Downtown Woodstock

Streetscape Master Plan

& Re-Visioning of Museum Square

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Canada

city of Woodstock

MY MAIN STREET
MA RUE PRINCIPALE

MHBC PLANNING URBAN DESIGN & LANDSCAPE ARCHITECTURE

Contents

Introduction

Downtown Woodstock is a dynamic growing community in the heart of southwestern Ontario and Oxford County. The Downtown is intended to be the most intensive and functionally diverse area of Woodstock, serving as the primary business, cultural and administrative centre in the County. The fabric of the downtown generally consists of 2 to 3-storey main street buildings which reflect a traditional Ontario downtown with a comfortable pedestrian scale. Museum Square is located central within the Downtown and is host to many of the City's events and festivals.

So why this project now? The City of Woodstock has undertaken a number of plans and studies focused on sustaining and improving its downtown including the Downtown Development Plan. The Council adopted Downtown Development Plan included a number of strategic directions and recommendations, the first of which was to beautify the downtown. While the Downtown hosts impressive architecture and a variety of businesses, the streetscape is reaching the end of its life cycle and needs a refresh. Similarly, despite the central location and size of Museum Square, the space is often underutilized and unused by those who live and work in the City of Woodstock.

Vibrant downtowns attract investment, tourism and people. The physical condition of the current streetscape and Museum Square negatively impacts the vibrancy of the Downtown. From an accessibility standpoint, the current streetscape causes barriers for those with physical limitations. A perceived increase in homelessness has also created challenges with attracting people and businesses to the downtown. By creating a clean, cohesive and visually attractive downtown, Woodstock's unique sense of place can be captured while encouraging repeat visits.

Generating a bold and compelling vision for the future of Downtown Woodstock will require new ways of working and thinking for the City of Woodstock and its cultural and business partners.

A great public space must be well located and well designed; seeded with the right combination of culture, commerce and play; creating authentic invitations for many people to care and participate in actively stewarding and caring for the space.

This Streetscape Master Plan is intended to serve as a tool to guide design and expenditures of future streetscape and related infrastructure in the City's core. Creating a central focal point that is accessible to the public and an attractive urban space with a wide variety of programming opportunities is a critical component to the overall project. Special attention has been given to Museum Square and the opportunities to create a space that better serves the needs of the community and provide users with a space that allows for relaxation, discovery, and active and passive engagement. The redesign of Museum Square has considered design elements that complement the streetscape to ensure a cohesive high quality urban design and aesthetic public realm.

For ease of navigation, this Master Plan report has been organized by theme, with the following colours for each of the sections:

I & A	**Inventory & Analysis (existing conditions)**
PIC Overview	**Public Consultation Overview**
Streetscape	**Streetscape Master Plan Concept**
Museum Square	**Re-Visioning Museum Square**
I & C	**Implementation & Costing**
Next Steps & Reco.	**Next Steps & Recommendations**

1

Inventory & Analysis

The Inventory and Analysis phase involved the systematic documentation and evaluation of existing site conditions. It served as a data collection mechanism with the results informing the design process and result of concept proposal for both the Streetscape Master Plan and Re-Visioning of Museum Square.

The design study included a comprehensive review of the inventory of Woodstock's Downtown. This review included multiple site visits to the downtown and Museum Square. The existing physical conditions of the study area were carefully examined to gain a better understanding of the current structure of the Downtown and Museum Square. The inventory and analysis also drew upon past initiatives and resources. The following studies and documents were reviewed as part of this project:

- Downtown Development Plan (includes a parking study)
- Woodstock Central Area Design Study
- Downtown Streetscape Sustainability Asset Management Plan
- Museum Square Redevelopment Concept
- City of Woodstock Community Strategic Plan & Integrated Community Sustainability Plan
- Woodstock Transportation Master Plan
- City of Woodstock Public Art Policy
- Oxford County Comprehensive Review (Population, Household & Employment Forecasts)
- Web based mapping (base and parcel mapping, 2015 aerial photography)
- Woodstock Zoning By-Law
- Oxford County Official Plan

The Downtown Development Plan in particular, provide a very detailed analysis of existing elements within the Downtown. This was critical in assessing current assets and deficiencies within the Downtown. The exhaustive analysis of the area resulted in a catalogue of information that was then combined into an inventory of strengths and weaknesses, as well as opportunities and constraints.

The future capital improvement potential was determined with a comprehensive analysis of a wide variety of issues impacting the downtown. These improvements have been broken down into the following categories:

- Existing Active Transportation & Transit
- Existing Parking
- Existing Vegetation
- Existing Site Furnishings

1.1 The Study Area

The study area for the Downtown Woodstock Streetscape Master Plan primarily includes Dundas Street and the designated Central Area from Vansittart Avenue to the west and Beal Street to the east. This area represents the historic core of Woodstock and the ideal place to reshape the streetscape. While the Streetscape Master Plan is focused primarily on Dundas for improvements, elements of the Master Plan could be extended to other streets within the Central Area in the future.

Dundas Street acts as Downtown Woodstock's main street and is defined primarily by historic 2 to 3-storey buildings which reflect a traditional Ontario downtown. The majority of the buildings within the downtown are in good condition. A few vacant parcels interrupt this structure, most notably to the west, but overall, the street has a strong street edge.

Dundas Street is generally characterized by concrete sidewalks with unit paving providing a transition at the curb. At City Hall, the entire boulevard is cobblestone to reinforce the City's historic past.

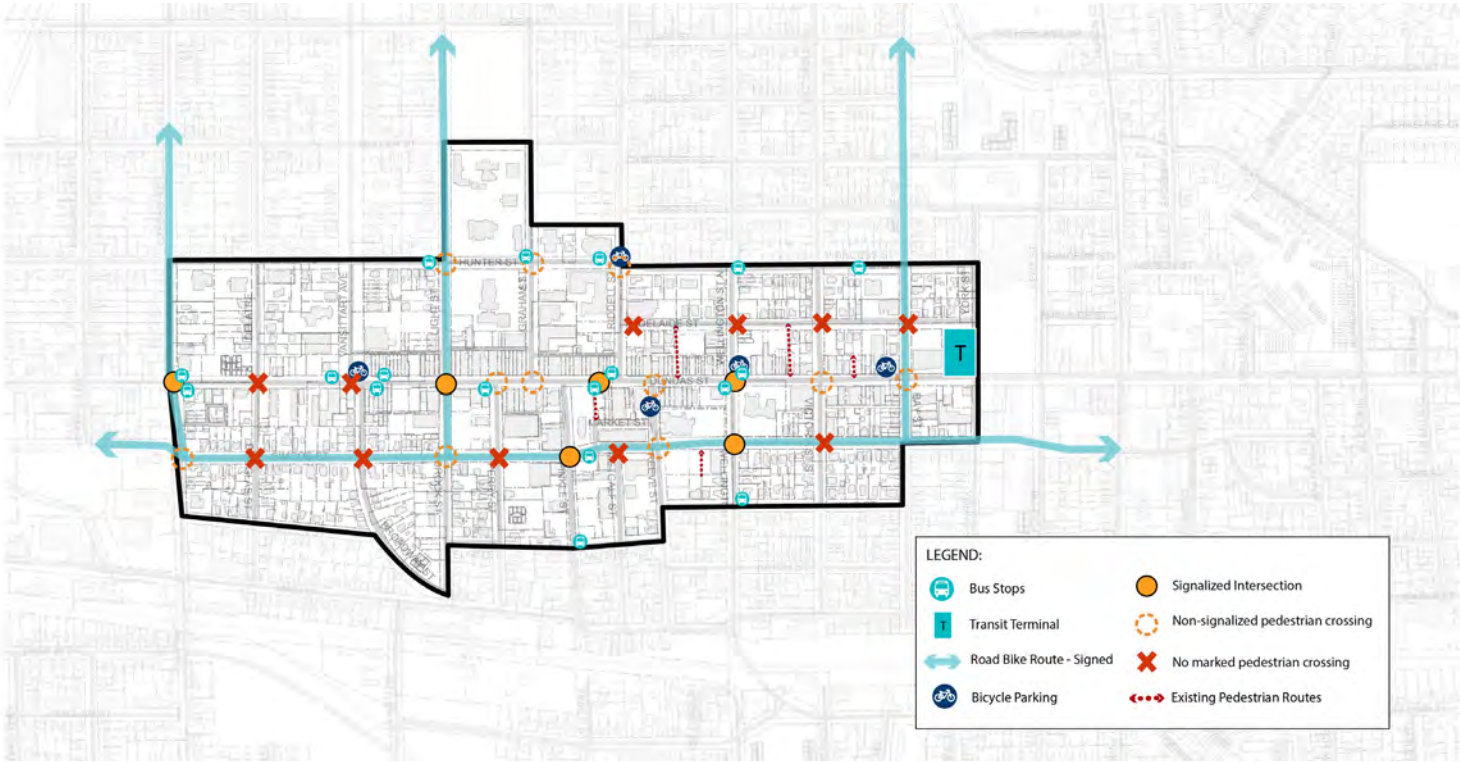
Prominent intersections and mid-block crossings consist of large planter boxes, initially intended to beautify the street. The planters are typically located within bump-outs. Most of these streetscape elements were installed two decades ago and are showing signs of deterioration.

The majority of trees that were planted along Dundas Street have not survived. Existing tree grates from this past vegetation has resulted in accessibility issues. Other streetscape elements such benches have been removed in their entirety.

1.2 Existing Active Transportation & Transit

Dundas Street, and surrounding streets in the downtown core have all been constructed with sidewalks on both sides of the street, which provide for pedestrian movement separated from vehicles. Dundas Street is also an existing transit corridor, with multiple transit stops located along the street, including an existing transit stop at Museum Square.

While Dundas Street lends itself to pedestrian activity and transit usage, it is also a major truck route. As such, cycling routes have been purposely directed off of Dundas Street and instead run parallel to Dundas and along Simcoe/Peel Street, one block to the south. A series of north/south cycling connections connect to this route, providing access to the downtown from surrounding neighbourhoods.

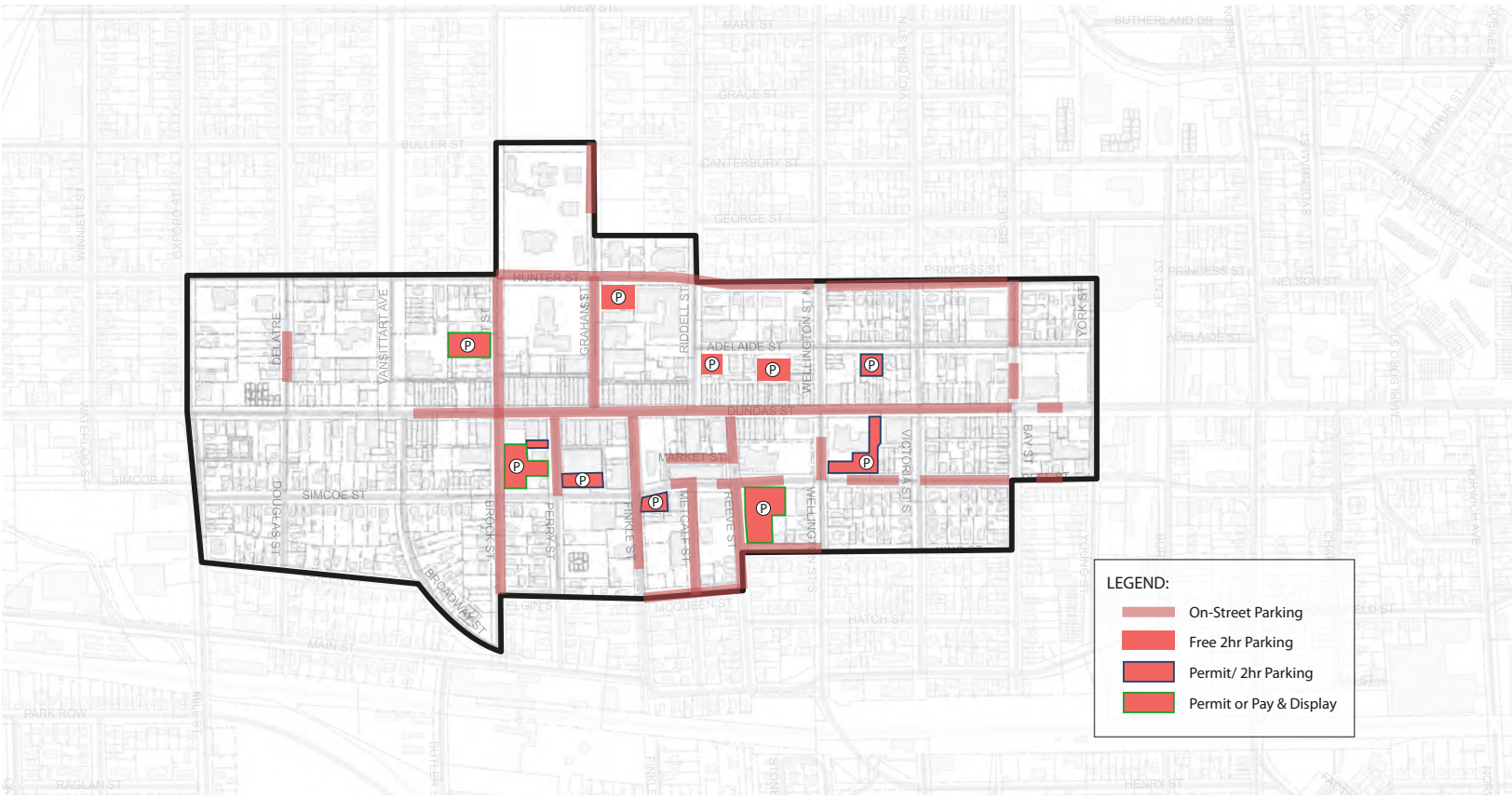


1.3 Existing Parking

There are ten municipal parking lots in the downtown with a total of 564 parking spaces (including 12 accessible spaces). These lots are designated as either 2-hour free parking; permit parking; pay and display or a combination of both as outlined in the graphic above. In addition, on-street parking spaces are provided on Dundas Street and elsewhere throughout the downtown.

A Parking Study was completed by Paradigm Transportation Limited in 2020 as part of the Downtown Development Plan which confirmed that the Market/Centre Lot, the Cole Walkway Lot, the Finkle Street lot and the Riddell Street Lot were the most utilized lots within the downtown. These lots are mostly centered with all being less that 200m (2-minute walk) from City Hall.

The findings within the Parking Study suggest that the City is generally well served by municipal parking. When busier lots reach capacity, there are a number of underused lots within walking distance that can accommodate overflow parking.

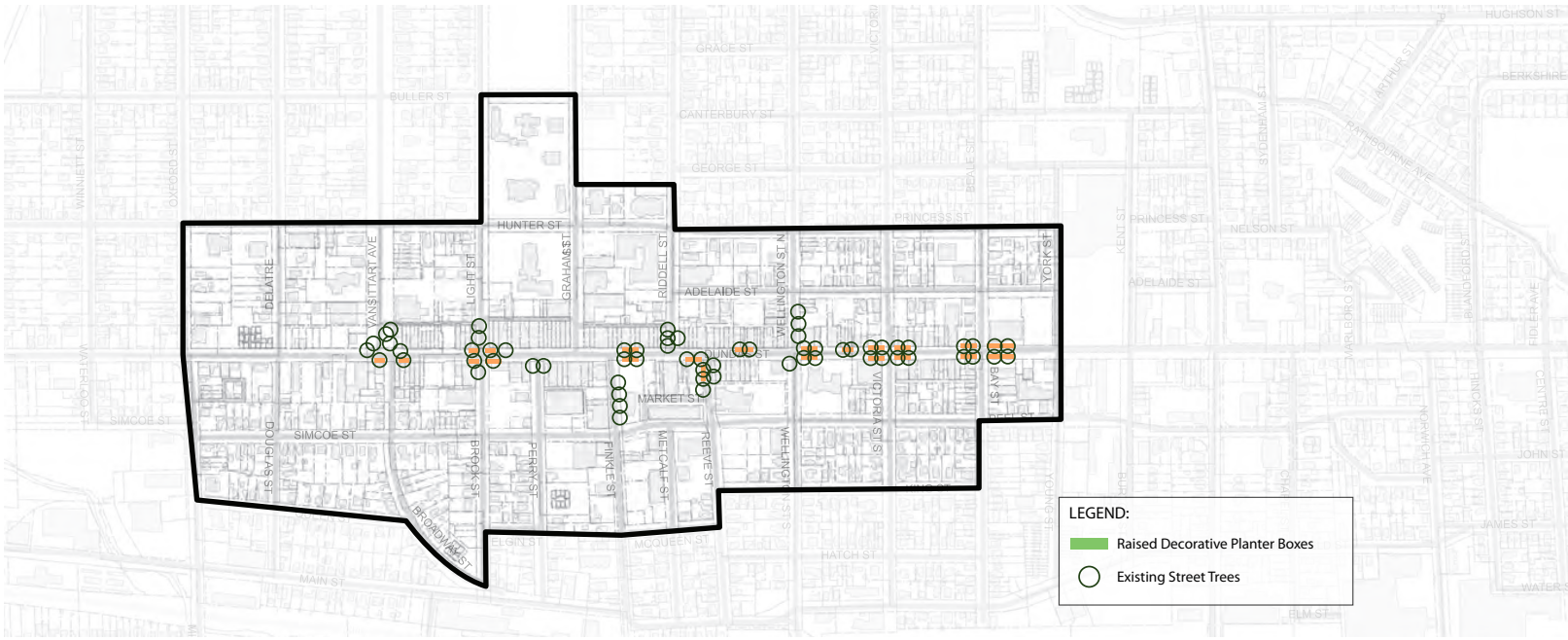


1.4 Existing Vegetation

As previously noted, the downtown includes a number of planter beds, located strategically throughout the downtown. A series of additional planters, containing mostly annuals, are located within Museum Square. While the planters were initially installed to beautify the downtown, the location and height profile of the planters has, in many cases, made these an obstacle from an accessibility perspective.

The current streetscape was installed in the 1990's as part of the "big dig" and contained a number of street trees. The majority of trees did not survive, and the trees that did survive have struggled to grow to their potential. The streetscape contains evidence of these past trees in the form of empty tree grates.

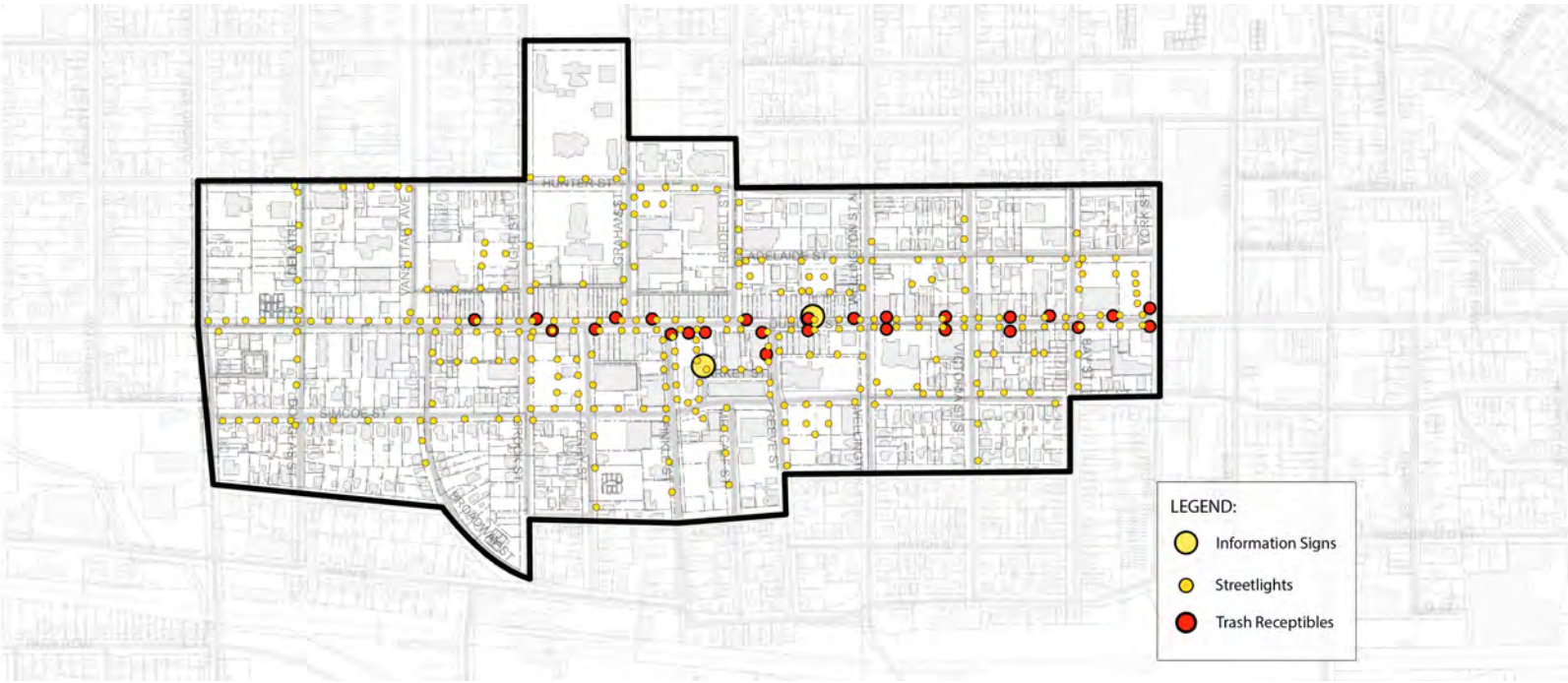
Museum Square, in contrast to Dundas Street, has multiple trees, planters and shrubs. There are also large grassy areas within the Square. Existing landscape elements within the Square reflect a more formal space, in particular those elements planted around the existing fountain.



1.5 Existing Site Furnishings

In terms of existing site furnishings, Dundas Street contains coordinated garbage receptacles and pedestrian scaled lighting. In limited locations bollards can also be found, these are coordinated colour-wise with the garbage receptacles and other elements within the downtown. Community bulletin boards are provided in two separate locations.

As previously noted most of the benches within the downtown were removed, resulting in a lack of seating options. A very limited number of bicycle racks are currently found within the downtown.



1.6 Summary

The Downtown is well located and equipped in terms of active transportation opportunities. The grid street pattern and short block lengths, combined with sidewalk infrastructure, lends itself to walking and pedestrian movement. The Downtown is very well served by transit, with multiple transit routes and bus stops located along Dundas Street. Shared bus stops and transfer stations are also located within the downtown, and the City's Transit Terminal is located just outside the limits of downtown.

The existing streetscape, which was constructed in the 1990's is deteriorating and is in need of a refresh. There have been tremendous advancement in technologies since the current streetscape was installed that will allow for greater success with street trees. The establishment of the Accessibility for Ontarians with Disabilities Act (AODA) requirements and advanced understanding of accessibility matters provide the City with the opportunity to make the downtown more accessible. Likewise, there is an opportunity to design a space that is more sustainable.

Reestablishing seating will also improve the accessibility of the downtown by providing opportunities for rest along the street. Introducing more bicycle racks will make the downtown more appealing to cyclists and those who wish to take advantage of active transportation opportunities.

The formal landscaping of the Museum lends itself to passive enjoyment, but does not attract people to the square outside of scheduled events. There is an opportunity to design the square in a way that draws people to the space. Incorporating elements that encourage play and exploration allow the space to be successful outside of programmed events.

2

Public Consultation Overview

Public and Stakeholder consultation played a key role in shaping the Streetscape Master Plan and Museum Square Re-Design. Various types of consultation were conducted between January 2022 and August 2022 designed to obtain feedback at key project milestones.

2.1 Consultation Process Overview

Consultation Program

Public and stakeholder consultation played a key role in shaping the Downtown Woodstock Streetscape Master Plan and Museum Square Re-Visioning. Consultation activities during the process included Stakeholder Committee meetings, public meetings, and Online engagement. Engagement opportunities were aligned with key project milestones to ensure that public input, advice, and concerns shaped the direction of the study. The following section provides a synopsis of the engagement methodologies that were used to generate community input.

Communication & Promotional Tactics

Public Notices
Formal notices were published approximately two weeks before scheduled Community Consultation Meetings and were posted Online (or a combination of both), to launch each round of consultation and promote and encourage participation.

Project Website
The project website (www.LetsTalkWoodstock.ca) served as a portal for all information and engagement activities during the projects consultation process. The website included a comprehensive overview of the project, relevant documents and resources, information about consultation events and opportunities to provide feedback, including engagement activities such as Online surveys (which included presentation materials from each community meeting).

Social Media
The City of Woodstock used various methods of social media and Radio blasts to advertise the Public Consultation Meetings.

