.0	6.4		6.4	6.4	
Lead/Lag							Lead			Lag	Lag	
Lead-Lag Optimize?							Yes			Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		None	C-Max		C-Max	C-Max	
Walk Time (s)	7.0	7.0		7.0	7.0			7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0		10.0	10.0			19.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0		0	0			0		0	0	
Act Effct Green (s)	12.1	12.1		12.1	12.1		61.8	59.4		46.1	46.1	
Actuated g/C Ratio	0.14	0.14		0.14	0.14		0.73	0.70		0.54	0.54	
v/c Ratio	0.54	0.36		0.25	0.09		0.46	0.24		0.10	0.34	
Control Delay (s/veh)	43.1	13.7		34.4	15.5		12.9	4.2		12.8	11.7	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay (s/veh)	43.1	13.7		34.4	15.5		12.9	4.2		12.8	11.7	
LOS	D	B		C	B		B	A		B	B	
Approach Delay (s/veh)		29.6			28.1			5.9			11.7	
Approach LOS		C			C			A			B	

Intersection Summary

Area Type: Other
Cycle Length: 85
Actuated Cycle Length: 85
Offset: 34 (40%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 85
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.54
Intersection Signal Delay (s/veh): 11.1 Intersection LOS: B
Intersection Capacity Utilization 54.0% ICU Level of Service A
Analysis Period (min) 15

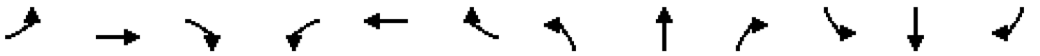
Splits and Phases: 2: Appleby Line & Palladium Way/Harrison Court





Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	108	92	46	23	192	830	33	905
v/c Ratio	0.54	0.36	0.25	0.09	0.46	0.24	0.10	0.34
Control Delay (s/veh)	43.1	13.7	34.4	15.5	12.9	4.2	12.8	11.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	43.1	13.7	34.4	15.5	12.9	4.2	12.8	11.7
Queue Length 50th (m)	16.4	1.8	6.7	0.6	6.6	12.0	2.3	25.8
Queue Length 95th (m)	29.6	13.5	15.1	6.4	30.5	19.6	8.5	43.1
Internal Link Dist (m)		108.7		116.4		67.2		322.3
Turn Bay Length (m)	45.0		60.0				70.0	
Base Capacity (vph)	396	432	361	481	428	3428	336	2684
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.27	0.21	0.13	0.05	0.45	0.24	0.10	0.34

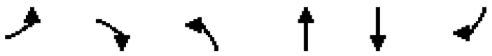
Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	103	12	75	44	4	18	182	754	34	31	748	112
Future Volume (vph)	103	12	75	44	4	18	182	754	34	31	748	112
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.1	7.1		7.1	7.1		4.0	6.4		6.4	6.4	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.91		1.00	0.91	
Frpb, ped/bikes	1.00	0.99		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.87		1.00	0.88		1.00	0.99		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1805	1336		1750	1665		1492	4904		1805	4919	
Flt Permitted	0.74	1.00		0.70	1.00		0.26	1.00		0.33	1.00	
Satd. Flow (perm)	1410	1336		1285	1665		415	4904		622	4919	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	108	13	79	46	4	19	192	794	36	33	787	118
RTOR Reduction (vph)	0	68	0	0	16	0	0	4	0	0	18	0
Lane Group Flow (vph)	108	24	0	46	7	0	192	826	0	33	887	0
Confl. Peds. (#/hr)			1	1								
Heavy Vehicles (%)	0%	13%	24%	3%	0%	0%	21%	5%	7%	0%	3%	6%
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		Perm	NA	
Protected Phases		4			8		5	2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	12.1	12.1		12.1	12.1		59.4	59.4		46.1	46.1	
Effective Green, g (s)	12.1	12.1		12.1	12.1		59.4	59.4		46.1	46.1	
Actuated g/C Ratio	0.14	0.14		0.14	0.14		0.70	0.70		0.54	0.54	
Clearance Time (s)	7.1	7.1		7.1	7.1		4.0	6.4		6.4	6.4	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	200	190		182	237		407	3427		337	2667	
v/s Ratio Prot		0.02			0.00		c0.05	0.17			0.18	
v/s Ratio Perm	c0.08			0.04			c0.28			0.05		
v/c Ratio	0.54	0.13		0.25	0.03		0.47	0.24		0.10	0.33	
Uniform Delay, d1	33.9	31.8		32.4	31.4		4.8	4.6		9.4	10.9	
Progression Factor	1.00	1.00		1.00	1.00		2.21	0.82		1.00	1.00	
Incremental Delay, d2	3.0	0.3		0.7	0.0		0.8	0.2		0.6	0.3	
Delay (s)	36.8	32.1		33.2	31.4		11.5	4.0		10.0	11.2	
Level of Service	D	C		C	C		B	A		A	B	
Approach Delay (s/veh)		34.7			32.6			5.4			11.2	
Approach LOS		C			C			A			B	

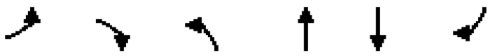
Intersection Summary			
HCM 2000 Control Delay (s/veh)	11.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.50		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	17.5
Intersection Capacity Utilization	54.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	19	0	988	847	20
Future Volume (vph)	0	19	0	988	847	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0	0.0	25.0			0.0
Storage Lanes	0	1	1			0
Taper Length (m)	7.5		7.5			
Lane Util. Factor	1.00	1.00	1.00	0.86	0.91	0.91
Ped Bike Factor						
Frt		0.865			0.997	
Flt Protected						
Satd. Flow (prot)	0	1644	0	6225	4977	0
Flt Permitted						
Satd. Flow (perm)	0	1644	0	6225	4977	0
Link Speed (k/h)	50			60	60	
Link Distance (m)	53.7			143.7	91.2	
Travel Time (s)	3.9			8.6	5.5	
Confl. Peds. (#/hr)			1			1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	5%	4%	0%
Adj. Flow (vph)	0	20	0	1029	882	21
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	20	0	1029	903	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	0.0			6.6	6.6	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25	15	25			15
Sign Control	Stop			Free	Free	

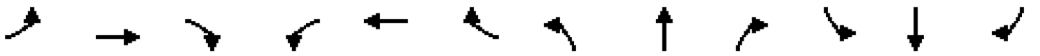
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 26.8%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	19	0	988	847	20
Future Volume (Veh/h)	0	19	0	988	847	20
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Hourly flow rate (vph)	0	20	0	1029	882	21
Pedestrians	1					
Lane Width (m)	3.6					
Walking Speed (m/s)	1.2					
Percent Blockage	0					
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (m)				144	91	
pX, platoon unblocked	0.92	0.91	0.91			
vC, conflicting volume	1151	306	904			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	779	0	568			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	98	100			
cM capacity (veh/h)	309	997	927			

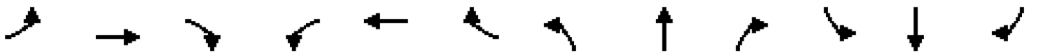
Direction, Lane #	EB 1	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3
Volume Total	20	257	257	257	257	353	353	197
Volume Left	0	0	0	0	0	0	0	0
Volume Right	20	0	0	0	0	0	0	21
cSH	997	1700	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.02	0.15	0.15	0.15	0.15	0.21	0.21	0.12
Queue Length 95th (m)	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (s/veh)	8.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	A							
Approach Delay (s/veh)	8.7	0.0				0.0		
Approach LOS	A							

Intersection Summary				
Average Delay	0.1			
Intersection Capacity Utilization	26.8%	ICU Level of Service		A
Analysis Period (min)	15			



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	56	439	19	49	156	44	17	22	59	8	9	44
Future Volume (vph)	56	439	19	49	156	44	17	22	59	8	9	44
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.995			0.976			0.919			0.904	
Flt Protected		0.995			0.990			0.991			0.993	
Satd. Flow (prot)	0	1845	0	0	1727	0	0	1690	0	0	1670	0
Flt Permitted		0.995			0.990			0.991			0.993	
Satd. Flow (perm)	0	1845	0	0	1727	0	0	1690	0	0	1670	0
Link Speed (k/h)		40			40			40			50	
Link Distance (m)		200.7			141.3			98.5			71.1	
Travel Time (s)		18.1			12.7			8.9			5.1	
Confl. Peds. (#/hr)	9		18	18		9			1	1		
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Heavy Vehicles (%)	0%	2%	6%	0%	10%	0%	7%	0%	2%	0%	0%	3%
Adj. Flow (vph)	67	523	23	58	186	52	20	26	70	10	11	52
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	613	0	0	296	0	0	116	0	0	73	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		0.0			0.0			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	47.2%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	56	439	19	49	156	44	17	22	59	8	9	44
Future Volume (Veh/h)	56	439	19	49	156	44	17	22	59	8	9	44
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Hourly flow rate (vph)	67	523	23	58	186	52	20	26	70	10	11	52
Pedestrians					1			18			9	
Lane Width (m)					3.6			3.6			3.6	
Walking Speed (m/s)					1.2			1.2			1.2	
Percent Blockage					0			2			1	
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (m)					141							
pX, platoon unblocked	0.99						0.99	0.99		0.99	0.99	0.99
vC, conflicting volume	247			564			1072	1050	554	1090	1035	221
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	228			564			1066	1043	554	1083	1028	202
tC, single (s)	4.1			4.1			7.2	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.6	4.0	3.3	3.5	4.0	3.3
p0 queue free %	95			94			87	87	87	93	95	94
cM capacity (veh/h)	1322			1002			154	199	524	136	203	818

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	613	296	116	73
Volume Left	67	58	20	10
Volume Right	23	52	70	52
cSH	1322	1002	295	381
Volume to Capacity	0.05	0.06	0.39	0.19
Queue Length 95th (m)	1.2	1.4	13.5	5.2
Control Delay (s/veh)	1.4	2.2	24.9	16.7
Lane LOS	A	A	C	C
Approach Delay (s/veh)	1.4	2.2	24.9	16.7
Approach LOS			C	C

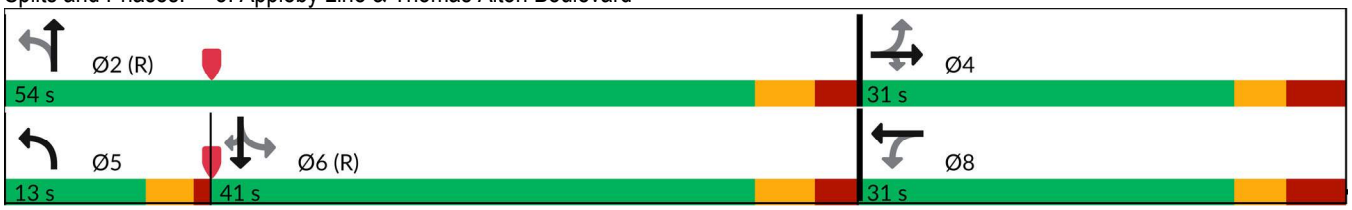
Intersection Summary				
Average Delay	5.1			
Intersection Capacity Utilization	47.2%	ICU Level of Service	A	
Analysis Period (min)	15			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	142	4	353	29	3	3	203	844	43	3	835	40
Future Volume (vph)	142	4	353	29	3	3	203	844	43	3	835	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		40.0	30.0		0.0	130.0		0.0	30.0		60.0
Storage Lanes	0		1	1		0	1		0	1		1
Taper Length (m)	7.5			7.5			7.5			7.5		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	1.00	0.91	1.00
Ped Bike Factor			0.99	1.00			1.00					0.98
Frt			0.850		0.925			0.993				0.850
Flt Protected		0.954		0.950			0.950			0.950		
Satd. Flow (prot)	0	1795	1599	1805	1758	0	1687	4786	0	1805	4988	1495
Flt Permitted		0.728		0.657			0.256			0.285		
Satd. Flow (perm)	0	1370	1577	1247	1758	0	454	4786	0	542	4988	1458
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			268		3			15				104
Link Speed (k/h)		40			50			60			60	
Link Distance (m)		141.3			116.2			309.3			143.7	
Travel Time (s)		12.7			8.4			18.6			8.6	
Confl. Peds. (#/hr)			1	1			2					2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	1%	0%	1%	0%	0%	0%	7%	8%	0%	0%	4%	8%
Adj. Flow (vph)	154	4	384	32	3	3	221	917	47	3	908	43
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	158	384	32	6	0	221	964	0	3	908	43
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1	1	2		1	2		1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (m)	2.0	10.0	2.0	2.0	10.0		2.0	10.0		2.0	10.0	2.0
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Size(m)	2.0	0.6	2.0	2.0	0.6		2.0	0.6		2.0	0.6	2.0
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA	Perm	Perm	NA		pm+pt	NA		Perm	NA	Perm
Protected Phases		4			8		5	2			6	
Permitted Phases	4		4	8			2			6		6
Detector Phase	4	4	4	8	8		5	2		6	6	6
Switch Phase												
Minimum Initial (s)	8.0	8.0	8.0	8.0	8.0		7.0	8.0		8.0	8.0	8.0
Minimum Split (s)	31.0	31.0	31.0	31.0	31.0		11.0	33.4		41.0	41.0	41.0
Total Split (s)	31.0	31.0	31.0	31.0	31.0		13.0	54.0		41.0	41.0	41.0
Total Split (%)	36.5%	36.5%	36.5%	36.5%	36.5%		15.3%	63.5%		48.2%	48.2%	48.2%
Maximum Green (s)	23.9	23.9	23.9	23.9	23.9		9.0	47.6		34.6	34.6	34.6
Yellow Time (s)	3.3	3.3	3.3	3.3	3.3		3.0	3.7		3.7	3.7	3.7
All-Red Time (s)	3.8	3.8	3.8	3.8	3.8		1.0	2.7		2.7	2.7	2.7
Lost Time Adjust (s)		0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)		7.1	7.1	7.1	7.1		4.0	6.4		6.4	6.4	6.4
Lead/Lag							Lead			Lag	Lag	Lag
Lead-Lag Optimize?							Yes			Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	3.0
Recall Mode	None	None	None	None	None		None	C-Max		C-Max	C-Max	C-Max
Walk Time (s)	7.0	7.0	7.0	7.0	7.0			7.0		7.0	7.0	7.0
Flash Don't Walk (s)	10.0	10.0	10.0	10.0	10.0			19.0		10.0	10.0	10.0
Pedestrian Calls (#/hr)	0	0	0	0	0			0		0	0	0
Act Effct Green (s)		15.7	15.7	15.7	15.7		58.2	55.8		42.9	42.9	42.9
Actuated g/C Ratio		0.18	0.18	0.18	0.18		0.68	0.66		0.50	0.50	0.50
v/c Ratio		0.63	0.76	0.14	0.02		0.50	0.31		0.01	0.36	0.05
Control Delay (s/veh)		41.9	19.7	27.5	19.5		10.0	7.2		7.3	9.3	1.1
Queue Delay		0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay (s/veh)		41.9	19.7	27.5	19.5		10.0	7.2		7.3	9.3	1.1
LOS		D	B	C	B		B	A		A	A	A
Approach Delay (s/veh)		26.2			26.3			7.7			8.9	
Approach LOS		C			C			A			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 85			
Actuated Cycle Length: 85			
Offset: 52 (61%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 85			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.76			
Intersection Signal Delay (s/veh): 12.1		Intersection LOS: B	
Intersection Capacity Utilization 61.9%		ICU Level of Service B	
Analysis Period (min) 15			

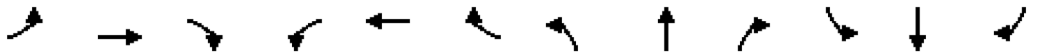
Splits and Phases: 5: Appleby Line & Thomas Alton Boulevard



Lane Group	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	158	384	32	6	221	964	3	908	43
v/c Ratio	0.63	0.76	0.14	0.02	0.50	0.31	0.01	0.36	0.05
Control Delay (s/veh)	41.9	19.7	27.5	19.5	10.0	7.2	7.3	9.3	1.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	41.9	19.7	27.5	19.5	10.0	7.2	7.3	9.3	1.1
Queue Length 50th (m)	23.8	16.7	4.4	0.4	10.7	20.4	0.1	35.0	0.4
Queue Length 95th (m)	37.7	41.6	10.4	3.1	25.8	36.1	m0.4	54.2	0.7
Internal Link Dist (m)	117.3			92.2		285.3		119.7	
Turn Bay Length (m)		40.0	30.0		130.0		30.0		60.0
Base Capacity (vph)	385	636	350	496	449	3149	273	2516	786
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.41	0.60	0.09	0.01	0.49	0.31	0.01	0.36	0.05

Intersection Summary

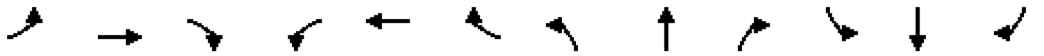
m Volume for 95th percentile queue is metered by upstream signal.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	142	4	353	29	3	3	203	844	43	3	835	40
Future Volume (vph)	142	4	353	29	3	3	203	844	43	3	835	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		7.1	7.1	7.1	7.1		4.0	6.4		6.4	6.4	6.4
Lane Util. Factor		1.00	1.00	1.00	1.00		1.00	0.91		1.00	0.91	1.00
Frpb, ped/bikes		1.00	0.99	1.00	1.00		1.00	1.00		1.00	1.00	0.98
Flpb, ped/bikes		1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00
Frt		1.00	0.85	1.00	0.93		1.00	0.99		1.00	1.00	0.85
Flt Protected		0.95	1.00	0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)		1794	1577	1803	1758		1687	4785		1805	4988	1458
Flt Permitted		0.73	1.00	0.66	1.00		0.26	1.00		0.28	1.00	1.00
Satd. Flow (perm)		1369	1577	1246	1758		454	4785		541	4988	1458
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	154	4	384	32	3	3	221	917	47	3	908	43
RTOR Reduction (vph)	0	0	218	0	2	0	0	5	0	0	0	21
Lane Group Flow (vph)	0	158	166	32	4	0	221	959	0	3	908	22
Confl. Peds. (#/hr)			1	1			2					2
Heavy Vehicles (%)	1%	0%	1%	0%	0%	0%	7%	8%	0%	0%	4%	8%
Turn Type	Perm	NA	Perm	Perm	NA		pm+pt	NA		Perm	NA	Perm
Protected Phases		4			8		5	2			6	
Permitted Phases	4		4	8			2			6		6
Actuated Green, G (s)		15.7	15.7	15.7	15.7		55.8	55.8		42.8	42.8	42.8
Effective Green, g (s)		15.7	15.7	15.7	15.7		55.8	55.8		42.8	42.8	42.8
Actuated g/C Ratio		0.18	0.18	0.18	0.18		0.66	0.66		0.50	0.50	0.50
Clearance Time (s)		7.1	7.1	7.1	7.1		4.0	6.4		6.4	6.4	6.4
Vehicle Extension (s)		3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)		252	291	230	324		428	3141		272	2511	734
v/s Ratio Prot					0.00		c0.05	0.20			0.18	
v/s Ratio Perm		c0.12	0.10	0.03			c0.28			0.01		0.01
v/c Ratio		0.63	0.57	0.14	0.01		0.52	0.31		0.01	0.36	0.03
Uniform Delay, d1		31.9	31.6	29.0	28.3		6.3	6.3		10.5	12.8	10.6
Progression Factor		1.00	1.00	1.00	1.00		1.00	1.00		0.52	0.64	1.00
Incremental Delay, d2		4.8	2.5	0.3	0.0		1.1	0.3		0.1	0.4	0.1
Delay (s)		36.8	34.1	29.3	28.3		7.3	6.5		5.5	8.6	10.7
Level of Service		D	C	C	C		A	A		A	A	B
Approach Delay (s/veh)		34.9			29.1			6.7			8.6	
Approach LOS		C			C			A			A	

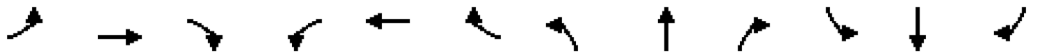
Intersection Summary			
HCM 2000 Control Delay (s/veh)	13.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.56		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	17.5
Intersection Capacity Utilization	61.9%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	3	244	48	25	153	30	22	0	42	118	1	14
Future Volume (vph)	3	244	48	25	153	30	22	0	42	118	1	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	15.0		0.0	20.0		0.0	0.0		0.0	0.0		0.0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (m)	7.5			7.5			7.5			7.5		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.975			0.976			0.911			0.986	
Flt Protected	0.950			0.950				0.983			0.957	
Satd. Flow (prot)	1805	1629	0	1805	1698	0	0	1607	0	0	1793	0
Flt Permitted	0.950			0.950				0.983			0.957	
Satd. Flow (perm)	1805	1629	0	1805	1698	0	0	1607	0	0	1793	0
Link Speed (k/h)		60			60			50			50	
Link Distance (m)		124.0			132.7			113.2			175.1	
Travel Time (s)		7.4			8.0			8.2			12.6	
Confl. Peds. (#/hr)	1		2	2		1	2					2
Peak Hour Factor	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69
Heavy Vehicles (%)	0%	16%	2%	0%	11%	0%	0%	0%	9%	0%	0%	0%
Adj. Flow (vph)	4	354	70	36	222	43	32	0	61	171	1	20
Shared Lane Traffic (%)												
Lane Group Flow (vph)	4	424	0	36	265	0	0	93	0	0	192	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.6			3.6			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane		Yes										
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Sign Control		Free			Free			Stop			Stop	

