

Urban Design Report

321-325 Courtland Avenue East, 230 & 240 Palmer Avenue, 30 Vernon Avenue Mixed-Use Redevelopment - Former Schneiders Site



Official Plan Amendment, Zone Change, Draft Plan of Subdivision 321-325 Courtland Avenue East, 230 & 240 Palmer Avenue, 30 Vernon Avenue 321 Courtland Developments Inc.





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321- 325 Courtland Avenue East 230 & 240 Palmer Avenue 30 Vernon Avenue

Former Schneiders Site

City of Kitchener

Official Plan Amendment Zone Change Draft Plan of Subdivision

April 2019

Prepared for: 321 Courtland Ave. Developments Inc. 560 Wellington Street London, Ontario N6A 3R4

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Introduction

1.1 Background

321 Courtland Ave. Developments Inc. is redeveloping the former Schneiders' site in Kitchener (referenced as the "site" in this report). The site is a 10.36-hectare assembly of multiple properties situated on the south/west side of Courtland Avenue between Stirling Avenue and Borden Avenue (for the purposes of this report, Courtland Avenue is referenced as north, Stirling Avenue as west, Borden Avenue as east, and the CNR rail line as south). This industrial complex consisted of six buildings although certain buildings have been demolished.

The site is currently designated for general industrial uses as part of the Courtland Mill-Woodside Park Secondary Plan in Kitchener's 1994 Official Plan. The City of Kitchener Planning Around Rapid Transit Stations ("PARTS") initiative related to new ION stations, however, builds on Regional and Provincial policy direction and the new 2014 Kitchener Official Plan concerning transit-oriented development and mixed-use intensification and redevelopment. The approved PARTS plan for the Rockway Station Area sees the Rockway area redeveloped in a mixed, compact, connected and balanced nature.

The proposed project is a large scale, mixed-use redevelopment that will transform the site and integrate it within the surrounding neighbourhood. New public street extensions into the site will integrate the site with the surrounding street fabric and break down the large block into smaller development areas. The residential mix will include a varied composition of mid-rise and high-rise apartment buildings, stacked townhouses, and mixed-use buildings. Adapted and new employment floor space will be provided in retained and repurposed buildings and is meant to contribute to a new complete district within the existing neighbourhood. An integrated series of open spaces will include both a public park, a publicly-accessible urban plaza, and outdoor private terraces and patios.

1.2 Proposed Applications

321 Courtland Ave. Developments Inc. is proposing applications for an Official Plan Amendment, Draft Plan of Subdivision, and Zoning By-law Amendment for the site. The Official Plan Amendment will redesignate the site from the "General Industrial" designation to special mixeduse, employment, residential, and park designations. The Draft Plan of Subdivision will establish new public streets and smaller development blocks. The Zoning By-law Amendment will rezone the site from the existing "General Industrial (M2) Zone" to special mixed-use, residential and park zones corresponding to the proposed Official Plan designations.

1.3 Report Purpose

This Urban Design Report establishes a long-term urban design vision for the site's redevelopment. It assesses and demonstrates how the proposed development and its design fits with City policies and guidelines. It bridges the gap between the design-related Official Plan policies and the detailed design stage through additional, more specific design guidance for future development of the streets, spaces and buildings on the site.

The Report provides the general expectation of the development's form and character moving forward in the development process. Section 2 provides a description and assessment of the site's existing conditions and its context within Kitchener and the immediately surrounding neighbourhood. Section 3 summarizes the applicable design-related policies and relevant guidelines. Section 4 outlines the design vision and objectives established as the basis for the design of the site. Section 5 outlines the overall Site Master Plan for the proposed development together with supporting site-level design guidelines. Section 6 outlines detailed block plans and design guidelines for each of the specific development blocks within the Site Master Plan. And Section 7 summarizes and concludes the Report.



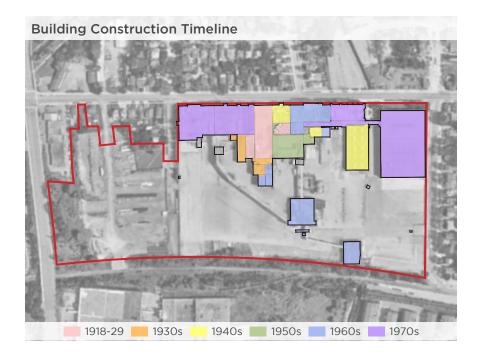
2 Conditions & Context

2.1 Site Location

Located in the Mill-Courtland Neighbourhood of Kitchener, the site is situated on the south side of Courtland Avenue between Stirling Avenue and Borden Avenue. The site is 10.36 hectares in size with approximately 343 metres of frontage on Courtland Avenue and 241 metres of frontage on Borden Avenue. It is bounded by Stirling Avenue South to the west, Courtland Avenue to the north, Borden Avenue to the east, and a CNR rail line to the south. The site comprises nearly all the land contained by this boundary, except for a series of smaller properties fronting onto Courtland Avenue between Palmer Avenue and Stirling Avenue or fronting directly onto Palmer Avenue. It is an assembly of six separate parcels: the 321-325 Courtland Avenue parcel comprising most of the site that contains the Schneiders' factory complex; the parcel that constitutes what would be the extension current Palmer Avenue (formerly Prince Albert Avenue right-of-way); 230 and 240 Palmer Street on the western side of Palmer Street; and 30 Vernon Street at the western end of the site.

2.2 Site History

The former Schneiders complex is made up of structures and additions of various size dating from 1918 to 1976. The plant was originally constructed in 1924 to serve as the meat processing facility for J.M. Schneider's fledgling sausage company. The plant and company grew substantially in the following years, becoming a mainstay in the community and contributing to the city's nickname of "busy Berlin". After peaking at 4,000 employees in the 1970s, global competition caused the company to decline. The Schneider family eventually sold the company to American firm Smithfield Foods in 1997. Maple Leaf Foods acquired the company from Smithfield in 2001 and closed the plant in 2014 as part of its modernization efforts.













2.3 Existing Site Conditions

The former Schneiders factory complex occupies the site, although demolition has occurred on much of the site. Pre-demolition, the complex contained approximately 69,900 square metres (752,000 square feet) of industrial floor space within six buildings, some of which were inter-connected. The former Plant building, recently demolished, extended along most of the site's Courtland Avenue frontage and consisted of the original factory and various additions from 1918 to 1976 that together contained approximately 52,000 square metres (562,000 square feet) of space over five floors. The six-storey Office building is connected to the east side of the Plant along Courtland Avenue as a distinct addition constructed in 1976 and contains approximately 6,410 square metres (69,000 square feet) of floor space. The one-storey Garage building sitting behind the Office building was constructed in 1948 and contains approximately 1,960 square metres (21,100 square feet) of floor space. The one-storey Distribution building sitting at the corner of Courtland Avenue and Borden Avenue was constructed in 1971 and contains approximately 6,465 square metres (69,600 square feet) of floor space. The Powerhouse and Water Treatment buildings, both recently demolished, were a two-storey and one-storey building, respectively, situated to the rear of the site near the CN Rail corridor.

The site's existing topography generally drops from high points near Stirling Avenue and the bridge over the CN Rail corridor, intermittently from Courtland Avenue and Palmer Avenue, and from the embankment along Stirling Avenue. The low-lying area extending south from the intersection of Stirling Avenue and Courtland Avenue is currently in the flood fringe. There is an additional low area where the Shoemaker Creek corridor runs through the site, contained within an underground box culvert before it emerges to the south and north of the site. This culvert runs through the area between the Office, Garage and Distribution buildings which will be retained as part of the proposed site redevelopment.



Former Plant Building on Courtland Avenue East



Urban Design Report | Schneiders Site Mixed-Use Redevelopment



2.4 Surrounding Context

Context within City

The site is located centrally within Kitchener in the Mill-Courtland Woodside neighbourhood that forms part of the broader ring of neighbourhoods that surround Downtown Kitchener. Downtown Kitchener's core and its focus of retail, restaurants and employment activities is within 1,500 metres of the site. Courtland Avenue offers connections to Downtown and the Highway 7/8 corridor and Ottawa Street offers higher order east-west connections. The site is within a short walk or ride to the Iron Horse Trail, connecting people to Downtown Kitchener and Uptown Waterloo. The neighbourhood contains several significant parks and recreational facilities, including the Mill-Courtland Community Centre, Rockway Golf Course, and Kaufman Park.

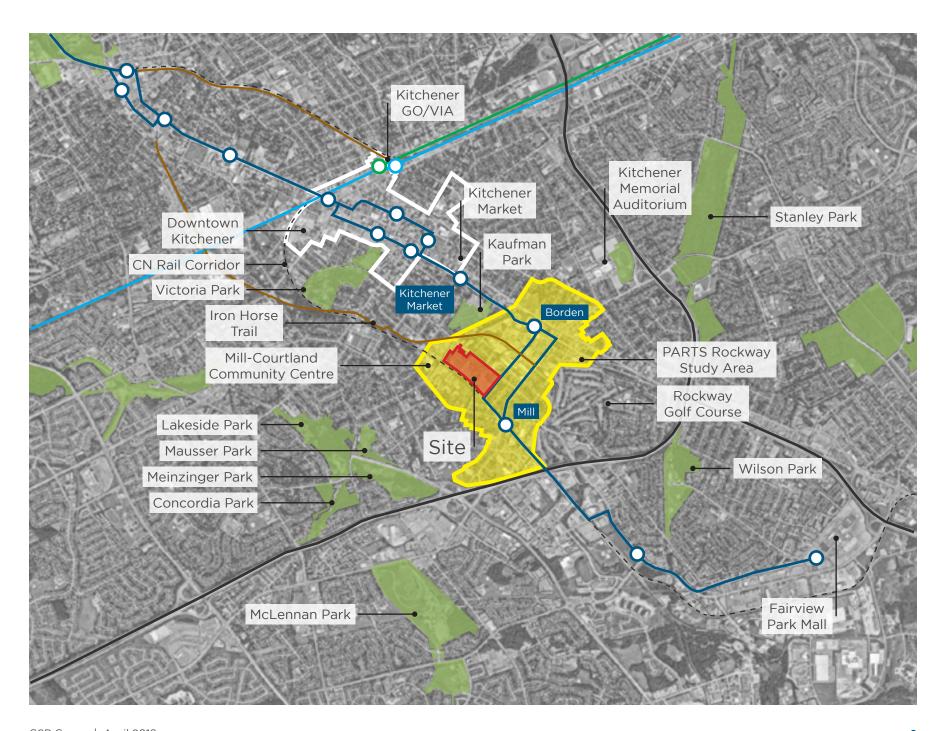
The higher frequency Route 205 iExpress runs across Kitchener along the Ottawa Street corridor with a northbound stop at Ottawa and Courtland and a southbound stop at Courtland and Borden both with stops at the Mill and Borden ION Stations. Within the new Rockway Station Area as part of the ION LRT system, the site is within a short walk of two ION stations that will provide higher frequency east-west travel through Waterloo Region, connecting Downtown Kitchener, Uptown Waterloo and the universities to the west and Fairview Mall to the east.



Courtland Avenue East Streetscape (pre-demolition)



Borden Avenue South Streetscape





Automobile Sales and Service on Courtland Avenue East facing the Site



Commercial Uses and grade change at Courtland Avenue and Stirling Avenue



Mill Street ION LRT Station



Mill-Courtland Community Centre at Corner of Mill Street and Stirling Avenue



Single Detached Residential on Courtland Avenue East



Single Detached Residential on Borden Street South facing the Site



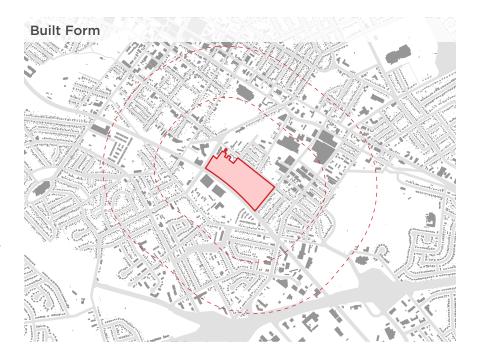
CN Rail Corridor and Townhouse Block abutting the south side of the Site

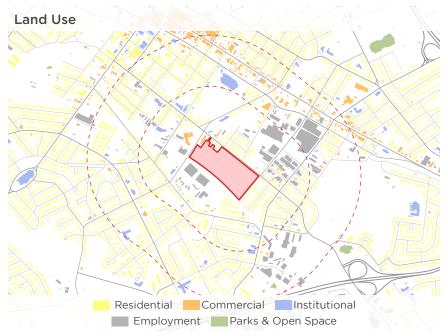


Residential lots on Palmer Avenue facing/abutting the Site

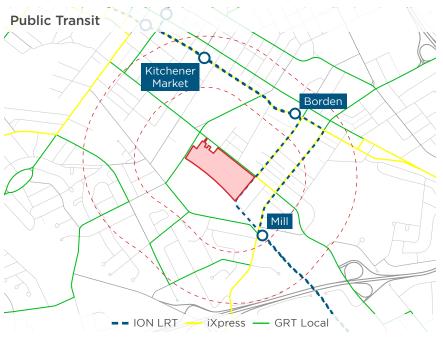
Land Use and Built Form

The site's immediately surrounding context within 800 metres features a mixed land use pattern. Detached dwellings are primarily situated to the immediate southeast, east and north of the site. A recent three-storey townhouse development ("Joy" townhouses) sits immediately to the southeast of the site across the CNR rail line corridor. There is a small commercial plaza at the corner of Stirling Avenue and Courtland Avenue comprised of retail and service commercial uses. There is a smaller area of mixed industrial/employment uses to the southwest of the site across the CN Rail corridor and a larger area to the northeast centred on the Borden Avenue corridor extending from Courtland Avenue to Charles Street, the latter comprised primarily of warehousing, packaging, sales, and other light industrial uses.









Street Pattern

The neighbourhood as a mixed street pattern with a tight grid of streets in the pre-war residential areas, a curvilinear street pattern in the post-war residential areas, and a more open grid with large parcels in the employment areas. Courtland Avenue is a "Regional Road" with an existing 18 metre right-of-way containing two vehicle lanes with intermittent cycling lanes along its length. Borden Street is a "Local Street" with an existing 23 metre right-of-way containing two vehicle lanes and the southbound ION track. Borden Street ends at the CNR rail corridor at the southern edge of the site, transitioning into a small public laneway. Stirling Avenue is a "Major Community Collector" with a 26 metre right-of-way containing a four-lane cross section. The street grid is interrupted by the large existing industrial parcels, the Shoemaker Creek corridor, and the rail corridor. Kent Avenue currently terminates at Courtland while Palmer Avenue extends into the site.

Railway Corridor

The CNR rail corridor abuts the entirety of the site's southern boundary. This rail line is a "Principal Branch Line" per CNR, which requires a minimum 15 metres separation distance to dwellings and attenuation fencing and berming. "Crash walls" as part of buildings are considered by CNR in respect to safety protection measures.

Public Transit

The neighbourhood is well-served by existing and planned transit services. Both the Mill and Borden ION stations are within a 10-minute walk (800 metres) of the site. The Mill ION Station is accessed by either Kent Avenue or Borden Avenue from the site and the Borden ION Station from either Courtland or walkways along the rail tracks from the terminus of Borden. The higher frequency Route 205 iXpress runs crossown along the Ottawa Street with a northbound stop at Ottawa and Courtland and southbound stop at Courtland and Borden, as well as at the Mill and Borden ION Stations. The local Route 8 runs along Courtland with existing stops at Palmer, Kent and Borden.

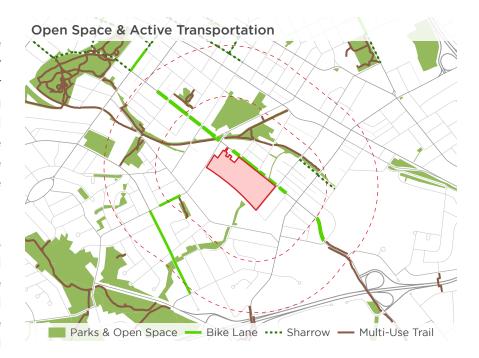
Parks and Open Space

There are several major parks and recreational facilities in the surrounding neighbourhood, including the Mill-Courtland Community Centre, Rockway Golf Course, and Kaufman Park. The Shoemaker Creek passes through the site within an underground culvert, extending from Meinzinger Park and Mausser Park near Homer Watson Boulevard to the Schneider Creek, a short distance to the south of the site. While there are several major park facilities within walking distance of the site, there are no smaller neighbourhood level parks in the immediate vicinity.

