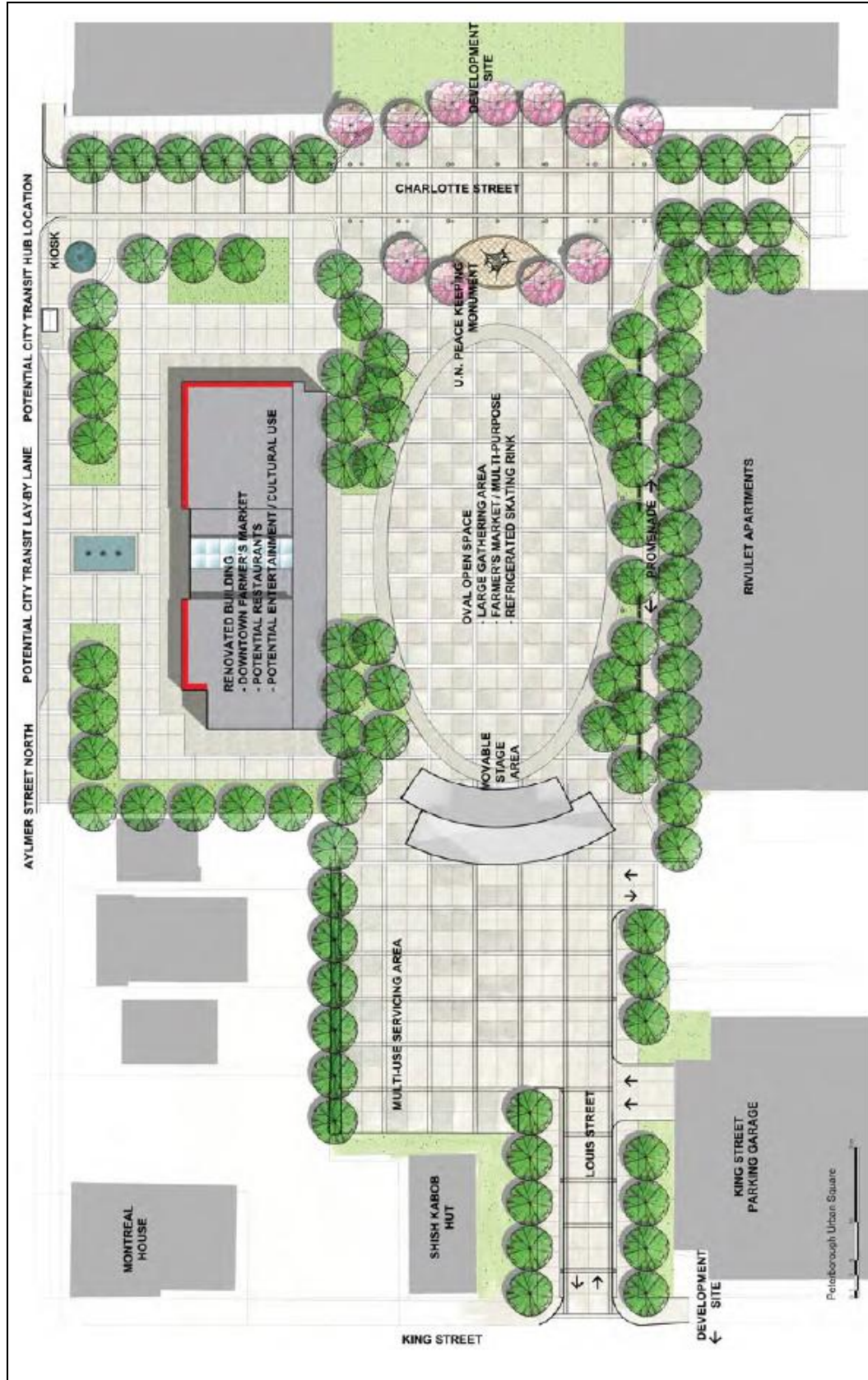
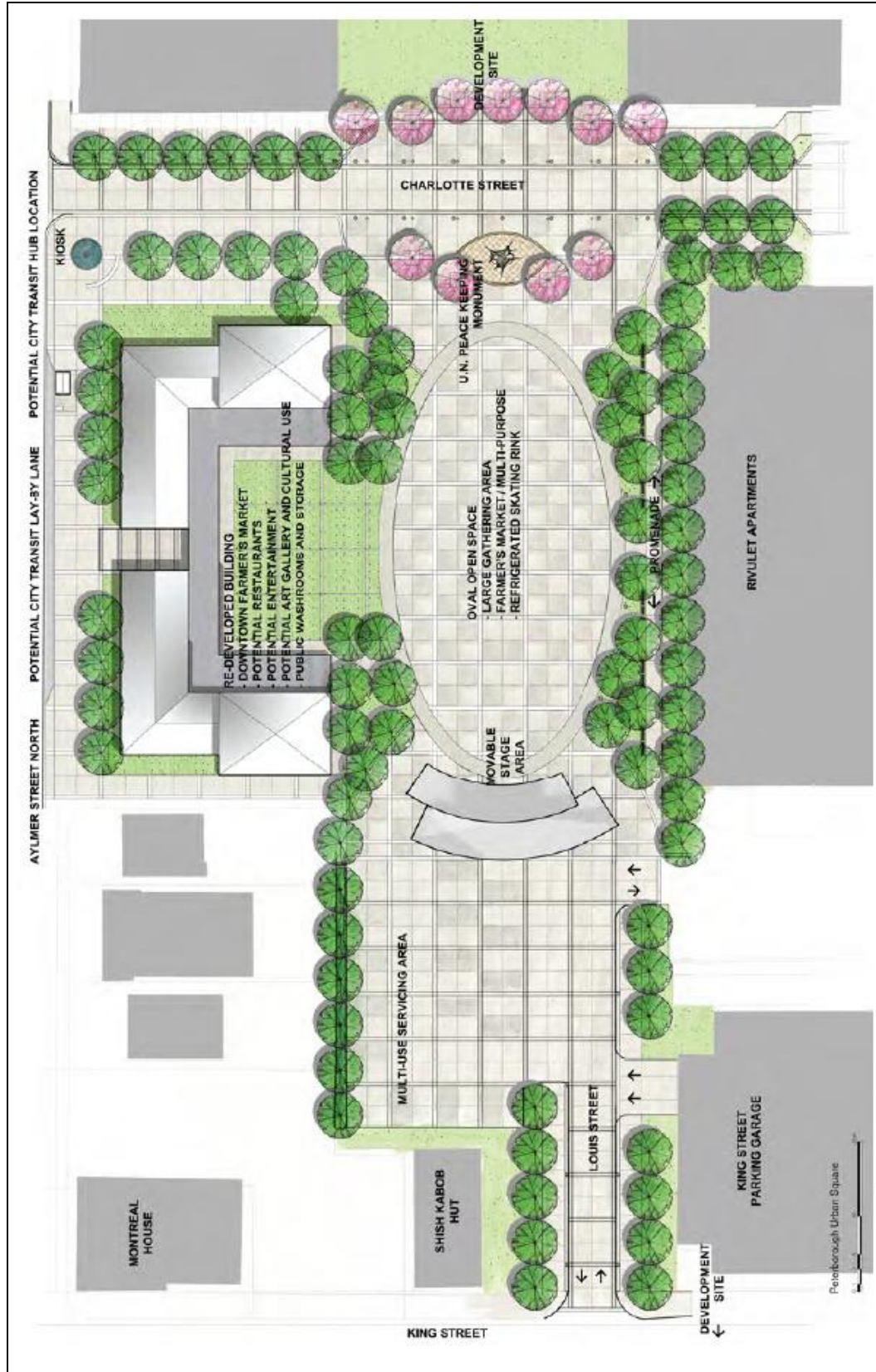




