Report No.: MHC-13-012

TO: Chair and Members of Municipal Heritage Committee

FROM: Cynthia Beach, Commissioner, Corporate and Strategic Initiatives

RESOURCE STAFF: Carola Bomfim Lima, Manager, Project Development

DATE OF MEETING: October 7, 2013

SUBJECT: 19-23 Queen Street and Block 4 Development

### **EXECUTIVE SUMMARY:**

The City intends to select a purchaser/developer for Block 4 in the North Block District (the Block bounded by Queen, King, Tragically Hip Way and Ontario Street) through a two stage Request for Proposals process. In order to clearly set out the criteria on which the evaluation of proposals will be based (as they relate to the heritage buildings known as 19 to 23 Queen Street on Block 4), the City has engaged Heritage Consultant Andre Scheinmann to prepare a detailed inventory and set of criteria for preservation, restoration and integration of this range of heritage buildings.

The development of Block 4 will require remediation and management to address the impacts of previous industrial uses. One of the City's goals is to achieve integration of the historic buildings into the overall design for the site, while still maintaining the economic viability of the development. The level of detail in this work was considered necessary for this particular site because of the significance of these buildings (with 23 Queen Street being represented continuously in mapping and noted in land records from 1798) and the important role they play in providing a transition between the historic core of Kingston and the more modern urban fabric to the north, including the Rogers K-Rock Centre. These guidelines have also been prepared to allow developers to prepare the best solutions to integrate the buildings in a manner acceptable for heritage approvals.

Following on the report to the Municipal Heritage Committee on June 24, 2013, the City's Heritage Consultant for Block 4 has now completed the heritage assessment and guidelines, consisting of the following sections (Exhibit A of this Report):

- Heritage Preservation Inventory;
- Preservation Design Guidelines;
- Technical Conservation Guidelines; and
- Integrative Guidelines for New Design.

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The Heritage Consultant has also worked with the Architecture and Planning Consultants in preparing the design criteria for the new development on Block 4 (Exhibit B of this Report) and the integration with the heritage building context.

These requirements will be included as part of the City requirements and the evaluation criteria for the Block 4 development proposals. All of the documents in Exhibit A and B have been prepared in order to allow proponents to provide a development proposal that will meet the requirements of the *Heritage Act*.

These documents are being presented to the Municipal Heritage Committee for their review and comment, regarding the proposed format and content of the work and the use of this work in guiding development proposals for Block 4 and the evaluation of these proposals.

#### RECOMMENDATION:

**THAT** Exhibit A, Block 4 Heritage Preservation Guidelines, September 2113, be approved as the basis for evaluating proposals for the preservation of 19-23 Queen Street as part of the development of Block 4, pursuant to *Ontario Heritage Act* requirements; and

**THAT** the Municipal Heritage Committee provide input at the October 7 meeting to City staff to be considered in the redevelopment of the North Block District Block 4 Design Guidelines in Exhibit B to support the Request for Proposal for redevelopment.

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# **AUTHORIZING SIGNATURES:**

ORIGINAL SIGNED BY COMMISSIONER

Cynthia Beach, Commissioner, Corporate & Strategic Initiatives

ORIGINAL SIGNED BY CHIEF ADMINISTRATIVE OFFICER

Gerard Hunt, Chief Administrative Officer

# **CONSULTATION WITH THE FOLLOWING COMMISSIONERS:**

Lanie Hurdle, Community Services	$\checkmark$
Denis Leger, <i>Transportation, Facilities</i> & <i>Emergency Services</i>	V
Jim Keech, President and CEO, Utilities Kingston	$\checkmark$

(N/R indicates consultation not required)

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### **OPTIONS/DISCUSSION:**

# Background:

The City will be issuing a Request for Proposals to Purchasers/Developers for Block 4 of the North Block District, which includes a range of heritage buildings known as 19 to 23 Queen Street. 29 Queen Street, while also a heritage-designated property, is not included in the review by the Heritage Consultant, as that property is to be transferred to Kingston Hydro Corporation. The building at 29 Queen Street is required by Kingston Hydro Corporation for the provision of electric infrastructure for the downtown. The 19-23 Queen Street buildings will be transferred out of City ownership to a private Purchaser/Developer.

Development proposals will be evaluated based on how well they address the various challenges associated with the site and the economic impacts of these challenges. These include:

- provision of public parking spaces (in addition to the parking required in association with new development);
- provision of public open space;
- the preservation, restoration and integration of the heritage buildings on the site; and
- the need for environmental remediation of the soils and implementation of risk management.

In order that Proponents are able to prepare their Proposals based on the most accurate and detailed information possible regarding the City requirements for Block 4, and also to facilitate the evaluation of the Proposals the City ultimately receives, the Heritage Consultant has prepared a series of documents that consists of three areas of focus (refer to Exhibit A):

- 1) Heritage Preservation Inventory Consisting of a detailed inventory of the buildings, dividing heritage attributes into the following categories: must be preserved, should be preserved, and worthy of preservation;
- 2) Preservation Design Guidelines Provide a set of parameters and outline the opportunities and constraints of "acceptable" interventions;
- 3) Technical Conservation Guidelines Outline the key elements of good practice for each material/element and considered supplemental to the guidelines currently made available to heritage property owners by the City, as well as the "Standards and Guidelines for the Conservation of Historic Places in Canada"; and
- 4) Integrative Guidelines for New Design Outline considerations and methods to ensure that new buildings on Block 4 exhibit a thoughtful understanding of the historical context through form, layout, scale, proportion, and materials.

In addition, the Heritage Consultant has worked in conjunction with the Architecture and Urban Design Consultants that have prepared the broader Design Guidelines for any new buildings proposed for Block 4, in order to ensure that there is appropriate consideration of the heritage context of the development (refer to Exhibit B).

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Staff and the Heritage Consultant will make a brief presentation on this work at the Municipal Heritage Committee Meeting, and will address questions from the Committee.

# **Next Steps:**

The Block 4 Heritage Preservation Guidelines, September 2013 (attached as Exhibit A to Report MHC-13-012) will be used as a basis for evaluating proposals for the preservation of 19-23 Queen Street as part of the development of Block 4.

The Design Guidelines will be used to establish certain specific evaluation criteria for the Proposals received, with respect to how the proposed development addresses the heritage context of the site and meets the requirements of the *Heritage Act*.

Comments from MHC on the draft Design Guidelines (attached as Exhibit B to Report MHC-13-012) will be considered by staff. There will also be further consultation with the community and a final report will be prepared for Council which will include the evaluation criteria for proposals. Comments from MHC at the October 7 Committee meeting will assist staff in finalizing the evaluation criteria including the heritage context of the site.

These documents may also be used as background studies in preparation of possible zoning amendments

### **EXISTING POLICY/BY LAW:**

Approvals for the redevelopment of the site will be required to follow land use approvals under the *Planning Act*, City of Kingston Official Plan and Zoning By-laws and the *Heritage Act*.

### **NOTICE PROVISIONS:**

Not applicable

#### **ACCESSIBILITY CONSIDERATIONS:**

Alternative formats of this report and the Exhibits are available on request.

### FINANCIAL CONSIDERATIONS:

Not applicable

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### **CONTACTS:**

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### OTHER CITY OF KINGSTON STAFF CONSULTED:

Shirley Bailey, Manager, Heritage and Urban Design Grant Bain, Director, Planning and Development Speros Kanellos, Director, Facilities Management and Construction Services Alan McLeod, Senior Legal Counsel Jim Miller, Director, Utilities Engineering Paul MacLatchy, Director, Environment & Sustainable Initiatives

#### **EXHIBITS ATTACHED:**

- Exhibit A Block 4 Heritage Preservation Guidelines, September 2013 Heritage Preservation Inventory, the Preservation Design Guidelines, the Technical Conservation Guidelines and the Integrative Guidelines for New Design, prepared by Andre Scheinmann
- Exhibit B North Block District Block 4 Design Guidelines, September 26, 2013 Working Draft of Design Criteria (specifically Integrative Design Guidelines for New Design prepared by CIMA/NORR and Andre Scheinmann

# Block 4 Heritage Preservation Guidelines September 2013

Block 4 Redevelopment – Heritage Preservation Component

# THE REDEVELOPMENT OF BLOCK 4: PRESERVATION COMPONENT

#### General Introduction

The block of downtown Kingston bounded by Queen St. to the south, the Tragically Hip Way to the north, King St. to the west and Ontario St. to the east, referred to as Block 4 of the North Block, is viewed by the City as an important component in the future development of its urban core. Adjacent to Kingston's busiest commercial area and directly across from the K-Rock Center it is viewed as an essential, potentially high quality, urbanizing link. For over a century this block was the location of the Kingston Gaslight Company (later the Kingston Gasworks, Kingston Gas and Electrical Light Works and finally the Public Utilities Commission). The historic industrial process associated with this operation has led, in the present day, to the block being classed as a 'brownfield' site. Now devoid of structures except along the Queen Street frontage the City now feels the time is right to attempt to move forward with the development of this block. The framework for this ambitious initiative is being established by the City and will form the basis of a two stage Request for Proposals (RFP) process that will invite the private sector to submit proposals for the development of the site.

An important component and challenge with regard to the development of the site is the associated preservation of the stone range, known municipally as 19 – 23 Queen Street along the block's Queen Street frontage. The special challenges derive from the required soil remediation with associated risk management measures and the sensitive integration of the historic buildings into the overall design for the site while still maintaining the economic viability of the development. A further heritage building, the brick and glass transformer station at the corner of King and Queen Streets is not included in the development but will remain and, in so doing, will also have some influence on the development.

The objective of meaningfully preserving 19-23 Queen Street, despite the challenges, reflects the acknowledgement of the site's heritage significance as well as the importance to the overall character of downtown Kingston of maintaining its heritage fabric, ideally interwoven with vibrant and thoughtful new design.