The Iron Horse Trail provides immediate walking and cycling options within the surrounding neighbourhood, connecting to Downtown and Uptown Waterloo to the west and Fairview Park Mall to the east. There is an intermittent bike lane on Courtland Avenue as well as planned bike lanes on Stirling Avenue and Ottawa Street, which will provide a connection to the broader cycling network. There is also a planned pedestrian connection from the southern corner of the site at Borden Street and the CNR corridor to the Mill ION Station.

Watercourses and Floodplain

The site is located within the Shoemaker Creek and Schneider Creek subwatersheds. Most of the site drains to Shoemaker Creek to the north with the remainder draining to Schneider Creek to the north/west. Running underground through the site, the Shoemaker Creek floodway is contained within a large closed concrete box culvert, which transitions at the downstream side of Courtland Avenue as an open concrete channel. Shoemaker Creek converges with Schneider Creek approximately 250 metres downstream of the site. No stormwater management controls exist for the Schneiders complex. The Schneider Creek and Shoemaker Creek Regulatory Floodplain limits on the site are defined as flood fringe only.







Stirling Avenue South Streetscape



Schneider Creek Culvert north of Courtland Ave E

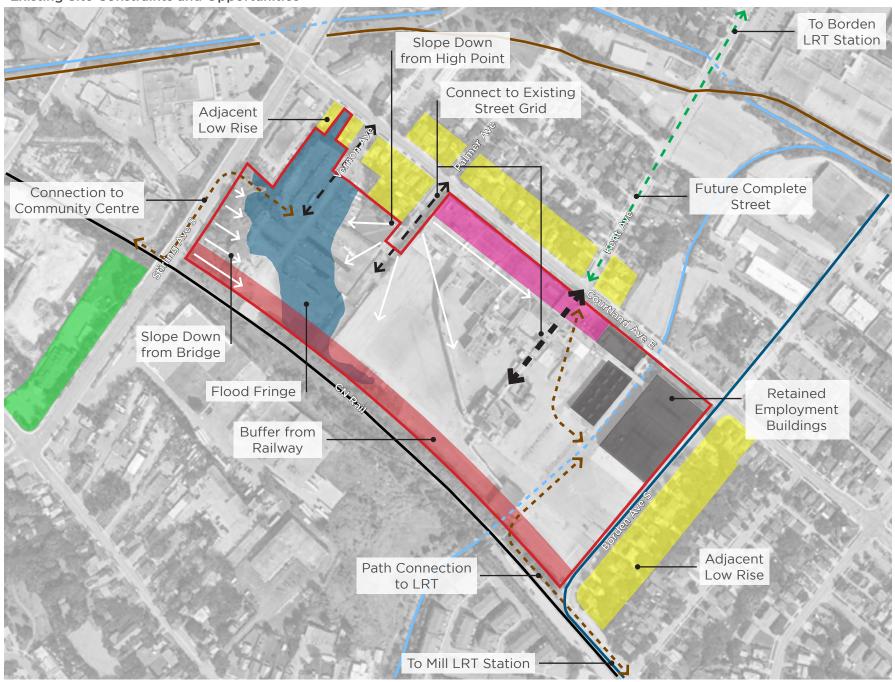


Palmer Avenue Streetscape



Schneider Creek Culvert south of CN Rail Corridor

Existing Site Constraints and Opportunities



Site Demolition Underway





Policy & Guideline Basis



3.1 Official Plan

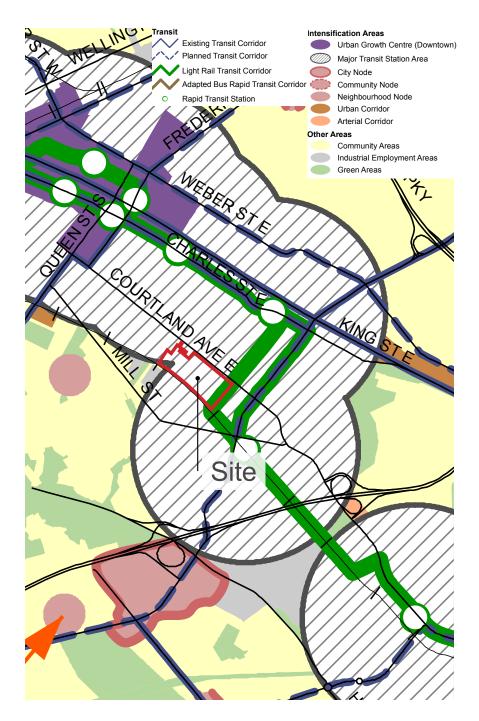
The new City of Kitchener Official Plan (the "2014 Kitchener Official Plan") was adopted by Kitchener City Council in 2014 and approved with modifications by the Region in November 2014. The following design-related sections are relevant to the site's design.

Land Use Structure

The site is part of the "Major Transit Station Area", the planned function which are detailed through Station Area Planning exercises. Generally, Major Transit Station Areas are to provide a focus for growth and development to support transit service levels, provide connections for various transportation modes to the transit system, achieve a mixture of uses, and have pedestrian-friendly and transit-oriented streetscapes and buildings. Sections 3.C.2.18 and 3.C.2.19 identify that the City will prepare Station Area plans o direct future development and redevelopment in these areas.

Urban Design

Section 11 contains the general urban design policy direction for Kitchener. At the neighbourhood level, Section 11.C.1.28 directs that development or redevelopment within Kitchener's Central Neighbourhoods is to be compatible with the existing neighbourhood. At the site level, Section 11.C.1.29 intends that existing sites are redeveloped and community infrastructure is "planned to enhance the site, buildings, open spaces and the streetscape". Section 11.C.1.31 intends that ensure new buildings are designed and existing buildings are reworked to "enhance pedestrian usability, respects and reinforce human scale, create attractive streetscapes and contribute to rich and vibrant urban places".



Sustainability

Section 7.C.4. provides the policy direction for sustainable development. Section 7.C.4.1 provides the general direction indicating that the City "will ensure that development and redevelopment strives to be increasingly sustainable". This includes encouragement, support and potentially requirements of compact development and efficient built form, environmentally responsible design and construction practices, integration and enhancement of natural features and landscapes, reduction of resource consumption associated with development, and transit-supportive development and greater use of active transportation modes. Section 7.C also contains a series of other sections and policies related to promoting and encouraging supporting sustainable development matters, including water conservation, energy conservation and efficiency, alternative energy systems, waste reduction and management, and air quality.

Parks and Open Spaces

Section 8.C provides the policy direction for parkland within Kitchener. Per Sections 8.C.1.13 and 8.C.1.15, the Parks Strategic Plan provides the direction for the requirements for open space and public parks in each neighbourhood including where future parkland is required. In respect to site selectin, Section 8.C.1.15 further indicates that the City will "select suitable sites, and plan for the complete integration of these sites with the integrated transportation system, the public transit system and multi-use pathway network". Complementing the public spaces, Section 8.C.1.21 identifies that on-site recreation facilities and usable greenspace will be required in multiple housing development and affordable housing developments. Section 8.C.1.23 identifies that the City will encourage "useable and accessible semi-public spaces in private developments that provide linkages and/or support arts, culture, recreation and leisure opportunities for its residents". Section 8.C.1.34 directs that "[p]rivately built urban squares and parks held in private ownership will not be considered part of parkland dedication".

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Streets

Courtland Avenue is identified as a "Regional Road", which are principally meant for higher capacity "people and goods movement within, through and between municipalities". Regional Roads are generally to have sidewalks on both sides of the street and dedicated on-street cycling facilities where appropriate, and new access points is to be regulated to maintain these streets' traffic carrying capacity. Borden Avenue, Palmer Avenue and Kent Avenue are all identified as a "Local Street", which are meant to "provide access to abutting properties and are not intended to carry high volumes of through traffic". Local Streets are to have sidewalks on both sides of the street and shared on-road cycling facilities.

Active Transportation

Section 13.C.1.2 supports pedestrian and cycling environments that provide "opportunities to walk and cycle for convenient travel, recreational, health, environmental and economic reasons" through such means as "integrating pedestrian and cycling facilities into existing, expanded and new development areas" and "providing pedestrian and cyclist connections to transit stops". Section 13.C.1.13 requires "new, multi-unit residential, commercial, industrial, office and institutional developments" to provide secure bicycle parking and encourages the provision of shower and change facilities for commuters. Section 13.C.1.6 encourages a mix of land uses to accommodate opportunities for walking to work and services without the need for driving or transit. Section 13.C.1.4 identifies that pedestrian-friendly streets will be designed by providing sufficiently wide sidewalks, minimizing conflicts with vehicular traffic through street design, and providing for more attractive, comfortable and safe streetscapes.

A "Planned Secondary Multi-Use Pathway/Connection (Type 2)" runs through the site's eastern portion. This is meant to provide a three-season north-south connection between Mill Street and Iron Horse Trail, following the alignment shown in the Multi-Use Pathways and Trails

Master Plan for the design, development and operation of the multiuse pathway system per Policy 13.C.2.1. Development applications are to reflect the Multi-Use Pathways and Trails Master Plan per Policy 13.C.2.2, although Section 13.C.2.3 does allow changes to the location and alignment to reflect on-the-ground conditions and opportunities with the need for an Official Plan Amendment.

Transit

Section 13.C.3.1 identifies the City "will ensure that all development and/or redevelopment proposals in areas serviced or planned to be serviced by public transit support the provision of an efficient, convenient and safe public transit service". Section 13.C.3.2 directs that the City strive to "ensure an arrangement of development and streets whereby the maximum walking distance to a planned or existing transit stop will not exceed 450 metres for 95 percent of residences, places of employment and community facilities". Section 13.C.3.12 identifies that the City will apply the relevant TOD provisions of the Regional Official Plan for the consideration of development and redevelopment applications sites served by rapid transit or higher frequency transit.

Transportation Demand Management

Section 13.C.7.1 establishes the City's support for the Region's TDM policies and initiatives. Specifically, Section 13.C.7.3 identifies "the incorporation of Transportation Demand Management measures" may be required and Section 13.C.7.4 contemplates "reduced parking requirements for development and/or redevelopment in accordance with Policy 13.C.8.2 where a comprehensive Transportation Demand Management Report is submitted to the satisfaction of the City". Section 13.C.8.6 specifically identifies that the City will develop a parking reduction strategy for land within Major Transit Station Areas to recognize and encourage rapid transit use.

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3.2 Rockway PARTS Plan

The PARTS Plans provide a more land use and design direction for each of the ION Station Areas within Kitchener. They are meant to further the policy direction of the Regional and Kitchener Official Plans concerning Major Transit Station Areas. The PARTS Rockway Plan was approved by City Council in December 2017 but has not yet been implemented through Official Plan and Zoning By-law amendments.

Station-Wide Strategies

The PARTS Rockway Plan was formulated based on a series of "Station-Wide Strategies" that sets the framework for capitalizing on the LRT investment in terms of land use and development patterns. This basis includes the following five strategic themes, each of which has nested series of specific strategies. The five themes include:

- 1. Creating a transit-supportive development pattern.
- 2. Designing streets as places.
- 3. Creating a strong park and open space network by improving connections between existing open spaces and providing a range of new open spaces.
- 4. Designing buildings that support placemaking and deliver an interesting and varied built environment.
- 5. Seamlessly integrating parking and servicing into a pedestrianfriendly and transit-supportive environment.

Key Directions

A series of "Key Directions" provides a general direction for land use and built form within the PARTS Rockway Plan. For the site, Key Direction #8 calls for the "reurbanization of the form Schneiders site" as higher intensity mixed-use development of residential and non-residential uses. Key Direction #8 for the site provides a set of eight area-specific land use and design strategies for the ultimate form of development, as follows:

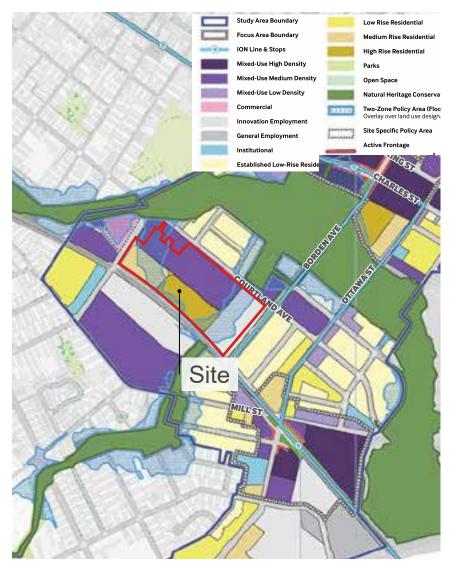
- a) Implement a framework of new land use permissions on the site to accommodate a mix of housing, innovation employment and supportive commercial uses.
- b) Through redevelopment, a significant new on-site park should be provided. The park should be designed and oriented to establish a connection between Kent Avenue and the Shoemaker Creek corridor, provide amenity for on- and off-site users, and help celebrate the history of the site.
- c) As part of the redevelopment of the site, a logical network of streets and blocks should be provided. This may include the extension of adjacent streets into the site and connections via a logical network of public or private internal streets. Alternate right-of-way widths and standards may need to be considered as long as services, utilities and amenities can appropriately be provided.
- d) Building height step-backs should be included in the zoning and design of buildings along Courtland Avenue, particularly for portions of buildings above four storeys. Attention should be given to the appropriate design of other mid-rise building areas on the site.
- e) Any buildings nine storeys and above should conform to the City's Tall Building guidelines and any related zoning regulations.
- Locate parking below grade, and / or within structures at the back of the site (subject to flood fringe policy criteria). Require reduced and shared parking between different uses on the site. Some surface parking could be considered in certain portions of the site during the initial phases of development to support the feasibility of new employment uses (in addition to the existing surface parking facility on the side of Courtland Avenue).
- g) Redevelopment should achieve a high standard of environmental (sustainability) performance and the feasibility of district energy should be studied.
- h) The site should incorporate green infrastructure, including on-site urban stormwater management features.

Preferred Land Use Plan

The preferred land use plan in the PARTS Rockaway Plan calls for the mixed-use redevelopment of the former Schneiders site, including employment, multiple residential, and mixed-use buildings. Four land use designations apply to the site: "Innovation Employment", "Mixed-Use Medium Density", "High Rise Residential", and "Mid-Rise Residential". The intent is that these designations would form the basis for the future City-initiated Official Plan Amendment implementing the PARTS Rockway Plan.

- (a) The Innovation Employment designation applies to the area around the Courtland and Borden intersection and extending along Borden to the railway. This designation is intended predominantly for office and high-tech manufacturing, including both large and small buildings, as well as opportunities for street related retail and restaurant uses to provide amenity. The Floor Space Ratio is meant to be between 0.6 to 2.0 and the maximum building height is 6 storeys.
- **(b)** The Mixed-Use Medium Density designation lines the remainder of the site's frontage portion along Courtland Avenue. This area is intended for a mixture of office, residential and retail uses with active uses at street level in a general form between 5 and 8 storeys in height, with parking in underground garages. The Floor Space Ratio is meant to be between 1.0 to 2.0 and the maximum building height is 8 storeys.
- (c) The High Rise Residential designation is on the eastern portion of the site's southern boundary shared with the CNR Railway edge, located away from the Courtland frontage. This area is intended for taller residential buildings greater than 8 storeys, building bases oriented to line streets and parks, and parking in underground garages. The Floor Space Ratio is meant to be between 2.0 to 4.0 and there is no maximum building height.
- (d) The Mid-Rise Residential designation is located to the west of

the High Rise Residential designation, along the boundaries with the CNR Railway and Stirling Avenue. This area is intended for mid-rise residential buildings with buildings between 4 and 8 storeys in height, buildings oriented to line streets and open spaces, and parking in underground garages. The Floor Space Ratio is meant to be between 1.0 to 2.0 and the maximum building height is 8 storeys.



