BOUSFIELDS INC.
PLANNING | DESIGN | ENGAGEMENT

Urban Design Brief

1 Clair Road East
City of Guelph

Prepared For
FCHT Holdings (Ontario) Corporation

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“This Urban Design Brief has been prepared in support of a Zoning By-law Amendment and Official Plan Amendment application by FCHT Holdings (Ontario) Corporation to permit a mixed-use development located within the eastern portion of the existing commercial plaza commonly referred to as Pergola Commons. Pergola Commons is municipally known as 1 Clair Road East in the City of Guelph.”

Introduction

This Urban Design Brief (“UDB”) has been prepared in support of a Zoning By-law Amendment (“ZBA”) and Official Plan Amendment (“OPA”) application by FCHT Holdings (Ontario) Corporation to permit a mixed-use development located within the eastern portion of the existing commercial plaza commonly referred to as Pergola Commons. Pergola Commons is municipally known as 1 Clair Road East in the City of Guelph (the “subject site”).

This UDB report provides a comprehensive assessment and justification for the proposed redevelopment in the context of the existing surroundings and the applicable urban design regulatory framework. The report includes a general physical description of the subject site and surroundings, a review of the applicable urban design policy framework, the urban design objectives associated with the proposal, a description of the proposed development both in terms of built form and public realm, and an overview of potential sustainability measures to be implemented through the development.

This Urban Design Brief is a companion document to the Planning Rationale Report, prepared by MHBC Planning Ltd., which sets out the land use planning vision and justification for the development of the subject site.

View south toward Buildings C and D and central Plaza from Clair Road East (Rendering provided by SvN Architects + Planners)

Part 1

Physical and Policy Context

1.1 Physical Context

1.1.1 Subject Site

Pergola Commons is a commercial plaza located at the southeast corner of the Gordon Street and Clair Road East intersection. The subject site is comprised of the easternmost block of Pergola Commons, and the subject site is located approximately 200 metres east of the intersection of Gordon-Clair intersection.

Generally rectangular in shape, the lot has a total area of approximately 22,188 square metres and is bounded by an existing private driveway (extending south from Farley Drive) to the west, Poppy Drive East to the south, Hawkins Drive to the east, and Clair Road East to the north. The intersection of the north-south private driveway with Clair Road East is signalized, while its intersection with Poppy Road East in the south is not.

Figure 1 - Aerial Photo - Surrounding Context

On-site Attributes

The subject site contains four standalone commercial buildings.

The north portion of the site contains two commercial buildings. A single-storey commercial-retail building is located at the northwest corner of the site, occupied by the Beer Store. A single-storey commercial building containing several retail units is located at the northeast corner, including two restaurants, a hair salon, and a learning centre. The primary entrances to these retail establishments face the surface parking that is located between these buildings, north of a driveway that connects Hawkins Drive in the east to the private driveway south of Farley Drive in the west.

The south portion of the subject site also contains two commercial buildings. At the southeast corner of the site is the Cineplex movie theatre, and south of the Beer Store and the east-west driveway is a single-storey pad building with a drive-thru along its east, operating as a Harvey's restaurant. A field of surface parking separates these two buildings, in addition to a surface parking area north of the movie theatre building.

Landscaped strips with shrub and tree plantings, as well as public sidewalks, are present along the north, east, and south extents of the subject site. Along the western edge of the subject site is a private sidewalk and landscaped areas, some of which are sodded with trees while others are planters. Decorative light standards are also located along the north-south driveway along the western extent of the site.

The Site in Context

To the north of the subject site is Clair Road East, a major arterial road as identified in the City of Guelph Official Plan. This road has a four-lane cross section with dedicated turning lanes and generally runs in an east-west direction.

North of Clair Road East is a mix of uses including additional retail and commercial uses, the Westminster Square Branch of the Guelph Public Library, and a mid-rise housing complex consisting of five four-storey residential apartment buildings, with an associated centralized surface parking lot. Beyond these areas, north of Goodwin Drive, is a low-rise residential neighbourhood comprising two-storey rowhouse forms.

To the east of the subject site, on the east side of Hawkins Drive, is a stormwater pond and open space area. Further east is Hall's Pond and Hall's Pond Trail, as well as Dallan Park. East of these open space areas, north and south of Poppy Drive East, are low-rise residential areas comprising two-storey single-detached house forms, and two- and three-storey townhouse blocks. Along Clair Road East, east of Hall's Pond, is mid-rise housing complex, consisting of three four-storey apartment buildings with a centralized surface parking area.

Immediately to the south of the subject site, on the south side of Poppy Road East, is a large single plot of land, which stretches from a private driveway south of the subject site to Gordon Street in the west. This land operates as a garden centre (i.e. Brock Road Nursery). East of the garden centre is a townhouse complex comprised of 18 two-storey townhouse blocks along the southern extent of Hawkins Drive and south of Poppy Drive East.

To the south of the garden centre is a large residential mixed-use development currently under construction, consisting of five buildings, ranging in heights from 2 to 14 storeys. Further to the south are several single-detached house forms fronting onto Gordon Street and a large semi-private golf course.

To the west of the subject site, on the west side of the private driveway extending south of Farley Drive, is a continuation of the Pergola Commons commercial plaza, which consists of six standalone commercial buildings and surface parking lot. The two commercial single-storey pad buildings closest to the intersection of Gordon Street and Clair Road operate as banks, each of which has a drive-thru. Commercial plazas are also located at the northwest, northeast, and southwest corners of the Gordon Street and Clair Road intersection. Further west and northwest are low-rise residential neighbourhoods with detached and semi-detached residential dwellings.

Figure 2 - Aerial Photo - Immediate Context

1.2 Urban Design Policy Context

1.2.1 City of Guelph Official Plan

The City of Guelph updated its Official Plan to conform to changes to Provincial legislation and policies as part of Official Plan Amendment 80 ("OPA 80"), which was adopted by the Council of the City of Guelph on July 11, 2022 and approved by the Minister of Municipal Affairs and Housing on April 11, 2023.

Growth Management and Land Use

The subject site is identified on Schedule 1a of the Official Plan as being a part of a *Strategic Growth Area* and *Greenfield Area*.

Policy 3.4.3 of the Official Plan directs that the City will promote and facilitate intensification in *Strategic Growth Areas*. Policy 3.6.3 provides that strategic growth areas will be planned and designed to:

- achieve increased residential and employment densities that support and ensure the viability of existing and planned transit service levels;
- be well served by transit and facilitate pedestrian and cycling traffic;
- provide mixed-use development in a higher density, compact form that supports walkable communities and live/work opportunities; and
- provide a mix of residential, office, institutional, and commercial uses that allows for a range of housing options and services.

Policy 3.6.6 indicates that the Gordon Street and Clair Road *strategic growth area* is classified as a Community Mixed-Use Node and will be planned to achieve a density target of 130 residents and jobs combined per hectare.

With respect to designated *greenfield areas*, Policy 3.7.1 states that such areas will be planned and designed in a manner which will contribute to the City's overall vision for the achievement of diverse and complete communities. It continues that development within the greenfield area must be compact and occur at densities that support walkable communities, cycling and transit and promote live/work opportunities. Policy 3.7.3 provides that designated greenfield areas will be planned as follows:

- ensure that new development is designed to promote energy conservation, alternative and/or renewable energy systems and water conservation;
- create street configurations, densities and an urban form that supports walking, cycling and the early integration and sustained viability of transit services;
- provide a diverse mix of land uses, including residential and employment uses, to support vibrant neighbourhoods;
- create high quality public open spaces with site design and urban design standards that support opportunities for transit, walking and cycling;
- promote, where appropriate through secondary planning, the development of identifiable, pedestrian oriented neighbourhood scale 'urban villages' through the use of medium and high density, street-related built form that contains a mix of commercial, residential and employment uses, as well as supporting live/work opportunities. These centres will be designed around active public spaces and streets and pedestrian access that is well-linked to the surrounding neighbourhood through walking, cycling and public transit; and
- develop and implement policies, including phasing policies and other strategies to achieve the targets of the Official Plan and ensure alignment of growth with infrastructure.

The subject site is designated *Commercial Mixed-use Centre* on Schedule 2. Section 9.4 of the Official Plan deals with commercial and mixed-use designations. The preamble text indicates that *Commercial Mixed-use Centres* are intended to develop over time into distinct areas with centralized public spaces that provide a range of uses including, retail and office uses, live/work opportunities and medium to high density residential uses.

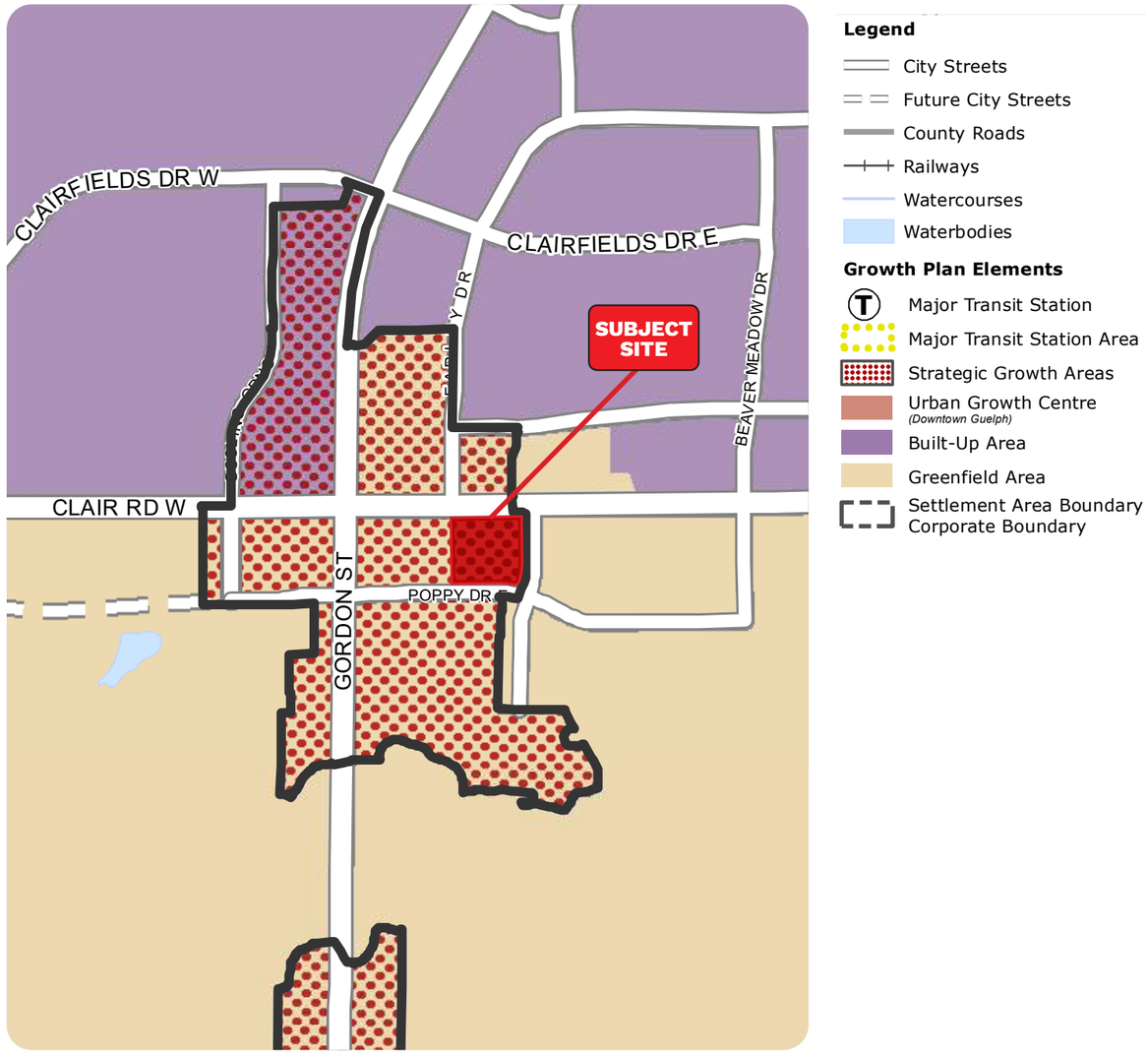


Figure 3 - OPA 80 Schedule 1A

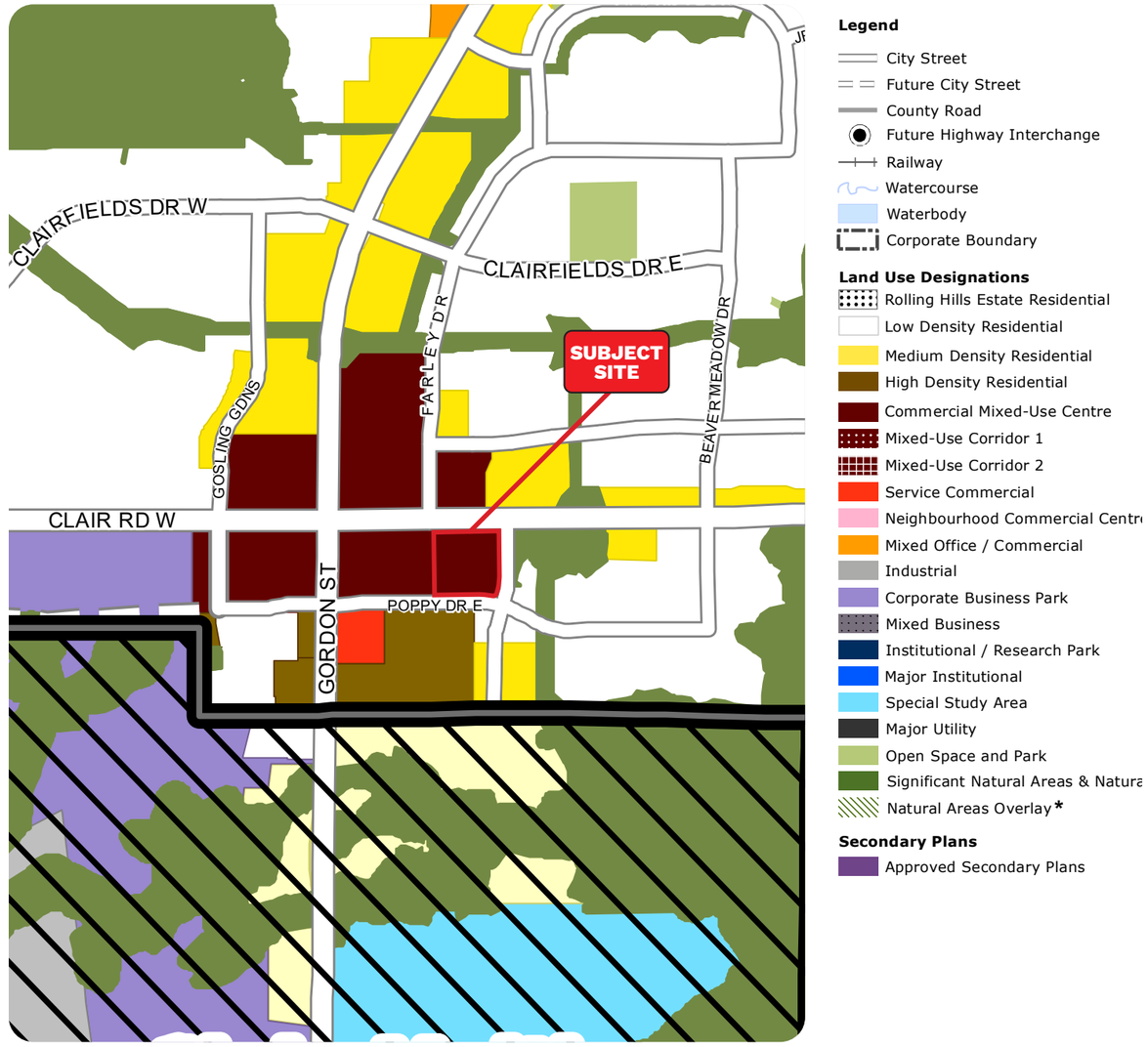


Figure 4 - OPA 80 Schedule 2

Relevant urban objectives for such areas, as outlined in the Official Plan, include:

- To promote a distinct identity and character for commercial and mixed-use development through high standards of urban design; and
- To create mixed-use areas that are pedestrian oriented and transit-supportive.

Policy 9.4.3(2) states that the intent of the *Commercial Mixed-use Centre* designation is to create a well-defined focal point and efficiently use the land base by grouping complementary uses in close proximity to one another providing the opportunity to satisfy several shopping and service needs at one location.

Policy 9.4.3(3) of the Official Plan provides that development will be comprehensively planned and integrated with the overall Community Mixed-use Node and in accordance with any applicable concept plans or urban design studies as per the policies of Section 3.6.

Policy 9.4.3(4) states that where residential uses are incorporated into *Commercial Mixed-use Centres*, they are intended to be developed as mixed-use buildings or multiple-unit residential buildings.

Further, the Official Plan states that those properties within *Commercial Mixed-use Centres* will be integrated through internal access roads, entrances from public streets, access to common parking areas, open space, grading, and stormwater management systems (Policy 9.4.3(5)). It is intended that individual developments within the *Commercial Mixed-use Centre* will be designed to be integrated into the wider community by footpaths, sidewalks, and bicycle systems and by the placement of smaller buildings amenable to the provision of local goods and services in close proximity to the street line near transit facilities.