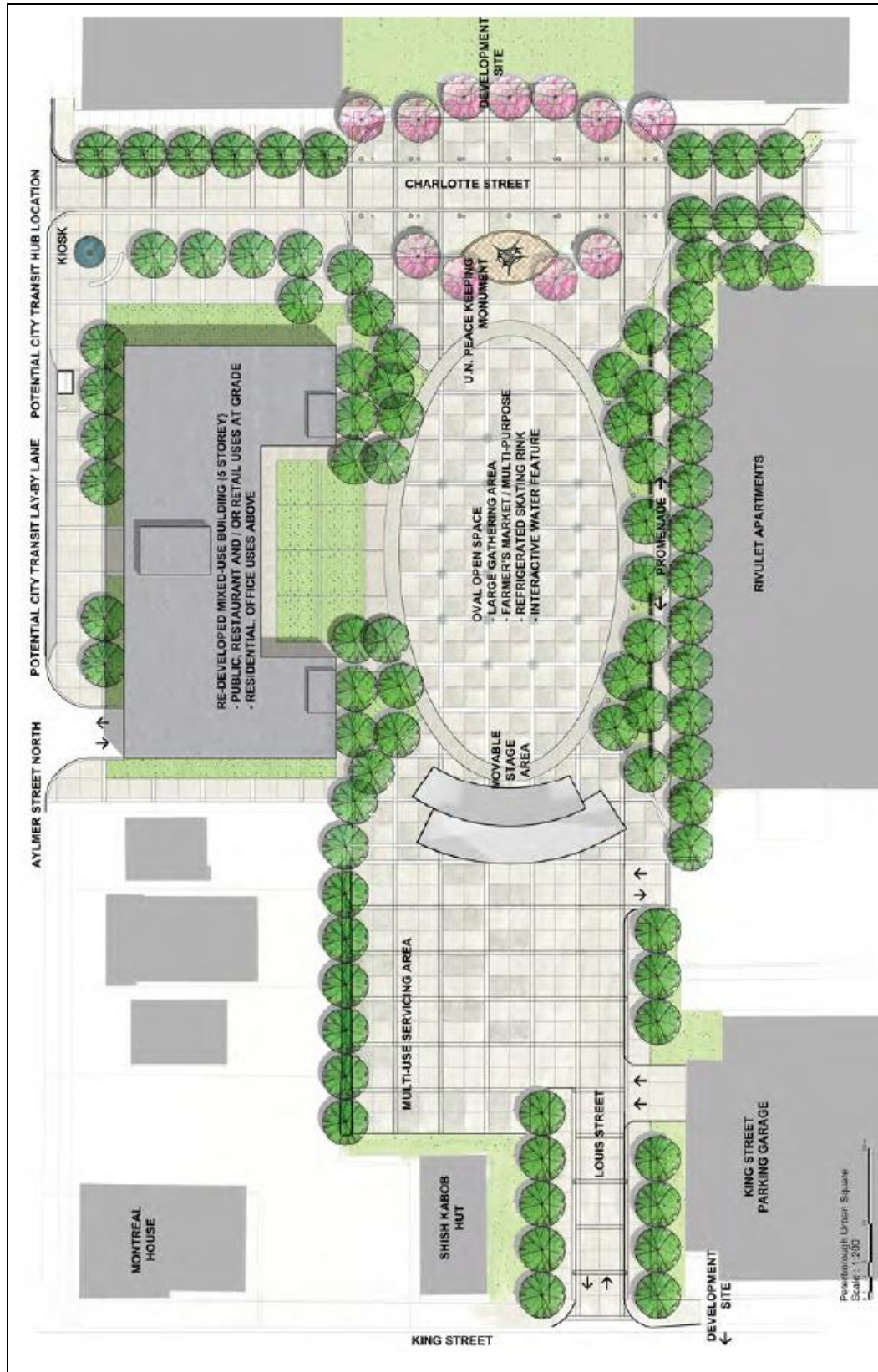
OPTION A



OPTION B



OPTION C1



OPTION C2



EXHIBIT 'D'
Page 1 of 1

OPTION D



City of Peterborough Downtown Urban Park

Final Design Report | January 2014



City of Peterborough Downtown Urban Park

Final Design Report | January 2014

Submitted to:



Submitted by:



Contents	Page
1.0 Introduction	1
1.1 Background	3
1.2 Study Process	3
1.3 Potential Site Identification	4
1.4 Preferred Site	6
2.0 Program Development	5
2.1 Program and Activities	9
2.2 Comparable Public Squares	11
3.0 Concept Options	11
3.1 Conceptual Diagrams	15
3.2 Programming Evaluation Matrix	26
4.0 Master Plan	23
4.1 Phase One Development Plan	29
4.2 Farmer's Market Layout Plan	33
4.3 Multi-Purpose Building Option	34
5.0 Implications and Costing	31
5.1 Parking Implications	37
5.2 Potential Funding Partners	37
5.3 Cost Estimates	38



Bird's Eye View of Downtown Peterborough



1.0 Introduction

1.0 Introduction

*"The Central Area is not just a physical entity but also the combination of diverse activities and places that combine to fulfill the **central place functions** of a growing urban centre."*

-Central Area Master Plan, 2009



Peterborough's Central Area, 2011

1.1 Background

The City of Peterborough Council adopted the Central Area Master Plan in 2009 which confirmed the need to continue investment in the Downtown area through urban renewal, infrastructure and streetscape improvements.

Part of this study was focused on finding an appropriate location for the Urban Park. After extensive analysis of six (6) different sites, the Louis Street Parking Lot site was identified as the best site, as the area is in need of public investment. The creation of an Urban Park on this site was identified as a key catalyst for private investment in the years following the development of the Urban Park.

See Section 1.3 for an overview of the analysis undertaken for the identified potential sites.

1.2 Study Process

This study was undertaken in six distinct phases. This report provides details of the final Plan for the Urban Park.

Phase 1: Vision and Programming

The first phase of the study focused on collecting background materials and undertaking interviews with stakeholders to gain a full understanding of the issues and opportunities that exist within Peterborough and the Downtown area in particular. During this phase comparable squares from around the world were investigated and analyzed in order to gain insight and inspiration from successful public spaces.

Phase 2: Preferred Site Confirmation

Phase 2 included a review of background materials, a complete evaluation, site analysis and a Strengths, Weaknesses, Opportunities and Threats (SWOT) analysis of the identified sites within the Downtown area, and selection of a preferred site for the Urban Park.

Phase 3: Design Program Refinement

Phase 3 of the study focused on developing and refining the programming and the urban design vision for the preferred site. The programming was developed in consultation with the community to enable them to provide input as to what type of activities, amenities and programming they envision for the Urban Park.

Phase 4: Conceptual Designs

This phase entailed developing 3 conceptual design alternatives that identified specific elements and features of each. Opportunities and constraints were then identified for each concept for evaluation purposes. Cost estimates for each concept were also prepared. These concepts were presented to stakeholders and the community for review and to garner feedback.

Phase 5: Draft Preferred Plan

After the evaluation and review was completed in Phase 4, the draft Plan for the Urban Park was prepared and presented based on the feedback and comments received. A final consultation process with stakeholders was included in this phase.

Phase 6: Final Plan

The final phase of the study included the development of the final Urban Park Plan, complete with a phasing plan and finalized cost estimates.

1.0 Introduction

1.3 Potential Site Identification

During the stakeholder interview process, six (6) potential sites for the Urban Park were identified. These sites included:

- Site A: Louis Street Parking Lot
- Site B: Peterborough Square
- Site C: Harvey's Restaurant Lot
- Site D: Ontario Court of Justice/Gas Works Lot
- Site E: Victoria Park
- Site F: No Frill's Parking Lot

Site A

The Louis Street Parking Lot was a site originally identified by the City of Peterborough in the Central Area Master Plan as the leading location for an Urban Park. It lies on the south west corner of Peterborough's central downtown and is framed by Charlotte, Aylmer, King and Louis Streets. The site is currently occupied by a parking lot, a Shoppers Drug Mart and several small businesses. The site is in a zone which transitions from the commercial downtown to residential.

Site B

Peterborough Square was identified numerous times in the stakeholder interviews as a potential site for the Urban Park and is surrounded by Simcoe, George, Charlotte and Water Streets. The site was historically the centre of Peterborough; Market Hall, a designated heritage property, occupies a portion of the site. The rest of the site is occupied by a commercial tower and a small

mall. The site lies in an area with vibrant retail activity and is considered the activity centre of Peterborough.

Site C

The Harvey's Restaurant site is located on the south east corner of Peterborough's central downtown. The site is framed by King, George and Sherbrooke Streets, with Water Street running through the site. This site has a view of the Otonabee River and could potentially act as a southern anchor to Millennium Park. Currently the site is occupied by a Harvey's Restaurant, a three story commercial building, a single story retail store and a parking lot.

Site D

Site D currently consists of the Ontario Court of Justice and Gas Works parking lot. The site is relatively difficult to access. It is bordered by Hunter, Queen and Simcoe Streets and the truck shipping lot for the Quaker Oat plant. The site is cut off from Queen Street by several small businesses and homes and access to the site from Simcoe Street is on a significant slope.