3.3 Urban Design Manual

General Guidelines (Part A)

Part A includes the following general themes:

- Site Design Guidelines: address considerations of ensuring safe and functional site circulation; screening of site servicing components; providing landscaping that enhances the overall project and the streetscape; providing site signage that does not clutter the streetscape; providing adequate light levels and minimizing intrusion of light; minimizing emergency response time; and arranging groups of buildings to create safe, secure and usable internal spaces.
- Building Design and Massing Guidelines: promote individual architectural expression, rather than prescribing architectural styles, colours or materials, and generally seek attractive buildings forms, façades and roof designs that are compatible with surrounding buildings, complementary to neighbourhood character and existing built fabric, and that minimize microclimate impacts through building design.
- CPTED Guidelines: identify physical design measures to proactively prevent crime through site and building design. There are specific guidelines for different land use typologies and built form typologies.

PARTS Design Brief (Part B)

The Design Brief for the PARTS Station Areas is meant as a interim design direction for certain Station Areas surrounding ION Stations, including the Mill and Charles Station. The Design Brief provides general corridor-wide design guidelines for all Station Areas. The general goals of the guidelines are to:

- Manage Growth and Change: focusing and directing growth within Station Areas reinforces and optimizes public infrastructure investments, builds compact, sustainable and complete communities and encourages transit use.
- Ensure a Mix of Land Uses: the type and mixture of land uses within the Station Areas will help create a sense of place and encourage a shift towards more sustainable modes of transportation and movement. Station Areas will contain different land uses.
- Enhance Transportation Choice and Connectivity: the success of the rapid transit system and station study areas will be influenced by many factors including the provision of a range of inter-connected transportation options that are efficient, convenient, enjoyable, safe, easily navigable, continuous and barrier-free. Transportation Demand Management measures will be critical.
- es, spaces and neighbourhoods will emerge and be shaped in areas around the rapid transit stations. To ensure that each of these is successful and vibrant, the design of station study areas must carefully integrate matters of built form, architecture, public realm, streetscape, place making, safety and universal design.
- Guide Public and Private Investmen: Light Rail Transit is a significant catalyst for shaping the built form and streetscapes of our community into the future. Additional strategic investments in the infrastructure and public realm in the areas beyond the immediate LRT line and stations stops can potentially provide further amenities to leverage an area's marketability and livability.

Tall Building Design Guidelines (Part B)

The Kitchener Tall Building Guidelines are meant as an addition to the Urban Design Manual to guide the design of tall buildings in the city, defined in the Official Plan as buildings over 9 storeys in height. The Guidelines are meant to be read in conjunction with the policies of the Official Plan and guidelines of the Urban Design Manual and are meant to be applied on a case-by-case basis. The key themes of the Draft Tall Building Design Guidelines include the following:

- Building bases: that are sized and massed to support pedestrian spaces, with taller ground floors that are active, transparent, and weather protected, balconies/amenity area for street-facing elevations, and at-grade parking structures that are hidden.
- Building towers: that have a compact footprint preferably with design measures that break up the visual mass of the tower (materials, articulation, minimum step-backs from building bass, balconies, and floor plate design) and transitions in height to lower rise through sensitive design in form. For consideration of multiple tower developments, additional considerations include variation in tower height between buildings, physical separation between towers determined by the building's height and tower length, and limited overlook on surrounding towers, through mitigating design techniques as necessary
- Building tops: that have a quality expression with integrated mechanicals and usable space, and different massing, materials, and step-back changes to provide distinction.
- Safety and Security: buildings designed to maximize natural surveillance opportunities on streets and spaces with active ground floor uses, generous wall transparency, and upper storey windows and balconies
- Open Spaces: a mixture of public and private spaces, that may vary in the nature type, location and design to provide outdoor amenity area for residents.

- Public Realm: a human-scaled, varied, visually appealing and landscaped treatment within the public realm with consideration for lighting, access, seating, and weather protection elements.
- Connections: incorporation of direct, logical, and continuous publicly-accessible mid-block connections through larger sites.
- Views: tall buildings that maintain, enhance and create view corridors and vistas.
- Compatibility of built form: compatibility through heights, scale, massing, and materials, taking design cues from surrounding context, setbacks and step-backs, and contemporary styles.
- Compatibility with heritage: respect of existing heritage resources through the scale, form, character, siting of new buildings, including considerations of designing the base to respect scale, setbacks, proportions and materials of adjacent built heritage.
- Sustainability: employ design choices in design, materials, and construction, including considerations for building materials, roof design, landscaping, stormwater management, energy efficiency and generation, lighting, and waste management.
- Bird-friendly: design considerations of lighting and surfaces regarding safety for birds.
- Micro-climate: minimization of shadow and wind impacts, with mitigation through the building as warranted.

Design Standards (Part C)

Part C contains design standards that provide specifications on technical details. Many detailed design standards sections are applicable to this development, but are better implemented at the Site Plan approval stage.



4 Design Vision & Objectives



4.1 **Development Vision**

321 Courtland Ave. Developments is proposing a compact, mixed-use redevelopment of the site. It will be a true mixed-use addition to the neighbourhood, including a range of low, mid and high-rise housing options; street-fronting retail spaces; and opportunities for employment uses. The non-residential uses will include opportunities for retaining and re-purposing some of the existing buildings on the site to create distinct, vibrant commercial spaces. Public streets will extend onto the site in a fashion that connects the existing neighbourhood fabric and breaks up the large site into smaller development blocks. These new urban streets will set the basis for a tree-lined public realm accommodating walking and cycling through the site. Complementing the public streets, a publicly-accessible series of parks and plazas that run north-south through the development will be a public realm focal point for the development and the surrounding neighbourhood. Collectively the development would be tied together with sustainable approaches and green infrastructure as it concerns site and building design.

4.2 Design Objectives

The following core design objectives reflect the achievement of the above development vision for the site. These objectives adapt the general intent of the Kitchener Official Plan, Urban Design Manual and PARTS Rockway Plan tailored to the site. The objectives form the basis for the Site Master Plan and supporting design guidelines informing the components that make up the development. Collectively, the proposed design strives for:

- A true mixed-use addition to the Rockway community that incorporates a mix of employment spaces for creative and innovative industries, varied housing choices in different forms, supporting retail, service and food spaces, and recreation and amenity spaces.
- 2. A series of attractive, active and pedestrian-oriented public streetscapes for both existing bounding public streets and new internal public streets on the site, achieved through building positioning, at-grade use and orientation, and supporting design elements and features.
- 3. A connected street network and circulation pattern on the site through extensions of new public streets that break up the site into a finer-grained fabric that is complemented by mid-block circulation routes, providing for a balanced vehicular and active transportation through the site.
- 4. A pattern of building massing and orientation that reinforces public street frontages with an intimate relationship between building and streetscapes, achieved through both building positioning close to the street edge and ground floor use, design and exterior articulation.

- 5. A pattern of building scale and transitions that knits the development with the surrounding neighbourhood's fabric through a street-related mid-rise form along Courtland and Borden and transitions into the site to taller building forms.
- 6. A design of the taller buildings along the site's southern property edge with a particular attention to sculpt and articulate the upper mass of the buildings to add variety throughout the block and provide for an a attractive and distinct addition to Kitchener's skyline.
- 7. An emphasis on structured parking as the predominant arking supply through the site ultimately, with on-street parking spaces to assist with providing short term needs and surface parking and loading areas away from public views.
- 8. An architectural character that creates a contemporary approach to the overall development through a balance of "reskinned" existing buildings and new buildings that embrace an architecture and materiality providing an integrated project expression moving forward.
- 9. An encouragement of sustainable development choices and initiatives (further to the broad achievements through transit-support, urban intensification, and building re-purposing) that promote environmental sustainability within the Rockway community as part of the redevelopment of an industrial brownfield into a vibrant new neighbourhood.
- 10. A landscape scheme that softens and helps define streets and circulation routes, public and private open spaces, and buildings with plantings and features, the latter with opportunities to incorporate reflections of the site's industrial past.





5 Site Master Plan & Guidelines



5.1 Overview

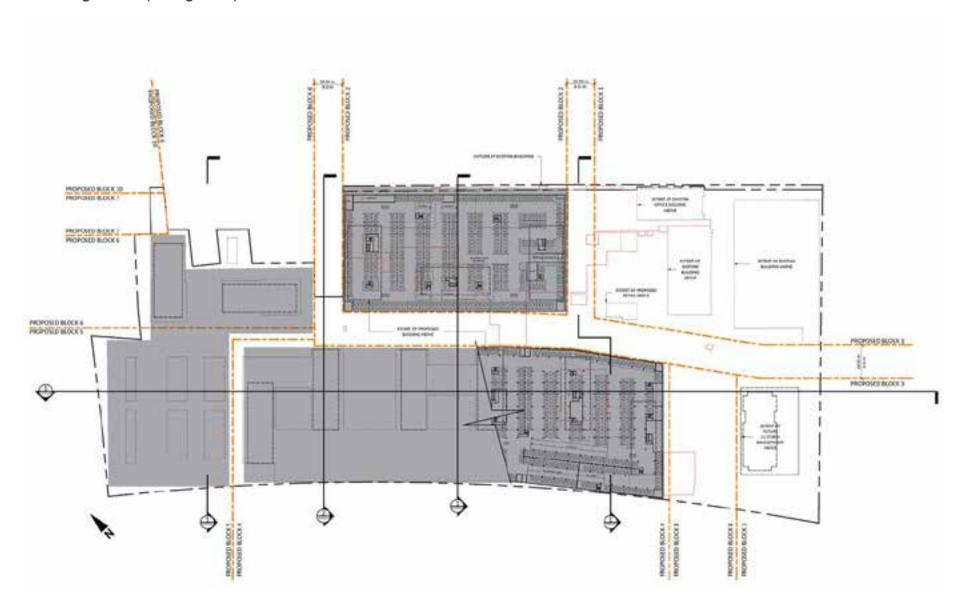
The former Schneiders site is one of the largest single redevelopment opportunities in the Rockway Station Area and the broader inner ring of neighbourhoods of Kitchener. At the time of closing, the Schneiders facility employed in the order of 1,200 employees and was a mainstay of the community throughout its history. Changing economic conditions related to larger industrial and manufacturing facilities resulted in its departure from the Kitchener landscape. The proposed Site Master Plan, however, charts a new vision for the site in its evolution to a complete and mixed community within the Rockway neighbourhood.

The design of the former Schneiders site rests on ten broad design objectives set for the site that, when taken together, strive for a compact, mixed, diverse, transit-oriented, walkable and cyclable, and sustainability community. The overall Site Master Plan for the Schneiders site illustrates the vision for the redevelopment of the site over the next 10 to 15 years. It was formulated to inform the crafting of land use policies and zoning to facilitate the site's redevelopment, recognizing it is an illustration of a long-term vision and there is a considerable amount of detailed design and associated work required to realize the vision.

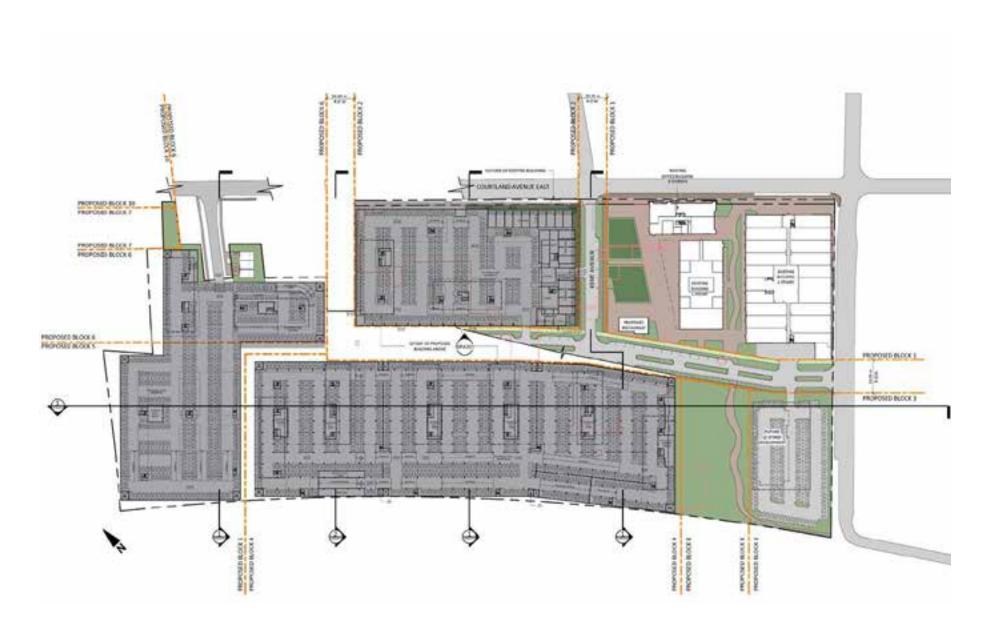




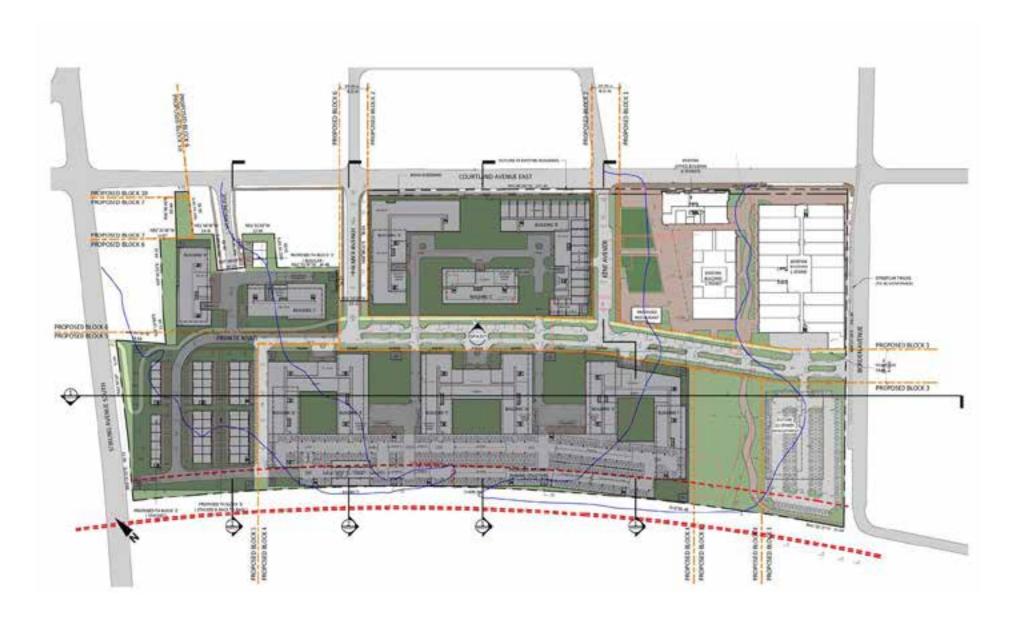
Parking Level 2 (Undeground)



Parking Level 1 (Underground)



Ground Floor Parking Level (Above-Grade)



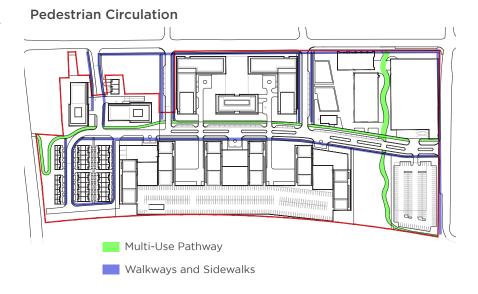
5.2 Streets

New public streets will establish the overall circulation structure and break the site into individual development blocks. These new streets provide the site with three connections to the surrounding street network through Courtland Avenue (two connections) or Borden Avenue (one connection). These would be complemented by private roadways within the individual development blocks.

Street One will be a new east-west street running from an extension of Palmer Street to Borden Avenue. It is designed with a 24-metre wide street right-of-way that will accommodate a central planted median, one travel lane in each direction, curb-side planted boulevards, a sidewalk on the south side, and a multi-use pathway and on-street parking on the north side. The north-side multi-use pathway runs between Stirling Avenue and Borden Avenue and intersects with a second, north-south multi-use pathway running through the employment block containing the three retained buildings. Street One is designed with Low Impact Development (LID) measures including permeable paving, central median bio-gardens, and perforated storm pipes.