The heritage importance of 19-23 Queen Street as the base of operations of the Kingston Gas and Light Company (1849, originally a private company but later an agency of the City), as one of the City's few surviving mid 19<sup>th</sup> century industrial complexes and, as an example of a residential scale stone range used for industrial purposes, has long been recognized. This status has been reinforced over the course of many different studies through the years, each one providing a deeper layer of understanding of this unusual, early industrial site.

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The range was included in Volume IV of the Buildings of Architectural and Historic Significance (BAHS), 1977 and was originally officially designated under the Ontario Heritage Act (OHA) in 1995. Following further research and in conformity to the changes to the Ontario Heritage Act in 2005, the designation by-law was revised in 2009 (By-Law No. 2009-15). Still more recently (2012), in anticipation of soil remediation work below the building, further investigation, research and analysis of its cultural value was undertaken. This research uncovered, among much other information, that a section of the building now known as 23 Queen Street, has been represented continuously in mapping and noted in land records from 1798 and may well originate prior to 1800. (This important new information will likely lead to a further revision of the Designation By-law.) The row was entered in the Canadian Register of Historic Buildings in 2006.

At this critical juncture in the history of the row the city has included as part of its RFP framework a preservation component comprising four parts:

- Part I: Preservation Inventory (I) A definitive inventory (I) of the site's heritage attributes required and/or desired to be preserved with the attributes 'mapped';
- Part II: Preservation Design Guidelines (PDG) Guidelines with regard to the opportunities and constraints in dealing with the historic complex. As well a section of the PDG, with regard to the interfaces and interplay between new and existing construction, is included with the General Design Guidelines;
- Part III: Technical Conservation Guidelines (T) Guidelines for the conservation/restoration of the heritage buildings.
- Part IV: Integrative Guidelines for New Design (IGND) Guidelines to assist in contextual design relative to the heritage complex. (See also the Design Guidelines for Block 4.)

General Introduction Page 2

# Part I: Preservation Inventory (I)

Heritage attributes, also sometimes referred to as character defining elements, are those aspects and features of a site that most deeply manifest the reason(s) for its cultural value. Heritage attributes can range from 'macro' aspects of the building such as its overall form and/or footprint to 'micro' details such as a plaster moulding.

The list of heritage attributes provided below has been prioritized into categories according to their level of importance to the heritage character of the building and hence for preservation. The location of each attribute has been mapped and/or noted on the attached drawings (Drawing 01 to 07) and its prioritization category colour coded to the associated Legend/Key. As well images of each area/element have been included in an Image Inventory. (Note: Some details are included within images of larger areas).

#### General Views:

Elevations/partial elevations are noted as *General Views* (GV) and the reference from the photo image to the view location for each is shown on the site plan (e.g. GV1-06 indicates the camera position on the site plan with the associated elevation is GV1, and it is found on drawing 06).

#### Details:

Details are coded with a detail number (D) as well as the Drawing number(s) where the detail is located, (e.g. the stone chimney at the east gable is listed as D3-06, Detail 3 located on Drawing 06). Detail numbering runs consecutively through all the drawings from D10 – D035.

(Please note that there is a discrepancy between the existing physical divisions between sections of the range and the current municipal addresses. To allow for ease of description/identification within this document and on the associated plans 19 Queen Street will refer to the easternmost one storey section; 21 Queen Street to the section between the transverse parapet walls and 23 Queen Street to the remaining western section of the building.)

### **Definition of Categories:**

# Category 'A':

These attributes **must be preserved** in any development scenario. If commitment to the preservation of these attributes is not acknowledged in the proposal the proposal will be considered 'incomplete' and rejected. Note: The listing of 'macro' components, such as "full elevations", does not necessarily mean that absolutely no modification can occur. However the range of potentially acceptable modifications will be delineated under the **Preservation Design Guidelines (PDG).** 

#### Category 'B':

These attributes are also important and **should be preserved**. Where the proponent feels that extenuating circumstances and/or other critical aspects of the total design preclude the preservation of any of the attributes in this category they may make that argument within their proposal. Lack of retention of these attributes may result in a 'markdown' within the proposal evaluation matrix. Note: The listing of 'macro' components, such as full elevations does not necessarily mean that absolutely no modifications can occur. However the range of potentially acceptable modifications will be covered under "Part II: Preservation Design Guidelines".

### Category 'C':

These attributes, while contributing to the heritage character of the property, are not as essential as those listed within Category A or B. While they are still considered worthy of preservation there will be no penalty if the proposal indicates that they cannot be preserved. However retention of these attributes may be subject to 'bonus points' within the proposal evaluation matrix.

### **Attributes List**

Following is a list of the attributes, sorted by category. The list is followed by the photo images, and then the drawings.

# Category 'A' (Green)

- The full south (front), east and north elevations of the main range known municipally as 19-23 Queen Street; (**Drawings 06, 07**)
- The existing roof pitches of the main range including the side gable roof form of 21 and 23 Queen Street and the parapeted low-slope form of 19 Queen Street; (Drawings 05,06,07)
- The coursed limestone treatment of the full façade of the range and the end wall/gable of 21 Queen Street; (Drawing 06)
- **D1 (Drawings 02 07):** The main transverse (originally) stone fire walls extending above the roof line as parapets and including those parapets (as well as that abutting the Hydro building);
- **D2-06/07:** The cut stone corbels at the base of the parapets including the surviving corbel at the front west eave abutting the Hydro building and at the rear between 21 and 23 Queen Street;
- D3-06: The stone chimney at the peak of the east gable;
- **D4-06:** The evidence of earlier openings at the façade in the form of stone voussoired arches;
- D5-06: The line of course discontinuity indicating where the infill central section abutted the original western pre-existing dwelling;
- **D6-06:** The brickwork of the east wall of 19 Queen Street;
- **D7-06:** The original upper storey window openings of 21 and 23 Queen Street including limestone arches and sills;
- **D8-06**: The remaining ground storey opening with stone arch (originally a door) at the façade adjacent to the current eastern entrance to 21 Queen Street;
- **D9-06:** The windows and window openings of the façade of 19 Queen Street including wood transoms, concrete lintels and sills;

- **D10-06:** The front door opening and transom of 19 Queen Street;
- **D11-06:** The pressed metal cornice and metal clad parapet with bracketed niches at the façade of 19 Queen St.;
- D12-06: The gaslight metal sconces flanking the entrance to 19 Queen Street
- D13-06: The painted wall sign at the exposed stone gable of 21 Queen Street reading "GAS – THE MODERN FUEL";
- **D14-06/07:** The copper batten seam roofing at 21 Queen Street;
- D15-07: The mixture of original stonework and later brick modifications at the rear wall;
- **D16-07:** The rear extension directly behind the eastern half of 21 Queen St. excluding the 2<sup>nd</sup> storey cantilevered bay;
- **D17-07:** The stonework of west and north walls of the extension;
- **D18-07:** The window and door openings and associated stone arches of the extension;
- **D19-07:** The large rear opening only visible from exterior (blocked in) directly in line with the front entrance to the Modern Fuel Gallery foyer (former Carriageway);
- **D20-07:** The evidence of earlier openings indicated by stone arches;
- D21-03: The irregularities at the walls to the west of the westernmost entrance and at the existing real wall of the hall to Modern Fuel Gallery as evidence of earlier configurations;
- D22-03: The partition wall to the west of the entrance to the Magazine office;
- **D23-03:** The fibrous plaster decorative paneled beams and corbels with acanthus leaves and associated columns at 19 Queen St.

### Category 'B' (Purple cross-hatched)

- **D24-06:** C. 1924 window and door openings at the façade of 21 Queen Street
- **D25-07:** Remaining stone wall of former gas holder extending to the rear of the rear extension to be preserved:
- **D26-03:** J& J Taylor Vault;

### Category 'C' (Red diagonal hatch)

- **D27-07:** Central one storey stone masonry extension (east elevation now concrete block);(2-07)
- **D28-07:** The arched window openings of the rear elevation.
- **D29-03:** The fibrous plaster decorative paneled beams and corbels with acanthus leaves at 21 Queen Street;
- **D30-03:** The patterned ceramic tile flooring at 21 Queen Street;
- **D31-03:** The door trim and baseboard at 19 and 21 Queen Street;
- D32-03: The stair including newel posts, balustrade and rails at 21 Queen Street;
- D33-03: Porcelain sinks at WC's of 21 Queen Street; (could be relocated)
- **D34-02:** Original timber floor structure at 19 and 21 Queen Street;
- **D35-02:** The newel post and rail at the basement stair (could be relocated).

# **Image Inventory**

(Note: Some listed details are included within the images of broader areas)



Partial view of façade – Western Section

(GV1-06)



Partial view of façade – Central Section

(GV2-06)

Block 4 Redevelopment: Heritage Preservation Component



Partial view of façade – Eastern Section(GV3-06)



East gable with 'Modern Gas' signage (GV4-06)

Block 4 Redevelopment: Heritage Preservation Component



General view - East Elevation (GV5-06)



East Elevation – upper wall and later brick parapet (GV6-06)

Block 4 Redevelopment: Heritage Preservation Component



View of early rear addition and surviving gas-holder wall (GV1-07)



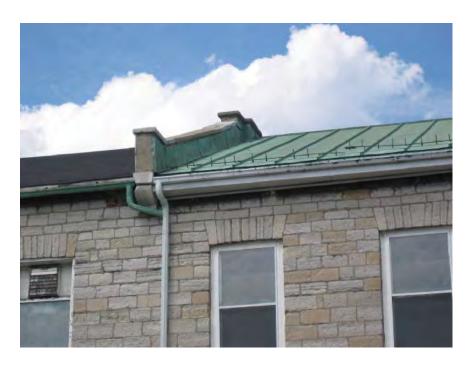
**General view – North Elevation (GV2-07)** 



West Elevation – Early rear addition (GV3-07)



Detail of transverse wall between 21 and 23 Queen (D1)



Detail: Stone parapet and corbel (D2)



Detail: Coursing anomaly at façade of 23 Queen Street (D5)