Downtown Woodstock Streetfest
The City of Woodstock participated in the Downtown Woodstock Streetfest promoting the project at a booth in August, 2022 to engage a range of community members in an informal setting.

Consultation Activities

Stakeholder Committee Meetings
At the onset of the project a Steering Committee was established comprised primarily of City and County staff. The Steering Committee included representatives from Economic Development, Planning, Engineering, Public Works and Parks & Recreation. The Steering Committee was an invaluable source of information and contributed greatly to the success of this project.

Stakeholders were also identified early in the process and a number of interviews and discussions with these stakeholder groups were held over the course of the project. Stakeholders were also informed of public information centres, and a number of special interest groups provided their feedback through the public meetings and surveys.

Public Consultation Meetings
Two Public Information Centre (PIC) meetings were held during the project timeline The meetings were designed to encourage broad participation through a variety of engaging formats (e.g., open houses, presentations, questions of clarification, facilitated discussions, and virtual presentations.) Feedback surveys, were made available Online following all PIC meetings. All PIC participants were also provided with comment cards that could be submitted in person or by email or traditional mail.

2.2 Stakeholder Meetings

Summary of Sessions

As previously noted, a number of stakeholder groups were identified early in the process. The project team conducted a number of interviews and discussions with these stakeholder groups. Stakeholders were also informed of public information centres, and a number of special interest groups provided their feedback through the public meetings and surveys. Stakeholder interviews and discussions occurred both virtually and in person (often depending on COVID-19 restrictions in place throughout the project duration). Multiple members of Council also participated in the various public meetings and stakeholder sessions, sometimes due to their involvement on various Committees.

Who We Consulted

- City Engineering
- City Parks and Recreation
- City Public Works
- Planning
- City Economic Development
- Woodstock Museum Advisory Committee
- Woodstock BIA
- Accessibility Advisory Committee
- Heritage Advisory Committee
- Woodstock Art Gallery
- Public Library Board
- Environmental Advisory Committee
- Alzheimer Society Southwest Partners
- Action Alliance Committee for Dementia Friendly Communities

The Master Plan presented herein incorporates multiple suggestions provided by the various Stakeholder groups. Comments and insights by the various stakeholders were often aligned with the feedback received from the public through the open houses and surveys.

Goals

A set of goals were established for the project based on the important feedback received from stakeholders and special interest groups. These goals included the following:

- The Streetscape and Museum Square should reflect a vibrant downtown that makes people want to spend time here.
- The downtown should be accessible to all and should consider those with physical, mental and financial limitations.
- The streetscape and museum square should be sustainable and should incorporate green materials and practices.
- Museum Square should consider seasonality and should have a flexible design that can incorporate a wide range of events and activities. Programming of the space will be critical to its success.
- Downtown should be safe and welcoming.
- Museum Square represents an opportunity to celebrate Woodstock's history and ties with agriculture through the inclusion of public art and partnerships with the City's museum, gallery and library.

2.3 What We Heard: PIC #1

Engagement Overview

As the first step in the planning process, our team reached out to the public, stakeholders and members of the community to better understand the public life and space of Downtown Woodstock. The input from this initial meeting has been used to inform the development of the preliminary concepts presented here.

In January 2022, the Project Team met with various stakeholder groups as well as held a virtual Public Information Centre (PIC) on January 12, 2022 with 85 participants. At these session, we asked what people enjoy or like about the Downtown, what they don't like and what could be improved. We provided image precedents of various elements relating to the Streetscape Master Plan and Museum Square to gain a better understanding of what the community would be interested in seeing in the future.

Participants were given the opportunity to ask questions and provide insights during the presentation. Following the presentation, participants were asked to complete an Online Survey to help guide the next phase of design. The project team used the key take-aways from the Public Information Centre, Stakeholder Interviews and Online Surveys to help shape the priorities for the next phase of the project.

We listened and learned from citizens, stakeholders and business owners.

85 Attendees of the first Public Information Centre
January 12, 2022

1,000 + Online engagement survey respondents
March, 2022

600 + Online engagement open comments
March, 2022

14 Engaged in multiple stakeholder meetings.
January - April, 2022

What We Asked

During this phase of public engagement the project team captured over +600 comments from the community. Most of the ideas and comments gathered fell within the following themes:

- Aesthetic & Design
- Retail & Services
- Activities & Events
- Social & Dining
- Movement & Functionality
- Crime & Safety
- History & Placemaking

The summary below provides a snapshot of general comments shared for each of the themes outlined above.

Aesthetic & Design

Participants appreciated, and would like to see more greenery, art, lighting and patios within the Streetscape. With a strong emphasis on more seating options.

Retail & Services

Participants appreciated the local businesses. Less vacancies and more variety when it comes to retail were suggested improvements.

Activities & Events

Participants indicated that they like the idea of activity within Museum Square and would like to see more markets, pop-ups, music & performances, active open space as well as a strong desire for a skating rink.

Movement & Functionality

There is a desire to keep parking on both sides of Dundas Street with more defined pedestrian crossings and a safer pedestrian realm. As well as a better defined and safer cycling route.

Social & Dining

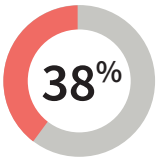
Participants liked the idea of more gathering spaces, activity and retail improving the overall public realm and making the area more inviting to users, visitors and families. They suggested more opportunities for dining and places to enjoy food and drink outdoors.

Crime & Safety

Participants generally do not feel safe at night and suggested increasing security/police presence as well as lighting improvements. A strong response was towards the methadone clinic and homelessness issues making the Downtown undesirable and feel unsafe.

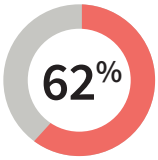
History & Placemaking

Participants enjoy the history and culture of Woodstock and the buildings along Dundas Street and within the Downtown. Preserving and enhancing the history of Woodstock was a key response from participants.



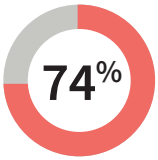
Surface Treatment

The top type of surface treatment voted was green integration. Coloured Concrete was a close second with 35% of votes.



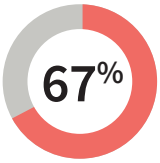
Activities, Play & Exercise

Temporary skating rink received the most interest, with Green Integration (55%) in second.



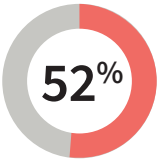
Open Space

Majority of participants favoured the idea of naturalized open space for play,activity and planned events.



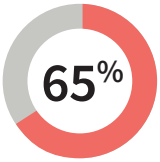
Performance Area

Majority of participants favoured a flexible event space that has multiple uses.



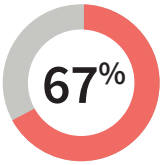
Seating

Respondents favoured a flexible gathering space. Respondents also liked the idea of communal tables and sculptural seating options.



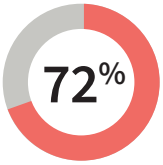
Lighting

Bollard lighting was most favoured. Catenary (43%) and Call Boxes (37%) were also highly liked.



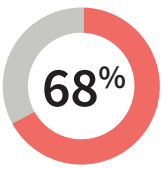
Vegetation

Shade trees were most requested followed by Naturalized (59%), Planter Seating (50%) and Annuals (41%).



Public Art

Temporary Installations were favoured over permanent installations.



Shelter

Semi-covered installations were preferred over full cover (33%).

Strategic Moves

Through this initial public engagement process, Our team came to understand what citizens, stakeholders and visitors like about Downtown Woodstock, what they don't like and what improvements they would like to see. From here, we developed the following strategic moves for moving forward with the Streetscape Master Plan and museum Square Design.

1

Increasing levels of comfort, accessibility, safety and inclusiveness of public spaces by acknowledging and accommodating the specific needs and experiences of all population groups within the community.

2

Creating a coherent and engaging landscape response that embraces natural qualities, community and cultural values.

3

Establishing attractive, usable, open spaces that are inclusive and offer a diverse range of experiences.

4

Improving people's ability to walk, cycle and access public transport throughout the Downtown that offers safe and efficient links and reduces barriers to movement.

5

Creating inviting, people-friendly streetscapes, open spaces and public places, that maximize the opportunities to create green places.

6

Designing infrastructure and green networks, spaces and places that support active lifestyles, and encourage social interaction to improve physical and mental health.

2.4 What We Heard: PIC #2

Engagement Overview

The second public meeting was broken up into two sessions, one in the afternoon and one in the evening to ensure all members of the community had an opportunity to attend. Meeting attendees were invited to participate in an open house input session that included an overview of the project process, the proposed new concepts, and a summary of the insights gained at the previous meeting.

Our team used the insight gained through previous engagement and developed an initial Streetscape Master Plan concept and two very different preliminary concept alternatives for Museum Square.

45 Attendees of the second Public Information Centre
May 10, 2022

700 + Online engagement survey respondents
June, 2022

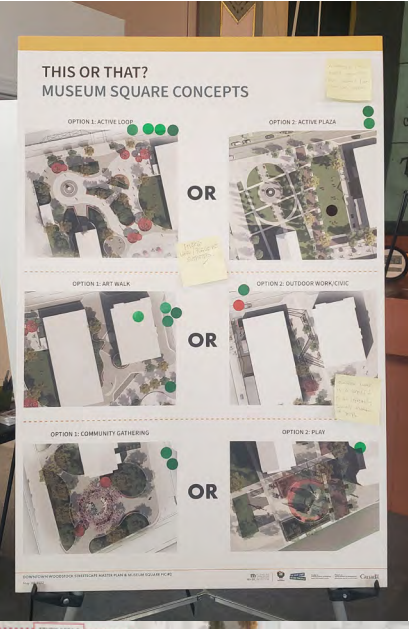
500 + Online engagement open comments
June, 2022

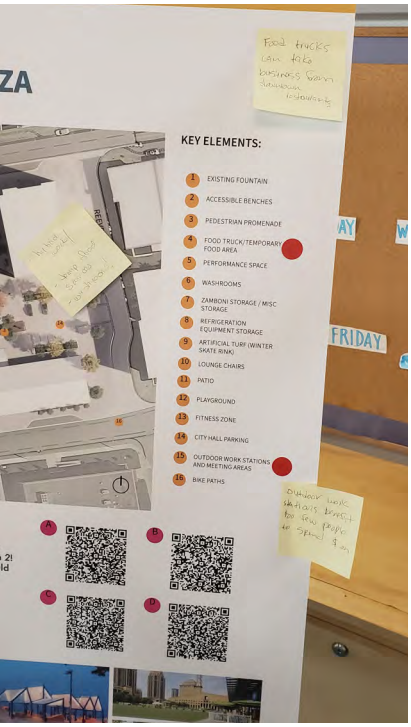
OPTION 1: MUSEUM SQUARE **TRAILS**

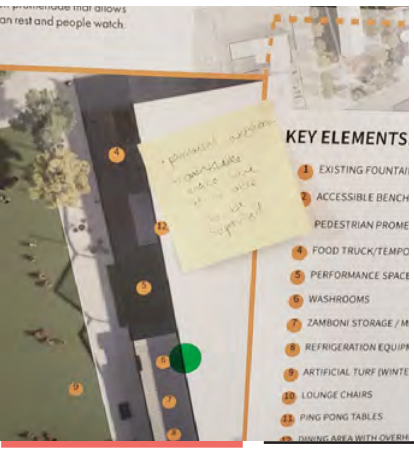
Featured a design with bigger, bolder and greener ideas to complement and elevate Museum Square.

OPTION 2: MUSEUM SQUARE **PLAZA**

Featured a design more sensitive to the heritage of downtown Woodstock integrated with new ideas, and design features.







What We Asked

Creating two concepts for Museum Square provided our team the opportunity to gain feedback on specific elements the public wished to see such as activities and events, public safety, social issues, aesthetics and design, mobility and functionality, retail and services, as well as history and placemaking.

Those in attendance were asked to visit stations set up around the room to view the presented material and participate in a dot placement visual preference exercise, as well as write their thoughts onto sticky notes and place them on the panels. This exercise allowed participants to provide feedback on the images and design features they liked, or disliked.

Other feedback opportunities were provided including comment cards where the public were able to write down additional feedback on the designs and submit to the project team and an Online survey was available on the project website (www.LetsTalkWoodstock.ca) following the public meeting.

Interactive Engagement

Our team included innovative ways to allow participants to gain a full understanding of the project including QR codes which allowed people to enter into the 3D model of Museum Square (see below).

IMMERSE YOURSELF....

Scan the QR codes on the panels with your mobile device's camera for a live experience inside the 3D model! Take a look around and get a feel for what this design would look like in real life.

Majority of participants favoured Option 1 “Trails” over Option 2 “Plaza”.

Seasonal Use

The pedestrian promenade from Option 1 which offers a passive trail in warmer months and a skating trail in the winter was preferred over the formal skating rink of Option 2. Additionally, participants favoured the water jet area providing fun for all ages during the summer and acts as a loading area away from the main skating trail in the winter to tie skates, and a safe space away from the trail.

City Hall

Participants enjoyed the idea of providing a space for people to display and view public art as well as gather and relax away from the main plaza, but also liked the idea of communal tables with power outlets.

South of the Square

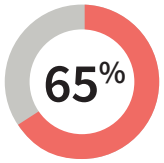
A quiet contemplative area was favoured over a children play area south of the Square. Concern was driven for safety with having a play area in this location being to close to the road.

Performances Spaces

Although Option 1 was favoured over Option 2, participants liked the formal performance area and open space from Option 2.

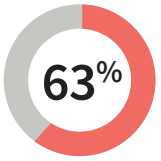
Safety & Security

Safety and security still played a prominent role in feedback being received with concerns for the types of people who will use the space and ensuring it is safe for all users.



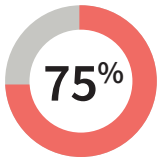
Preferred Option

Option 1 “Trails” was the preferred concept over Option 2 “Plaza”



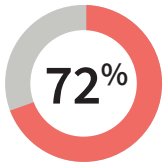
Seasonal Use

A skating trail on a concrete walkway was preferred over a skating rink.



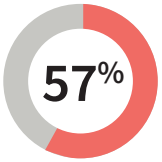
City Hall

The Art Walk was preferred over designated workspaces for the area adjacent to City Hall



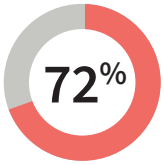
Vehicle Access

Parking with a tree lined pedestrian promenade with power bollards for events was the preferred maintenance access.



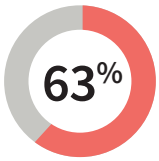
South of the Square

A quiet contemplative area with communal gathering spaces was preferred over structural play



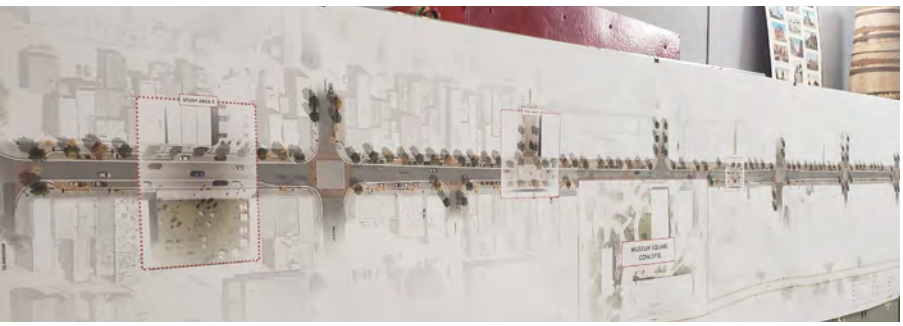
Washrooms & Food Areas

A continuous canopy with fixed washrooms were preferred over standalone sculptural and temporary washrooms.



Planting

Raised planter beds in meandering shapes with integrated seating were preferred over formal, manicured beds and lawns with stand alone benches.



3

Streetscape Master Plan Concept

This section presents the overall design concept for Downtown Woodstock's Streetscape. The project team developed this concept by incorporating the comments received during the Public Engagement phase. The Streetscape Master Plan will guide the City's infrastructure and public realm renewal program, ensuring an integrated approach with other key downtown implementation strategies.

3.1 The Overall Concept

The Plan

The master plan proposes a streetscape and public realm vision for Downtown Woodstock. This proposed plan and overall implementation strategies look at the entire Downtown stretch, from Vansittart Avenue to Beale St./ Bay St. This master plan proposes a continuous approach throughout the Downtown, with unique interventions based on site specific needs. The plan also recognizes the current character of the Downtown and seeks to develop a phased approach in which Woodstock's Downtown can continue to grow, thrive and invite public use. Overall objectives are outlined here.

The following sections outline the overall Streetscape Master Plan strategy with additional detail and strategies provided for key areas as well as proposed materials. This proposal seeks to provide a framework in which the Downtown Streetscape can developed and enhanced.

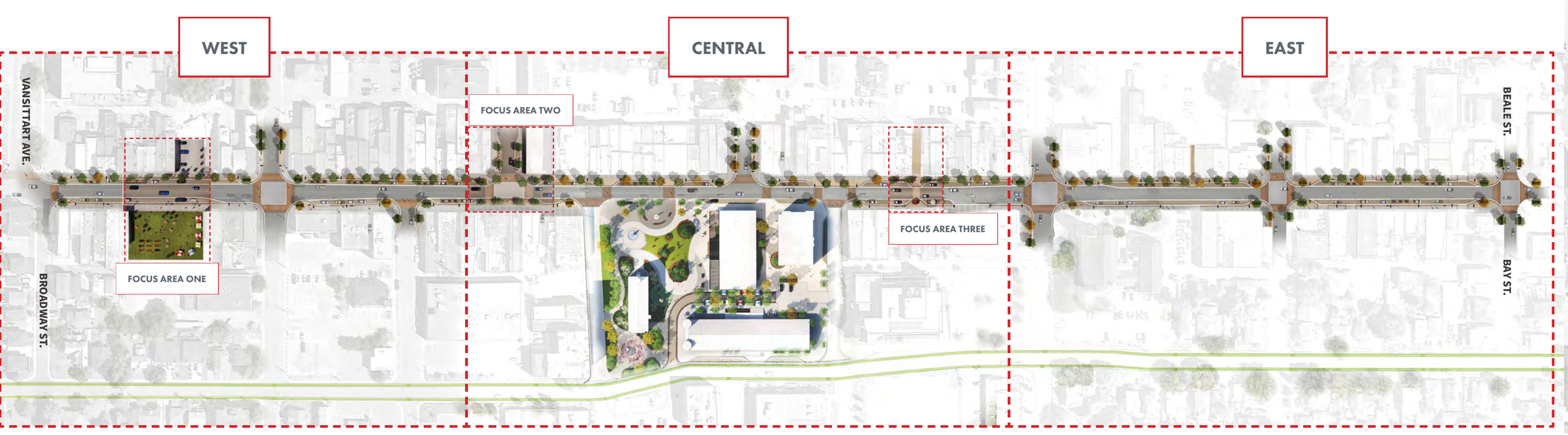
1 **Strengthen existing historical characteristics.**
Embrace the existing heritage and culture of Woodstock Downtown, and as a City.

2 **Update and provide accessible street furnishings.**
Enhance existing lack of street furniture and ensure that accessibility and comfort is at the forefront.

3 **Provide safe crossings and well defined crosswalks.**
Enhance crosswalks and provide safe travel for all modes of transportation.

4 **Expand the vegetation and promote healthy vibrant trees.**
Provide space for plants to thrive including trees, native shrubs and perennials and hanging baskets.

5 **Provide timeless materiality.**
Allow for materials that are durable and can be maintained in the future.



West Enlargement

The West enlargement focuses on the Dundas Street corridor from Vansittart Avenue to Perry Street. Street parking in this area is largely preserved and enhanced with carefully selected materials. This area also considers existing vacant land and underutilized spaces. This Plan does not seek to propose use within spaces that are not City owned, rather it recommends considering temporary uses to activate these spaces and the streetscape while waiting for development to occur. Refer to Focus Area One for an in depth look at this approach.

01 TREES IN SOIL CELLS

02 BENCHES

03 PERMANENT BOLLARDS

04 STREET LIGHT [WITH HANGING RODS]

05 CATENARY LIGHTS

06 CANOPY FEATURE
[POTENTIAL PUBLIC ART COMMISSION]

07 BIKE PARKING

08 TEMPORARY PATIO [FLEXIBLE PARKING]

09 TACTILE SURFACING

10 CROSSWALK

11 COLOURED ASPHALT

Central Enlargement

The Central enlargement focuses on the Dundas Street corridor from Graham Street to Wellington Street. This area is the heart of the Downtown. With the proximity of City Hall, Museum Square, and other important destinations, it makes this the most active area of the Downtown. Parking has been modified in select locations to allow for bump-outs and enhanced pedestrian crossings. This ensures a well connected, active space that emphasizes pedestrian safety. Several streets terminate at Dundas Street within this area. These terminating views provide an opportunity for Public Art and enhanced vistas along the streetscape.

01 TREES IN SOIL CELLS

02 BENCHES

03 PERMANENT BOLLARDS

04 STREET LIGHT [WITH HANGING RODS]

05 CATENARY LIGHTS

06 CANOPY FEATURE
[POTENTIAL PUBLIC ART COMMISSION]

07 BIKE PARKING

08 TEMPORARY PATIO [FLEXIBLE PARKING]

09 TACTILE SURFACING

10 CROSSWALK

11 COLOURED ASPHALT

East Enlargement

The East enlargement focuses on the Dundas Street corridor from Wellingston Street to Beal/Bay Street. Similarly to the West enlargement area, street parking in this area is largely preserved and enhanced with carefully selected materials. This stretch focuses on flexible parking and the opportunity to enhance main intersections without any mid block connections. These main intersections are high traffic, multi modal spaces and the focus was to ensure safe and accessible crossings are present. While street lights provide opportunities to cross safely, there are other elements outlined herein that make these areas safer to use.

01 TREES IN SOIL CELLS

02 BENCHES

03 PERMANENT BOLLARDS

04 STREET LIGHT [WITH HANGING RODS]

05 CATENARY LIGHTS

06 CANOPY FEATURE
[POTENTIAL PUBLIC ART COMMISSION]

07 BIKE PARKING

08 TEMPORARY PATIO [FLEXIBLE PARKING]

09 TACTILE SURFACING

10 CROSSWALK

11 COLOURED ASPHALT

3.2

Focus Area One

Underutilized and abandoned lots can become areas of misuse. Ownership plays a significant role in programing these spaces, and this proposal does not aim to provide a clear solution, but rather a guide to these spaces and how they might be activated. Consultation with private owners is critical to ensure a successful activation of site.

Pop-up parks, events and temporary uses have gained a lot of traction in providing use to undeveloped sites in recent years. Temporary parking areas can be accommodated with movable planters and gravel surfaces, while green areas are prime locations for festivals, markets and programmed events. The proposed concept shows a temporary parking lot with movable planters, gravel surfacing and wheel stops. This proposed parking can be accessed through an existing alley. This solution can be used to provide additional parking while ensuring the space is used.

Alternative Approaches to Vacant Land

temporary use, when successful, can rapidly and efficiently bring underutilized land into productive use, thereby reducing or removing many undesirable externalities.

To the south, on an open green space, the concept shows a Market event with temporary tents, planting and picnic benches. This proposed event is strengthened by the proposed community garden that can exist as a pilot in this sunny space. A community garden would bring users to the site every day, while programmed Market days will activate the space into the summer evenings.

Large open spaces are hard to find in most Downtown areas. Temporary uses, when successful can rapidly and efficiently bring underutilized land into productive use and reduce undesirable externalities. As low-cost and low-risk strategies, temporary projects can also respond quickly to changing conditions and demands.

The local community can also benefit from temporary use projects. In addition to reducing the negative externalities caused by vacant land, temporary use projects can include the community in participation in the activation of the space that serve local needs of the community.