Site E

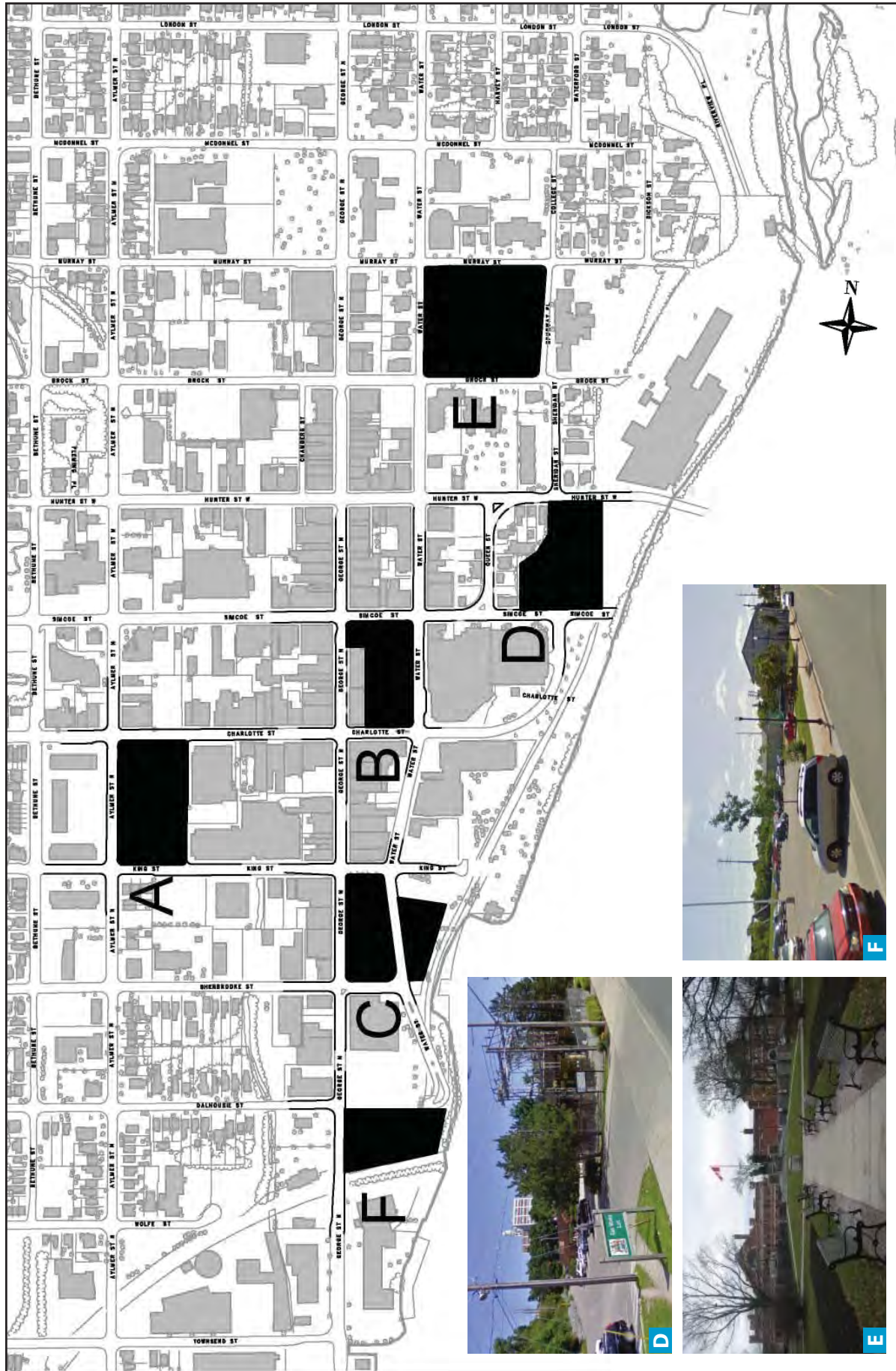
Victoria Park lies in the north eastern corner of the downtown core. It is a formal park with defined paths and a significant amount of trees. Murray, George, Brock and Spurway Streets define the site, which slopes up toward the east. The site is largely surrounded by public and special district services with little retail.

Site F

The No Frill's parking lot is located outside of the downtown core to the south. The site is bordered by George Street and the Otonabee River with only a portion of the entire parking lot being considered as part of the site. There is very little pedestrian traffic and the site has a suburban character.



1.0 Introduction



1.0 Introduction

1.4 Preferred Site

As a result of the outcomes of the site evaluation, the Louis Street Parking Lot Site was confirmed as the preferred site. Generally, this site was preferred because it is currently available (owned by the City), has a lower development cost and will generate less construction disruption. The site is relatively clear and could easily be developed into an Urban Park. In terms of practicality, the site was the best realistic option.

Strengths

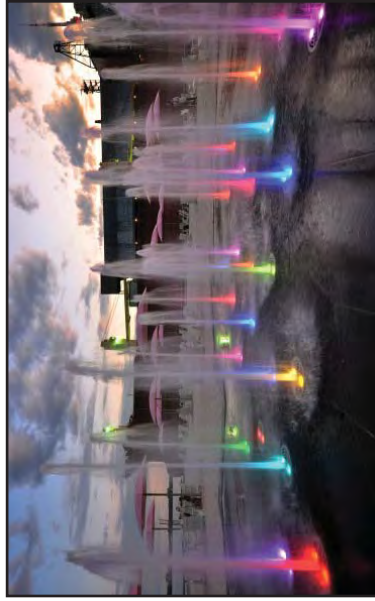
- Strategic Development Opportunities
- Municipal Ownership
- Short Term Development Horizon
- Existing Programming – Market, Other Events
- Future redevelopment of surrounding area (catalytic effect)
- Transit and Pedestrian Access
- Available Parking in Parking Garage
- Frontage on Charlotte, King and Aylmer Streets
- Central location within Downtown core area

Weaknesses

- Existing Image as a parking lot



Preferred Site: Louis Street Parking Lot



2.0 Program Development



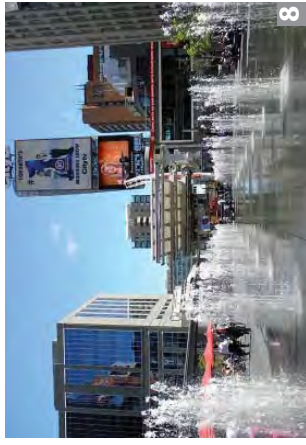
Programming could include New Year's Eve Celebrations

2.1 Program and Activities

Through the stakeholder and community engagement process, a number of key program opportunities were identified to create a year-round place for public gathering and celebration.