Detail: Surviving original gaslight sconce (D12)



Stonework/Arches at early addition (D16)

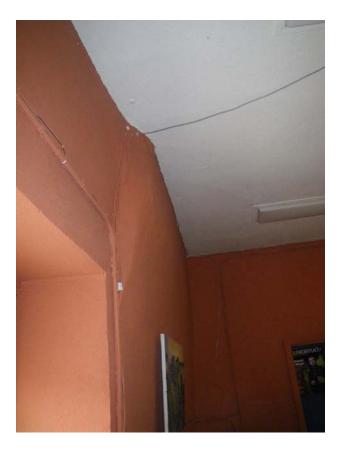
Part 1: Inventory of Heritage Attributes



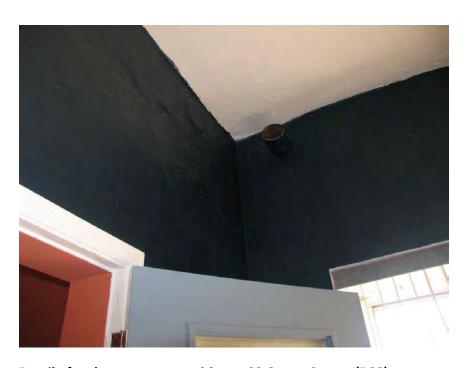
Partial view - North elevation including former carriageway exit (D19)



Stone anomalies from earlier arrangement (D21)



Stone Anomalies from earlier arrangement (D21A)



Detail of early transverse partition at 23 Queen Street (D22)

Block 4 Redevelopment: Heritage Preservation Component



Detail: Panelled beam and ornate corbels in fibrous plaster, 19 Queen St. (D23)



Detail: J & J Taylor Vault, 21 Queen St. (D26)



Detail: Fibrous plaster beam, 21 Queen St. (D29)



Detail: Decorative ceramic tile pattern, 21 Queen St. (D30)



Detail: Typical door casing and base, 19 Queen St. (D31)



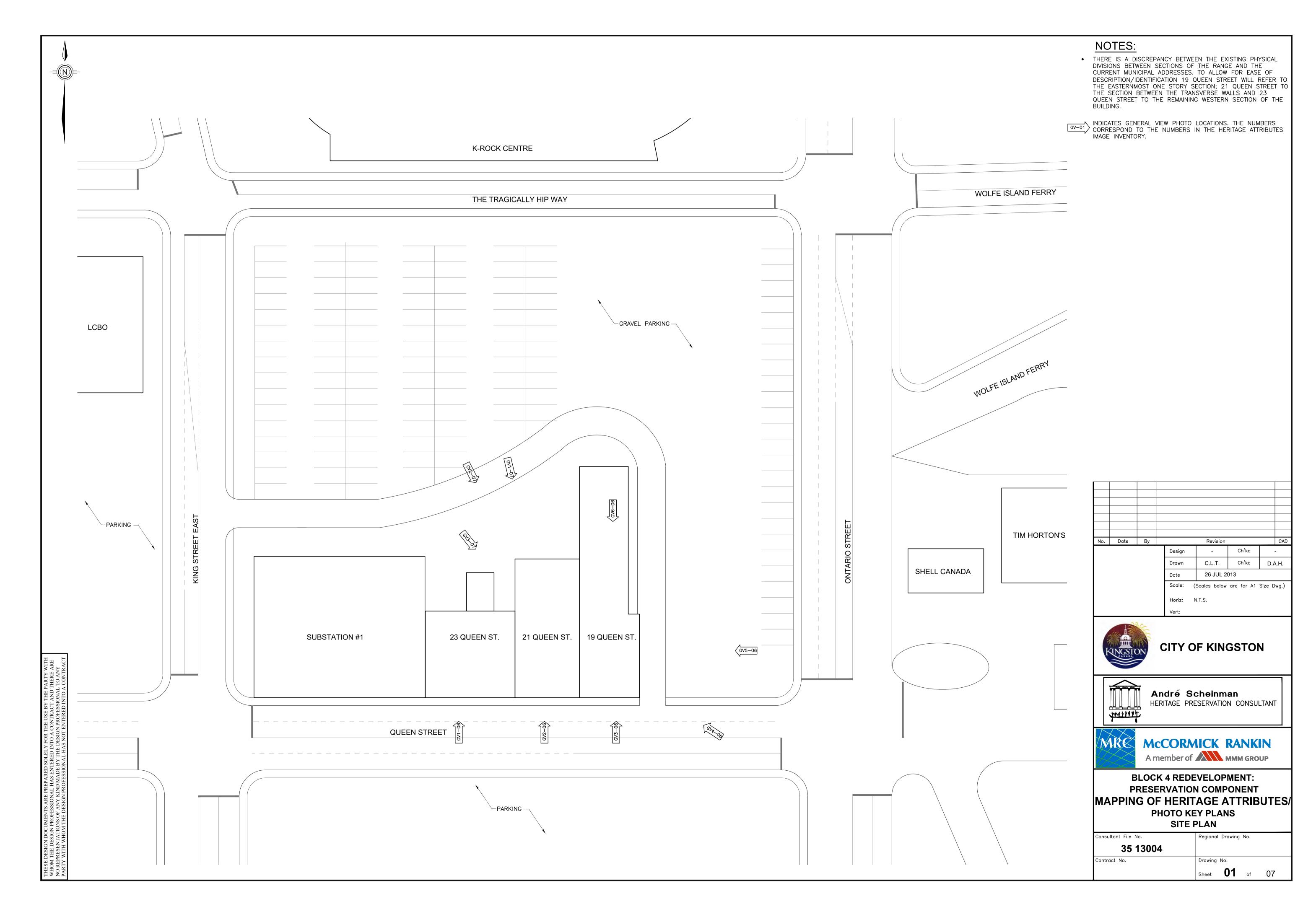
Detail: Staircase, 21 Queen St. (D32)