01 TREES IN SOIL CELLS [IN PLANTERS]
02 BENCHES
03 PERMANENT BOLLARDS
04 STREET LIGHT [WITH HANGING RODS]
05 CATENARY LIGHTS
06 CANOPY FEATURE [POTENTIAL PUBLIC ART COMMISSION]
07 BIKE PARKING
08 FLEXIBLE PARKING
09 TACTILE SURFACING
10 PROPOSED PILOT COMMUNITY GARDEN
11 PROPOSED PARKING LOT

3.3

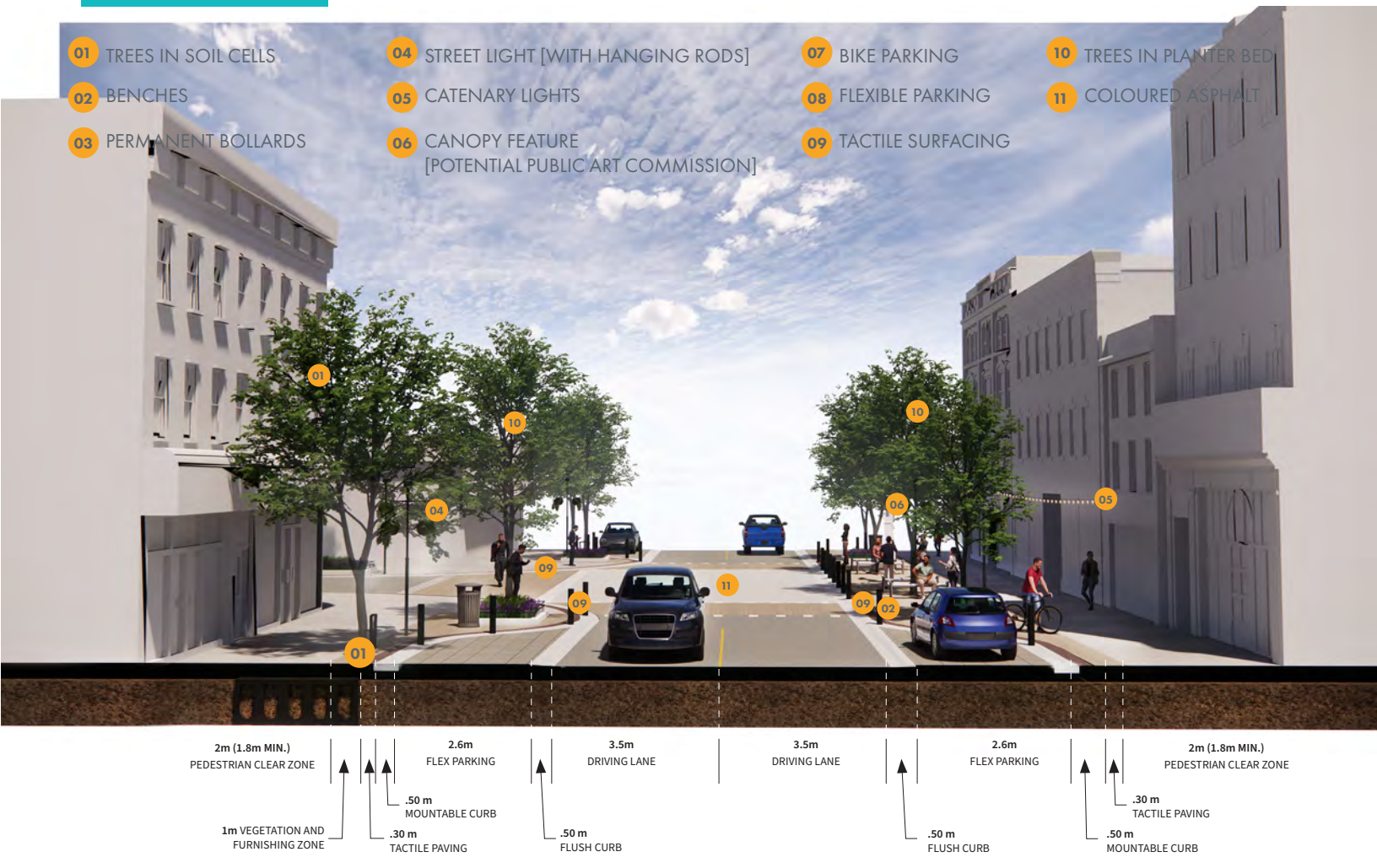
Focus Area Two

Intersections are an important design element within the proposed streetscape design. These high traffic, multi modal spaces are critical to ensuring that all users are able to cross the street safely. While street lights provide a sense of security, there are other elements that make these areas safer to use.

High contrast pedestrian crossings are proposed through the use of printed and coloured asphalt. The pedestrian and cyclist is alerted of a safe crossing through the use of material and colour, while at the same time drivers are alerted of areas where pedestrians might be. Tactile surfacing is proposed at all boundaries where pedestrians might step into a shared area. This high contrast strip ensures that there is an extra level of protection for all users.

Corner Bump-Outs

or curb/sidewalk extensions successfully reduce crossing distances at intersections and physically and visually identify an intersection.



All intersections are proposed to have curb extensions. This ensures that minimal distances are provided for pedestrians to cross the street. Curb extensions also provide a buffer between the intersection and parking areas ensuring that no vehicles are able to park close to an intersection.

Street furniture is set back from the intersection to allow for clear sightlines and high canopy trees are proposed as an indicator at all intersections. High canopy trees are proposed to be planted in curbed planters and allow for unobstructed sightlines and provide visual cues for areas where pedestrians and vehicles will interact.

All trees will be planted within a planter that is supported by soil cells underground. These soil cells ensure that the trees will be able to thrive in an urban environment and reach their mature stature.

01 TREES IN SOIL CELLS
02 BENCHES
03 PERMANENT BOLLARDS
04 STREET LIGHT [WITH HANGING RODS]
05 CATENARY LIGHTS
06 CANOPY FEATURE [POTENTIAL PUBLIC ART COMMISSION]
07 BIKE PARKING
08 FLEXIBLE PARKING
09 TACTILE SURFACING
10 TREES IN PLANTER BED
11 COLOURED ASPHALT

3.4

Focus Area Three

Crosswalks and safe pedestrian crossings are critical components of complete streets. Stamped asphalt is proposed at all crosswalks and areas where pedestrians interact with vehicles. High contrast, white bands run along the crosswalks to ensure enhanced visibility where no signalized intersection exists. Clear sight lines are established by setting back street furnishings and streetscape elements at crosswalks.

Curb extensions are proposed at all crosswalks and intersections. This provides a reduced distance to travel across the street and ensures safe crossing for all users, regardless of age and ability. Curb extensions also signal drivers that they should slow down and remain on alert at these locations. High contrast, tactile paving is proposed at all boundaries where pedestrians might step into a shared area.

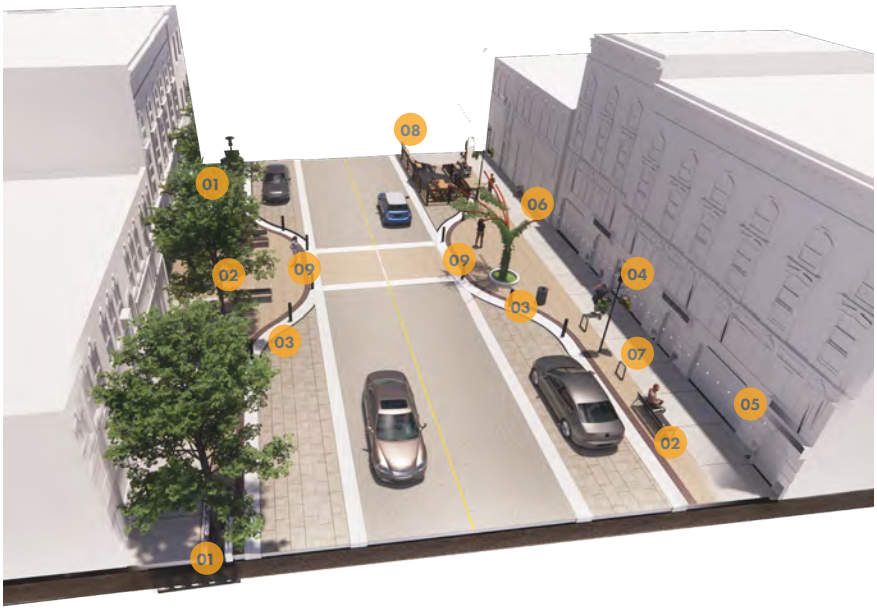
Mid-Block Bump-Outs

emphasize pedestrian priority and safety; reduce crossing distance and slow vehicular traffic, with the added benefit of creating more direct connections throughout the Downtown.

This focus area looks at the typical condition where bump-outs are introduced to shorten pedestrian interaction with vehicles, as well as providing a high contrast surface to alert vehicles of the likelihood of pedestrians.

Permanent bollards are proposed on either side of each bump-out to ensure that safety is provided when pedestrians are looking for an opportunity to cross the street. All crosswalks are also furnished with high contrast tactile surfaces that adhere to the AODA standards.

Bump-outs also provide an excellent location for Public Art to occur. The extra space and highly visible location allow these spaces to become key destinations for Public Art installations. Wayfinding signage associated with Public Art is encouraged to allow pedestrians enjoy the Art while they wait to cross.



01 TREES IN SOIL CELLS [PAVER SURROUND]
02 BENCHES
03 PERMANENT BOLLARDS
04 STREET LIGHT [WITH HANGING RODS]
05 CATENARY LIGHTS
06 CANOPY FEATURE [POTENTIAL PUBLIC ART COMMISSION]
07 BIKE PARKING
08 TEMPORARY PATIO [FLEXIBLE PARKING]
09 TACTILE SURFACING

3.5 STREETSCAPE ZONES

The streetscape plays an important role in the livability, vitality and character of Downtown Woodstock. This Streetscape Master Plan was designed to create an attractive, pedestrian-friendly, greener downtown for people to enjoy and explore. Proposed updates took into consideration all age groups and levels of abilities. These updates will enhance the visitor experience, celebrate Woodstock's history, and make the downtown more accessible, walkable, and better connected to its surrounding neighborhoods. Further, this thriving pedestrian environment will spark economic development resulting in Downtown Woodstock becoming a more attractive destination to live, shop, eat, and work.

Constructibility was a key consideration within this proposal. While it is critical to propose a beautiful and engaging plan, this proposal also takes into account materiality, installation and maintenance over time. A timeless design is proposed that will be economically sound for today and into the future.

Streetscape Zones

Sidewalks are critical components of any streetscape design. They transport people, enhance connectivity, improve safety and promote walkability. Within the sidewalk, several functionally distinct zones are identified. Streetscapes consist of elements including travel lanes, transit routes, bikeways, vegetation, sidewalks, parking and sitting areas, and gathering spaces. In a setting such as Downtown Woodstock, the design and treatment of its streets is critical to the safe movement of people. This Streetscape Master Plan has outlined the following three zones that will be discussed throughout this report, and are incorporated within the entire Master Plan:

- **The Pedestrian Clear Zone**
- **The Furnishing/Planting/Edge Zone**
- **Flexible Parking Zone**

The Pedestrian Clear Zone

The Pedestrian Clear Zone provides an unobstructed and accessible public path of travel dedicated for pedestrians. This zone should be a minimum of 1.8m wide [complying with the minimum Accessibility for Ontarians with Disabilities Act (AODA) standards for two-way travel for people using mobility devices]. While this is a minimum standard, this proposal outlines the need for a minimum of 2 meters wherever possible. This ensures that there is an abundance of space for all pedestrians, whether they are walking in pairs or alone.

At all times, the pavement must be even and well maintained, while draining away from the buildings. Local businesses should be prohibited from placing advertisements or other signage on this pathway. No element should encroach within this zone, including but not limited to, planters, site furniture and any other temporary item. Soil cells are proposed underneath this zone to allow for trees to grow to a mature size without lifting paving material and creating hazardous trip areas.

The Furnishing/Planting/ Edge Zone

The Furnishing/Planting Zone is the section of the streetscape between the back of curb and the Pedestrian Clear Zone. This zone houses street furnishings, trees, and space for signage. Typical streetscape furnishings include, but are not limited to, benches, bike racks, bollards, bus shelters and transit stops, pedestrian and traffic signal poles and street lighting, newspaper kiosks, mailboxes, street trees, and waste receptacles. This zone should be a minimum of 1m wide and will be comprised of coloured and stamped asphalt to compliment the downtown historic character.

Housed within the Furnishing Zone is the Edge Zone. This area is located immediately next to the Furnishing Zone and back of curb. This zone is instrumental in providing a high contrast strip that alerts pedestrians that they will be stepping into an area that allows vehicles. This zone will generally be a minimum of 0.5m and is made up of coloured and stamped asphalt. The high contrast colour provides visual cues, while the stamped pattern allows for tactile cues.

The Flexible Parking Zone

The Flexible Parking Zone provides temporary parking with the opportunity for businesses to spill out and claim the area for patios or other approved uses. With an abundance of parking lots surrounding the downtown, this space has been allocated as "flexible" in order to allow business owners to decide whether it serves them better as a usable outdoor space or additional storefront parking.

This plan proposes to use stamped and coloured asphalt on all street parking within the Downtown. This approach, with the addition of a wide flush curb followed by a wide rolled curb, allows for a space that can be used for multiple purposes. It is recommended that patios within the parking areas are reviewed for approval by the City of Woodstock.

Within the past couple of years, the popularity of outdoor patios has risen significantly and the demand for additional outdoor dining space has grown. The use of street parking as "spill out" space for businesses is an innovative approach when the world is turning to pedestrian comfort over parking ease.

3.6 Design Elements

3.6.1 Streetscape Elements

A common suite of streetscape furnishings will provide a unique identity for the Downtown. A consistent and simple approach to furnishings is recommended to balance the overall appearance of the Downtown while the deliberate placement of furnishings will encourage safer and more comfortable pedestrian circulation. The Downtown streetscape furnishings include benches, bollards, bicycle infrastructure and waste receptacles.

- All streetscape elements should be placed in the Furnishing Zone to allow for an uninterrupted clear path for pedestrians except for road safety elements such as parking metres, sign,street and traffic light poles in the Edge Zone,where the street geometry does not have enough space to allow for a Furnishing Zone.
- Streetscape furnishings should be placed a minimum of 0.6m from the back of curb, including benches,bollards, bus shelters, bike racks, and waste receptacles.

Seating

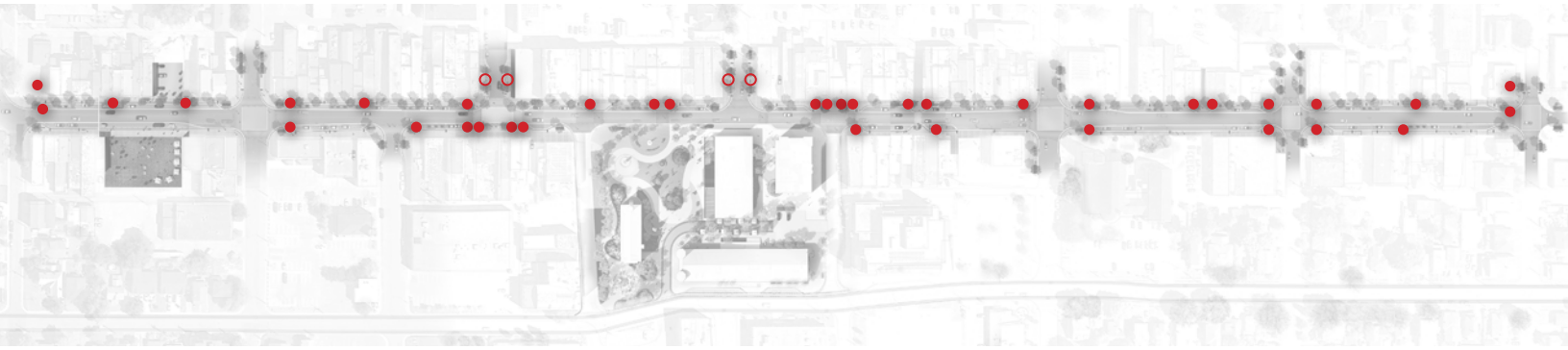
- Where feasible, seating to be spaced 60m apart to improve the accessibility of streets and promote an age-friendly downtown. Spacing can be a maximum of 100m.
- Place benches a minimum 0.6m from back of curb.
- Benches should be located under tree canopies where possible to provide shade and comfort.
- Benches shall be accessible.
- Where seating is oriented parallel to the curb,it should face toward buildings.
- Where space permits, benches in the Furnishing Zone should be perpendicular to the curb.
- In corner bump-outs, benches should be organized to create social spaces and encourage gathering.
- Avoid the use of metals on seating.
- Provide options for arm rests.
- Provide options for backed and backless benches.

Example of a backed bench with arm rests.
Manufacturer: Maglin Site Furniture, Woodstock ON
Model: MBE-0870-00021

Example of a backless bench with arm rests.
Manufacturer: Maglin Site Furniture, Woodstock ON
Model: MBE-0870-00120

BENCH LOCATIONS

backless benches *backed benches*



Bollards

- Bollards to be used at bump-out locations where pedestrians are waiting to cross.
- Bollards should be used where deemed appropriate to separate pedestrian zones from potential conflicts.
- Temporary bollards may be used to close off and delineate flex and shared streets for seasonal uses and during special events and festivals that share the street.
- Spacing between bollards should provide at least 1 metre of clear width to meet minimum accessibility requirements but never be wider than 1.5 metres.
- Designs should avoid linking bollards with chains or ropes.

Example of a permanent bollard
Manufacturer: Hauser Site Furniture, Waterloo ON
Model: PS-82-P-21-AL

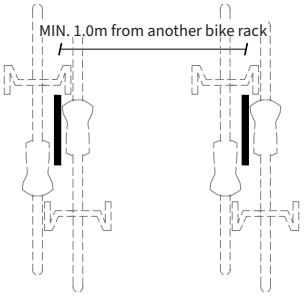
BOLLARD LOCATIONS

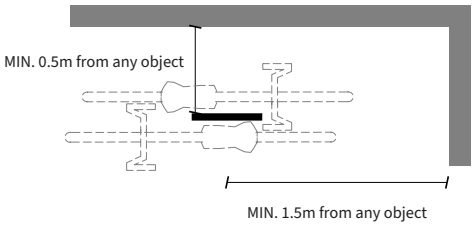
permanent bollard

Bicycle Parking

- Bicycle parking should be provided at regular intervals throughout the Downtown and close to building entrances.
- Where possible, bike racks should be placed near lighting.
- Ensure sufficient space is provided for two bikes on one bike rack. Bike rack needs 50cm on each side, and a minimum distance of 1.5m when measured from center to any object at the front of a bike rack.
- Place bike racks parallel to curb when in furnishing zone that is 1 meter wide.
- Bicycle parking should not impede the Pedestrian Clear Zone.

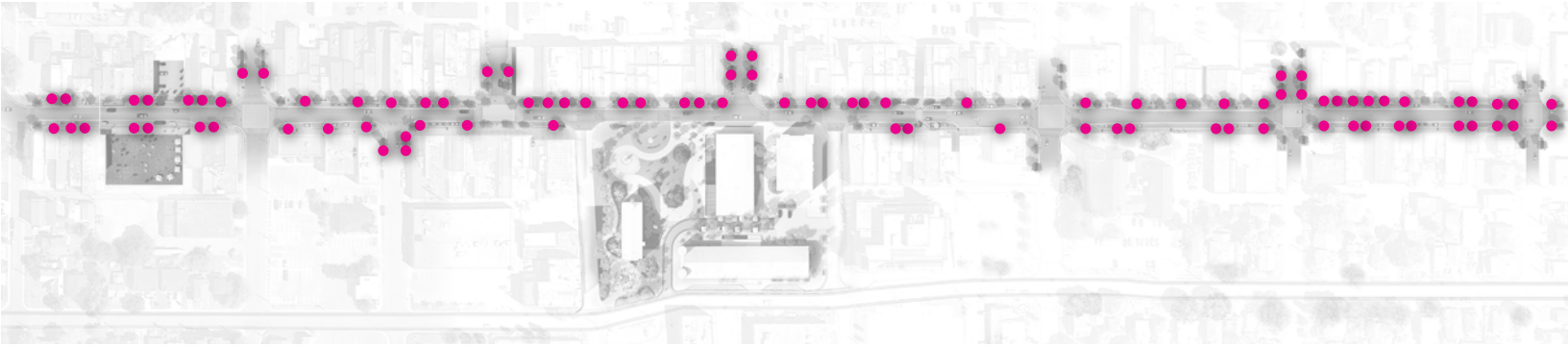
Example of a bike rack
Manufacturer: Maglin Site Furniture, Woodstock ON
Model: MBR-2300-00001





BIKE RACK LOCATIONS

- *bike rack*



Waste Receptacles

- Waste receptacles should be located at high activity street corners, and should be placed within the Furnishing Zone.
- Waste receptacles should be placed at regular intervals throughout the downtown and located close to seating areas.
- Waste receptacles should be designed to be universally accessible.
- Side opening designs are recommended to facilitate easy maintenance.
- Waste receptacles should incorporate rain covers.
- A Downtown-wide design for waste receptacles should be developed to assist with maintenance.
- Waste receptacles should have clean, simple designs.

Example of a waste receptacle
Manufacturer: Maglin Site Furniture, Woodstock ON
Model: MTR-0650-00011

WASTE RECEPTACLE LOCATIONS

- *waste receptacle*

Transit Stops

The location and design of transit stops directly impacts the comfort and attractiveness of transit service. The selection of a transit bus stop locations should be guided by the safety and comfort of users, while minimizing the delay to transit service.

Where on-street parking is permitted, transit platforms bump-outs within the Furnishing Zone should be considered to improve transit reliability, travel time and accessibility. These curb extensions align the transit bus stop with the parking lane, allowing the transit vehicle to stop and board transit riders without having to leave and re-enter the travel lane, which reduces traffic interactions.

- Stops should generally be located at intersections close to a pedestrian crossing.
- Stops should be clear of clutter and unobstructed for boarding and dismounting.
- Signalized intersections are ideal locations for bus stops to allow for safe pedestrian crossings, and to ease the experience of route-transfers.
- Mid-block bus stops are recommended only near significant pedestrian generators, and where intersections are far away.
- Transit stop design considerations:
  - » Sidewalks should connect directly to transit shelters to encourage active transit use and ensure safety and convenience.
  - » Transit stops should include basic amenities, including seating, trash receptacles, lighting, and route information.
  - » Transit stops should include a shelter for weather protection.
  - » Transit shelters should have transparent walls to improve pedestrian safety and provide visual connection between waiting transit users and approaching transit vehicles.
  - » Transit stops should have barrier-free access and be compliant with AODA standards.

TRANSIT STOP LOCATIONS

transit stops

3.6.2 Public Art

To further reflect on the local history and cultural identity of the Downtown, opportunities to incorporate public art for beauty, interest, animation and weather protection are encouraged as part of the streetscape. Public art is art that is temporary or permanent, accessible to the public and enhances or provides interest to the public realm. It can also educate or bring awareness to a special aspect of the area or the community.

- Public art should be incorporated where possible to beautify, improve and provide interest to the public realm.
- Public artwork should be located in areas that do not interfere with the pedestrian clearway or vehicular traffic.
- Incorporate Public Art within highly visible areas - primarily at the terminus of a street, located where a bulb-out is present.
- Supporting infrastructure should be provided to install art that can illuminate otherwise dark urban areas and plazas, or locations not suitable for street trees or plantings.
- Public art should be limited near forms of traffic control (e.g. stop signs) in order to minimize driver distractions.
- Public art should be physically and visually accessible, barrier free and incorporate universal design principles.
- Public art should have a maintenance schedule and plan before installation.