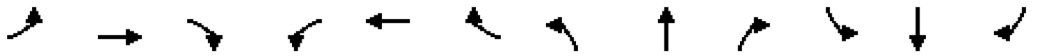
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 41.6%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	3	244	48	25	153	30	22	0	42	118	1	14
Future Volume (Veh/h)	3	244	48	25	153	30	22	0	42	118	1	14
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69
Hourly flow rate (vph)	4	354	70	36	222	43	32	0	61	171	1	20
Pedestrians		2						2			1	
Lane Width (m)		3.6						3.6			3.6	
Walking Speed (m/s)		1.2						1.2			1.2	
Percent Blockage		0						0			0	
Right turn flare (veh)												
Median type		TWLTL			None							
Median storage veh)		2										
Upstream signal (m)					133							
pX, platoon unblocked												
vC, conflicting volume	266			426			716	737	391	740	751	247
vC1, stage 1 conf vol							399	399		317	317	
vC2, stage 2 conf vol							317	338		423	434	
vCu, unblocked vol	266			426			716	737	391	740	751	247
tC, single (s)	4.1			4.1			7.1	6.5	6.3	7.1	6.5	6.2
tC, 2 stage (s)							6.1	5.5		6.1	5.5	
tF (s)	2.2			2.2			3.5	4.0	3.4	3.5	4.0	3.3
p0 queue free %	100			97			94	100	90	63	100	97
cM capacity (veh/h)	1308			1142			523	507	641	466	485	795

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1
Volume Total	4	424	36	265	93	192
Volume Left	4	0	36	0	32	171
Volume Right	0	70	0	43	61	20
cSH	1308	1700	1142	1700	595	487
Volume to Capacity	0.00	0.25	0.03	0.16	0.16	0.39
Queue Length 95th (m)	0.1	0.0	0.7	0.0	4.1	13.9
Control Delay (s/veh)	7.8	0.0	8.3	0.0	12.2	17.1
Lane LOS	A		A		B	C
Approach Delay (s/veh)	0.1		1.0		12.2	17.1
Approach LOS					B	C

Intersection Summary				
Average Delay	4.7			
Intersection Capacity Utilization	41.6%	ICU Level of Service		A
Analysis Period (min)	15			

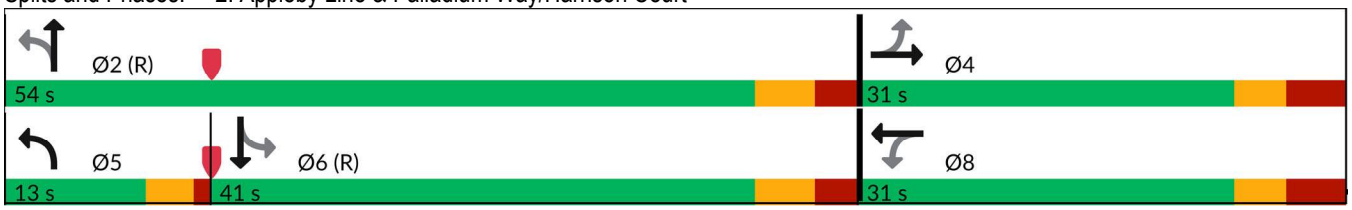


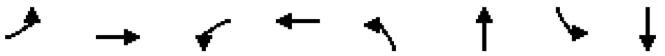
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	151	13	214	129	13	40	109	1033	42	43	775	98
Future Volume (vph)	151	13	214	129	13	40	109	1033	42	43	775	98
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	45.0		0.0	60.0		0.0	0.0		0.0	70.0		0.0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (m)	7.5			7.5			7.5			7.5		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	1.00	0.91	0.91
Ped Bike Factor		0.98		1.00								
Frt		0.859			0.887			0.994			0.983	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1719	1605	0	1787	1685	0	1805	5000	0	1805	4950	0
Flt Permitted	0.718			0.458			0.234			0.221		
Satd. Flow (perm)	1299	1605	0	858	1685	0	445	5000	0	420	4950	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		240			45			11			32	
Link Speed (k/h)		60			50			60			60	
Link Distance (m)		132.7			140.4			91.2			346.3	
Travel Time (s)		8.0			10.1			5.5			20.8	
Confl. Peds. (#/hr)			4	4								
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	5%	0%	0%	1%	0%	0%	0%	3%	6%	0%	3%	3%
Adj. Flow (vph)	170	15	240	145	15	45	122	1161	47	48	871	110
Shared Lane Traffic (%)												
Lane Group Flow (vph)	170	255	0	145	60	0	122	1208	0	48	981	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		5.6			3.6			3.6			6.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (m)	2.0	10.0		2.0	10.0		2.0	10.0		2.0	10.0	
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Size(m)	2.0	0.6		2.0	0.6		2.0	0.6		2.0	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		Perm	NA	
Protected Phases		4			8		5	2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		5	2		6	6	
Switch Phase												
Minimum Initial (s)	8.0	8.0		8.0	8.0		7.0	8.0		8.0	8.0	
Minimum Split (s)	31.0	31.0		31.0	31.0		11.0	33.4		41.0	41.0	
Total Split (s)	31.0	31.0		31.0	31.0		13.0	54.0		41.0	41.0	
Total Split (%)	36.5%	36.5%		36.5%	36.5%		15.3%	63.5%		48.2%	48.2%	
Maximum Green (s)	23.9	23.9		23.9	23.9		9.0	47.6		34.6	34.6	
Yellow Time (s)	3.3	3.3		3.3	3.3		3.0	3.7		3.7	3.7	
All-Red Time (s)	3.8	3.8		3.8	3.8		1.0	2.7		2.7	2.7	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	7.1	7.1		7.1	7.1		4.0	6.4		6.4	6.4	
Lead/Lag							Lead			Lag	Lag	
Lead-Lag Optimize?							Yes			Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		None	C-Max		C-Max	C-Max	
Walk Time (s)	7.0	7.0		7.0	7.0			7.0		7.0	7.0	
Flash Don't Walk (s)	10.0	10.0		10.0	10.0			19.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0		0	0			0		0	0	
Act Effct Green (s)	17.2	17.2		17.2	17.2		56.7	54.3		44.6	44.6	
Actuated g/C Ratio	0.20	0.20		0.20	0.20		0.67	0.64		0.52	0.52	
v/c Ratio	0.65	0.49		0.84	0.16		0.29	0.38		0.22	0.38	
Control Delay (s/veh)	41.5	7.9		67.5	11.6		8.3	7.2		18.5	13.8	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay (s/veh)	41.5	7.9		67.5	11.6		8.3	7.2		18.5	13.8	
LOS	D	A		E	B		A	A		B	B	
Approach Delay (s/veh)		21.4			51.1			7.3			14.0	
Approach LOS		C			D			A			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 85			
Actuated Cycle Length: 85			
Offset: 34 (40%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 85			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.84			
Intersection Signal Delay (s/veh): 14.6		Intersection LOS: B	
Intersection Capacity Utilization 71.5%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 2: Appleby Line & Palladium Way/Harrison Court





Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	170	255	145	60	122	1208	48	981
v/c Ratio	0.65	0.49	0.84	0.16	0.29	0.38	0.22	0.38
Control Delay (s/veh)	41.5	7.9	67.5	11.6	8.3	7.2	18.5	13.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	41.5	7.9	67.5	11.6	8.3	7.2	18.5	13.8
Queue Length 50th (m)	25.0	2.0	22.3	1.9	5.8	27.6	4.2	33.0
Queue Length 95th (m)	40.2	17.5	#39.8	9.9	13.4	33.1	13.6	50.3
Internal Link Dist (m)		108.7		116.4		67.2		322.3
Turn Bay Length (m)	45.0		60.0				70.0	
Base Capacity (vph)	365	623	241	506	440	3195	220	2614
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.47	0.41	0.60	0.12	0.28	0.38	0.22	0.38

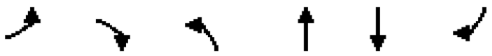
Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	151	13	214	129	13	40	109	1033	42	43	775	98
Future Volume (vph)	151	13	214	129	13	40	109	1033	42	43	775	98
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.1	7.1		7.1	7.1		4.0	6.4		6.4	6.4	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.91		1.00	0.91	
Frpb, ped/bikes	1.00	0.98		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.86		1.00	0.89		1.00	0.99		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1719	1604		1781	1686		1805	5001		1805	4951	
Flt Permitted	0.72	1.00		0.46	1.00		0.23	1.00		0.22	1.00	
Satd. Flow (perm)	1299	1604		859	1686		444	5001		419	4951	
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	170	15	240	145	15	45	122	1161	47	48	871	110
RTOR Reduction (vph)	0	191	0	0	36	0	0	4	0	0	15	0
Lane Group Flow (vph)	170	64	0	145	24	0	122	1204	0	48	966	0
Confl. Peds. (#/hr)			4	4								
Heavy Vehicles (%)	5%	0%	0%	1%	0%	0%	0%	3%	6%	0%	3%	3%
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		Perm	NA	
Protected Phases		4			8		5	2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	17.2	17.2		17.2	17.2		54.3	54.3		43.9	43.9	
Effective Green, g (s)	17.2	17.2		17.2	17.2		54.3	54.3		43.9	43.9	
Actuated g/C Ratio	0.20	0.20		0.20	0.20		0.64	0.64		0.52	0.52	
Clearance Time (s)	7.1	7.1		7.1	7.1		4.0	6.4		6.4	6.4	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	262	324		173	341		386	3194		216	2557	
v/s Ratio Prot		0.04			0.01		0.02	c0.24			0.20	
v/s Ratio Perm	0.13			c0.17			0.18			0.11		
v/c Ratio	0.65	0.20		0.84	0.07		0.32	0.38		0.22	0.38	
Uniform Delay, d1	31.1	28.2		32.6	27.4		6.4	7.3		11.2	12.3	
Progression Factor	1.00	1.00		1.00	1.00		1.06	0.86		1.00	1.00	
Incremental Delay, d2	5.4	0.3		28.3	0.1		0.4	0.3		2.4	0.4	
Delay (s)	36.6	28.5		60.8	27.5		7.2	6.6		13.6	12.8	
Level of Service	D	C		E	C		A	A		B	B	
Approach Delay (s/veh)		31.7			51.1			6.6			12.8	
Approach LOS		C			D			A			B	

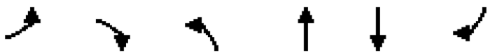
Intersection Summary			
HCM 2000 Control Delay (s/veh)	15.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	17.5
Intersection Capacity Utilization	71.5%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	34	0	1204	1060	20
Future Volume (vph)	0	34	0	1204	1060	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0	0.0	25.0			0.0
Storage Lanes	0	1	1			0
Taper Length (m)	7.5		7.5			
Lane Util. Factor	1.00	1.00	1.00	0.86	0.91	0.91
Ped Bike Factor						
Frt		0.865			0.997	
Flt Protected						
Satd. Flow (prot)	0	1644	0	6346	5072	0
Flt Permitted						
Satd. Flow (perm)	0	1644	0	6346	5072	0
Link Speed (k/h)	50			60	60	
Link Distance (m)	53.7			143.7	91.2	
Travel Time (s)	3.9			8.6	5.5	
Confl. Peds. (#/hr)			1			1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	0%	0%	0%	3%	2%	0%
Adj. Flow (vph)	0	38	0	1338	1178	22
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	38	0	1338	1200	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	0.0			6.6	6.6	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25	15	25			15
Sign Control	Stop			Free	Free	

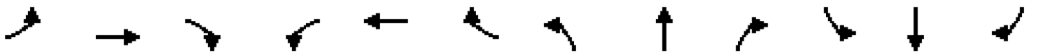
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 30.9%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	34	0	1204	1060	20
Future Volume (Veh/h)	0	34	0	1204	1060	20
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	0	38	0	1338	1178	22
Pedestrians	1					
Lane Width (m)	3.6					
Walking Speed (m/s)	1.2					
Percent Blockage	0					
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (m)				144	91	
pX, platoon unblocked	0.92	0.90	0.90			
vC, conflicting volume	1525	405	1201			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	813	0	829			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	96	100			
cM capacity (veh/h)	296	979	729			

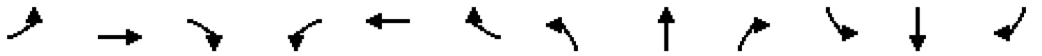
Direction, Lane #	EB 1	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3
Volume Total	38	335	335	335	335	471	471	258
Volume Left	0	0	0	0	0	0	0	0
Volume Right	38	0	0	0	0	0	0	22
cSH	979	1700	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.04	0.20	0.20	0.20	0.20	0.28	0.28	0.15
Queue Length 95th (m)	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (s/veh)	8.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	A							
Approach Delay (s/veh)	8.8	0.0				0.0		
Approach LOS	A							

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	30.9%	ICU Level of Service	A
Analysis Period (min)	15		



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	17	308	14	137	426	42	4	14	54	12	11	27
Future Volume (vph)	17	308	14	137	426	42	4	14	54	12	11	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.994			0.991			0.899			0.929	
Flt Protected		0.997			0.989			0.997			0.988	
Satd. Flow (prot)	0	1866	0	0	1862	0	0	1703	0	0	1682	0
Flt Permitted		0.997			0.989			0.997			0.988	
Satd. Flow (perm)	0	1866	0	0	1862	0	0	1703	0	0	1682	0
Link Speed (k/h)		40			40			40			50	
Link Distance (m)		200.7			141.3			98.5			71.1	
Travel Time (s)		18.1			12.7			8.9			5.1	
Confl. Peds. (#/hr)	4		9	9		4						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	7%
Adj. Flow (vph)	18	324	15	144	448	44	4	15	57	13	12	28
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	357	0	0	636	0	0	76	0	0	53	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		0.0			0.0			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Sign Control		Free			Free			Stop			Stop	

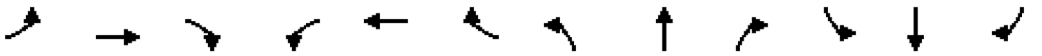
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 67.7%		ICU Level of Service C	
Analysis Period (min) 15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	17	308	14	137	426	42	4	14	54	12	11	27
Future Volume (Veh/h)	17	308	14	137	426	42	4	14	54	12	11	27
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	18	324	15	144	448	44	4	15	57	13	12	28
Pedestrians								9			4	
Lane Width (m)								3.6			3.6	
Walking Speed (m/s)								1.2			1.2	
Percent Blockage								1			0	
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (m)					141							
pX, platoon unblocked	0.90						0.90	0.90		0.90	0.90	0.90
vC, conflicting volume	496			348			1169	1161	341	1194	1146	474
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	382			348			1131	1122	341	1159	1106	357
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.3
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.4
p0 queue free %	98			88			97	91	92	89	93	95
cM capacity (veh/h)	1063			1213			130	160	701	119	163	605

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	357	636	76	53
Volume Left	18	144	4	13
Volume Right	15	44	57	28
cSH	1063	1213	369	231
Volume to Capacity	0.02	0.12	0.21	0.23
Queue Length 95th (m)	0.4	3.0	5.7	6.4
Control Delay (s/veh)	0.6	3.0	17.3	25.2
Lane LOS	A	A	C	D
Approach Delay (s/veh)	0.6	3.0	17.3	25.2
Approach LOS			C	D

Intersection Summary				
Average Delay	4.2			
Intersection Capacity Utilization	67.7%	ICU Level of Service	C	
Analysis Period (min)	15			

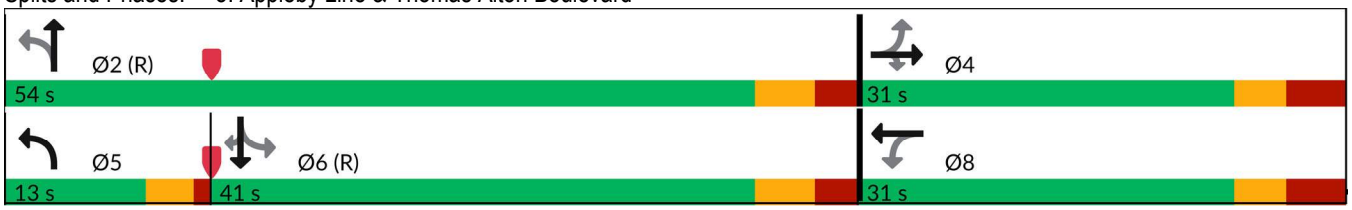


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	76	9	286	86	10	4	444	1218	76	1	996	114
Future Volume (vph)	76	9	286	86	10	4	444	1218	76	1	996	114
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		40.0	30.0		0.0	130.0		0.0	30.0		60.0
Storage Lanes	0		1	1		0	1		0	1		1
Taper Length (m)	7.5			7.5			7.5			7.5		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	1.00	0.91	1.00
Ped Bike Factor		1.00	0.98	0.99	1.00		1.00					0.98
Frt			0.850		0.960			0.991				0.850
Flt Protected		0.957		0.950			0.950			0.950		
Satd. Flow (prot)	0	1802	1599	1805	1817	0	1770	4999	0	1805	5085	1599
Flt Permitted		0.737		0.699			0.185			0.188		
Satd. Flow (perm)	0	1386	1568	1319	1817	0	344	4999	0	357	5085	1559
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			252		4			18				120
Link Speed (k/h)		40			50			60			60	
Link Distance (m)		141.3			116.2			309.3			143.7	
Travel Time (s)		12.7			8.4			18.6			8.6	
Confl. Peds. (#/hr)	1		5	5		1	2					2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	1%	0%	1%	0%	0%	0%	2%	3%	0%	0%	2%	1%
Adj. Flow (vph)	80	9	301	91	11	4	467	1282	80	1	1048	120
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	89	301	91	15	0	467	1362	0	1	1048	120
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1	1	2		1	2		1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (m)	2.0	10.0	2.0	2.0	10.0		2.0	10.0		2.0	10.0	2.0
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Size(m)	2.0	0.6	2.0	2.0	0.6		2.0	0.6		2.0	0.6	2.0
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA	Perm	Perm	NA		pm+pt	NA		Perm	NA	Perm
Protected Phases		4			8		5	2			6	
Permitted Phases	4		4	8			2			6		6
Detector Phase	4	4	4	8	8		5	2		6	6	6
Switch Phase												
Minimum Initial (s)	8.0	8.0	8.0	8.0	8.0		7.0	8.0		8.0	8.0	8.0
Minimum Split (s)	31.0	31.0	31.0	31.0	31.0		11.0	33.4		41.0	41.0	41.0
Total Split (s)	31.0	31.0	31.0	31.0	31.0		13.0	54.0		41.0	41.0	41.0
Total Split (%)	36.5%	36.5%	36.5%	36.5%	36.5%		15.3%	63.5%		48.2%	48.2%	48.2%
Maximum Green (s)	23.9	23.9	23.9	23.9	23.9		9.0	47.6		34.6	34.6	34.6
Yellow Time (s)	3.3	3.3	3.3	3.3	3.3		3.0	3.7		3.7	3.7	3.7
All-Red Time (s)	3.8	3.8	3.8	3.8	3.8		1.0	2.7		2.7	2.7	2.7
Lost Time Adjust (s)		0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)		7.1	7.1	7.1	7.1		4.0	6.4		6.4	6.4	6.4
Lead/Lag							Lead			Lag	Lag	Lag
Lead-Lag Optimize?							Yes			Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	3.0
Recall Mode	None	None	None	None	None		None	C-Max		C-Max	C-Max	C-Max
Walk Time (s)	7.0	7.0	7.0	7.0	7.0			7.0		7.0	7.0	7.0
Flash Don't Walk (s)	10.0	10.0	10.0	10.0	10.0			19.0		10.0	10.0	10.0
Pedestrian Calls (#/hr)	0	0	0	0	0			0		0	0	0
Act Effct Green (s)		11.9	11.9	11.9	11.9		62.0	59.6		34.6	34.6	34.6
Actuated g/C Ratio		0.14	0.14	0.14	0.14		0.73	0.70		0.41	0.41	0.41
v/c Ratio		0.46	0.69	0.49	0.06		0.77	0.39		0.01	0.51	0.17
Control Delay (s/veh)		40.4	16.2	42.1	25.0		23.7	5.9		12.0	17.2	2.5
Queue Delay		0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay (s/veh)		40.4	16.2	42.1	25.0		23.7	5.9		12.0	17.2	2.5
LOS		D	B	D	C		C	A		B	B	A
Approach Delay (s/veh)		21.7			39.7			10.5			15.7	
Approach LOS		C			D			B			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 85			
Actuated Cycle Length: 85			
Offset: 52 (61%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 85			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.77			
Intersection Signal Delay (s/veh): 14.3		Intersection LOS: B	
Intersection Capacity Utilization 70.2%		ICU Level of Service C	
Analysis Period (min) 15			

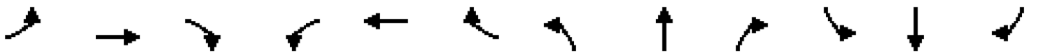
Splits and Phases: 5: Appleby Line & Thomas Alton Boulevard