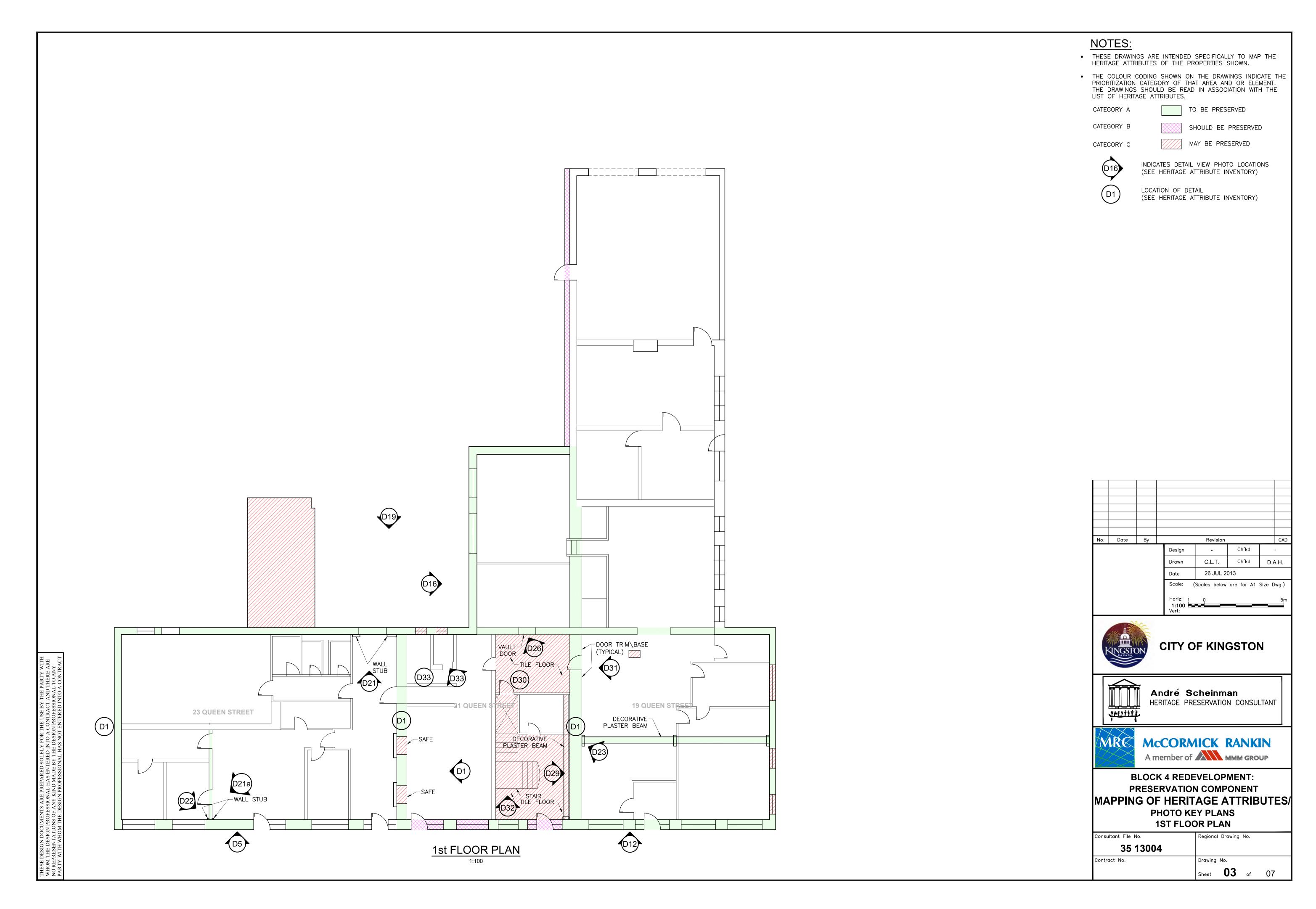


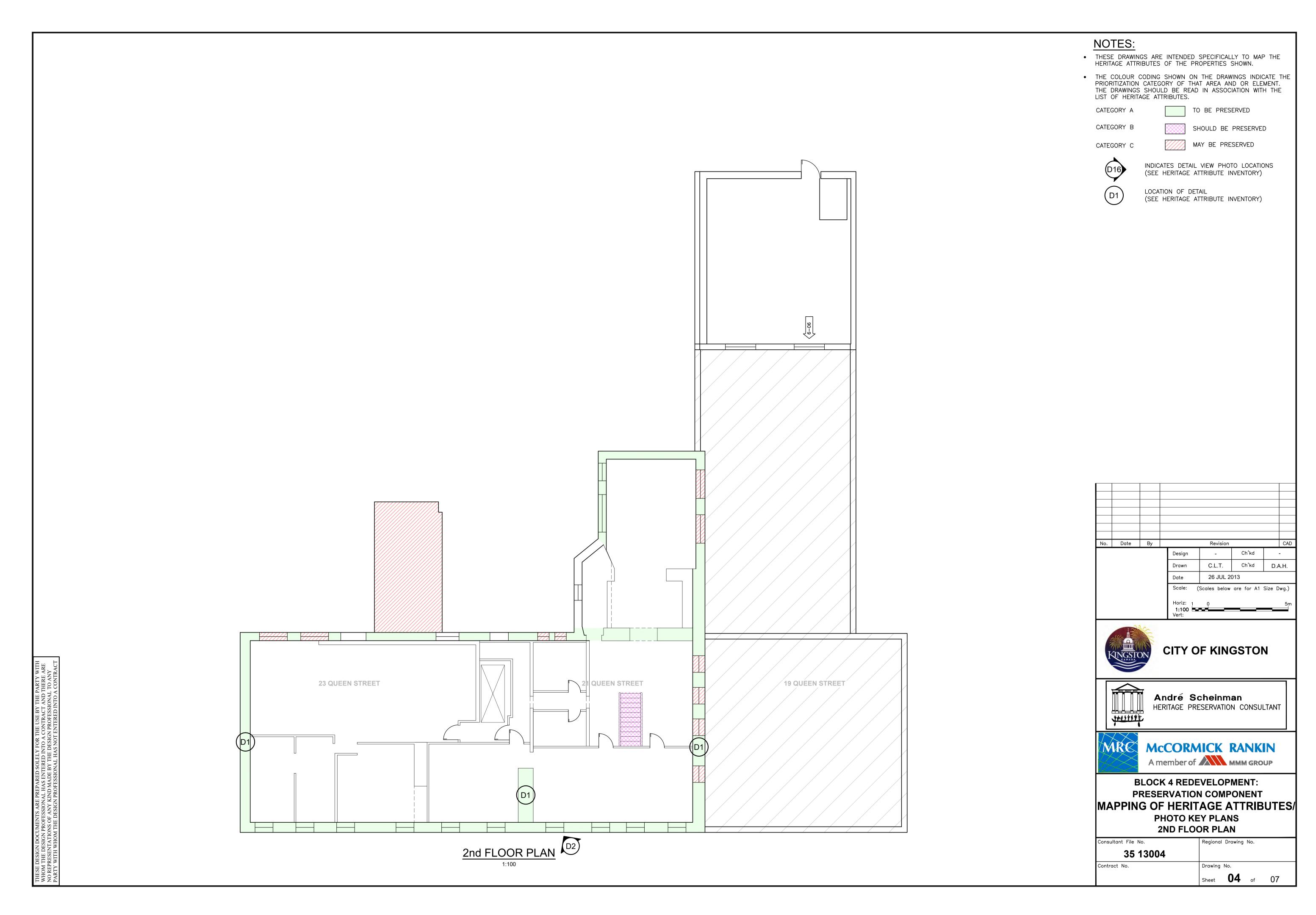
Detail: Porcelain sink (D33)

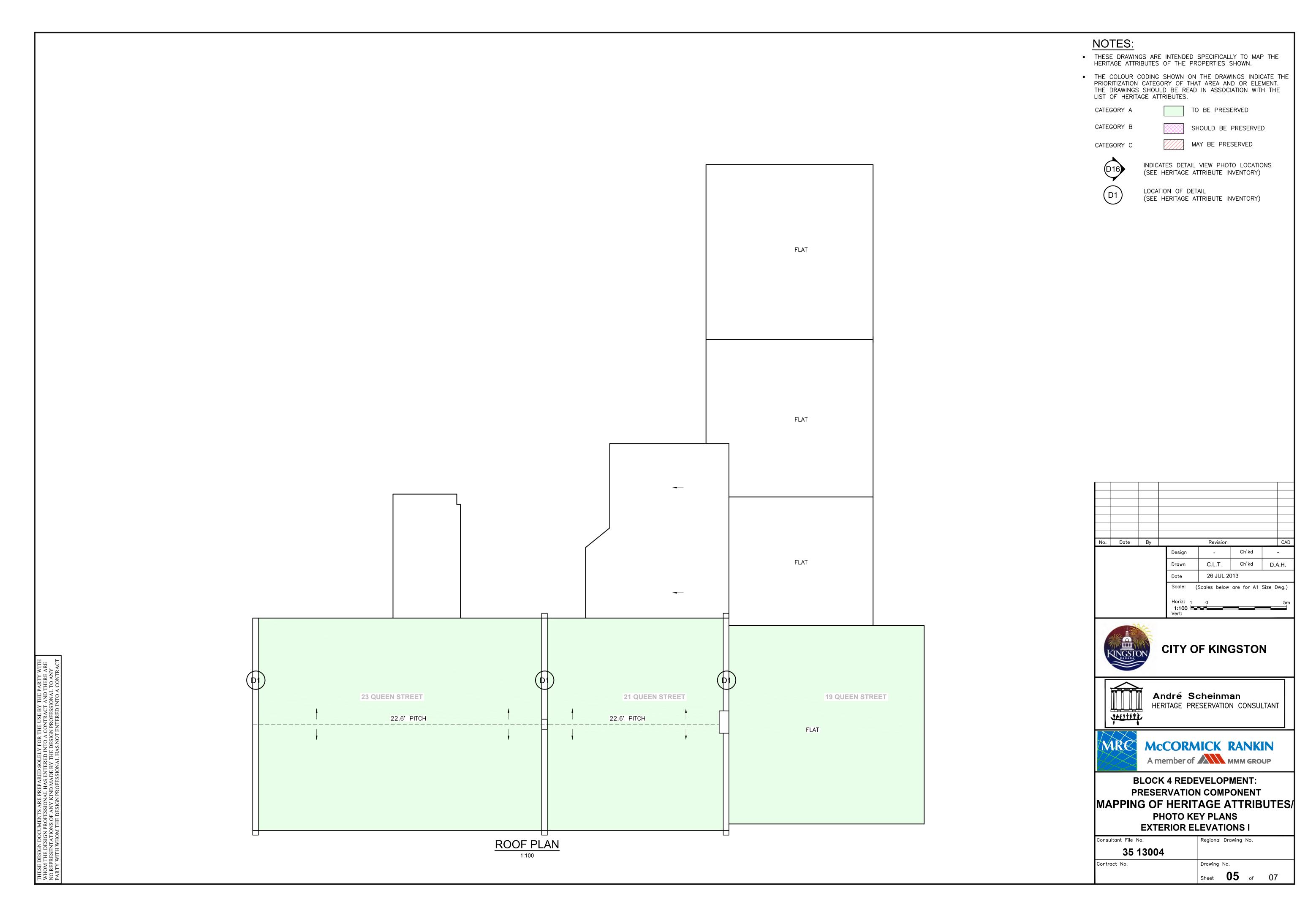


Detail: Basement stair rail and newel (D35)