Example Canopy Public Art
Artist: Matter Architecture Practice
Name: Bloomcanopy, 2017
Location: Phoenix, AR

Example Interactive Public Art
Artist: CAITLIND R.C. BROWN & WAYNE GARRETT
Name: Cloud
Location: Various

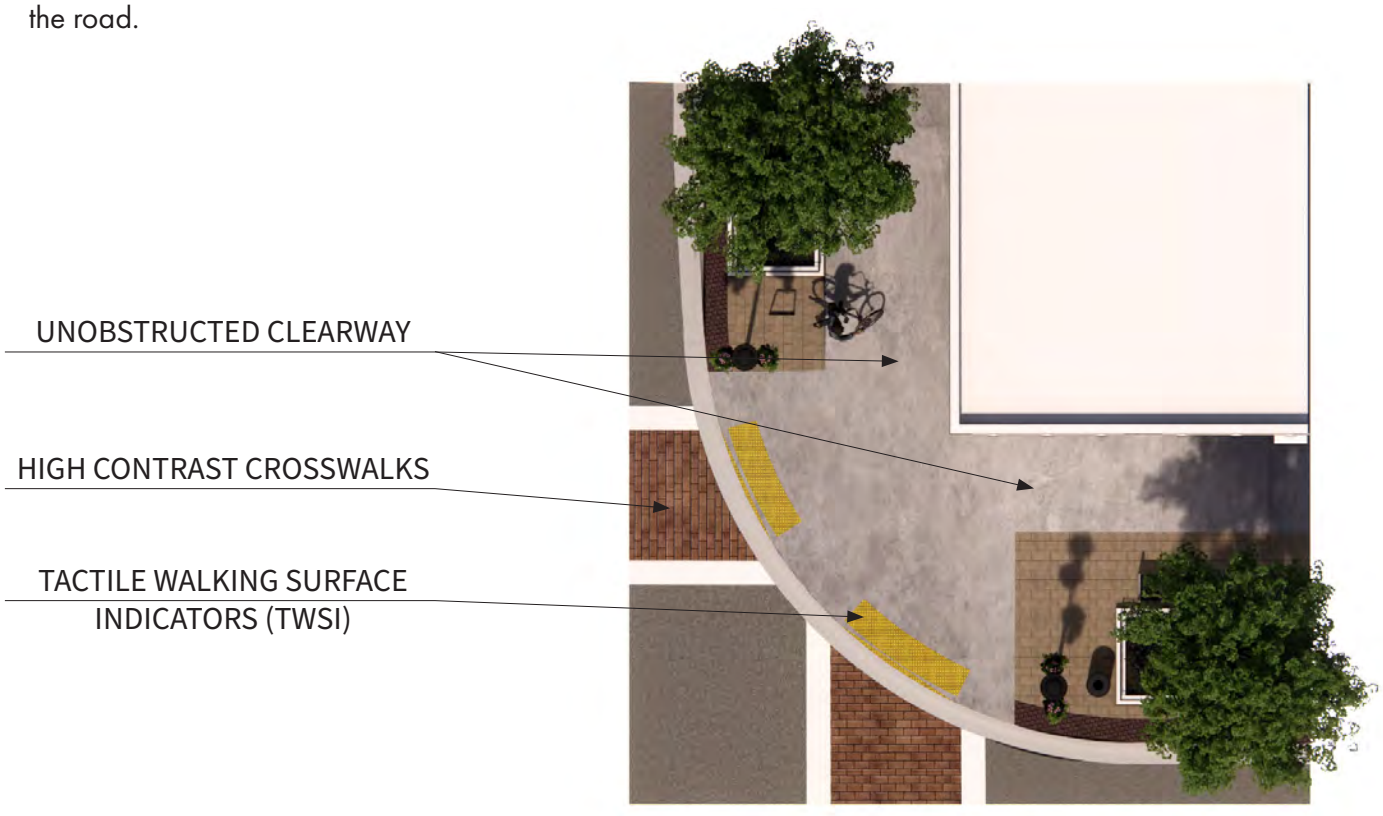
Example Light Public Art
Artist: CAITLIND R.C. BROWN & WAYNE GARRETT and Studio North
Name: Light Keeper
Location: Toronto, ON

3.6.3 Accessibility

All aspects of the streetscape shall be designed to be accessible to persons living with disabilities and must comply with the Accessibility for Ontarians with Disabilities Act [AODA] and its regulations including the Design of Public Spaces Standards. Outlined in this section are several key public realm accessibility objectives for the Streetscape Master Plan. The primary goal of these recommendations is to ensure that the design of areas within the public realm consider users of all abilities.

Pedestrian Clearway

- Pedestrian clearway must remain unobstructed.
- A continuous public sidewalk should be provided on both sides of the street.
- Tactile walking surface indicators are required wherever a pedestrian is approaching a potentially dangerous location, such as from a sidewalk to a street.
- Pedestrian clearways are recommended to be a minimum of 1.8m, but 2m is preferred wherever possible.
- Where crossings over intersections occur, clearways should be continuous and marked with materials that provide visual contrast from the road.
- Signage boards, seating and retail spillout spaces is not be permitted within the Pedestrian Clear Zone.
- Overhead signage and canopies should not be located any lower than 2.5 metres above the Pedestrian Clear Zone.
- To minimize risk to persons with visual limitations, all routes should be free of protruding obstacles, overhanging signs, and branches.
- Benches with back rests and arm rests are to be provided.



Pedestrian Crossings

- Where driveways cross the Pedestrian Clear Zone, sidewalks should be continuous and level through the conflict zone.
- Promote and prioritize pedestrian safety throughout the Downtown by designing intersections that:
  - » Reduce crossing distances through the provision of corner bump-outs or curb/sidewalk extensions;
  - » Improve visibility ad traffic calming through narrower travel lane widths and smaller corner radii; and
  - » Use materials and textures that enhance pedestrian priority.
- Where traffic flows and use of adjoining lands permit, provide mid-block bump outs at all street locations that meet the following criteria:
  - » Where on-street parking exists at curb edge and can be adopted for bump-out mid-block;
  - » Where there is no bus stop;
  - » Where adjacent building uses allow for boulevard expansion into the parking lane;
  - » Where there is a need to reduce the length of the street block or create better pedestrian circulation; and,
  - » Where mid-block connections meet the street, provided there are no conflicts with vehicular maneuvering.
- Curb ramps should be used to provide assistance to persons with mobility disabilities, as well as providing a proper transition between the road surface and top of curb at pedestrian sidewalk corners.
- Crosswalks should be continuous and connected to adjacent sidewalks. Crosswalks should be clearly designated for safety, with appropriate surface markings or variation in construction material, and signage.

Pass Throughs, Lanes and Alleys

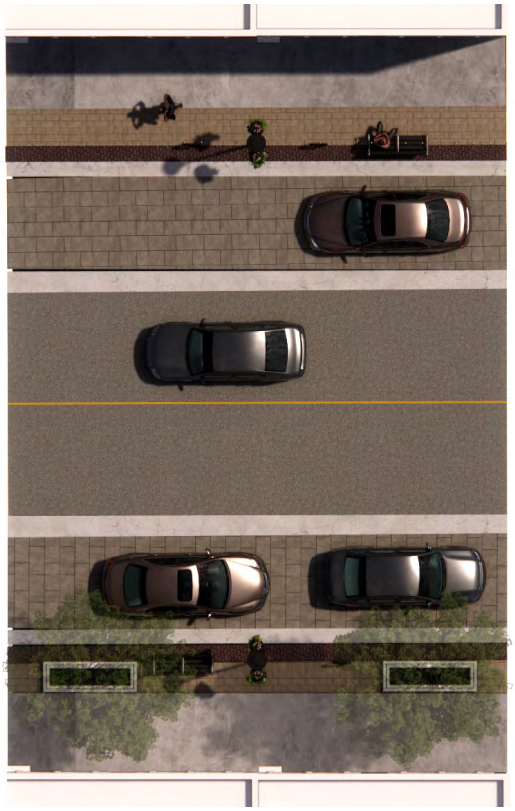
Additional connectivity is provided by the multiple pass through lanes and alley ways behind Dundas Street. These important connections are underutilized and often under supervised. This plan recommends the following actions be taken to improve overall connections and safety within these areas:

- Continue paving from the Furnishing Zone into pass through to parking lots behind Dundas Street.
- Provide additional lighting to encourage convenient, safe and frequent public use.
- These walkways should also be barrier-free by allowing unobstructed views from one end to the other.
- Provide an abundance of wayfinding and signage to display information to pedestrians on where pass through and laneways lead.
- Encourage murals and wall art in the pass through to discourage vandalism.

Typical crosswalk with continuing paving to parking lot

On-Street Parking

- Parallel on-street parking is preferred over perpendicular or angled parking to minimize the overall width of the roadway and to optimize sightlines.
- On-street parking may be situated between bump-outs where appropriate.
- Bump-outs should be well landscaped and designed to accommodate snow removal.
- To improve sight lines restrict parking near intersections, properly trim vegetation, move stop lines back from crosswalks and use curb extensions.
- Parking and access design should mitigate potential pedestrian and vehicular conflicts through clearly demarcated circulation routes, pavement marking, and wayfinding signage.



Typical parallel parking layout

Signage

The City should retain a consultant to prepare a detailed Wayfinding and Signage Master Plan to facilitate movement throughout the downtown, identify points of interest, and connections to other areas within the City. This plan should consider creating a consistent identity that reflects the Downtown's character. Signage should clarify wayfinding, location of parking, provide informational resources and enhance the pedestrian environment. Recommended elements for the Wayfinding and Signage Master Plan are as follows:

Auto Directional Signage:

As motorists enter the Downtown these signs should provide direction towards major destinations. These signs should recur at all important decision points providing a continuous path toward each destination within the Downtown.

Pedestrian Wayfinding:

The pedestrian wayfinding system guides pedestrians and provides more detailed information about points of interest, events, activities and services. The system is structured around a network of designated pedestrian corridors through the downtown, focusing particular attention to the needs and likely routes of downtown visitors, as well as the quality of the environment.

Downtown Gateways:

Gateway signs mark the points where major autoroutes enter the Downtown area. These signs are designed to announce that you are entering a special district. Where possible, they will be placed in locations with clear views of the Downtown.

Parking Directional:

Parking directional signs direct drivers from designated corridors and key destinations to parking lots and on-street parking spaces helping them locate the destination on foot after parking.

Street Identity Signs:

Within the Downtown, distinctive street identity signs provide a constant reinforcement of distinct identity.

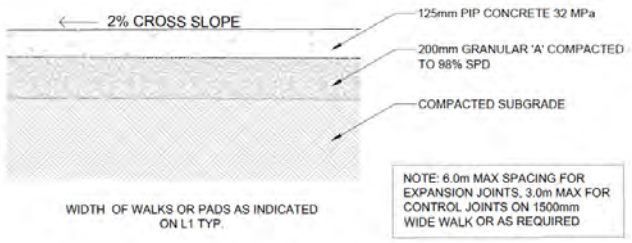
3.6.4 Paving

High quality materials are both attractive and economical over the long term. They will last longer and better withstand the impacts of heavy use and climate. A palette of high-quality materials for downtown streets will redefine the public realm. The Streetscape Master Plan proposes a simplified palette of colours, paving materials and patterns for the area.

Pedestrian Clearways

The use of concrete is practical from both economical and functional perspectives and provides a uniform and universally accessible surface.

- All Pedestrian clearways are to be made of cast-in-place concrete with a broom finish to ensure a safe, comfortable and universally accessible surface treatment.
- Special paving will not permitted in front of individual buildings or developments.

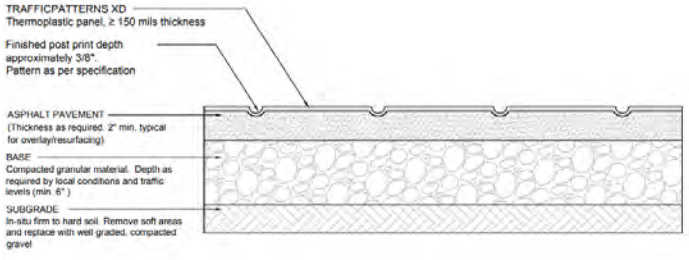


Typical detail of concrete sidewalk

Crosswalk Treatment

Crosswalks at controlled intersections within the Downtown should be designed to minimize the distance traveled by pedestrians. Crosswalks assist pedestrians in safely crossing streets by signifying the crossing point for vehicles approaching an intersection. The paving material and colour of crosswalks on all streets should be consistent wherever possible to create uniformity throughout the Downtown.

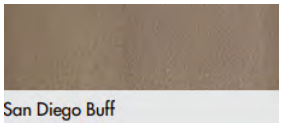
- Crosswalks should incorporate unique pavement treatments or markings that can alert drivers and indicate pedestrian priority.
- Pavement treatments or markings must be durable and long-wearing so they remain highly visible for many years.
- Crosswalks to be impressed and coloured asphalt made of heavy duty, durable material.

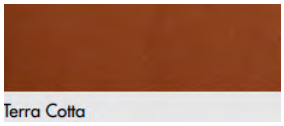


Typical detail of heavy duty imprinted and coloured asphalt. Detail provided by 'Hub Surface Systems'
Field Colour: Heritage Red
Border Colour: White

Furnishing/Edge Zone

- Furnishing zone to be pedestrian asphalt detail with imprinted and coloured asphalt.
- Edge zone to be high contrast from Furnishing zone.


San Diego Buff


Terra Cotta

Manufacturer: Hub Surface Systems
Furnishing Zone Colour: San Diego Buff or approved alternate
Furnishing Zone Pattern: Offset Brick
Edge Zone Colour: Terra Cotta or approved alternate
Edge Zone Pattern: Tile
Application: StreetPrint

On-Street Parking

Stamped asphalt is an economical and aesthetic alternative to standard black asphalt concrete, pavers, brick or patterned concrete.

Stamped asphalt is used for on-street parking stalls to not only differentiate it from the through travel lanes but also to better blend the transition between the boulevard and roadway.


Bedrock

Manufacturer: Hub Surface Systems
On Street Parking Colour: 'Bedrock' or approved alternate
Pattern: Offset Brick
Application: StreetPrint

3.6.5 Planting

Planting beds and trees within soil cells offer abundant opportunities to green the downtown. Movable planters and hanging baskets can add an infusion of colour and an additional layer of visual interest to the streetscape using annuals. Permanent planters allows for native, drought tolerant and salt tolerant planting that can showcase the importance of adding our natural environment back to our Urban areas.

Raised Planters

Well maintained planters can be a colourful addition to the streetscape and are strongly encouraged throughout the downtown. Green infrastructure such raised planters are permitted within the Edge and Furnishing Zones to ensure that the Clear Path Zone is maintained for safe pedestrian flows;

- All landscaped planter beds adjacent to vehicular areas shall be protected by a minimum 150mm high concrete curb and decorative iron fence on top.
- Utilize spaces around raised planters to provide refuge areas and safe travel routes for at grade portions of pedestrian walkways
- Decorative planters should be installed at the beginning/end of the planting & furnishing zone and in bump-outs.
- Planting material should be chosen for its ability to withstand the climate, visual interest throughout the year, and for ease of maintenance.
- Explore opportunities to add planting throughout the downtown in locations where sight lines are not restricted.
- Collaborate with the Upper Thames River Conservation Authority on trees, shrubs and plants that can thrive in this location.
- Demonstration and educational planting beds are encourages and signs should be implemented to teach passerby of the benefits of planting in the downtown.

Shrubs

Shrub selection for urban environments can vary. It is recommended that Native species be considered, along with species that can withstand harsh winter conditions, low maintenance and salt spray. The following is a list of acceptable plants based on their hardiness and tolerance to pollution. Plant selection should be considered based on location on the plan, and no invasive species are to be planted along the streetscape and within the Downtown.

Native

Red osier dogwood (Cornus sericea) – winter interest

Alternative Dogwood (Cornus alternifolia)

Round-leafed Dogwood (Cornus rugose)

Black Currant (Ribes americanum)

Common juniper (Juniperus communus) - evergreen

Creeping juniper (Juniperus horizontalis) – evergreen

Canadian Yew (Taxus Canadensis) - evergreen

Non Native

Green Mountain Ash Boxwood (Buxus hybrids)

Spirea (Spirea spp.)

Cotoneaster (Cotoneaster spp.)

Juniper (Juniperus spp.) – choose based on height and sightlines

Slowmound mugo pine (Pinus mugo 'slowmound')

Dwarf mugo pine (Pinus mugo)

Tree Planting

Street trees provide incredibly important and measurable benefits that are vital to the overall health of the community. Innovative technologies are making the challenge of growing large, healthy street trees in highly urbanized areas feasible. As the downtown streetscape is redeveloped, street tree planting will play a prominent role.

- Street tree species need to withstand tough conditions and be tolerant of drought, salt, wind, and soil compaction.
- Above ground and below ground conflicts will also inform appropriate species choices.
- Species will be chosen based on their ability to thrive in urban conditions, their status as native or non-invasive, and their ability to contribute to the diversity and resiliency of the City's urban forest.
- Trees should offer shade and heat moderation in the summertime but not be so thick as to prevent filtered sunshine.
- Trees should be high headed to allow for sight to the store fronts.
- Tree spacing will vary depending on the desired size and form of the tree species at maturity, but the average spacing will be 10 meters on center.
- Trees will be planted in the Furnishing Zone within planting areas that are bounded by concrete curbs with decorative iron on top.
- Trees will not be planted where they may impede visibility at intersections and crosswalks.
- Utilities design and location should be coordinated so that it does not interfere with sustainable tree growth.
- Collaborate with the Upper Thames River Conservation Authority on trees that can thrive in this location.
- It is recommended that 15-20 cu.m. of soil per tree is provided where trees share the same soil volume area and 25-30 cu.m./tree be provided where trees do not share soil areas.

Native Street Trees

Hackberry (Celtis occidentalis) – provides berries for birds

Kentucky coffeetree (Gymnocladus dioicus)

Betula papyrifera (Paper birch) – single stem

Non Native

Ginkgo (Ginkgo biloba 'Fastigata')

Ginkgo (Ginkgo biloba 'Princeton Sentry')

Thornless honeylocust (Gleditsia triacanthos var. inermis) – Various thornless varieties

European hornmean (Carpinus Betulus)

Platanus x acerifolia (London planetree)

Ulmus x Accolade (Accolade elm)

TREE LOCATIONS

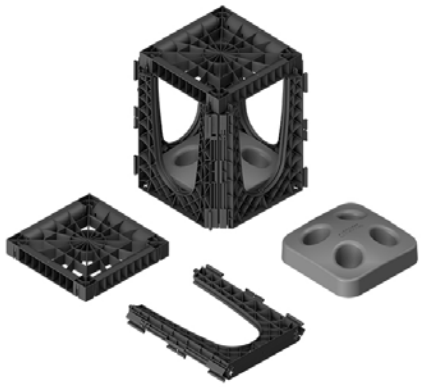
● *trees*

Soil Cells

Soil cells play a significant role in the survival of Urban trees. Long term growth in constrained soil trenches and soil pits have significantly reduced the overall health and maturity of Urban trees. This has continued to prove a challenge for municipalities in urban horticulture management. Most times, the incorporation of trees in urban environments have become an after through, where infrastructure takes precedence over horticultural requirements. In the meantime, urban tree canopies have become more and more important in our societies and contribute to overall well being and comfort. The economic and social benefits of Urban canopies have driven municipalities to invest in soil cells and technologies to ensure that trees have the best chance at survival and reaching mature sizes.

The Streetscape Master Plan proposed the use of structural cells to support tree growth. It is recommended that 15-20 cu.m. of soil per tree is provided where trees share the same soil volume area and 25-30 cu.m./tree be provided where trees do not share soil areas. The incorporation of soil cells reduces long term maintenance as tree roots have space to thrive and do not seek to come to the surface for oxygen. Soil compaction is reduced significantly, increasing the tree's survival and vitality. Soil cells will be connected to form a continuous soil volume area as much as feasible to allow for cost savings and optimal tree growth.

- Soil cells to be 1 meter deep to optimize for space.
- Incorporate root protection measures around the perimeter of soil cells to ensure that no uplifting occurs.
- It is recommended that 15-20 cu.m. of soil per tree is provided where trees share the same soil volume area and 25-30 cu.m./tree be provided where trees do not share soil areas.



Example of Soil Cell
Manufacturer: GreenBlue Urban, Woodstock ON
Model: RootSpace AirForm
Depth: 1 meter

3.6.6 Safety & Security

Pedestrian Safety

Significant opportunities remain to improve pedestrian safety and comfort within Downtown Woodstock by resolving traffic and pedestrian conflicts at problematic intersections. Pedestrian safety is of utmost importance in order to support the efforts to bring more people into Woodstock's Downtown. Impacts of pedestrian safety should be carefully weighed in the consideration of all downtown development and street improvement projects.

- Install pedestrian walk signals that count down the amount of time left to cross at all intersections within the Downtown area
- Crosswalks should be continuous and connected to adjacent sidewalks. Crosswalks should be clearly designated for safety, with appropriate surface markings or variation in construction material, and signage
- Sidewalks should connect directly to transit shelters to encourage active transit use and ensure safety and convenience.
- Enhance visibility for vehicles by providing well-marked pedestrian crosswalks.
- Encourage efforts to protect pedestrians from crime. Pedestrian scaled lighting on sidewalks and buildings should be used.
- Recessed, dark and dangerous building areas should be well lit. All permits for new or remodeled outside spaces within the downtown should require a lighting plan to promote pedestrian safety.

Lighting

Decorative lighting may be installed to enhance pedestrian experience and safety. Lighting features should be located in the Planting and Street Furnishing Zone, and installed on light poles. Decorative lighting plays a key role in animating streets and sidewalks, enhancing safety, and emphasizing streetscape character. Its design should reflect its context and the surrounding cultural environment. Lighting can also be used to highlight special features like heritage buildings, character areas or landscaping and public art features.

It is recommended that an electrical consultant be retained in order to provide adequate light levels throughout the site. This proposal looks to remove existing lighting and replace with modern but historic styles.

- Downcast pedestrian-scale lighting should be provided along the streetscape and at key intersections.
- Consideration should be given to providing additional or feature pedestrian-scale lighting in areas with a high volume of pedestrian activity.
- Downcast, pedestrian-scaled lighting enhances safety and visibility on streets. At gateways and focal points, lighting can be used to accent special features, such as heritage properties, landscaping and signage
- Consolidate road and pedestrian lighting onto one pole, where possible, to minimize visual clutter.
- Building lighting should be used to accentuate prominent buildings.
- Incorporate and locate lighting to allow for surveillance, particularly around building entrances and parking facilities. Ensure lighting design provides even light and avoids shadows and glare.
- Light emitting diodes (LEDs), solar power, road reflectors and other alternative lighting and energy sources should be encouraged for energy efficiency.
- Include hanging poles for decorative baskets and banners.
- Include equipment required for string lights along the South side of the street, between light standards.

Manufacturer: LumenPulse, Longueuil, QC
Model: PURE 100V
Type: Pole Mount
Addition: Planter and banner accessories

Crime Prevention Through Environmental Design (CPTED)

CPTED strategies aim to reduce victimization, deter offender decisions that precede criminal acts, and build a sense of community among inhabitants so they can gain territorial control of areas, reduce crime, and minimize fear of crime. The following guidelines should be considered in the design of safe sites and buildings:

- Use appropriate features that express ownership and boundaries such as defined entrances, parking areas, and pathways.
- Provide adequate lighting illumination and continuous lighting across sites.
- Provide adequate lighting illumination and continuous lighting and ensure sight lines between buildings and pedestrian walkways are unobstructed and well lit.
- Integrate informal surveillance by considering visibility, light and openness.
- Incorporate appropriate lighting that does not produce glare. Avoid excessively bright lighting.
- Increase security through the use of private wayfinding signage.
- Provide barrier-free access for emergency vehicles.
- Consider views for safety and surveillance opportunities when selecting and siting landscape elements.
- Provide appropriate seasonal maintenance (vegetation maintenance, snow removal) to provide safe access to all accessible areas of the property (i.e. entrances, parking, amenity space, servicing area, paths, etc).

3.6.7 Maintenance

The life cycle and maintenance of a streets are key concerns for designers, affecting longterm cost, environmental sustainability and the perceived quality of a place. It is important not to compromise the long-term longevity and quality of materials, planting and furnishings to save on short-term costs. Correspondingly, maintenance practices must adapt to new conditions. Maintenance requirements should be considered when deciding the placement and design of landscaping, curbs and boulevard elements to avoid accidental damages. Snow clearing is particularly important to ensure safe access for users of the road and sidewalks.

- Consider the spatial needs of snow maintenance activities in the boulevard and roadway.
- Edge zones allow for snow to accumulate
- Priority should be given to the clearing of snow from curb ramps at all intersections and to bike lanes/cycle tracks.
- Develop appropriate policies and management practices to address conflicts between on-street parking and snow clearing / street cleaning.
- Consider maintenance of street trees and plantings in order to meet City urban forestry standards.
- Design bull-noses of medians to be contoured, to reduce the risk of maintenance vehicles damaging the curb.
- Consider street sweeping equipment operations when designing streets (bump-outs and curb extensions in particular).
- Develop an appropriate inspection and repair program for all boulevard elements.
- Install skateboard deterrents on site furnishings as required.
- Flexible Streets use a variety of high quality materials and will require a higher-order of maintenance.
- Consider using hardy plants that are drought tolerant and salt tolerant to reduce long term maintenance and replacement.
- Consider cost and ongoing maintenance of hanging planters.