Policy 9.4.3(6) provides that *Commercial Mixed-use Centre* are strongly encouraged to incorporate Main Street type development in strategic locations. Main Street areas, as identified through concept plans as per Section 3.6, will be planned and designed to reflect the following:

- multi-storey buildings fronting onto the main street;
- ground floor retail and service uses are strongly encouraged;
- office uses at ground floor should be limited;
- residential uses should be provided primarily above commercial uses in addition to some free-standing residential buildings;
- rhythm and spacing of building entrances and appropriately sized storefronts to encourage pedestrian activity;
- urban squares, where appropriate; and
- on-street parking.

Policy 9.4.3(7) states that the City will require the aesthetic character of site and building design to be consistent with the Urban Design policies of the Official Plan and any applicable urban design guidelines while recognizing the unique context of individual *Commercial Mixed-use Centres*, citing that measures may be incorporated into development approvals to ensure consistency.

Policy 9.4.3(17) directs that, within *strategic growth areas*, the maximum height is 14 storeys, and that the implementing zoning by-law will establish regulations for height transitions, stepbacks, and angular planes. Policy 9.4.3(19) follows that, for freestanding residential and residential within mixed-use buildings in *strategic growth areas*, the maximum net density is 250 units per hectare and the minimum net density is 150 units per hectare.

Urban Design

Section 8 of the Official Plan deals with urban design and sets out a series of policies intended to promote the creation of enduring, attractive, and valued environments which are memorable and flexible and can evolve to accommodate changes in use over time.

The urban design objectives of the Official Plan include:

- To create neighbourhoods with diverse opportunities for living, working, learning, and playing.
- To build compact neighbourhoods that use land, energy, water, and infrastructure efficiently and encourage walking.
- To showcase natural attributes as defining features that are an integral component of the City's image, character, and indigenous heritage by making them highly visible and accessible, especially lands along the Speed and Eramosa Rivers.
- To engage in "place-making" - developing infrastructure, spaces and buildings that are permanent and enduring, memorable and beautiful, adaptable and flexible, and valued.
- To conserve and celebrate the City's cultural heritage resources through the reuse of built heritage and cultural heritage landscape assets and ensuring that adjacent development responds to and respects these assets.
- To ensure that the design of the built environment promotes excellence in urban design by respecting the character of the existing distinctive areas and neighbourhoods of the city.
- To create a diversity of inviting and accessible gathering places that promote a full range of social, cultural, and economic interaction.
- To establish a pattern of interconnected streets and pedestrian networks in which buildings frame and address public spaces.
- To allow for a range of architectural styles and promote expressions that bring interest and diversity in urban form and architectural design while responding appropriately to the local context and achieving compatibility.
- To design space that is accessible to all, regardless of abilities. To improve conditions for greater personal security within publicly accessible spaces by designing them to be attractive and comfortable to the public, increasing the potential for informal surveillance and reducing opportunities for crime.
- To preserve and enhance the identified and protected public views and public vistas of built and natural features.
- To design for a choice of mobility including walking, cycling, transit and driving.
- To require urban design that reduces energy and water demand through such measures as, but not limited to, orientation of streets and buildings and the implementation of active and passive renewable energy systems and alternative energy systems and water conservation strategies.

Section 8.1 encourages sustainable urban design, indicating that the design of site and building development will support energy efficiency and water conservation through the use of alternative energy systems or renewable energy systems, building orientation, sustainable building design, low impact stormwater infiltration systems, drought-resistant landscaping and similar measures (Policy 8.1(1)).

Section 8.2 deals with public realm, and promotes that a clearly identifiable public realm should be established in all residential areas consisting of an interconnected network of streets, parks, school sites, community trails and open spaces (Policy 8.2(1)).

Policy 8.2(3) provides that development proposals shall extend, establish, or reinforce a modified grid-like street network that:

- connects with the existing urban fabric of streets, open spaces, and developed areas;
- is highly interconnected;
- responds sensitively and creatively to natural and other established features;
- integrates with the pedestrian and bicycle networks;
- supports the integration of viable transit service; and
- is designed to maximize opportunities for solar gain while respecting the built form policies of the Official Plan.

Policy 8.2(4) indicates that block lengths shall be reasonably short especially within Community Mixed-use Nodes and Intensification Corridors and shall optimize connectivity for pedestrians and encourage walking. Longer blocks shall have adequately sized mid-block pedestrian links.

Policy 8.2(7) states that road design will balance the provisions for a safe, accessible, functional and attractive pedestrian-oriented environment with an acceptable level of motor vehicle traffic. To achieve a pedestrian oriented public realm and streetscape, a variety of techniques may be implemented, depending on the function and context of the road, including:

- widening sidewalks to allow for a comfortable pedestrian environment as well as retail displays, outdoor café seating, benches and shade trees;
- reduce lane widths;
- provision of landscaped boulevards;
- provision of on-street parking;
- provision of transit priority measures and bicycle infrastructure;
- provision of regular intersections of roads to allow for the creation of a modified grid system; and
- use of alternative road geometrics and materials at pedestrian crossing areas.

Policy 8.2(9) provides that the planting of trees, shrubs and groundcover in street medians and shoulders shall be designed to allow for their long-term health through the implementation of best practices for planting and maintenance. Planting in street medians and shoulders will generally be undertaken with low maintenance, drought resistant and salt tolerant plant species.

Further, the City will coordinate street infrastructure elements such as lighting, parking areas, landscaping, transit shelters, trash containers, bicycle racks and signage to enable the continuity in character and function of the streetscape, in accordance with Policy 8.2(10).

Finally, public realm Policy 8.2(11) states that new development shall be designed to contribute to a pedestrian-oriented streetscape, and may be achieved through the use of strategies that are appropriate for the proposed development and the site's context such as:

- locating built form adjacent to, and addressing, the street edge;
- placing principal building entrances towards the street and corner intersections;
- maintaining or extending a continuous building façade or streetwall along the street;
- providing active uses that provide an interface with the public realm that enhances the liveliness and vibrancy of the street;
- incorporating weather protection measures such as canopies, awnings, building projections or colonnades, where possible;
- ensuring that street elements are coordinated with those within the public street right-of-way; and
- ensuring that the placement of above-ground utilities do not visually detract from a cohesive streetscape through such strategies as clustering utilities in appropriate locations or containing them in other streetscape features.

With respect to landmarks, public views, and public vistas, buildings should be oriented to maintain public vistas of Significant Natural Areas on lands adjacent to the site, and streets should create view corridors and public vistas of Significant Natural Areas, the river valleys, and park facilities (Policies 8.3(6) and (7)).

In consideration of gateways, Policy 8.4(7) provides that, where a commercial or mixed-use development is located at the intersection of major streets, the development or redevelopment of each corner property are considered minor gateways and development will incorporate neighbourhood-scale gateway features. Generally, this shall be accomplished through high-quality built form and may include pedestrian linkages into the site at the intersection. Policy 8.4(8) continues that gateways to new neighbourhoods should create a sense of entrance and arrival contributing to community image and identity. Elements contributing to gateway features and design may include trees and other landscaping, feature lighting, paving and public art.

Section 8.6 provides policies relating to the built form of different building scales. Policy 8.6(1) provides that new buildings shall address the street. Buildings shall have front façades with entrances and windows that face the street and that reflect and, where appropriate, enhance the rhythm and frequency of the immediate vicinity. Policy 8.6(2) states that the principal entrances of commercial and mixed-use buildings shall be oriented toward the street and provide direct user entrances from adjacent streets and walkways. Blank facades facing a street, open space or park shall not be permitted.

Policy 8.6(3) provides that commercial, employment and mixed-use buildings should be consistently located close to the street edge and sidewalk, while Policy 8.6(4) states that corner buildings shall address both streets by providing two articulated façades facing the street. Policy 8.6(5) indicates that buildings adjacent to the street edge and at sites with high public visibility shall be designed to take into account their high public visibility by incorporating elements such as increased height, roof features, building articulation and high-quality finishes and windows. Buildings should be placed in close proximity to the intersection of major streets to emphasize the intersection, ensuring that building entrances are visible from that intersection Policy 8.6(6).

Rooftop mechanical equipment and systems are to be completely screened from public view, as per Policy 8.6(7).

To reduce the mass of long building facades, Policy 8.6(8) states that long building facades that are visible along a public street will incorporate recesses, projections, windows or awnings, colonnades and/or landscaping along the length of the façade.

Policy 8.6(10) provides that, where appropriate, a building's first storey shall generally be taller in height to accommodate a range of non-residential uses.

Section 8.9 provides policies relating to high-rise buildings (i.e. generally buildings above six storeys), where Policy 8.9(1) indicates the following for all tall building forms:

- To ensure tall buildings act as landmarks, they shall incorporate a distinctive bottom, middle and top. Interesting architectural features and roof treatments should be considered for all rooftops of all buildings;
- Parking should be provided primarily below grade with limited visitor surface parking. Structured parking above-grade may be permitted, where appropriate;
- Built form studies addressing building massing, shadows, views and microclimatic studies may be required to determine the potential impacts to the surrounding neighbourhood arising from tall buildings;
- Floor plate sizes of the tower portion (i.e. storeys five and above) of the building may be limited to encourage slender and elegant tall building designs; and
- The tower portion (i.e. storeys five and above) of the building shall be carefully placed to ensure adequate spacing between towers to allow for solar access and privacy.

As related to transition, Policy 8.11(1) indicates that to achieve compatibility between different land uses, development will be designed to create an appropriate transition through the provisions of roads, landscaping, spatial separation of land uses and compatible built form.

Section 8.12 deals with parking. Policy 8.12(2) provides that underground or structured parking is encouraged to reduce or eliminate the need for surface parking, while policy 8.12(10) indicates that, for underground and above-grade parking structures, driveway access and ramp locations shall be located to reduce conflicts with pedestrians and minimize negative impacts on the streetscape.

Of particular relevance is Policy 8.12(1) which states that building placement in combination with landscaping shall be used to screen surface parking areas. Surface parking areas should generally be located at the rear or side of buildings and not between the front of a building and the street. Where permitted adjacent to the public realm, surface parking areas shall be designed in a manner that contributes to an attractive public realm by providing screening and landscaping (our emphasis). Generously sized landscape strips incorporating combinations of landscaping and/or decorative fencing or walls should be provided adjacent to the street edge to provide aesthetically pleasing views into the site while screening surface parking areas.

Policy 8.12(6) provides that bike parking should be provided and located conveniently in close proximity to building entrances.

Section 8.13 of the Official Plan deals with access, circulation, loading and storage areas. Policy 8.13(1) encourages the use of shared driveways for employment, commercial and mixed-use sites to reduce access points and reduce conflicts with pedestrians. Policy 8.13(3) states that private roads and internal driveways required for site circulation shall be designed to be comfortable for pedestrians, cyclists and vehicles. Internal driveways will be designed to interconnect with adjacent properties to create an overall cohesive and integrated circulation network. Well-articulated and distinct pedestrian walkways should be placed along a building street frontage and linked to public boulevards, public sidewalks, transit stops, trail systems and other pedestrian systems, as per Policy 8.13(4). To that end, Policy 8.13(5) indicates that pedestrian systems shall incorporate landscaping, pedestrian scale lighting and be defined by distinct materials and/or raised walkways. Policy 8.13(6) provides that loading bays, waste service areas and building utilities/mechanical equipment should be located within a building, screened from public view.

Section 8.18 deals with safety, with Policy 8.18(2) stating that new development should be designed in a manner that:

- provides opportunity for informal surveillance of outdoor areas, including public parks, streets and parking areas;
- clearly marks the transition or boundary between public and private spaces;
- includes materials that allow for the built environment to be effectively and efficiently maintained;
- provides adequate lighting; and
- provides multiple walking routes, where appropriate.

Section 8.20 deals with urban squares, stating that such spaces will be framed by buildings with ground-floor uses that provide activity throughout the day (Policy 8.20(1)). Policy 8.20(3) provides that hard and soft landscape elements and features within the urban square shall be designed to define and articulate activity areas, circulation, entry points, seating and gathering areas, as well as the relationship between adjacent buildings and the streetscape.

Section 8.21 deals with public art, promoting its incorporation into buildings, infrastructure or landscapes as a placemaking opportunity (Policy 8.21(1)).

1.2.2 City of Guelph Urban Design Manual (July 2017)

In its three volumes, the City of Guelph Urban Design Manual (i) outlines the City's urban design vision for the municipality, (ii) provides an update to the City's Urban Design Action Plan, and (iii) provides urban design standards and directions, as well as concept plans for four community mixed-use notes, including the Gordon/Clair Node where the subject site is located. The purpose of the document is to demonstrate and provide guidance on the use of urban design excellence in the creation of complete and distinctive communities that enhances a sense of place.

The Manual provides urban design principles based on Official Plan objectives upon which the urban design vision is based. Some of these include:

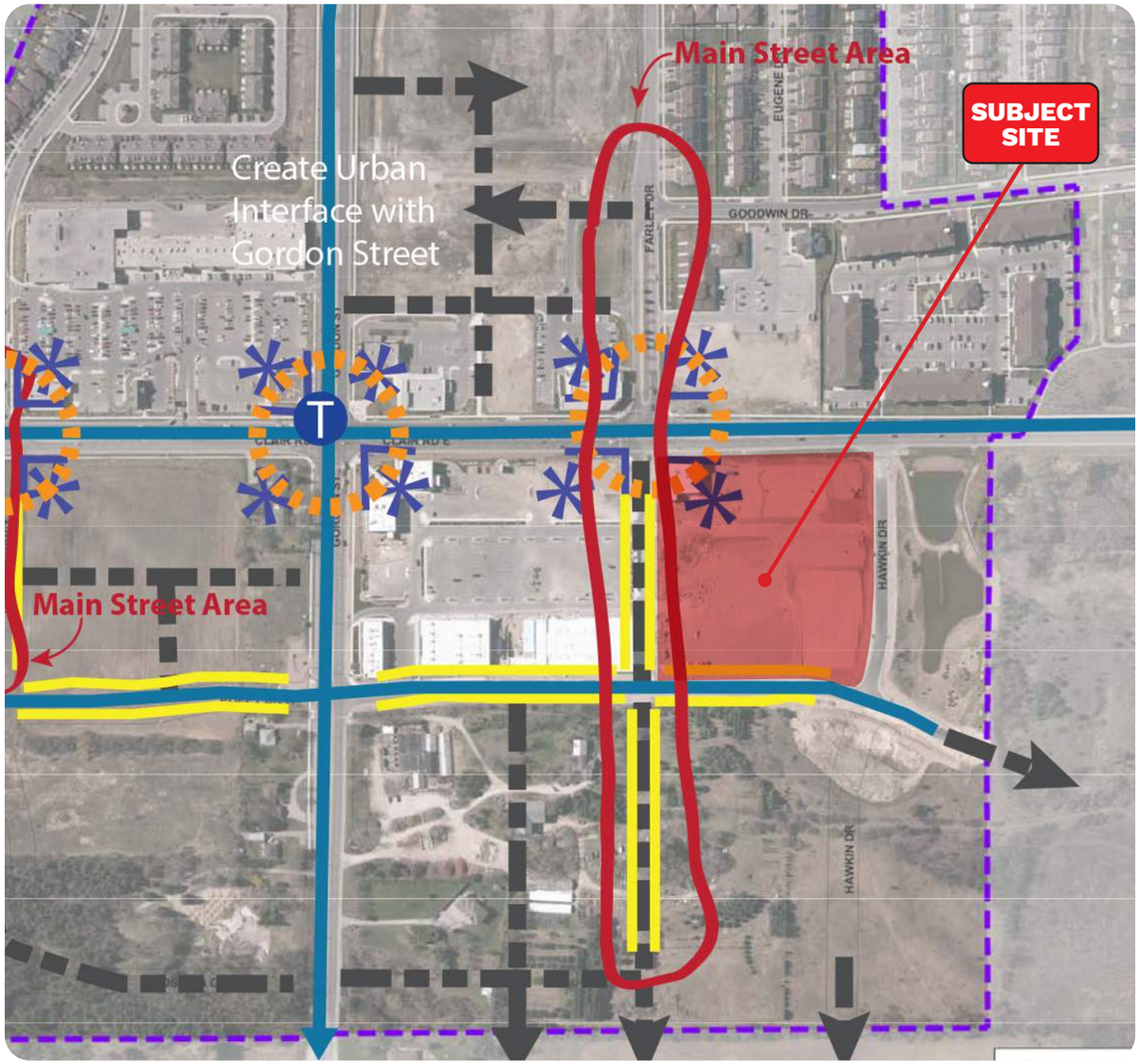
- Create neighbourhoods with diverse opportunities for living, working, learning and playing.
- Build compact neighbourhoods that use land, energy, water and infrastructure efficiently and encourage alternative modes of transportation.
- Showcase natural attributes as defining features of the City's character by making them highly visible and accessible, especially lands along the Speed and Eramosa Rivers.
- Engage in "placemaking" - developing infrastructure, spaces, and buildings that are permanent and enduring, memorable and beautiful, adaptable and flexible, and valued.
- Create a diversity of inviting and accessible gathering places that promote a full range of social, cultural and economic interaction.
- Design for a choice of mobility including walking, cycling, transit and driving.
- Establish a pattern of interconnected streets and pedestrian networks in which buildings frame and address public spaces.
- Allow for a range of architectural styles and promote expressions that bring interest and diversity in urban form and architectural design while responding appropriately to the local context and achieving compatibility.
- Ensure that the design of the built environment respects the character of the existing distinctive areas and neighbourhoods of the City.
- Design space that is accessible to all, regardless of abilities.
- Improve conditions for greater personal security within publicly accessible spaces by designing them to be attractive and comfortable to the public, increasing the potential for informal surveillance and reducing opportunities for crime.
- Preserve and enhance protected public views and public vistas of built and natural features.