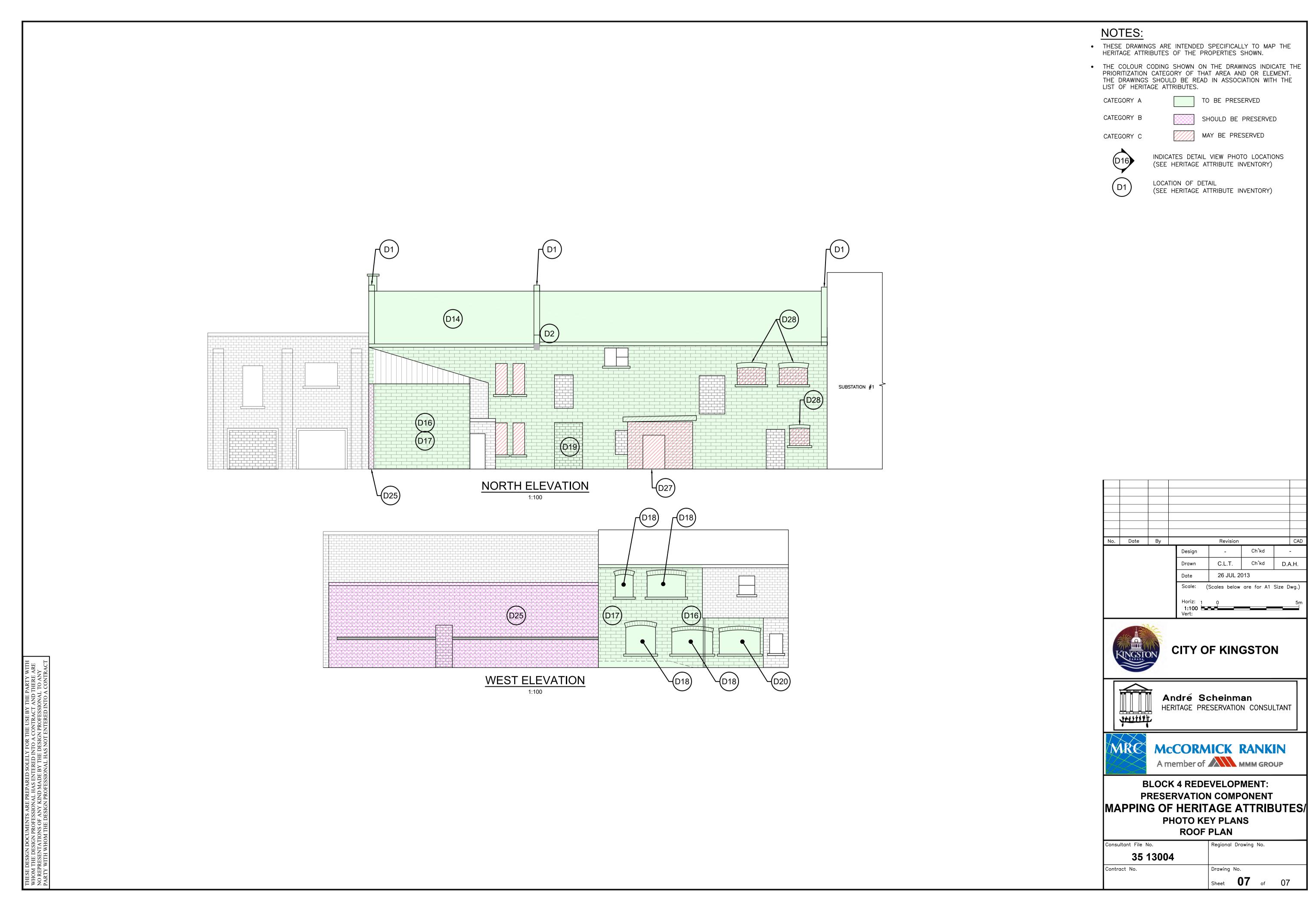












# Part II - Preservation Design Guidelines (PDG)

### 1.0 Overview

The preservation of 19-23 Queen Street is considered to be a key component of the redevelopment of Block 4. It provides an important link between the historic core and the vital new design anticipated for the remaining area to the north in concert with the K-Rock Center directly across The Tragically Hip Way. The historic complex, along with the Hydro Building at the corner (which is not included in the project), will provide a key aspect of the identity of the block as well as its southern face.

As noted and delineated in "Part I: Preservation Inventory" (I, or the Inventory), it is the City's intention that the significant aspects of the early industrial complex, those elements deemed essential to its heritage character, be preserved.

It is intended that this document be read in association with the Inventory and its coded drawings. As well certain Inventory images will be cross-referenced here-in. Though preservation is the overarching goal, it is recognized that some interventions will be necessary and also that certain forms of intervention, based on an understanding of the evolution of the complex, may actually serve to enhance the heritage appearance of the building while also fulfilling current objectives.

The purpose of the PDG is to:

- provide the proponent with a sense of the parameters opportunities/constraints
  of 'acceptable' intervention associated with major aspects of the heritage
  complex (see following);
- provide guidance with regard to the new design intended to assist in ensuring optimum integration with the historic complex (see Integrative Guidelines for New Design within the General Design Guidelines).

Note also that there is a third component to the heritage aspect of the RFP that will set out the guidelines for appropriate technical conservation of the major heritage fabric/features of the complex (T).

(Please note that there is a discrepancy between the existing physical divisions between sections of the range and the current municipal addresses. To allow for ease of description/identification within this document and on the associated plans 19 Queen Street will herein refer to the easternmost one storey section; 21 Queen Street to the section between the transverse parapet walls and 23 Queen Street to the remaining western section of the building.)

# 2.0 Opportunities for Restoration//Enhancement/Alteration

In reviewing the 'opportunities' noted below, the proponent should be aware that the preservation of existing heritage fabric (as delineated in the Inventory) remains the primary objective. However, if presented as part of a well-considered strategy in keeping with good heritage practice and shown as being important to the proponent's overall design, the following interventions may be deemed acceptable. Stated in the terminology of the Standards and Guidelines for the Conservation of Historic Places in Canada –

Part II: Preservation Design Guidelines

**\_Preservation** is the essential approach but some **Rehabilitation** of the interior and rear elevation is virtually inevitable and **Restoration** of certain features may possibly be rationalized within a well-considered concept.

# 2.1 South (Queen Street) Elevation

The façade of the historic complex is highly constrained. However changes have occurred, over time, to many of the ground storey openings and these provide potential opportunities for restoration and/or sympathetic alteration.



Fig.1: Existing façade 21-23 Queen Street

# 2.1.1 The Former Carriageways:

The 1875 bird's eye view of the site shows the 10 bays of the upper storey as they remain to this day (Fig. 2). However, on the ground storey two carriageway openings are shown. Indeed the longer voussoired 'flat' arch for the western opening remains evident in the existing stonework (Fig.1), while the more eastern opening becomes apparent upon entering the hallway to the Modern Fuel Gallery.



Fig.2: 1875 'Bird's Eye View' (Brosius), Kingston Gas & Light Co. is #8 QA

Carriageways are a typical and picturesque component of both the residential and commercial core of the old town (Figs.3-5). If restored they could provide pedestrian access into the heart of the site in a manner both authentic and evocative, an appropriate transition from historic Kingston into its future. The reconstruction of such major elements however must be very carefully executed based, to the extent possible, on site- specific research, examination of comparable examples within the area, as well as best period practice. At the west carriageway the opening would be created to utilize the existing flat arch at the façade though at the rear, where no documentation exists, another type of arch treatment may be considered acceptable. (See Fig.5)



Fig.3: Arched carriageways at Queen St. east of Bagot St.



Fig.4: Detail of elliptically arched stone carriageway



Fig.5: Carriageway at Brock St. west of King St. Note flat arch at street face semicircular arch at courtyard.

The potential restoration of the carriageways has associated implications with regard to the appropriate 'period' treatment of the elevation. The reinstatement of only the west carriageway would require the alteration of the ground storey window opening/sash treatment to that shown on the c.1924 photo (Fig.6) while the reinstatement of both carriageways would entail the restoration of the ground storey window treatment at both 21 and 23 Queen Street.



Fig.6: Configuration of openings and features c.1924

## 2.1.2 The Ground Storey Window Openings of 23 Queen Street

Please note that while window openings and sash configuration is discussed below appropriate sash materials/types will be discussed in the Technical Conservation Guidelines (T).

Fig. 6 clearly shows that the ground storey openings of this section of the building were the last to be changed to the current configuration. This photo, and that of Fig. 7, taken in 1950, confirms that through this period they were paired casements separated by a heavy mullion – very likely their historical form (post 1875 - as according to the 1875 bird's eye view the two openings to the west of the eastern carriageway did not then exist and the only window was set higher in the elevation –where its arch still remains). The windows appear to have cut limestone sills as still exist at the upper units. Of particular importance is that the western carriageway is still present in that photo as well as its large double-leaved doors. Also of interest is that by that period, the eastern carriageway (current gallery entrance) had been in-filled to form a window unit, as evidenced by the relatively clean stonework around that opening. The restoration of these window openings to their original size and configuration would very much enhance the façade, particularly in concert with the restoration of the western carriageway.



Fig.7: View from southeast, 1950. QA

# 2.1.3 The Ground Storey Window Openings of 21 Queen Street

Except for the one surviving original opening, all the ground storey windows at 21 Queen Street were changed when 19 Queen Street was constructed. The two were integrated to form the new offices for the Public Utilities Commission as shown in Fig.6. For this reason, the current window treatment does have a level of historic importance, though obviously changed from the original configuration. However, if it was considered essential to the overall design and/or included the restoration of the eastern carriageway, it would be possible to consider restoring these openings to their earlier form, likely a close match to those of 23 Queen Street (as shown on Fig.6). A reconstruction of this nature would require further research to attempt to actually confirm their form. In that regard the width and height of the openings is already established by the one surviving original opening. This former door dates back to at least 1875 (Fig.2).

## 2.1.4 19 Queen Street

The openings here are original and would be restored/conserved. It is assumed as well that the sconce shades will be restored and, given the importance of the lighting theme to the history of the site, the fixtures re-illuminated (see also the "Exterior Lighting" section within the "Part IV: Integrative Design Guidelines"). The loss of the decorative marquis and the original transom glazing treatment has undermined the original design (Fig.6) and, consequently, the reconstruction of any or all of these features would greatly enhance its appearance.



Fig.8: 19 Queen St. Note lane at former Police Station (now demolished)

## **2.2 East Elevation** (Inventory Photo GV4-06)

(Please note that the additions directly to the rear of 19 Queen Street are relatively recent and not considered a priority for preservation and thus are not dealt with here.)

## 2.2.1 Gable Wall of Main Block (above 19 Queen St.)

The stone gable with its "Gas, the Modern Fuel" wall signage is to be conserved, however there could be some flexibility with regard to the treatment of the fenestration (currently four windows) which appear to date from c.1924. The two northerly units are not visible to the public except at a great distance and thus could potentially be reconfigured and/or in-filled as niches if that were shown to be essential to the new design. Any such intervention would require approval of the specific proposed treatment.

## 2.2.2 19 Queen Street (excluding 'tails') (Inventory Photo GV5-06)

This modest elevation is close to its original form and no significant change is Anticipated, however if such were proposed as being essential to the overall design (e.g. the reconfiguring of a window opening), the proposal would receive consideration.

## 2.2.3 Rear Addition to 21 Queen Street

The preservation of the wall of this section of the complex has two distinct components - the treatment of the exposed section above the addition to 19 Queen Street and that of the wall currently enclosed (and seemingly abutted) by the adjacent addition directly to the rear of 19 Queen Street (but which would be exposed should that addition be removed, as expected).

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Fig.9: Upper wall of rear addition- brick parapet above original stone

With regard to the exposed section, it is assumed that both the stone lower section and the brick parapet will be preserved (Fig.9). However, in attempting to further define heritage priorities, it is the original stone lower section with the remnant stone pilaster which is absolutely essential for preservation. The brickwork above, associated with the shed roof of the addition, while still considered worthy of retention, could be subject to greater change and/or removal if it were considered necessary for the overall design. As well there would be flexibility with the two window openings at the addition, each with paired sash, as these are more recent, not of high quality and not publicly visible.