Lane Group	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	89	301	91	15	467	1362	1	1048	120
v/c Ratio	0.46	0.69	0.49	0.06	0.77	0.39	0.01	0.51	0.17
Control Delay (s/veh)	40.4	16.2	42.1	25.0	23.7	5.9	12.0	17.2	2.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	40.4	16.2	42.1	25.0	23.7	5.9	12.0	17.2	2.5
Queue Length 50th (m)	13.4	7.2	13.8	1.6	35.9	26.3	0.1	50.6	3.5
Queue Length 95th (m)	24.9	28.6	25.6	6.0	#102.4	43.8	m0.1	54.7	m2.4
Internal Link Dist (m)	117.3			92.2		285.3		119.7	
Turn Bay Length (m)		40.0	30.0		130.0		30.0		60.0
Base Capacity (vph)	389	622	370	513	604	3512	145	2069	705
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.23	0.48	0.25	0.03	0.77	0.39	0.01	0.51	0.17

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	76	9	286	86	10	4	444	1218	76	1	996	114
Future Volume (vph)	76	9	286	86	10	4	444	1218	76	1	996	114
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		7.1	7.1	7.1	7.1		4.0	6.4		6.4	6.4	6.4
Lane Util. Factor		1.00	1.00	1.00	1.00		1.00	0.91		1.00	0.91	1.00
Frpb, ped/bikes		1.00	0.98	1.00	1.00		1.00	1.00		1.00	1.00	0.98
Flpb, ped/bikes		1.00	1.00	0.99	1.00		1.00	1.00		1.00	1.00	1.00
Frt		1.00	0.85	1.00	0.96		1.00	0.99		1.00	1.00	0.85
Flt Protected		0.96	1.00	0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)		1800	1568	1793	1817		1769	5000		1805	5085	1559
Flt Permitted		0.74	1.00	0.70	1.00		0.18	1.00		0.19	1.00	1.00
Satd. Flow (perm)		1386	1568	1320	1817		344	5000		357	5085	1559
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	80	9	301	91	11	4	467	1282	80	1	1048	120
RTOR Reduction (vph)	0	0	217	0	3	0	0	5	0	0	0	71
Lane Group Flow (vph)	0	89	84	91	12	0	467	1357	0	1	1048	49
Confl. Peds. (#/hr)	1		5	5		1	2					2
Heavy Vehicles (%)	1%	0%	1%	0%	0%	0%	2%	3%	0%	0%	2%	1%
Turn Type	Perm	NA	Perm	Perm	NA		pm+pt	NA		Perm	NA	Perm
Protected Phases		4			8		5	2			6	
Permitted Phases	4		4	8			2			6		6
Actuated Green, G (s)		11.9	11.9	11.9	11.9		59.6	59.6		34.6	34.6	34.6
Effective Green, g (s)		11.9	11.9	11.9	11.9		59.6	59.6		34.6	34.6	34.6
Actuated g/C Ratio		0.14	0.14	0.14	0.14		0.70	0.70		0.41	0.41	0.41
Clearance Time (s)		7.1	7.1	7.1	7.1		4.0	6.4		6.4	6.4	6.4
Vehicle Extension (s)		3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)		194	219	184	254		593	3505		145	2069	634
v/s Ratio Prot					0.01		c0.19	0.27			0.21	
v/s Ratio Perm		0.06	0.05	c0.07			c0.36			0.00		0.03
v/c Ratio		0.46	0.38	0.49	0.05		0.79	0.39		0.01	0.51	0.08
Uniform Delay, d1		33.6	33.2	33.8	31.6		13.7	5.2		15.0	18.8	15.4
Progression Factor		1.00	1.00	1.00	1.00		1.00	1.00		0.76	0.86	0.59
Incremental Delay, d2		1.7	1.1	2.1	0.1		6.8	0.3		0.1	0.8	0.2
Delay (s)		35.3	34.3	35.9	31.7		20.5	5.5		11.4	17.0	9.3
Level of Service		D	C	D	C		C	A		B	B	A
Approach Delay (s/veh)		34.6			35.3			9.4			16.2	
Approach LOS		C			D			A			B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	15.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	17.5
Intersection Capacity Utilization	70.2%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Intersection: 1: Site Driveway/Lionel Court & Palladium Way

Movement	EB	EB	WB	WB	NB	SB
Directions Served	L	TR	L	TR	LTR	LTR
Maximum Queue (m)	8.9	3.2	8.8	1.2	17.3	10.5
Average Queue (m)	1.1	0.1	1.2	0.0	9.5	4.5
95th Queue (m)	5.8	2.3	6.0	0.9	15.0	12.2
Link Distance (m)		115.4		104.6	102.7	164.8
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (m)	15.0		20.0			
Storage Blk Time (%)		0				
Queuing Penalty (veh)		0				

Intersection: 2: Appleby Line & Palladium Way/Harrison Court

Movement	EB	EB	WB	WB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	L	TR	L	TR	L	T	T	TR	L	T	T	TR
Maximum Queue (m)	40.5	31.7	22.8	9.7	52.8	38.0	32.7	26.9	13.3	58.3	50.4	44.2
Average Queue (m)	17.6	12.3	9.7	2.8	23.3	14.3	13.2	7.9	4.3	30.6	18.8	14.5
95th Queue (m)	32.3	24.9	20.6	8.6	41.4	29.8	27.2	20.6	11.3	51.1	39.3	30.6
Link Distance (m)		104.6		119.7	66.5	66.5	66.5	66.5		334.4	334.4	334.4
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	45.0		60.0						70.0			
Storage Blk Time (%)	0											
Queuing Penalty (veh)	0											

Intersection: 3: Appleby Line & Site Driveway

Movement	EB
Directions Served	R
Maximum Queue (m)	11.8
Average Queue (m)	4.2
95th Queue (m)	11.5
Link Distance (m)	34.4
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (m)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 4: Valera Road/Site Driveway & Thomas Alton Boulevard

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (m)	20.9	36.0	20.7	17.4
Average Queue (m)	5.7	7.6	10.9	7.6
95th Queue (m)	18.1	23.4	18.3	14.2
Link Distance (m)	191.9	110.5	89.8	61.3
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (m)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 5: Appleby Line & Thomas Alton Boulevard

Movement	EB	EB	WB	WB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	LT	R	L	TR	L	T	T	TR	L	T	T	T
Maximum Queue (m)	58.3	46.8	14.4	10.9	50.5	51.7	42.7	25.3	8.2	45.0	46.8	43.4
Average Queue (m)	22.3	23.9	4.8	1.6	21.0	26.1	15.9	6.9	0.5	16.6	17.2	14.3
95th Queue (m)	43.3	41.3	12.9	7.2	38.1	46.8	34.0	17.9	3.8	37.3	38.5	33.0
Link Distance (m)	110.5			98.0		295.2	295.2	295.2		126.2	126.2	126.2
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)		40.0	30.0		130.0				30.0			
Storage Blk Time (%)	1	1								2		0
Queuing Penalty (veh)	5	1								0		0

Intersection: 5: Appleby Line & Thomas Alton Boulevard

Movement	SB
Directions Served	R
Maximum Queue (m)	17.0
Average Queue (m)	2.9
95th Queue (m)	10.8
Link Distance (m)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (m)	60.0
Storage Blk Time (%)	
Queuing Penalty (veh)	

Network Summary

Network wide Queuing Penalty: 6

Intersection: 1: Site Driveway/Lionel Court & Palladium Way

Movement	EB	EB	WB	NB	SB
Directions Served	L	TR	L	LTR	LTR
Maximum Queue (m)	1.7	7.3	8.9	17.9	30.2
Average Queue (m)	0.1	0.4	2.4	9.5	13.2
95th Queue (m)	1.6	5.3	8.8	17.0	21.9
Link Distance (m)		115.4		102.7	164.8
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (m)	15.0		20.0		
Storage Blk Time (%)		0			
Queuing Penalty (veh)		0			

Intersection: 2: Appleby Line & Palladium Way/Harrison Court

Movement	EB	EB	WB	WB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	L	TR	L	TR	L	T	T	TR	L	T	T	TR
Maximum Queue (m)	48.7	57.0	51.8	28.7	34.8	42.8	44.5	41.8	19.4	56.5	45.7	43.9
Average Queue (m)	24.7	18.8	22.7	7.2	12.5	21.1	22.5	17.9	6.1	30.2	19.7	17.4
95th Queue (m)	41.6	41.5	43.1	22.7	25.2	37.8	38.5	34.4	15.0	49.7	40.9	35.9
Link Distance (m)		104.6		119.7	66.5	66.5	66.5	66.5		334.4	334.4	334.4
Upstream Blk Time (%)		0										
Queuing Penalty (veh)		1										
Storage Bay Dist (m)	45.0		60.0						70.0			
Storage Blk Time (%)	1	0	0									
Queuing Penalty (veh)	3	0	0									

Intersection: 3: Appleby Line & Site Driveway

Movement	EB
Directions Served	R
Maximum Queue (m)	13.1
Average Queue (m)	6.3
95th Queue (m)	13.5
Link Distance (m)	34.4
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (m)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 4: Valera Road/Site Driveway & Thomas Alton Boulevard

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (m)	16.6	43.3	17.8	18.4
Average Queue (m)	2.0	12.1	9.3	7.9
95th Queue (m)	9.7	30.4	15.8	15.3
Link Distance (m)	191.9	110.5	89.8	61.3
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (m)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 5: Appleby Line & Thomas Alton Boulevard

Movement	EB	EB	WB	WB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	LT	R	L	TR	L	T	T	TR	L	T	T	T
Maximum Queue (m)	42.0	43.6	30.7	11.0	109.2	67.1	61.9	41.3	10.9	56.8	60.3	53.2
Average Queue (m)	13.7	22.4	15.1	2.7	53.2	25.1	23.4	15.6	0.4	32.2	34.2	30.6
95th Queue (m)	29.5	39.1	27.1	9.1	92.9	49.5	46.0	32.9	5.8	54.3	55.1	48.6
Link Distance (m)	110.5			98.0		295.2	295.2	295.2		126.2	126.2	126.2
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)		40.0	30.0		130.0				30.0			
Storage Blk Time (%)		1	1			0				7		0
Queuing Penalty (veh)		1	0			0				0		0

Intersection: 5: Appleby Line & Thomas Alton Boulevard

Movement	SB
Directions Served	R
Maximum Queue (m)	26.0
Average Queue (m)	10.3
95th Queue (m)	21.7
Link Distance (m)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (m)	60.0
Storage Blk Time (%)	
Queuing Penalty (veh)	

Network Summary

Network wide Queuing Penalty: 5

Appendix G

Traffic Control Justification

Signal Justification Calculation for Forecasted Volumes (OTM Book 12 - Justification 7)

Horizon Year: Five-Year Total Traffic
Region/City/Township: City of Burlington

Major Street: Palladium Way North/South: N
Minor Street: Lionel Court / Site Driveway 1

Number of Approach Lanes: 1
Tee Intersection? N
Flow Conditions: Restricted

PM Forecast Only? N

Warrant Results		
150% Satisfied	**No**	Justification for new intersections with forecast traffic
120% Satisfied	**No**	Justification for existing intersections with forecast traffic

Time Period	Major Street: Palladium Way						Minor Street: Lionel Court / Site Driveway 1						Peds Crossing Main Road
	Eastbound			Westbound			Northbound			Southbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
AM Peak Hour	10	156	61	19	202	87	60	0	22	20	0	2	0
PM Peak Hour	3	244	48	25	153	30	22	0	42	118	1	14	0
Average Hourly Volume	**3**	**100**	**27**	**11**	**89**	**29**	**21**	**0**	**16**	**35**	**0**	**4**	**0**

Warrant 1 - Minimum Vehicular Volume

Warrant	AHV
1A - All	335
1B - Mino	75
2A - Majo	260
2B - Cros	55

1A	Approach Lanes	1		2 or more		Average Hourly Volume
	Flow Conditions	Free	Restricted	Free	Restricted	
			X			
	All Approaches	480	720	600	900	335
					% Fulfilled	**46%**

1B	Approach Lanes	1		2 or more		Average Hourly Volume
	Flow Conditions	Free	Restricted	Free	Restricted	
			X			
	Minor Street Approaches	120	170	120	170	75
					% Fulfilled	**44%**

Warrant 2 - Delay To Cross Traffic

2A	Approach Lanes	1		2 or more		Average Hourly Volume
	Flow Conditions	Free	Restricted	Free	Restricted	
			X			
	Major Street Approaches	480	720	600	900	260
					% Fulfilled	**36%**

2B	Approach Lanes	1		2 or more		Average Hourly Volume
	Flow Conditions	Free	Restricted	Free	Restricted	
			X			
	Traffic Crossing Major Street	50	75	50	75	55
					% Fulfilled	**74%**

Signal Justification Calculation for Forecasted Volumes (OTM Book 12 - Justification 7)

Horizon Year: Five-Year Total Traffic
Region/City/Township: City of Burlington

Major Street: Thomas Alton Boulevard North/South: N
Minor Street: Valera Road / Site Driveway 3

Number of Approach Lanes: 1
Tee Intersection? N
Flow Conditions: Restricted

PM Forecast Only? N

Warrant Results		
150% Satisfied	**No**	Justification for new intersections with forecast traffic
120% Satisfied	**No**	Justification for existing intersections with forecast traffic

Time Period	Major Street: Thomas Alton Boulevard						Minor Street: Valera Road / Site Driveway 3						Peds Crossing Main Road
	Eastbound			Westbound			Northbound			Southbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
AM Peak Hour	56	439	19	49	156	44	17	22	59	8	9	44	
PM Peak Hour	17	308	14	137	426	42	4	14	54	12	11	27	
Average Hourly Volume	**18**	**187**	**8**	**47**	**146**	**22**	**5**	**9**	**28**	**5**	**5**	**18**	**0**

Warrant 1 - Minimum Vehicular Volume

Warrant	AHV
1A - All	497
1B - Mino	70
2A - Majo	427
2B - Cros	19

1A	Approach Lanes	1		2 or more		Average Hourly Volume
	Flow Conditions	Free	Restricted	Free	Restricted	
			X			
	All Approaches	480	720	600	900	497
					% Fulfilled	**69%**

1B	Approach Lanes	1		2 or more		Average Hourly Volume
	Flow Conditions	Free	Restricted	Free	Restricted	
			X			
	Minor Street Approaches	120	170	120	170	70
					% Fulfilled	**41%**

Warrant 2 - Delay To Cross Traffic

2A	Approach Lanes	1		2 or more		Average Hourly Volume
	Flow Conditions	Free	Restricted	Free	Restricted	
			X			
	Major Street Approaches	480	720	600	900	427
					% Fulfilled	**59%**

2B	Approach Lanes	1		2 or more		Average Hourly Volume
	Flow Conditions	Free	Restricted	Free	Restricted	
			X			
	Traffic Crossing Major Street	50	75	50	75	19
					% Fulfilled	**26%**

Appendix H

MMLOS Analysis

LOS AND DATA ENTRY - Use this to enter what you know and for detailed or summary results presentation

Actual	D	B	E	C	B
SCENARIO:	*Palladium Way*				
Area Type:	*Industrial Connector*				
MODE					
Type	**SEGMENTS**				
Target (Custom if necessary)	D	C	D	D	D
Adjustment for Planning Direction	None	None	None	None	None
Reasons for adjustment (if applicable)					
Adjustment for Strategic Policy	None	None	None	None	None
Reasons for adjustment (if applicable)					
Actual	D	B	E	C	B

Active Transportation Design Check	
Do the pedestrian facilities provide direct access to all properties along the segment? (Direct access can be provided by an adjacent facility or designated crossing to the property in question)	Yes
Does the bicycle facility selected correspond with the minimum appropriate facility type identified in the context appropriate nomograph (Figure 6.1, 6.2)?	Yes
-	
-	
-	

MMLOS Evaluation

Measure 1	Pedestrian Facility Width (m)	Bike Facility Width per Direction (m)	Transit Facility Type	Width of Curb Lane (m)	Mid-block V/C Ratio
	2.1 - 2.5	1.2 - 1.5	Mixed traffic with 1 lane per direction	3.4 - 3.6	Less than 0.60
Measure 2	Pedestrian Buffer Width (m)	Bike Buffer Width (m)	Transit Passenger Amenities	Car Level of Service	Curb Lane Conflicts
	2.1 - 2.5	Has physical measures AND buffer width > 1	No presence of passenger amenities such as shelters, seating, shade trees, etc.	B	3-4
Measure 3	Max Distance Between Controlled Crossings (m)	Conflicts with Other Modes (in-lane conflicts and cross point conflicts)	Pedestrian Level of Service	-	-
	Greater than 320	Two "low" conflict indicators	D		
Measure 4		-	-	-	-

LOS AND DATA ENTRY - Use this to enter what you know and for detailed or summary results presentation

Actual	D	F	D	C	C
SCENARIO:	*Thomas Alton Boulevard*				
Area Type:	*Neighbourhood Connector*				
MODE					
Type	**SEGMENTS**				
Target (Custom if necessary)	C	B	D	D	E
Adjustment for Planning Direction	None	None	None	None	None
Reasons for adjustment (if applicable)					
Adjustment for Strategic Policy	None	None	None	None	None
Reasons for adjustment (if applicable)					
Actual	D	F	D	C	C

Active Transportation Design Check	
Do the pedestrian facilities provide direct access to all properties along the segment? (Direct access can be provided by an adjacent facility or designated crossing to the property in question)	Yes
Does the bicycle facility selected correspond with the minimum appropriate facility type identified in the context appropriate nomograph (Figure 6.1, 6.2)?	Yes
-	
-	
-	

MMLOS Evaluation

Measure 1	Pedestrian Facility Width (m)	Bike Facility Width per Direction (m)	Transit Facility Type	Width of Curb Lane (m)	Mid-block V/C Ratio
	1.5 - 1.7	1.2 - 1.5	Mixed traffic with 1 lane per direction	3.4 - 3.6	Less than 0.60
Measure 2	Pedestrian Buffer Width (m)	Bike Buffer Width (m)	Transit Passenger Amenities	Car Level of Service	Curb Lane Conflicts
	Greater than 2.5	Has no physical measures and buffer width is < 0.5	Moderate presence of passenger amenities such as shelters, seating, shade trees, etc.	C	9+
Measure 3	Max Distance Between Controlled Crossings (m)	Conflicts with Other Modes (in-lane conflicts and cross point conflicts)	Pedestrian Level of Service	-	-
	Greater than 320	Two "high" conflict indicators	D		
Measure 4		-	-	-	-

COMMITTEE OF ADJUSTMENT

Meeting 22 **AGENDA** **DECEMBER 10, 2025**

HEARING NO. 5.2 - 5:30 P.M.

File
540-02-A-046/25

APPLICANT: 2160 Lakeshore (2024) Nominee Inc,

PROPERTY: 2160 Lakeshore Road
PLAN 99 PT LOTS 98,99
City of Burlington - Regional Municipality of Halton.

PROPOSAL: The applicant is proposing the conversion of a former leasing office into a one-bedroom residential dwelling unit on the ground floor of an existing 160-unit apartment building, for a total of 161 residential dwelling units.

VARIANCES:

7. To permit a maximum density of 218 units per hectare instead of the maximum permitted 185 units per hectare for a total of 161 residential dwelling units.

8. To permit an existing driveway to be set back 2.4m from a wall of a building containing windows of habitable rooms in dwelling units located on the ground floor instead of the minimum required 3m.

Committee of Adjustment
2160 Lakeshore Rd

October 29, 2025

Erin Shacklette
Committee of Adjustment
City of Burlington
Community Planning |Development and Growth Management
426 Brant St
Burlington, Ontario
L7R 2G2

Dear Erin,
We have assembled the necessary information as required by zoning comments as outlined in the email received October 27, 2025.

Please see below of parking breakdown:

- Visitor parking – 23 surface parking spaces
- Occupant parking – 2 surface parking + 184 underground parking spaces, 186 spaces in total.

Zoning requires:

- 1 occupant space per unit
- 0.25 visitor space per unit.
- 100% of occupant parking shall be enclosed

We are proposing 1 unit, which requires 1 occupant space and 0 (0.25 rounded down) visitor space. There are excessive existing underground occupant spaces that can accommodate the 1 occupant space required for the proposed unit.