3.7 Streetscape Typical Elements

3.7.1 Bump-outs and Intersections

01 Crosswalk
- heavy duty imprinted and coloured asphalt

02 Tactile Walking Surface Indicator (TWSI)
- install at all areas where pedestrians step into road crossings

03 Typical concrete sidewalk
- pedestrian grade sidewalk
- install heavy duty concrete at all parking entries

04 Raised Planter Curb
- 150mm high planter curb with decorative iron on top

05 Light Standard
- include plant and banner pole

06 Bench
- ensure benches have arms and back for heightened accessibility

07 Waste Receptacle
- install in high use areas

08 Bike Racks
- install in high use areas

09 Rolled Curb
- 40mm high, 500mm wide

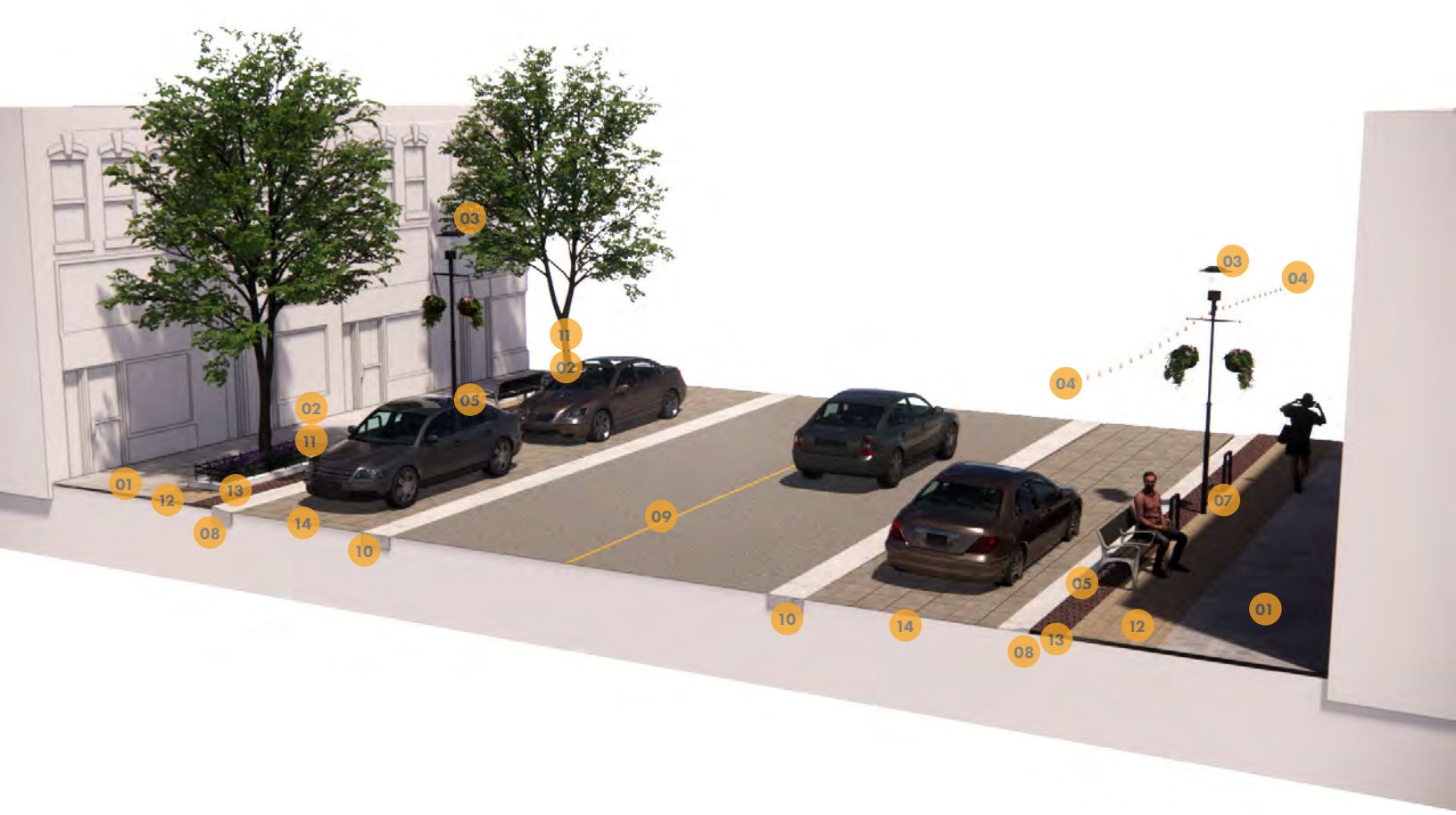
10 Transition from rolled curb to existing typical curb

11 Perennial planting beds with trees
- 15 cu.m. minimum soil volume per tree

12 Furnishing Zone
- pedestrian imprinted and coloured asphalt

13 Edge Zone
- pedestrian imprinted and high contrast coloured asphalt

3.7.2 Typical Street Section



01 Typical concrete sidewalk
- pedestrian grade sidewalk
- install heavy duty concrete at all parking entries

02 Raised Planter Curb
- 150mm high planter curb with decorative iron on top

03 Light Standard
- include plant and banner pole

04 Catenary Lights
- on wire between light standards

05 Bench
- ensure benches have arms and back for heightened accessibility

06 Waste Receptacle
- install in high use areas

07 Bike Racks
- install in high use areas

08 Rolled Curb
- 40mm high, 500mm wide

09 Drive Aisle
- typical asphalt with line painting

10 Flush Curb
- 500mm wide

11 Perennial planting beds with trees
- 15 cu.m. minimum soil volume per tree

12 Furnishing Zone
- pedestrian imprinted and coloured asphalt

13 Edge Zone
- pedestrian imprinted and high contrast coloured asphalt

14 Flexible Parking Zone
- pedestrian imprinted and high contrast coloured asphalt

4

Re-Visioning Museum Square

This section presents the design concept for Museum Square. The project team developed this concept by incorporating the comments received during the Public Engagement phase. The Museum Square Concept Plan will guide the redevelopment of this important public space.

4.1 The Overall Concept

- A COVERED STAGE
- B SPACE FOR TEMPORARY FOOD SERVICES
- C BATHROOMS (2), STORAGE AND UTILITY BUILDING
- D ICE TRAIL REFRIGERATION EQUIPMENT (OPEN TOP)
- E ZAMBONI STORAGE
- F ICE RINK/CONCRETE WALKING PATH
- G WATER JETS
- H INTEGRATED PLANTER WITH SEATING AND WOODEN PERGOLA
- I HERITAGE FOUNTAIN AND CENTRE OF WOODSTOCK MEMORIAL
- J SCULPTURAL PLAY FEATURE
- K CONTEMPLATION AREA (POTENTIAL EXPANSION OF MUSEUM SQUARE)
- L MARKET STREET WITH POWER AND WATER BOLLARDS FOR EVENTS AND OVERHEAD STRING LIGHTS
- M REBUILD STEPS TO FACE MARKET STREET
- N OUTDOOR WORK STATIONS
- O TEMPORARY AND ACCESSIBLE PARKING FOR CITY HALL
- P INTEGRATED PLANTER WITH SEATING
- Q BENCH SEATING
- R CLUSTER SEATING WITH TABLE
- S BIORETENTION GARDEN
- T POTENTIAL PUBLIC ART LOCATION
- U BIKE LANES

Located at the center of Woodstock, Museum Square is an important gathering and cultural space. This City block houses The Woodstock Museum (National Historic Site), City Hall and Theatre Woodstock. Connected by open spaces, the square is underutilized and lacks overall direction for times that no event is planned.

With the City of Woodstock's commitment to maintaining current investment and cultural resources, it becomes even more critical to redevelop Museum Square in such a way that utilizes it's current assets and ensures that a cohesive, vibrant space is developed. Recent building removals has expanded the available space for development, but one structure remains within the Square. The proposed concept is developed with this structure in place, and it is recommended that if this land is acquired in the future, the concept should be updated with the same design objectives and goals.

The proposed plan strives to propose a space that considers all users and their abilities. Museum Square becomes a dynamic and contemporary space, with long open vistas and engaging activities. Seasonality and temporal use is at the forefront, with planned spaces for events, Skate Path, Water Jets, Public Art and art viewing, space for outdoor reading and passive relaxation, and a covered stage with ancillary structures. The plan in split into character areas which define the spaces and further expand on the proposed spaces and their interconnections.

Character Areas

4.2 Cultural Node

Early in the project there were discussions with Museum staff and the City as to which elements of the existing Museum Square needed to be retained. With the exception of the museum itself, the only other fixed element identified as needing to remain in situ, was the existing fountain located in front of the Museum. The Cultural Node serves as the "front yard" of the Museum and has been designed to incorporate the fountain, and to showcase the architecture of the museum.

Trees and landscape materials have been strategically located within the Cultural Node to provide seating and shade opportunities, while maintaining open views to the museum. The proposed skating trail has been designed to loop around the fountain, transforming what is currently a passive space into a space that can be used year-round for more active uses. Museum staff expressed concerns about existing mature trees located close to the museum building and potential damage to the foundation of the museum as a result of their root systems. These trees are proposed to be replaced by smaller stature trees which will frame the view of the museum without overwhelming it.

An opportunity for future public art within the Cultural Node has also been identified. Public art should be located close to Dundas, but offset from the Museum to maintain open views.

https://api2.en-scape3d.com/v3/view/e1aea384-7c34-4bc5-89bc-bccb0e47c87c

Seasonality

Seasonal use is critical for the success of any public space. In order to make this space lively and well programmed, we have incorporated a Skate Path within the design. The 4 meter wide Skate Path can be used to set up for events in the summer, or take a stroll on the concrete path and enjoy the signs. In the Winter, the path becomes a skate surface that entices users of all ages.

4.3 Activity Transect

As the name implies, the Activity Transect, is where most of the active uses of the Museum Square design are located. This includes a stage/performance area and areas for seating (both fixed and temporary). Interactive water play elements have been incorporated, together with a play structure to encourage families to use this space. Structures are proposed along the Eastern edge of the Activity Transect, and these house two bathrooms, water fountains, miscellaneous storage, zamboni and refrigeration equipment.

The play structure is designed as an active and engaging element within the space and should be different than the typical playground equipment found in a neighbourhood park. The Activity Transect has been designed with consideration to how the space can be used throughout the year, and at different times of day. While bathrooms are contemplated within this space, the City is encouraged to explore opportunities for public washrooms within the Market Centre.

Provide flexible spaces for a diversity of Activities and experiences.

Urban parks and public spaces should encourage a diversity of uses by delivering unique spaces and features that accommodate social interaction.

https://api2.en-scape3d.com/v3/view/2e016ec4-3ccf-4a40-ba1b-c88ab08aa3b8

4.4

Art Walk

An existing building separates City Hall from the rest of Museum Square. The space between the two buildings presents both a challenge and an opportunity to draw people from Dundas Street to Market Street.

This space should be designed in accordance with any future plans for an addition to City Hall (including improvements to make City hall more accessible). The incorporation of seating, catenary lighting and public art, can make this space a unique and interesting feature within the overall Museum Square design. Planters are proposed to weave within the space in an artistic way, while creating small gathering spaces and quite areas for discussion and meetings.

The area will also provide outdoor space for City employees that can be used for lunch or informal meetings.

Public Art can bring economic and social value to their surroundings through social interactions.

Linking physical, historic, cultural, and natural features together creates a unique sense of place.

https://api2.enscape3d.com/v3/view/f7601501-a838-43c7-91b5-d07ac5692c46

4.5

Market Street

Market Street continues to provide an opportunity for short-term parking and event space. The Street can be closed during special events, and provides for a drop/off and pick/up area for setting up of events. Bollards that provide water and electricity are proposed within this space for ease of access and increased event use.

New steps connecting the Market Centre to the Street are also proposed in order to increase the connection between the Market Centre and Reeve Street. Outdoor work stations will provide downtown employees with an opportunity to work outside during mild weather. Flexible tables and chairs are proposed near the water features and play structure. Accessible parking for City Hall has been incorporated within this space as well adjacent to City Hall.

Bioretention gardens are proposed along the edges of the parking lot. These areas will capture stormwater runoff from the parking area and will treats runoff by using the natural properties of soil and vegetation to remove contaminants.

A variety of programming options foster interaction.

Informal community-scale events such as performances, farmer's markets, kiosks and community bulletin boards, cafes, or street vendors bring people together.

https://api2.enscape3d.com/v3/view/6c2f34a5-62f9-4167-af05-19cac31b7a44

4.6 Memorial Walk

The existing George Washington Jones memorial walk cuts through the middle of Museum Square and provides a pedestrian connection from Dundas Street to Simcoe Street. The plan proposed a Memorial Walk to the west side of the Museum, between the Museum and Finkle Street. This quiet area provides an idea space for pedestrians to stroll the proposed meandering pathways or site and contemplate.

The new memorial walk includes a curvilinear pedestrian pathway that is separated from the adjacent street by landscaping and trees. This shelters users from the adjacent street while providing shade from the hot afternoon sun. Trees are proposed to be removed along the West side of the Museum to allow for sights to the historic building.

The walk provides direct connection from the historic fountain in the front plaza, past the historic Museum and into to the Contemplative Area proposed south of the Museum.

Celebrate Cultural Identity.

Linking physical, historic, and cultural together creates a unique sense of place and provides users to connect with their heritage.

https://api2.enscape3d.com/v3/view/69a164df-0a90-4694-b63c-88ea1ef3be81

4.7

Contemplative Area

The area south of the museum is currently underutilized and consists primarily of a large grassed area. The Contemplative Area balances the activity and bustle of the rest of Museum Square by providing space that can be used for quiet reflection and rest. This area is proposed as the final phase of construction. The phasing of this space was determined based on discussions with the Museum and an understanding that there may be an expansion to the museum in the future.

The Contemplative Area should be constructed only if the Museum determines that such an addition is not likely to occur. Should an addition to the museum be constructed in the future, a smaller contemplative space should still be designed and provided. The Contemplative Area is directly connected to the relocated Memorial Walk and acts as a gateway to the south side of the park. Flowering trees and an abundance of planting is proposed in this area to ensure that noises are buffered and shade is provided for quiet use and contemplation.

Prioritize the pedestrian experience.

Deliver unique spaces and features that accommodate social interaction, contemplation and gathering

https://api2.enscape3d.com/v3/view/71cfd847-8167-4c9d-8cc0-9d9191521810

4.8 Design Elements

4.8.1 Access & Circulation

Well-designed open spaces are easy to access and walk through. Museum Square provides a direct and legible relationship with the public street to create an inviting, accessible space for all users. Circulation and accessibility is at the forefront of the design.

Pedestrian Access

- Minimize changes in grade both from the public street and within Museum Square.
- Connect the public space to the surrounding pedestrian network and locate entry paths with clear views to other exists from the public space.
- Continue pedestrian paths through the public space with direct routes.
- Ensure the edges are well connected and unobstructed.
- Locate elements such as vents or large grates away from pedestrian walkways or routes as they can both detract from the aesthetic quality of the space and provide tripping hazards.
- Design pedestrian routes so that they do not conflict with servicing access routes.
- Define locations where pedestrian paths intersect with vehicular routes through pavement treatments, vertical markers, signaling and clear signage.
- Ensure that accessible access is provided throughout the site for persons living with disabilities and must comply with the Accessibility for Ontarians with Disabilities Act [AODA] and its regulations including the Design of Public Spaces Standards.
- Provide for a wide range of materials and textures to allow for a dynamic and interesting ground plane.

Bicycle Parking

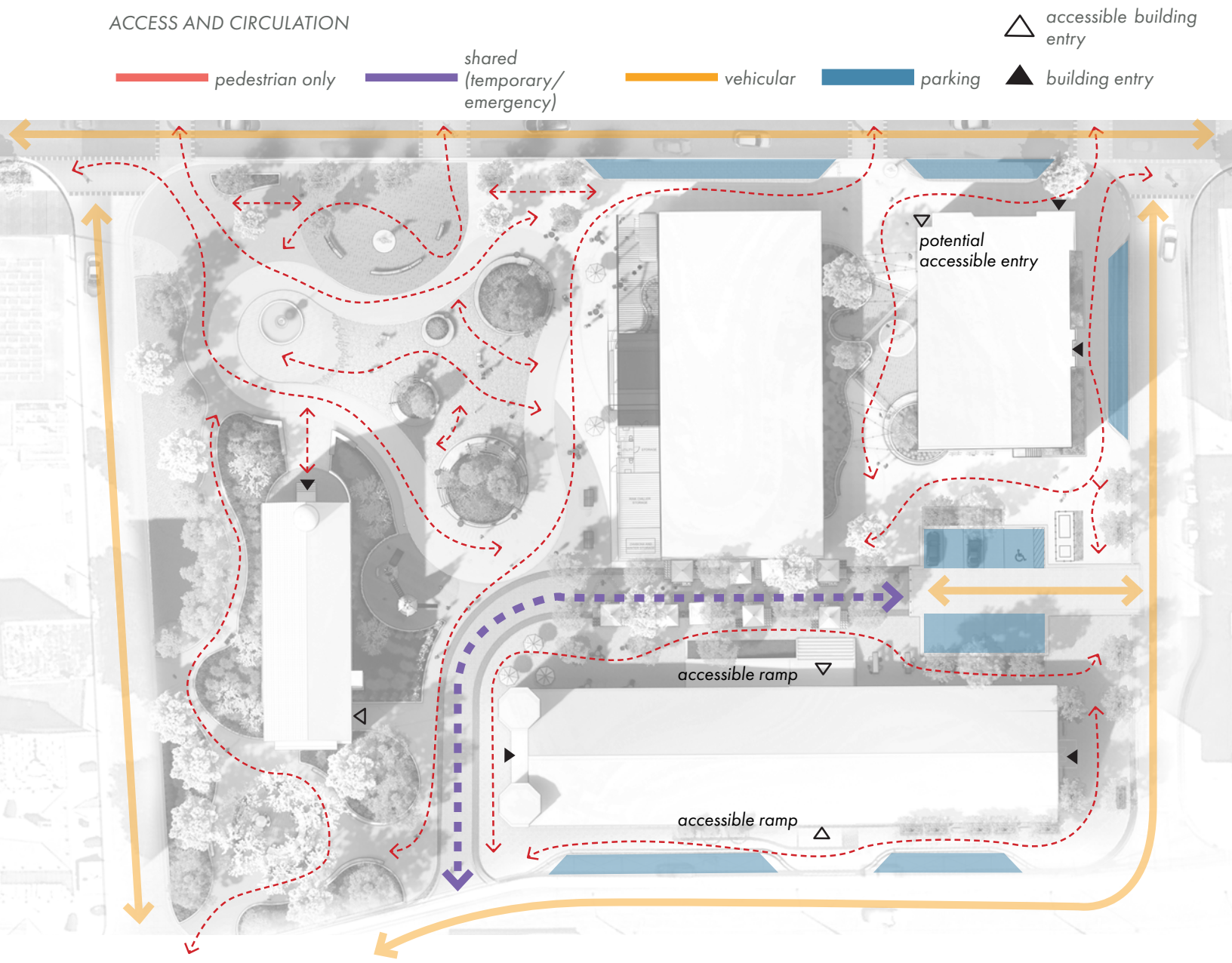
- Locate near transit stops, adjacent to building entries, near shared parking areas and/or next to play areas.
- Locate sufficient bike racks near bike lanes to the South of Museum Square.
- Where possible, bike racks should be placed near lighting and sheltered.
- Bike racks should match the style and spacing requirements as set out by the Streetscape Master Plan.
- Bicycle parking should not impede any accessible pathways.

Example of a bike rack
Manufacturer: Maglin Site Furniture, Woodstock ON
Model: MBR-2300-00001

Parking & Vehicle Access

Parking within Museum Square is minimized and positioned near City Hall. Accessible parking spots are available here, as well as space to allow for visitors, but all parking within the square is temporary.

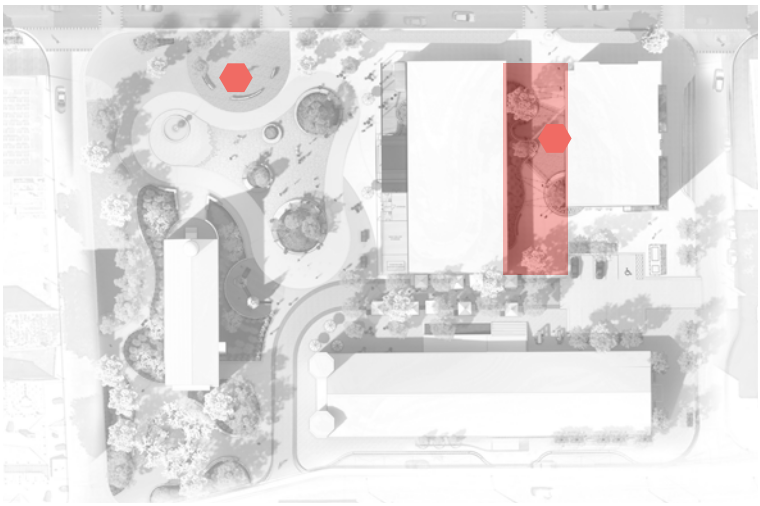
- Consolidate access roads and driveways wherever possible to minimize disruption of the public sidewalk and to facilitate traffic movement to public roadways.
- Provide removable bollards at the boundary with Market Street to allow vendors, deliveries and maintenance to enter.
- Vehicle access is prohibited with the exception of emergencies, maintenance, vendors and deliveries.
- Allow for a minimum of 6 meter clearway on Market St. to facilitate emergency access.
- Provide removable bollards at Simcoe Street.
- Provide temporary parallel parking around the perimeter of the site. Avoid parking in front of the Cultural Node.
- All transit to stop within the right of way. No buses are to have a dedicated pull in spot.



4.8.2 Public Art

The inclusion of public art within Museum Square will contribute to the culture and history of the City, and will enhance the unique character of the area. Public art is art that is temporary or permanent, accessible to the public and enhances or provides interest to the public realm. It can also educate or bring awareness to a special aspect of the area or the community.

- Provide supporting infrastructure to install art that can illuminate otherwise dark urban areas and plazas, or locations not suitable for street trees or plantings.
- Public art should be physically and visually accessible, barrier free and incorporate universal design principles.
- Public art should have a maintenance schedule and plan before installation.
- Public art should incorporate temporary installations that change over time.



PUBLIC ART LOCATIONS

public art

Example of permanent and temporary Public Art
Artist: CAITLIND R.C. BROWN & WAYNE GARRETT
Name: Various
Location: Various
https://incandescentcloud.com/

4.8.3 Site Furnishings

Seating & Tables

Seating is an essential amenity for open space, as it allows users to relax and take refuge in the open space. The incorporation of seating is considered one of the key design elements which will make Museum Square functional and inviting. Seating provides cues to the public that they are welcome, and that they can pause, rest and relax in the space.

- Provide comfortable seating options, allowing for:
  - » A variety of configurations, including for small groups to encourage social interaction as well as individuals;
  - » Options to sit in either the sun or shade;
  - » A variety of seating types, including both fixed and movable furniture, and seating with backs; and,
  - » Multi-functional elements that can accommodate seating such as steps, raised planters, grassy landforms.
- Permanent seating should be located at the edge of spaces and along connecting pathways where desired.
- Locate seating to promote views and lines of sight across spaces.
- Consider movable furniture that allows visitors to make choices and to gather in smaller or larger groups when desired.
- Where planter walls are intended to provide seating opportunities, the design of the planter and the plant materials must allow for this use.
- Avoid the use of metals on seating.
- Provide options for arm rests.
- Provide options for backed and backless benches.
- Provide flexible seating options that can be moved.
- Provide lounge seats.

Example of a custom bench feature and flexible seating

Example of a backed bench with arm rests.
Manufacturer: Maglin Site Furniture, Woodstock ON
Model: MBE-0870-00021

Example of a curved bench
Manufacturer: Maglin Site Furniture, Woodstock ON
Model: Ogden Collection

Drinking Fountains

- Provide drinking fountains near areas of physical activity that are accessible to all such as the playground, performance area, skating trail, and exercise equipment.
- Drinking fountains are proposed to be within the Activity Node, adjacent to Washrooms and storage.

drinking fountains and wasrooms

Bollards

- Removable bollards are to be used in locations that require emergency vehicle access. Locks must be as inconspicuous as possible and multi-keys must be provided to all appropriate city agencies.
- Include removable bollards at both ends of the proposed Market Street.
- No permanent bollards are proposed within Museum Square.

Example of a removable bollard
Manufacturer: Hauser Site Furniture, Waterloo ON
Model: PS-82-RM-16-AL

Waste Receptacles

- Waste receptacles should be placed at regular intervals throughout Museum Square and located close to seating areas, food vendors and washrooms.
- Waste receptacles should be designed to be universally accessible.
- Side opening designs are recommended to facilitate easy maintenance.
- A City-wide design for waste receptacles should be developed to assist with maintenance. An opportunity for community individuality should be considered in the universal design.

Example of a waste receptacle
Manufacturer: Maglin Site Furniture, Woodstock ON
Model: MTR-0650-00011

4.8.4 Active Uses & Play Features

An overarching goal for the re-visioning of Museum Square was to create a public space that is attractive, vibrant and includes diversity of activities for all users and at different times of the day. The re-visioning of Museum Square has been designed to be flexible and accommodate multiple types of programs and events. These programs should be able to celebrate the physical, social, cultural, and natural features of the site and respond to the diversity within communities.