The actual nature of the lower section of the wall remains unknown in the area now shared/enclosed within the adjacent addition though it is assumed that the stonework remains in place. When later abutting materials and finishes are eventually stripped away it will be examined for evidence of original features. However there will be substantial flexibility as to how it is treated including an understanding that it might once again be enclosed within new construction.

## 2.3 The North Elevation

Historically subject to a much greater degree of alteration than the front, related to the industrial function of the complex and its changing processes, the surviving combination of stone and brick still makes for a texturally, and historically interesting (funky), wall surface. While the intention is to preserve as much of this fabric as possible, it is also recognized that interventions will be required for a variety of reasons ranging from the need to gain machine access to the basement and foundation area for soil remediation/excavation to the possible reopening of the carriageways, and the tying in of new design elements. Wherever possible, however, advantage should be taken of the

existing openings and disturbance kept to the minimum that practical requirements will allow.



Fig.10: North elevation (except rear wall of rear addition) and 19 Queen St.

## 2.3.1 The Rear Addition at 21 Queen Street (Inventory Photo GV3-07)

The north wall actually incorporates a portion of the former south wall of the Gas Holder, making the stonework treatment at the northwest corner quite challenging. Given the history that it represents, the retention and stabilization of the existing rough double layer treatment is considered quite acceptable. The existing half gable of the shed roof above the stonework is not considered of historic importance. The addition also includes a later cantilevered 2<sup>nd</sup> storey brick bay that is not required to be preserved (See also West Elevation).

#### 2.3.2 21 Queen Street

There is substantial flexibility with regard to the treatment of the exposed portion of this section of the building. The intention is to retain the general brick/stone walling, however the paired window openings at both storeys could potentially be modified and the brick entrance vestibule removed. It should be noted that removal of the cantilevered upper storey of the addition will necessitate rebuilding the missing section of the main wall (taken down when the cantilevered area was added).

## 2.3.3 23 Queen Street

Again, the intention here is to generally retain the stone/brick walling with a particular emphasis on the stone as being the surviving original material. Of greatest importance is the retention of the existing stonework at the ground storey of the western half of 23 Queen Street that is thought to include material from the early 19<sup>th</sup> century dwelling.

With regard to openings the modest block in-filled former door opening, coded as "must be preserved" has been so designated because it appears to be a modified (and denigrated) version of the old eastern carriageway exit into the service yard. Should the carriageway feature be reinstated, this opening could be restored to its period arch treatment. However in any scenario, evidence of this opening must be preserved. Beyond that, the intention is that the segmentally arched window openings be retained. These could be reopened, treated as niches and /or remain in-filled, but must still be 'legible'. If essential to the new design, more extensive modification could be considered. The reinstatement of the western carriageway would obviously have a major impact on the elevation, but if handled properly, could be considered an acceptable and enhancing feature.

## 2.3.4 The Rear Addition at 23 Queen Street

This one storey (originally) stone dependency has long been part of the complex. As such it bears consideration for retention. However, as a substantial portion of its walling has been replaced with concrete block and its central position inhibits the potential courtyard space, its preservation is not considered mandatory.

## 2.4 West Elevation

Due to the presence of the Hydro Building the west elevation only consists of the Rear addition at 21 Queen Street and the surviving Gas Holder wall.

## 2.4.1 The Stone Wall of the former Gas Holder (Inventory Photo GV1-07)

This feature, a remaining wall of the original stone gas holding tank, has been inventoried as a 'should be preserved' rather than 'must be preserved' element due to the level of constraint it might create for the new design, combined with the structural challenges in stabilizing it once the adjacent additions are removed. However, it is both an important historic element and a highly evocative and textural feature and could well be a featured element in an appropriately sensitive courtyard design. Thus its preservation is greatly encouraged.

Here again it is the stone wall that is considered to be of major importance while the brick associated with the abutting addition can be removed. As well, where the proponent is making the commitment to preserve the wall, it is understood that openings may have to be introduced, such as a door/gate into the courtyard, with the expectation that they would be done in a manner appropriate to the overall heritage design.



Fig.11: Iron gate at residential garden wall – Ontario St. between Gore St. & Earl St.



Fig.12: Wooden carriage gate at stone wall, Barrack St. west of Wellington St.

# 2.4.2 Rear Addition to 21 Queen Street (Inventory Photos 3-07, 5-07)

This addition features some excellent stonework (though in some areas covered with a brownish red paint) with segmentally arched openings including three large door openings at the ground storey though now all, or partially, in-filled. The stonework, arches and the delineation of the former openings are to be preserved. Indeed the reopening of any of these large arches is very much encouraged. They potentially could provide an evocative entrance into the courtyard from the east.

The removal of the cantilevered upper section will entail the rebuilding of the west wall at its former plane. This rebuilt section should generally closely match the appearance of the adjacent wall and structurally will require 'toothing in'.

## 2.5 Roof, Roofing and associated features

The existing gable form and pitch of the roofs of 23 and 21 Queen St. are to be preserved as is the low-slope roof at 19 Queen St. The stone chimney at the east gable, the stone parapets and associated corbels are obviously important features.

With regard to roofing - the batten seam copper roof still extant at 21 Queen Street provides an excellent roofing choice for both gable roofs from the heritage, quality and service life perspectives. The 1947 Fire Insurance Map indicates that the roofing for 23 Queen Street was also metal in that period. Other non-corroding metals such as zinc and terne coated stainless steel would also be acceptable, but both sections of the pitched roof buildings should be done similarly with the associated flashings of matching metal.

All service related features such as vents and stacks should be kept unobtrusively as possible to the north slope keeping in mind they will also likely be publicly visible from the courtyard.

No structure visible from the south should be built up directly from the roof slope or otherwise extend over and/or crowd the ridge however framing for an atrium and/or pavilion structure could potentially interface with the rear slope below the ridge, extending northward at that plane. Preferably any new element, which would actually engage the existing roof structure, would be confined to 23 Queen Street where it has been substantially altered (steel trusses) whereas at 21 Queen Street much of the original c.1850 timber truss system remains in place.

Recent investigation has shown that, at some point in the 19<sup>th</sup> century, 21 Queen Street had three dormers at the front and back respectively (lighting a finished third storey in the gable) and, if, in the proponent's view, such a treatment assisted their design objectives, then the reconstruction of this element could be considered.

The unseen low slope roof behind the parapet at 19 Queen Street could be handled in a variety of membrane types as well as with traditional gravel topped built up roofing (BUR) matching the existing. As the gable of 21 Queen Street is intended to remain publicly visible no building directly above the roof of 19 Queen Street will be considered acceptable.

## 2.6 Building Interiors

Given that there is very little in the way of original finishes throughout the interior of 21 and 23 Queen Street those spaces are considered quite open to a wide range of renovation opportunities. However, the main transverse walls, which extend (for the most part) up through the roof as parapets, must be retained. (Inventory Photo D1).

The wall between 21 and 23 Queen St., now stripped of finishes, contains a range of materials and both active and redundant structural features including an extremely long,

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almost flat, brick arch, a long heavy timber lintel and two more recent brick arched niches to house safes (of somewhat lesser priority for preservation). While it may be quite interesting to leave this mixed bag of stone, brick and timber exposed, not unlike the rear exterior wall, this is not required. What is important is that the original features remain in place, though finishes be applied over them (as they were originally).

21 Queen Street does have a variety of interior features and finishes ranging from tiled floors to a substantial staircase, dating from its renovation as part of the P.U. C. office area in association with the building of 19 Queen Street, and these have been identified for potential retention. However retention is not mandatory if the proponent can make a convincing case that the best scheme for the overall interior cannot incorporate these elements.

However, at 19 Queen Street, similar features such as the decorative paneled plaster beam and plaster corbel with acanthus leaves, were part of the original design for that interior by architect William Newlands and here the expectation is that they will be preserved. (Inventory Photo D23)

## 2.6.1 Interior Remnants of Original Features (Inventory Photos D21, D21A)

Several anomalies protruding from existing wall planes have been identified for preservation. These are vestiges of the original building arrangement and are to be preserved. (The exception might be if the masonry 'anomalies' shown in Photo D21 were to be reincorporated into a reconstructed eastern carriageway.) Though antithetical to smooth, conventionally finished wall planes these features will continue to be "conversation starters" regarding the form of the mid 19<sup>th</sup> century buildings.

# Part III: Technical Conservation Guidelines (T)

## 1.0 Introduction

As delineated in "Part I: Inventory of Attributes", it is the City's intention that the significant aspects of the early industrial complex, those elements deemed essential to its heritage character, be preserved.

It is intended that this document be read in association with the Inventory (I) and its coded drawings, as well as the Preservation Design Guidelines (PDG). To review images associated with specific conditions described below refer to the Inventory and/or PDG.

The proponent must be aware that the conservation initiatives associated with the project are to be undertaken in accordance with the highest standards and reflect the best current and traditional trade practices. Following are technical guidelines for the main aspects of the conservation of the historic property. These are not intended to replace detailed specifications, but rather to ensure that the key elements of good practice for each material/element are well understood and employed in a site-specific manner. With regard to 'Windows' and 'Heritage Masonry', these guidelines can be considered to supplement those produced by the City of Kingston for heritage property owners. The other major reference in that regard with which the proponent should be familiar is the Standards and Guidelines for the Conservation of Historic Places in Canada.

## 2.0 Fenestration (Windows)

The existing window sash at the south (front) and east elevations is a combination of c.1924 units and much more recent material. At the (north) rear elevation almost all openings, including all of the historic openings, have been blocked in.

# 2.1 Technical Window Conservation - General Requirements

Window conservation/replication shall be undertaken by skilled tradesmen who have substantial, proven experience in this type of work.

The replication of existing sash shall be based on site-checked measurements and recording of existing moulding profiles, etc. This would then be developed into detailed shop drawings and a mock-up for each window type being replicated for consultant approval prior to fabrication.

Materials shall match those of the original assembly, such as the use of traditional chalk and linseed oil glazier's putty in the re-glazing of lights.