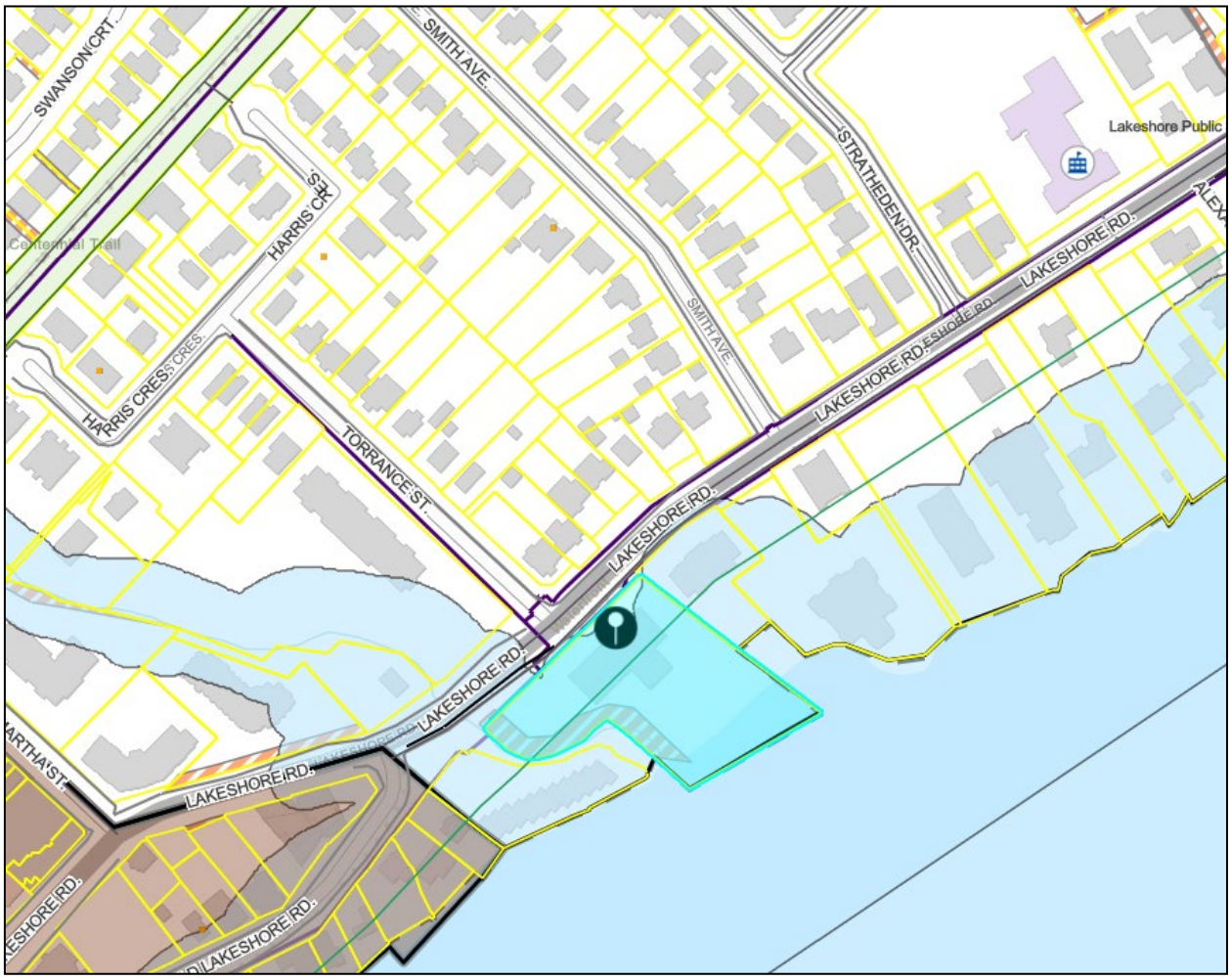
Therefore, no variance is required for parking.

Regards

Lance Kaprielian MA, Barch, BES, OAA, RAIC
Principal

COMMITTEE OF ADJUSTMENT
MINOR VARIANCE
STAFF REPORTS

Owner(s): 2160 Lakeshore (2024) Nominee Inc
Address: 2160 Lakeshore Rd, Burlington
File No. **A-046/25**
Ward: 2



Staff Comments

Committee of Adjustment

There is one previous minor variance applications on record for this property.

File No. A059/1989 – Approved

Originally Requested Variances:

COMMITTEE OF ADJUSTMENT
MINOR VARIANCE
STAFF REPORTS

1. To construct a canopy at the front entrance of an existing building which will extend to 2.35 m from road widening allowance setback instead of the required setback of 14.2 m (15.2 m – 1 m = 14.2 m)
2. To enclose existing garage ramp with steel and glass structure on existing 4' height concrete walls which has a 0 m setback from the east property line instead of the required 7.6 m
3. To permit a fountain (oval shaped 3.6 m wide x 1.8 m and .3 m deep) with a front yard setback of 1 m from road widening allowance instead of the required 15.2 m.

Variances Approved as Amended:

1. To permit the new canopy structure with a front yard setback of 5 m from the deemed street width instead of the required 14.2 m
2. To permit the steel and glass structure to enclose the existing garage ramp with a side yard setback of 12.4 m from the deemed street width instead of the required 15.2 m
3. Withdrawn
4. To permit the steel and glass structure to enclose the existing garage ramp with a front yard setback of 12.4 m from the deemed street width instead of the required 15.2 m.

Date: May 30, 2025 Prepared By: E. Shacklette

Zoning

Background:

The subject property is assessed as being constructed in 1968, and was zoned RM4 under Zoning By-law 1416, enacted on May 20, 1954. Further amendments under By-law 1416 include By-law 2272 enacted on December 19, 1962, By-law 2471 enacted on December 2, 1963 and By-law 2542 enacted on April 23, 1963.

By-law 2272,enacted on December 19, 1962, contained parking lot requirements for apartment houses under Section 8.4, and included requirements such as no off-street parking in the front yard, no driveway to be located within ten feet of a window of a habitable room which is in the basement or first floor of an apartment building and no parking lot to be located within twenty feet of a window of a habitable room that is in the basement or first floor of an apartment house.

The existing building contains existing residential units on the ground floor adjacent to the proposed unit conversion within the required 3 m driveway setback. Zoning believes these units may have been part of the original approval but are not able to obtain evidence or applicable regulations under previous by-laws to permit these units. The variance therefore includes the legalization of these units.

COMMITTEE OF ADJUSTMENT
MINOR VARIANCE
STAFF REPORTS

The subject property was zoned RM3, or Medium-Density Residential, under By-law 4000-3, enacted on August 26, 1969. The RM3 zone introduced density requirements to determine the maximum gross rentable floor area instead of the maximum number of units as per our current regulations.

Previous variances were approved in 1989 under Zoning By-law 4000-3, under file 540-02-A059/89, to enclose the ramp to the underground parking, add a new front canopy and internal renovations for a garbage room.

Proposal:

The applicant is proposing the conversion of a former leasing office into a one-bedroom residential dwelling unit on the ground floor of an existing 160-unit apartment building, for a total of 161 residential dwelling units.

Variances required:

1. To permit a maximum density of 218 units per hectare instead of the maximum permitted 185 units per hectare for a total of 161 residential dwelling units.

2. To permit an existing driveway to be set back 2.4m from a wall of a building containing windows of habitable rooms in dwelling units located on the ground floor instead of the minimum required 3m.

Condition:

1. The applicant shall apply for a Zoning Clearance Certificate.

Notes:

1. This application has been reviewed under Section 45 (1) of the Planning Act.

2. A designated accessible parking space is not required for one additional residential dwelling unit.

3. The Architect is required to submit a letter confirming the total number of existing occupant and visitor parking spaces to demonstrate compliance with required parking, prior to the issuance of the Zoning Clearance Certificate. Additional variances may be required and will be the Applicant's responsibility to obtain.

Date: Oct 24, 2025 Prepared By: M. Rusin-Hynek

Site Planning

Site Characteristics	
Lot Frontage (m)	102.6 m
Lot Area (m^2)	7416 m^2
Existing Land Uses *(ex. buildings, structures, driveways, fences, etc…)*	18 storey apartment building with two levels of underground parking, surface parking and outdoor swimming pool.
Site Grading *(ex. Flat and level, significant grade differences)*	Site slopes down from Lakeshore Road to Lake Ontario.
Notable Site Features	Site is located on Lake Ontario and is therefore regulated by Conservation Halton.
Surrounding Land Uses *(ex. Adjacent building relationships, natural features, notable adjacencies)*	High density residential (apartments), medium density (townhouses), low density residential (detached dwellings), commercial.
Nearest Major Intersection	Lakeshore Road and Brant Street.
Neighbourhood Boundaries* *Based on OP, 1997 *residential neighbourhood* definition	North: New Street East: Guelph Line South: Lake Ontario West: Brant Street

Neighbourhood Characteristics:

- Located in the Downtown Residential High-Density Zone (DRH) which permits apartment buildings, retirements homes, offices in an existing building and offices on the ground floor of a residential building.
- Located in the Downtown Mixed-Use Centre, with a mix of residential, retail, office and institutional uses are close by.
- Close to multiple amenities, including the waterfront trail which is located on the south side of Lakeshore Road.

A site visit was conducted on November 21, 2025, and existing on-site conditions are summarized in site photos included in Attachment No. 1 (Site Photos).

1) City of Burlington Official Plan:

Does the proposed minor variance(s) from the zoning by-law maintain the general intent and purpose of the Official Plan?

Yes

Regional Official Plan (2022):

The proposal does meet the general intent and purpose of the Regional Official Plan, 2022 (ROP, 2022) for the following reasons:

- Section 76 of the ROP indicates that the range of permitted uses and the creation of new lots within the Urban Area will be in accordance with Local Official Plans and Zoning By-laws. Given that an apartment building is permitted by the City's Zoning By-law, staff are of the opinion that the requested variances meet the general intent and purpose of the ROP.
- The proposal to add an additional dwelling unit is consistent with the objectives of the Urban Area designation on Map 1, which promotes intensification and increased densities (Part III, objective 72.9).

Regional Staff have also reviewed this application and have no objections to the Minor Variance application.

Official Plan, 1997 & 2020

Parts of Burlington Official Plan, 2020 (BOP, 2020) are not in-force due to ongoing Ontario Land Tribunal Appeals, so applications are reviewed against a combination of in-force policies under BOP, 2020 and the older Burlington Official Plan 1997 (BOP, 1997).

The requested variances meet the general intent and purpose of the Official Plan for the following reasons:

- The proposal to add an additional unit to the site is consistent with the general objective of the 'Mixed Use Centre' and 'Downtown Urban Growth Centre Boundary' designation according to Schedule 'B' (Comprehensive Land Use Plan- Urban Planning Area) of the BOP, 1997, as amended, to promote the efficient use of resources and municipal services. This higher intensity area encourages
  transit-supportive and pedestrian-oriented development while retaining compatibility with nearby land uses.
- The proposed density after the unit is added is comparable to the upper range of density permitted in the 'Downtown Residential – Medium and/or High Density Precincts' designation under Schedule 'E' (Downtown Mixed Use Centre - Land Use Plan) of the BOP, 1997, as amended. In this designation, ground or non-ground oriented housing units, such as apartment buildings, are permitted with densities between 26 and 185 units per net hectare.
- A proposed increase in density beyond what is contemplated in the Official Plan can be permitted, according to an implementation policy under Part VI Subsection 3.2 e), which states "Minor variations from numerical requirements in the Plan may be permitted without a Plan amendment, provided the general intent of the Plan is maintained". This policy enables staff to consider a minor

variation from BOP, 1997 density requirements, such as the proposed variances for density, provided the general intent of the Plan is maintained.

- Staff note that the existing density of the subject lands exceeds the maximum permitted density of 185 units per hectare. The existing development is 215.75 units per hectare whereas 218 units per hectare is proposed.
- The proposal to add one residential rental unit to the existing building meets the intent and purpose of the Official Plan with respect to Housing Supply (Part III, Section 2.3) and Housing Affordability (Part III, Section 2.4).
- The proposal is consistent with policy 2.3.2(h), which states the City shall, in co-operation with other orders of government, encourage the provision of a range of housing types, including rental housing, for individuals and families.
- Part III, Section 2.3.1 (b) (Housing Supply) directs that that the City encourage the retention of existing rental housing and the construction of new rental housing. Further, Part III, Section 2.4.1 (a) (Housing Affordability) requires that a range of housing and tenure types are available to meet the various lifestyle and income group needs of the existing and future population. The proposal is consistent with these policies given that one additional rental unit is proposed to be added to the City's housing stock.
- Whereas sites where intensification are proposed are subject to specific evaluation criteria under Part III, Section 2.5.2 of the BOP, 1997, the proposal is consistent in the following ways:
    - The site is serviced by municipal services and the proposed increase is not large enough to justify a servicing, school or park capacity analysis, required by criteria (i)
    - Zoning has indicated that the applicant is required to submit a letter confirming the total number of existing occupant and visitor parking spaces to demonstrate compliance with required parking, prior to the issuance of the Zoning Clearance Certificate. This will demonstrate consistency with criteria (ii)
    - Transportation Planning staff have no concerns related to the requested variances, consistent with criteria (iii)
    - The subject lands are in proximity to Burlington Transit Route 3 which runs along Lakeshore Road, then north on Guelph Line, connecting with the 407 Carpool lot on Dundas Street, consistent with criteria (iv).
    - The exterior of the existing apartment building will remain as-is and for this reason will continue to provide compatibility with the existing neighbourhood character in terms of scale, massing, height, siting, setbacks, coverage, parking and amenity area consistent with criteria (v).
    - No changes are proposed to existing vegetation therefore criteria (vi) is not applicable.
    - Given that only internal changes are proposed, the building and the associated sun shadowing will not be changing from the current conditions, consistent with criteria (vii)
    - The subject lands are within a walkable community that is less than a ten-minute (800 m) walk from Downtown Burlington, which contains a number

of office, service commercial and retail uses and amenities consistent with criteria (viii)
    - No impacts have been identified, therefore criteria (ix), which requires "adequate buffering and other measures to minimize any identified impacts" is not applicable.
    - The adjacent properties are already developed. The addition of one unit to the subject lands would not preclude future re-development on adjacent properties, consistent with criteria (x).
    - The subject lands and the subject lands are regulated by Conservation Halton. CH has indicated no objection to the approval of the variances, however, have indicated that a CH permit will be required to permit an additional unit within CH's regulated area. With respect to archaeology, it is acknowledged that the subject lands are within an area of archaeological potential, however, recognize that ground disturbance will not occur as a result of the proposed site modifications are internal to the building envelope therefore matters of cultural heritage would be protected. Therefore, criteria (xi) is addressed.
    - Criteria (xii), which refers to stormwater policies under Part II, section 2.11.3 and requires stormwater drainage facilities in accordance with existing master plans, is not applicable to the proposal.
    - The building is located on the periphery of a low-density residential neighbourhood and has access to Lakeshore Road, a minor arterial, consistent with criteria (xiii).
- With regard to the proposed variance to permit windows of habitable rooms within a 2.4 m setback of a driveway, Part VI, Section 2.5.1 states that the objective of site plan control is to ensure safe, functional and orderly development having high standards of design and efficiency of land use and servicing particularly with respect to site function. Although site plan approval would not be required for the proposal, staff are of the opinion that the requested variance would maintain the Official Plan's general intent to ensure safe and functional development for the following reasons:
    - The location of the proposed unit and existing units fronting the driveway is existing and staff are of the opinion that the function of the development has not been negatively impacted by the reduced setback between the windows of habitable rooms and the driveway.
    - The driveway is bordered by a raised planter, providing protection to the windows of a habitable room of the existing units and proposed unit as it relates to vehicle safety.

2) City of Burlington Zoning By-law 2020:

Does the proposed minor variance(s) from the zoning by-law maintain the general intent and purpose of the Zoning By-law?

Yes – (Variance No. 1 (Increased Density)

The application requests a variance to permit a maximum density of 218 units per hectare instead of the maximum permitted 185 units per hectare for a total of 161 residential dwelling units. The general intent and purpose of Burlington Zoning By-law 2020 is to ensure an appropriate amount of density for a site while limiting any associated impacts.

The proposed minor variance is consistent with this intent for the following reasons:

- The proposal involves interior renovations and would not alter the external appearance of the existing building.
- Matters related to compatibility have been reviewed and assessed. The scale, massing, height, siting, setbacks, coverage, parking and amenity area will remain unchanged, therefore maintaining compatibility with the existing character of the neighbourhood.
- The proposal represents small scale intensification that will not result in impacts to the function of the site and will maintain compatibility with the surrounding neighbourhood.

Yes - Variance No. 2 (Reduced setback between driveway from windows)

The existing building contains existing residential units on the ground floor adjacent to the proposed unit conversion within the required 3 m driveway setback. Zoning believes these units may have been part of the original approval but are not able to obtain evidence or applicable regulations under previous by-laws to permit these units. The variance therefore includes the legalization of these units.

The application requests a variance to permit an existing driveway to be set back 2.4m from a wall of a building containing windows of habitable rooms in dwelling units located on the ground floor instead of the minimum required 3m. The general intent and purpose of Burlington Zoning By-law 2020 is to ensure ground floor habitable rooms are not negatively impacted by unwanted headlight glare.

The proposed minor variance is consistent with this intent for the following reasons:

- The existing and proposed units all contain floor to ceiling window coverings which can be managed by the resident of the unit should glare or privacy become an issue.
- The location of the driveway contains a narrow planting bed containing shrubs and decorative grass which would help diffuse headlight glare.
- Increasing the setback of the driveway from the habitable rooms with an additional 60 cm (3 m - 2.4 m = 60 cm) would not likely meaningfully improve the existing condition.

3) Desirability:

Is the proposed minor variance from the zoning by-law desirable for the appropriate development or use of the land, building or structure?

Yes

The proposed minor variances are desirable for the appropriate development and use of the land for the following reasons:

- The proposal involves interior renovations and would not alter the external appearance of the existing building therefore the addition of one unit to the subject lands will be almost undetectable.
- The variances will allow for the modest intensification of the subject property and contribute to the range and mix of housing options available in the City, in alignment with the BOP 1997
- Development Engineering, Forestry, Transportation Planning, Conservation Halton and Halton Region have no objections to the requested variances.

4) Minor in Nature:

Is the proposed minor variance(s) from the zoning by-law considered minor in nature?

Yes

The proposed minor variances are minor in nature for the following reasons:

- Although the applicant is requesting an increase in density and to locate windows of a habitable room closer to a driveway, the proposed unit will be contained within the existing apartment building and adjacent to an existing driveway.
- The variances do not promote overbuilding of the site or development of the site in a manner that is inconsistent with the expectations of the City's Official Plan and Zoning By-Law.
- The variances will not pose adverse effects to the subject property, adjacent properties or the surrounding streetscape.

Cumulative Effects of Multiple Variances and Other Planning Matters:

The variances relate to different provisions and have no cumulative effects.

Recommendation:

Staff has reviewed the proposed variances in accordance with the Planning Act, the policies of the Official Plan and the requirements of the Zoning By-law and has no objection.

Date: November 21, 2025 Prepared By: Melissa Dalrymple, MCIP, RPP

COMMITTEE OF ADJUSTMENT
MINOR VARIANCE
STAFF REPORTS

Report Schedules & Attachments:
Attachment No. 1 (Site Photos)

View of the subject lands from Torrance Street to the north.	*View of windows of habitable rooms facing existing driveway.*
View of rear yard and Lake Ontario.	*View of the rear of the building.*

COMMITTEE OF ADJUSTMENT
MINOR VARIANCE
STAFF REPORTS

Medium density use to the west.	*Commercial and low density uses to the north.*
High density use to the east.	

Development Engineering

Development Engineering has reviewed the proposed minor variances and has no objection.

Date: November 4, 2025 Prepared By: P. Dimitroulias

Forestry

Forestry has no objection to the proposed variance requested. However, forestry provides the following advisory comments:

COMMITTEE OF ADJUSTMENT
MINOR VARIANCE
STAFF REPORTS

Advisory Comments:

1. A tree permit will be required for any and all work around regulated trees in accordance with the City's Public and Private Tree By-laws.

Date: November 12, 2025 Prepared By: M.Krzywicki

Building

1. A Building Permit is required for all building construction activities.

2. Permit application drawings must be prepared by a qualified designer in accordance with Division C, Section 3.2 – Qualifications of Designers, and the applicable Ontario Building Code (OBC) requirements.

3. Compliance with OBC Part 4 must be validated to ensure structural adequacy of the building due to proposed work

4. Compliance with OBC Section 3.2.5 must be verified to ensure existing buildings remain in compliance, particularly where the proposed property line intersects or affects the existing fire route.

Date: November 13, 2025 Prepared By: Anil Kumar

Transportation Planning

Deemed Road Width Analysis

The deemed right-of-way width through Lakeshore Road is 30 metres. To meet the ultimate deemed width of 15 metres from the center line, a widening of approximately 3 metres is required along the frontage of Lakeshore Road adjacent to the subject site.

While Minor Variances do not require lands be conveyed to the City, it shall be noted that private infrastructure is not permitted within the lands of deemed width whether above, below, or at grade.

Date: June 9, 2025 Prepared By: Stephanie Robinson

Transportation Planning have reviewed the proposed minor variance application and have no comments because the application has no impact on parking, the driveway, or the adjacent street.

Date: November 6, 2025 Prepared By: Thalia Thompson

COMMITTEE OF ADJUSTMENT
MINOR VARIANCE
STAFF REPORTS

Finance

Notice regarding Development Charges:
The owner, its successors and assigns, are hereby notified that City Development Charges may be payable in accordance with the applicable By-law 72-2004, as may be amended, upon issuance of a building permit, at the rate in effect on the date issued. For further information, the owner is advised to contact the City Building Department (905) 335-7731.

Tax
All property taxes including penalty and interest must be paid. This includes all outstanding balances plus current year taxes that have been billed but are not yet due. Local improvements must be commuted.

Date: October 30, 2025 Prepared By: L. Bray

Halton Region

Regional Staff have reviewed the Minor Variance application proposing the conversion of a former leasing office into a one-bedroom residential dwelling unit on the ground floor of an existing 160-unit apartment building, for a total of 161 residential dwelling units. Variances are requested to the maximum permitted dwelling unit density and the minimum required setback to the driveway from the exterior wall containing windows of habitable rooms.