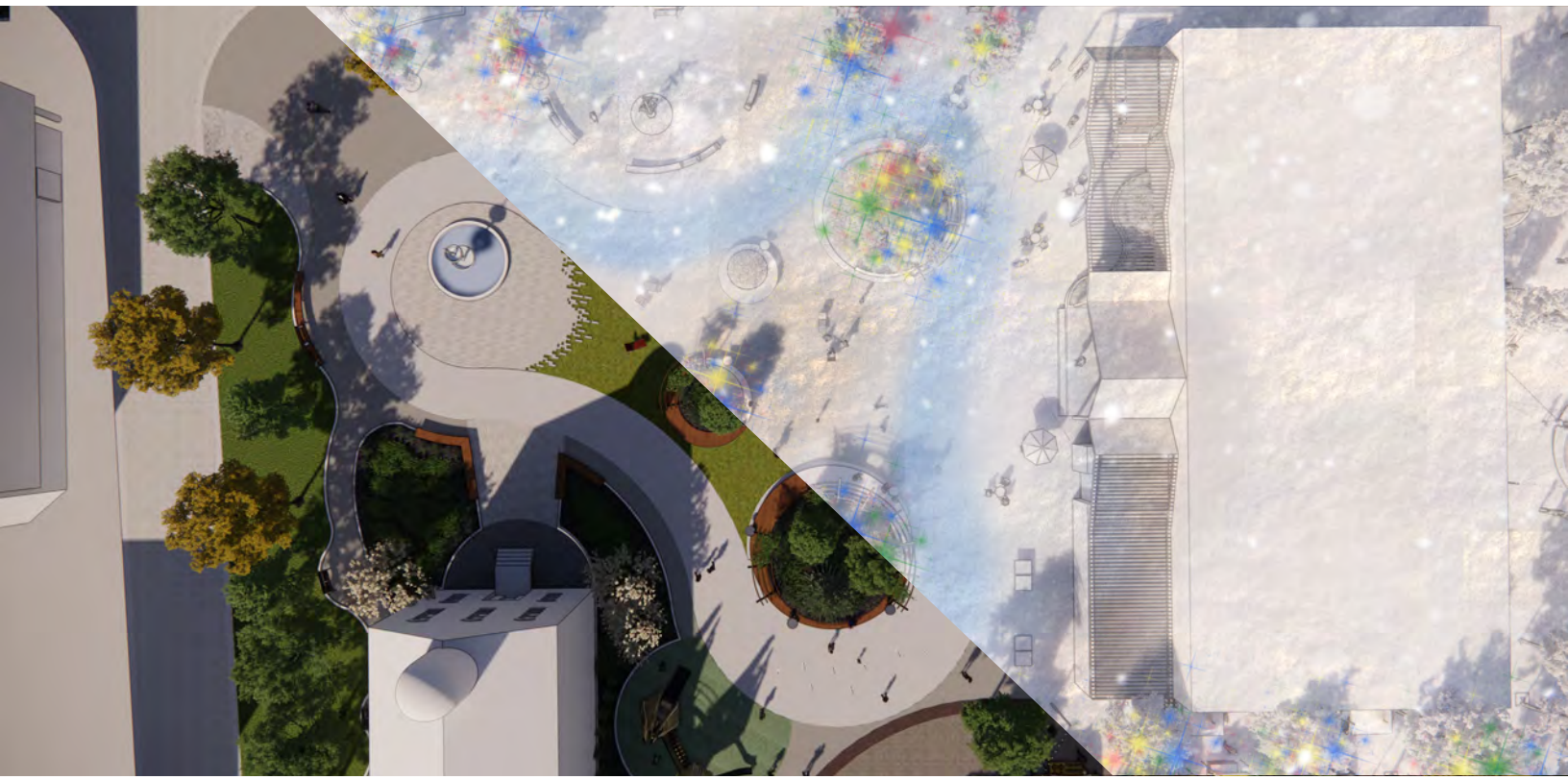
Skating Trail & Water Play

To heighten use of Museum Square during the long winter months, the design scheme proposes a skate trail along the pedestrian walkway that loops around the fountain, transforming what is currently a passive space into a space that can be used year-round for more active uses. It will serve to attract users during cold weather and encourage residents as well as visitors to take full advantage of winter.

The trail is designed as a curving path at 4 meters wide and approximately 150 meters long. The trail itself will become a new pathway in the summer that will be better suited for supporting events. The addition of pedestrian lighting will also facilitate night-time use, as well as increase overall safety and security.

The design also includes an area containing water jets that will become a calm ice zone in the winter. This will allow children and novices to safely navigate prior to entering the trail itself. In the summer, it will convert to a safe area to play with water.

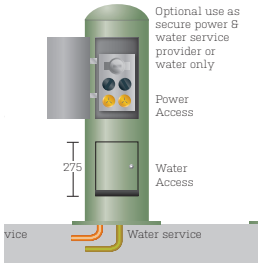
Museum Square will become a node of activity, supported by summer water play. In the winter the open areas can accommodate temporary fire pits where users can warm up or parents can wait for their children. A proposed new structure will be used to store the refrigeration equipment and basic storage. This structure will be designed to blend into the overall aesthetic contributing to the cohesion and continuation of the existing design language.



Open Space

The artificial turf lawn area within Museum Square provides space for formal events and invites spontaneous activity to occur. Leisurely activities like picnics, sunbathing and informal sports play, amongst other outdoor activities, are catered to here. The open space is bounded by the pedestrian promenade, connecting the open space to the playground, art walk, and the contemplative area.

Additionally, the parking lot to the east will provide easy vehicular access to the park, and open space. This area would also benefit from an expansion in utilities for site servicing. Greater access to water and power infrastructure is needed to support formal events, particularly if event capacity may be increased. Power and water bollards are proposed to along Market Street for events.



Example of a water and power bollard
Manufacturer: Electra
Model: ELE302B-SS4-W4

Performance Area

The performance area has been located adjacent to the existing building to create a natural backdrop and includes a full cover to offer protection from the elements. It consists of a covered elevated stage with unique roofline and electrical connections within the structure. This steel structure is intended to also support lighting, a screen and sound system for all events and outdoor movie watching events. The back-of house building is consolidated with the adjacent storage, allowing the stage to use the building as a natural backdrop and maximize the open space.

Playground Equipment

Play is an important part of a successful public space. The plan strives to welcome all users and provide activities that allow families to spend the day in Downtown Woodstock. The play feature is strategically located adjacent to the active zone, along with the water jets and open spaces. This allows for a seamless relationship between used in which common activities are grouped together, ensuring that parents always have eyes on their children for safety. The play structure itself is sculptural and offers a visual attractor whether or not it is in use. Seating has been proposed to surround the playground and play features, with ample shade and tables for family gathering.

- Playground equipment should be imaginative, easily maintained and should be located in areas shaded by trees.
- Select play equipment that stimulates imagination and active play.
- Design play equipment with a multi-generational lens and to complement the cultural preferences of the local population.
- Playground surfaces to be EPMD coloured rubber surfacing.
- Ensure that play feature offers an abundance of shade.
- Locate play structure near other child friendly activities.
- Allow for gathering and seating near or around the play space.

Example of a scuptural play feature
Designer and Installer: Earthscape, Wallenstein ON
Model: Forest Tower Duo
Age Range: 5-12y
Capacity: 27

4.8.5 Temporary Uses

Consideration was given to how events such as food festivals, markets, games,movies, concerts, art shows and/or sports etc. can be accommodated simultaneously when desired. A variety of programming options should be employed at Museum Square to serve different audiences.

Market Street

- Well treed avenue with power and water bollards to accommodate events and vendors.
- Include overhead catenary lighting to enclose the space and provide ample lights when events go into the night.
- Allow for flexible tables and chairs so space can be used for meetings and gathering when no event is planned.
- Trees in soil cells to be high headed and allow for ample vertical clearance.

Market St with no planned events

Market St during farmers market

Vendors/Food Stalls

Space has been provided near Dundas St. to allow for temporary food vendors to access the site when events are scheduled, or winter skating is planned. This space provides opportunities for food trucks to service only when approved by the City of Woodstock, and it is not intended to take away from downtown businesses.

- Locate spaces for vendor stalls beside the main pedestrian through-paths.
- Allow for easy access to support events in all seasons, ie. hot chocolate during winter skating, or food at a concert or movie night.
- Promote local downtown businesses by encouraging them to become event vendors in this space.

Example of a vendor space when at a concert event

4.8.6 Structures

Washrooms

Washrooms have been requested by the community to support a vibrant and active downtown. Permanent public washrooms have been provided as part of the re-visioning of Museum Square.

Consideration should be given to providing public washroom facilities and access within adjacent publicly owned buildings for easier maintenance, safety and security.

Mechanical Equipment & Utilities

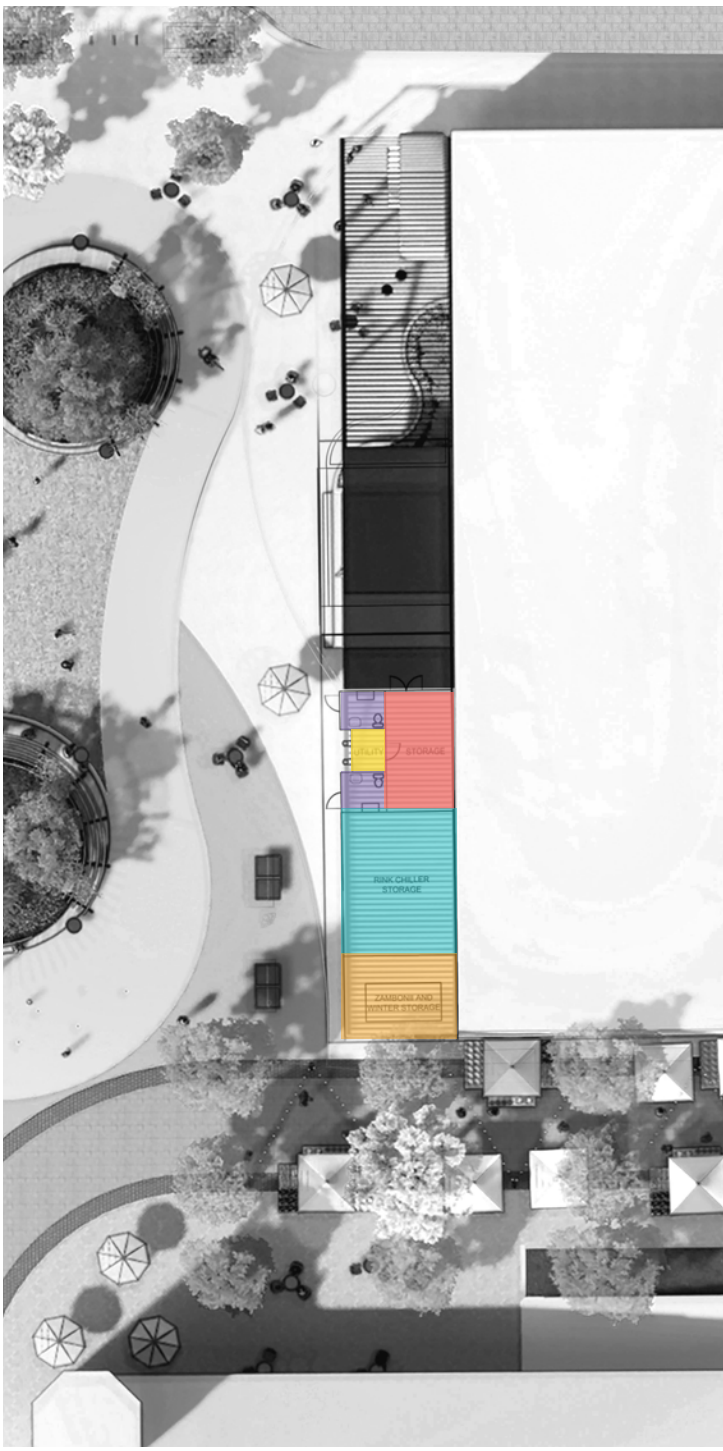
Utilities must be considered as an integrated component in the design of the public realm. Utilities are important elements within Museum Square to house equipment for electrical, water jets, telecommunication and other utility company systems.

- Where possible, screen utilities from public view with landscaping or house them within a structure.
- Utility cabinets should be located in areas where they do not needlessly detract from the aesthetic qualities of Square.
- Locate utility cabinets near pedestrian and parking for maintenance access.
- Maintain current utilities and tie in wherever possible.

Storage

Storage areas will be required within Museum Square to house equipment required for programming activities.

- Where possible, outside storage areas should be coordinated with servicing and loading areas.
- Allow for seasonal storage and future reoccurring event needs.
- Consider the potential for additional storage in nearby existing building and potential expansion of the Woodstock Museum storage.



zamboni winter storage (summer storage extension)

accessible bathrooms

rink chiller storage (open top)

utility (water fountain in front)

multi purpose and stage storage

4.8.7 Planting

Public Engagement feedback showed an overwhelming desire to keep green spaces and planting within Museum Square. Movable planters can add an infusion of colour and an additional layer of visual interest to the streetscape using annuals, while permanent planting is proposed in at grade and above grade planting beds.

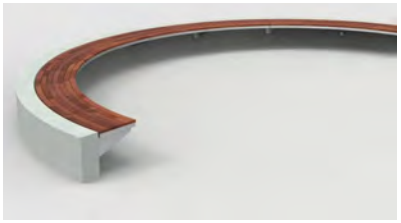
Raised Planters

Museum Square is designed with varying height planters to provide buffers, delineate boundaries and support integration of seating. This strategy provides a dynamic use of site furniture and features, and offers varying beneficial outcomes.

- Raised planting beds to be 600mm concrete walls with sufficient reinforcing as provided by Structural Engineer.
- Include rigid insulation along the back of all raised planting beds to avoid soil freezing in winter time.
- Integrate irrigation within all planting beds whenever possible.
- Planting material should be chosen for its ability to withstand the climate, visual interest throughout the year, and for ease of maintenance.
- Collaborate with the Upper Thames River Conservation Authority on trees, shrubs and plants that can thrive in this location.
- Demonstration and educational planting beds are encourages and signs should be implemented to teach passerby of the benefits of planting in the downtown.
- Integrate raised planters with seating to offer a variety of seating and planting opportunities.

Example of raised planter with top seat

Example of raised planter wall mounted seat



Example of a bench mounted on wall
Manufacturer: Maglin Site Furniture, Woodstock ON
Model: Ogden Collection

Example of GFRC planter with integrated seat
Designer: O2 Planning + Design Calgary AB

Example of a bench mounted on wall
Manufacturer: Maglin Site Furniture, Woodstock ON
Model: Ogden Collection

At Grade Planting Beds

At grade planting beds are used strategically to move people thought the site, create beautiful entrances to structures and provide opportunities for seasonal planting.

- Encourage community involvement by attracting horticultural clubs to sponsor and plant gardens throughout the Square.
- Encourage use of evergreens to provide interest and variety to all planting beds.
- Incorporate irrigation design wherever possible to ensure plant survival and reduced future maintenance.
- Use at grade planting beds around features where sight line preservation is desired, ie. Playground and Memorial Walk.
- Plant a variety of species and encourage flowering or vibrant plants at gateways and around Woodstock Museum.
- Use at grade planting beds around Woodstock Museum to maximize views of the historic building.

Example of at grade planting in gateway

Example of at grade planting for sight lines to Woodstock Museum

Plants

Planting throughout Museum Square should focus on Native species, gateway planting and demonstration gardens. Museum Square provides an opportunity to engage local horticultural groups as well as educational programs and students.

- Soil cells to be provided for all trees proposed within hard surfaces.
- Soil cells to be 1 meter deep to optimize for space.
- Incorporate root protection measures around the perimeter of soil cells to ensure that no uplifting occurs.
- It is recommended that 15-20 cu.m. of soil per tree is provided where trees share the same soil volume area and 25-30 cu.m./tree be provided where trees do not share soil areas.
- Collaborate with the Upper Thames River Conservation Authority on trees, shrubs and plants that can thrive in this location.

4.8.8 Safety & Security

The Re-visioning of Museum Square maximizes safety, comfort, and amenity provision including access to sunlight, clear views to and from adjacent streets and buildings, universal accessibility, pedestrian-scale lighting, four season landscaping, seating, public art, and protection from wind and inclement weather. The space is framed and relates to surrounding buildings, with at-grade active uses to support the open space, offer programming opportunities, and establish a natural surveillance element to promote safety.

- Provide unobstructed views to and from other nearby public spaces, including public streets or open spaces.
- Avoid the creation of entrapment spots, such as dead ends, that are not highly visible.
- Locate public toilets, play and recreation facilities in accessible and active areas.
- Provide lights on sidewalks, trails and active play areas to encourage physical activity into the evening.
- Use design elements and materials to reduce risk of falls, especially among older adults.
- The selection, siting, and maintenance of landscape elements should incorporate CPTED principles by considering views and safety and surveillance opportunities.

Weather Protection

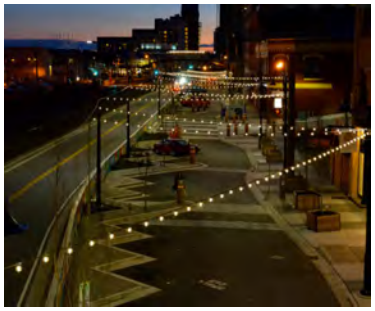
- Give preference to natural weather protection such as trees, or landscaping, before relying on built structures for weather protection.
- Provide areas of shade through tree planting or other high quality structures.
- Provide weather protection for key pedestrian routes and where people are likely to congregate, for example, seating areas and building entrances.
- Determine, on a site by site basis, the most appropriate locations for areas that require some form of shade protection for part of the day, such as children's' play ares.

Lighting

Appropriate and well-designed lighting is an important feature that can enhance the safety of open spaces and help to deter unwanted activities. Lighting can also extend the usable hours of the space into the evening.

- Downcast, pedestrian-scaled lighting enhances safety and visibility within the Square. At gateways and focal points, lighting can be used to accent special features.
- Develop a lighting plan that identifies ways to utilize lighting in creative ways.
- Incorporate and locate lighting to allow for surveillance, particularly around building entrances and parking facilities. Ensure lighting design provides even light and avoids shadows and glare.
- Use catenary lights to promote a sense of place trough enclosure.

Example of pedestrian pole lights and bollards
Manufacturer: Lumenpulse, Longueuil QC
Model: Element Column



Example of catenary lights on poles
San Francisco

5

Implementation & Costing

An integral component of the redevelopment of the Streetscape Master Plan and Museum Square Re-Visioning is the phasing of its implementation. The site phasing is developed based on the project's overall approach and design strategy. Costing has been broken down for each phase.

As reiterated throughout the report, key recommendations for the Streetscape Master Plan includes prioritization of pedestrian initiatives, the reduction of vehicular traffic and the expansion of amenities to satisfy growing demand, across all four seasons.

To ensure a coherent approach to implementation, the initiatives outlined within this document have been assigned phasing for development based on input received from the public, stakeholders and City Staff on key priorities. The phasing strategy of the Streetscape Master Plan is broken down into four phases:

Phase 1 **Cycling Routes:**
Mill Street to Huron Street

Phase 2 **Streetscape Improvements:**

- Brock Street to Graham Street
- Graham Street to Riddell Street
- Riddell Street to Wellington Street

Museum Square Re-Design

Phase 3 **Streetscape Improvements:**
Vanisttart Avenue to Light Street

Phase 4 **Streetscape Improvements:**

- Wellington Street to Victoria Street
- Victoria Street to Bay Street

To account for shifting priorities, the project phasing was adjusted according to the specific priority areas. The phasing strategy prioritizes the order of the initiatives and projects to be implemented, as they will be catalysts for redevelopment and new development in the study area.

Since some of these guidelines recommend a change in current practices and services, the cost and operational implications of these changes should be monitored as part of the implementation process. In the event that the cost of operational changes is not endorsed through budget approval, some recommendations may not be implemented.

The following pages provide a demonstration of how short and long term build-out scenarios might happen. It is anticipated that the ultimate streetscape vision will be constructed without below grade utility improvements.

Lastly, while costing for individual features must be readily considered, capital expenditures and efforts will be wasted if resources are not allocated towards maintenance. Beyond implementation, site maintenance is critical to the long-term success of this site and it is imperative that fiscal allotments are made to support site upkeep. This will signify a commitment to Downtown Woodstock's continued success, and the future longevity of Museum Square.

5.1 Phase 1

Phase 1 of the design will consist of improvements to the active transportation Network with newly constructed bicycle lanes along the north and south sides of Simcoe Street/Peel Street. Analysis showed that from a vehicle perspective, bicycle lanes in this location can be accommodated. This east-west connection was recommended in order to provide easier cycling access to Museum Square and Downtown Woodstock.

Including bicycle lanes on Simcoe Street/Peel Street has less overall traffic impacts, reduced construction costs and the potential for bicycle / vehicle conflicts when compared with Dundas Street. The speed and volume of motorized traffic are key factors influencing the context sensitive design of cycling facilities.

Clear delineation of the bicycle lanes and wayfinding can improve safety for all road users. The use of pavement markings, signs, grade change between users and physical design, like buffers, will be considered to mitigate hazards, such as car doors opening, or pedestrians walking into bicycle paths. Cycling infrastructure provides choice in how people are able to move around the city.

When trips are shifted from driving to cycling, motor vehicle volumes decrease, which in turn reduces traffic congestion, as well as air and noise pollution. Streets with cycling infrastructure also have the potential to move more people, at a lower cost, and with improved public health outcomes.

5.1.1 Phase 1 Costing

Woodstock Cycle Track:

On Simcoe St/Peel St. from Mill St. to Huron St.

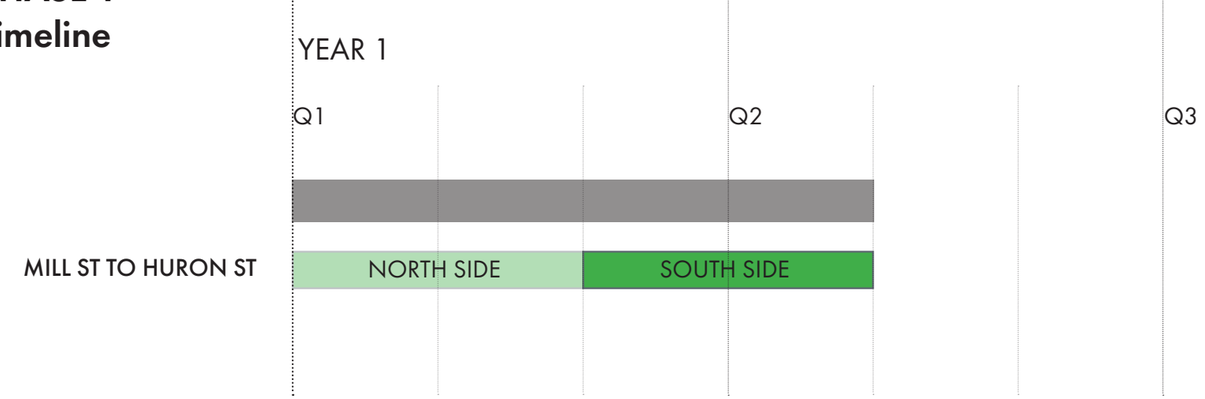
Item	Description	Quantity	Unit	Unit Cost	Estimated Musuem Square Cost
1.0	**CYCLE TRACK**				
1.1	Signed bike route in Urban Area. Price includes both sides of the road, assumes one sing a minimum of every 330m/direction of travel	1.5	l.km	$2,000.00	$3,000.00
				CYCLE TRACK OPTION 01	**$3,000.00**
1.2	Signed Bike Route with Paved Shoulder in conjunction with existing road reconstruction / resurfacing. Price for both sides of the road, 1.5m paved shoulder, assumes cycling project pays for additional granular base, asphalt and edge line	1.5	l.km	$70,000.00	$105,000.00
				CYCLE TRACK OPTION 02	**$105,000.00**
1.3	Conventional 1.5m-1.8m Bicycle Lanes by Adding Bike Lane Markings and Signs. Price for both sides of the road, includes signs, stencils and edge line. Price is for thermoplastic paint.	1.5	l.km	$35,000.00	$52,500.00
				CYCLE TRACK OPTION 03	**$52,500.00**
1.4	Signed Bike Route with Wide Curb Lane with Road Reconstruction Project. Price for both sides of the road, includes curb replacement, catch basin adjustments, lead extensions and driveway ramps	1.5	l.km	$300,000.00	$450,000.00
				CYCLE TRACK OPTION 04	**$450,000.00**
				SUB-TOTAL FOR PREFERED OPTION 3 (Not-Including Taxes):	$52,500.00
				20% Contingency	$10,500.00
				CYCLE TRACK	**$63,000.00**

This estimate of costs is based on the professional opinion and experience of MHBC at a Class C level. Tendered bids or actual construction costs may differ due to market conditions and will supersede this estimate. Cost estimate is based on a comprehensive list of requirements and assumptions, including a full description of the preferred schematic design option, construction/design experience, and market condition.Prices are based on Oxford County Trails Master Plan Unit Price Schedule with inflation accounted for.