All woodwork repairs and replaced elements should replicate the original species and have a moisture content of not greater than 12%. Neither finger-jointed nor laminated materials are acceptable. Where available, salvaged old-growth material of known

provenance would be an option. Otherwise, quality should be at the level of C-Select.

Where possible, replacement hardware design (finger lifts, sash locks etc.) should based on existing examples of the historic treatment.

Where an increase in energy conservation capability is desired sprung bronze weather stripping can be inserted at jambs and rails in a traditional manner.

At conserved original windows traditional exterior and/or interior 'storms' or 'piggyback glazing may be utilized. Care must be taken to ensure that the ease of operability of the unit is not compromised. As discussed in detail below at certain locations insulated glass (IG) may be considered acceptable. It is intended that the project reflect and integrate the objectives of heritage conservation as the LEED system inspired sustainability.

Where new replica units have been fabricated, new material should be subtly identified by date stamping or labelling in an inconspicuous location.

# 2.2 General Conservation Methodology

Original work is to be retained as far as possible with very minor chips etc. accepted as is.

Minor areas of decay should be cut out, flushed with zinc napthanate (or boron based preservative) and the area consolidated with wood filler. Where strength is required, use epoxy based wood filler. For general cosmetic filling, use latex based wood filler.

Larger areas of decay are to be cut out and repaired with matching wood in the form of "plugs" or "Dutchman". In repairing with plugs, note that the plug should be slightly irregular fitting tightly into the more circular area cut out to avoid future shrinkage problems. "Dutchman" should be cut to maximize surface area for gluing (i.e. tapered scarf joints). Treat both cut out areas and plug/Dutchman with preservative prior to gluing.

Where mouldings or elements are being reproduced they must exactly replicate the original (species, size, profile).

All woodwork removed which is to be reinstalled, and all new work, is to be back-primed and painted before installation.

All required dismantling, such as removal of stops, parting strips, sash, and hardware shall be done with extreme care, taking appropriate precautions not to damage adjacent material or the window components themselves.

All missing, cracked and/or separated glazing putty is to be replaced. Neatly and carefully clean rebate to bare wood using an approved putty softening methodology, e.g. temperature controlled heat gun designed specifically for this purpose. Re-glaze using traditional methodology – prime muntins, set back putty, install glass with non-corroding glazing points and apply linseed oil based putty, finishing to a bevel and tooled smooth.

Where the intention is to restore operability replace missing sash weights and cords and repair weight boxes at jambs. Ensure that restored balance system takes into account any changes to original sash such as the addition of weather stripping at rails and/or the use of 'piggyback' panes for energy conservation purposes.

## 2.3 19 Queen Street

The existing window treatment (i.e. shop front windows with transoms), is to be conserved. However the actual glazing has been replaced in virtually all units and at several of the transoms mullions were introduced later. Thus given that: the glazing is not original; the windows are not operable except for one transom hopper (not original); and the sash does not include any delicate muntin configuration which would be negatively impacted, the existing glazing could be replaced by insulated glass (IG) units. However the existing exterior 'brick' mould, transom rail and interior mouldings shall be conserved and/or removed then reinstated. 'Stops', typically damaged during the removal process, can be replaced but must replicate the original moulding profile.

## 2.4 21 Queen Street

The existing window treatment derives from c.1924 though the upper storey openings of the front elevation are original. The existing door opening at the southeast corner was a shop front window c.1924 and this arrangement could be restored.

The shop front windows, like those of 19 Queen Street can be treated by restoring the existing large plate glass with transom configuration, but, if desired, providing IG units.

Behind recent metal 'storms' the one over one wood sash at the upper storey survive and appear to be in fair condition. Typically there are missing and/or broken sash cords/pulleys and some decay at the bottom rail, wood sub-sill and at the base of stiles. The intent is to conserve the sash. As regards the glazing itself, retention, where sound, as single pane (possibly with storm window and/or piggyback sash) is ideal but the simple configuration again would allow for the unobtrusive insertion of thermal glazing. However, the modification to IG units would require an associated adjustment to the weight balance system in order to allow for smooth operation. (See "Conservation Methodology").

## 2.5 23 Queen Street

As at 21 Queen Street, the existing second storey window openings are original. However, at this section of the complex, the ground storey treatment has been altered much more recently, likely in the 1970's. Other than the inclusion of the large lintel detail, somewhat in keeping with the c.1924 treatment of 19 and 21 Queen Street, neither the configuration nor the actual units reflects a renovation in sympathy with the earlier historical treatments. As well, the existing sash at the first storey is all modern metal.

As neither the existing sash nor the openings have significant heritage value, two options, other than retention of the existing, are possible. The first would retain the existing openings but provide a more compatible window (and door) configuration and wood sash type; the second would restore the original openings with their voussoired arches and cut stone sills and replicate the wood paired casement windows shown in both the c. 1924 and 1950 photos (Fig. 6-7, PDG). Replication should include: the number and proportion of the lights; the width of casings; the heavy mullion between casements and size of rails and stiles. All elements would be wood. Once again the

preference would be for traditional single pane units, however, being reproductions, insulated glazing would be acceptable. In that option muntin width should be kept to the absolute minimum required to support the double glazing. This scenario would also involve the restoration of the carriageway doors.

While the original openings survive at the 2<sup>nd</sup> storey no historic sash remains. Assuming the restoration of casements units at the first storey the most appropriate approach would be to also restore the casement treatment at this level documented as still extant in the 1950 photo (Fig.7 PDG). The requirements would be as described above for the ground storey casements.

For the façade of 23 Queen Street the restoration option would be preferred as the existing treatment is not based on its pre 1970 history nor can it be argued that it constitutes an enhancement of the original design or has design merit in its own right. The restoration approach on the other hand encompasses a period that is documented photographically as extending from c.1924 to 1950 (likely from much earlier) to c.1970.

# 2.6 North (Rear) Elevation

As noted in the PDG there is much greater flexibility with regard to window treatment at this elevation. Evidence of past openings, signified by in-filled segmental arches, is to be retained and wherever possible these former windows re-opened. Where this is being proposed, window treatment should match the historical configurations described for the façade (i.e. 1/1 or multi-pane casement). However, while wood windows would still be preferred here, clad wood IG units with simulated divided lights would be acceptable. (Note that 'simulated lights' are here defined as a 'muntin' at both exterior and interior pane with a spacer between – visually providing a sense of depth.)

New openings can be introduced into this elevation if existing openings are insufficient or do not 'work' within the new design however the placement and treatment of these openings would have to be compatible with the historic character of the building though not necessarily exactly replicate their appearance. In a situation where several original windows had been re-opened the sash of any new openings would have to match and/or be deemed compatible.

# 3.0 Doors and Carriageways

As noted elsewhere there is an opportunity to restore carriageways extending from Queen Street to the courtyard, or at least treating the façade door openings as carriageway type doors. The reinstatement of actual carriageways would constitute a major intervention with significant structural implications but may be warranted as a component of the overall site design and desired pedestrian traffic pattern. In any restoration scenario however, the reconstruction of at least the west carriageway door itself, as depicted in the historic photos, would enhance the façade.

Restoration of that carriageway door would involve reopening the full area under the surviving arch and providing a pair of wood doors, each with a ledged and braced plank bottom section and incorporating a 4 pane window above. A multi-pane transom would be reinstated above the double doors. No record exists of the other carriageway door(s)

so if reinstatement was contemplated, the recommended approach would be to replicate the treatment at the western entrance.

The existing narrower opening under its stone arch at 21 Queen Street is the only original surviving ground storey opening and as such should be treated with particular care. Ideally it would be reinstated as a door and fabricated to traditional period design and detailing – such as two solid lower panels, two glazed upper panels (all 4 panels with panel moulds) and the typical transom treatment.

The historic photos show that the current treatment of the entrance to 19 Queen Street – door with sidelights and transom – is generally appropriate however the historic photos depict a wider door with glazed upper and lower 'panels' and a tall bottom rail flanked by narrow sidelights and this is the treatment that should be restored.

## 3.1 Rear Elevation

As there is little indication and no documentation of the treatment of the carriageway doors and/or other door types at this elevation, a range of approaches could be acceptable. Continuing the replication of the documented historic treatment at the front is a preferable approach, but an open archway or perhaps a more clearly modern solution could also be considered.

# 4.0 Roofing

As noted in the PDG, the conservation of the copper batten seam roofing at 21 Queen Street and the restoration of roofing to match at 23 Queen Street would be the ideal approach. While initially expensive, the longevity of a properly detailed and applied copper roof, provides value in the long term.

The actual conservation measures required at 21 Queen should be determined through a detailed inspection by an expert in traditional metal roofing. Key areas of concern would be the condition and sealing of the counter flashings at the parapets and chimney, the viability of the existing ridge cap and any sign of tearing and/or star cracking due to wind uplift at the batten pans and batten pan seams. All counter flashings should be set into reglets at the stonework and sealed. Wind uplift issues may require more extensive treatment such as the cutting out and resetting of pan sections with additional fastening. Given the generally poor condition of the parapet caps copper cap flashings will have to be introduced, properly detailed and secured to 'hook on' strips. The metal should be isolated from direct contact with the masonry and there should be no direct contact between different metals to avoid galvanic action leading to corrosion. In that regard the steel snow fence currently running along the front eave of 21 Queen Street should be replaced by a non-ferrous version.

The restoration of copper roofing at 23 Queen Street should replicate that of 21 Queen Street including copper weight (min. 16 oz.), pan spacing and pattern, batten size and treatment at ridge, eave and ridge cap detail.

The eave treatment should be integrated with new copper gutters that incorporate transverse bracing, a reinforced leading edge and bronze hanger supports to ensure

ability to withstand snow and ice. New copper rain water leader sized to the required volume would be placed at the current locations and tied into the existing drains. An expansion joint is required in the section of gutter running across 23 Queen Street due to its length.