The City's Action Plan outlined in the Manual is divided into three parts: opportunity areas, organizational improvement, and urban design policy directions. Opportunity areas include the Downtown, community mixed-use nodes (like the subject site), intensification corridors, employment areas, neighbourhood infill and residential development, and city-wide opportunities.

With respect to community mixed-use nodes, five such areas are identified including the Gordon/Clair Mixed-use Node. The Manual provides that the City's vision for these areas is to transform them into distinct urban villages with mixed-use, high-density housing, transit, cycling and pedestrian-friendly features that provide balanced live-work opportunities. The City's objectives for the community mixed-use nodes include:

- Develop residential and office uses as well as live-work opportunities.
- Develop a grid-like network of streets that provide a framework for intensification and encourage walking and cycling.
- Establish attractive, usable, open spaces.
- Use trails to link community mixed-use nodes to nearby green spaces.
- Define a distinct character for each node through architecture, public art, open spaces and streetscape design.
- Integrate public transit and development in convenient locations within each node.

The challenges and/or constraints with achieving the City's vision are also highlighted.



Legend

- Proposed Transit Node
- Dedicated Cycling Facility
- On-street Parking
- Focal Point/Key Intersection
- Streetwall with Building Entrances
- Potential Mixed-use Building/Taller Building
- Proposed Road/Active Transportation Connection
- Study Area Boundary
- Main Street Area
- Existing Trail

Figure 5 - Gordon/Clair Mixed-Use Node Concept Plan

Relevant to the subject site is the Gordon/Clair Mixed-use Node Concept Plan in Volume 3 of the Manual, for which the concept plan principles include the following:

- Create and reinforce a Main Street Area 1 (see Policy 9.4.2.6 of OPA 48) along Gosling Gardens (south of Clair Road) and Farley Road (south of Goodwin Drive).
- Develop an attractive intermodal Transit Node (i.e. generally bus bays) on-street including upgraded amenities for transit users near the intersection of Gordon Street and Clair Road.
- Locate signature and taller buildings at focal points/ key intersections and within walking distance of Gordon Street.
- Introduce a modified grid road pattern that creates adaptable urban blocks and that promotes connectivity and pedestrian/cyclist movement. Design road cross-sections to ensure comfort for cyclists/ pedestrians.
- Design, site and orient buildings along Gordon Street to reflect the importance of Gordon Street as a main north-south connector, and its role as a key transit route. Along “Main Street Areas” and Gordon Street create pedestrian-friendly edges (e.g., active doors, clear glazing and limited surface parking).
- Create connections (e.g., road, cycling infrastructure and trail) to the Clair-Maltby Secondary Plan area.
- Establish cycling facilities along Gordon Street, Clair Road and Poppy Drive.

In particular, for the subject site, the intersection of Clair Road East and Farley Drive is identified in the concept plan as a focal point/key intersection. This intersection is also identified as a potential location for taller mixed-use buildings. Farley Drive is highlighted as a Main Street Area, extending south along the western edge of the subject site. Poppy Drive is illustrated as providing dedicated cycling facilities, while both Poppy Drive East and the southerly extension of Farley Drive demonstrate on-street parking opportunities.

1.2.3 Urban Design Guidelines

Built Form Standards for Mid-Rise and Townhouses

The City of Guelph has developed Built Form Standards for Mid-rise Buildings and Townhouses to provide design direction for private development of these types of buildings throughout the city. On April 9, 2018 the Mid-rise and Townhouse Built Form Standards were approved by Council.

The subject proposal includes high-rise buildings, and as such the Built Form Standards for Mid-rise Buildings and Townhouses do not apply. Notwithstanding that, the document has been considered with respect to site organization and design standards, in particular with respect to the general arrangement of common amenity areas.

Direction on site organization and design is in Section 6.0 of the Guideline document. The Guideline provides that site design should be carefully considered and respond to site characteristics and adjacent land uses. It continues that site components should be organized efficiently and should consider the location and orientation of buildings, parking, access, and circulation, landscaped space, outdoor amenity space and trees, while considering impacts on the environment and stormwater systems. It states that efficient sites should achieve the following:

- Establish a good relationship between buildings and the street;
- Provide a context based transition zone between the building and the street right of way;
- Create a balance between built form and open space;
- Reduce the visual impact of parking;
- Encourage healthy lifestyle choices, such as active modes of travel;
- Contribute to greening streets and development sites;
- Where permitted, create connections to adjacent streets, trails, natural heritage systems and open spaces; and
- Respect site constraints such as existing trees and grading, engineering requirements, utilities, and noise, and integrate into the final design.

Section 6.3 deals with common amenity areas, with the stated objective that the location, size and design of common outdoor amenity areas should be appropriate given the building type, unit mix, and adjacent land uses and amenities, and that these areas should provide comfortable, universally inclusive, and safe spaces for pedestrians with a range of active and passive programming.

The general standards for common amenity areas include the following:

- If a development has more than 20 units, and more than 10 units have 3 or more bedrooms, a children's play area should be provided.
- A minimum of 50% of the required common amenity area shall be accessible at-grade outside, in one contiguous area. To ensure spaces are usable and appropriately scaled, the width to depth proportion of a common outdoor amenity area should not exceed 4:1.
- Where a development is located within a Node or Corridor, the common amenity space requirement may be reduced by up to 50% where a park with a minimum size of 1 hectare with equivalent amenities is located within a 500-metre walking distance from the site.
- Common outdoor amenity areas must include multiple functions or activities that encourage meeting, gathering or play (i.e. play area, seating, community garden, shade structure, barbecues, water features).
- Common outdoor amenity areas must be directly connected to a local street; a park, natural heritage or open space; or the building. They shall not be surrounded by parking.

- Common outdoor amenity spaces should be located away from building servicing, parking and loading functions. If this is not possible, servicing areas should be heavily screened with a landscaped buffer and a fence.
- Where amenity areas have direct visual connection with the interior of the building, these spaces should preferably be interior amenity space or shared common areas.
- Consider microclimate effects through the orientation, location and landscaping of common outdoor amenity areas; provide a balance of sun, shade and protection from wind.
- Rooftop common amenity areas are permitted. Consider location and placement to ensure compatibility with adjacent properties.

Downtown Guelph Streetscape Manual & Built Form Standards (July 2014)

The City of Guelph has developed the Downtown Streetscape Manual and Built Form Standards to provide design direction to private investment and new development in the Downtown. The Built Form Standards also provide policy direction for future updates to the City's Zoning By-law in implementing the Downtown Secondary Plan. In addition, the Built Form Standards incorporate a complete Heritage Conservation Analysis of the Downtown. Council adopted these documents on August 25, 2014.

The subject site is not located within the Downtown, and as such this guideline does not apply to the subject proposal. Notwithstanding that, the Downtown Streetscape Manual and Built Form Standards document have been considered in developing the design for the subject site as related to the built form standards contained in Sections 3.3 and 3.4, as described below.

Section 3.3 provides site design standards for all buildings, including guidance related to setbacks, open space, private amenity space, public art, parking, access, loading and servicing, and sustainable design. Relevant guidance in this regard is outlined as follows:

Setbacks

- Buildings should address adjacent streets while incorporating appropriate setbacks to maintain streetwall continuity and to achieve appropriate transitions between the public and private realm.

Open space

- Locate and design open space to read as a public space and include features and programming opportunities to encourage year-round use.
- Open spaces should provide direct visual and physical connections to public streets, park, and open spaces, including adjacent pedestrian and cycling routes.
- Complement and connect open spaces with publicly accessible open space on neighbouring properties, where possible.
- Create attractive views and focal points.
- Maximize safety, comfort, and amenity, including access to sunlight, clear views to and from adjacent streets and buildings, universal accessibility, pedestrian-scale lighting, four season landscaping, seating, public art, and protection from wind and inclement weather.
- Define and animate the edges of open space with well-proportioned podium buildings, permeable facades, and active uses at-grade.
- Use design elements, such as surface materials, furnishings, landscaping, and pedestrian-scale lighting that are high-quality, functional, universally accessible, and environmentally sustainable.

Private amenity space

- Locate and design shared private outdoor amenity space to maximize access to sunlight, minimize noise and air quality impacts, and include high-quality, universally accessible and environmentally sustainable materials.
- Four season landscaping, seating, pedestrian-scale lighting, trees, shade structures, weather protection, screening, and programming opportunities should be provided as appropriate.
- Make private balconies large enough (minimum 1.5 metre depth) to provide usable outdoor space.
- When rooftops are used for outdoor amenity, ensure that the podium of any building mass or tower that faces the space is treated through the use of non-reflective materials to protect migratory birds.
- Where possible, locate interior amenity facilities adjacent to shared outdoor amenity areas and provide windows and doors for direct physical and visual access between these spaces.

Public art

- Public art should be appropriately sited in highly visible locations, and should work in conjunction with other elements of site design, including setbacks.
- Public art should be located in publicly accessible open spaces including courtyards, gardens, or in front of primary building entrances in locations viewable from the adjacent public street or open space. Public art may also be incorporated into architectural elements and building entrance-ways.

Parking, access, loading and servicing

- Structured parking facilities, either above or below grade, are encouraged to reduce demand for surface parking and should be clad with high quality materials, and be wrapped with active at-grade uses.
- Vehicular entrances to parking and servicing areas should generally be located on Local Streets, Secondary Streets or Laneways and should be consolidated wherever possible to maximize and accentuate building frontages and front yards and minimize the number of curb cuts. Shared driveways between two properties shall be encouraged.
- Loading and service areas generally shall be located in the interior of a development block, at the rear of building, where possible. Enclosed loading and servicing areas shall be encouraged.

Sustainable site design

- Site design should meet sustainable design standards and best sustainable building practices.
- Where possible, site design should minimize impervious hard surfaces. Porous pavement, and landscaped areas with adequate size and soil conditions, should be maximized to capture roof drainage and increase the total amount of water run-off absorbed through infiltration.
- Recommended landscape materials should be of indigenous stock and from locally ground sources and non-invasive, as well as species that are generally drought resistant and require minimal maintenance.
- Shade trees and coniferous shrubs should be provided adjacent to sidewalks, pedestrian walkways, and throughout surface parking areas.

Section 3.4 provides building design standards for all buildings, including guidance related to height, massing and floor plates, stepbacks, angular planes, articulation and detailing, ground floor and building entrances, and materials, among other things. Relevant guidance with respect to building design is outlined as follows:

Height

- Low-rise buildings are characterized as less than 4 storeys. Mid-rise buildings are 4 to 6 storeys in height, and tall buildings as 7 to 18 storeys in height.

Massing and floor plates

- Buildings should be massed to establish appropriate height transitions to existing adjacent developments, and suitable interfaces with adjacent streets, lanes, intersections, and open spaces.
- Buildings taller than 6 storeys (19.5 metres) should moderate perceived mass and shadow impacts, while providing appropriate height transitions to adjacent low-rise areas and to contribute to a varied skyline.
- Between the 1st to 5th storeys, floor plates should be massed to respect relevant setback, stepback, and angular plane provisions, but are not subject to a maximum size. Between the 6th and 8th storeys, floor plates should be no greater than 1,200 square metres in addition to respecting relevant stepback and angular plane provisions. Above the 8th storey, floor plates should be no greater than 1,000 square metres with a maximum length to width ratio of 1.5:1, in addition to respecting relevant stepback and angular plane provisions.
- (Tall) buildings should be massed with clearly defined podium building and tower features. The podium building should be massed to primarily address both frontages as well as the rear yard. The tower should be massed to address all frontages.
- Tower floor plates should be organized, located and articulated to minimize shadow impacts and negative wind conditions on surrounding streets, parks, open spaces and properties, and to minimize loss of sky view from the public realm.
- Design tower floor plates to allow for the passage of natural light into interior spaces, and create architectural interest and visually diminish the overall scale of the building mass through appropriate design measures.

Stepbacks

- Buildings should incorporate stepbacks where appropriate to maintain suitable building proportions, to mitigate the visual impact of height, and to create comfortable pedestrian conditions.
- Generally, buildings greater than 6 storeys in height should contain an additional 3 metre stepback above the 6th storey.
- Buildings should contain additional stepbacks ranging between 1.5 and 2.5 metres above and inclusive of the 7th storey in order to contain all massing within relevant front yard angular plane provisions, without fixed stepback locations.

Angular planes

- Angular Planes should be used on a discretionary case-by-case basis as a guideline tool, as opposed to a regulation, to evaluate the massing and height transitions of proposed developments.
- Buildings equal to or less than 10 storeys in height should contain all massing within a 45-degree angular plane taken from the front property line, at a height equivalent to 80% of the adjacent street right-of-way width.

Articulation and detailing

- Buildings should be articulated and detailed to achieve a high quality of design and to break up the continuity of the primary building facade.
- Where buildings have frontages over 40 metres long, massing should be articulated or broken up to express individual commercial or residential units through distinctive architectural detailing. Vertical breaks, recesses, stepbacks, and other architectural elements should also be provided.
- Developments should generally not be greater than 60 metres long.
- Primary building facades should not include blank walls.
- Building entrances can be expressed and detailed in a variety of ways including large entry awnings, canopies or double-height glazing.
- Generally, buildings should be oriented toward and have their main entrances on a street or open space.
- Buildings should incorporate architectural details such as vestibules, recessed entrances, covered walkways, canopies and awnings to provide weather protection.
- Avoid balcony arrangements that significantly increase the physical and apparent visual building mass. Generally, balconies should be recessed and/or integrated into the design of the building facade

Ground floor and building entrances

- The ground floor and entrance should promote animation at street level, while encouraging casual surveillance.
- Buildings should have a minimum ground floor height of 4.5 metres, measured floor-to-floor from average grade.
- Building entrances should promote visibility to interior lobbies to allow for safe and convenient arrival and departure from the building. They shall provide as direct access as possible between the building entrance and the sidewalk.
- Use high-quality architectural and landscape design to emphasize primary entrances.
- Filter and screen views into private dwelling units with soft landscaping, but ensure views to streets and open spaces are maintained.
- Front patios for ground-floor residential units, where appropriate, should be raised to provide for privacy and a transition between the public and private realms.

Materials

- Building materials should be selected for their suitability, durability, and architectural quality.

Roofs, cornices and parapets

- Rooftop mechanical equipment and elevator cores should be architecturally integrated within the building design, or screened from view through a minimum 5 metre stepback.

Sustainable building design

- Buildings should be designed to meet sustainable building standards and best sustainable building practices.
- New buildings are encouraged to reduce the energy consumption of both building and site systems (e.g. HVAC, hot water, lighting, etc.) through the use of appropriate mechanical and construction technology (e.g. natural cooling, light recovery, passive solar design, etc.).
- Vegetated or “green” roofs are recommended to minimize water runoff, improve building insulation, and provide additional outdoor amenity areas.
- All buildings should have conveniently located waste management facilities to support the separation of waste into different streams (e.g. compost, paper, plastics, etc.).
- Development should be designed to maximize opportunities for solar gain.

1.3 Urban Design Objectives

1.3.1 Urban Design Vision

The urban design vision for the subject site is based on the principles of providing a complete, connected community that focuses on a well-connected, inviting public realm and introduces attractive, appropriately scaled buildings with a mix of uses.

The plan is predicated on opportunities to link the new community to the existing surrounding neighbourhoods with an internal driveway network and pedestrian connections. Planned along the north-south woonerf, connecting Clair Road East to Poppy Drive centrally through the site, and an existing east-west driveway connection, the site design includes the introduction of central courtyards and new public parkland, as well as landscaped building frontages at grade-related uses.

The proposed development aims to urbanize the underutilized site in the Gordon-Clair Mixed-use Node while providing transition to the broader surrounding neighbourhood. The design for the site has been developed to create an inviting and attractive pedestrian environment along building edges and in open spaces between buildings, locating active residential and non-residential uses at grade and cladding buildings in materials to activate and add visual interest within the public realm. The scale and siting of the proposed buildings adequately limits shadowing on the public realm and establishes a design language that can be applied through all three phases of the proposed development.

The proposed buildings respond appropriately to the surrounding landscape and context and will contribute to the transformation of the subject site into a complete community, integrated into the broader neighbourhood where people can live, work, and play.

1.3.2 Goals and Objectives

Key objectives for the development of the subject site include:

- Providing strong built form relationships to the adjacent streets and open spaces, compatible with the existing and planned built form pattern, height, and scale;
- Incorporating pedestrian-related architectural scale and treatment within the public and private realm;
- Fostering social interaction and providing opportunities for passive and active recreation through a variety of new open space elements and connections to existing ones;
- Designing built form which is harmonious with the character of the existing and planned context for the surrounding area;
- Improving pedestrian movement and general connectivity; and
- Creating an expression of a healthy community concept through the promotion of public transit use, cycling, walking and the use of landscaped open spaces and community facilities.