PHASE 1

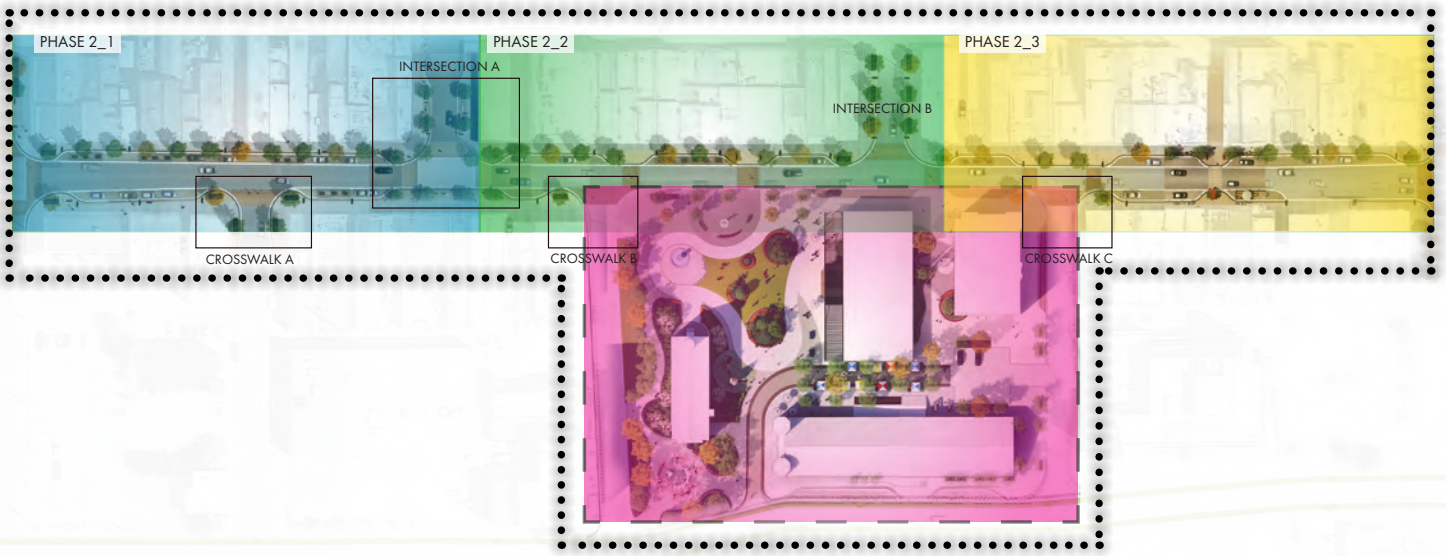
PHASE 1

Timeline



5.2 Phase 2

Phase two consists of the Central area and is the heart of the Downtown. With the proximity of City Hall, Museum Square, and other important destinations, it makes this the most active area of the Downtown. Parking has been modified in select locations to allow for bump-outs and enhanced pedestrian crossings. This ensures a well connected, active space that puts pedestrians and their safety first. This phase focuses on the area as a whole as a "destination" and includes both streetscape updates as well as the Re-Design of Museum Square. The sections are broken out into 4 different areas focusing on specific design elements and requirements.



Phase 2_1

With predominant focus on the streetscape, this phase consist of elements including travel lanes, transit routes, vegetation, sidewalks, parking and sitting areas, and gathering spaces. In a setting such as Downtown Woodstock, the design and treatment of its streets is critical to the safe movement of people. Careful design consideration will be made in regards to crosswalks and intersections to promote safe movement and pedestrian oriented design.

Phase 2_2

The streetscape in front on Museum Square plays a vital role in the overall cohesive design of Downtown Woodstock. This phase will learn and adapt from Phase 2_1 and be cohesive in design features and elements creating a seamless transition along the streetscape.

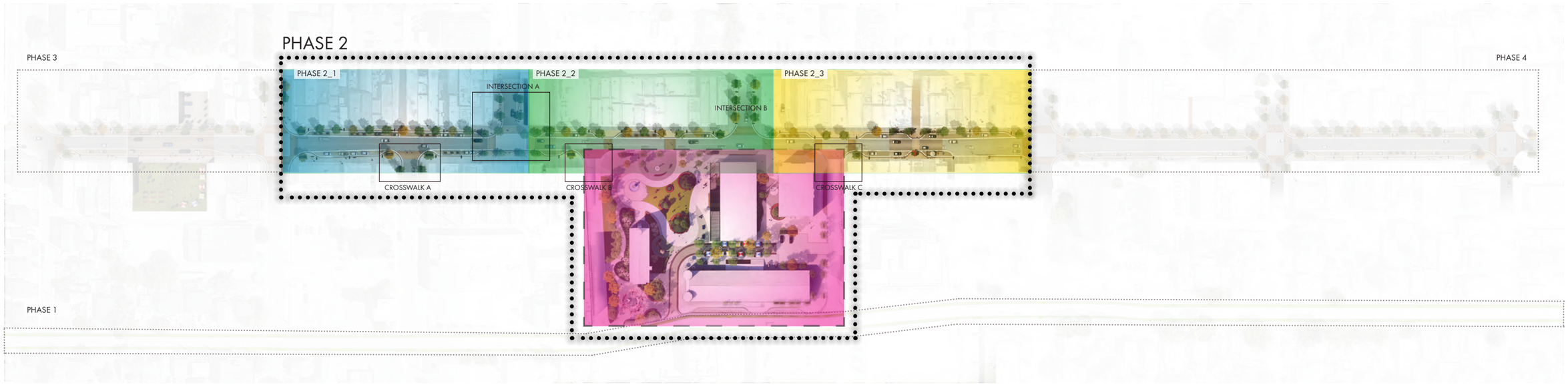
Phase 2_3

Upon completion of Phase 2_2, the construction of Phase 2_3 will begin on the eastern section of the Central Area. Breaking the streetscape within the Central Area into three sections allows for residents, visitors and users to still have access to the space and the ability to enjoy the new improvements. This also allows for business to maintain operation with minimizing impacts along the streetscape.

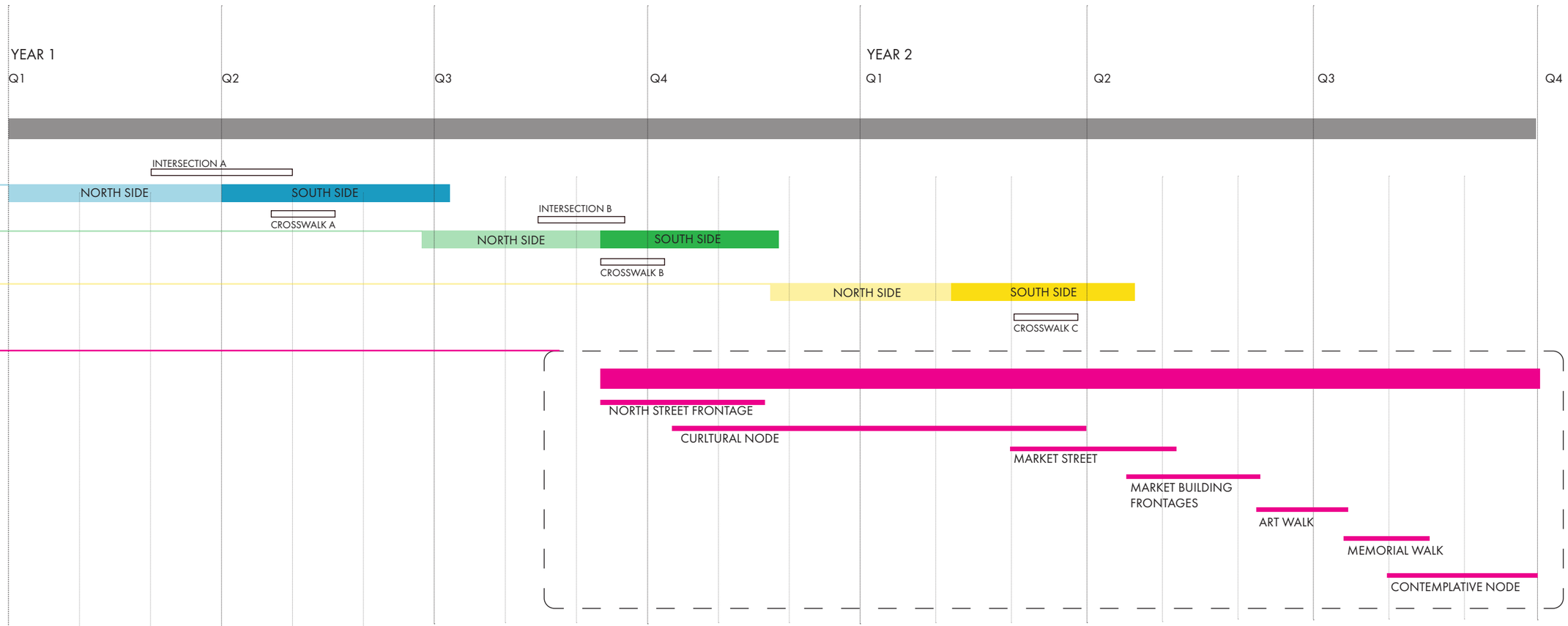
Museum Square

The Re-Design of Museum Square should run concurrently with the Phases of the streetscape. This will ensure improvements are cohesive and coordinated between the streets and square. The connection between Museum Square plays an important role in activating the streetscape and creating an inviting space.

PHASE 2



PHASE 2 Timeline



5.2.1 Phase 2 Costing

Downtown Streetscape:

Brock Street to Graham Street | Graham Street to Riddell | Street Riddell Street to Wellington Street

Item	Description	Ph1 Quantity	Unit	Unit Cost	Estimated Phase 1 Cost
0	Mobilization	1	l.sum	$13,000.00	$13,000.00
1.0	**SITE DEMOLITION**				
1.1	Remove existing unit pavers	1280	sq.m	$20.00	$25,600.00
1.2	Tree removal	13	ea.	$550.00	$7,150.00
1.3	Remove and store signage for reinstall	1	allow	$5,000.00	$5,000.00
1.4	Relocate existing utility	1	allow	$50,000.00	$50,000.00
1.5	Remove planting bed at grade	205	sq.m	$10.00	$2,050.00
1.6	Remove concrete planters and soil. Includes disposal	105	l.m	$50.00	$5,250.00
1.7	Remove concrete (includes disposal)	2020	sq.m	$30.00	$60,600.00
1.8	Remove asphalt (assume subgrade remains)	6387	sq.m.	$9.00	$57,483.00
1.9	Remove existing curbs	860	l.m	$25.00	$21,500.00
1.10	Remove light standards and store	23	allow	$1,000.00	$23,000.00
1.11	Rough grading. Includes disposal		allow		$74,175.00
	Detour signage and coordination		allow		$10,000.00
1.12	Remove existing site furnishing and store	1	allow	$2,500.00	$2,500.00
				DEMO TOTAL	**$344,308.00**
2.0	**SOFTSCAPE**				
2.1	Sod for meeting existing conditions	4	sq.m	$15.00	$60.00
2.2	Deciduous Trees (50mm Cal. W.B includes soil)	57	ea.	$650.00	$37,050.00
2.3	Shrub and perennial beds	250	ea.	$60.00	$15,000.00
2.4	Soil Cell Area (1000mm deep system includes panelsto make up 1 meter depth for a minimum of 15 cu.m. per tree. Includes all airflow, grid, perforated pipes, root barrier, etc.)	835	sq.m.	$375.00	$313,125.00
2.5	Planting soil (minimum 15 cu.m. per tree)	1045	cu.m.	$75.00	$78,375.00
				SOFTSCAPE TOTAL	**$443,610.00**
3.0	**HARDSCAPE**				
3.1	Supply and install standard concrete sidewalk	2630	sq.m	$125.00	$328,750.00
3.2	Supply and install pedestrian grade coloured and impressed asphlat	2551	sq.m	$155.00	$395,405.00
3.3	Supply and install vehicle grade coloured and impressed asphlat	850	sq.m	$285.00	$242,250.00
3.4	Supply and install asphlat and line work	3252	sq.m	$90.00	$292,680.00
3.5	Supply and install tactile surfacing	45	sq.m	$50.00	$2,250.00
3.6	Supply and install 150mm concrete with decorative iron	520	l.m.	$225.00	$117,000.00
3.7	Supply and install 150mm typical curb and gutter	115	l.m.	$150.00	$17,250.00
3.8	Supply and install flush curb (300mm wide)	1218	l.m.	$150.00	$182,700.00
3.9	Supply and install rolled curb (500mm wide and 75mm height)	650	ea	$175.00	$113,750.00
				HARDSCAPE TOTAL	**$1,692,035.00**
4.0	**SITE FURNISHING**				
4.1	Allow for install of new road signage. Assume 1 sign every 10 meters on both sides of the road)	43.5	allow	$500.00	$21,750.00
4.2	Supply and install permanent bollards	68	ea.	$750.00	$51,000.00
4.3	Supply and install new light standards with flower/banner arm	42	ea.	$7,500.00	$315,000.00
4.4	Supply and install catenary lights between light standards. Includes required accessories	215	lm.	$400.00	$86,000.00
4.5	Supply and install backed benches	21	ea.	$2,500.00	$52,500.00
	Supply and install backless benches	4		$2,000.00	$8,000.00
4.7	Supply and install waste receptacles	16	ea.	$1,500.00	$24,000.00
4.8	Supply and install bike racks	41	ea.	$500.00	$20,500.00
				SITE FURNISHING	**$578,750.00**
			SUB-TOTAL (Not-Including Taxes):		$3,071,703.00
				30% Contingency	$921,510.90
				PH1 TOTAL	**$3,993,213.90**

will supersede this estimate.A class "C" estimate is prepared when a project is at the "Preliminary Design" stage. A Class C estimate is generally an estimate based on the initial functional program and broad concept approach. This cost estimates considers that no underground infrastructure needs to be replaced or repaird, and as such only represents surface works. No consulting fees or HST has been included within this cost estimate.

Museum Square - Preliminary Cost Estimate

Item	Description	Ph1 Quantity	Unit	Unit Cost	Estimated Musuem Square Cost
0	Mobilization	1	l.sum	$15,000.00	$15,000.00
1.0	**SITE DEMOLITION**				
1.1	Remove existing unit pavers (includes disposal)	4953	sq.m	$25.00	$123,825.00
1.2	Tree removal	60	ea.	$350.00	$21,000.00
1.3	Site preparation and rough grading (includes removal of debris)	1328	sq.m	$10.00	$13,280.00
1.4	Remove and store site furnishing	25	ea.	$300.00	$7,500.00
1.5	Allow for misc. utilitiy movement and adjustment to accept new design	1	allow	$20,000.00	$20,000.00
1.6	Remove sod and dispose	2847	sq.m	$5.00	$14,235.00
1.7	Remove concrete (includes disposal)	83	sq.m	$25.00	$2,075.00
1.8	Remove existing light standard	23	ea.	$2,500.00	$57,500.00
1.9	Remove planting bed at grade (includes topsoil and plant material)	193	sq.m.	$20.00	$3,860.00
1.10	Remove existing curbs	497	l.m	$25.00	$12,425.00
1.11	Remove and store bollards	16	ea.	$75.00	$1,200.00
1.12	Remove raised concrete planter (includes topsoil)	210	l.m	$50.00	$10,500.00
1.14	Remove sign and store for future install	1	allow	$2,500.00	$2,500.00
				DEMO TOTAL	**$289,900.00**
2.0	**SOFTSCAPE**				
2.1	Supply and install artificial turf	390	sq.m	$95.00	$37,050.00
2.2	Deciduous Trees (60mm Cal. W.B)	61	ea.	$550.00	$33,550.00
2.3	Small Columar Treest (50mm cal)	14	ea.	$400.00	$5,600.00
2.4	Ornamental Trees (45 mm Cal WB)	17		$350.00	$5,950.00
2.5	Shrub beds (1 Gal)	1255	sq.m.	$60.00	$75,300.00
2.6	Supply and install ornamental grasses (1 Gal)	50	ea.	$30.00	$1,500.00
2.7	Supply and install SOD	405	sq.m	$15.00	$6,075.00
2.8	Supply and install bioretention media and plants at parkin lot	70	sq.m	$100.00	$7,000.00
2.9	Supply and install planting soil	1662	cu.m.	$15.00	$24,930.00
2.10	Supply and install soil cell (min. 15cu.m. per tree, 1 meter deep with accessories)	490	sq.m.	$375.00	$183,750.00
	SOFTSCAPE TOTAL			**SOFTSCAPE TOTAL**	**$380,705.00**
3.0	**HARDSCAPE**				
3.1	Supply and install standard concrete ramp	212	sq.m	$150.00	$31,800.00
3.2	Supply and install coloured concrete	2820	l.m.	$240.00	$676,800.00
3.3	Supply and install typical concrete sidewalk	130	sq.m	$125.00	$16,250.00
3.4	Concrete stairs at Market Building North	1	l.sum	$5,500.00	$5,500.00
3.5	Supply and install 300mm wide flush concrete curb with gutter	305	l.m.	$125.00	$38,125.00
3.6	Supply and install EPDM coloured rubber play surface	125	sq.m	$200.00	$25,000.00
3.7	Supply and install 150mm concrete planter curb with decorative iron	145	l.m.	$200.00	$29,000.00
3.8	Supply and install 150mm concrete planter curb	465	l.m.	$100.00	$46,500.00
3.9	Supply and install 600mm planter curb	103	l.m.	$350.00	$36,050.00
3.10	Supply and install rolled, mountable curb with gutter	452	l.m.	$150.00	$67,800.00
3.11	Supply and installed Pedestrian asphlat with coloured and impressed pattern	1410	sq.m.	$155.00	$218,550.00
3.12	Supply and install Vehicular grade asphalt with coloured and impressed pattern	1755	sq.m.	$285.00	$500,175.00
3.13	Supply and install tactile surface	23	sq.m.	$50.00	$1,150.00
3.14	Supply and install unit pavers	2053	sq.m	$250.00	$513,250.00
				HARDSCAPE TOTAL	**$2,205,950.00**
4.0	**SITE FURNISHING**				
4.1	Supply and install Park and City Info sign	1	allow	$3,000.00	$3,000.00
4.2	Supply and install educational signage	1	allow	$5,000.00	$5,000.00
4.3	Supply and install single bench	15	ea.	$2,500.00	$37,500.00
4.4	Supply and install curved benches	103	l.m.	$1,750.00	$180,250.00
4.5	Supply and install custom planter/seating (includes concrete base with varying wood top	1	allow	$115,000.00	$115,000.00
4.6	Supply and install concrete table and chairs at contemplation areas	1	allow	$30,000.00	$30,000.00
4.7	Supply and install tables and chairs (set)	10	ea.	$3,800.00	$38,000.00
4.8	Supply and install tables at custm bench	7	ea.	$1,000.00	$7,000.00
4.9	Supply and install permanent bollards	6	ea.	$1,100.00	$6,600.00
4.10	Supply and install removable bollards	10	ea.	$1,500.00	$15,000.00
4.11	Supply and install loose lounge chairs	5	ea.	$1,500.00	$7,500.00
4.12	Supply and install waste container	9	ea.	$1,500.00	$13,500.00
4.13	Supply and install bike racks	24	ea.	$500.00	$12,000.00
4.14	Supply and install Umbrellas	6	ea.	$1,500.00	$9,000.00
4.15	Supply and install Sculptural Play Structure	1	allow	$335,000.00	$335,000.00
4.16	Supply and install wooden stage with frame and accessories	1	l.sum	$35,000.00	$35,000.00
4.17	Supply and install small cantilevered trellis	28	l.m.	$2,500.00	$70,000.00
4.18	Catenary lights and connection to infrastructure	1	allow	$45,000.00	$45,000.00
4.19	Supply and install pedestrian lighting (includes elecrical connections)	25	ea.	$5,000.00	$125,000.00
4.20	Supply and install steel canopy (includes covered potion and electrical)	1	allow	$125,000.00	$125,000.00
4.21	Supply and install power and water bollards (includes utility hook up)	4	ea.	$9,500.00	$38,000.00
4.22	Supply and install tree grate	14	ea.	$750.00	$10,500.00
				HARDSCAPE TOTAL	**$1,262,850.00**

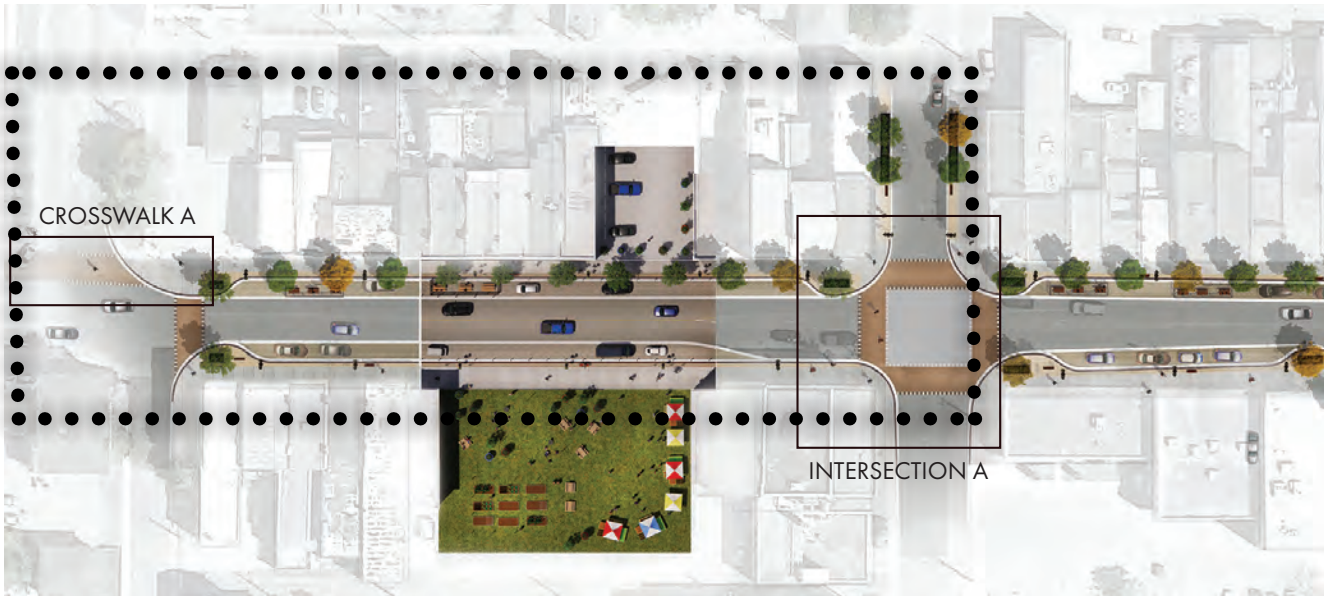
Museum Square - Preliminary Cost Estimate (cont.)

5.0	**SKATE TRAIL AND STRUCTURES**				
5.1	Supply and Install Permanent Skating Rink (Include refrigeration equipment, concrete rink floor, piping, startup. It does not include electrical, water, drainage, or any site prep)	702	sq.m.	$1,000.00	$702,000.00
5.3	Structure to house zamboni and storage. Includes servicing for hydro, water and drainage (does not include architectural fees for design)	1	allow	$95,000.00	$95,000.00
5.4	Wood screen to house rink chiller with open top. Allow for power connection	15	l.m	$500.00	$7,500.00
5.5	Structure to house Storage and bathrooms (does not include architectural consultant fees)	1	allow	$100,000.00	$100,000.00
5.6	Supply and install 9 water controllable water jets. (Includes electrical, mounting of manifold and colontroller in buidling and pipes)	1	l.sum	$60,000.00	$60,000.00
5.7	Zamboni (Small tractor pulled, requires mounting. Tractor not included)	1	allow	$20,000.00	$20,000.00
				SKATE TRAIL TOTAL	**$984,500.00**
		SUB-TOTAL (Not-Including Taxes):			$5,138,905.00
				20% Contingency	$1,027,781.00
				MUSEUM SQUARE TOTAL	**$6,166,686.00**

This estimate of costs is based on the professional opinion and experience of MHBC at a Class C level. Tendered bids or actual construction costs may differ due to market conditions and will supersede this estimate. Cost estimate is based on a comprehensive list of requirements and assumptions, including a full description of the preferred schematic design option, construction/design experience, and market condition.