Kent Avenue and Palmer Avenue will extend into the site south of Courtland Avenue to connect into Street One. They are designed with 20-metre wide street rights-of-way and will accommodate one travel lane in each direction, curb-side planted boulevards, sidewalks on both sides, and an on-street parking bays on one side. Portions of Kent Avenue and Palmer Avenue will have similar LID measures as Street One for infiltration purposes.

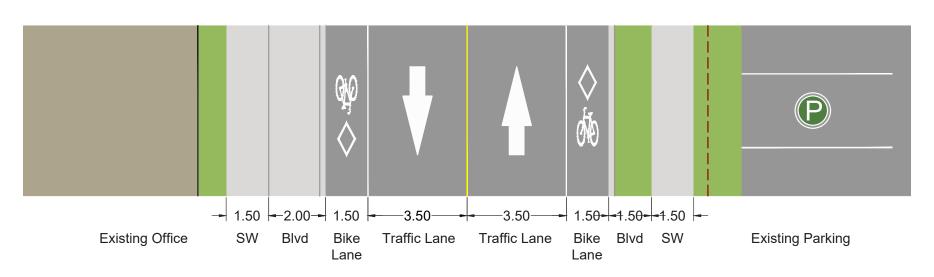
Vehicular Circulation Public Roads Private Roads/Driveways





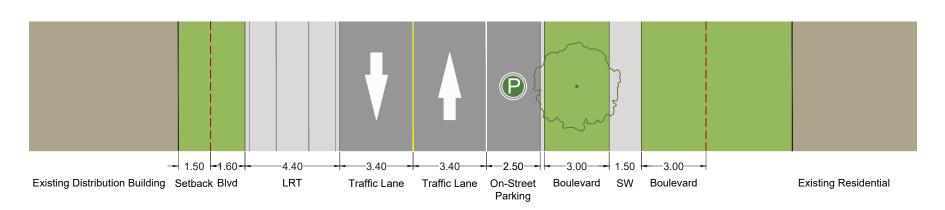


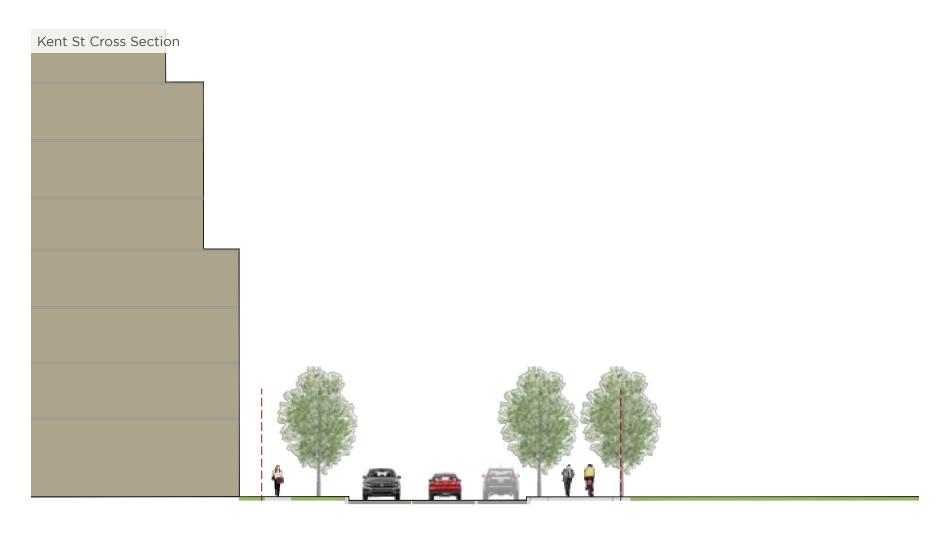


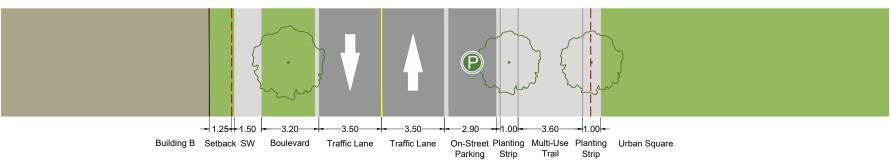














5.3 Open Spaces

The PARTS Rockway Plan calls for new parks and public open spaces as part of major developments that "include a range of amenities that respond to the character and needs of adjacent land uses and users" which, depending on adjacencies, "could include play structures, splash pads, skating areas, and more urban hardscaped plazas with seating and greenery". Additionally, it intends that as large sites redevelop, coordination of the design of new parks and open spaces is needed to ensure the "provision of a diversity of spaces that strategically address various community needs".

integrated series An greenspaces on the site, either in public or private ownership, is located and designed to achieve this aim. Formal publiclyaccessible open space on the site is provided by way of an integrated urban park and urban plaza that is meant to run north-to-south through the site connecting to Courtland Avenue. These spaces will provide for the outdoor recreation and amenity needs for residents, employees and the public. These publiclyaccessible open spaces would be complemented by the private amenity spaces on each of the development blocks, outlined in Section 5.4.2 below.





5.3.1 Public Park

Block 9 in the southeast corner of the site will be dedicated as a public park. This park is a 0.46-hectare rectangular parcel with approximately 50 metres of width along Street One and 100 metres of depth extending to the CNR rail line to the south. It is situated to be framed by the taller building forms on Blocks 3 and 4 to the east and west, respectively, and coordinated with the location of a new multi-use pathway that connects the development to the Mill ION Station.

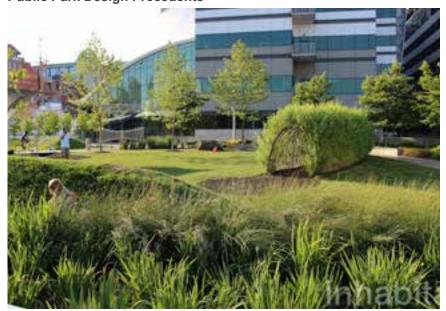
The conceptual design programs this space as a "urban green" with opportunities for walkways, open lawns, play structures, sitting areas, and supporting landscape treatments. This space is meant to provide for more structured play space for residents within the development and the public. The detailed design for this urban green should consider:

- A meandering multi-use pathway (see Section 5.4.3 below) through the space reflective of a naturalization of the Shoemaker Creek with variations in pathway width;
- o A series of different play areas catering to different age groups;
- o An open lawn space for more casual, flexible use;
- A public art installation in a prominent location along the multiuse pathway or park frontage, particularly one that is reflective of the site's history and past use;
- Pedestrian-scaled lighting and seating opportunities around the above activity spaces;
- Stormwater infiltration areas that are integrated into the landscape design and aesthetic of the space, rather than simply functional areas;
- Recognition of the interface of the park with both the abutting interim surface parking area and the 12-storey mixed-use building in the future, concerning such matters as building entrances, amenity areas, connections and privacy/overlook.

Public Park Concept Plan



Public Park Design Precedents









5.3.2 Urban Plaza

An urban plaza will be a privately-owned and publicly-accessible space as part of the adaptive re-use and redevelopment of the employment block. This publicly-accessible urban plaza extends the open space network from the public park on Block 9 across Street One into Block 1 and towards the corner of Kent Avenue with Courtland Avenue. It is comprised of the larger open space contained by Kent Avenue, Street One, and the new and retained buildings, as well as an outdoor corridor running between the retained buildings from Street One to Courtland.

The conceptual design programs this space with a predominately hardscaped character to support spill-out spaces from abutting commercial buildings and provide opportunities for larger gatherings and functions. It is meant to complement the soft-scaped character and function of the public park. The detailed design for this urban plaza should consider:

- A combination of hardscaped and landscaped spaces to provide opportunities for a diversity of activities;
- Complementary spaces for the adaptive re-use of the existing buildings, providing space for restaurant patios and a diversity of outdoor amenities within the open space;
- A series of open lawn spaces for small recreation activities as well as hardscape areas with shelters and seating opportunities as part of a central square.
- Seating opportunities throughout the space with a combination of free-standing seating and integrated seatwalls, with supporting shade structures or features as appropriate;
- Structured programmable space to provide a diversity of uses and activities, such as stages and games tables;
- Spaces lining the abutting buildings providing spill-out space for ground floor commercial uses, such as patios or retail;
- Public art or heritage elements at prominent entrances to the

- space, such as at the corner of Kent and Courtland, particularly with a character and finish that reflect the site's industrial vernacular and history;
- The bounding public streets as flexible "flat" streets, with rolled curbs and bollards, to allow it to be closed for larger public events associated with the urban plaza;
- Tasteful, pedestrian-scaled lighting accents for night-time use of the spaces and routes through the space;
- Regular planting patterns of deciduous trees framing activity spaces for shade and separation;
- Massed feature planting areas in prominent locations for visual effect and colour; and
- Continuation of the meandering multi-use pathway from the public park through the corridor between the retained buildings, using a hard-scaped treatment and accommodating informal seating opportunities.





Urban Plaza Design Precedents









5.3.3 Multi-Use Pathways

The public park and urban plaza are coordinated with the series of multi-use pathways running through the site. A multi-use pathway would run from the bend in Borden Avenue at the site's southeast corner, through the public park crossing Street One, and between the retained buildings on Block 1 towards Courtland Avenue. This alignment also accommodates a future connection crossing the CNR rail line corridor and connecting to Mill Street to the south as part of the overall trail network. This multi-use pathway intersects with the proposed east-west multi-use pathway running from Stirling Avenue to Borden Avenue through the Street One right-of-way and development blocks.

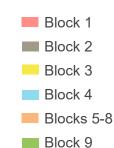
Multi-use trails should have a travelled width of at least 3 metres, outside of which may be edge landscaping or the street boulevard. They should have concrete or asphalt surfaces and be visually different from sidewalk surface materials in terms of texture and/or colour. Signage along the route, either trail side free-standing signs or those that are part of the trail surface, should be included at key locations for decision-making along the route.





5.4 Development Blocks

The street network of the Site Master Plan organizes the site with six distinct development blocks, each with differing forms and function. In total these development blocks will contain in the order of 2,800 residential units in low-rise, mid-rise, and high-rise building forms as well as 19,200 square metres of office and employment space and 3,200 square metres of supporting retail and personal service space throughout an employment and commercial cluster. Section 5 of this report provides common design guidance that is generally shared by all blocks while Section 6 provides specific design guidance related to particular blocks concerning built form and function.





5.4.1 Streetscape Landscaping

The setback space between the building wall and public right-of-way should incorporate a well-designed landscape treatment that bridges the gap between the public and private realms of the streetscape.

For residential buildings with ground floor residential units, ground level plantings should complement street trees within the public rights-of-way to provide interest and help distinguish the public-private boundary. Groupings of plant materials should be used to frame building elevations and accentuate building entrances and walkways. Ground level plantings should be selected based on form, hardiness, seasonal interest and colour, and maintenance requirements, with a preference for native species which demonstrate higher tolerances for urban conditions including heat, drought and salt exposure. A diversity of plant material that provides visual interest throughout the year should be used, including deciduous and coniferous species and combiantions of shrubs, ornamental grasses and perennials to achieve different forms and textures. Plantings along the street edge should be no more than 1 metres in height or 0.45 metres at street corners to avoid creating entrapment and to preserve sight line triangles.

For mixed-use buildings with ground floor commercial uses facing the public streets, landscape treatments should extend from the public sidewalk to the building front to establish a unified quality to that of the public realm. This is generally expected to a more hard-scaped environment with plantings to accentuate. Durable and easily maintained surface materials that provide opportunities for adding colour and breaking up the mass into smaller fields should be used. At-grade plantings and furnishing details can include raised concrete planters between entrances where space permits, decorative pedestrian-scaled lighting fixtures on poles along the internal roadway, and benches, bicycle racks, and trash receptacles near retail entrances. As well, larger planted reas can be accommodated, further to design guidance related to residential buildings above.





5.4.2 Private Amenity Spaces

Publicly-accessible spaces will be complemented by private outdoor amenity spaces on residential development blocks for the use of building residents. The apartment blocks include at-grade courtyards between the buildings as well as rooftop communal terraces that provide opportunities for a range of casual use activities and functions, while the contemplated stacked townhouse forms provide individual rooftop terraces for residents. The design of these different spaces should, when considered together, capture a broad range of functions and elements to diversify the recreation opportunities available to residents and visitors.

For courtyards:

- Courtyards should be formed by abutting building masses on the block, internalizing and insulating these spaces to a certain degree from the abutting public street and situated to maximize natural surveillance opportunities from buildings, streets and walkways.
- Courtyards should have clearly defined walkways through the space that are lined with canopy trees and plantings to frame the open space and connect with building entrances. Softscape areas within courtyards should include combinations of open sod areas, planting beds (raised or at-grade), and groundcover areas to provide opportunity for outdoor gathering of small groups and individual users. In such areas, the height, form, colour and seasonal qualities of tree and ground plantings should be considered based on their proposed use location and whether irrigation is present.
- Hardscape areas with courtyards should include walkways, sitting areas, and other activity spaces. Paving materials such as coloured or textured concrete should be used within the courtyard areas, with unit paving, or natural stone pavers used as accents and banding.

- Slopes within the courtyard hardscaped areas should be relatively level, with ramps provided where grade transition is required, or the use of cast-in-place seatwalls or raised planter beds should be considered where appropriate to retain grades and provide interest to the space.
- Elements such as plantings, decorative fencing, bollards, or structures should be used in combination to act as edge treatments and to frame points of interest or courtyard access points by providing differentiation between private, semi-private, and public areas.
- Consideration should be given to providing canopied structures for shade and shelter from the elements where group seating areas are proposed.
- All entrance points and walkways should be well lit, and distinguish which areas are public or private through the use of wall sconces, bollard and pathway lighting, as well as pedestrian scaled light standards where appropriate.



For rooftop terraces:

- Rooftop terraces can be located on the podium base or top storey rooftop and are typically more hardscaped in nature.
- Co-locating terraces with indoor amenity areas allows a flow between indoor and outdoor spaces for residents.
- The landscaped design of rooftop terraces can include a series of smaller "rooms" within the rooftop that provide for different functional areas and some privacy between spaces.
- Terraces should principally be hard surfaced for durability and incorporate informal and more formal seating areas including the potential for cooking and warming facilities, and opportunities for raised and deckplanted plantings and trees.
- Green roof portions should be encouraged for planting, water-runoff, and cooling purposes.
- Terraces should incorporate mitigation measures of wind assessments, if any recognizing the proposed mid-rise form, to ensure comfortable outdoor living spaces.
- Terraces should be complemented by individual unit balconies and terraces where space and design intent permits.





5.5 Sustainable Design

Sustainable design entails a comprehensive, holistic approach to the design, construction, operation and maintenance of sites and buildings. While LEED or another rating system is not being targeted for the project, utilizing individual sustainability techniques, whether individually or as a group, are encouraged. Sustainability comes at three general levels: the neighbourhood, site, and building levels of design

Neighbourhood-level sustainability comes from features or contextual situations that are naturally inherent from the site. At the neighbourhood level, many sustainable benefits are inherent within the proposed redevelopment, including:

- Remediation and redevelopment of a brownfield site within the existing fabric of Kitchener's Rockway area.
- Accommodation of different lifestyle needs for residents with a range of different housing types, forms and sizes.
- Provision of a complete neighbourhood with a potential for a mix of residential, commercial, community, and recreational activities.
- Provision of a compact neighbourhood with built form densities that efficiently use land and support rapid and local transit uses.
- Interconnected system of sidewalks, walkways, multi-use trails, on-street bicycle facilities, and open spaces that promote opportunities for active transportation choices.