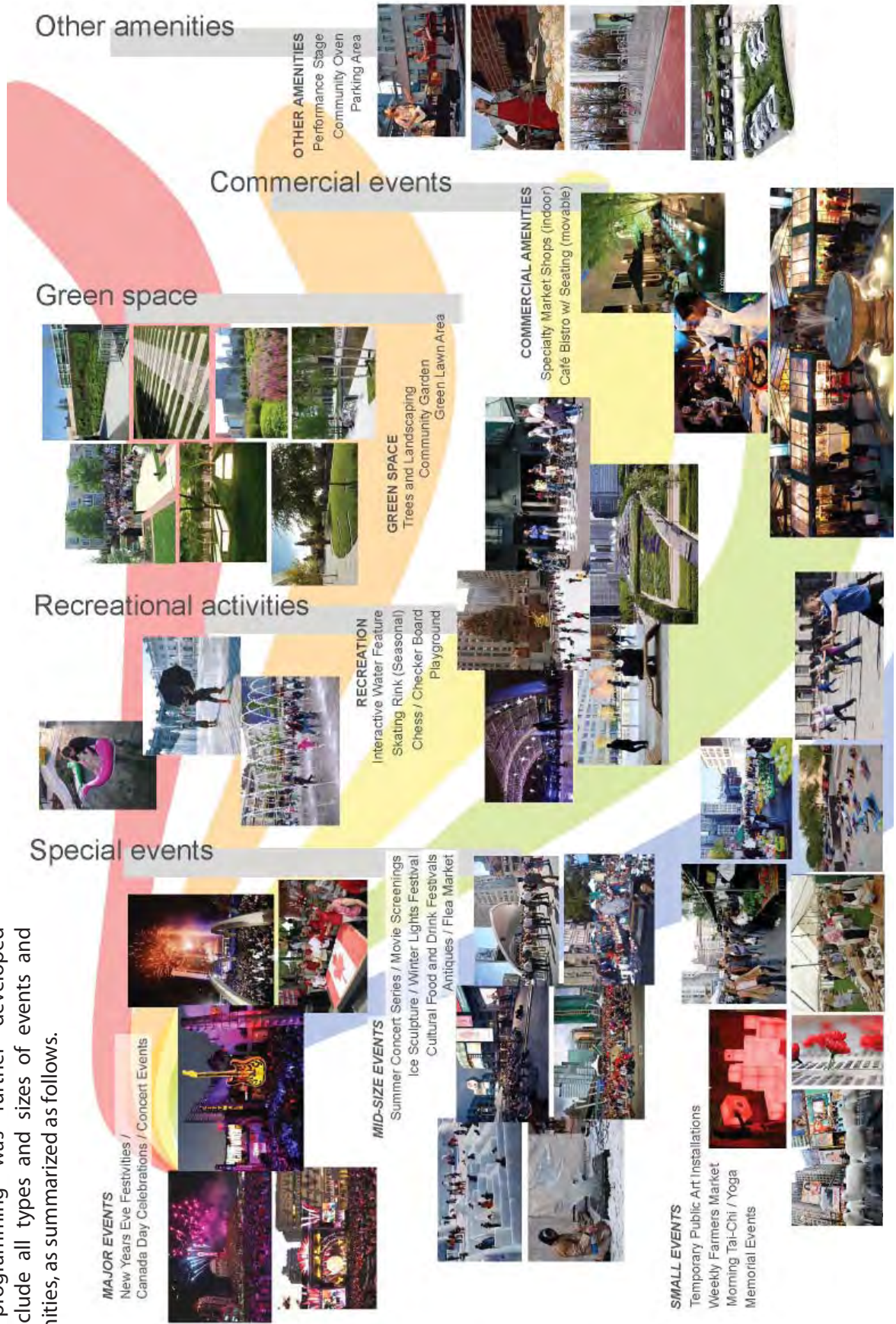
Potential Program Elements

1. Farmer's Market
2. Temporary Art Installations
3. Ice Skating
4. Seating / Movable Furniture
5. Mixed-Use / Market Building
6. Performance Venue
7. Community BBQ (Rib-fest)
8. Interactive Water Feature(s)
9. Children's Library Program / Art Lessons
10. Children's Summer Camp



2.0 Program Development

The programming was further developed to include all types and sizes of events and amenities, as summarized as follows.



2.2 Comparable Public Squares

Public Square	Area	Why the Square is Successful	Imagery
Bryant Park, New York City, New York	24,900 m ²	• Attractions and destinations • Amenities • Seasonal strategy • Central role of management • Inner square and outer square	  
Pioneer Courthouse Square, Portland, Oregon	4,046 m ²	• Central management body • Seasonal strategy	  
Campus Martius, Detroit, Michigan	10,117 m ²	• Flexible design • Seasonal strategy	  

3.0 Conceptual Options



3.0 Conceptual Options

*Current impressions of the Downtown
identified a number of attributes and
impressions that were factored into the Design
Plan for the Urban Park.*



Market Hall Clock Tower

3.0 Conceptual Options

3.1 Conceptual Diagrams

A series of conceptual options were generated to explore the development opportunities and potentials of the Louis Street site and related spaces. These include urban park development options as follows:

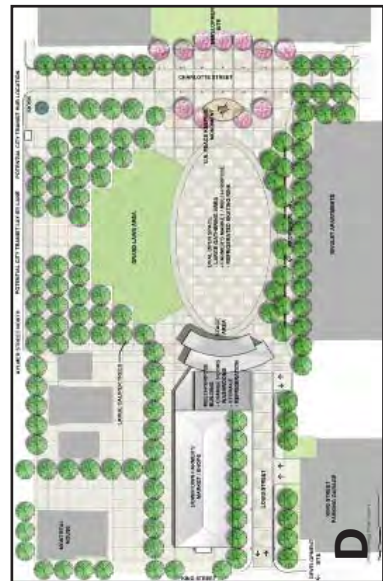
Option A - Louis Street site

Option B - Louis Street site + Shoppers Drug Mart site (utilizing existing building)

Option C1 - Louis Street site + redeveloped Shoppers Drug Mart site

Option C2 - Louis Street site + redeveloped Shoppers Drug Mart site with public / private uses

Option D - Louis Street site + expanded site from Charlotte to King and Louis to Aylmer Streets (Full build-out)



3.0 Conceptual Options

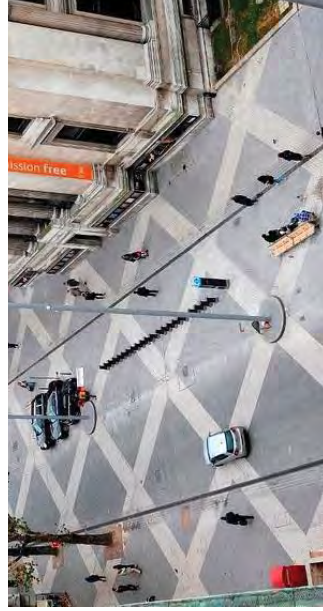
Option A - Louis Street Site

Key Features

- Louis Street becomes a non-through street, but provides access to the King Street Parking Garage, the Rivulet Apartments and a small parking / multi-use space at the south end of the site.
- Integrates seamlessly with the Charlotte Street redesign.
- Multi-use central space that doubles as an ice rink in winter months.
- Multi-use building with change rooms, washrooms, storage, refrigeration, etc.
- Stage facility for performances and related uses.
- Sitting and relaxation spaces.
- Specialty lighting.
- Green planting areas and stormwater management facilities.



Flexible Central Space with Interactive Water Features / Ice Skating Rink



Continuous Paving across street



Outdoor Farmer's Market Area

3.0 Conceptual Options



Option A Conceptual Design

3.0 Conceptual Options

Option B - Louis Street Site + Shoppers Drug Mart Site

Key Features

- Louis Street becomes a non-through street, but provides access to the King Street Parking Garage, the Rivulet Apartments and a small parking / multi-use space at the south end of the site.
- Integrates seamlessly with the Charlotte Street redesign.
- Multi-use central space that doubles as an ice rink in winter months.
- Multi-use building with change rooms, washrooms, storage, refrigeration, etc.
- Stage facility for performances and related uses.
- Sitting and relaxation spaces.
- Specialty lighting.
- Green planting areas and stormwater management facilities.
- Re-purposed existing Shoppers Drug Mart building to include:
 - Enhanced presence on Aylmer Street and at potential City Transit Hub.
 - Additional indoor / outdoor site area around existing / re-purposed building.
 - Potential to hold Farmer's Market, restaurants (permanent and / or temporary), and entertainment / cultural events, etc.