200-540 BINGEMANS CENTRE DRIVE / KITCHENER / ONTARIO / N2B 3X9 / T 519 576 3650 / F 519 576 0121 / **WWW.MHBCPLAN.COM**

5.3 Phase 3



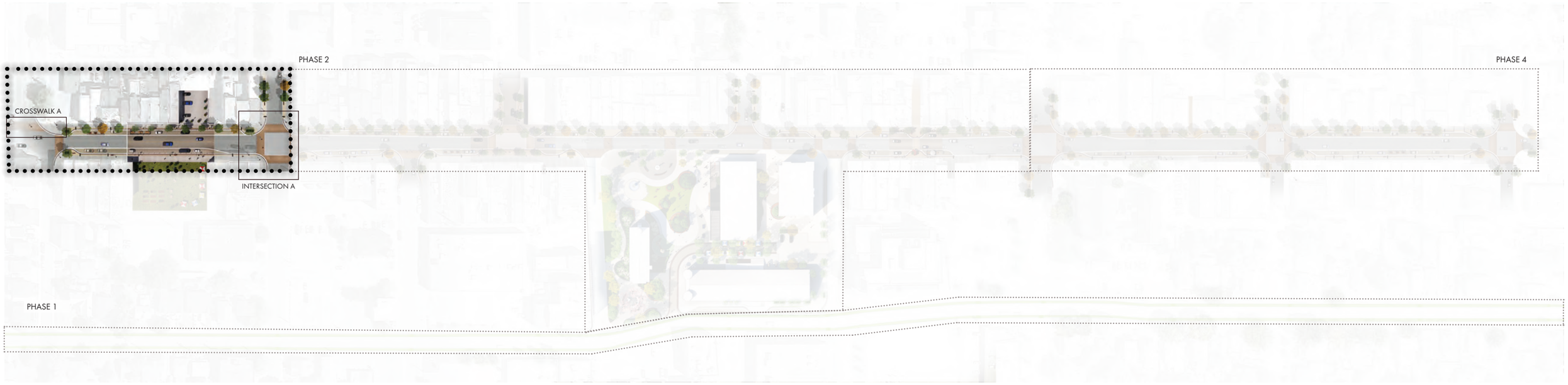
Proposed work to the West area of Dundas street should be timed to coincide with the completion of Phase 2. The improvements to this area can be completed separately based on funding, but are to be designed with the same elements and features as the Central area and overall Streetscape.

CROSSWALK A:
Stamped asphalt is proposed at all crosswalks and areas where pedestrians need to interact with vehicles. Curb extensions are proposed at all crosswalks. This ensures that pedestrians have a short distance to travel and ensuring safe crossings for all users, regardless of age and ability. Curb extensions also signal drivers that they should slow down and remain on alert at all crossings. Tactile surfacing is proposed at all boundaries where pedestrians might step into a shared area. Clear sight lines are ensured by setting back street furnishing and street elements at crosswalks.

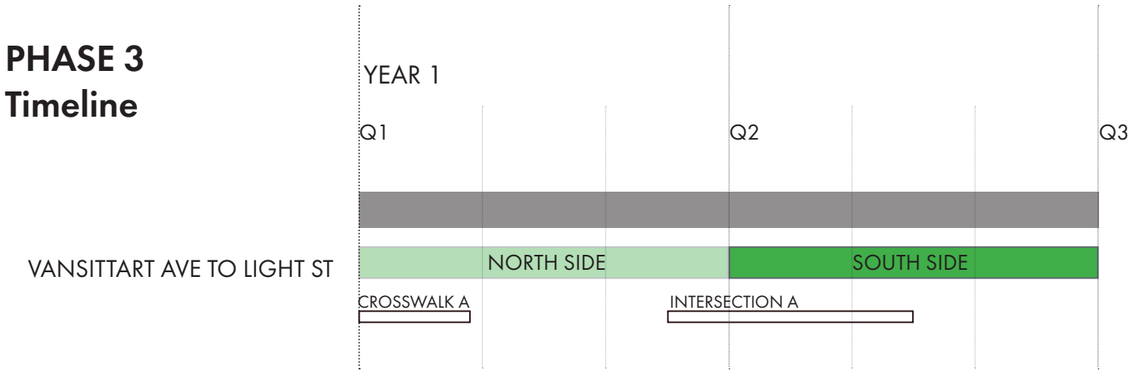
INTERSECTION A:
All intersections are proposed to have curb extensions and stamped asphalt to emphasize pedestrian routes. This ensures that minimal distances need to be traveled to cross the street, as well as ensuring that no vehicle parks close to an intersection. Street furniture is set back to allow for clear sightlines and high canopy trees are proposed as an indicator at all intersections. High canopy trees are proposed to be planted in curbed planters which ensure no visual obstruction while providing a visual cue to an area where pedestrians and vehicles will interact.

This area also takes a look at vacant land and underutilized spaces. This Plan does not seek to propose use within spaces that are not City owned, rather it suggests temporary uses for activating streets while waiting for development to occur. Consultation with private owners is critical to ensure a successful activation of site.

PHASE 3



PHASE 3
Timeline



5.3.1 Phase 3 Costing

Downtown Streetscape:

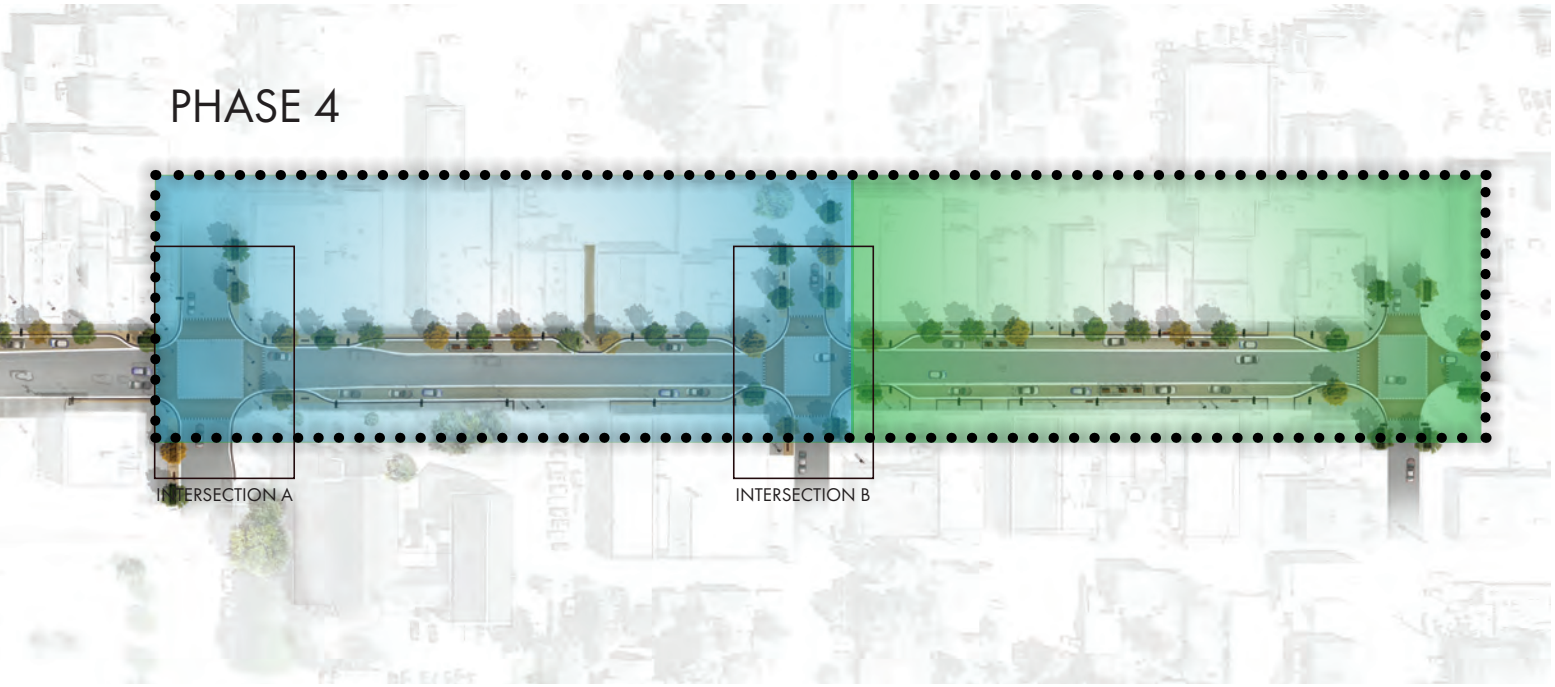
Vanisttart Avenue to Light Street

Item	Description	Unit	Unit Cost	Ph2 Quantity	Estimated Phase 2 Cost
0	Mobilization	l.sum	$13,000.00	1	$6,500.00
1.0	**SITE DEMOLITION**				
1.1	Remove existing unit pavers	sq.m	$20.00	580	$11,600.00
1.2	Tree removal	ea.	$550.00	4	$2,200.00
1.3	Remove and store signage for reinstall	allow	$5,000.00	1	$3,000.00
1.4	Relocate existing utility	allow	$50,000.00	1	$25,000.00
1.5	Remove planting bed at grade	sq.m	$10.00	0	$0.00
1.6	Remove concrete planters and soil. Includes disposal	l.m	$50.00	60	$3,000.00
1.7	Remove concrete (includes disposal)	sq.m	$30.00	810	$24,300.00
1.8	Remove asphalt (assume subgrade remains)	sq.m.	$9.00	2802	$25,218.00
1.9	Remove existing curbs	l.m	$25.00	320	$8,000.00
1.10	Remove light standards and store	allow	$1,000.00	9	$9,000.00
1.11	Rough grading. Includes disposal	allow			$31,417.50
	Detour signage and coordination	allow			$2,000.00
1.12	Remove existing site furnishing and store	allow	$2,500.00	1	$2,500.00
			DEMO TOTAL		**$147,235.50**
2.0	**SOFTSCAPE**				
2.1	Sod for meeting existing conditions	sq.m	$15.00	45	$675.00
2.2	Deciduous Trees (50mm Cal. W.B includes soil)	ea.	$650.00	17	$11,050.00
2.3	Shrub and perennial beds	ea.	$60.00	70	$4,200.00
2.4	Soil Cell Area (1000mm deep system includes panelsto make up 1 meter depth for a minimum of 15 cu.m. per tree. Includes all airflow, grid, perforated pipes, root barrier, etc.)	sq.m.	$375.00	275	$103,125.00
2.5	Planting soil (minimum 15 cu.m. per tree)	cu.m.	$75.00	335	$25,125.00
			SOFTSCAPE TOTAL		**$144,175.00**
3.0	**HARDSCAPE**				
3.1	Supply and install standard concrete sidewalk	sq.m	$125.00	1076	$134,500.00
3.2	Supply and install pedestrian grade coloured and impressed asphlat	sq.m	$155.00	805	$124,775.00
3.3	Supply and install vehicle grade coloured and impressed asphlat	sq.m	$285.00	595	$169,575.00
3.4	Supply and install asphlat and line work	sq.m	$90.00	1295	$116,550.00
3.5	Supply and install tactile surfacing	sq.m	$50.00	13	$650.00
3.6	Supply and install 150mm concrete with decorative iron	l.m.	$225.00	155	$34,875.00
3.7	Supply and install 150mm typical curb and gutter	l.m.	$150.00	85	$12,750.00
3.8	Supply and install flush curb (300mm wide)	l.m.	$150.00	275	$41,250.00
3.9	Supply and install rolled curb (500mm wide and 75mm height)	ea	$175.00	85	$14,875.00
			HARDSCAPE TOTAL		**$649,800.00**
4.0	**SITE FURNISHING**				
4.1	Allow for install of new road signage. Assume 1 sign every 10 meters on both sides of the road)	allow	$500.00	15	$7,250.00
4.2	Supply and install permanent bollards	ea.	$750.00	10	$7,500.00
4.3	Supply and install new light standards with flower/banner arm	ea.	$7,500.00	14	$105,000.00
4.4	Supply and install catenary lights between light standards. Includes required accessories	lm.	$400.00	95	$38,000.00
4.5	Supply and install backed benches	ea.	$2,500.00	4	$10,000.00
	Supply and install backless benches		$2,000.00	0	$0.00
4.7	Supply and install waste receptacles	ea.	$1,500.00	4	$6,000.00
4.8	Supply and install bike racks	ea.	$500.00	17	$8,500.00
			SITE FURNISHING		**$182,250.00**

SUB-TOTAL (Not-Including Taxes):		$1,129,960.50
30% Contingency		$338,988.15
PH2 TOTAL		**$1,468,948.65**

will supersede this estimate.A class "C" estimate is prepared when a project is at the "Preliminary Design" stage. A Class C estimate is generally an estimate based on the initial functional program and broad concept approach. This cost estimates considers that no underground infrastructure needs to be replaced or repair, and as such only represents surface works. No consulting fees or HST has been included within this cost estimate.

5.4 Phase 4

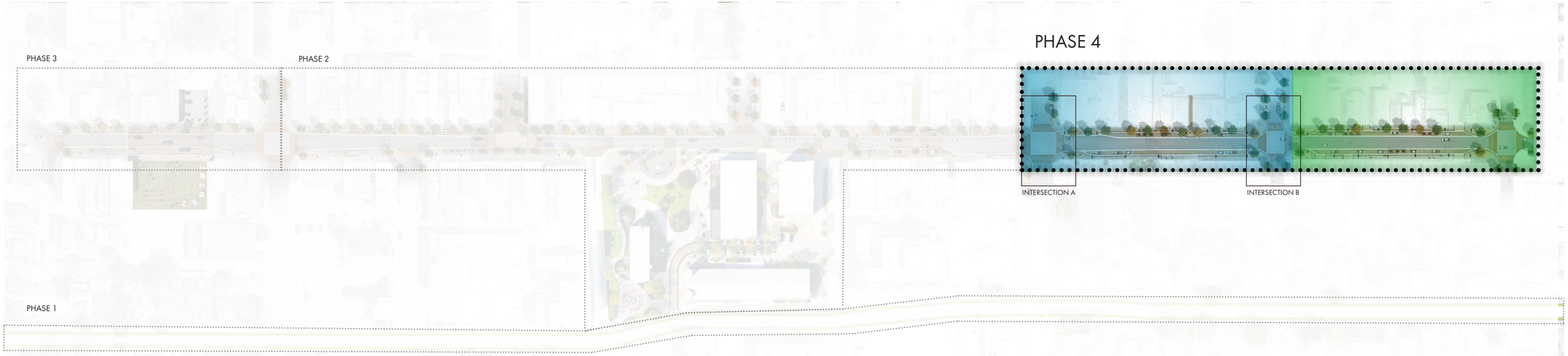


Similarly to Phase 3, the improvements to this area can be completed separately based on funding, but are to be designed with the same elements and features as the Central area and overall Streetscape. This is also to be respectful of taxpayers, as the fiscal burden for these developments will be placed on them.

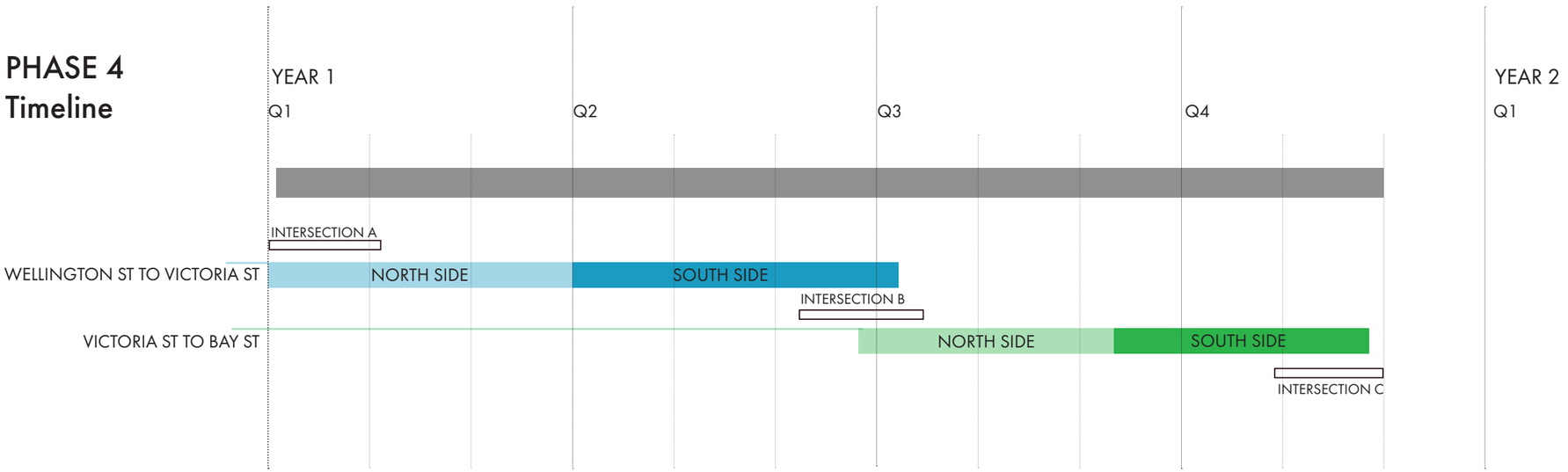
Intersections are an important design element within the proposed redevelopment. These high traffic, multi modal spaces are critical to ensuring that all users cross safely. While street lights provide opportunities to cross safely, there are other elements that make these areas safer to use.

INTERSECTION A & B:
All intersections are proposed to have curb extensions and stamped asphalt to emphasize pedestrian routes. This ensures that minimal distances need to be traveled to cross the street, as well as ensuring that no vehicle parks close to an intersection. Street furniture is set back to allow for clear sightlines and high canopy trees are proposed as an indicator at all intersections. High canopy trees are proposed to be planted in curbed planters which ensure no visual obstruction while providing a visual cue to an area where pedestrians and vehicles will interact.

PHASE 4



PHASE 4 Timeline



5.4.1 Phase 4 Costing

Downtown Streetscape:

Wellington Street to Victoria Street | Victoria Street to Bay Street

Item	Description	Unit	Unit Cost	Ph3 Quantity	Estimated Phase 3 Cost
0	Mobilization	l.sum	$13,000.00	1	$13,000.00
1.0	**SITE DEMOLITION**				
1.1	Remove existing unit pavers	sq.m	$20.00	2100	$42,000.00
1.2	Tree removal	ea.	$550.00	20	$11,000.00
1.3	Remove and store signage for reinstall	allow	$5,000.00	1	$5,000.00
1.4	Relocate existing utility	allow	$50,000.00	1	$50,000.00
1.5	Remove planting bed at grade	sq.m	$10.00	0	$0.00
1.6	Remove concrete planters and soil. Includes disposal	l.m	$50.00	380	$19,000.00
1.7	Remove concrete (includes disposal)	sq.m	$30.00	0	$0.00
1.8	Remove asphalt (assume subgrade remains)	sq.m.	$9.00	4300	$38,700.00
1.9	Remove existing curbs	l.m	$25.00	730	$18,250.00
1.10	Remove light standards and store	allow	$1,000.00	22	$22,000.00
1.11	Rough grading. Includes disposal	allow			$47,910.00
	Detour signage and coordination	allow			$5,000.00
1.12	Remove existing site furnishing and store	allow	$2,500.00	1	$2,500.00
			DEMO TOTAL		**$261,360.00**
2.0	**SOFTSCAPE**				
2.1	Sod for meeting existing conditions	sq.m	$15.00	81	$1,215.00
2.2	Deciduous Trees (50mm Cal. W.B includes soil)	ea.	$650.00	30	$19,500.00
2.3	Shrub and perennial beds	ea.	$60.00	135	$8,100.00
2.4	Soil Cell Area (1000mm deep system includes panelsto make up 1 meter depth for a minimum of 15 cu.m. per tree. Includes all airflow, grid, perforated pipes, root barrier, etc.)	sq.m.	$375.00	475	$178,125.00
2.5	Planting soil (minimum 15 cu.m. per tree)	cu.m.	$75.00	640	$48,000.00
			SOFTSCAPE TOTAL		**$254,940.00**
3.0	**HARDSCAPE**				
3.1	Supply and install standard concrete sidewalk	sq.m	$125.00	1615	$201,875.00
3.2	Supply and install pedestrian grade coloured and impressed asphlat	sq.m	$155.00	1655	$256,525.00
3.3	Supply and install vehicle grade coloured and impressed asphlat	sq.m	$285.00	1085	$309,225.00
3.4	Supply and install asphlat and line work	sq.m	$90.00	1955	$175,950.00
3.5	Supply and install tactile surfacing	sq.m	$50.00	38	$1,900.00
3.6	Supply and install 150mm concrete with decorative iron	l.m.	$225.00	300	$67,500.00
3.7	Supply and install 150mm typical curb and gutter	l.m.	$150.00	105	$15,750.00
3.8	Supply and install flush curb (300mm wide)	l.m.	$150.00	590	$88,500.00
3.9	Supply and install rolled curb (500mm wide and 75mm height)	ea	$175.00	405	$70,875.00
			HARDSCAPE TOTAL		**$1,188,100.00**
4.0	**SITE FURNISHING**				
4.1	Allow for install of new road signage. Assume 1 sign every 10 meters on both sides of the road)	allow	$500.00	32	$16,000.00
4.2	Supply and install permanent bollards	ea.	$750.00	0	$0.00
4.3	Supply and install new light standards with flower/banner arm	ea.	$7,500.00	26	$195,000.00
4.4	Supply and install catenary lights between light standards. Includes required accessories	lm.	$400.00	110	$44,000.00
4.5	Supply and install backed benches	ea.	$2,500.00	12	$30,000.00
	Supply and install backless benches		$2,000.00	0	$0.00
4.7	Supply and install waste receptacles	ea.	$1,500.00	8	$12,000.00
4.8	Supply and install bike racks	ea.	$500.00	36	$18,000.00
			SITE FURNISHING		**$315,000.00**
			SUB-TOTAL (Not-Including Taxes):		$2,032,400.00
			30% Contingency		$609,720.00
			PH3 TOTAL		**$2,642,120.00**

will supersede this estimate.A class "C" estimate is prepared when a project is at the "Preliminary Design" stage. A Class C estimate is generally an estimate based on the initial functional program and broad concept approach. This cost estimates considers that no underground infrastructure needs to be replaced or repaired, and as such only represents surface works. No consulting fees or HST has been included within this cost estimate.

6

Next Steps & Recommendations

General

- Ensure future City initiates align with the Streetscape Master Plan recommendations herein.
- Accessibility should be a key principal of each phase of design. No new development should move forward without adhering to the AODA requirements and guidelines.
- The City should retain a consultant to prepare a detailed Wayfinding and Signage Master Plan to facilitate movement throughout the downtown, identify points of interest, and connections to other areas within the City.
- Any development (public & private) within the Downtown core should be consistent with the Streetscape Master Plan. For example, if a new development requires modifications to the streetscape or removal of streetscape elements during construction, these elements should be reinstated at the owners cost.
- The City should prepare a communications strategy with local businesses and landowners within the study area prior to construction. The communication strategy should consider matters such as temporary road closures, alternative accesses and temporary loss of parking spaces.
- The City should explore partnership opportunities with owners of vacant properties for use of these properties on a temporary/ interim basis as illustrated within this document.
- Official Plan policies and zoning within the Downtown should remain flexible and should allow for a wide range of re-development opportunities. Residential intensification within the Downtown area will support both local business and Museum Square and should be encouraged.
- There are a number of existing alleys and pedestrian connections to these alleys that can be improved through better lighting and wayfinding. These improvements should be included within a future Wayfinding and Signage Master Plan.

Museum Square & Programming

- The City should appoint a dedicated staff member to the programming of Museum Square (i.e. an event coordinator). The event coordinator should also look at opportunities for temporary use of vacant properties elsewhere within the Downtown.
- City Staff should continue to work with the BIA in developing programming opportunities.
- Should the City acquire additional buildings within Museum Square the Master Plan should be update to reflect this additional space while maintaining the original design intent.
- The contemplative area shown behind the museum is intended as the last phase of development. This recognizes the potential future expansion of the Museum. Should an addition to the Museum be provided in the future, a Landscape Plan should be prepared for the lands surrounding the addition. This landscape plan should be coordinated with other elements of the overall Master Plan.

Detailed Design

- Prior to construction a consultant should be retained for detailed design and tender based on phasing and timing.
- The design consultant should prepare a detailed Class A cost estimate based on each phase of implementation.
- In conjunction with detailed design, the City should prepare a maintenance manual based on the products chosen at tender.
- Ensure staff have the technical documentation to continue maintenance requirements.
- Construction within Museum Square should be coordinated with staff at the Museum.
- Detailed design should be done with a lens to sustainability. This includes sourcing local products; incorporating native plant materials and trees; using products with long life cycles; and looking for opportunities to recycle construction waste and existing materials.