- Due to Provincial legislation, as of July 1, 2024, the Halton Region's role in land use planning and development matters has changed. The Region is no longer responsible for the Regional Official Plan – as this has become the responsibility of Halton's four local municipalities. As a result of this change, a Memorandum of Understanding (MOU) between the Halton municipalities and Conservation Authorities has been signed that identifies the local municipality as the primary authority on matters of land use planning and development. The MOU also defines the continued scope of interests for the Region and the Conservation Authorities in these matters.
- Regional Staff have no objections to the Minor Variance application.

Date: November 4, 2025 Prepared By: Navjot Kaur

Conservation Halton
CH File: PMVG-2758

Conservation Halton (CH) staff has reviewed the above-noted application according to our regulatory responsibilities under the *Conservation Authorities Act* (CA Act) and Ontario Regulation 41/24 and our provincially delegated responsibilities under Ontario Regulation 686/21 (e.g., acting on behalf of the province to ensure decisions under the *Planning Act* are consistent with the natural hazards policies of the Provincial Planning Statement [PPS, Sections 5.1.11-5.2.8] and/or provincial plans).

Proposal

CH understands that variances are requested to permit an increase in maximum density of units per hectare and permit an existing driveway to be set back 2.4m from a wall of a building containing windows of habitable rooms in dwelling units on the ground floor. These variances are required to support the conversion of a former leasing office into a one-bedroom apartment in the existing apartment building.

Regulatory Comments (Conservation Authorities Act and Ontario Regulation 41/24)

CH regulates all watercourses, valleylands, wetlands, Lake Ontario Shoreline, hazardous lands (e.g. flooding and erosion hazards, dynamic beaches, unstable soil and bedrock), as well as lands adjacent to these features. Based on CH's Approximate Regulation Limit (ARL) mapping, the subject property is regulated by CH as it is on the Lake Ontario shoreline, adjacent to a tributary of Rambo Creek, and contains the flooding and erosion hazards associated with the Lake Ontario shoreline and that watercourse. CH regulates 15m from the greater of the flooding or erosion hazards associated with the Lake Ontario shoreline and watercourses.

Permits are required from CH prior to undertaking development activities within CH's regulated area and applications are reviewed under the *Conservation Authorities Act (CA Act)*, Ontario Regulation 41/24 and CH's *Policies and Guidelines for the Administration of Part VI of the Conservation Authorities Act and Ontario Regulation 41/24 and Land Use Policy Document*, last amended April 17, 2025 (https://conservationhalton.ca/policies-and-guidelines).

CH staff visited the subject property on November 21, 2025 and it appears that a portion of the existing building may be within the erosion hazard associated with the shoreline. CH policies generally do not support new development activities in buildings within the shoreline erosion hazard which add additional dwelling units. The following technical information may be required through the CH permit process to confirm the development activity setbacks on the subject property and if a CH permit can be issued for the proposed additional dwelling unit:

1. A topographic survey confirming the hazard limits on site including the erosion hazards associated with Lake Ontario and Rambo Creek. The determination of these limits may require technical information including a top of bank staking,

geotechnical assessment, and/or assessment of shoreline protection works. Discussion of what technical studies will be required can be discussed with staff prior to application and will be confirmed within 21 days of CH receiving a formal application.

2. Once a complete CH permit application is submitted, staff will review to determine if policy is met and a permit can be issued or, if policy is not met, if it is an application we support for submission to CH's Board.

Provincial Planning Statement - Natural Hazards (Sections 5.1.1-5.2.8)

In addition to CH's regulatory responsibilities (described above), CH also has provincially delegated responsibilities under Ontario Regulation 686/21: Mandatory Programs and Services, including acting on behalf of the Province to ensure that decisions under the *Planning Act* are consistent with the Natural Hazards Sections (5.1.1-5.2.8) of the Provincial Planning Statement (PPS).

The PPS generally directs development away from natural hazards where there is an unacceptable risk to public health, safety or property damage, and states that development shall not create new or aggravate existing hazards. Based on available information, the building subject to these minor variances may be within the erosion hazard associated with the Lake Ontario shoreline. However, CH raises no concerns with consistency with the PPS natural hazards policies considering the nature of the proposal and given the proposed works are not anticipated to create new or aggravate existing hazards.

Recommendation

Given the above, CH staff has no objection to the approval of the requested variances however, a CH permit is required for the proposed development activities (e.g., construction of additional dwelling unit) within CH's regulated area. The applicant is encouraged to contact CH staff to discuss permit requirements and process.

We trust the above is of assistance. Please contact the undersigned with any questions.

Date: November 24, 2025 Prepared By: Ashley Gallaugher

Burlington Hydro

Please see attached document at the end of this report for Burlington Hydro Comments

Date: November 10., 2025 Prepared By: Carlos Gaviria

Burlington hydro inc.

November 10, 2025

2160 Lakeshore Rd,
Burlington, ON

Attention: Lance Kaprielian, 416-451-4888, lance@studiolimina.ca, Studio Limina Inc.

Re: Proposing conversion of a former leasing office into a one-bedroom

Mr. Kaprielian,

This letter serves as confirmation that Burlington Hydro Incorporated ("BHI") has reviewed the proposing conversion of a former leasing office into a one-bedroom permit file No **540-02-A-046/25** submitted to the City of Burlington's Building Department.

Upon reviewing the submitted permit application drawings, the proposing conversion of a former leasing office into a one-bedroom residential dwelling unit on the ground floor of an existing 160-unit apartment building, if the proposing is not interfering with access of the existing electrical room, BHI has no comments.

Before you begin demolition or construction, we would like to stipulate the following conditions:

- Relocation, modification or removal of existing hydro facilities, if required, shall be at the customer's expense. BHI will refer to the latest BHI standards, if possible, if issues arise between existing hydro facilities and proposed building structures.
- Hydro easement is to remain clear of heavy vehicle traffic. Construction shall not encroach any easement.
- Customer is to ensure that BHI has access to hydro facilities and easements.
- Customer to acquire any easement for Burlington Hydro, if required.
- Project must meet City of Burlington Standards.
- Machine excavation within one meter of underground plant is not permitted.
- Do not excavate within two meters of Hydro poles and anchors except for the termination pole where the duct structure shall be terminated by the customer under the supervisor of BHI inspector.
- Please arrange for underground hydro cable locates, prior to beginning construction, by contacting Ontario One call at (800) 400-2255.
- To ensure safety, maintain a minimum working clearance of 1 meter (3 feet) from any secondary wire (120V/240V) and a 3-meter (10 feet) minimum clearance from any primary wire (exceeding 750V).
- Please refer to the latest edition of the Occupational Health and Safety Act ("OHSA") and Regulations for Construction Projects when construction is planned to be performed in the proximity of hydro distribution system.

1340 Brant Street, Burlington, ON · L7R 3Z7 **burlingtonhydro.com** 905-332-1851

AP

GridSmartCity renewing energy

Partner since **2009**

Burlington hydro inc.

- Arrange for disconnect and isolation of the power supply if a person or equipment is to encroach on the minimum distance permitted under the OHSA and OESC.

I may be contacted at (905) 332 1851 ext. 347 should you have additional questions or concerns

Regards,

Carlos Gaviria C.E.T.
Engineering Services Technician

Rosso Parra, P.Eng.
Engineering Manager
Customer Connections & Key Accounts

NOV 10/2025
RP

1340 Brant Street, Burlington, ON · L7R 3Z7 burlingtonhydro.com 905-332-1851

GridSmartCity renewing energy

Partner since 2009

(905) 335-7629
committeeofadjustment@burlington.ca
FILE NO. 540-02-**A-046/25**
Committee of Adjustment
Date of Mailing: November 25, 2025

NOTICE OF PUBLIC HEARING

2160 Lakeshore (2024) Nominee Inc, 19 Lesmill Rd. Suite 100 Toronto have applied to the Committee of Adjustment for a Minor Variance to the requirements of Zoning By-law 2020, as amended. The property in question is **2160 Lakeshore Rd. Burlington** (see map).

The applicant is proposing the conversion of a former leasing office into a one-bedroom residential dwelling unit on the ground floor of an existing 160-unit apartment building, for a total of 161 residential dwelling units. This proposal results in the following variances:

1. To permit a maximum density of 218 units per hectare instead of the maximum permitted 185 units per hectare for a total of 161 residential dwelling units.

2. To permit an existing driveway to be set back 2.4m from a wall of a building containing windows of habitable rooms in dwelling units located on the ground floor instead of the minimum required 3m.

You have received this notice as stipulated by the *Planning Act* because your property is within 60 metres of the property noted above. The application materials are available on request by contacting Committee of Adjustment staff by one of the methods listed above. A copy of the Agenda, containing staff reports and drawings, can be viewed online under the Meeting Agenda tab at **Burlington.ca\coa on or after November 24, 2025**.

Committee of Adjustment Hearings will be hybrid-conducted in person and virtually. All members of the public, applicants and their agents will now have the option to participate in the public meeting process in person at City Hall in Council Chambers, or remotely via Zoom Webinar Video Conferencing Technology. The Committee of Adjustment will meet to consider the above application under Section 45 of the *Planning Act*, 1990, as amended on:

WEDNESDAY DECEMBER 10, 2025,
This application is scheduled to be heard at or after 5:30 pm.

How to participate if I have comments or concerns?

Written Submissions

Members of the public who would like to participate in a Committee of Adjustment meeting are able to send written comments regarding the application by e-mail to committeeofadjustment@burlington.ca with the subject line to read “Comments_Your Name_File No._Address of the Property”.

Alternatively, written comments can be sent by regular mail addressed to the Secretary-Treasurer. Include your name, address, application number and address of the property for which you are providing comments.

City of Burlington Committee of Adjustment - Community Planning
426 Brant Street P.O. Box 5013 Burlington, Ontario, L7R 3Z6
committeeofadjustment@burlington.ca

To allow all Committee of Adjustment members the opportunity to review and consider your comments, please provide your written submissions to be received no later than noon the day before the hearing date.

Oral Submissions

Members of the public are also able to provide oral comments regarding Committee of Adjustment Hearing items by participating virtually through Zoom via computer or phone, or by attending the Hearing in-person. Participation virtually requires pre-registration in advance. Please contact staff for instructions if you wish to make a presentation containing visual materials.

1. Virtual Oral Submissions
   To register as a delegate, please contact the Secretary-Treasurer no later than 12:00 p.m. (noon) the day before the hearing date. The following information is required to register; Committee of Adjustment file number, hearing date, name, and mailing address of each person wishing to speak, if participation will be by phone or video. All requests to delegate must contain a copy of your intended remarks which will be circulated to all members of Committee in advance.

2. In person Oral Submissions
   Interested members of the public, agents, and owners who wish to participate in person may attend Council Chambers on the date and time listed on the Notice of Public Hearing. Please note that you will be required to provide your name and address for the record. It is advised that you arrive no less than 10 minutes before the time of the Public Hearing as noted on the Notice of Public Hearing.

Attend or View the Committee of Adjustment Hearing:

If you do not wish to participate, but would like to follow along, the hearing will be held in person at City Hall in Council Chambers and live through a Zoom Webinar. Instructions, links and phone numbers for joining the meeting will be posted on the Committee of Adjustment webpage the day prior to the scheduled meeting. The link will be active at **4:30 p.m.**

If you wish to be notified of the decision of the Committee of Adjustment in respect to this application, you must submit a written request to the Secretary-Treasurer. This will also entitle you to be advised of a possible Ontario Land Tribunal Hearing. In accordance with the Planning Act, the Committee of Adjustment decision may be appealed to the Ontario Land Tribunal by the owner, the Minister of Municipal Affairs and Housing, a specified person or public body that has an interest in the matter.

The applicant is advised that it is **mandatory** that either the applicant or an authorized agent of the applicant must be present at the hearing either in person or virtual.

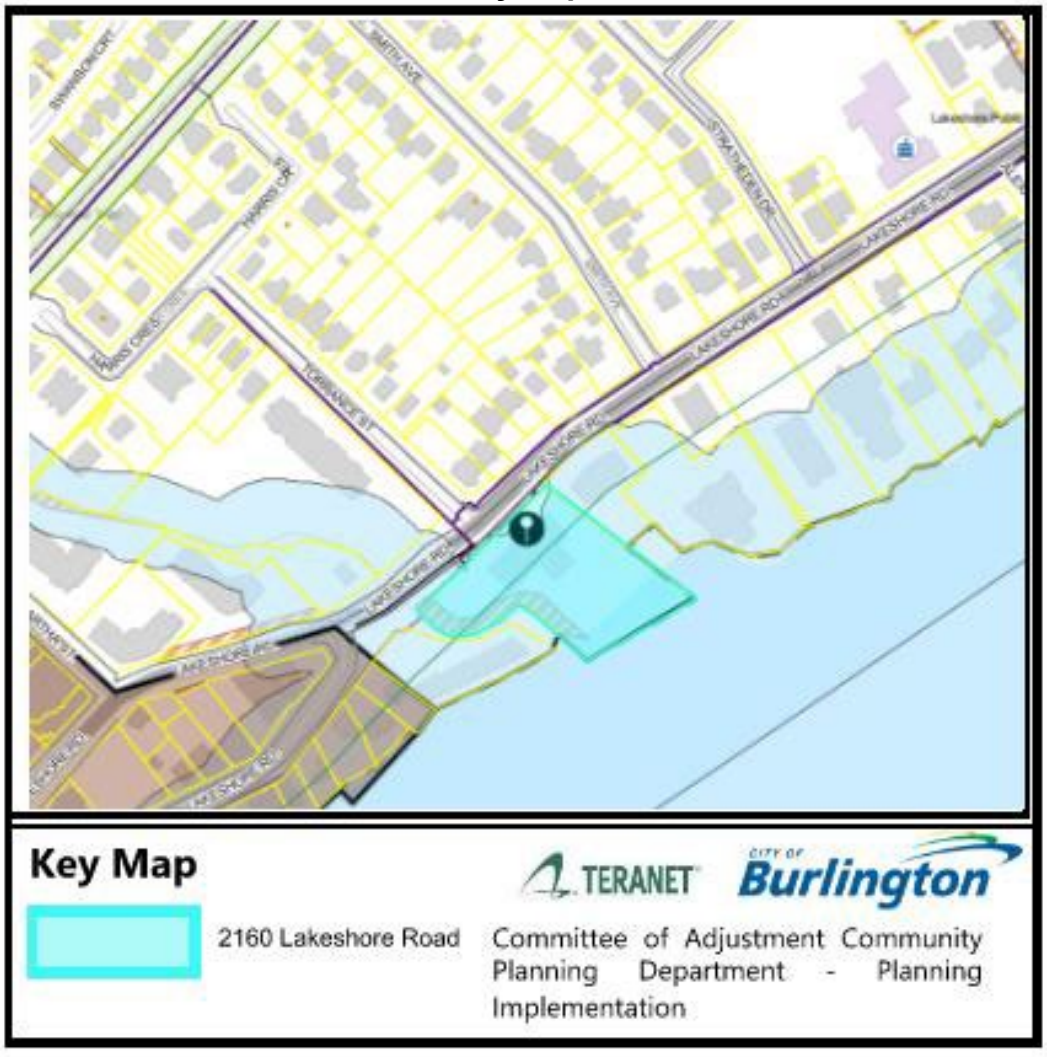
For more information about this matter, contact Catherine Susidko-Petriczko at committeeofadjustment@burlington.ca

Yours truly,

Catherine Susidko-Petriczko
Secretary-Treasurer
Committee of Adjustment

Personal information including comments and public feedback, is collected under the legal authority of the Planning Act, R.S.O. 1990, Chapter c. P.13, as amended, and the Municipal Freedom of Information and Protection of Privacy Act, R.S.O. 1990, as amended, which will be used to process the application and in the decision making process and becomes the property of the City of Burlington, and is considered to be a public record and will be disclosed to any individual (including being posted on the internet) upon request. Questions about this collection should be directed to the Secretary-Treasurer, Burlington Committee of Adjustment, Community Planning Department, 426 Brant Street, P.O. Box 5013, Burlington, Ontario; L7R 3Z6 (905) 335-7629.

Key Map



Burlington

MINOR VARIANCE – 2025

Committee of Adjustment
Department of Community Planning
426 Brant Street, Burlington ON
committeeofadjustment@burlington.ca

PLANNING ACT, R.S.O. 1990, C.P. 13
APPLICATION FOR MINOR VARIANCE OR FOR PERMISSION

THE UNDERSIGNED HEREBY APPLIES TO THE COMMITTEE OF ADJUSTMENT FOR THE CITY OF BURLINGTON UNDER SECTION 45 OF THE PLANNING ACT, R.S.O. 1990, C.P.13, AS DESCRIBED IN THIS APPLICATION, FROM BY-LAW NO. 2020. (AS AMENDED)

Application made under:
■ Section 45 (1) of the Planning Act ☐ Section 45 (2) of the Planning Act

Discussed the application with a City Zoning Examiner and Development Planner Y ■ or N ☐
Name of Planner: Mariana Da Silva Name of Zoning Examiner: _____

PROPERTY INFORMATION
Municipal Address(es) of property:
2160 Lakeshore Road

Legal Description of property:
Part of Lots 88 and 89 Brants Block Registered Plan 99, City of Burlington

Official Plan Designation: unknown Current Zoning Designation DRH

OWNER(S) INFORMATION:
Legal Name (as it appears on the title for the property):
2160 Lakeshore (2024) Nominee Inc.

Mailing Address: 19 Lesmill Road City: Toronto
Postal Code: M3B 2T3 Home Phone: _____ Mobile Phone: 416-278-9630
Work Phone: _____ E-Mail: dcurtis@greenwin.ca

AGENT INFORMATION (if applicable): (This person will be the primary point of contact if provided)

Name: Lance Kaprielian. Studio Limina Inc

Business Address: 180 Shaw Street suite 315 City: Toronto, Ontario
Postal Code: M6J 2W5 Home Phone: _____ Mobile Phone: 647 899 8295
Work Phone: 416 451 4888 E-Mail: lance@studiolimina.ca

PROPOSED DEVELOPMENT Please outline in detail your proposed development and list each variance you are requesting, as well as the Zoning By-law Requirements. Attach a separate sheet if required.

Convert old leasing office space to apartment unit

Variance(s) Requested	Zoning Bylaw Requirement
density - 217.10 units / ha	density - 185 units / ha
(existing density=215.75 units / ha)	
existing driveway to be set back 2.4m from a wall of	minimum required 3m from wall
a building containing windows of habitable rooms in dwelling units located on the ground floor	

In your own words, please explain why you are unable to comply with the provisions of the Zoning By-law and how the minor variance(s) meet the four (4) tests under the Planning Act:

1. Why is the variance(s) minor in nature?

No change is proposed to the existing building outline, no change is proposed to site, no change of use of existing building. Scope of work is interior only, area of conversion is only 40 sqm.

2. Why are the variance(s) desirable for the appropriate use of the land?

It will be very desirable to add an apartment unit to this building. The location adjacent to other apartments will provide a seamless alignment with other units.