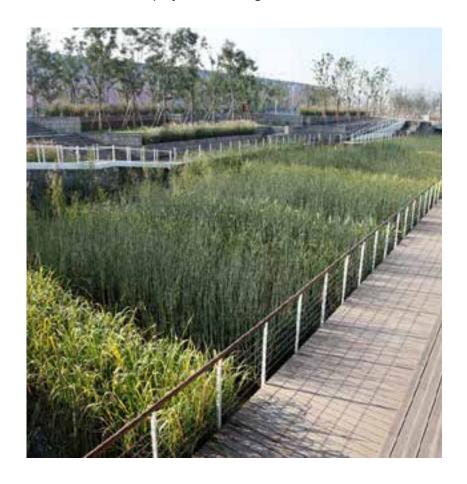




Site-level sustainability comes from the arrangement and design of the site's spaces and functions, outside of buildings. For designing the site's outdoor areas and functions at the more detailed stages of development, the following should be explored:

- Maximize the use of structured parking facilities (either underground or above ground) versus surface parking areas.
- Divide larger surface parking areas with landscaped areas to minimize impervious surfaces.
- Use permeable or pervious surface materials for surface parking areas.
- Use high albedo surface materials on surface parking areas, such as concrete or light coloured asphalt, to minimize heat absorption.
- Use deciduous trees in strategic locations surrounding buildings to provide natural shading.
- Select native species of plants that are hardy, salt tolerant, and sustainable in an urban environment.
- Use structural soils for street planting to establish a healthy canopy of trees along all streets over time.
- Use a diversity of street tree species to avoid a monoculture that may be susceptible to disease.
- Use xeriscape planting practices, including the use of droughttolerant plant species, to avoid the need for irrigation systems and maximize water conservation efforts.
- Consider landscape schemes that use groundcover plants and mulching of plantings beds to reduce weeds and maintain soil moisture, in lieu of sod that would require intensive watering and maintenance.
- Incorporate opportunities for utilizing non-potable water sources where irrigation is required, such as roof capture, in combination

- with efficient, centralized drip irrigation systems.
- Utilize rainwater practices for ground infiltration where re-use is not needed, such as permeable surfaces, drainage swales, infiltration trenches, or soakway pits.
- Undertake lighting plans that ensure a uniform level of lighting across the site, accent pedestrian activity areas, and utilize energy efficient fixtures.
- Consider incorporating alternative roof designs and use (green roofs, blue roofs, or white roofs) on large exposed roofs of buildings, which may include above-grade parking structures or retained employment buildings.



Building-level sustainability comes from both exterior and interior design, recognizing the planning process concerns itself principally with the form and exterior finishes. For laying out and designing buildings at the detailed stages of development, the following should be explored:

- Maximize the amount of north-facing building exposures which provide diffuse daylighting and south-facing passive solar heating opportunities
- Balance the wall-to-window ratio between interests of energy efficiency and urban design objectives for visibility and transparency.
- Maximize the amount of natural daylighting into building interiors to minimize energy use.
- Maximize the use of passive ventilation opportunities through building design to reduce energy requirements.
- Incorporate interior controls for climate and lighting that can be tailored to individual building users to optimize energy requirements.
- Incorporate internal areas for the collection and sorting for garbage, recyclables, and organic waste.
- Implement construction waste management plans that divert most construction waste from the landfill stream.
- Establish minimum thresholds for use of reused, recycled, or reclaimed materials in construction practices.
- Select materials on those that are regionally sourced and those that are renewable.
- Implement a Transportation Demand Management plan for the building in keeping with TDM guidelines above.
- Consider incorporating alternative roof designs and use (green roofs, blue roofs, or white roofs) on large exposed roofs of buildings, which may include above-grade parking structures or retained employment buildings.

5.6 Transportation Demand Management

The site inherently supports movement by transit and active modes given its advantages related to proximity to ION Stations; bus routes and Iron Horse Trail; the proposed compact and mixed-use nature of the development; and new public sidewalks, walkways, and bike routes through the site. The proposed development plan will include bicycle parking spaces (indoors and outdoors) as part of all residential and non-residential buildings and shower and change facilities within the non-residential buildings, which are both Transportation Demand Management (TDM) measures to reduce car travel needs. Minimum requirements for both measures are included with the proposed zoning for the site.

These TDM measures support the minimum vehicular parking rates in the proposed zoning which are set below the current rates in Kitchener's By-law 85-1 (but are in-line with those in the draft CROZBY by-law). Development providing the minimum parking rates should be encouraged as a further TDM measure, particularly given proximity to rapid transit options in the immediately surrounding area.

Further to these TDM measures regulated through zoning, other measures should be explored at the time of detailed design. Such TDM programs for buildings or grouping of buildings include such measures as shared parking between different land uses, Travelwise memberships, car share programs, TDM coordinator and support programs, unbundled parking, and paid parking.



6 Block Plans & Guidelines



6.1 Block 1 – Courtland Mixed-Use (Employment)

6.1.1 Intent

Block 1 is a 1.7-hectare parcel situated at the corner of Courtland Avenue and Borden Avenue, bound by Courtland, Borden, Kent and Street One. Its location corresponds to the three existing buildings on the site that will be re-purposed as a mixed-use employment cluster. The development of this block reflects the "Innovation Employment" land use designation of the PARTS Rockway Plan (described in Section 6.8 of this Report).

The existing six-storey Office building along Courtland Avenue will be maintained generally in its current exterior form with an interior fit-up for office and retail space. This building would accommodate approximately 1,075 square metres of ground floor retail space and 5,350 square metres of office space on the second through sixth floors. The ground floor exterior of this cast concrete building would be opened to better relate to the Courtland Avenue edge for pedestrian interaction with new office spaces on the upper floors, while exterior changes may be made to update and better fit with the intended character of the employment block.

The existing one-storey Distribution building sitting at the corner of Courtland Avenue and Borden Avenue will be retained and will undergo significant exterior re-cladding and interior fit-out for new office space targeted to technology and creative industries. This building would accommodate approximately 8,650 square metres of office space on two floors, including the existing first floor and a new second floor. The design of these spaces would take advantage of the large volume and high ceilings (two storey equivalent building) to break up the larger building into a series smaller office spaces that reflect contemporary trends for technology and creative businesses prevalent throughout Waterloo Region.

The existing one-storey Garage building positioned between the two other buildings would be retained in its current form with exterior works and interior-fit up for retail and service commercial spaces. This building would accommodate approximately 8,650 square metres of office space on one floor. This design of this building's spaces would emphasize the character of this existing red-brick building with retail openings that face out on the urban plaza to the west and the interior courtyard to the east shared with the other existing buildings. This space provides opportunities for a distinct retail character that relates to the existing building and its surrounding context of buildings and open spaces.

Added to these re-purposed buildings, a new one-storey building surrounds the intersection of Street One and Kent Avenue on the site. This building would be smaller scale in the order of 250 square metres of floor space. This new building is intended to accommodate a distinct restaurant / craft brewery as part of the employment block to serve the site and broader neighbourhood, located as an activity point on the edge of the urban plaza.

Vehicular access to Block 1 is limited to the existing loading access on the south side of the distribution building (Existing Building 3) accessed from Street One and aligned with the access to interim surface parking lot on Block 3. No parking is provided on Block 1; rather, it will be accommodated by the existing parking lot on the north side of Courtland Avenue (existing 120 parking spaces) that forms part of the owner's larger landholding as well as by the interim surface parking lot on Block 3.







Re-purposed Distribution Building at Borden/Courtland







6.1.2 Design Guidance

(a) Vehicular Circulation

Vehicular access to Block 1 will be limited to a single access from the Street One frontage, providing access to existing loading facilities within the re-purposed Distribution building. Further accesses to Street One or Kent Avenue are not desired given it would result in interruptions of the urban plaza.

(b) Pedestrian Circulation

The public streets bounding Block 1 will provide public sidewalks (Courtland, Kent, Borden) or a multi-use pathway (Street One) that will be the principal movers of people to and from the block. The length and mass of the three re-purposed buildings provides many options and opportunities for new openings for ground floor retail and commercial entrances. There are opportunities for multiple openings directly onto the urban plaza, to the Courtland Avenue frontage, and to the outdoor "corridor" between the Distribution, recognizing that detailed floor plans will dictate those decisions. Office, and Garage buildings. Circulation routes through the urban plaza and corridor should be supported with surface materials, furnishings, landscaping and pedestrian-scale lighting that are high-quality, functional and universally accessible.

(c) Parking and Loading

Block 1 does not contain parking, but rather will be served by proposed parking on Block 3 in the shorter term as well as existing parking area on the north side of Courtland. A loading function is maintained on the south side of the Distribution building as it generally exists today although substantially smaller in scale. A building extension for the loading facilities extends south of the loading area and will screen views from Borden Avenue. Opportunities for fencing and screening plantings should be explored, where space and truck turning movements permit, between the loading area and the multi-use pathway along the north side of Street One.

New Restaurant Building (Left) and Re-purposed Garage Building (Right) Along Street One



(d) Building Height

The PARTS direction calls for a maximum of 6 storeys for buildings, through new buildings or additions. The existing building heights of the re-purposed buildings are intended to remain unchanged (although additional floor space is to be created in the Distribution building with a new second floor in the interior building cavity). The proposed new restaurant is meant to be a single storey building. Minimum building heights are not warranted given the nature of the block and its existing building fabric.

(e) Building Setbacks

The existing building setbacks to Courtland Avenue and Borden Avenue are set and occupy most of the frontages, so new buildings are limited on Block 1. While an intimate relationship to street edges is generally desirable for commercial buildings, the proposed new commercial building (restaurant) should have flexibility in building setbacks that allows for alternative building positioning and orientation depending on the intended relationship between the building and the surrounding urban plaza.

(f) Building Length

Although large new buildings on Block 1 are not expected given the existing building fabric, similar to Block 2 buildings should be no longer than 70 metres.

(g) Ground Floor Design

The Distribution building is meant to be re-clad with contemporary materials and a regular rhythm of new window openings along the length of the Borden, Courtland and the elevations facing the outdoor corridor to provide natural light into the anticipated creative industries. This treatment is intended to carry up the height of this existing single

storey building with a "double-storey" height. Entrances to this repurposed building have not been finalized as yet (the conceptual floor plans on the following pages are solely illustrative), but a series of entrances along Courtland as a principal entrance and along the outdoor corridor that "spill out" into this shared space are encouraged.

The Garage building is meant to embrace its industrial vernacular characterized by its red brick cladding. Additional openings for doors and windows are meant to support a range of smaller and larger retail and service commercial uses as the retail focus for the overall site. A regular rhythm and frequency of new windows and retail entrances are encouraged, particularly along the west side facing the urban plaza and east side facing the outdoor corridor, although building tenancies and floor areas will dictate.

The Office building is expected to stay largely in its existing exterior condition as compared to the Distribution and Garage buildings. New ground floor retail uses as part of the Office building re-work should incorporate significant glazing components for transparency to the street and should consider accentuating canopies and signage to highlight the retail spaces. As well, attached or free-standing shade structures are encouraged on this side of the building to extent the function of retail and restaurants onto the urban plaza.

New buildings on Block 1 should have a minimum floor-to-floor height of 4.5 metres to accommodate internalized loading areas, flexibility for difference commercial uses and prominence of retail spaces as part of the ground floor realm. Transparency of the wall elevations and outdoor seating areas are particularly important considerations considering this building's relationship with the urban plaza. Design features and treatment should reflect this prominence.

Block 1 - Conceptual Floor Plan Option (A)



Block 1 - Conceptual Floor Plan Option (B)



(h) Upper Storey Stepbacks

Step-backs may be warranted for any new mid-rise buildings up to the maximum height of 6 storeys, but it depends on form and intent. Generally, a minimum 1.5 metre step-back on the 4th or 5th floors can provide sufficient distinction of the upper storeys.

(i) Building Articulation

More specific design guidance on articulation of the three existing buildings is not warranted at this time, given the variety of appropriate options and methods for re-purposing these building and in the interest of keeping options open for flexibility of design. The general goal for these buildings should be to establish a contemporary character that blends new with old, transparent building faces at-grade contributing activity, and accents and features that support the key outdoor people place. The Garage building warrants more subtle touches that build on its more traditional industrial vernacular. The Office building is expected to undergo more minimal exterior works related to further enhancing the pedestrian experience along Courtland. The Distribution building provides a large canvas for creative touches and coloration that meshes with the creative interior spaces and businesses and industries. Across all three buildings, building articulation features that support a pedestrian realm should be a priority, including careful consideration of windows and fenestration, entrance doors, and building canopies.

6.1.3 Zoning Considerations

A MU-2 Zone with permissions for a range of office and technology and technology-supportive uses and prohibitions on residential uses is proposed for Block 1. The following special regulations are warranted for built form and design matters in the Block 1 zoning:

- MINIMUM and MAXIMUM Yards to Courtland, Borden, Kent and Street One of 1.5 to 7.5 metres to clarify and refine the "build-to" area of minimum and maximum yard setbacks to respective streets for the site. MAXIMUM Yard abutting Kent up to 10 metres where the yard contains a publicly-accessible landscaped area, to allow for an increased maximum setback where the building faces onto the private urban plaza or similar space.
- MAXIMUM Building Height of 25 metres to reflect the nature of taller commercial floors in mixed-use or stand-alone buildings.
- MINIMUM Width of Primary Ground Floor Façade of 50%
 of the length of abutting street lines, including all new and
 existing buildings on the lot to ensure it measured across all
 existing and new buildings on the site.





6.2 Block 2 – Courtland Mixed-Use (Residential)

6.2.1 Intent

Block 2 is a 1.4-hectare parcel situated along Courtland Avenue bounded by Kent Avenue, Palmer Avenue and Street One. It is to be developed for medium density residential uses in keeping with the location and direction of the "Mixed-Use Medium Density" land use designation of the PARTS Rockway Plan. The proposed zoning also has permissions for ground floor retail and office uses.

Three buildings (Buildings A, B and C) containing a total of 539 apartment units are arranged on Block 2 in a perimeter fashion to provide street presence along Courtland, Palmer, Kent and Street One. Buildings A and B extend along Courtland Avenue and around Kent Avenue and Palmer Avenue as "L-shaped" buildings. Buildings A and B provide a transition in height from Courtland Avenue into the site with five-storey portions along Courtland that rise to seven storeys extending along Kent Avenue and Palmer Avenue towards Street One. Given grade differences across this block, Building A is lined with integrated 2-storey at-grade "townhouse" units that provide an active edge to the otherwise exposed edge of the parking garage where it rises out of the ground. Building C frames Street One as an eight-storey building.

The three buildings surround an internal courtyard space that provide opportunities for outdoor amenity areas for residents and visitors. Driveway access to Block 2 would be provided from Street One aligned with Block 4 to the south, internally on the site rather than from Courtland, Kent or Palmer directly. Parking for Buildings A, B and C would be provided by a stand-alone two-level underground parking garage with 619 parking spaces.

Mid-Rise Buildings at Courtland Streetscape







Looking North West

6.2.2 Design Guidance

(a) Vehicular Circulation

Vehicular accesses to Block 2 are preferably limited to Street One, although accesses to Kent Avenue and Palmer Avenue could be contemplated, so that service and loading functions can be positioned behind the building street wall along Courtland Avenue. Accesses to Street One should be aligned with similar accesses to Block 4 on the other side of Street One to limit traffic conflicts for drivers and pedestrians. As well, they should be appropriately spaced to the intersections of Palmer Avenue and Kent Avenue with Street One to minimize traffic conflicts. Such accesses should provide for a safe and direct circulation route internal to the site that provides for drop-off space, access to loading spaces and areas, and turnaround facilities.

(b) Pedestrian Circulation

The public streets bounding Block 2 will provide public sidewalks (Courtland, Kent, Palmer) or a multi-use pathway (Street One) lining the block's edge that will be the principal movers of people to and from the site. Main building entrances or pass-through entrances between the street and the block interior should be provided on the Courtland, Kent and Palmer frontages to connect, although individual units entrances are also encouraged (see Ground Floor Design below). These mid-block connections should have surface materials, furnishings, landscaping and pedestrian-scale lighting that are high-quality, functional and universally accessible as part of the overall landscape design of the interior part of Block 2.

(c) Parking and Loading

The proposed development incorporates all parking on Block 2 within two levels of an underground parking garage (portion exposed given grades) and internalized loading spaces. Should plans change and integrated above-grade parking be pursued, they should treated appropriately as integral component of the building architecture and should be, at a minimum, lined with ground floor active uses facing

Courtland, Kent and Palmer. Surface parking and loading spaces should be minimized to the extent possible, although a small area(s) of surface parking internalized on the block may be appropriate where screened/edged by landscaping.