1.3.3 Guiding Principles

Connectivity

A primary urban design strategy driving the design of the proposed development is increasing walkability and improving circulation in the east end of Pergola Common. As such, the design of the subject site is organized around the following four key principles:

- Following a planned system of internal pedestrian and vehicular connections;
- Placing buildings appropriately within the streetscape to demonstrate an established street edge condition;
- Integrating pedestrian circulation with the existing and planned pedestrian system in the surrounding area; and
- Providing opportunities for a variety of types and scales of connected open space areas.

These basic design principles provide for a distinctive site character while allowing for flexibility in the planned overall comprehensive development of the Master Plan Area, in addition to providing a safer, more comfortable environment for pedestrians, cyclists, and new area residents.

Fit and Transition

In general, the design for the subject site introduces compatible built form typologies, predicated on the achievement of well-designed built form that is sited, massed, and oriented with consideration for the adjacent and surrounding existing and planned context, with the intent to create a liveable, functional, and attractive environment. Taller building heights are located within the northern half of the subject site, adjacent to Clair Road East and the internal east-west driveway. These taller forms are set back away from the low-rise residential areas to the southeast and establish a gradual transition down to areas of differing intensification and scale.

Influencing the site design and function, buildings have been massed to define and frame the public realm with good proportion and establish an appropriate interface between buildings as a phased, master planned area. The buildings demonstrate a cohesive design composition through the use of materials and architectural character, providing visual interest or appeal from within the public realm and creating an appropriate relationship with adjacent streets and open spaces.

Built form impacts (such as shadowing and wind) on the streets, sidewalks and existing and new surrounding open spaces have been considered and minimized. To that end, a comfortable microclimate should be achieved across the subject site, providing adequate access to sunlight and sky view and maintaining adequate privacy between residential buildings.

Enhanced Public Realm and Open Space

The public realm is an integral part of comprehensive site design and will be complementary to the architecture and provide for a cohesive site appearance over the development of three phases.

An exemplary quality of public realm improvements is proposed, including the central shared woonerf, carefully landscaped transitions at grade-related residential uses, and the southerly greening of the site extending east to the proposed public park. Together, these landscape elements will provide a comprehensive, consistent, and coherent streetscape and open space system that helps to define and animate the street edges and visually improve the subject site as a whole.

Further, an important objective is to foster an animated and activated public realm that is safe and accessible, enhanced through the introduction of open space elements such as:

- centralized amenity courtyards or plazas within each phase or development block to provide opportunities for active and passive recreation and social interaction;
- well-connected hard and soft landscaped walkways and open areas; and
- street trees and coordinated street furnishings.

To advance an ‘eyes on the street’ approach to safety and encourage lingering and interaction within the open space network, new streets are proposed to be lined with landscaped boulevards and animated with active at-grade uses. Further, building entrances should be visible and directly accessible from public sidewalks and buildings should be well-articulated and clad with high-quality architectural finishes to provide visual interest within the public realm.

View east across Private Driveway (Rendering provided by SvN Architects + Planners)

View north up woonerf toward Building A (Rendering provided by SvN Architects + Planners)

Part 2

Development Concept and Design Solutions

2.1 Development Concept

Site Design

The site design is predicated on the objectives of providing increased connectivity across the site, transition to adjacent low-rise areas, and a comfortable pedestrian experience through the incorporation of enhanced landscaping and public realm design.

Figure 6 - Coloured Ground Floor and Landscape Plan (Courtesy of SvN Architects + Planners)

For the logical and sequential development of the subject site, the proposal is organized in three phases, structured along the two central connections across the site. This approach allows for the existing retail uses along Clair Road East and within the west end of the site to remain functional while providing the opportunity for development of the southeast corner of the site.

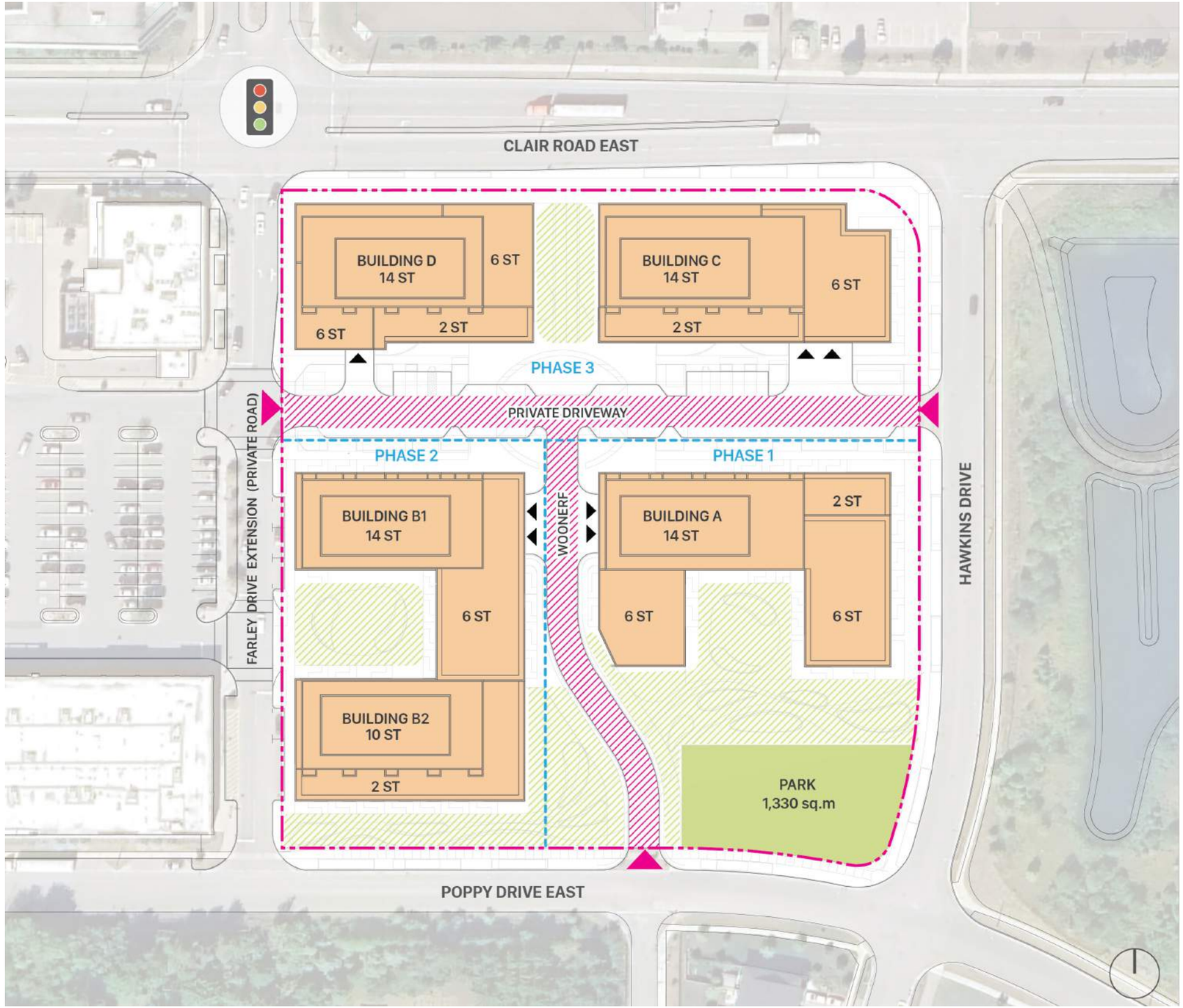
The first organizing feature is the proposed north-south woonerf. The landscape design for the site is structured along the proposed woonerf street-typology that favours pedestrians, while encouraging vehicles to move at a low speed through the use of pedestrian-oriented pavement and a smaller street section. The woonerf also features bollards and decorative street lighting. The second supporting organizing feature is the existing east-west driveway which will take the appearance of a local street with residential lobbies, grade-related residential units with landscaped front entryways, and on-street parking. Both are treated with street trees and other landscape plantings, as well as decorative feature paving, bike parking, and coordinated street furniture. Along the north, east, and south perimeter of the site, the existing rights-of-way are also treated with street trees, planters with raised curbs (with integrated bench/furnishings), and decorative feature paving. The western edge of the site features street trees, walkways with decorative pavers, and lay-by pick-up/drop-off zones.

Phase 1, which occupies the southeast corner of the site, is proposed to include a 14-storey, U-shaped residential building within the northern portion of the block (i.e. Building A) and a 1,330-square-metre unencumbered public park (equivalent to 6% of the subject site area). Additional open space is included through the provision of centrally located outdoor amenity space at grade.

Phase 2, which occupies the southwest corner of the site, is proposed to include a 14-storey, U-shaped residential building within the northern portion of the block (i.e. Building B1) which also incorporates a 10-storey element within the southern portion of the block near to Poppy Drive East (i.e. Building B2). Open space is incorporated through the provision of outdoor amenity space at grade, located adjacent to the woonerf at the southeast corner of the block and centrally between the building wings, as well as landscaped space along the southern extent of the Phase 2 block along Poppy Drive East.

Phase 3, which occupies the northern portion of the site (north of the existing east-west driveway), is proposed to include two 14-storey mixed use buildings fronting Clair Road East (i.e. Buildings C and D). In addition to two outdoor amenity areas, a central plaza is proposed between the two buildings, visually extending the proposed woonerf to the north and creating an inviting ‘spill out’ space for the non-residential uses proposed at grade within the block.

In addition to the surface parking located along the east-west driveway, all other parking is proposed the be underground in a two-level parking garage. Loading and servicing areas are also internalized within each proposed building at grade. Vehicular access to theses spaces in the Phase 1 and 2 buildings is provided from the north-south woonerf while the east-west driveway provides vehicular access for the Phase 3 buildings.



LEGEND

- SUBJECT SITE
- PROPOSED DEVELOPMENT
- VEHICULAR CIRCULATION
- PROPOSED PUBLIC PARK
- OPEN SPACE
- VEHICULAR ENTRANCE
- VEHICULAR ACCESS TO UNDERGROUND PARKING, LOADING, AND SERVICING AREAS
- SIGNALIZED INTERSECTION
- PHASE LINE

Figure 7 - Site Design

Built Form

Building A

The east-west portion of Building A is 14 storeys (51.5 metres including mechanical penthouse), and steps down to two 6-storey (20.5 metres) north-south wings. One runs adjacent to Hawkins Drive and the other runs along the eastern edge of the proposed woonerf. At its northeast corner, Building A steps down to 2 storeys. The scale of the building, coupled with the articulation of the streetwall and the stepping down of heights adjacent to open space elements on the block (i.e. the park and outdoor amenity spaces), contributes to the pedestrian experience around Building A and around the subject site.

Building A has a gross floor area of 19,900 square metres and includes 189 residential units. A total of 2,757 square metres of amenity area is provided with Building A, including 330 square metres indoors at grade and on Level 7, and 2,427 square metres outdoors at grade and on Level 7.

The floorplate area of Levels 8 through 14 is approximately 912 square metres. Building A is separated from Building B1 to the west by 17.0 metres between podium elements and 28.1 metres between taller building elements. To that end, the upper floors of Building A are set back 26.5 metres from Hawkins Drive. To the north, Building A is set back 29.9 metres between podium elements.

Grade-related uses animate the public realm around Building A on all sides, creating a pedestrian friendly experience at grade. Along the northern elevation is the residential lobby, as well as grade-related townhouse units, each with a landscaped front patio appropriately allowing for a transition from public outdoor space to private indoor space. In a similar manner, grade-related townhouse units with landscaped front entryways line the eastern elevation facing Hawkins Drive. Along the southern elevation, facing the central outdoor amenity space and public park area, are additional grade-related townhouse units and the indoor amenity space, contiguous with a proposed outdoor amenity area. This amenity space also faces westward and is adjacent to more grade-related townhouse units fronting the woonerf.

A mix of size and types of residential units occupy the floors above grade, each of which has a private balcony or terrace. Generally, balconies are inset except for those facing north at Level 8 and above.

Building B

The northerly east-west element of Building B (i.e. B1) is 14 storeys (51.5 metres including mechanical penthouse), and steps down to a 6-storey (20.5 metres) north-south wing along the western edge of the proposed woonerf. The southerly east-west element of Building B (i.e. B2) is 10 storeys (39.5 metres including mechanical penthouse). The base of Building B2 steps down to 2 storeys and is set back from Poppy Drive East in the south. The scale of the building, coupled with the articulation of the streetwall and the stepping down of heights adjacent to open space elements on the block, contributes to the pedestrian experience around Building B.

Building B has a gross floor area of 25,434 square metres and includes 250 residential units. A total of 3,272 square metres of amenity area is provided with Building B, including 746 square metres indoors at grade and on Level 7, and 2,526 square metres outdoors at grade and on Level 7.

The floorplate area of Building B1 Levels 8 through 14 is approximately 829 square metres, while the floorplate area of Building B2 Levels 7 through 10 is approximately 817 square metres. Building B1 is separated from Building A to the east by 17.0 metres between podium elements and 28.1 metres between taller building elements. To the north, the podium of Building B1 is 28.3 metres from the podium of Building D to the north. Building B2 is separated from Building B1 to the north by 25.0 metres, and from Poppy Drive East in the south by 18.1 metres. To the west, Building B is set back 3.0 metres from the westerly private driveway.

Grade-related uses animate the public realm around Building B on all sides, creating a pedestrian friendly experience at grade. Along the northern elevation is the lobby to Building B1, as well as grade-related townhouse units, each with a landscaped front patio appropriately allowing for a transition from public outdoor space to private indoor space. In a similar manner, grade-related townhouse units with landscaped front entryways line the eastern elevation facing the proposed woonerf, in addition to an indoor amenity space and its contiguous outdoor amenity area. Along the southern elevation, set back from Poppy Drive, are additional grade-related townhouse units and additional landscaped outdoor amenity area fronting the public street. The western elevation features the lobby to Building B2, as well as side walls of grade-related townhouse units. Facing the central courtyard of Building B, which contains an outdoor amenity space, is contiguous indoor amenity space, as well as grade-related townhouse units with landscaped front entryways.

A mix of size and types of residential units occupy the floors above grade, each of which has a private balcony or terrace. Generally, balconies are inset except for those facing north at Level 8 and above for Building B1 and for those facing south at Level 7 and above in Building B2.

Buildings C and D

South of Clair Road East, Buildings C and D are each proposed at 14 storeys (50.5 metres each, including mechanical penthouse). Each building steps down to 6 storeys along adjacent street frontages (19.5 metres each), and then 3 storeys in the south. The scale of the building, coupled with the articulation of the streetwall and the stepping down of heights in key areas, contributes to the pedestrian experience around Buildings C and D.

Building C has a gross floor area of 16,996 square metres and includes 146 residential units. Building D has a gross floor area of 14,898 square metres and includes 136 residential units. Together, for both Buildings C and D, the total proposed GFA is 31,894 square metres, with a total of 282 units. In both buildings C and D, a total of 2,341 square metres of amenity area is provided, including 803 square metres indoors at grade and on Level 7, and 1,538 square metres outdoors at grade and on Level 7.