Specialty Lighting



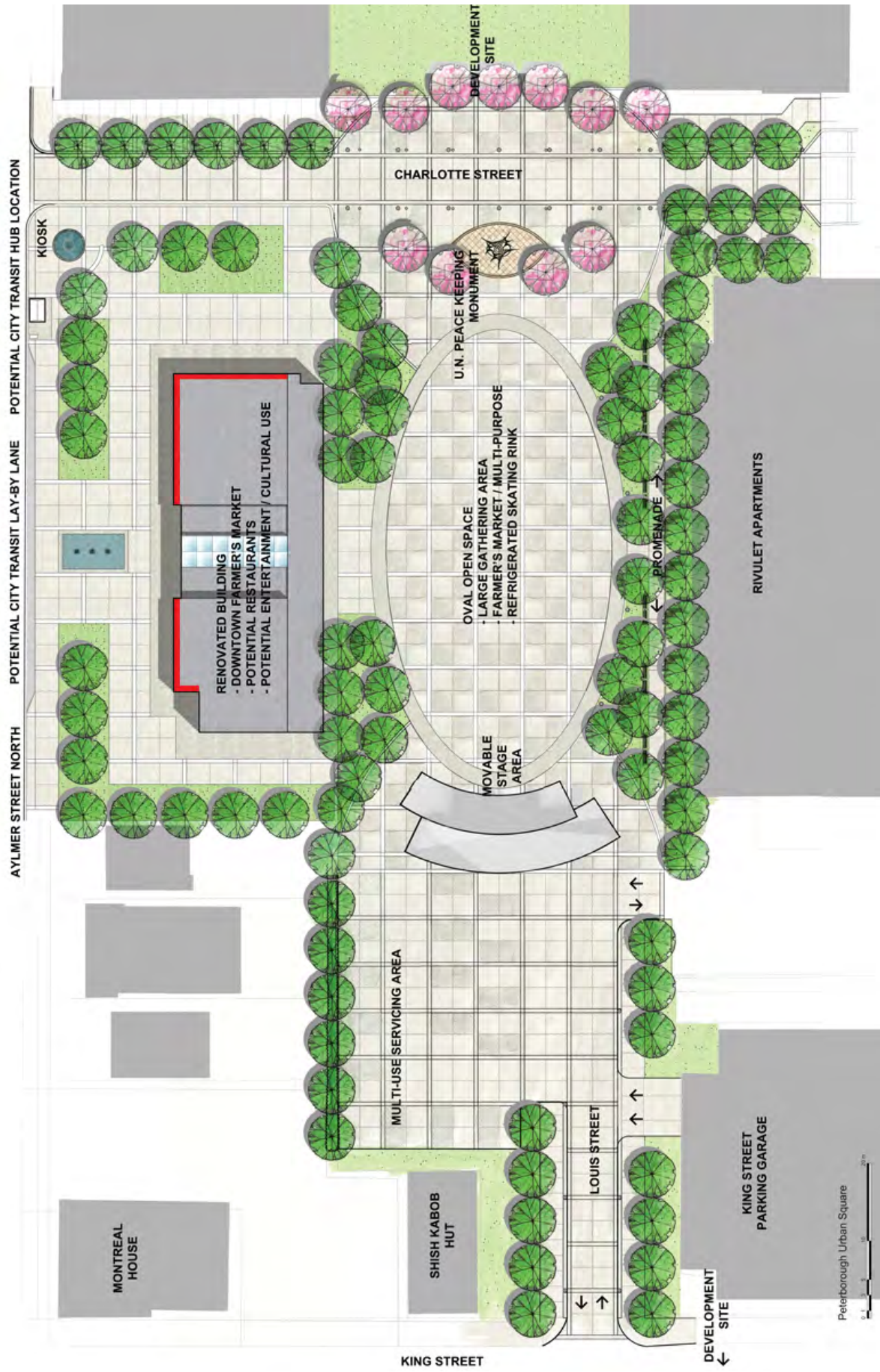
Outdoor Cafe / Movable Furniture



Re-Purposed Building can host an Indoor Farmer's Market and other Special Events



3.0 Conceptual Options



Option B Conceptual Design

3.0 Conceptual Options

Option C1 - Louis Street Site + New Building on Shoppers Drug Mart Site

Key Features

- Louis Street becomes a non-through street, but provides access to the King Street Parking Garage, the Rivulet Apartments and a small parking / multi-use space at the south end of the site.
- Integrates seamlessly with the Charlotte Street redesign.
- Multi-use central space that doubles as an ice rink in winter months.
- Movable stage facility for performances and related uses.
- Sitting areas and relaxation spaces.
- Specialty lighting.
- Green planting areas and stormwater management facilities.
- Re-developed Shoppers Drug Mart building to include:
 - Enhanced presence on Aylmer Street and at potential City Transit Hub.
 - Additional indoor / outdoor site area around re-developed building, including a market green.
 - Potential to hold Farmer's Market, restaurants (permanent and / or temporary), and entertainment / cultural events, etc.
 - Potential for public-private partnership.



Multi-Use Central Space



Market Green Flexible Space

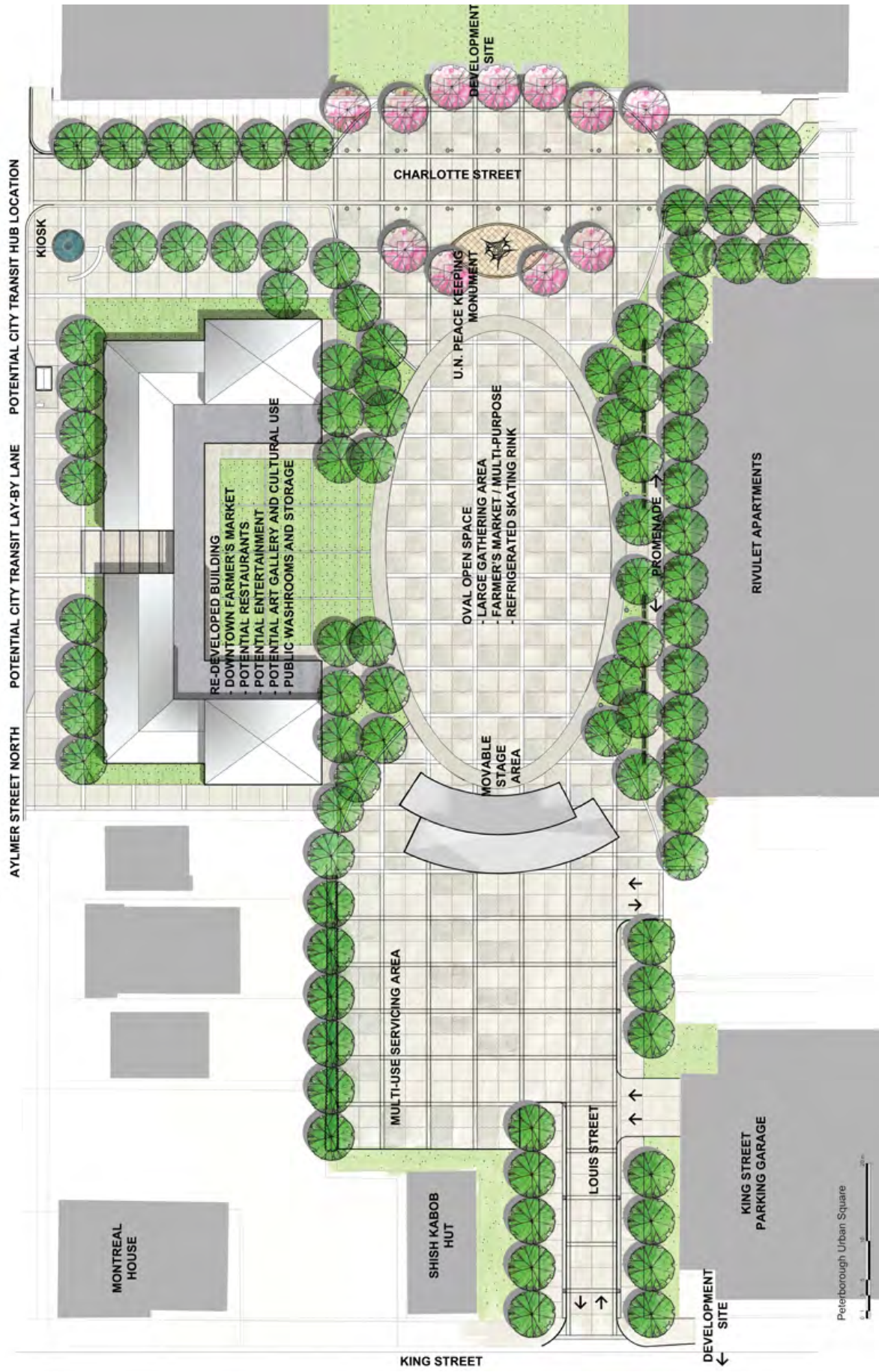


Pedestrian Promenade



Sitting Areas and Space for Relaxation

3.0 Conceptual Options



Option C1 Conceptual Design

3.0 Conceptual Options

Option C2 - Louis Street Site + New Building on Shoppers Drug Mart Site

Key Features

- Louis Street becomes a non-through street, but provides access to the King Street Parking Garage, the Rivulet Apartments and a small parking / multi-use space at the south end of the site.
- Integrates seamlessly with the Charlotte Street redesign.
- Multi-use central space that doubles as an ice rink in winter months and interactive water features in the summer months.
- Movable stage facility for performances and related uses.
- Sitting areas and relaxation spaces.
- Specialty lighting.
- Green planting areas and stormwater management facilities.
- Re-developed Shoppers Drug Mart building to include:
 - Enhanced presence on Aylmer Street and at potential City Transit Hub.
 - Additional indoor / outdoor site area around re-developed building, including a market green.
 - Potential mixed-use mid-rise building to hold private residential units above and public / retail uses at grade including the Farmer's Market, restaurants and entertainment.
 - Potential for public-private partnership.