(d) Building Height

The proposed maximum building height for Block 2 is 8 storeys in keeping with Medium Intensity Mixed Use designation of the PARTS Rockway Plan. Further to this maximum, the minimum building height should be 3 storeys (or approximately 10.5 metres) to ensure a reasonable street wall height along the perimeter of the bounding streets and ensure an efficient use of the site.

(e) Building Setbacks

The base of mid-rise buildings should be positioned close to the street edge to reinforce activity and interest along the bounding streetscapes of Block 2. The street wall portion of new mid-rise buildings, being those portions of the buildings associated with the minimum building height of 3 storeys, should be built generally within 1.5 to 5 metres of the property line. Mixed-use buildings with commercial at-grade should be closer to 1.5 metres for interaction and activity purposes while residential atgrade buildings should provide more space for privacy purposes (see Ground Floor Design). Buildings should have at least 80% of the facing building wall within this build-to zone; the remaining portion of building wall can be setback up to 7.5 metres to provide for different functions, including entrances, outdoor sitting areas, landscaping, or variation in the building envelope. While this setback range is appropriate for the Courtland Avenue, Kent Avenue and Palmer Avenue, buildings along Street One warrant a larger setback, upwards of 10 metres in general, to accommodate the multi-use pathway alignment on the north side of the street.

(f) Building Length

Buildings should line the bounding public streets of Block 2 in a perimeter block fashion to frame these public streetscapes with a built edge. A minimum of 50% of the length of the abutting street lines should contain buildings within the build-to lines of the ground floor setbacks to ensure a strong street edge. With this is mind, buildings along the Courtland Avenue and Street One frontages should generally be no longer than 70 metres to ensure openings in the form along the streetscapes and to provide opportunities for mid-block circulation and open spaces. Buildings lining Kent Avenue and Palmer Avenue are appropriate to line the entirety of those public frontages given the narrower depth of the block.

(g) Ground Floor Design

At-grade retail is generally desirable along the length of Courtland Avenue in the interests of active streetscapes. Mixed-use buildings with retail at-grade on Block 2 should have a minimum floor-to-floor height of 4.5 metres to accommodate internalized loading areas, flexibility for difference commercial uses and prominence of retail spaces as part of the ground floor realm. Residential units located at grade are also permitted but do present different considerations concerning transition and privacy to facing residential living spaces. A minimum 3.5 metre separation between the building wall and property line along the street should be used to provide for landscaped space distinguishes a public to private realm transition. Together with a horizontal separation, taller floor-to-floor heights also at least 4.5 metres taller with raised floors (minimum 0.9 metres) and steps should be considered to provide further privacy to such residential units. Such raised situations are appropriate for units either with individual entrances leading to the public sidewalks or units with facing outdoor amenity space.

(h) Upper Storey Stepbacks

New mid-rise buildings on Block 2 should incorporate step-backs of upper storey massing to abutting public street frontages. Given the entirety of the perimeter is bound by public streets, the extent and nature of step-backs varies. They serve two general purposes.

Larger step-backs are meant in situations requiring a transition to surrounding or abutting low-rise properties, but also additionally provide for sun penetration and reduction of visual perception. Midrise buildings along Courtland Avenue warrant such larger step-backs given the context of detached dwellings on the other side of the street. Setbacks of at least 15 metres from the lower storeys is appropriate to provide for upper storey separation.

Smaller step-backs can provide relief to "pedestrian perception" from street level for pedestrian comfort purposes related to the height of mid-rise forms. Such setbacks are warranted along the side streets of Borden Avenue, Kent Avenue and Street One around the sides and rear of the blocks facing Courtland Avenue. A minimum setback of 1.5 metres is appropriate above the third or fourth storeys along these public frontages. Additional step-backs on the uppermost storeys can also assist in providing additional definition to the roof mass of buildings.

(i) Building Articulation

Mid-rise buildings on Block 2 should be refined and articulated to demonstrate their prominence on broader site and interface with Courtland. Generally, a contemporary architectural expression is desirable for Block 2 buildings in terms of form, materials and colouration. Longer building masses lining the bounding public streets

of Block 2 should be articulated, both horizontally and vertically, with a variety of means. This includes considerations for recessions or projections of the building envelope with a regular rhythm of divisions along the street as well as architectural touches related to changes in materials and colours, balcony design, and supporting architectural features. Materials should be high quality and durable, including consideration for brick, stone, and masonry products as principal base materials.

The ground floor articulation of Block 2's buildings should be a design priority given their context. Higher proportions of transparent windows and doors on the ground floor along the bounding streets are important, although a balanced proportion of solid and glass fits the context and brings energy conservation benefits. Glass of the ground floor and above two storeys should have visual markers and any reflection to avoid bird collisions. Canopies and other similar features should be provided at a minimum for main building entrances, although mixeduse building with at-grade retail building may warrant longer canopies that span the building wall for architectural affect and coverage. "Cutouts" of the building corner at the ground floor where two building intersect can provide additional space, visibility and weather protection functions.

6.2.3 Zoning Considerations

A MU-2 Zone with permissions for a range of multiple residential and ground floor non-residential uses is proposed for Block 2. The following special regulations are warranted concerning built form and design matters for inclusion in the Block 2 zoning:

- MINIMUM and MAXIMUM Yards to Courtland, Kent, Palmer and Street One of 1.5 to 7.5 metres to clarify and refine the "build-to" area of minimum and maximum yard setbacks to respective streets for the site, recognizing in respect to the rear yard that there are no "true" rear yards on the site as the perimeter is bounded by streets.
- MAXIMUM Yard on Street One additional up to 10 metres to recognize a greater setback to Street One to provide opportunity for greater separation to multi-use pathway on the north side of Street One and additional space for landscaping efforts.
- MINIMUM Building Height of 11 metres to ensure a minimum building height of 4 storeys reflective of the general direction of the Mixed-Use Medium Density designation in PARTS Rockway.
- MAXIMUM Building Height of 34 metres with those building portions exceeding 18 metres in height at at least 20 metres from Courtland to establish an 8-storey maximum the block with transition requirements that limit building heights within 20 metres of Courtland to provide a transition in height per the general direction of PARTS Rockway.
- Dwelling units may be located on the ground floor of a Multiple
 Dwelling building to allow for ground floor residential units that
 assist in providing activity and interest along the street edge,
 including the intended integrated "townhouse" units that line the
 edge of the parking garage where it would otherwise be exposed given final site grades.







6.3 Block 3 – Borden Future Mixed-Use Development

6.3.1 Intent

Block 3 is a 0.58-hectare parcel situated at the southwest corner of Borden Avenue and Street One. This block is intended to accommodate a surface parking lot in the interim to serve the employment uses on Block 1. In the future, this block will be redeveloped as a 12-storey mixed-use building (Building L) containing 248 apartment units and office spaces and other commercial uses on the lower floors as the last phase of development. This block reflects the location and general intent of the "Innovation Employment" designation in the PARTS Rockway Plan, recognizing the integration of residential uses in mixed-use forms.

Building L is meant to provide a transition between Borden Avenue and the taller buildings proposed on Block 4 to the west of the proposed public park. Access to this block is provided from Street One aligned with the access to Block 1, office an and a separate underground parking garage to serve residents and employees on Block 1.

6.3.2 Design Guidance

(a) Interim Condition

The long-term vision for Block 3 is the development of a higher-rise mixed office and residential building. In the interim, though, Block 3 is envisioned as a surface parking lot that will accommodate parking needs for the Block 1 employment and commercial activities. This surface parking lot should be bounded by 2 to 3-metre wide landscaped strips surrounding the perimeter for plantings to provide an attractive edge recognizing the interim nature of Block 3. Substantial plantings within the internal areas of the parking lot, while typically warranted to be break up the space, is not appropriate in the interim for reasons of waste of resources given the proposed long-term redevelopment. Further this interim guidance, the below guidance applies to long-term redevelopment of the site for a new mixed-use building.

Massing of Future Building Flanking Public Park



(b) Vehicular Circulation

Vehicular accesses to Block 3 should be limited to Street One, and away from Borden Avenue. Accesses to Street One should be aligned and coordinated with loading accesses to Block across the street to minimize turning movement conflicts with larger vehicles.

(c) Pedestrian Circulation

Street One and Borden Avenue will provide public sidewalks lining the block's edge that will be the principal movers of people to and from the site. Walkways lining the west and east sides of the building should be provided that feed into the public park and Borden Avenue, respectively. These connections should have surface materials, furnishings, landscaping and pedestrian-scale lighting that are high-quality, functional and universally accessible as part of the overall landscape design.

(d) Parking and Loading

The proposed development incorporates all parking on Block 3 within an underground parking garage and internalized loading spaces. Should plans change and integrated above-grade parking be pursued, they should be treated appropriately as integral component of the building architecture and should be, at a minimum, lined with ground floor active uses Street One. Surface parking and loading spaces should be minimized to the extent possible, although a small area(s) of surface parking internalized on the block may be appropriate where supported by landscaping.

(e) Building Height

The proposed plan incorporates a 12-storey development with substantially upper-storey setbacks as described below. Further to this maximum, the minimum building height should be 3 storeys (or approximately 11 metres) to ensure a reasonable street wall height along the perimeter of the bounding streets and ensure an efficient use of the site.

(f) Building Setbacks

The base of a taller building on Block 3 should be positioned close to the street edge to reinforce activity and interest along the bounding streetscapes. Along Street One, the street wall portion of buildings should be built generally within 1.5 to 5 metres of the property line. Mixed-use buildings with commercial at-grade should be closer to 1.5 metres for interaction and activity purposes while residential at-grade buildings should provide more space for privacy purposes (see Ground Floor Design). Borden Avenue warrants a greater minimum setback, approximately 4 to 5 metres to provide reflect the nature of the facing low-rise properties on the east side of Borden Avenue.

(g) Building Length

A minimum of 50% of the length of the abutting street lines of Street One and Borden Avenue should contain buildings within the build-to lines of the ground floor setbacks to ensure a strong street edge. Buildings along the Courtland Avenue should generally be no longer than 70 metres to provide opportunities for mid-block circulation and open spaces.

(h) Ground Floor Design

Design guidance for ground floor design of mixed-use buildings is similar to that provided for Block 2.

(i) Upper Storey Stepbacks

A new taller mixed-use building on Block 3 should incorporate significant step-backs of upper storey massing to the Borden Street frontage to provide a transition to surrounding low-rise properties on the east side of Borden. A defined low-rise base like the low-rise height on the facing side of Borden (11 metres) should be setback from the street edge per the above setback considerations. From that base, the upper storey massing should have a minimum setback of 20 to 25 metres from the lower storeys to accommodate a reasonable separation. Additionally, smaller step-backs on higher portions of the

upper storeys (such as a minimum of 1.5 metres) are encouraged to provide architectural distinction and refinement of the roofline mass as part of the overall design.

(j) Building Articulation

Design guidance for building articulation for Block 3 is similar to that provided for Block 3.

6.2.3 Zoning Considerations

A MU-2 Zone with permissions for a range of multiple residential and requiring a minimum amount of non-residential uses such as office and technology uses is proposed for Block 3. The following special regulations are warranted concerning built form and design matters for inclusion in the Block 3 zoning:

- MINIMUM and MAXIMUM Yard on Street One of 1.5 and 7.5
 metres to clarify and refine the "build-to" area of minimum and
 maximum yard setbacks to respective streets for the site, similar to Areas 1 and 2.
- MINIMUM Yard abutting Borden of 4.5 metres to provide for an increased minimum setback to Borden as part of a minimum transition in form to existing dwellings on the east side of the street
- No MAXIMUM Yard abutting Borden to allow design opportunities further building separations than the 5.0 metres proposed for Blocks 1 and 2, again in the interest of transition.
- MAXIMUM Building Height of 38.5 metres with any building portion exceeding 11.0 metres in height at least 25 metres from lot line abutting Borden, allowing for the 12-storey future mixeduse building while ensuring the upper storeys above a 4-storey form consistent with low-rise properties to the east is considerably setback.





6.4 Block 4 – High-Rise Residential

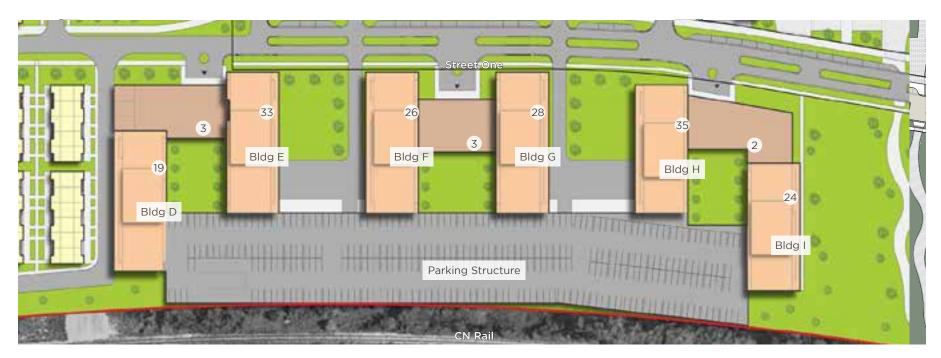
6.4.1 Intent

Block 4 is a 3.0-hectare parcel situated along most of Street One's south side and bounded by the CNR rail line to the south, the public park on Block 9 to the east, and the stacked townhouses on Block 5 to the west. This block will accommodate higher rise residential forms and will contain the bulk of the proposed development's intensity and units. This block reflects the location and general intent of the "High Rise Residential" land use designation of the PARTS Rockway Plan.

Block 4 contains six high-rise residential buildings (Buildings D through I) arranged along the Street One frontage with a total of 1,755 apartment units. Building heights are varied along the length of Block 4, ranging from 19 storeys to 35 storeys in height with the lower heights on the eastern and western ends of the block for height transition purposes. The six buildings are arranged in three modules of two buildings each,

connected by a low-rise podium (two or three storeys in height) that link the buildings and provide a lower edge to the Street One edge between the towers. The spaces between the podium and towers contain a combination of at-grade and rooftop amenity spaces, complementing the internal common amenity areas expected within the buildings.

Parking for Block 4 is provided by an integrated parking garage shared between the six residential buildings. A four-storey above-grade garage contains 1,220 parking spaces along the southern boundary of Block 4, providing for a buffer from the abutting the CNR rail line. One level of underground parking containing 800 parking spaces lies under the entirety of Block 4, including the buildings and above-grade parking structure. All six buildings on Block 4 access the above-grade and underground parking through one of the two entrance driveways from Street One, which are aligned with those access driveways on Block 2 to the north.



Street One Streetscape Looking West



6.4.2 Design Guidance

The Tall Buildings Guidelines summarized in Section 3 of this report provide direction for buildings over nine storeys and are applicable to Block 4. Rather than providing site-specific guidance for Block 4 as is provided for the other blocks in this section, the following addresses how the proposed development responds to the design guidance in the Tall Building Guidelines. It is a meant to assist with a preliminary dialogue on design understanding the detailed design that is required further to the subject planning approvals. The proposed design responds to the sections and guidance of the Tall Building Guidelines as follows:

a) Building Ground Floor & Base Design:

Block 4 buildings are arranged perpendicularly with their narrow edges facing Street One and looking to Courtland, to visually diminish the appearance of mass looking north to south through the site. The buildings are arranged in three modules of two building each. They have a 3-storey base (Building H has a 2-storey building base reflecting grade conditions here) atop which sits the tower. Each module is linked by a connecting podium, 3 storeys between Buildings D/E and F/G and 2 storeys between Buildings H/I, running parallel to Street One. These connecting podiums provide multiple functions: accommodating entrances to the two buildings for drop-off purposes, providing for continuity of the architectural treatment of the building bases, screen large portions of the integrated parking structure, and enclosing outdoor courtyard space between the buildings.