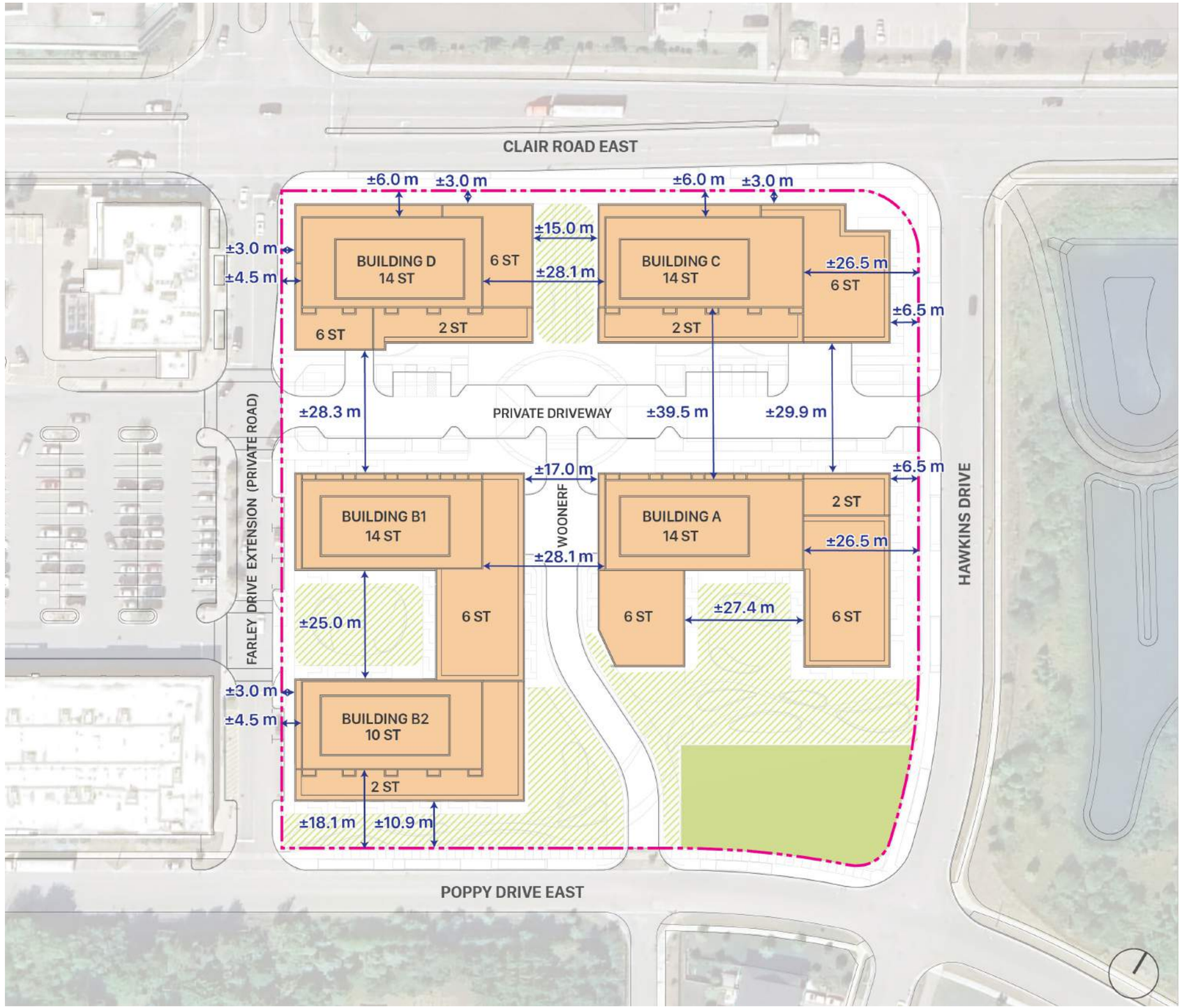
The floorplate area of Building C Levels 8 through 14 is approximately 914 square metres. Building C is separated from Building D to the west by 15.0 metres between podium elements and 28.1 metres between taller building elements. To the south, the podium of Building C is set back 29.9 metres from Building A. To the east, Building C is set back 26.5 metres from Hawkins Drive. To the north, Building C is set back 3.0 metres from Clair Road East at the lower levels and 6.0 metres at the upper levels.

The floorplate area of Building D Levels 8 through 14 is approximately 830 square metres. Building D is separated from Building C to the east by 15.0 metres between podium elements and 28.1 metres between taller building elements. To the south, the podium of Building D is set back 28.3 metres from Building B2. To the west, Building D is set back 3.0 metres from the westerly private driveway. To the north, Building D is set back 3.0 metres from Clair Road East at the lower levels and 6.0 metres at the upper levels.

Grade-related uses animate the public realm around Buildings C and D on all sides, creating a pedestrian friendly experience at grade. For Building C, commercial uses are located along the northern elevation. Grade-related townhouse units with landscaped front entryways line the eastern elevation facing Hawkins Drive. At its southwest corner is the residential lobby entrance to Building C, as well as indoor amenity space. The west elevation features indoor amenity space with a contiguous outdoor amenity area and retail uses facing the central plaza.

For Building D, commercial uses are also located along the northern elevation, as well as along the entire western elevation. At its southeastern corner is the residential lobby entrance to Building D, as well as indoor amenity space. The east elevation features indoor amenity space with a contiguous outdoor amenity area and retail uses facing the central plaza. The frontage of retail space on the east of Building D and west of Building C (facing the open public space) creates an animated pedestrian connection to the woonerf and to the surface parking that is located on the east-west private driveway south of Buildings C and D.

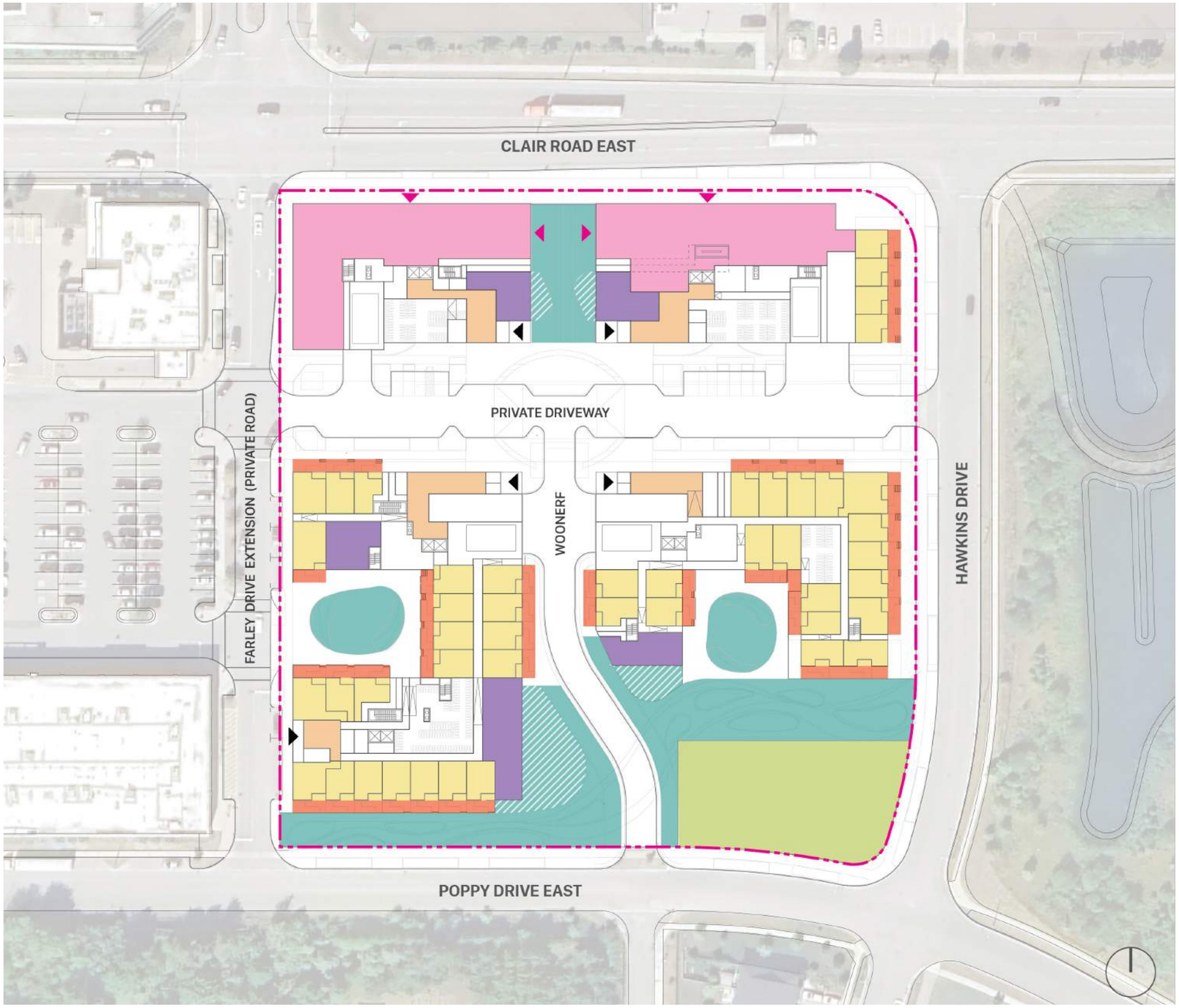
A mix of size and types of residential units occupy the floors above grade, each of which has a private balcony or terrace. Generally, balconies are inset except for those facing south at Level 8 and above for each Building C and D.



LEGEND

- SUBJECT SITE
- PROPOSED DEVELOPMENT
- PROPOSED PUBLIC PARK
- OPEN SPACE

Figure 8 - Built Form: Setbacks and Separation Distances



LEGEND

- SUBJECT SITE
- COMMERCIAL
- RESIDENTIAL LOBBY
- GRADE-RELATED TOWNHOUSE UNIT
- RESIDENTIAL FRONTAGE
- INDOOR AMENITY
- OUTDOOR AMENITY
- OUTDOOR AMENITY (NOT PUBLICLY ACCESSIBLE)
- LOBBY ENTRANCE
- COMMERCIAL ENTRANCE

Figure 9 - Built Form: Ground Floor Uses

Transition

Appropriate transition to adjacent low-rise or open space areas is being achieved through the siting, massing, and orientation of built form onsite, as well as through spatial separation from areas of sensitivity including the low-rise residential area to the southeast and the existing open space system east of Hawkins Drive.

Built form transition has been achieved by placing the taller buildings elements (i.e. 14 storeys) within the northern portion of the subject site. Within Phases 1 and 2 of the subject site, the 14-storey elements are located within the northern portion of each block, oriented east-west along the south side of the driveway running westward off Hawkins Drive. Further north of this driveway, the two 14-storey buildings comprising Phase 3 are situated to front Clair Road East, also in an east-west orientation. The buildings proposed as part of Phases 1 and 3 step down from 14 storeys to 6 storeys, while the Phase 2 building provides further stepping down of height with the 10-storey form in the southern portion of the site. In all buildings, there is further stepping down to 2 storeys, establishing a gradual transition down to areas of differing intensification and scale. To that end, the buildings closest to Poppy Drive East in the south and Hawkins Drive in the east each fit beneath a 45-degree angular plane projected from the centreline of each right-of-way toward the subject site.

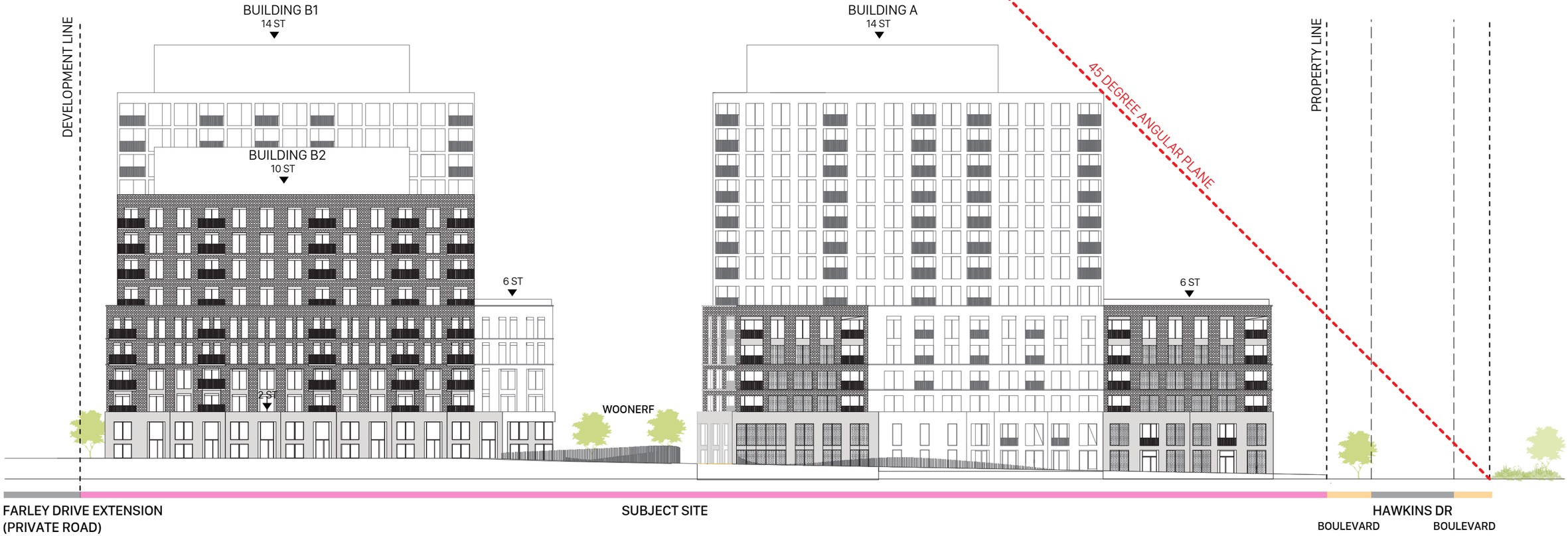
Transition to the adjacent low-rise areas and open spaces has also been a consideration when siting the proposed open space elements on the subject site. To assist in providing spatial separation from the proposed buildings, prominent open space elements have been located between the buildings and the existing low-rise areas or open space areas, within the southern portion of the site or with widened building setbacks along the eastern extent of the site. In this regard, the arrangement of the buildings supports the daylighting strategy for the subject site whereby exposure to sunlight within the public realm is optimized and shadowing of the open space running the southern extent of the site, including the proposed public park, is prevented.

Overall, the orientation, stepping down of building heights and general building setbacks coupled with the location of open space elements work together to provide appropriate transition to nearby areas of differing scale and intensity, ensuring a fit and compatibility of adjacent uses.

Public Views and/or Vistas

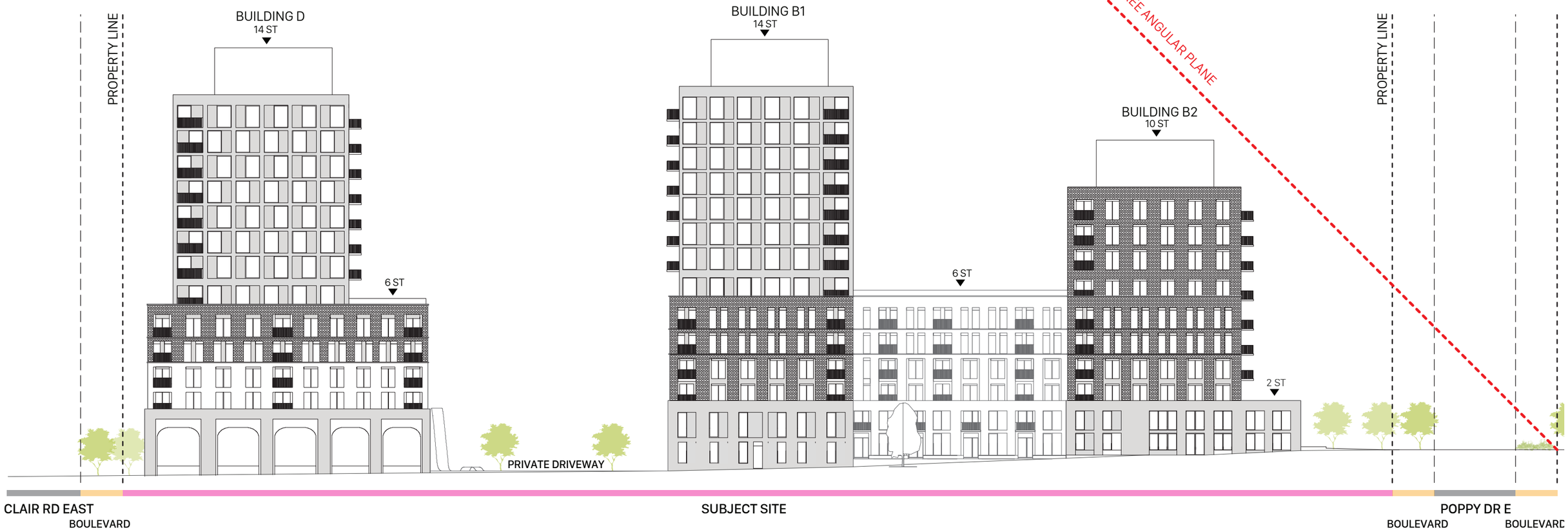
There are no specific public views or vistas that are being maintained as part of the proposal. Views eastward along Poppy Drive East toward the stormwater pond and open space area east of Hawkins Drive will be enhanced through the introduction of the public park at the southeast corner of the site. Similarly, the view east across the subject site toward Hawkins Drive and the stormwater pond will be framed and enhanced through the streetwall being established on wither side of the private east-west driveway.

Further, views north across Poppy Drive East and south from Clair Road East along the proposed woonerf will provide an enhanced visual experience through the introduction of the open space elements and landscaping forming part of the proposal.



SOUTH ELEVATION

Figure 10 - Transition: Angular Plane from East Side of Hawkins Drive



WEST ELEVATION

Figure 11 - Transition: Angular Plane from South Side of Poppy Drive East

Access, Circulation, Parking, Loading, and Storage

Access to the subject site is provided at three locations: northbound from Poppy Drive East along the proposed woonerf, westbound from Hawkins Drive east of the site, and eastbound from the existing private driveway extending south from Farley Drive. No direct vehicular access to any of the proposed buildings is provided from the public streets surrounding the subject site. This allows for a generally continuous pedestrian realm along the perimeter of the site, limiting the interaction of cars and people and promoting a safe and comfortable pedestrian experience.

Vehicular access to Buildings A and B is provided from the proposed woonerf, at driveway entrances across from each other and located centrally within the subject site away from Poppy Drive East. These driveway entrances lead to two separate two-level underground parking garages under each development block. Vehicular access to Buildings C and D is provided at the east end of the east-west driveway bisecting the site, leading to a shared two-level underground parking garage north of the east-west private driveway.

In addition to the parking provided in the underground parking garages, 24 non-residential surface parking spaces are proposed for short-term use along the east-west driveway through the site and along the eastern portion of the private driveway flanking the western edge of the subject site. Those along the southern and eastern limits of the private driveways are oriented as lay-by parking while the majority of those adjacent to Buildings C and D are perpendicular spaces.