Mixed-use facing public space



Movable Stage for Flexibility

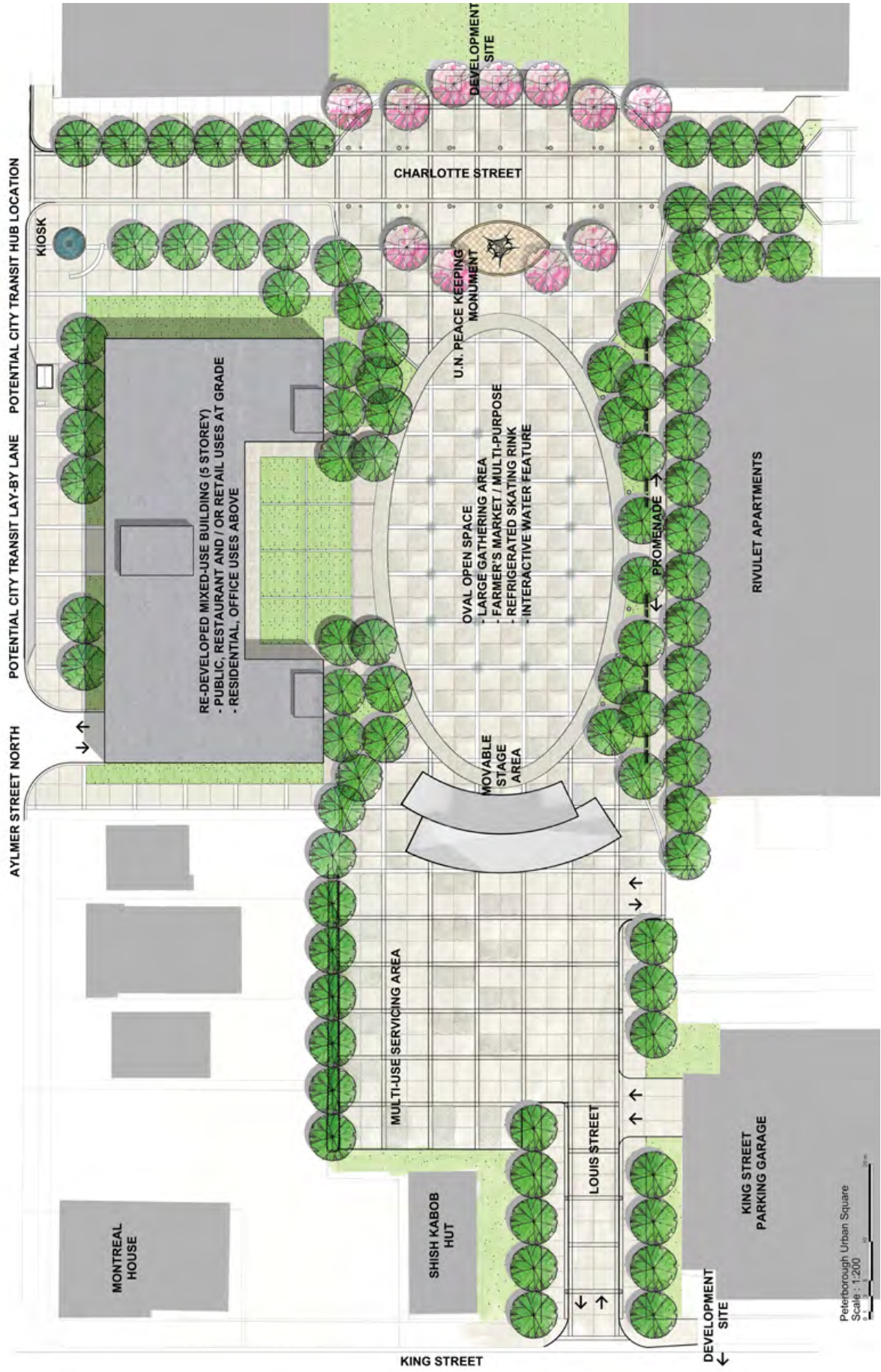


Private land use above with public uses at grade development



Interactive Water Features

3.0 Conceptual Options



Option C2 Conceptual Design

3.0 Conceptual Options

Option D - Full Area Build-Out

Key Features

- Louis Street becomes a non-through street, but provides access to the King Street Parking Garage, the Rivulet Apartments and a small parking / multi-use space at the south end of the site.
- Integrates seamlessly with the Charlotte Street redesign.
- Multi-use central space that doubles as an ice rink in winter months.
- Multi-use building with change rooms, washrooms, storage, refrigeration, etc.
- Stage facility for performances and related uses.
- Sitting and relaxation spaces.
- Specialty lighting.
- Green planting areas and stormwater management facilities.
- New year-round market building fronting onto King Street, adjoined with multi-purpose building.
 - Potential to hold Farmer's Market, restaurants (permanent and / or temporary), and entertainment / cultural events, etc.
- Enhanced open presence on Aylmer Street and at potential City Transit Hub with urban tree grove and grand lawn area with movable furniture.
- Additional indoor / outdoor site area around new market building.



Year-Round Market Building



Sustainable Planting and Paving



Urban Tree Grove



Grand Lawn with Movable Furniture

3.0 Conceptual Options



Option D Conceptual Design

3.0 Conceptual Options

3.2 Programming Evaluation Matrix

A programming evaluation matrix was developed in order to determine potential uses and programming opportunities that would be able to take place within the site. This provided an understanding of the types of events and amenities that could be implemented within the public square for each of the four (4) options. The program items illustrated are not mandatory, but rather illustrate the site's potential to handle both large and small scale events.

ACTIVITIES + AMENITIES	OPTION A	OPTION B	OPTION C	OPTION D
SPECIAL EVENTS				
MAJOR EVENTS*				
New Years Eve Festivities / Canada Day Celebrations / Concert Events	2,891m ² (2,150 people)	2,891m ² (2,150 people)	3,246m ² (2,450 people)	3,991m ² (3,000 people)
MID-SIZE EVENTS*				
Ice Sculpture and Winter Lights Festival / Cultural Food and Drink Festivals / Summer Concert Series / Movie Screenings / Antiques Flea Market	2,231m ² (1,650 people)	2,231m ² (1,650 people)	2,586m ² (1,950 people)	3,331m ² (2,500 people)
SMALL EVENTS				
Weekly Farmers Market (market stall @ 3x3m; each person allocated 2m ²)	1,440m ² (50 stalls / 495 people)	1,440m ² (50 stalls / 495 people)	1,440m ² (50 stalls / 495 people)	2,100m ² (60 stalls / 780 people)
Group Exercise Classes (each person allocated 4m ²)	1,237m ² (310 people)	1,237m ² (310 people)	1,927m ² (480 people)	2,825m ² (705 people)
Memorial Events (each person allocated 2m ²)	628m ² (314 people)	628m ² (314 people)	628m ² (314 people)	480m ² (240 people)
Temporary Public Art Installations	✓	✓	✓	✓
RECREATION				
Interactive Water Feature	✓	✓	✓	✓
Playground	✓	✓	✓	✓
Skating Rink (Seasonal)	✓	✓	✓	✓
Chess / Checker Board	✓	✓	✓	✓
GREEN SPACE				
Community Garden	✓	✓	✓	✓
Trees and Landscaping	3,972m ²	4,705m ²	3,691m ²	4,505m ²
Green Lawn Area	x	x	690m ²	725m ²
COMMERCIAL AMENITIES				
Specialty Market Shops (indoor)	x	1,000m ²	990m ²	1,876m ²
Café Bistro w/ Seating (movable)	✓	✓	✓	✓
OTHER AMENITIES				
Performance Stage	✓	✓	✓	✓
Community Oven	✓	✓	✓	✓
Parking Area	28 parking spaces	28 parking spaces	28 parking spaces	x

*Note: Major events include the closing of Charlotte Street and 25% circulation but exclude spaces below the tree canopies. Mid size events do not include the closing of Charlotte Street or the spaces below the tree canopies.

4.0 Master Plan





Louis Street Site Prior to Development

4.0 Master Plan

4.1 Phase One Development Plan

The development plan for Phase One emphasizes a number of values and principles for the Urban Park:

Focus on Publicly Owned Lands for Redevelopment. Phase one places an emphasis on developing the land currently owned by the City, the Louis Street Parking Lot, a portion of the Charlotte Street road allowance, and a majority of the Louis Street road allowance.

Seamless Integration with Charlotte Street Redevelopment. The design of the Urban Park will be integrated with the design of Charlotte Street to create a public space that is cohesive and unified. For special events, Charlotte Street can be easily closed from Aylmer Street to George Street so that the Urban Park and Charlotte Street together can accommodate large gatherings of people. During these special events people can travel unimpeded by vehicles over a large area of the Downtown Core.