The length of the buildings varies. Lining Street One, the building base range generally between 70 and 80 metres with the connecting podiums in between the tower bases. Extending from Street One, the building bases are between 50 and 75 metes generally, excluding the portion of the 4-storey parking garage to the rear of Block 4 along the rail corridor. Although exceeding the gener-





al guideline length of 70 metres in some instances, the visual perception of these bases is mitigated by the regular rhythm of windows and articulation and reduced through the setbacks and height change of the connecting podiums

Distinction of the building base will be achieved through a combination of tower recessions from the outside edges of the longer sides of the building modules, differentiation in colours and materials from that of the tower portions, and a consistent rhythm of transparent fenestration lining all sides. Ground floor heights of all six buildings facing Street One are generally 6.5 metres, which are meant to accommodate common amenity areas and functions of the building leading to the public streetscape. Building elevations and floor and unit design have not advanced to a point where the incorporation of balconies is known, but they are expected in certain location for base units. Taken together, this design will anchor the base of the buildings and provides an appropriate street edge condition, with variety created through the rhythm of building base and courtyards as the pairs of towers alternate.

The integrated 4-storey above-grade parking garage purposely lines the railway corridor for buffering purposes. The ends of the parking garage along the railway corridor are "tucked in" to minimize perception along those lengths. They are screened by the connecting podiums of the base from views from Street One. The architectural treatment where exposed along Block 4's ends and in the spaces between the building modules will need to integrate these exposed edges within the overall architecture of the buildings, particularly for the ends facing the stacked townhouses and public park while recognizing the rear context and limited prominence of these rail-facing walls.





a) Building Tower Design

For the "Size & Proportion" guidance, the tower form of the six buildings is characterized as "large slab" per the Tall Building Guidelines formula. This is the function of the tower floor plate sizes (approximately 1,300 square metres per tower) and length-to-width ratio (range between 2.25 to 2.5). This orientation is partly a function of Block 4's contextual relationship with the railway corridor. Visually breaking the tower mass per the Tall Building Guidelines would be addressed at the time of Site Plan Approval when more detailed architectural plans are known.

For the "Separation" guidance, the Tall Building Guidelines employ a mathematical formula to suggest separation distances between buildings, with taller buildings requiring ever greater separation between towers. For the proposed development form, the Guidelines call for separations between the towers of between 46 to 53 metres as a function of the respective tower height and tower length. The proposed development plan has tower separations generally between 26 and 37 metres, which is enough to create the desired privacy between buildings. The end buildings (Building C and I) have staggered towers with an overlap of about 50% (Building C) and 35% (Building E) to the other building in the module. The middle building modules (D, E, F and G) are aligned parallel with full overlaps; but in our view this is an appropriate outcome for Block 4 given the railway presence, desired street pattern and other design objectives for the broader site. The separation and overlap impacts are entirely contained on the site and do not impact offsite properties or compatibility with adjacent properties.

Concerning "Relative Height" guidance, the tower heights has been varied as intended by the Tall Building Guidelines. The towers vary from 19 to 35 storeys across Block 4, with abutting height differences between towers principally between 60% and 80% relationship between shorter and taller towers. Buildings F and G in the middle of the block are similar, with only a two storey difference, but variety is made up across the block. The heights are varied in the "random" pattern for variety and

interest purposes with the shortest buildings at the ends of Block where they transition to other residential blocks on the site. The tall buildings are stepped for variety and sculpted to reduce the appearance of mass and add visual interest to the upper building. Additional design refinement will occur at the Site Plan Approval stage employing materiality, balconies, use of colour, top design and other techniques to further reduce the appearance of mass and bulk.

There are many individual guidelines in the "Design for Tall Buildings" document which, and in conjunction with the OP policies and PARTS Rockway Plan, form a comprehensive design guidance. Given site configuration and development objectives, it is impossible to obtain full compliance with all guidelines, as acknowledged in the Tall Buildings Guidelines. Most of the City's design guidance can be achieved as demonstrated, and further refinement of these matters will occur at the Site Plan Approval stage.



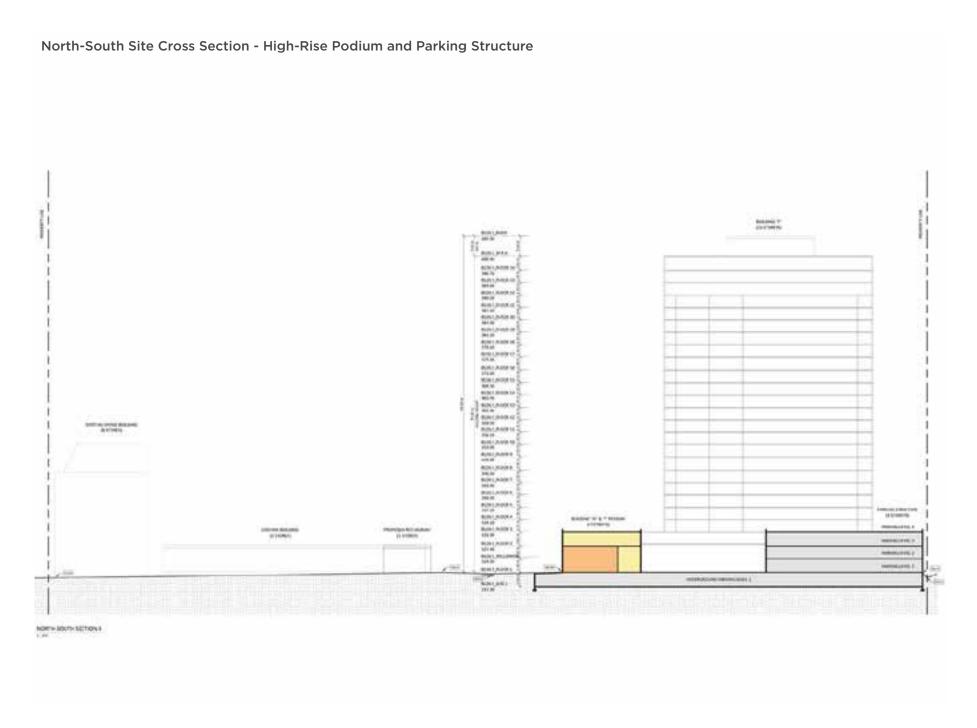


Relative Heights of Block 4 Buildings

North-South Site Cross Section - High-Rise and Parking Structure

(see Page 36 for cross section locations)





a) Building Top Design

The building tops of the six buildings are finished with enclosed mechanical penthouses, setbacks of the uppermost storeys from the Street One face, upper cornice lines and changes in cladding materials and colours. This is meant to provide a refined rooftop to the overall development's skyline. These details will be explored and detailed through the Site Plan Approval process, which may include further distinctions between the buildings.

b) Safety

Safety and security objectives of the Tall Building Guidelines will be met through building placement and massing towards public streetscapes and open spaces and furthered with the intended proportions of transparent glazing used. These considerations will be further explored at the time of Site Plan Approval in respect to the design of the overall block and the building modules.

c) Public and Private Open Space

The proposed public park on Block 9 and urban plaza on Block 1 provide the main recreation spaces for residents and employees on the overall site. Complementing the function of these spaces, the Block 4 buildings contains a series of private amenity spaces for building residents and visitors. At-grade landscaped courtyard spaces are provided between the building modules, either those enclosed by the building form or exposed to the Street One edge. The connecting podium provides opportunities for rooftop terraces for formal amenity space for residents. As well, balconies throughout the six buildings provide additional amenity space for individual units. The design details of these spaces will be determined through the Site Plan Approval process.

d) Streetscapes

Street One provides the public street edge for the Block 4 development. The building massing of the six buildings on Block 4 reinforce an urban streetscape character to this new street, with

buildings positioned close to the sidewalk edge but with variation and recession of portions of the built form to provide relief. Street One's landscape design as well as the design of the landscape spaces on Block 4 facing the street will be determined at the time of Site Plan Approval. The public realm, while not fully designed at this stage, is conceptually illustrated in the model and street sections, and demonstrates that the desired human-scaled, varied and visually appealing streetscape can be achieved.

e) Mid-Block Connections

Street One provides a new public thoroughfare of the larger site for pedestrian connections. The six Block 4 buildings will connect into the public sidewalks on this new street either through building entrances situated close to the sidewalk edge or through walkways from the open courtyards framed by the buildings where such spaces are exposed to Street One. The Building I interface with the public park will be explored at the time of Site Plan Approval, which currently shows an on-site walkway lining the building length leading to the public sidewalk on Street One. The finishes and supporting amenities along all Block 4 walkways will be determined at the time of Site Plan Approval.

f) Views and Skyline

The skyline and views to Block 4 will be interesting and varied given building placement and variation in tower heights. Kent Street, principally, as well as Palmer Avenue are important entrances to the site and Building H and Building E, respectively, terminate these entry views. These building ends terminating these views require special design treatment, which will be explored at the time of Site Plan Approval.

g) Scale and transitions

Block 4 is purposely situated at the "back" of the site away from Courtland and in from Borden and Stirling, per PARTS Rockway

Plan, to transition height into site. The lowest tower heights on Block 4 sit at the west (19 storeys) and east (24 storeys) ends with the middle buildings between 26 and 35 storeys in heights in varied pattern. Each of the six buildings are anchored by a building base and connecting podiums that is scaled through building positioning and architecture to support the public streetscape of Street One. The positioning of towers with their lengths perpendicular to Street One is meant to provide breaks in the tower mass along the Street One streetscape and allow for skyviews. The six buildings are designed with a contemporary architecture using a pattern of solid-to-glass proportions that complement surrounding older neighbourhoods.

a) Adaptability and Resilience

Green roofs are not being considered at this time. Street One is designed with Low Impact Development (LID) measures, including permeable paving, central median bio-gardens, and perforated storm pipes under the central median. Landscaped areas on Block 4 may be utilized as infiltration areas for the clean water collection and discharge system as part of the overall site's development. Water-efficient and drought-tolerant species will be incorporated into the landscape plans at the time of Site Plan Approval, including the consideration of rainwater collection and re-use as warranted and appropriate.

b) Energy Efficiency and Generation

Energy efficiency matters including relevant considerations of passive techniques, building envelope, and lighting will be addressed at the time of Site Plan Approval. Light-coloured roofs will be considered at that time. On-site generation is not being considered at this time for the project.

c) Waste Management

Detailed floor plans have not been prepared at this time for the six buildings. The buildings will incorporate internal garbage areas for garbage and recycling collection and sorting. Residential garbage rooms are expected to conveniently located to provide easy connections for collection vehicles. Options for the collection of organic waste will be considered as part of the overall waste management program at the time of detailed design.

d) Bird-Friendly Design

The preliminary architectural design for the six buildings employs a solid-to-glass ratio with breaks in the length of glass surfaces that is conducive to bird-friendly design. Glass surface choice and lighting design will be explored at the time of Site Plan Approval to ensure bird-friendly design is achieved.

e) Microclimate

Wind impact and shadow impact assessments were undertaken for the preliminary development plan.

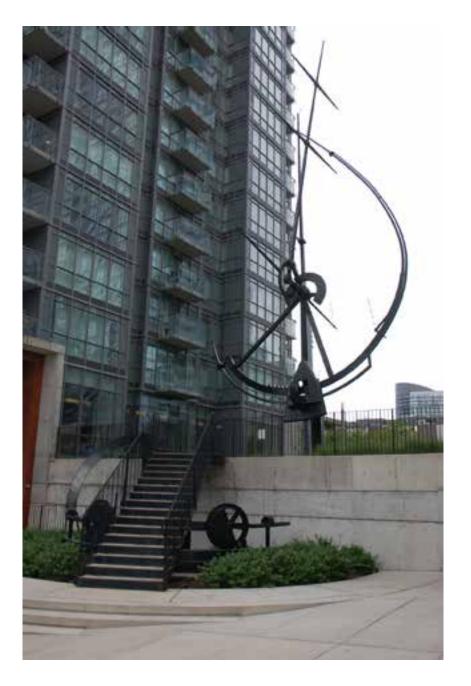
The preliminary wind impact assessment by RWDI identifies that the proposed development form generally "performs well in minimizing the impact of the wind on grade-level areas within the development, and at off-site pedestrian areas". The 4-storey above-grade structure on Block 4 provides a significant sheltering effect and orientation of the six building towers aligns the long axis with the prevailing wind direction, thereby reducing the frequency and severity of strong wind flows. The entrances to the six buildings are expected to be sheltered by prevailing westerly winds by the parking structure and connecting podiums. Mitigation measures are recommended on certain podium rooftop terrace locations (southwest-facing) to improve user comfort conditions.

The shadow impact assessment is contained in Appendix A of this Urban Design Report.

6.4.3 Zoning Considerations

An R-9 Zone with permissions for a range of multiple residential and ground floor non-residential uses is proposed for Block 4. The following special regulations are warranted concerning built form and design matters for inclusion in the Block 3 zoning:

- MINIMUM Front Yard of 2.0 metres along Street One and MINIMUM Side Yard of 5.0 metres to simplify the application of minimum setbacks of building bases along property edges.
- MINIMUM Rear Yard of 0 metres to any portion of a building containing an above-grade structured parking garage, 15 metres otherwise, to allows zero setbacks for parking garage portions of the buildings and 15 metres for other portions of the buildings. CNR standards and guidelines for crash walls and other safety features would need to be addressed at the time of detailed design.
- MINIMUM Building Separation of 25 metres between any portions of buildings exceeding 19 metres in Building Height on the same lot, which is meant to establish a minimum separation standard between building towers on Block 4. Further consideration of tower separation and other tower matters are meant to be addressed through detailed design utilizing the guidance of the Tall Building Guidelines.
- Exclusive use patio areas for ground floor level dwelling units
 are not required provided common outdoor amenity areas are
 available with such buildings and MINIMUM Landscape Area:
 20% of the lot area, may include landscaped areas on the rooftops of buildings. This provides a more contemporary approach
 for amenity areas seen in recent high-rise projects that allows
 for a combination of balconies and rooftop terraces for outdoor amenity spaces and landscaping to satisfy the recreation
 needs.



6.5 Blocks 5, 6, 7 and 8 – Mid-Rise Multiples

6.5.1 Intent

Block 5 is a 1.16-hectare parcel situated south of the private driveway, abutting Block 4. Block 5 contains 113 stacked townhouse units, including both standard and back-to-back stacked townhouses. Both Blocks 5 and 6 will be served by an underground parking garage with 440 parking spaces.

Block 6 is a 0.73-parcel north of the private driveway in Block 5. It will accommodate two six-storey residential buildings (Buildings J and K) that are arranged to line the private driveways from Street One and Vernon Avenue.

The small 0.3-hectare Block 8 north of Building K with frontage on Courtland Avenue is reserved as a future development block and could be developed with Block 6 on the site or could be consolidated with other landholdings on Courtland Avenue if such a situation presents.

The 0.06-hectare parcel Block 7 north of Building J is intended for a small block of townhouses with access from Vernon Avenue.



6.5.2 Design Guidance

The below provides guidance on the proposed mid-rise building forms and variations of stacked townhouse forms. The Urban Design Manual standards of Part C provide general direction on more "standard" street and cluster townhouses forms.

(a) Vehicular Circulation

Vehicular accesses to Blocks 5 and 6 are meant to be provided by way of a private driveway linking to Street One. An additional access is provided by way of Vernon Avenue, which could either connect into underground parking, as proposed, or provide a surface circulation route. The private roadway system should be looped for connections and avoidance of dead-end and turnaround situations to the extent possible. It should provide for a safe and direct internal circulation route internal to the site that provides for drop-off space and access to loading spaces and areas.



(b) Pedestrian Circulation

The private roadway system servicing Block and 6 should have walkways on at least one side of the roadway leading to Street One public sidewalks, which also can connect into the east-west multipathway running through these blocks. Internal courtyards between townhouse blocks are encouraged and should have opportunities for walkways leading through these spaces.

(c) Parking and Loading

The proposed development incorporates all parking on Block 5 and 6 within one level of undergoung parking garage and internalized loading spaces. Should plans change and integrated above-grade parking be pursued with the mid-rise buildings of Block 6, they should be treated appropriately as integral component of the building architecture and should be, at a minimum, lined with ground floor active uses like residential lobbies and indoor amenity space. Integrated garage for stacked townhouses throughout Blocks 5 and 6 are also appropriate provided they are incorporated well into the building architecture.

(d) Building Height

In the context of the proposed site's development, stacked townhouses forms on Block 5 with underground parking accommodation is preferred, although integrated garages are also appropriate. A maximum height of 4 storeys for stacked townhouses is appropriate to accommodate a range of different stacking configurations and unit types.