3. Do the variance(s) meet the intent and purpose of the Official Plan?

Yes, the added density will be quite minor and in keeping with the OP

4. Do the variance(s) meet the intent and purpose of the Zoning By-law?

Yes, the added density will be quite minor and in keeping with the Zoning

CITY OF Burlington

MINOR VARIANCE – 2025

Committee of Adjustment
Department of Community Planning
426 Brant Street, Burlington ON
committeeofadjustment@burlington.ca

PROPERTY DETAILS (please complete all fields):

Date property purchased:	Date property first built on:	Date of proposed construction:
APR/15/2024	1968	AUG/01/2025
mmm/dd/yyyy	mmm/dd/yyyy	mmm/dd/yyyy

Existing Use of the Subject Property (check one):

Detached Dwelling ☐ Semi-Detached Dwelling ☐
Townhouse Dwelling ☐ Street Townhouse Dwelling ☐ Stacked Townhouse Dwelling ☐
Apartment ■ Mixed Use ☐ Hi Rise ☐
Commercial ☐ Industrial ☐ Vacant ☐
Other ☐ _____

Length of time the existing uses of the subject property have continued:
unknown

Proposed Use of the Land:

NO CHANGE - apartment

Existing Uses of Abutting Properties (check all that apply)

Residential ☐ Commercial ☐ Industrial ☐ Multi-Residential ■ Vacant ☐ Hydro right of-way ☐
Railway right-of-way ☐ Provincial Highway ☐ Park ☐ Other ☐ _____
Conservation Halton Lands: Lake Ontario ☐ Creek ☐ Storm Water Management Pond/Channel ☐
Ravine ☐

Additional Information

Is liquor sold on site? Y ☐ or N ■

Is the property on the Municipal Cultural Heritage Register for the City of Burlington? Y ☐ N ☐ Unknown ■

Type of Access to the Subject Lands

Provincial Highway ☐	Municipal Road ■	Private Road ☐	Water ☐	Other(specify) ☐

Municipal Services Provided

Water ■ If not available, by what means is it provided: _____
Sanitary Sewers ■ If not available, by what means is it provided: _____
Storm Sewers ■ If not available, by what means is it provided: _____

IS THE SUBJECT LAND(S) THE SUBJECT OF ANY OF THE FOLLOWING DEVELOPMENT APPLICATIONS: ☐ Official Plan Amendment ☐ Zoning By-law Amendment ☐ Building Permit ☐ Site Development Plan ☐ Plan of Subdivision ☐ Previous Minor Variance ☐ Consent

CITY OF Burlington

MINOR VARIANCE – 2025

Committee of Adjustment
Department of Community Planning
426 Brant Street, Burlington ON
committeeofadjustment@burlington.ca

FOR RESIDENTIAL DETACHED OR SEMI-DETACHED DWELLINGS

Dimensions of Property			Street Width (see first page of application for how to obtain)				
Frontage	Depth	Area	Actual	Deemed	Required	Lot Coverage	Corner Lot? Y ☐ N ☐

Particulars of all buildings and structures on or proposed for the subject lands
(attach additional page if required)

EXISTING (Dwelling/Building)		PROPOSED (Dwelling/Building/Addition)	
Ground Floor Area (incl. attached garage)	M^2	Ground Floor Area (incl. attached garage)	M^2
Gross Floor Area:	M^2	Gross Floor Area:	M^2
Number of Storeys:		Number of Storeys:	
Width:	M	Width:	M
Length:	M	Length	M
Height:	M	Height	M
Garage/Car Port		**Garage/Car Port**	
Detached?	Y ☐ N ☐	Detached?	Y ☐ N ☐
Gross Floor Area:	M^2	Gross Floor Area	M^2
Width:	M	Width:	M
Length:	M	Length:	M
Height:	M	Height:	M
Accessory Structures (Shed, Gazebo etc)		**Accessory Structures**	
Gross Floor Area:	M^2	Gross Floor Area:	M^2
Width:	M	Width:	M
Length:	M	Length:	M
Height:	M	Height:	M
Other (pool, additional sheds, decks, driveways, etc.)		**Other**	
Gross Floor Area:	M^2	Gross Floor Area:	M^2
Width:	M	Width:	M
Length:	M	Length:	M
Height:	M	Height:	M

LOCATION of all existing and proposed buildings and structures

EXISTING		PROPOSED	
Front:	M	Front:	M
Rear:	M	Rear:	M
Side/Street Side:	M	Side/Street Side:	M
Side/Other Side:	M	Side/Other Side:	M

CITY OF Burlington

MINOR VARIANCE – 2025

Committee of Adjustment
Department of Community Planning
426 Brant Street Burlington ON
committeeofadjustment@burlington.ca

FOR COMMERCIAL, MIXED USE, INDUSTRIAL AND OTHER

Dimensions of Property			Street Width (see first page of application for how to obtain)				
Frontage	Depth	Area	Actual	Deemed	Required	Density	Have you applied for Site Plan Approval? Y ☐ N ☐ File #:

Particulars of all buildings and structures on or proposed for the subject lands
(attach additional page if required)

EXISTING (Building)		PROPOSED (Building/Addition)	
Ground Floor Area:	M^2	Ground Floor Area:	M^2
Gross Floor Area:	M^2	Gross Floor Area:	M^2
Number of Storeys:		Number of Storeys:	
Width:	M	Width:	M
Length:	M	Length	M
Height:	M	Height	M
Floor Area: Office Space	M^2	Floor Area: Office Space	M^2
Floor Area: Warehouse/Retail/Other:	M^2	Floor Area: Warehouse/Retail/Other	M^2
# of Existing Units:		# of Proposed Units:	
Floor Area Ratio:		Floor Area Ratio:	
Required Parking Spaces:		Proposed Parking Spaces:	
Existing Parking Spaces:			
EXISTING (Other)		**PROPOSED (Other)**	
Ground Floor Area:	M^2	Ground Floor Area:	M^2
Gross Floor Area:	M^2	Gross Floor Area:	M^2
Number of Storeys:		Number of Storeys:	
Width:	M	Width:	M
Length:	M	Length	M
Height:	M	Height:	M

LOCATION of all existing and proposed buildings and structures

EXISTING (Building)		PROPOSED (Building)	
Front:	M	Front:	M
Rear:	M	Rear:	M
Side:	M	Side:	M
Side:	M	Side:	M
OTHER		**OTHER**	
Front:	M	Front:	M
Rear:	M	Rear:	M
Side:	M	Side:	M
Side:	M	Side:	M

MULTI-RESIDENTIAL
(STREET TOWNHOUSE, HI-RISE, STACKED TOWNHOUSES, DUPLEXES, etc)

Dimensions of Property			Street Width (see first page of application for how to obtain)				
Frontage	Depth	Area	Actual	Deemed	Required	Density	Have you applied for Site Plan Approval? Y ☐ N ☒ File #:
102.6m	88m	7416 m2	0m	30m	unknown	217.1/ha	

Particulars of all buildings and structures on or proposed for the subject lands
(attach additional page if required) NO CHANGES are proposed to the building exterior

EXISTING (Building)			PROPOSED (Building/Addition)		
Ground Floor Area:	1032	M^2	Ground Floor Area	1032	M^2
Gross Floor Area:	18576	M^2	Gross Floor Area:	18576	M^2
Number of Storeys :	18		Number of Storeys:	18	
Width:	49.6	M	Width:	49.6	M
Length:	29.8	M	Length	29.8	M
Height:	48	M	Height	48	M
# of Existing Units:	160 units	M^2	# of Proposed Units.	1 unit	M^2
Floor Area Ratio:	0.14	M^2	Floor Area Ratio.	0.14	M^2
Required Parking Spaces.	201.25		Proposed Parking Spaces.	209	
Existing Parking Spaces:	209				
Density	215.75 units/ha		Density	217.10 units/ha	
EXISTING (Other)			**PROPOSED (Other)**		
Ground Floor Area:		M^2	Ground Floor Area.		M^2
Gross Floor Area:		M^2	Gross Floor Area:		M^2
Number of Storeys:			Number of Storeys.		
Width:		M	Width:		M
Length:		M	Length		M
Height:			Height:		M

LOCATION of all existing and proposed buildings and structures

EXISTING (Building)			PROPOSED (Building)		
Front:	13	M	Front:	13	M
Rear:	43	M	Rear:	43	M
Side:	10	M	Side:	10	M
Side:	43	M	Side:	43	M
OTHER (existing deck)			**OTHER**		
Front:	29	M	Front:	29	M
Rear:	15	M	Rear:	15	M
Side:	1	M	Side:	1	M
Side:	12	M	Side:	12	M

EXEMPTION FROM NEW SURVEY REQUIREMENT

Minor additions to an existing dwelling or for a proposed accessory building or structure (i.e., deck, driveway, pergola, shed), may be exempt from having to provide a new survey. Please refer to Page 3 of this application package for more details. Minor Variances with concurrent Consent applications require a new survey.

Applicant/Owner: Lance Kaprielian	Property Address: 2160 Lakeshore Road

1. I, Lance Kaprielian (Print Name) In my capacity as Agent (Owner or agent) do attest to the following:

Please complete Section A, B, or C

A. The OLS survey/sketch of survey dated 1988 (mmm/dd/yyyy)

has been revised by: M.J. Terry (Person or Company Name)

OR

B. The site plan, architect's plan or engineer's plan dated _____ (mmm/dd/yyyy)

has been revised by: _____ (Person or Company Name)

OR

C. The sketch or plot plan** dated June 18, 2018 (mmm/dd/yyyy)

**Accepted for applications involving variances for Uses only.

was prepared by: Land Survey Group (Person or Company Name)

2. All structures, measurements, setbacks and boundaries of the property are shown accurately as of: June 18, 2018 (mmm/dd/yyyy)

3. The material submitted shows all measurements in metric, as calculated/converted by: _____ (Person or Company Name)

4. Should the need arise during application processing for an new OLS survey, the applicant/agent agree to provide the survey as required by Committee or city staff in order to receive a decision on the application.

Lance Kaprielian
Digitally signed by Lance Kaprielian
DN: C=CA, E=lance@studiolimina.ca, O=Studio Limina Inc., CN=Lance Kaprielian
Date: 2025.05.29 14:07:28-04'00'

Signature of Owner/Applicant — Date (mmm/dd/yyyy): May 29, 2025

MINOR VARIANCE – 2025
Committee of Adjustment
Department of Community Planning
426 Brant Street, Burlington ON
committeeofadjustment@burlington.ca

POSTING OF ADVISORY SIGN

This will confirm the requirement of the Committee of Adjustment for a sign to be posted by all applicants or agents on each property under application.

A sign will be made available to you after completion of the zoning review of your application(s) and you are directed to post each sign in a prominent location that will enable the public to observe the sign.

The location of each sign will depend on the lot and location of structures on it, however, the sign should be placed so as to be legible from the roadway in order that the public can see the sign and make note of the telephone number should they wish to make inquiries. In most cases, please post the sign on a stake as you would a real estate sign. For commercial or industrial buildings it may be appropriate to post the sign on the front wall of the building at its entrance. Please contact the undersigned if you have any queries on the sign location.

DO NOT POST THE SIGN INSIDE THE BUILDING BY A WINDOW. The sign must be outdoors by the roadway in order to be visible and readable.

Each sign must remain posted beginning 10 days prior to the hearing, until the day following the hearing. Please fill in the form below indicating your agreement to post the sign(s) as required. This form must be submitted with the application so that it may be placed on file as evidence that you have met the committee's requirements. Failure to post the sign as required will result in deferral of the application.

I UNDERSTAND THAT EACH SIGN MUST BE POSTED AT LEAST 10 DAYS BEFORE THE HEARING, AND WILL REMAIN POSTED AND BE REPLACED, IF NECESSARY, UNTIL THE DAY FOLLOWING THE HEARING.

Owner Name	2160 Lakeshore (2024) LP c/o Greenwin Corp.	Property Address	2160 Lakeshore Road
			05/02/2025
	Signature of Owner/Applicant		Date (mmm/dd/yyyy)

CITY OF Burlington

MINOR VARIANCE – 2025

Committee of Adjustment
Department of Community Planning
426 Brant Street, Burlington ON
committeeofadjustment@burlington.ca

AFFIDAVIT

*Please fill out at time of submission of application

I have the authority to bind the Corporation (check if applicable) [1] Signature of Applicant or Authorized Agent. Duncan Curtis

I, Duncan Curtis (print name) of the City (Region/City/County) of Toronto in the Province (City/Town/Township)

of Ontario solemnly declare that all the statements contained in this application are true and I make this solemn declaration conscientiously believing it to be true and knowing it is of the same force and effect as if made under oath and by virtue of the Canada Evidence Act.

Declared before me at the City (Region/City/County) of Toronto in the Province of Ontario (City/Town/Township)

this 9 day of May 2025.

Signature of Commissioner, etc.

Signature of Applicant or Authorized Agent

EMIL ELISEEDER,
a Commissioner, etc.,
Province of Ontario,
while a Barrister and Solicitor.
LSO #86918R

PERMISSION TO ENTER

IMPORTANT This MUST be completed for all applications and signed by the OWNER.

Municipal Address of Subject Lands: 2160 Lakeshore Road

I hereby authorize the Committee of Adjustment members, City of Burlington and Region of Halton staff to enter onto the above-noted property for the limited purposes of evaluating the merits of this application.

Signature of Owner

Duncan Curtis, P.Eng.
Print Name

CITY OF Burlington

MINOR VARIANCE – 2025

Committee of Adjustment
Department of Community Planning
426 Brant Street, Burlington ON
committeeofadjustment@burlington.ca

OWNERS AUTHORIZATION

If using an agent, the owner must also complete the following form:

I, Duncan Curtis, P.Eng. being the registered owner of the subject lands, hereby
(print name)

Authorize Lance Kaprielian to prepare, submit and act on my behalf with respect to this
(print agent name)

application for a Minor Variance

[signature] 05/02/2025

Signature of Owner Date (mmm/dd/yyyy)

Notice of collection of personal information

Personal information contained on this form is collected under the authority of the Planning Act, RSO 1990, c. P.13, to process applications and make decisions. Applications made under the Planning Act, are considered part of the public record and shall be made available to the public. Questions about this collection can be directed to the Manager of Development Planning, City of Burlington 426 Brant Street, Burlington, Ontario L7R 3Z6, 905-335-7600.

The applicant acknowledges that an application, all supporting information and materials, including studies and drawings, submitted under the Planning Act, pursuant to s. 1.0.1 of the Planning Act, RSO 1990, c.P.13, as amended, shall be made available to the public.

Minor Variance Application Checklist Please add a check mark beside the items you have provided with your application. Illegible drawings or those missing required details will be returned to applicant.	**Select (✓)**
LEGAL SURVEY (must be prepared and signed and dated by an Ontario Land Surveyor) *** For new development, a Proposed Building Plan stamped by an Ontario Land Surveyor or Professional Engineer may be required.**	✓
OR	
DETAILED SITEPLAN (must be prepared and stamped by Professional Engineer, Ontario Land Surveyor or Professional Architect). A legal survey may still be required at the discretion of staff.	✓
AND	
PLAN and ELEVATION DRAWINGS which include the following as applicable: (Missing details or illegible drawings will be sent back to the applicant for correction)	✓

SITE PLAN

- ■ Metric Scale
- ■ North Arrow
- ☐ Frontage
- ☐ Depth
- ☐ Lot Area
- ☐ Lot Coverage
- ☐ Deemed StreetLine
- ☐ Existing Front Yard Setbacks
- ☐ Existing Rear Yard Setbacks
- ☐ Existing Side Yard Setbacks
- ☐ Existing Street Side Yard Setbacks
- ☐ Existing Porch, Stairs and Overhang Setbacks
- ☐ Proposed Front Yard Setbacks
- ☐ Proposed Rear Yard Setbacks
- ☐ Proposed Side Yard Setbacks
- ☐ Proposed Street Side Yard Setbacks
- ☐ Proposed Porch, Stairs and Overhang Setbacks
- ☐ Streets (Public and Private)
- ☐ Street Names
- ☐ Parking (Dimensioned spaces, Driveway Width, Arrangement)
- ☐ Railways (Location of them and setbacks to structures)
- ☐ All Watercourses and/or Conservation Halton Areas(creeks, lakes, etc)

CITY OF Burlington

MINOR VARIANCE – 2025

Committee of Adjustment
Department of Community Planning
426 Brant Street, Burlington ON
committeeofadjustment@burlington.ca

Minor Variance Application Checklist

Please add a check mark beside the items you have provided with your application.
Illegible drawings or those missing required details will be returned to applicant.

LOCATION AND MEASUREMENTS OF SHED, DECK OR OTHER STRUCTURES

- ☐ Setbacks
- ☐ Height
- ☐ Area
- ☐ Length
- ☐ Width

ELEVATIONS

- ☐ Metric
- ☐ Front
- ☐ Rear
- ☐ Side 1
- ☐ Side 2

FLOOR PLANS

- ■ Metric
- ■ North Arrow
- ☐ Gross Floor Area Calculation
- ☐ Ground Floor Area Calculation
- ☐ Floor Area Ratio (where applicable)

I have reviewed the minor variance checklist and ensure all the applicable information is shown on the drawings submitted as part of this application.

Lance Kaprielian Digitally signed by Lance Kaprielian DN: C=CA, E=lance@studiolimina.ca, O=Studio Limina Inc., CN=Lance Kaprielian Date: 2025.04.28 11:11:00-04'00'

Signature of Owner/Agent

2025.04.25

Date (mmm/dd/yyy)

COPYRIGHT ACT APPLIES TO USE
AND REPRODUCTION

BUILDING LOCATION SURVEY OF
PART OF LOTS 98 and 99
BRANTS BLOCK
REGISTERED PLAN 99
CITY OF BURLINGTON
REGIONAL MUNICIPALITY OF HALTON
SCALE - 1" = 40'

M. J. TERRY
ONTARIO LAND SURVEYOR
1988

CITY OF BURLINGTON
SITE PLAN & ZONING
APPROVED FOR DETAIL
SHOWN
DEPARTMENT OF
BUILDING SERVICES
PER
DATE

Lakeshore Road

PART 16 30R-554

N 37° 39' 30" E
15.92'

10' WIDENING INST 188255 BY BY LAW 3552

N 45° 59' E

336.75'

CONCRETE WALL

CONCRETE WALL

PART 14 30R-554

N 45° 59' E
98.0'

95.40'

NORTHERLY ANGLE
OF LOT 99, PL 99

41.75'

42.03'

42.91'

UNDERGROUND PARKING

CONCRETE APARTMENT
BUILDING Nº 2160

2589 5

51.47'

N 53° 11' W

INST.
188812

LOT
99

LOT
98

UNDERGROUND
PARKING

276.0

N 48° 37' 30" W
30.68'

N 62° 26' 30" E
28.93'

N 64° 02' 30" W
14.49'

N 72° 30' E
24.07'

N 64° 50' E
42.78'

N 54° 17' E
15.42'

N 53° 37' 30" E
34.15'

N 25° 08' 30" E
10.75'

N 50° 40' W
38.43'

N 48° 03' W
70.00'

PART 1 30R-6523
EASEMENT AND
RIGHT OF WAY

INST.
LOT 98

CONCRETE WALL

CONCRETE WALL

UNDERGROUND POOL

UNDERGROUND PARKING

N 49° 42' E
195.46'

50.0'

55.0'

52.0'

WATERS EDGE

LINE BETWEEN BRANTS BLOCK AND TOWNSHIP OF NELSON

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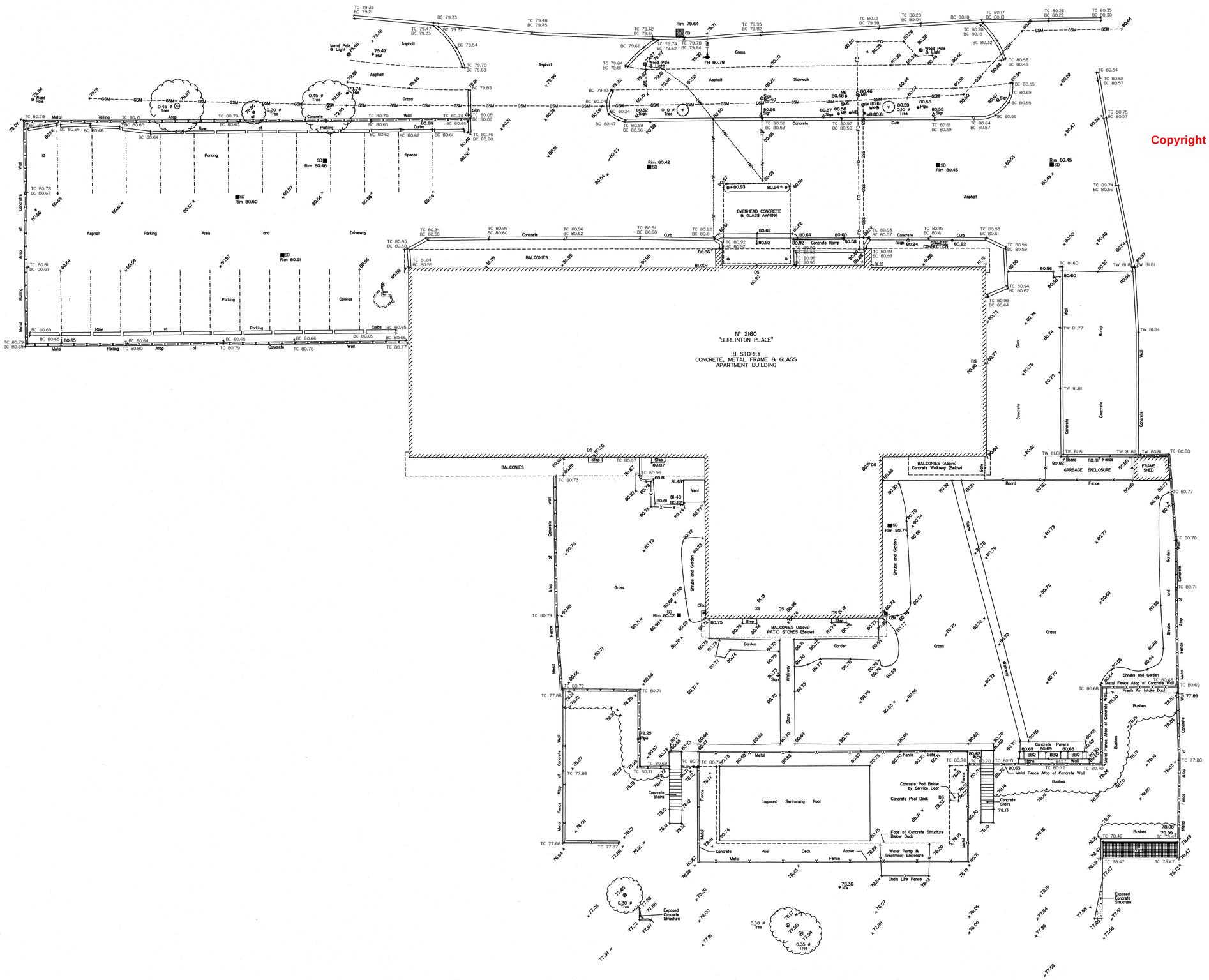

PLAN OF TOPOGRAPHY OF

2160 LAKESHORE ROAD

CITY OF BURLINGTON

SCALE = 1 : 150

0 1 2 3 4 5 10 metres

METRIC

DISTANCES SHOWN HEREON ARE IN METRES AND CAN BE CONVERTED TO FEET BY DIVIDING BY 0.3048

NOTE

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ELEVATION NOTE

ELEVATIONS SHOWN HEREON ARE GEODETIC AND IN METRES AND ARE RELATED TO CITY OF BURLINGTON BENCH MARK N° 198 HAVING A PUBLISHED ELEVATION 78.036 METRES.