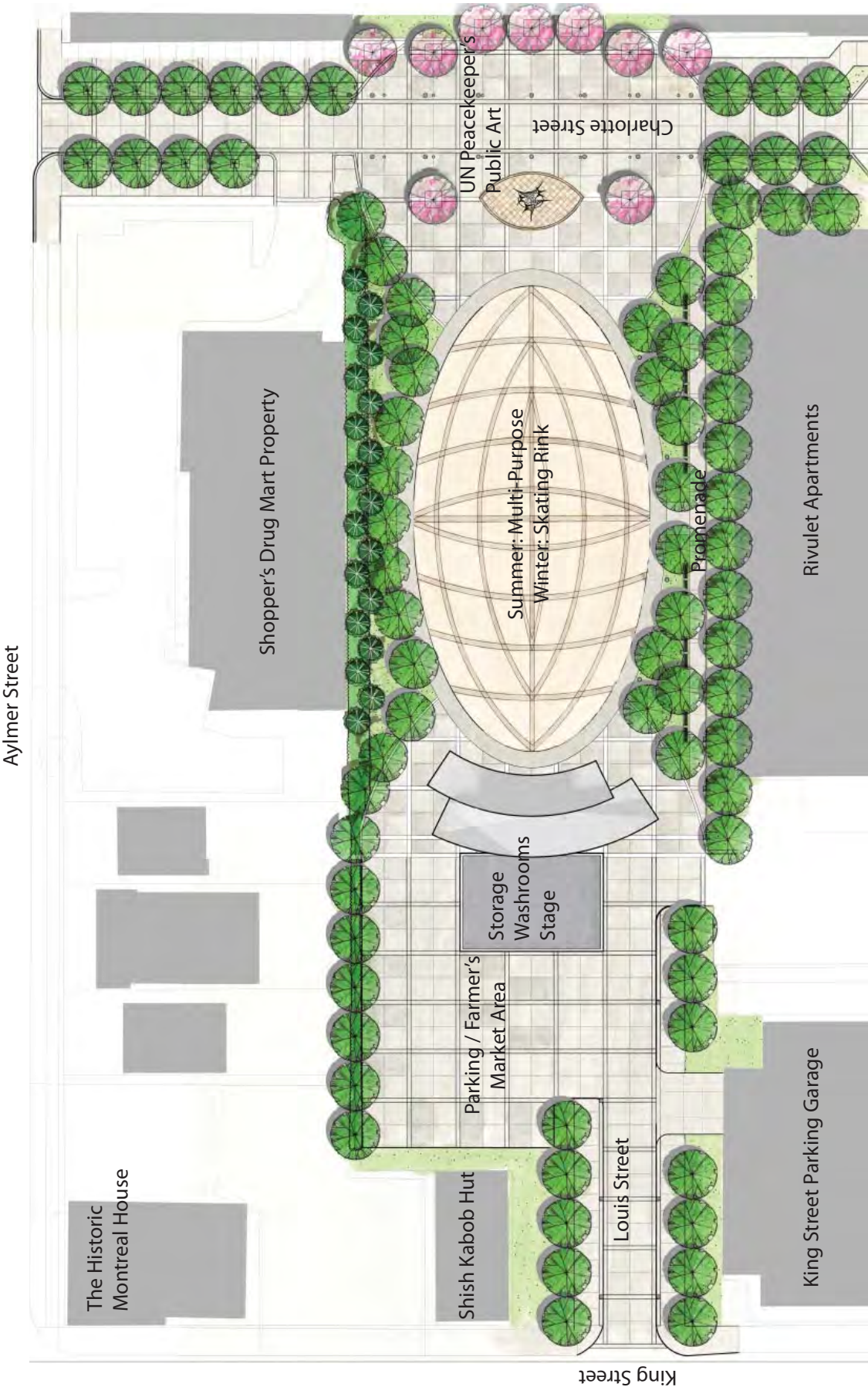
Ensure the Urban Park is Flexible and Multi-Use. Develop an Urban Park that can accommodate a variety of uses and provides flexibility for the users of the space. Ensure that the Urban Park, and its related infrastructure, can be utilized at all times of the day, all seasons of the year, and for all types of events, both large and small.

Incorporate LID Measures into the Design of the Urban Park. Low Impact Development (LID) measures can easily be integrated into the design of the Urban Park through efficient lighting fixtures and design, stormwater management and drainage techniques, and retaining and utilizing rain water on-site, among others.

Provide for a Functional Farmer's Market within the Space. Design the Urban Park to ensure that the Farmer's Market can continue to exist on the site in a well functioning and practical manner.

Additional key considerations to be taken into account during the next phase of design work for the Urban Park include the incorporation of electrical outlets / power sources for vendors, safety and security concerns utilizing Crime Prevention Through Environmental Design (CPTED) principles, mechanical considerations for ice rink, site furniture and amenities, design and siting of public art, etc. The timing of construction of the Urban Park should be coordinated with the redevelopment of Charlotte Street.

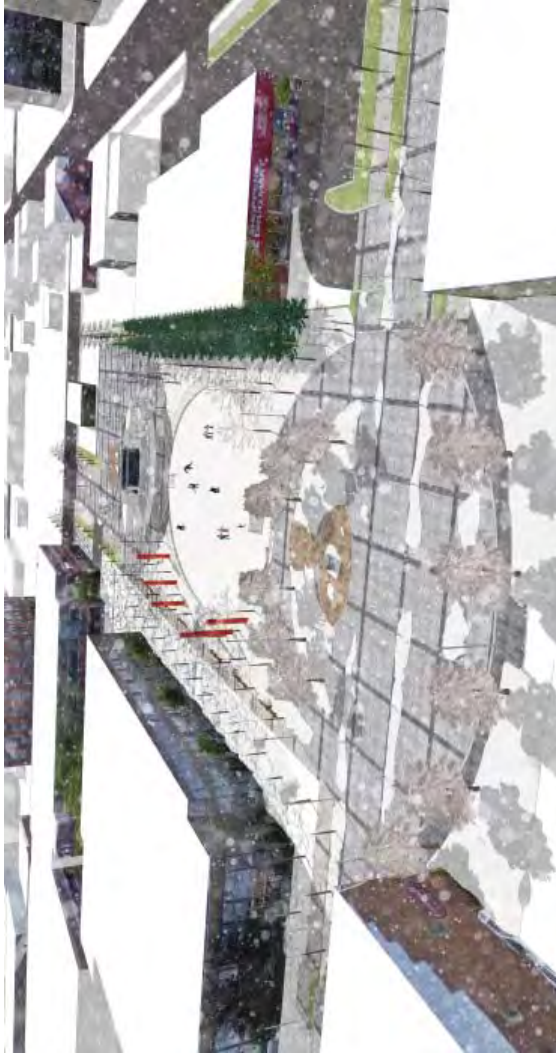
4.0 Master Plan



Phase One Development Plan



Perspective in Summer



Perspective in Winter



Perspective at Night



Perspective from Charlotte Street

4.0 Master Plan

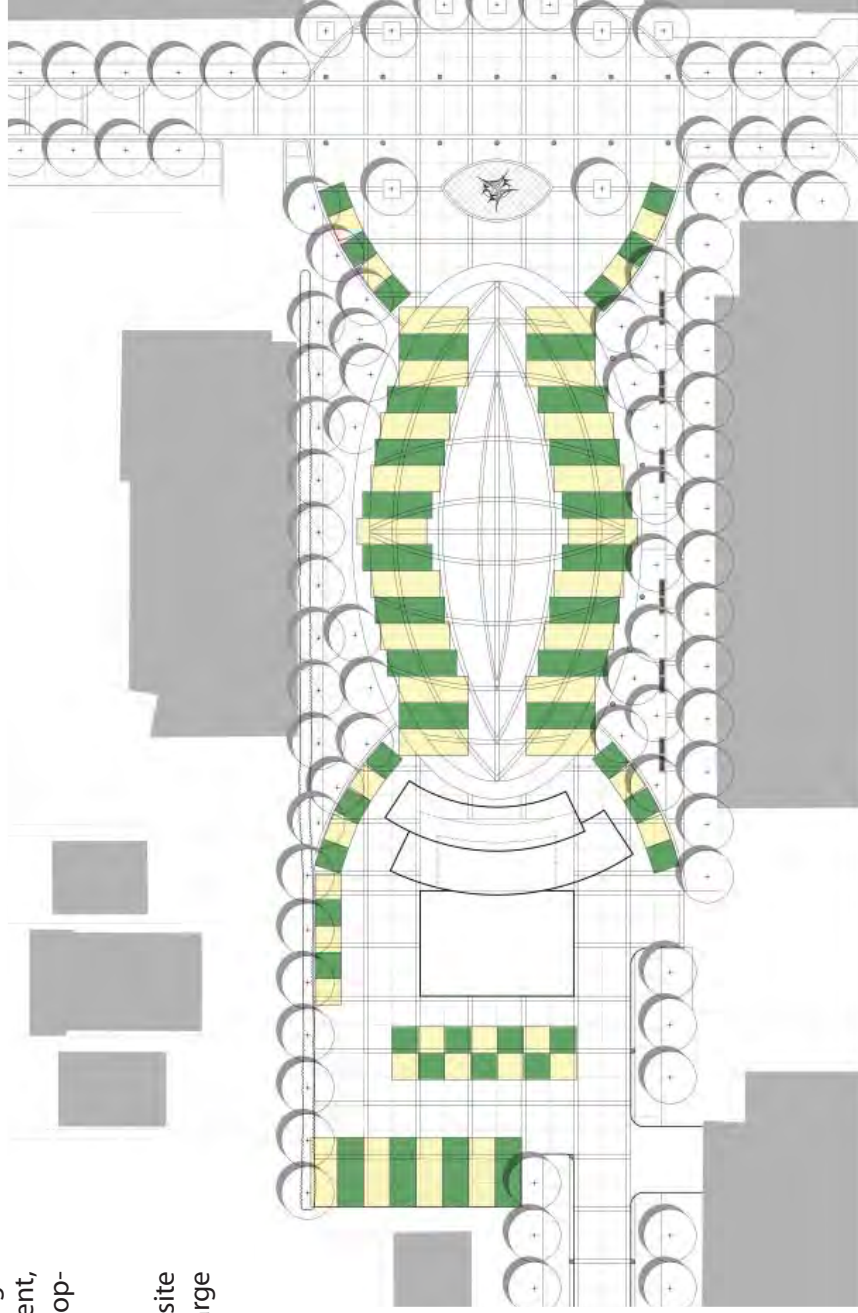
4.2 Farmer's Market Layout Plan

A facility fit analysis was conducted for the Phase One Development Plan to determine the number of both large and small stall sizes that would be able to be accommodated on the site.