In total across the subject site, 791 car parking spaces are proposed, including 75 non-residential parking spaces (for visitors and commercial use) and 692 residential spaces within the underground parking garage, and the 24 at-grade non-residential spaces.

With respect to bike parking, 858 spaces are proposed across the subject site, either indoors or outdoors. This includes 778 long-term bike parking spaces and 80 short-term bike parking spaces. Short-term bike parking is located at grade near to primary building entrances on each block and retail entrances for Buildings C and D. Long-term bike parking is situated at grade in each building in a bike storage room. No bike parking is proposed to be located below grade.

With respect to loading and storage areas, each building includes an internalized loading and garbage storage area at grade. For Buildings A and B, those areas are located adjacent to the vehicular access to each underground parking garage from the proposed woonerf. For Building C, the loading and garbage storage areas are also located adjacent to the vehicular access to the underground parking garage from the east-west private driveway. For Building D, internalized loading and garbage storage areas are located within the southern portion of the building, accessed from the west end of the east-west private driveway.

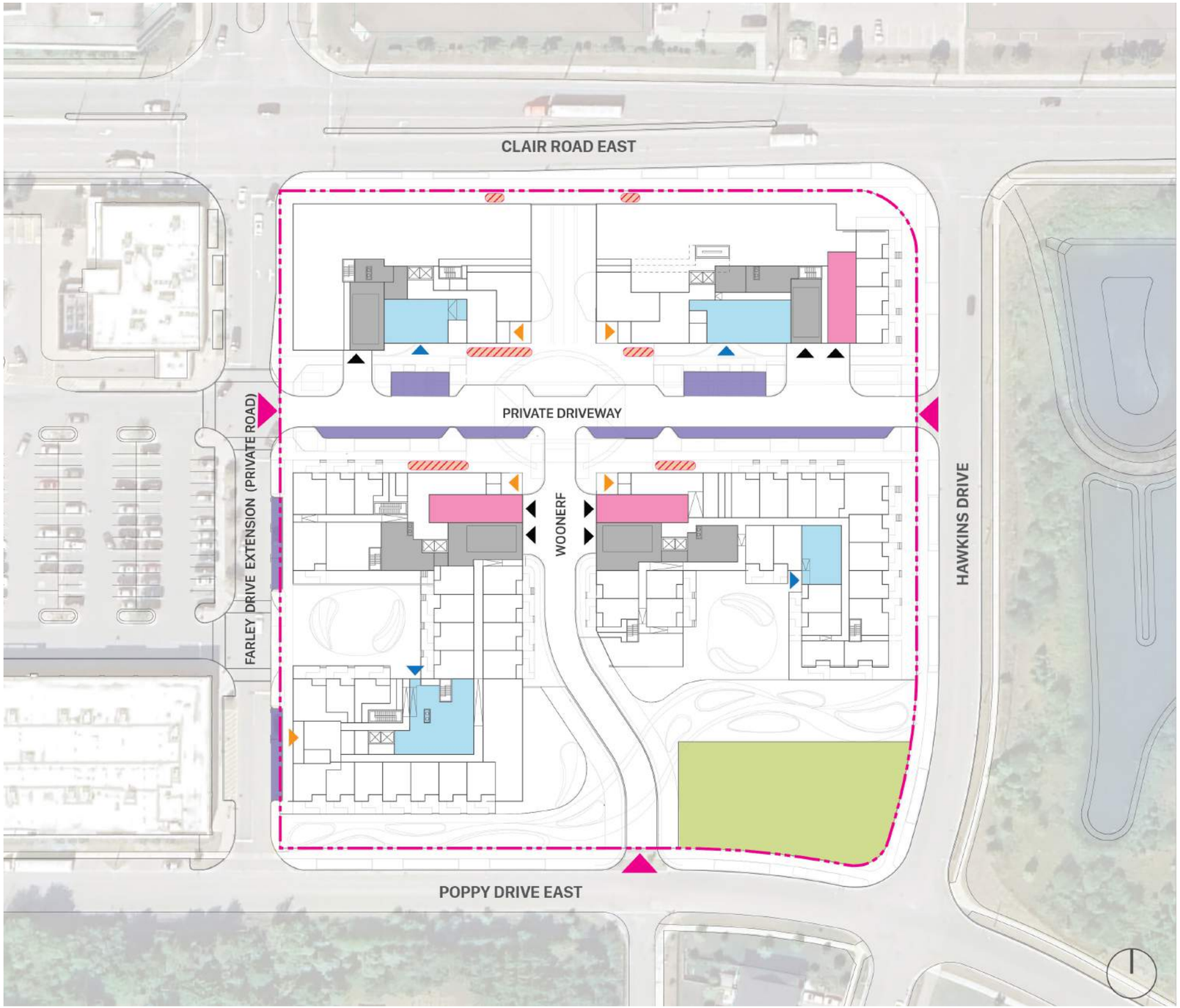


Figure 12 - Vehicular Access and Circulation

Materials and Architectural Treatment

The human scale of the proposed buildings will be expressed through the architectural detailing and other public realm design elements within the subject site. The building design responds to the context of the surrounding public realm and is treated with complementary materials. This includes the coordination of material expression and articulated balconies above grade, and with visually interesting paving materials and site furnishings within the private and public realm.

Grade-related residential units lining portions of the perimeter of each Building A, B, C, and D have been thoughtfully designed and respond to surrounding private and public open spaces. Proportions of windows, articulation and entrances directly relate to the adjacent public realm. Careful attention has been paid to materiality, ensuring quality design and the creation of variation within individual frontages.

The facade design proposed across the subject site demonstrates a high regard for the pedestrian-oriented nature envisioned for the public realm. Generally, throughout the subject site, building facades have been designed to achieve visual interest from within the adjacent public realm by:

- creating a style and rhythm of consistent architectural components;
- varying complementary architectural materials and textures to emphasize particular building elements or volumes;
- breaking up and/or articulating overly long wall portions; and
- incorporating glazed areas along the facade to promote transparency and visibility where appropriate.

In order to ensure a vibrant, pedestrian-friendly environment along adjacent streets and open spaces, active grade-related uses are proposed within the subject site. In addition to the commercial uses located along Clair Road East, uses such as residential lobbies, grade-related residential units with active doors and front yards, or residential amenity spaces will animate the pedestrian realm and provide eyes on the street, generally improving safety in these areas as well.

The highly transparent building facades at lobby and amenity spaces provide views into active grade-related spaces, while also allowing for passive observation of the streetscape from the building interior. To that end, no blank walls are proposed along facades facing streets or open spaces. Where grade-related uses are more private in nature, for example residential townhouse units, the provided setbacks from the public realm are wide enough accommodate private front entryways leading to units, as well as space for landscaping for partial privacy where possible and appropriate.

Specifically with respect to materiality, initial façade studies explore the possibility of creating a unique character through the application of materials for each of the buildings by utilizing finishes such as coloured masonry veneer or similar. To emphasize the lower floors and add visual interest from within the public realm, the first two floors of each building is intended to receive this unique façade treatment which could vary between buildings on the site but remain complementary overall. The middle portion of each building (generally above Level 2 and below Level 7, except for with respect to Building B2) is clad with a neutral-toned brick masonry that will be consistent across development blocks, and again accented by clear glazing and precast paneling where appropriate. For taller building elements (i.e. from Level 7 up to Level 14), each building is proposed to be treated with precast paneling in a tone that is complementary to the masonry cladding applied to the building midsection, and again accented with clear glazing and metal paneling as appropriate.

It should also be noted that glazing with a bird-friendly frit will be applied to the first 16 metres of the buildings facing the proposed public park and the stormwater pond on the east side of Hawkins Drive.

Precedent Imagery (Courtesy of SvN Architects + Planners)

Precedent Imagery (Courtesy of SvN Architects + Planners)

Lighting and Signage

A variety of proposed lighting conditions will contribute to an animated public realm while reinforcing the overall character of the proposed development and providing illumination along important routes. To provide visual interest throughout high traffic pedestrian areas and open spaces, as well as to ensure visibility and safety for a comfortable pedestrian experience throughout the subject site, site lighting strategies have been incorporated into the proposal design in the following ways:

- Ambient catenary lighting is proposed across the plaza between Buildings C and D;
- Feature site light poles are strategically located along either side of the north-south woonerf, south of the Phase 3 lands extending to Poppy Drive East; and
- Task and accent lighting features will be located at the entrances to lobbies and grade-related residential units to mark the entryway to each space.

Further details about signage and building and site accent lighting will be established through the detailed design process.

Microclimate: Wind and Shadows

Wind Impacts

A preliminary Pedestrian Wind Assessment has been prepared by RWDI for the proposal. The assessment was based on the wind-tunnel testing conducted for the proposed development under the Existing and Proposed configurations of the site and surroundings. The results were analyzed using the regional wind climate records and evaluated against the City of Guelph Pedestrian Wind Criteria for pedestrian comfort (pertaining to common wind speeds conducive to different levels of human activity) and pedestrian safety (pertaining to infrequent but strong gusts that could affect a person's footing). The predicted wind conditions are presented in RWDI's report, and are summarized as follows:

- Wind speeds that meet the pedestrian safety criterion are expected at all areas assessed for both configurations tested.
- The existing wind conditions are considered appropriate for the intended pedestrian use throughout the year.
- With the addition of the proposed project, wind conditions are predicted to continue to be appropriate for the intended pedestrian use at all grade-level areas assessed, including all main entrances, public sidewalks, and the outdoor park area south of Building A, throughout the year.
- Suitable wind conditions are generally expected in the summer for outdoor amenity spaces at grade, except the area between Buildings C and D, where wind speeds are higher than desired for passive activities.
- Wind speeds conducive to the intended pedestrian use are expected at all Level 7 outdoor amenities during the summer, with higher-than-desired wind speeds expected around the northeast corners of Buildings C and D.

Shadow Impacts

In support of the proposed application, a Shadow Study has been prepared by SvN Architects + Planners, the project architect. The Study includes a preliminary analysis letter and shadow impact imagery. Analysis dates and times (in hourly increments) include April 21 from 8:00 a.m. to 6:00 p.m., June 21 from 8:00 a.m. to 7:00 p.m., September 21 from 8:00 a.m. to 5:00 p.m., and December 21 from 10:00 a.m. to 3:00 p.m. Both the proposal and the as-of-right zoning envelope are illustrated in the Study.

The preliminary analysis letter reviews the incremental shadow impact from the proposal relative to the City of Guelph's shadow impact criteria as outlined in the Terms of Reference for Shadow Studies ("TOR"), including residential amenity spaces, children's play spaces, public realm (i.e. sidewalks and open spaces), community gardens, and cultural heritage resources. The following summarizes the shadow impact criteria outlined in the City's TOR:

- **Residential Amenity Spaces**: Shadows from proposed developments should not last for more than one hour per day on areas such as yards, decks, and (rooftop) patios and pools on April 21, June 21, and September 21. This criterion is met if incremental shadows occur for no more than two consecutive test times.
- **Children's Play Spaces**: Incremental shadows from proposed developments should allow for a balance of sun and shade on children's play spaces on each of April 21, June 21, September 21, and December 21 (applicable to schoolyards, tot-lots, and play areas only) between the hours of 10:00 a.m. and 2:00 p.m. On an average basis during this period, at least half of the area must be in the sun (e.g. full sun half the time, or 50 percent sun coverage all the time). This criterion is met if the Sun Access Factor is at least 50 per cent on each of the test dates. This criterion applies to off-site public areas as well as those common outdoor amenity areas that are part of a proposed development.
- **Public Realm**: Developments should be designed to provide full sunlight to the opposite sidewalk in mixed-use, commercial, employment and high-density residential areas with pedestrian traffic on September 21 for at least four full hours total including the two-hour period between 12:00 p.m. and 2:00 p.m., plus any two additional one-hour periods between either 9:00 and 11:00 a.m. or 3:00 p.m. and 5:00 p.m. This criterion is met if there is no incremental shadow from the proposed development at 12:00 p.m., 1:00 p.m. and 2:00 p.m., and at any two consecutive times in each of the morning and afternoon groups or three consecutive times in either the morning or afternoon group. Developments should also be designed to provide a Sun Access Factor of at least 50 per cent on public open spaces and plazas on September 21. This criterion is met if the Sun Access Factor is at least 50 per cent on each of the test dates.
- **Community Gardens**: Shadows from proposed developments should provide at least 6 hours of direct sun on community gardens, and turf and flower gardens in public parks on September 21. This criterion is met if full sun is provided on any seven test times on September 21.
- **Cultural Heritage Resources**: Shadows should not create a negative impact by altering the appearance of identified cultural heritage attributes such as historical buildings and landmarks, buildings with elaborate or carved elements that rely on sun/shadow patterns, and stained-glass windows, or by changing the viability of a natural feature or plantings, such as gardens or heritage trees. Incremental shadows, if any, must be identified in the sun and shadow study, and the determination of negative impact will be made by the City on a case-by-case basis. This criterion is met if no incremental shadows fall on identified cultural heritage resources on any of the test dates and times.

As identified in the preliminary analysis letter, the following summarizes the impacts from the proposal on each area studied:

- **Residential Amenity Spaces**: Several residential outdoor amenity areas are included as part of the proposal, both at grade and on Level 7 of the proposed buildings. The amenity areas are shaded for approximately half of the exposure time on the test dates. On September 21, those spaces at grade south of Buildings A and B, as well as those rooftop amenity spaces at Buildings A, B, and D, experience the least amount of shading from the proposal (i.e. Areas 1B, 2A, and 2B and Areas 1C, 2C, and 5B). The amount of shadowing on outdoor amenity spaces is greater on April 21, and June 21. Further detailed analysis through the calculation of resultant Sun Access Factor for each residential amenity space during the required test times will establish the locations where adequate sunlight is achieved.
- **Children's Play Spaces**: The proposed public park experiences zero hours of incremental shadow from the proposal on each April 21, June 21, September 21, and December 21 for the hours of 10:00 a.m. to 2:00 p.m. As such, the criterion is met.
- **Public Realm**: The sidewalk along the south side of Poppy Drive East experiences full sunlight in the morning hours until 3:00 p.m. on September 21 (i.e. 7 hours), after which point there is incremental shadow from the proposal. The sidewalk along the north side of Clair Road East experiences full sunlight from 12:00 p.m. onwards on September 21 (i.e. 4 hours), before which point there is incremental shadow from the proposal. The sidewalk along the east side of Hawkins Drive is in full sunshine from 9:00 a.m. to 1:00 p.m. on September 21 (i.e. 5 hours), after which point there is incremental shadow from the proposal. Although the opposite sidewalks along the adjacent public rights-of-way experience at least 4 hours of full sunshine, the criterion is not met for Clair Road East and Hawkins Drive as there is shadowing on these sidewalks during the period of 12:00 p.m. and 2:00 p.m. Notwithstanding that, it is our opinion that the sidewalks experience am adequate amount of full sunlight throughout the day, despite experiencing shadow during the midday test period.
- **Community Gardens**: There are no community gardens in the vicinity of the subject site that are impacted by shadows from the proposed development.
- **Cultural Heritage Resources**: There are no cultural heritage resources in the vicinity of the subject site that are impacted by shadows from the proposed development.

Given the planned height for the subject site within a strategic growth area and the measures taken with respect to the design of the proposal to sensitively locate building mass on the site, it is our opinion that the incremental shadow impacts from the proposal is appropriate and limited in the context of the surroundings.

2.2 Public Realm

The public realm strategy is focused on creating an open space system comprised of new public and private open spaces throughout the subject site to enhance the quality of life for new residents and existing community members, providing a setting for community life. More specifically, the design of the subject site contributes to the development of a high-quality, attractive, and sustainable open space system through the inclusion of enhanced streetscapes, high-quality outdoor amenity space, and new open space areas that extend the existing open space system east of Hawkins Drive.

A key feature of the public realm strategy is to implement design elements that improve the pedestrian experience along streets and open spaces. Together, the following public realm elements will provide a basis for the character of the subject site across the various phases of redevelopment.

Streetscape Integration and Open Space Elements

In general, public streets and open spaces will feature pedestrian-oriented sidewalks with a strong landscape character, complete with a variety of landscape elements that make for a comfortable and inviting pedestrian environment. Active uses, including residential lobbies, grade-related residential townhouse units with active doors and front yards, residential amenity spaces, and strategically located commercial uses along Clair Road East, will line the street edges and animate the streetscape.

Additionally, the pedestrian-oriented streetscape is well supported by new tree plantings, a clearway for pedestrian travel, designated areas for pedestrian crossings, variation in soft landscaping and planter style/ height and treatment, variation in site lighting design and application, coordinated street furniture, centrally located integrated public art, strategically located cycling infrastructure, and cohesive decorative paving materials.

Significant elements contributing to the strong landscape character throughout the site include the proposed public park, woonerf, and Clair Road plaza. These new spaces proposed as part of the redevelopment will contribute to the creation of a high-quality urban environment that supports a wide range of functions, allows for a variety of pedestrian uses, and is distinct yet visually connected through the incorporation of contemporary materials and details. Street trees and landscape plantings will be used to create an attractive pedestrian environment in conjunction with the thoughtful application of material finishes.