LEGEND

SD	DENOTES	SURFACE DRAIN
CB	—|—|—	CATCH BASIN
FH	—|—|—	FIRE HYDRANT
DS	—|—|—	DOOR SILL ELEVATION
ICV	—|—|—	IRRIGATION CONTROL VALVE
MB	—|—|—	METAL BOLLARD
CBx	—|—|—	CABLE BOX
GK	—|—|—	GAS KEY
WK	—|—|—	WATER KEY
HW	—|—|—	HAND WELL
BC	—|—|—	BOTTOM OF CURB
TC	—|—|—	TOP OF CURB
TW	—|—|—	TOP OF WALL
GW	—|—|—	GUY WIRES
ø	—|—|—	DIAMETER
	——HW——	HYDRO WIRES/CONDUIT
	——FO——	BELL TELEPHONE WIRES/CONDUIT
	——GSM——	GAS MAIN
	——GSS——	GAS SERVICE
	——WS——	WATER SERVICE

SURVEYOR'S CERTIFICATE

I CERTIFY THAT :

1. THE SURVEY WAS COMPLETED ON JUNE 13TH, 2018.

JUNE 25th, 2018 — DATE

PETER J. HOMER
Ontario Land Surveyor

LSG | LAND SURVEY GROUP
ONTARIO LAND SURVEYORS

777 THE QUEENSWAY, UNIT 1, TORONTO, ONTARIO, M8Z 1N4
Tel: 416-252-2511 416-467-8023 Fax: 416-252-1501 www.landsurveygroup.com

DRAWN : R. M. RILLERA | CHECKED BY : PJH | PLAN N° : LSG-4436

Project Identification	
Address	2160 Lakeshore Road Burlington
Zoning	DRH - Downtown High Density

Project Description
Proposed conversion of exisitng ground level office to a 1 bedroom apartment suite

Lot Details					
Lot Area	7416	m²			no change
	0.7416	Ha			no change
Setbacks	all exisitng, no proposed changes				no change
Coverage	all exisitng, no proposed changes				no change

Project Data					
	Existing	Proposed	Total	By-Law	Notes
Apartments	160	1	161		refer to chart for suite mix
Density	Min: 50/units/hectare and Max: 185 units/hectare				
	215.75		217.10	185	existing density exceeds maximum
Parking	required: 1.25 spaces per suite. 1/tenant and 0.25 visitor				
Indoor	184	0	184		
Surface	25	0	25		
Total	209	0	209	201.25	existing parking meets bylaw minimum
Amenity	required: 22m² amenity per suite				
Swimming Pool	223m²				no change
BBQ Area	60.4m²				no change
Library	9.3m²				no change
Gym	39m²				no change
Billiard Room	38m²				no change
Shower room	m²				no change
Powder room	2.8m²				no change
Change Rooms	m²				no change
Balcony	2482.6m²				no change
Total	2855.1m²		2855.1m²	3542 m²	existing amenity is below minimum

Suite summary

	01 stack	02 stack	03 stack	04 stack	05 stack	06 stack	07 stack	08 stack	09 stack
Ground Floor	2 Bedroom	1 Bedroom	1 Bedroom	2 Bedroom	2 Bedroom	2 Bedroom	Bachelor	1 Bedroom	
Second Floor	2 Bedroom	1 Bedroom	1 Bedroom	2 Bedroom	2 Bedroom	2 Bedroom	Bachelor		3 Bedroom
Third Floor	2 Bedroom	1 Bedroom	1 Bedroom	2 Bedroom	2 Bedroom	2 Bedroom	1 Bedroom	1 Bedroom	3 Bedroom
Fourth Floor	2 Bedroom	1 Bedroom	1 Bedroom	2 Bedroom	2 Bedroom	2 Bedroom	1 Bedroom	1 Bedroom	3 Bedroom
Fifth Floor	2 Bedroom	1 Bedroom	1 Bedroom	2 Bedroom	2 Bedroom	2 Bedroom	1 Bedroom	Bachelor	3 Bedroom
Sixth Floor	2 Bedroom	1 Bedroom	1 Bedroom	2 Bedroom	2 Bedroom	2 Bedroom	1 Bedroom	Bachelor	3 Bedroom
Seventh Floor	2 Bedroom	1 Bedroom	1 Bedroom	2 Bedroom	2 Bedroom	2 Bedroom	1 Bedroom	Bachelor	3 Bedroom
Eighth Floor	2 Bedroom	1 Bedroom	1 Bedroom	2 Bedroom	2 Bedroom	2 Bedroom	1 Bedroom	1 Bedroom	3 Bedroom
Ninth Floor	2 Bedroom	1 Bedroom	1 Bedroom	2 Bedroom	2 Bedroom	2 Bedroom	1 Bedroom	Bachelor	3 Bedroom
Tenth Floor	2 Bedroom	1 Bedroom	1 Bedroom	2 Bedroom	2 Bedroom	2 Bedroom	Bachelor	1 Bedroom	3 Bedroom
Eleventh Floor	2 Bedroom	1 Bedroom	1 Bedroom	2 Bedroom	2 Bedroom	2 Bedroom	1 Bedroom	Bachelor	3 Bedroom
Twelfth Floor	2 Bedroom	1 Bedroom	1 Bedroom	2 Bedroom	2 Bedroom	2 Bedroom	1 Bedroom	Bachelor	3 Bedroom
Fourteenth Floor	2 Bedroom	1 Bedroom	1 Bedroom	2 Bedroom	2 Bedroom	2 Bedroom	1 Bedroom	Bachelor	3 Bedroom
Fifteenth Floor	2 Bedroom	1 Bedroom	1 Bedroom	2 Bedroom	2 Bedroom	2 Bedroom	1 Bedroom	Bachelor	3 Bedroom
Sixteenth Floor	2 Bedroom	1 Bedroom	1 Bedroom	2 Bedroom	2 Bedroom	2 Bedroom	1 Bedroom	1 Bedroom	3 Bedroom
Seventeenth Floor	2 Bedroom	1 Bedroom	1 Bedroom	2 Bedroom	2 Bedroom	2 Bedroom	1 Bedroom	Bachelor	3 Bedroom
Eighteenth Floor	2 Bedroom	1 Bedroom	1 Bedroom	2 Bedroom	2 Bedroom	2 Bedroom	1 Bedroom	Bachelor	3 Bedroom
Nineteenth Floor	2 Bedroom	1 Bedroom	1 Bedroom	2 Bedroom	2 Bedroom	2 Bedroom	1 Bedroom	Bachelor	3 Bedroom

LIST OF DRAWINGS

ARCHITECTURAL

Cover	A0.00
Site Plan	A0.01
Ex. Plan - Ground Floor	A1.01
Ex. Plan - P1 Level	A1.02
Ex. Plan - P2 Level	A1.03
Ex. Plan - Typical 3-18 Floor	A1.04
Balcony Area	A1.05
Partial Ground Floor Plan	A1.10
Proposed Suite Plan	A2.01

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Suite Creation

2160 Lakeshore Blvd, Burlington

COVER

Date of Drawing: 2025.02.26
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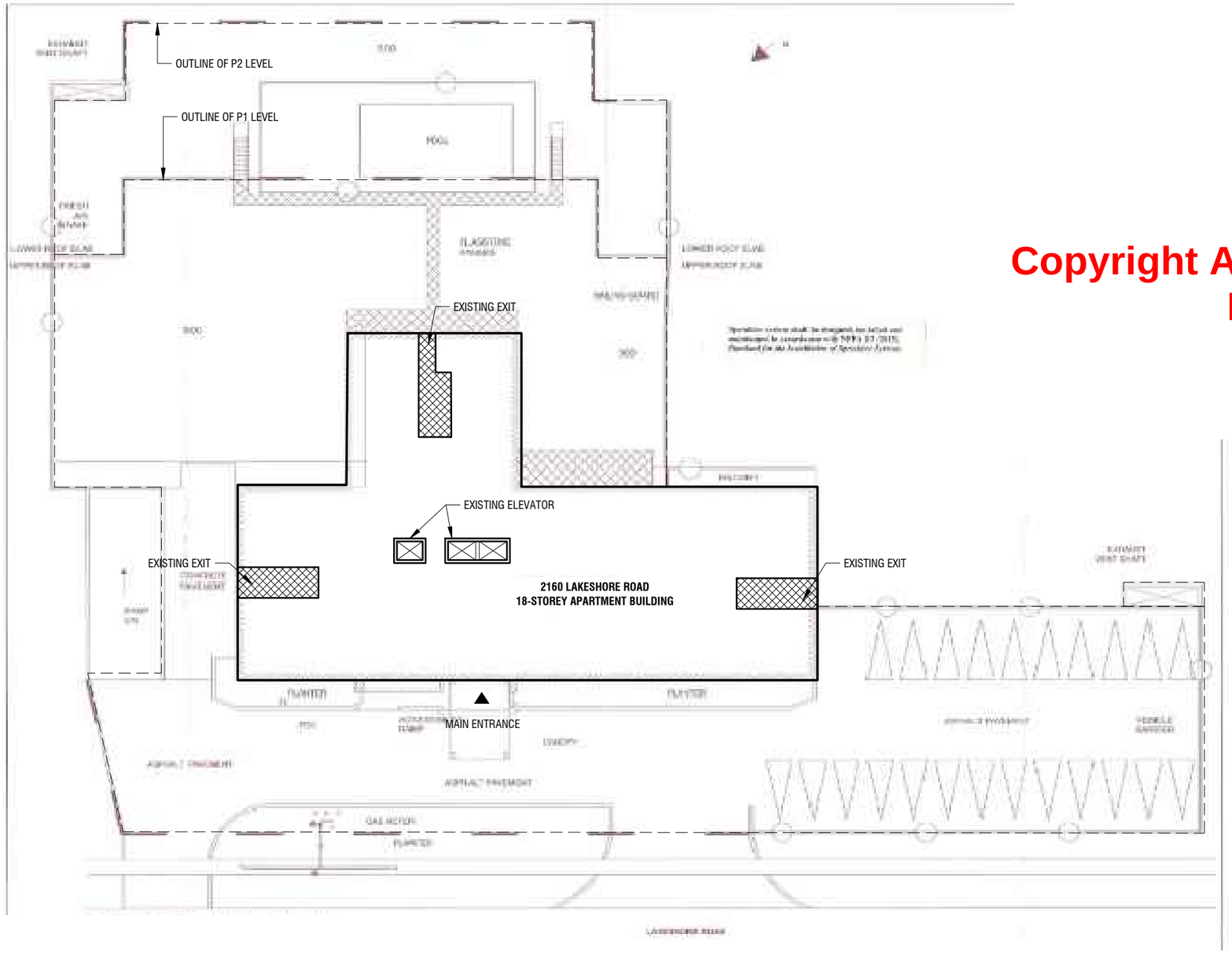
A0.00



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EX. SITE PLAN

Date of Drawing: 2025.02.04	Project Number: 24-32
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A0.01

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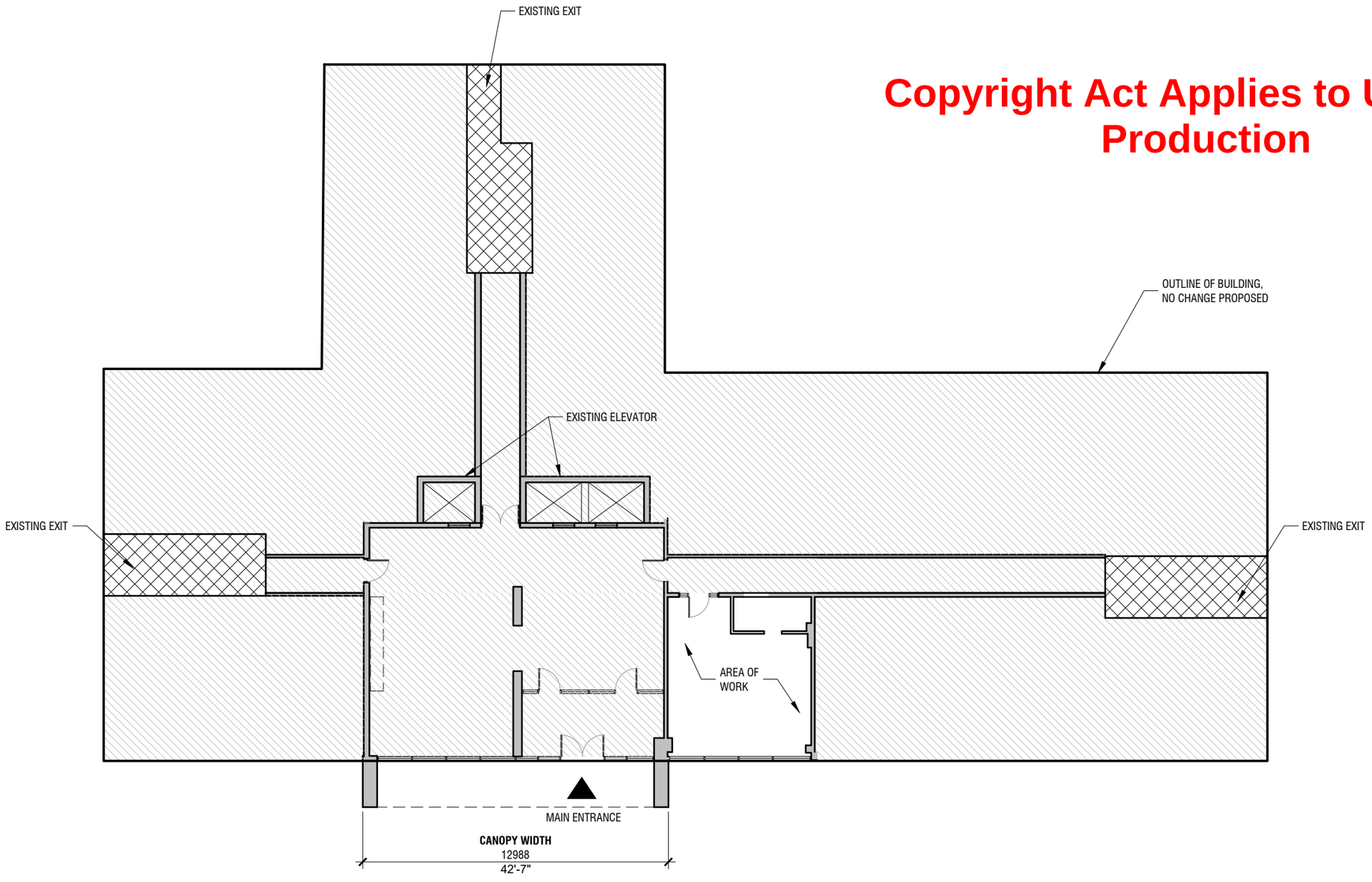

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Suite Creation

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EX. PLAN -
GROUND FLOOR

Date of Drawing:	Project Number:
2025.02.04	24-32
Drawn by:	Drawing Scale:
	1:200

A1.01

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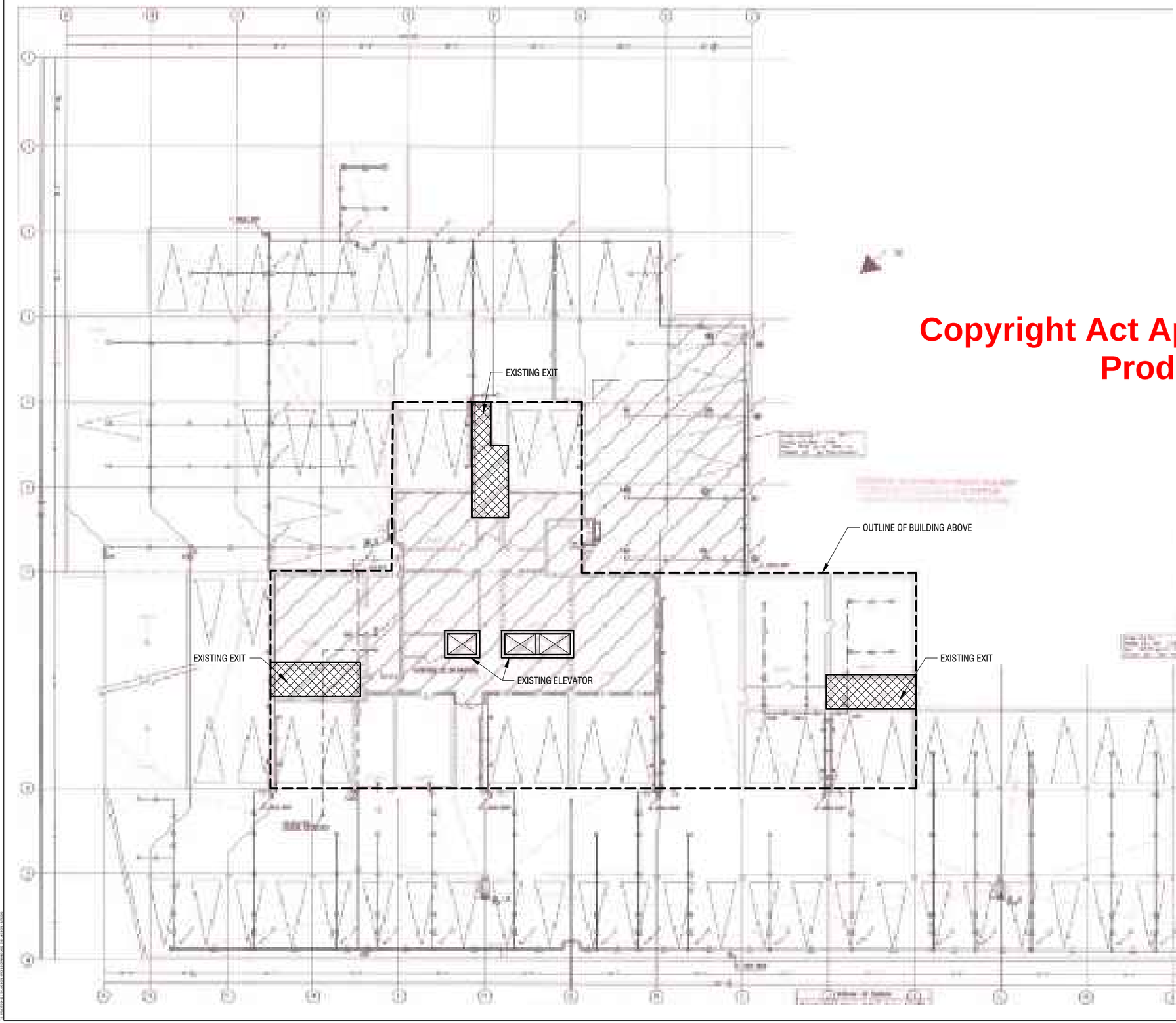

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EX. PLAN - P1 LEVEL

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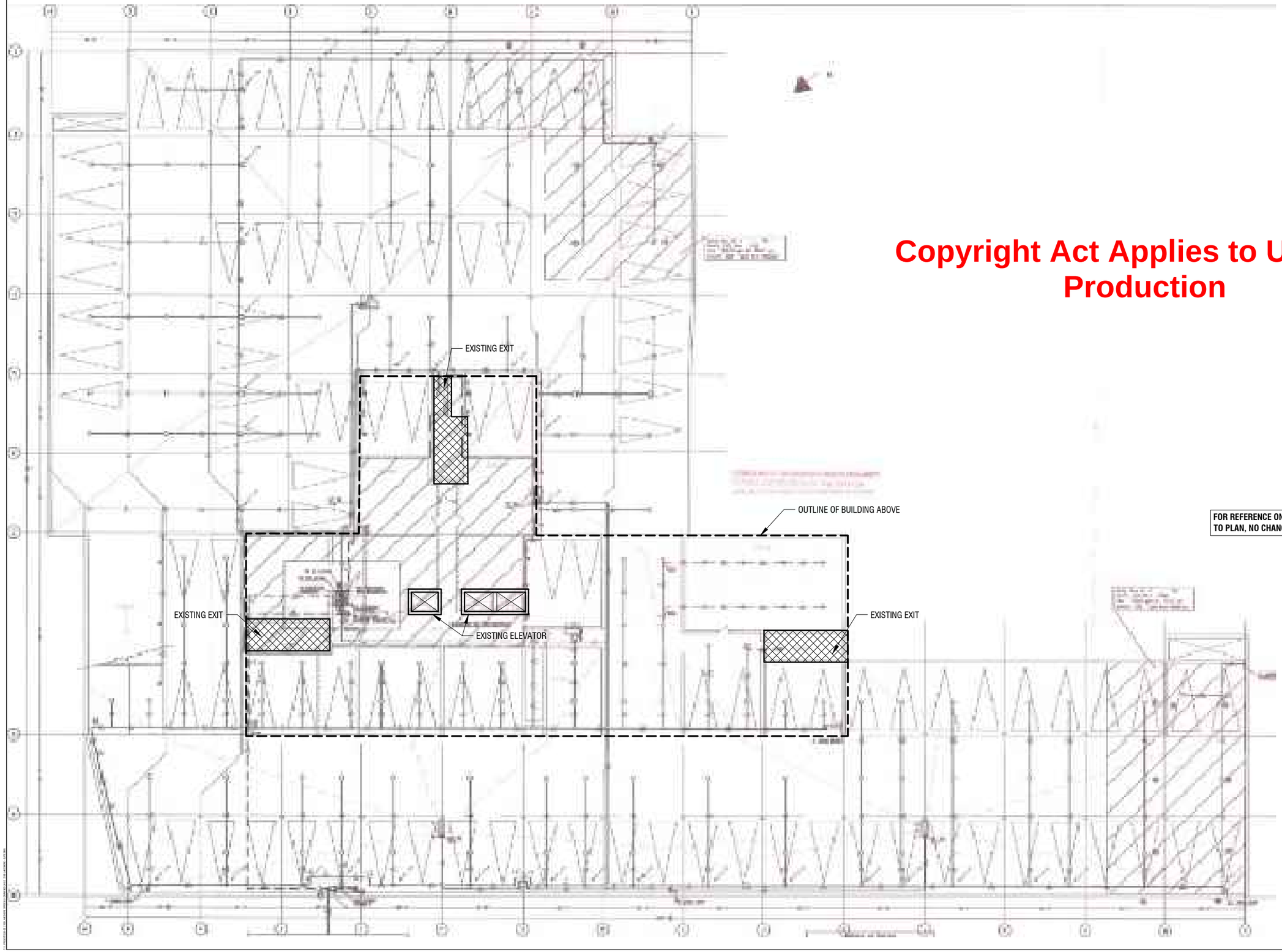
Project Number: 24-32
Drawing Scale: 1:300