The proposed maximum building height for Block 6 is 8 storeys in keeping with Medium Intensity Mixed Use designation of the PARTS Rockway Plan; however, 6-storey forms provide opportunities for a more appropriate fit to abutting low-rise dwellings on Palmer Avenue and Courtland Avenue. Minimum building heights are not warranted as other forms of low-rise forms like further stacked townhouses are also appropriate on Block 6.

(e) Building Setbacks

Stacked townhouses with underground parking should be at least 1.5 metres from private roadways for landscaping purposes along building fronts. Stacked townhouse forms with attached garages should have a minimum front yard setback of 6 metres. Side yard separation should be at least 1.5 metres to provide access between the front and rear yards. End units should have a separation of at least 4.5 metres to allow for mature tree planting between the building wall and private roadway edge. The separation between the rears of stacked townhouse blocks should be at least 10 to 15 metres combined to allow for walkways, landscaping, and sunlight.

The base of mid-rise buildings should be positioned close to the street edge or private roadway edge to reinforce activity and interest along the bounding streetscapes. The street wall portion of new mid-rise buildings should be built generally within 1.5 to 5 metres of the property line facing streets and roadways. Where mid-rise building abut existing detached dwellings along Palmer Avenue or Courtland Avenue, there should be a minimum setback of 3.0 metres to the building base and 7.5 metres to upper storeys.

(f) Building Length

All forms of stacked townhouse blocks should be no more than 50 metres in length to a break in the building form. Mid-rise buildings on Block 6 should be no more than 50 metres in length.

(g) Ground Floor Design

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The width of townhouse units should be sized so that at least 40% of the ground floor elevation can be windows and doors and that sufficient space for soft landscaping and tree planting can be provided to edge the private roadway. Locations of main entrance doors can either be from the private roadway side or internal courtyards, or both. Porches and stairs should be permitted to encroach up to 2.5 metres into the front setback.

Mixed-use buildings with retail at-grade on Block 6 should have a minimum floor-to-floor height of 4.5 metres to accommodate internalized loading areas, flexibility for difference commercial uses and prominence of retail spaces as part of the ground floor realm. For at-grade residential units, a minimum 3.5 metre separation between the building wall and property line along the street should be used to provide for landscaped space distinguishes a public to private realm transition. Together with a horizontal separation, taller floor-to-floor heights also at least 4.5 metres taller with raised floors (minimum 0.9 metres) and steps should be considered to provide further privacy to such residential units. Such raised situations are appropriate for units either with individual entrances leading to the public sidewalks or units with facing outdoor amenity space.

(h) Upper Storey Stepbacks

Upper storey step-backs are not warranted for stacked townhouses on Block 5; rather, minor step-backs for architectural effect or accommodation of terraces are encouraged. Smaller step-backs on the 6-storey forms of Block 6 can provide relief to "pedestrian perception" from street level for pedestrian comfort purposes related to the height of mid-rise forms, as well as provide for a refined upper storey and roofline shape. Where desired, a minimum setback of 1.5 metres should be considered above the fourth or fifth storey.

(i) Building Articulation

The design of stacked townhouse and mid-rise buildings should embrace a contemporary architectural consistent with the overall project in terms of forms, materials, and colouration, Longer mid-rise building masses should be articulated, both horizontally and vertically, with a variety of means. This includes considerations for recessions or projections of the building envelope with a regular rhythm of divisions along the street as well as architectural touches related to changes in materials and colours, balcony design, and supporting architectural

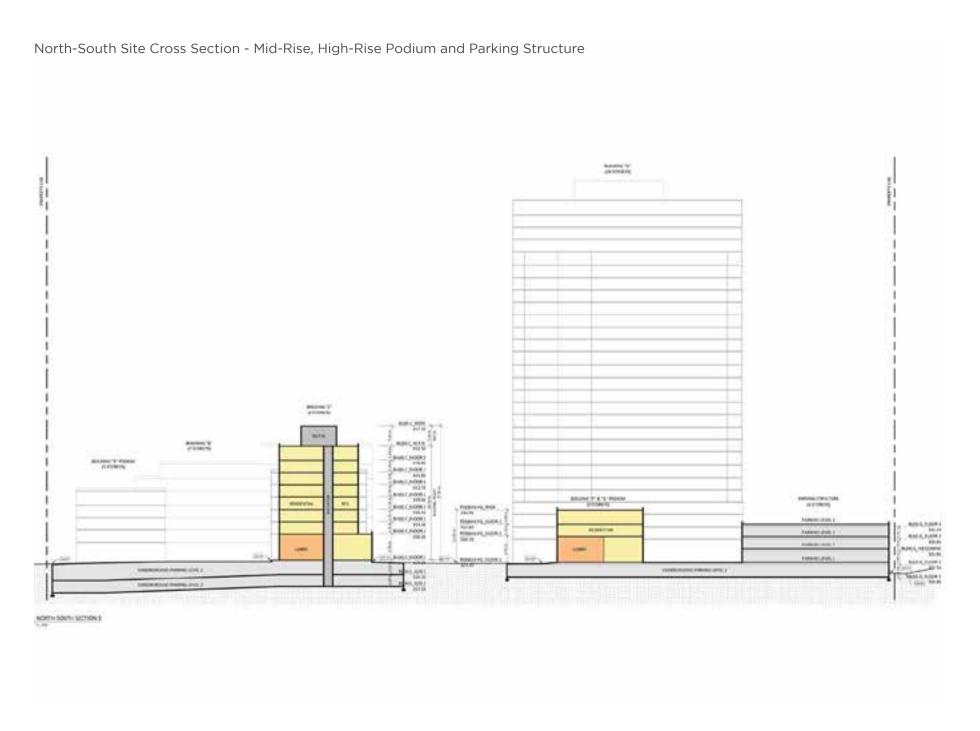
features. For stacked townhouses, architectural variation within blocks and between blocks in encouraged, although maintaining a unifying character. All elevations should be treated with a high degree of articulation, recognizing an emphasis on the elevation containing the primary building entrances. Materials on stacked townhouse and midrise forms should be high quality and durable, including consideration for brick, stone, and masonry products as principal base materials.

6.5.3 Zoning Considerations

An R-8 Zone with permissions for a range of multiple residential uses, including townhouses, stacked townhouse, and apartments, as well as permissions for ground floor non-residential uses in certain location is proposed for Blocks 5 through 8. The following special regulations are warranted concerning built form and design matters for inclusion in the Block 3 zoning:

- MINIMUM Lot Width of 12 metres recognizes the narrow configuration of Block 5 where it connects to Street One for a private driveway access.
- MINIMUM Front Yard of 6.0 metres or 3.0 metres with non-residential uses at grade establishes a distinction between standalone residential buildings in keeping with surrounding properties and mixed-use buildings with ground floor commercial uses that are desired closer to the street.
- MINIMUM Side Yard of 1.5 metres for buildings 13.5 metres
 or less in Building Height or 3.0 metres for buildings greater
 than 13.5 metres in Building Height, but 7.5 metres to the lot
 line shared with a property containing an existing residential
 building. This provides more contemporary zoning regulations
 for low- and mid-rise housing forms, generally distinguishing between housing forms that are 4 storeys and less or greater than
 4 storeys.

- MINIMUM and MAXIMUM Building Height of 10.5 metres to 27.5 metres, which is meant establish a minimum building height for a lower mid-rise form (3 storeys) and a slightly increased maximum building height (27.5 metres as compared to 24 metres) to reflect contemporary heights for 8-storey buildings.
- Exclusive use patio areas for ground floor level dwelling units are not required provided outdoor common amenity areas are available as part of such buildings and/or private amenity areas are provided entirely above grade. As well, a MINIMUM Landscape Area that is 20% of the lot area, which may include landscaped areas on the rooftops of buildings. These regulations provide for a more contemporary approach for amenity areas as seen in similar projects allowing for a combination of balconies and rooftop terraces for outdoor amenity spaces.



Stacked Townhouses on Private Roadways Viewed from Stirling Avenue







Summary

The redevelopment of the former Schneiders site provides an opportunity to create a new higher density, mixed use neighbourhood in close proximity to two ION Rapid Transit stations. The site development strategy generally follows the land use and urban design direction of the recent PARTS Rockway Plan, and implements Provincial, Regional and City land use policies.

The Master Plan illustrates the extension of local streets into the site to connect the 'old' and 'new', Three buildings are being retained as an employment and commercial hub, with a new urban plaza located along Kent Street as the focal and meeting point for the neighbourhood. A new public park is being created and a multi-use trail established. A variety of mid-rise and high-rise residential buildings are proposed with lower buildings on the northern and western edge, and high-rise buildings with a four-storey parking structure along the railway. This layout achieves a compatible arrangement with adjacent neighbourhoods while providing the intensity and activity of development desired by the PARTS Rockway Plan.

This Master Plan demonstrates the appropriateness of the proposed Official Plan Amendment, Zoning By-law Amendment and Draft Plan of Subdivision from an urban design perspective. This Urban Design Report provides detailed design guidance for consideration and refinement for the Site Plan Approval stage as plans evolve.

Appendix 1

Shadow Study

A Shadow Analysis was prepared for the site (GSP Group, September 2018 – Appendix 1) for the test dates of June 21st, September 21st, and December 21st. The analysis demonstrates that shadows are generally contained within the site and do not significantly impact the private outdoor spaces of adjacent neighbourhoods. Within the site, the proposed public park and plaza have substantial parts in full sun for most of the test times. Public streets have varying degrees of shadows.

For the June 21st test date, conditions are favourable throughout the day. Shadows impact some of the stacked townhouses at the 10:00 am test time, but shadows move quickly beyond the 12:00 pm test time. Street One has intermittent shadows as a result of the towers during the 12:00 and 2:00 pm test times, but these shadows are narrow and move throughout the day. A limited number of neighbouring low rise residential properties to the southeast are only impacted after the 6:00 pm test time, therefore enjoying full sunlight for most of the day. The urban plaza and public park are unaffected during the 10:00 am, 12:00 pm and 2:00 pm test times.

For the September 21st test date, there are shadow impacts to the stacked townhouses during the 10:00 am test time, however as shadows move eastward, only few of them are impacted at the 12:00 pm test time, and there are no impacts at the 2:00 pm test time. Street One has no shadow impacts during the 10:00 am test time, but it has a more significant impact during the 12:00 pm test time. Around the 2:00 pm test time, shadows from the towers are intermittent along Street One

due to the narrow shape of the buildings, letting a significant amount of sunlight to pass through. The urban plaza and public park are unaffected during the 10:00 am, 12:00 pm and 2:00 pm test times.



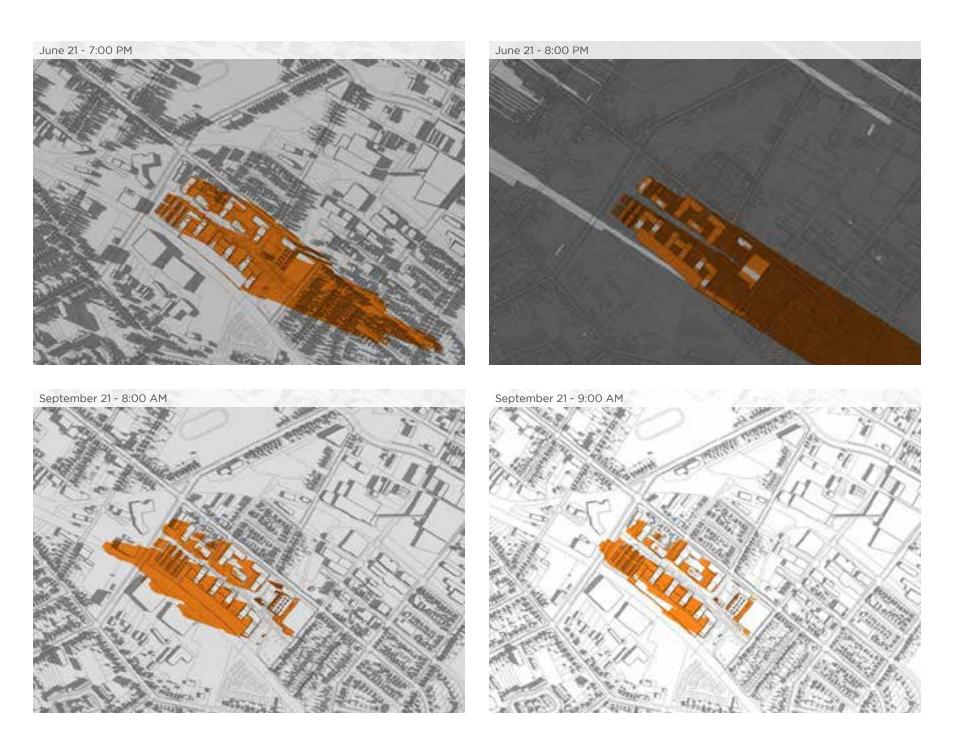
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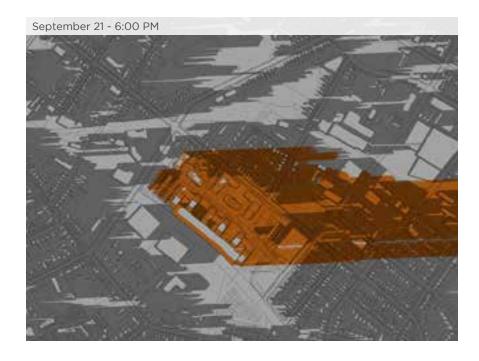


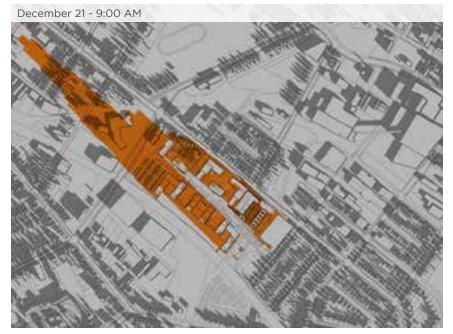
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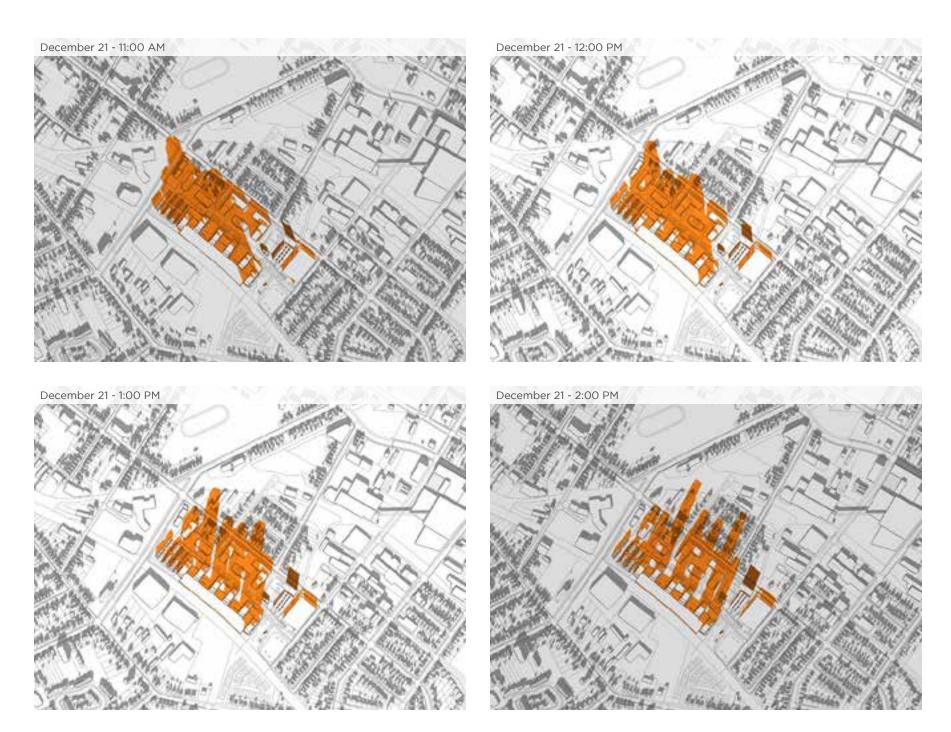


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