Precedent Imagery (Courtesy of SvN Architects + Planners)

- The proposed public park has been strategically located at the southeast corner of the site to provide for increased access to sunlight and sky view. The space around the park has been thoughtfully designed with open space elements to the west and north that will be treated with hard and soft landscaping to enhance the user experience within these areas. In addition to providing variation in the application of paving types, these areas incorporate plantings on raised planters, including new trees and mixed planting beds, and benches for seating. Though the design and program of the public park is to be determined, it has generous frontage along two public streets and provides and attractive and welcoming entry to the subject site from the southeast.
- The proposed woonerf has been designed to prioritize pedestrians, while encouraging vehicles to move at a low speed through the implementation of pedestrian-oriented pavement and a narrower 7-metre street section. The street features a flush curb and is lined on either side with new tree plantings, alternating decorative bollards, light poles, benches, and bike rings which help to distinguish pedestrian only zones from shared zones. At its northern portion, the woonerf intersects with the east-west private driveway (which has a lower grade elevation), where the paving at the pedestrian crossing continues across the driveway and creates a continuous pedestrian zone. Also at this location is a public art feature and focal point for the site with integrated seating.
- The proposed plaza south of Clair Road East, between Buildings C and D, provides a physical and visual extension of the woonerf. The space is of a width that provides comfortable enclosure of the space for users, and Its integration into the overall streetscape is achieved through the incorporation of several elements. These include new trees, variation in hardscape materiality and application, coordinated movable furnishings (including seating areas near to retail entrances), and ambient lighting through the introduction of catenary lighting between buildings.

Finally, the streetscape treatment provides for the sensitive transition from public space to private space where grade-related residential uses are proposed along street frontages (i.e. townhouse units and residential outdoor amenity space). Both uses are integrated into and provide animation of the streetscape, but are afforded appropriate privacy and the transition from public space to private space as follows:

- Grade-related townhouse units have been set back from the public realm to accommodate private entryways with biodiverse landscaped entrances, creating a private transition along the building edges. Depending on the grading around each building, further transition is provided through steps leading up to private residential entrances.
- Outdoor amenity spaces between Building A and the public park, Building B and the proposed woonerf, and Buildings C and D have all been treated with 1.8-metre tall decorative privacy fencing to establish these private open spaces while providing visibility between public and private space and increasing visual interest from within the public realm.

Precedent Imagery (Courtesy of SvN Architects + Planners)

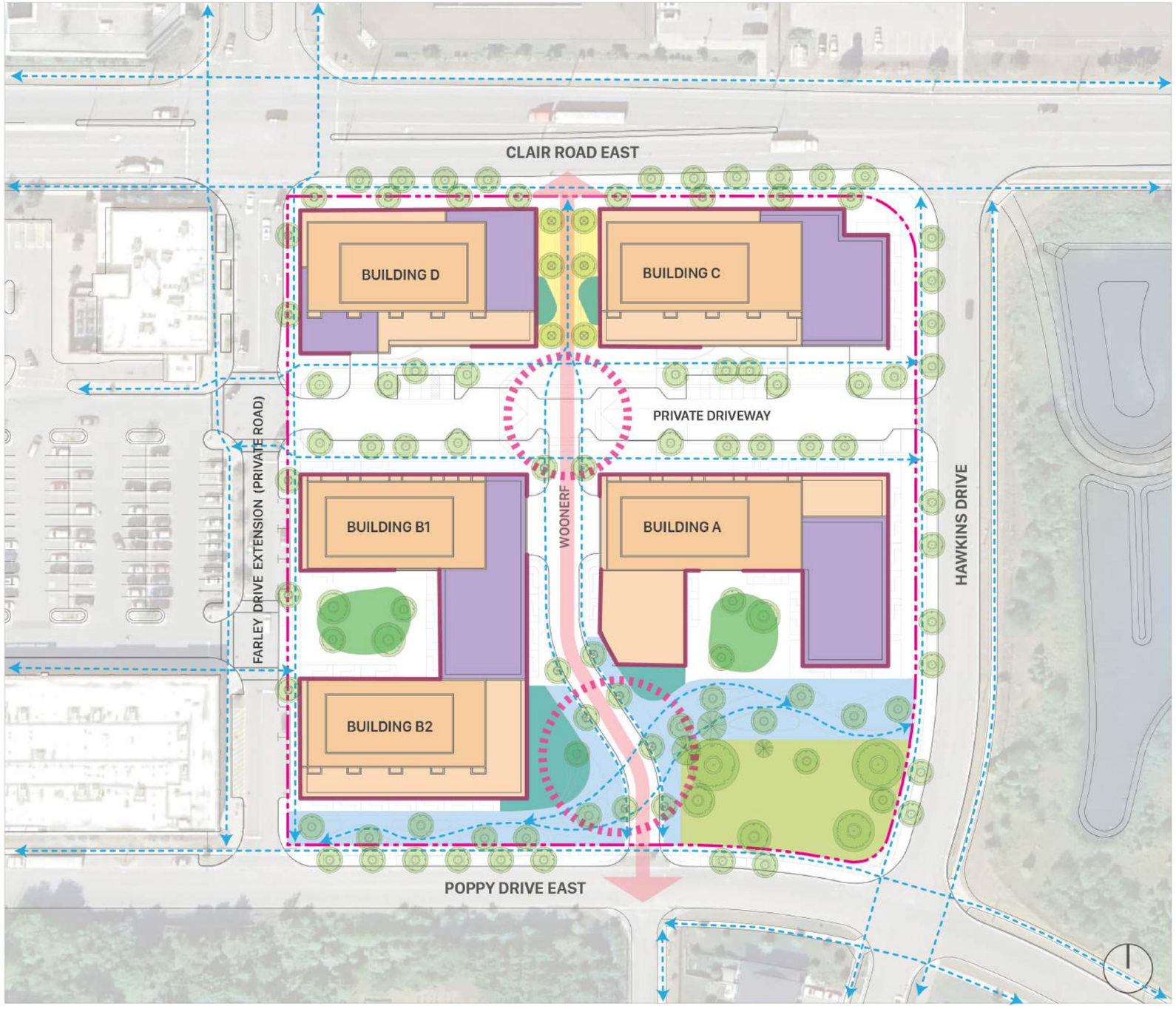


Figure 13 - Public Realm and Landscape Elements

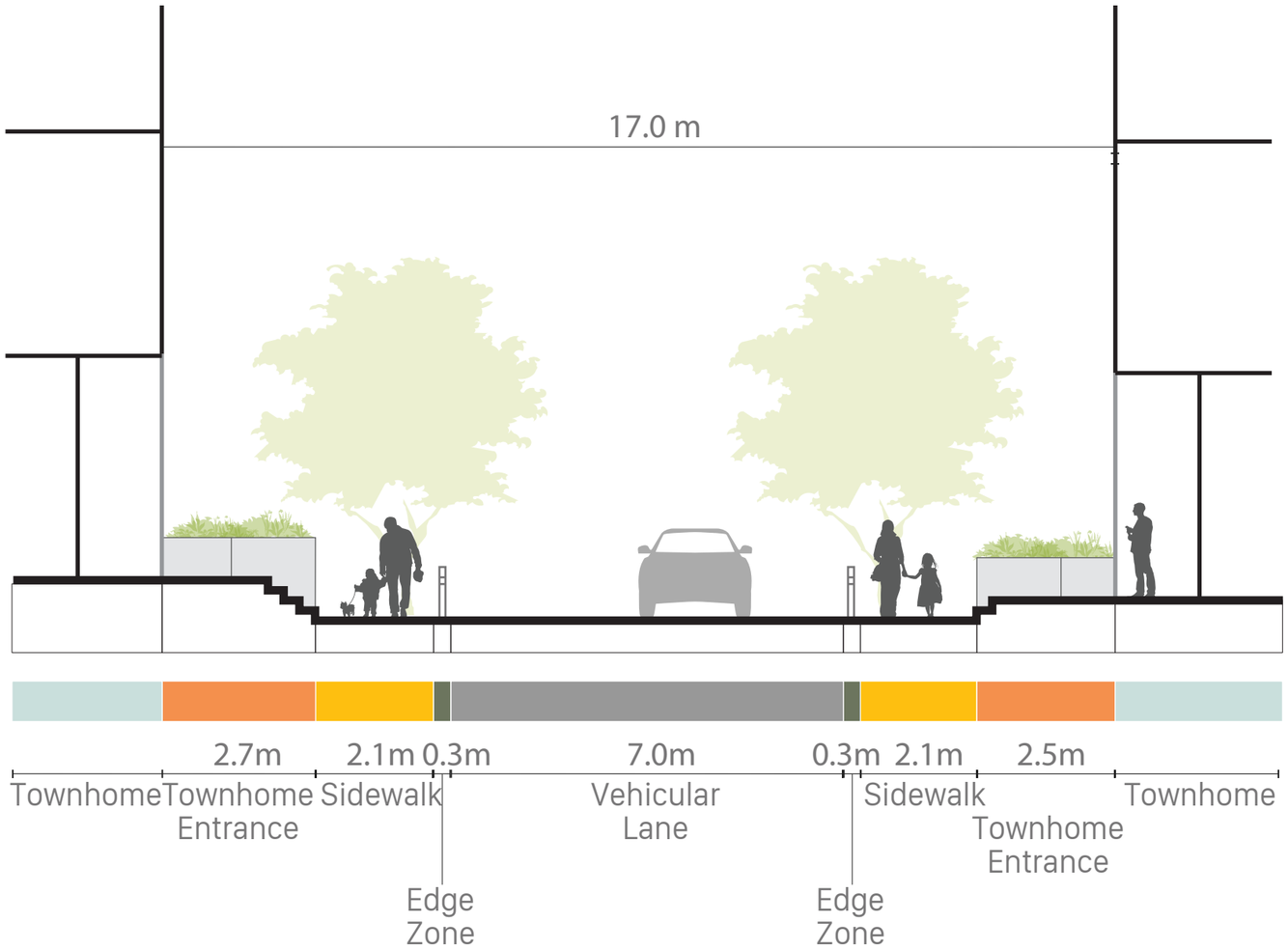


Figure 14 - Section through Woonerf at Townhouse Frontages (Courtesy of SvN Architects + Planners)

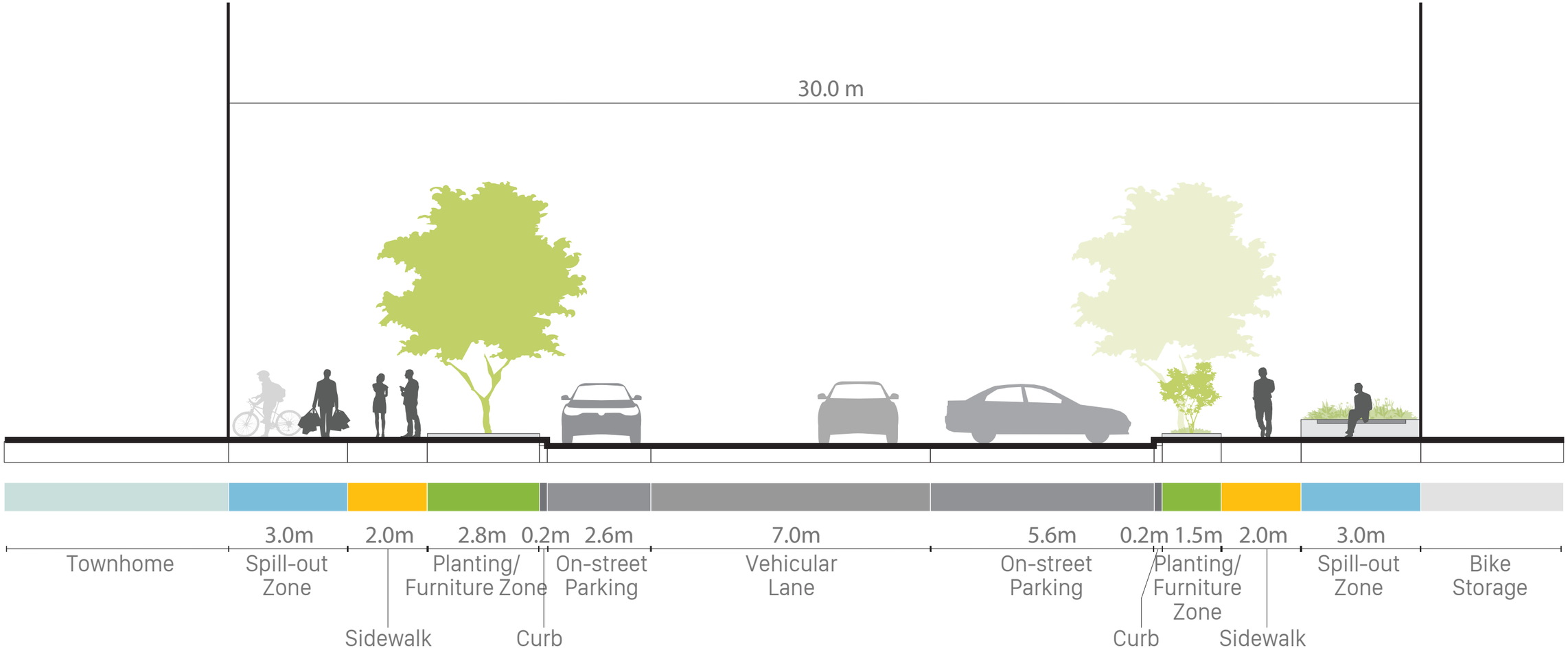


Figure 15 - Section through East-West Private Driveway (Courtesy of SvN Architects + Planners)

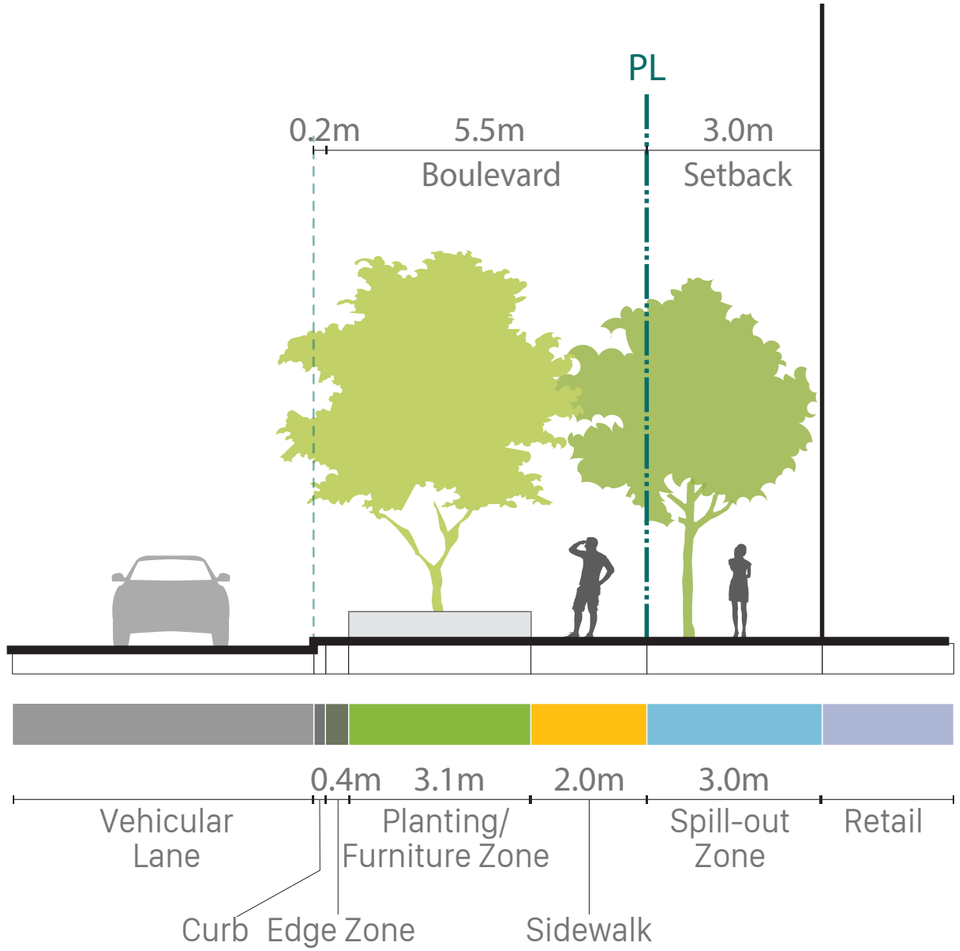


Figure 16 - Section at interface of Retail on Subject Site and Clair Road East
(Courtesy of SvN Architects + Planners)