A1.02



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Suite Creation

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EX. PLAN - P2 LEVEL

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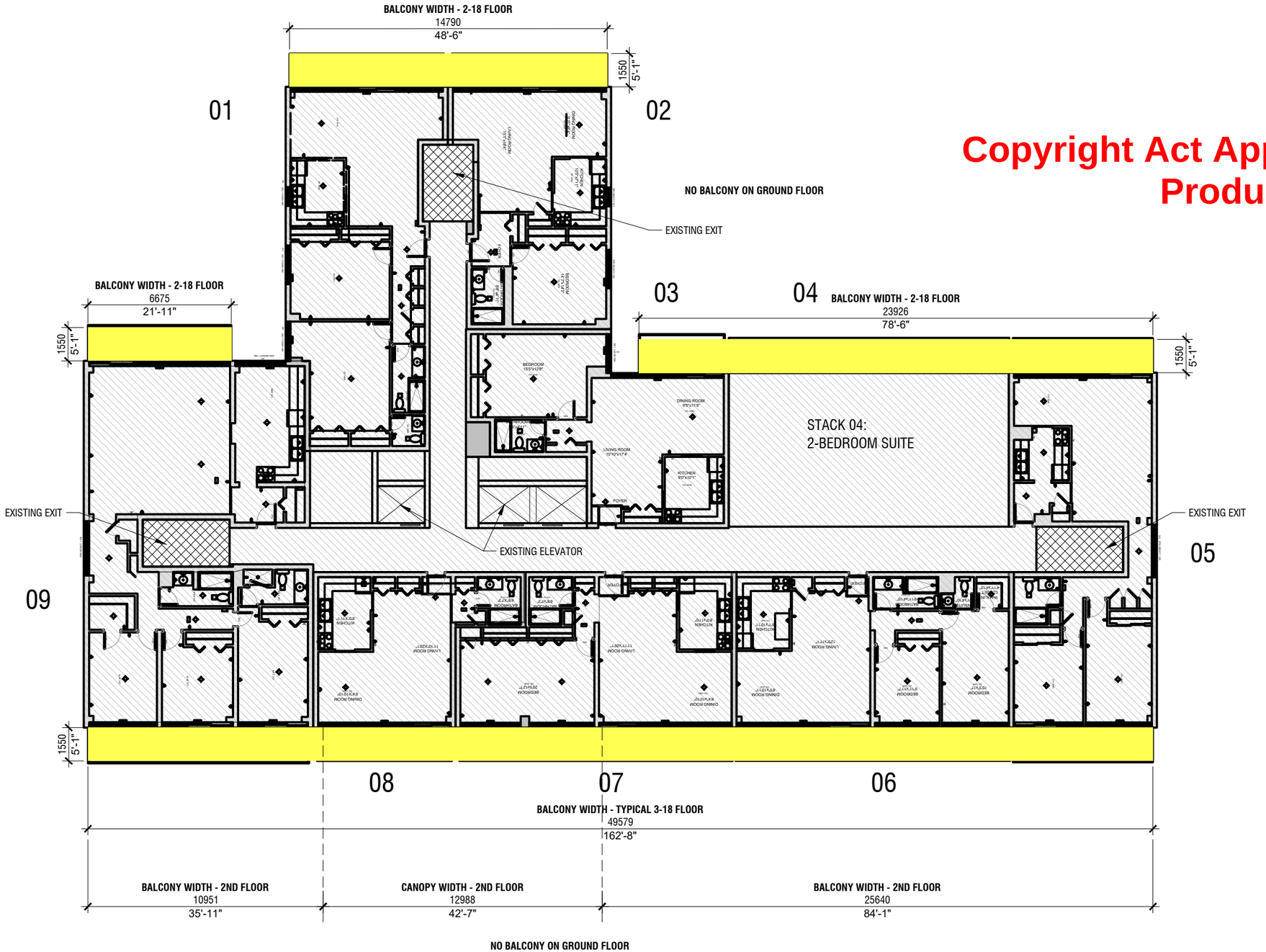
Drawn by:
Project Number: 24-32
Drawing Scale: 1:300

A1.02



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BALCONY AREA CALCULATION

- FRONT ELEVATION - 1286.29 M²
- GROUND FLOOR: 0 M²
- 2ND FLOOR: (10.95+25.64)X1.55=56.71 M²
- 3-18TH FLOOR: 49.58X1.55X16=1229.58 M²

REAR ELEVATION - 1196.29 M²

- GROUND FLOOR: 0 M²
- 2-18TH FLOOR: (6.68+14.79+23.93)X1.55X17=1196.29 M²

TOTAL BALCONY AREA = 1286.29+1196.29=2482.59 M²

NOT IN SCOPE

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EX. PLAN - TYPICAL 3-18

Date of Drawing: 2025.02.04
Drawn by:
Project Number: 24-32
Drawing Scale: 1:300

A1.04

BALCONY AREA CALCULATION

- FRONT ELEVATION - 1286.29 M²
- GROUND FLOOR: 0 M²
- 2ND FLOOR: (10.95+25.64)X1.55=56.71 M²
- 3-18TH FLOOR: 49.58X1.55X16=1229.58 M²

REAR ELEVATION - 1196.29 M²
- GROUND FLOOR: 0 M²
- 2-18TH FLOOR: (6.68+14.79+23.93)X1.55X17=1196.29 M²

TOTAL BALCONY AREA = 1286.29+1196.29=2482.59 M²

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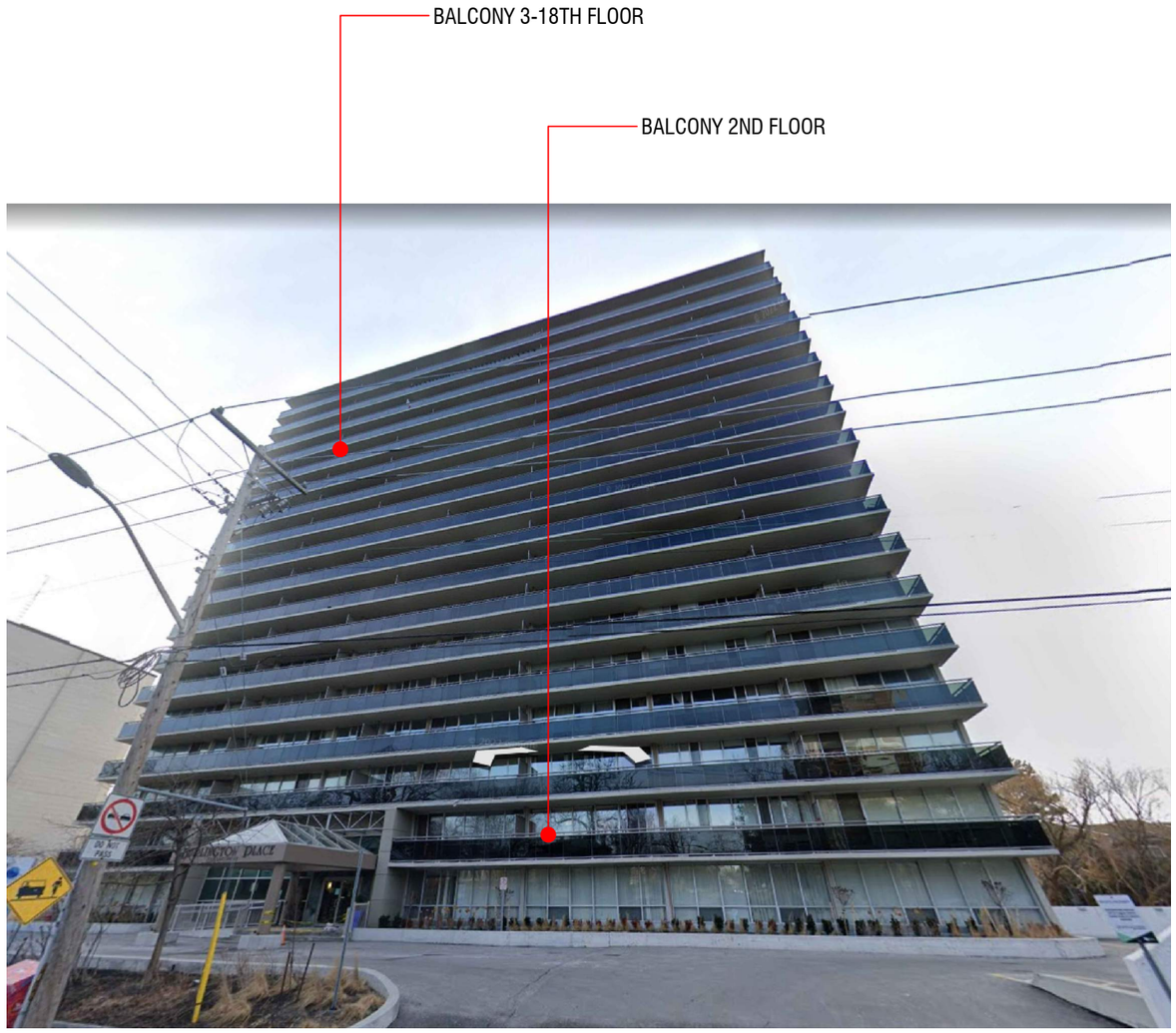

FRONT ELEVATION

REAR ELEVATION

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BALCONY AREA

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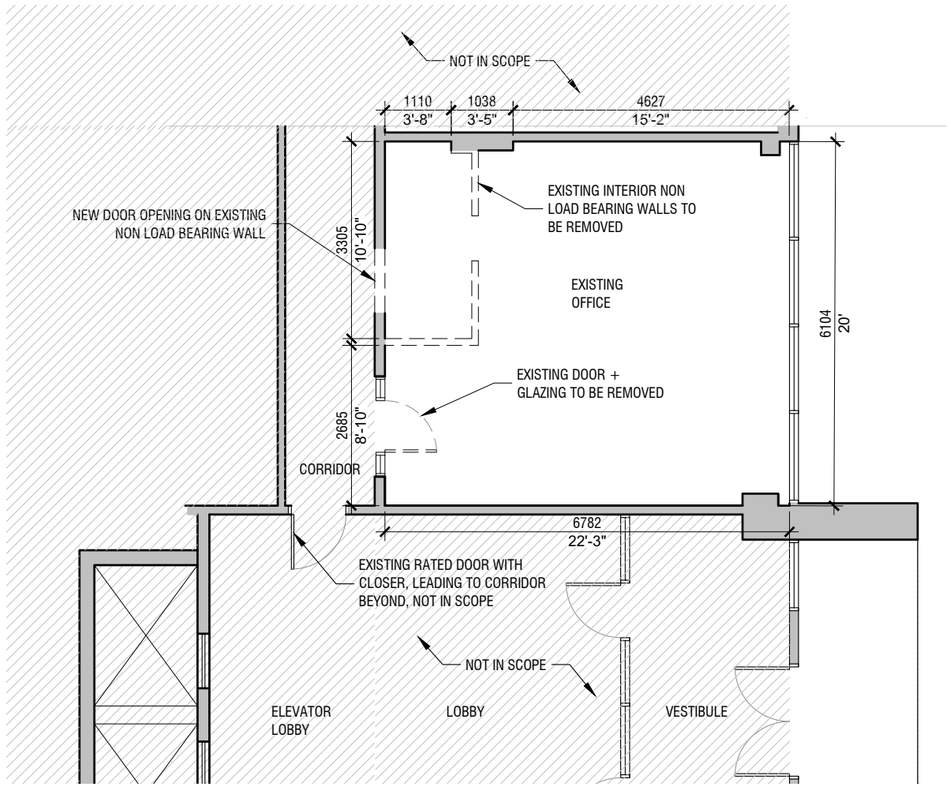
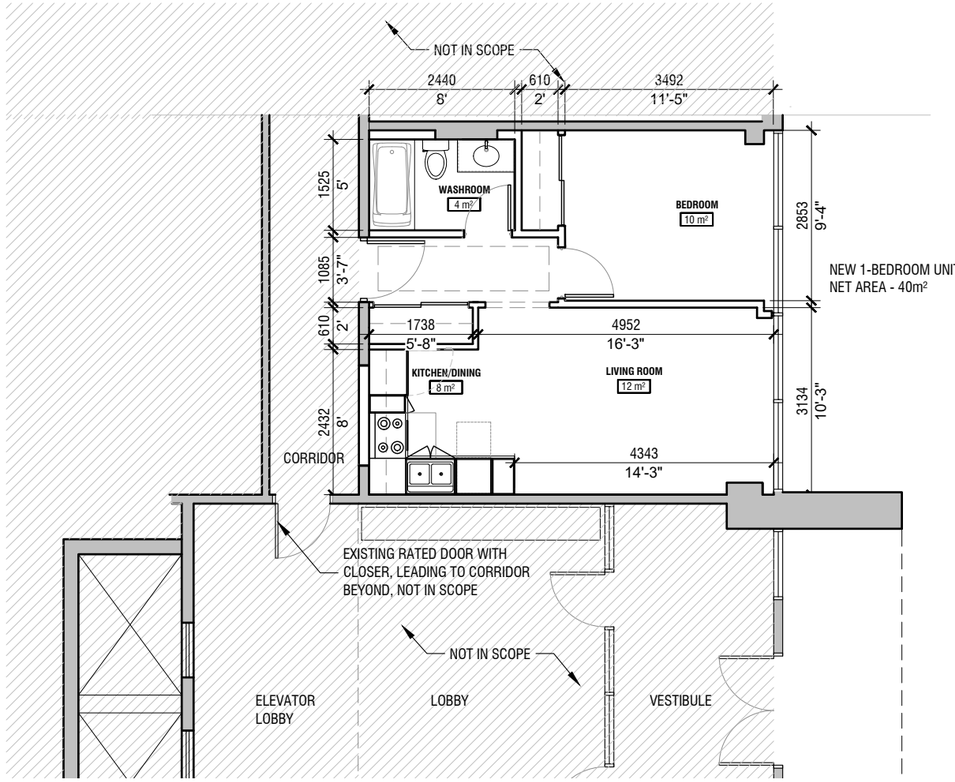


1 A1.10 EX. / DEMO PLAN
1:100



2 A1.10 PROPOSED PLAN
1:100

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Suite Creation

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PARTIAL GROUND FLOOR PLAN

Date of Drawing: 2025.02.04	Project Number: 24-32
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A1.10

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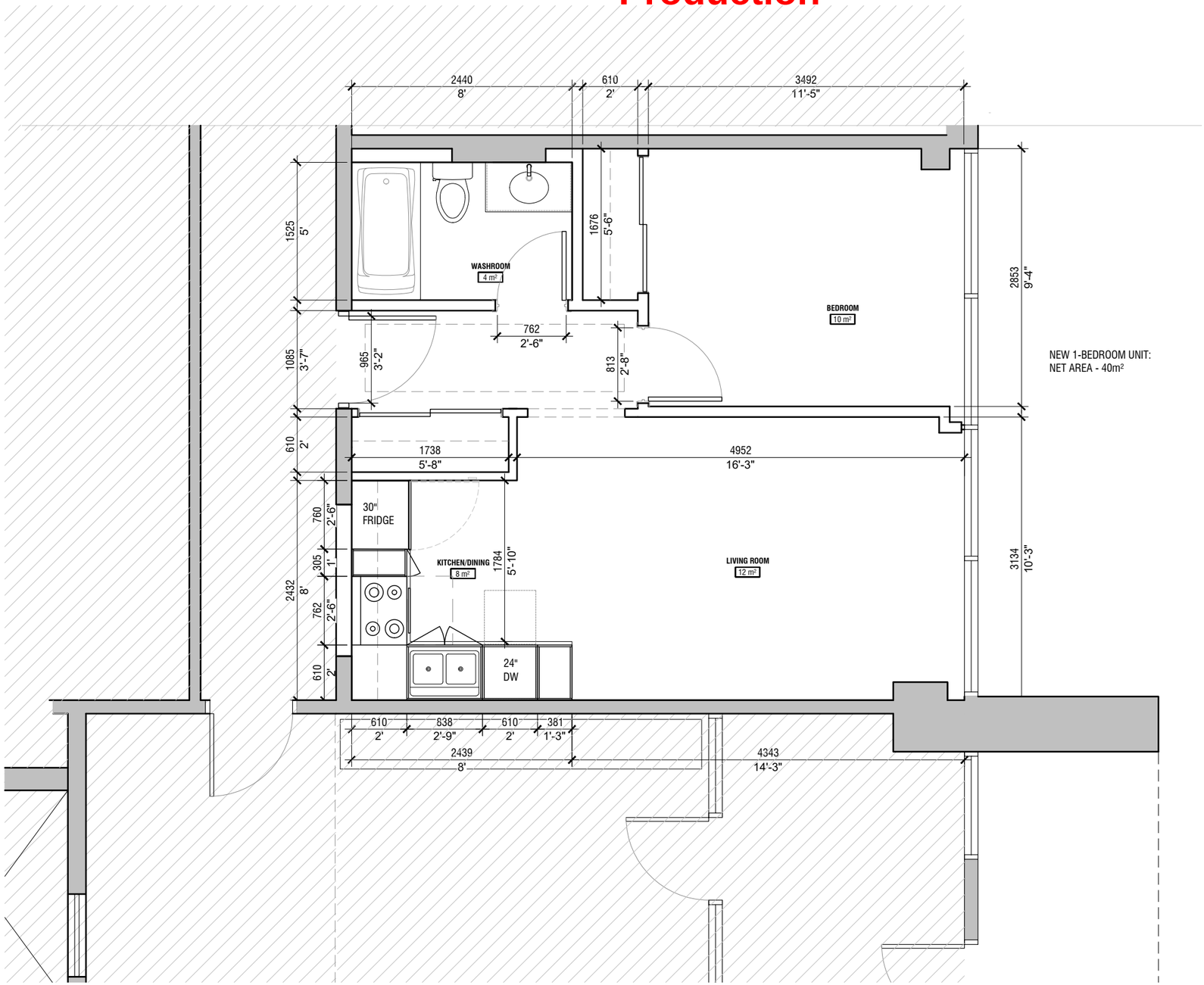

NOT IN SCOPE

1. CONTRACTOR AND ALL SUB-TRADES SHALL VERIFY ALL SITE DIMENSIONS, ALL DRAWINGS, DETAILS AND SPECIFICATIONS AND REPORT ANY DISCREPANCIES TO THE ARCHITECTS IN WRITING FOR APPROVAL BEFORE PROCEEDING WITH THE WORK.

2. CONTRACTOR AND SUB-CONTRACTORS, BEFORE PROCEEDING WITH WORK, MUST SUBMIT ALL NECESSARY SAMPLES FOR APPROVAL OF QUALITY AND FINISH TO THE ARCHITECTS.

3. CONTRACTOR MUST COMPLY WITH THE CONTRACT DOCUMENTS, PERFORMANCE REQUIREMENTS, APPLICABLE CODES AND REGULATIONS.

4. ALL DRAWINGS AND WRITTEN MATERIAL HEREIN CONSTITUTES THE ORIGINAL AND UNPUBLISHED WORK OF "STUDIO LIMINA INC." AND MAY NOT BE DUPLICATED, USED OR DISCLOSED WITHOUT PRIOR WRITTEN CONSENT OF "STUDIO LIMINA INC"

5. DRAWINGS NOT TO BE SCALED

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Suite Creation

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PROPOSED SUITE PLAN

Date of Drawing: 2025.02.04
Drawn by:
Project Number: 24-32
Drawing Scale: 1:50

A2.01