For the purpose of this analysis, large stalls are sized at 10 x 3 m and small stalls are 3 x 3 m. Large stalls can accommodate a truck and a small tent, while small stalls can only accommodate a "pop-up" tent.

The facility fit analysis determined that the site could accommodate approximately 42 large stalls and 39 small stalls.

Removable bollards are recommended to be located along the north (Charlotte Street streetscape) and south side (adjacent to the stage area) of the site in order to allow merchants to access the stall spaces during the farmer's market and other events.



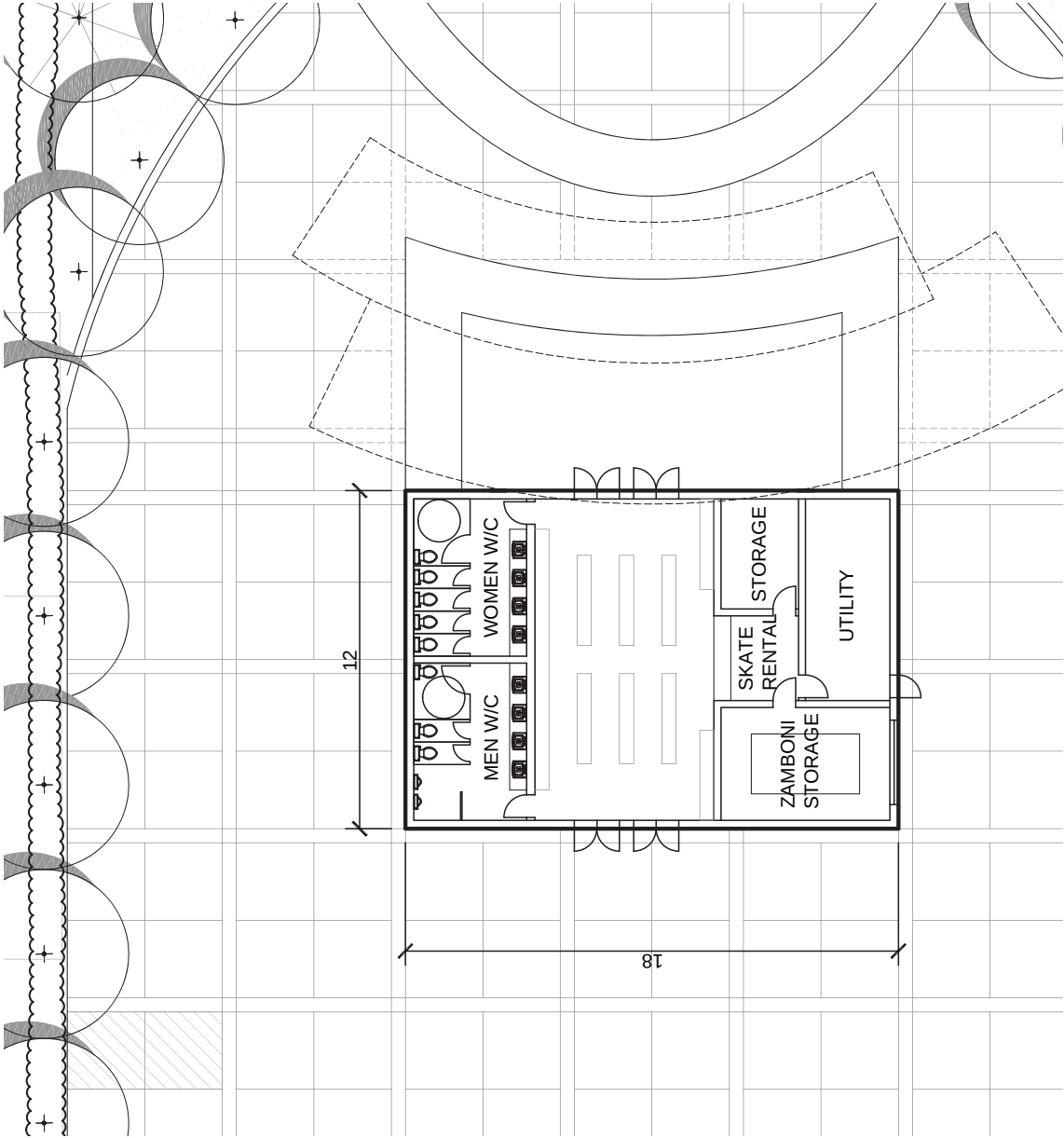
Farmer's Market Layout Plan

4.0 Master Plan

4.3 Multi-Purpose Building Option

A facility fit analysis was also conducted in order to determine the appropriate size of the multi-purpose building.

It was determined that a building size of 12 x 18 m could comfortably accommodate both men's and women's washroom facilities, general storage area, utility (electrical / mechanical) room, zamboni storage area, skate rental kiosk, as well as a general open area for skating preparation and changing. This facility can also be utilized as a staging area for performers when an event is being held.



Potential Multi-Purpose Building Layout



5.0 Implications and Costing

*The King Street Parking Garage currently has
628 parking spaces available.*



King Street Parking Garage

5.1 Parking Implications

Currently, there are 107 parking spaces in the Municipal Parking Lot at Louis Street. A limited number of parking spaces will be retained on-site, located behind the stage area, accessible from Louis Street.

The King Street Parking Garage (directly adjacent to the site) has 628 parking spaces available. Currently there are 470 monthly pass holders (75% of capacity) with the remaining 158 spaces open to the general public for daily parking.

The 2007 Strategic Downtown Parking Management Study stated that approximately 500-700 new parking spaces would be required in the next 5-10 years. It appears the projection for parking demand in the 2007 Strategic Downtown Parking Management Study has not been realized six years after its completion. The development of the Urban Park will likely become a catalyst for development in the area, indirectly increasing the demand for parking, which will have to be partially paid for with the use of funds obtained through the City's cash-in-lieu of parking policy in the Downtown.

The development of the Urban Park should not result in an immediate demand for additional parking. However, longer term, there may be a need to provide additional parking.

5.2 Potential Funding Partners

A number of potential funding opportunities have been identified for Phase One of the Development Plan for the Urban Park. These include the following elements:

- name of the square;
- open oval space / skating rink;
- memorial area on Charlotte Street;
- stage / performance venue;
- sitting areas / benches; and,
- sustainable planting areas.

Two groups have expressed an interest in funding public art at the Park's north end as well as "The Oval".

5.0 Implications and Costing

5.3 Cost Estimates

	Units	Unit Price	Total
1.0 Demolition	6200 m²	\$10/ m²	\$62,000.00
2.0 Paving (net area excluding ice rink, softscape and building footprint)	2970 m²	\$200	\$594,000.00
3.0 Grading	6200 m²	\$12	\$74,400.00
4.0 Ice Skating (concrete surface, refrigerate system, manual ice resurfacer)	1000 m²	Lump Sum	\$500,000.00
5.0 Peace Keeping Memorial Fountain Allowance		Lump Sum	\$150,000.00
6.0 Concrete Curb	425m	\$100/m	\$42,500.00
7.0 Vertical Features	6	\$50,000 each	\$300,000.00
8.0 Stage/ Service Building	200 m²	\$2,000/ m²	\$500,000.00
9.0 Site Light up			
Light Standard	25	\$6000 each	\$150,000.00
Bollard Light	35	\$2000 each	\$70,000.00
Uplight	40	\$1000 each	\$40,000.00
10.0 Site Furniture Allowance		Lump Sum	\$50,000.00
11.0 Banners/ Signage/ Plaques		Lump Sum	\$50,000.00
12.0 Site Service Allowance			
Irrigation/ Water Supply		Lump Sum	\$20,000.00
Drainage/ Storm		Lump Sum	\$60,000.00
Electrical Service		Lump Sum	\$200,000.00
Sanitary (if required)		Lump Sum	\$10,000.00
13.0 Special Item- Interactive Fountain		Lump Sum	\$100,000.00
14.0 Planting			
Tree	98	\$600	\$58,800.00
Shrub and Planting Beds	2,030 m²	\$40	\$81,200.00
		Sub Total	\$3,112,900.00
* Excluding Streetscape Development on Charlotte Street ±1000m² adjacent to site area		10% Contingency	\$311,290.00
			\$3,424,190.00
		10% Fees	\$342,419.00
		Total	\$3,766,609.00
		13% HST	\$489,659.17
		Grand Total	\$4,256,468.17