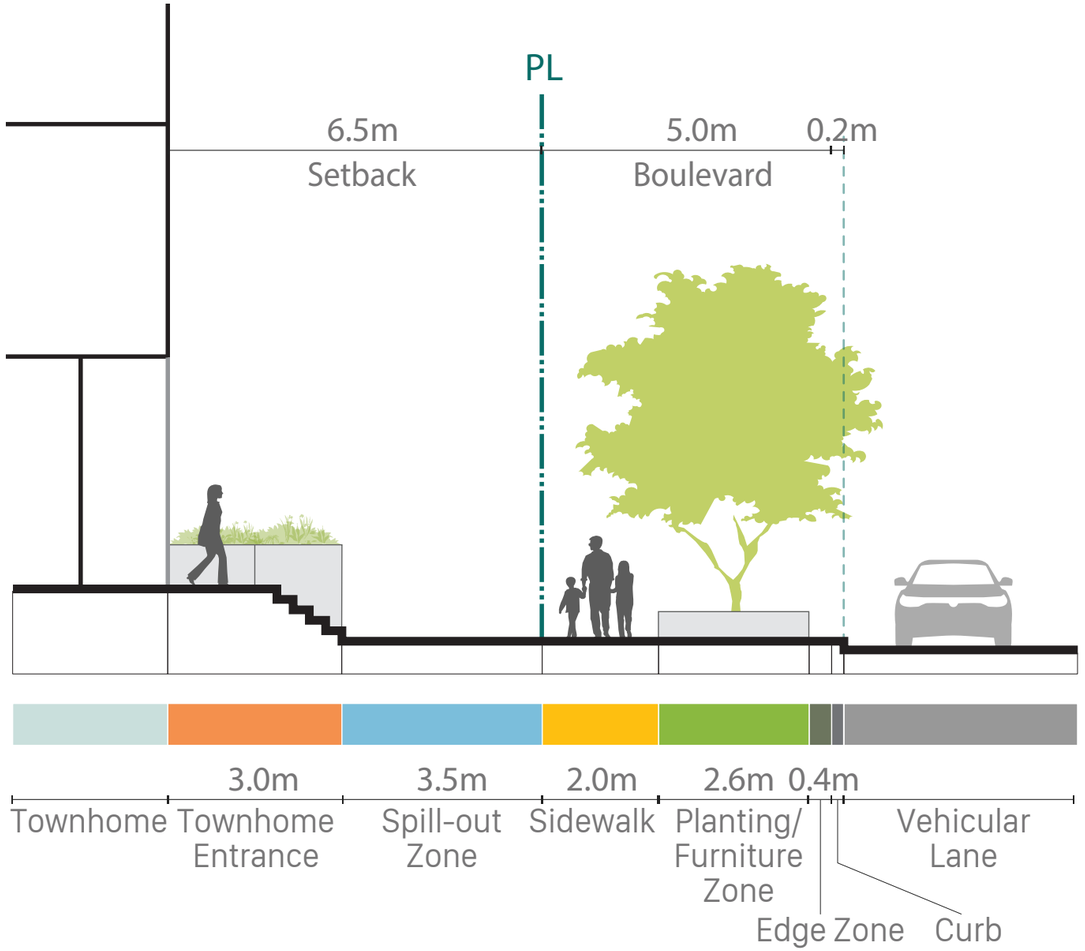


Figure 17 - Section at interface of Subject Site and Hawkins Drive
(Courtesy of SvN Architects + Planners)

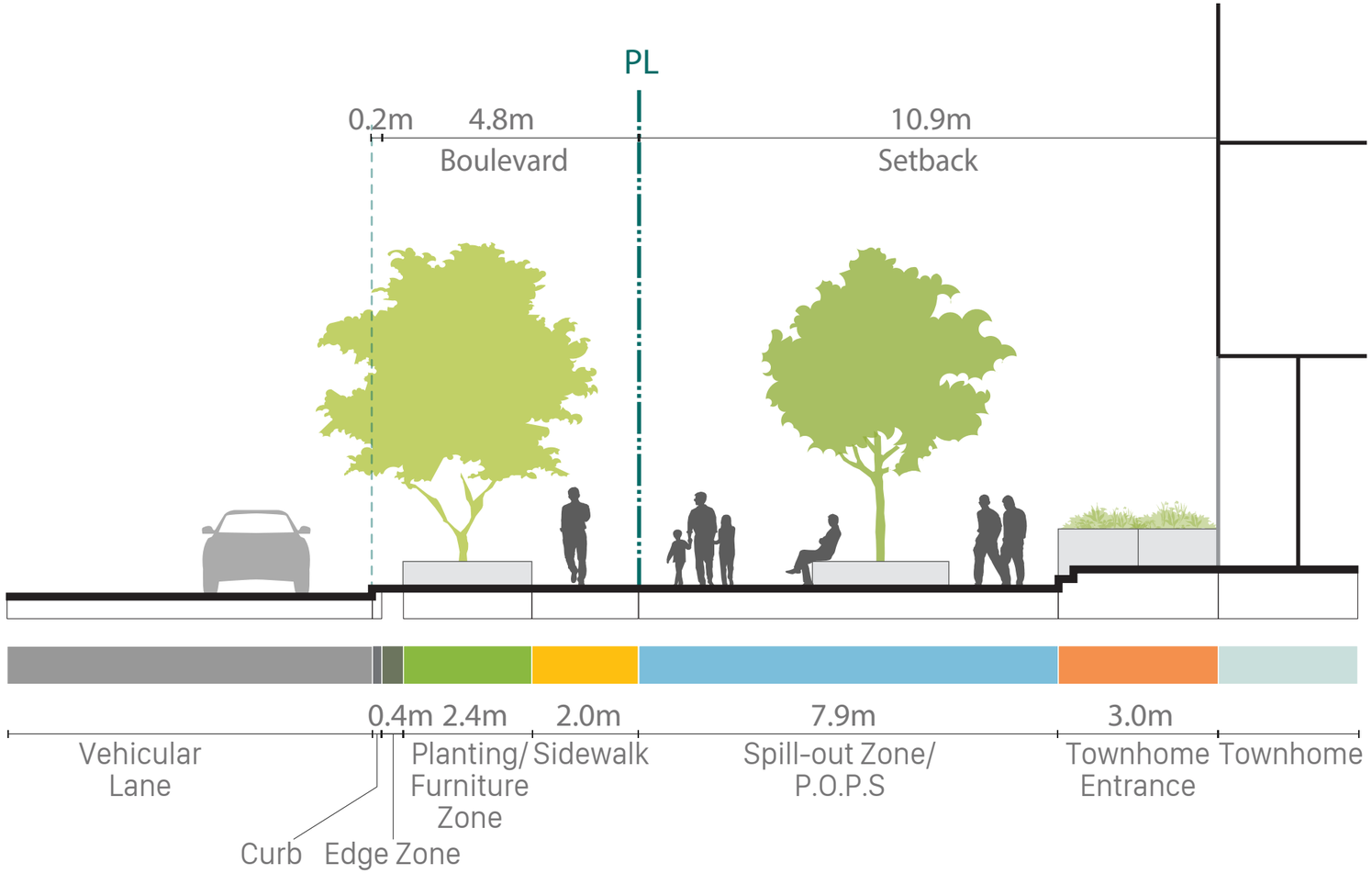


Figure 18 - Section at interface of Subject Site and Poppy Drive East (Courtesy of SvN Architects + Planners)

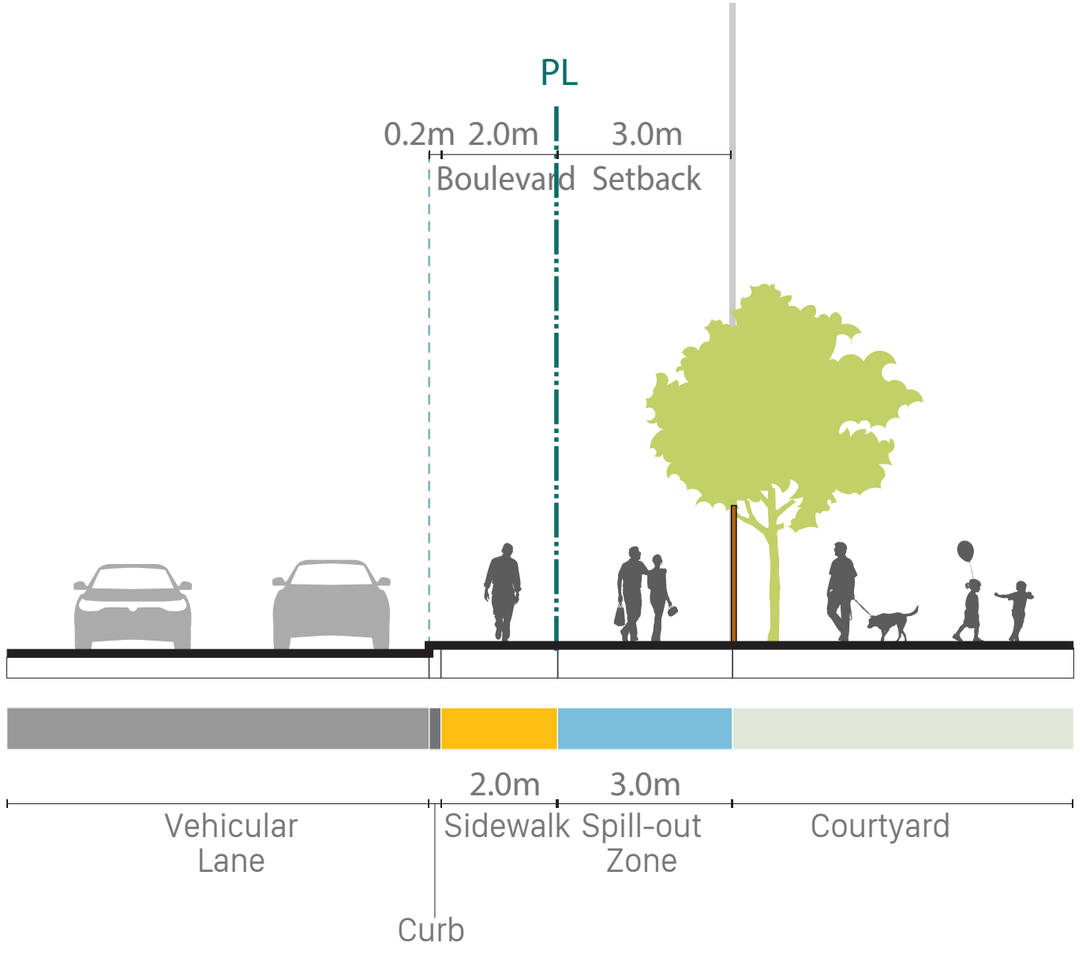


Figure 19 - Section at interface of Central Plaza on Subject Site and Clair Road East (Courtesy of SvN Architects + Planners)

2.3 Sustainability Measures

2.3.1 General Environmental Sustainability

Sustainability in urban design refers to the mechanisms with which built forms can contribute to an environment to encourage environmental responsibility and health while also limiting the potential negative impacts of and from redevelopment.

The design for the subject site contributes to the introduction of a sustainable community by introducing a mix of land uses within a site layout that provides direct and convenient connections for pedestrians to encourage the further use of the active transportation modes.

The following architectural, landscape, and transportation sustainability measures are being considered where possible for the redevelopment of the subject site.

Architectural Sustainability Measures

To the extent possible, the development of the subject site will include various low impact design elements to maximize energy and water efficiency, promote a healthy indoor air environment for occupants and enhance the local environment through the selection of building materials. Some of the potential elements to be implemented may include:

- **Energy performance and reduced expanses of glazing**: Generally, buildings will be designed to reduce heat gain and cooling loads and increase the overall performance of the building envelope by incorporating a low percentage of glazing (i.e. window-to-wall ratio of 40% to 60%), increased insulation within the wall cavity, and higher performing glazing with enhanced low-e coatings to block UV rays without compromising the transmission of visible light while improving envelope performance.
- **Energy conservation**: High-efficiency mechanical/ electrical systems will be specified to maximize energy efficiency and reduce energy consumption. Residential units will contain energy efficient appliances, lighting, and programmable thermostats.
- **Waste Management**: To minimize the amount of waste being disposed of in landfills, tri-sorter chute systems will be included in the design of each building. All residents will have access to the tri-sorter chute and will be expected to dispose of waste, recyclables, and organics separately.
- **Sustainable roofing choices**: High albedo roofing materials and green roofs will be incorporated to help reduce the heat island effect and reduce stormwater runoff.

Landscape Sustainability Measures

To the extent possible, the landscape related initiatives described below will be considered to ensure that the landscaping associated with the redevelopment of the subject site takes advantage of current materials and techniques resulting in greater sustainability. Green Infrastructure and Low-Impact-Development ("LID") technologies will be implemented in the development of the subject site in order to preserve and restore the natural hydrologic cycle. Additionally, the following LID strategies are being considered for implementation on the subject site:

- **Bioswale and rain garden**: The proposed woonerf has a consistent green edge along its south perimeter which includes a bioswale and rain garden that receive the woonerf pavement surface stormwater runoff. These LID design elements are expected to provide a small retention capacity, the opportunity for on-site infiltration, and prolonged evapotranspiration periods.
- **Tree plantings**: A balanced mix of medium to large trees is a key feature of the landscape approach. Trees are generally proposed within large open planters; where open planters are not an option, soil will be available to the tree using a soil cell system. A variety of native species will be used to promote bio-diversity, support ecosystem, and enhance urban forest resilience.
- **Planting materials**: The proposed development public realm includes a series of privately owned, publicly accessible open spaces and private amenities that provide a balanced ratio of softscape and hardscape. The proposed on-site softscape include planting beds with Water efficient, drought-tolerant native perennial, pollinator-supportive planting gardens that will increase the site's biodiversity.
- **Heat island mitigation**: Significant tree canopy coverage on-site and permeable paving materials will be implemented to mitigate the pervasive urban issue of the heat-island effect.
- **Green roofs**: Green roofs will be incorporated to reduce the amount of roof run-off and help with the low-impact storm water management approach for the subject site. The exact location of green roofs will be determined as the proposal design progresses.
- **Stormwater management and stormwater reuse**: The most up-to-date generation of stormwater filters will be installed in the Development such that stormwater runoff and snowmelt leaving the subject site 'cleaned' of suspended solids prior to entering the natural environment.
- **Infiltration strategies**: Infiltration strategies such as infiltration tanks/galleries will be utilized to mimic the groundwater table recharge characteristics of the site, prior to development.

Transportation Sustainability Measures

The following transportation-related initiatives for sustainability will be considered to the extent possible in coordination with the abovementioned architectural and landscaping measures:

- **Cycling facilities**: Bicycle storage facilities will be provided outdoors at grade and at accessible locations within buildings to improve the ease of use.
- **Pedestrian connections**: The site layout provides a network of new pedestrian connections via municipal sidewalks and new pedestrian walkways. These new connections will encourage the use of the active transportation modes.
- **Electric vehicle infrastructure**: EV-ready parking stalls will be introduced to encourage and support the use of electric vehicles.

2.3.2 Energy

The Community Energy Initiative ("CEI") is the City of Guelph's commitment to use and manage energy more efficiently than past practices. The main goal of the CEI is for Guelph to become a Net Zero Carbon community by 2050. In support of this application, a Community Energy Initiative Letter has been prepared by MHBC Planning Ltd. under separate cover and should be referenced for greater detail.

The proposed development responds to the City's Community Energy Initiative in the following ways:

- Providing for a complete community where the subject site will be developed with higher mixed-use densities, served by the proposed ground floor commercial uses and the adjacent existing commercial plaza. The development will provide for ample outdoor amenity space and a new public park at the southeast corner of the subject site. Proposed pedestrian pathways throughout the site are strategically located, ensuring the new community is connected and walkable, making good use of the existing and planned surrounding amenities and connections.
- The landscape design framework for the subject site is organized along a proposed woonerf street-typology that favours pedestrians, while encouraging vehicles to move at a low speed through the use of pedestrian-oriented pavement and a smaller street section. The proposed central woonerf provides a visual and physical for pedestrians and vehicles across the subject site from north to south. Further, it allows for the extension of the public realm and outdoor amenity areas while providing for the separation of vehicle and pedestrians with the use of bollards, ensuring its continued safe use.
- The proposed landscape design and public park provide attractive and comfortable outdoor space for the new community, while providing new outdoor space for the existing residents of the surrounding area. The thoughtfully designed landscape and open space areas will enhance the streetscape, and the building façades and entrance location will be well-integrated to ensure that the proposed development fits with the surrounding community. For example, at-grade residential units will animate the woonerf with biodiverse landscaped entrances creating a private transition along the building edges.

- The subject site is well connected to the existing road network, public transit, and planned active transit infrastructure. Future residents will have access to several bus routes providing a number of connections across the city including Hanlon Industrial Park, Stone Road Mall, University of Guelph, and Downtown. Further, future residents will also have access to the existing and planned pedestrian and cycle pathways from Dallan Park connecting to the larger trail network. To support alternative modes of transportation such as cycling, the proposed development will provide for indoor bicycle storage for residents.
- The most up-to-date generation of stormwater filters will be installed in the Development such that stormwater runoff and snowmelt leaving the subject site 'cleaned' of suspended solids prior to entering the natural environment.
- Infiltration strategies such as infiltration tanks/ galleries will be utilized to mimic the groundwater table recharge characteristics of the site, prior to development.
- EV-ready parking stalls will be introduced to encourage and support the use of electric vehicles.
- Proposed buildings will be oriented and sited to take advantage of increased daylighting opportunities.
- The buildings have been designed to incorporate sustainable roofing choices, such as high albedo or lighter-coloured roofing materials. Green roofs will also be incorporated to help reduce the heat island effect and reduce stormwater runoff. High albedo and permeable paving materials will also be used throughout the subject site to mitigate heat island effects.
- Daylighting strategies have been taken into consideration to enhance daylight exposure between buildings within the public realm. The arrangement of the proposed buildings has been optimized to prevent shading on the proposed public park and lessen the impact of shadows on the pedestrian connection through the woonerf.

Bird’s Eye View Looking Northwest toward Subject Site, (Rendering provided by SvN Architects + Planners)

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