The low slope roof at 19 Queen Street can be undertaken in a variety of materials from the traditional Built-up Roofing (BUR) to mod-bit or EPDM Solutions. Again the critical aspect is the correct detailing of flashings at the roof/parapet junction and at the interface with the wall of 21 Queen Street. It is recommended that after the conservation of the concrete masonry parapet caps that metal cap flashings be introduced as described above.

# 5.0 Masonry

The stonework of the heritage complex is the most essential aspect of its heritage character, reflecting the use of Kingston limestone as the City's defining material from the early 19th century to the mid-1920's. Its preservation therefore is of the utmost importance. Any approvable changes to the stonework, especially on the front façade, will be limited to modifications associated with restoring historic details and/or alterations associated with acceptable restoration choices such as re-establishing the original carriageway. Any proposed alterations to the stonework for other purposes are extremely unlikely to be considered acceptable.

A key component in the consideration of proposals will be the proponent's demonstrated understanding of the importance of masonry conservation to the project and evidence of their having the technical expertise to carry it out.

The walls of the structures are generally traditional double wythe construction where the interior and exterior layers, comprised of solid stone units have between them an internal layer of rubble and mortar that is intended to bridge and bind the outer layers. Deterioration of the core and joints can leave voids and separations in the core that can become manifest as bulges, cracks and other forms of deterioration. This can lead to local and/or global instability. The condition of the walls must be carefully assessed and a conservation program developed which will ensure ongoing stability and a readily maintainable envelope in the future. While the principal of minimum intervention should be respected, the level of intervention must be sufficient to restore the integrity of the walling. The construction process associated with the proposed development would allow both sides of the wall to be accessed as necessary for a complete and thorough restoration. Once interior finishes have been reinstated, access for maintenance and intervention may be limited, more costly and less effective.

The visual effect of these buildings is not only based on their configuration and scale, but also on the detailing of the stone arrangement, textures and the patterns used in construction. For the most part, the details are not specific to individual building sections, but are consistent across respective elevations. However when viewed closely, the evolution of the complex can be 'read' in the subtle differences in masonry treatment between the sections. It is essential that the original detailing, both as a unifying (e.g. corbels), and distinguishing (e.g. slight offsets in coursing) factors, be retained in the course of conservation. The details of the stonework include, but are not limited to, the colour of the stone, the patterns used in coursing, treatment around openings, the finish and pitch of the individual units as well as the size of individual stones.

The stonework of the south facade is more formal and has a ranged coursed ashlar pattern, but is divided at the junctures of the buildings. This pattern is very regular, well executed and shows a high degree of craftsmanship. Stones here are generally flat with very little pitch and are of more or less uniform size with almost no irregularities in the pattern. While this is a formal façade, there is no edge detail on the margins of the stones at the openings or in corner quoins. Soldier coursed flat arches (voussoirs) are present above several of the surviving original window openings. Other details, such as the original separation within the building at 23 Queen Street, are evident as a vertical line (albeit irregular) where the two buildings meet. In addition to the details associated with the current openings at 23 Queen Street, there is evidence of past lintels and flat arches which indicate the 19<sup>th</sup> century configuration of the building, including that of the western carriageway. While these are inconsistent with the overall existing pattern, they must be maintained, as they represent the earlier incarnations of the building.

At the east side of the building, the pattern of the stonework is a less formally coursed, random range pattern with the painted sign "GAS THE MODERN FUEL". While the sign engages the attention of the public, the stone pattern more subtly indicates that this is a secondary elevation of the building. Due to the extent of weathering at the parapet and gable, this area will likely require substantial conservation.

The conservation of the painted lettering must be considered when this elevation is being addressed, as the letters bridge a number of mortar joints. It is important that the paints selected to conserve the lettering be moisture permeable (silicate paints), allowing moisture to evaporate so that damage to the masonry and/or the sign is avoided.

At 19 Queen Street the stonework at the front gives way to brickwork at the east elevation and this, too, is to be conserved.

At the back of the building, the pattern of the stone has been significantly altered over time with brick used extensively to rebuild and infill areas as well as for arches at window and door openings. Thus there is much more freedom here to renovate as required. However the surviving stonework at the lower storey of the west section may well contain stone walling that predates the industrial complex and should be very carefully conserved. The pattern on the rear, as originally constructed, was generally the least formal, laid up random broken range. In this treatment stones of any size were worked into the wall based on availability and the size of the stones being laid directly around it.

Throughout the various elevations all repairs and alterations must be well integrated with the original walling by careful replication of detailing, stone type/dimension/colour and mortar colour and joint profile. It would appear, especially on the front façade, that most of the stone can be maintained and conserved. Where any stone removals do occur, due to alteration, the stones should be salvaged in order to be used in other portions of the building. On the façade of the complex, most of the first storey sills have been replaced in concrete. Ideally these sills would be restored to Kingston limestone.

Masonry repair must, in general, follow traditional methods. Other than some specific modern proprietary formulations and/or products which, used strategically, can yield conservation benefits (such as saving a stone that would otherwise have to be replaced), 'tried and true' traditional techniques are preferred. The City of Kingston has published the "Policy on Masonry Restoration in Heritage Buildings (Revised 2013)".

This policy, which is amended from time to time, provides general guidance regarding repointing and mortars to be used on heritage stone buildings as well as the materials and methods consistent with good practice. While this policy is generally intended for repairs to residential scale heritage buildings, the methodology can be extrapolated for more major restorations. Such technical matters as lime based mortars and appropriate aggregates are discussed. The development of the Queen Street properties should be consistent with the spirit and intent of the policy.

The buildings are constructed of Kingston limestone. The general category of stone referred to as Kingston limestone actually consists of several colours and minor variations of stone from the Black River formation. This geological formation is prevalent in the Kingston area and represents a band of limestone from Kingston running northwest to the area of Orillia. These limestones belong to ASTM C568/568M, Category 3 high density limestone with the blue grey colours having low magnesium carbonate content. Raw stone from the guarry is generally black and weathers to one of several colours depending on the impurities and the magnesium content. The buildings at Queen Street are constructed with stones with a low magnesium content likely in the 1% to 3% range with a blue-grey colour due to impurities. In selecting any replacement units for the project the colour match should be based on the fully weathered colour of the stone. Especially on the front of the building, the colour should be based on the prevalent colour not on the extremes of colours that are present on the building. Several Kingston limestones include minor beds within the broader bedding planes which can create issues. These styolitic beds cannot be avoided sometimes, due to the supply available at the time. However these should be limited in number and confined to the center third of the stone especially for stones that will not be highly compressed such as sill stones and parapet caps.

Conservation and preservation of the original stone is the priority. The stabilization of the original stone walls can generally be achieved through repointing and in some cases, where necessary, dismantling and relaying of the original stones. Where stones are shattered, replacement stones would be required but it does not appear that this will be a major issue at 19-23 Queen Street.

While grouting of voided rubble cores has been used with varying degrees of success, the use of grout must be prudently considered. There must be sufficient continuity of wall surfaces to contain the grout and sufficient drying time before winter to avoid freeze/thaw damage. It is not uncommon for grout to require a month for each 2 inches of thickness to fully dry. Thus a 12 inch rubble core which is fully grouted may require up to 6 months to fully dry. These constraints must be carefully evaluated in considering grouting.

If changes are considered to the thermal make-up of the walls such as would occur with the addition of significant insulation, the shift in dew point must be evaluated to ensure that condensation does not occur within the wall section. This could cause freeze/thaw damage to the stone. While vapor barriers and control of the climate can be effective, the damage from incorrect applications is difficult to repair and must be avoided.

## 5.1 Excavation

Soil remediation and excavation under 19-23 Queen Street may be necessary as a result of redevelopment of Block 4. The degree and extent of excavation must be carefully considered and its effect on the stonework analyzed. The proposed mitigation

measures necessary to minimize any negative impacts on the stone walling must be clearly articulated. The extent of removal and general methods of supporting the existing structure during excavation must be clearly defined. The foundations of the building occur at different elevations and there are different conditions throughout the various portions of the structure. At 19 and 21 Queen Street, a basement area has been excavated, using benched construction. Benched construction is a method whereby the original footings are left at their original elevation, however the soil directly under the footings is contained by benching walls located approximately 600 mm outside the original footing and wall. The old foundation is left perched on top of the soil which is contained by the benching walls. In order to remove the soil under the stone walls, a careful sequence of short alternating excavations, underpinning and support would be required. Stone walls are stiff and generally brittle. Any movement that would occur would likely manifest itself in cracking of the walls above and loss of heritage fabric. The entire area towards 23 Queen Street and part of 21 Queen Street does not have an excavated basement and both the underpinning and soil removal in these areas would have to occur to a more full extent if the soil is to be removed. Not only the perimeter walls, but all interior stone walls would have to be supported in order to excavate any soil under the footings. In addition to the support underneath the walls, during all phases of excavation, lateral support would have to be provided to the various walls to ensure their stability. While a portion of this bracing may be in the form of the existing floor and wall structures, the system will have to be evaluated relative to the requirements and the phasing of any potential project. This type of work is a task which is usually completed by specialty foundation contractors and will require significant control during construction.

In the overall design of the site, consideration should be given to effect of micro-environmental changes that certain approaches could have on the existing stone buildings. The design for over all site drainage must ensure that water is directed away from the existing stonework and, perhaps less obviously that the nature of air movement around the building must be taken into account. If air movement, which currently occurs around the structure, is restricted, portions of the stone structure may not dry as in the past. Protection against the infiltration of water will reduce maintenance costs and reserve the most original fabric in the long run.

## 6.0 Decorative Metalwork and Cast Iron

A major feature of the façade of 19 Queen Street is the decorative metal (likely galvanized iron) treatment of the moulded cornice and the dentillated panels cladding the front parapet. While apparently in reasonable condition, there are signs of corrosion and some deformation. These elements will have to be carefully assessed and appropriate conservation strategies developed. At minimum, removal of areas of rust to bare metal (or treating with rust arresting coating), spot priming with rust inhibitive primers, and coating with a high quality finish specifically designed for metal will be called for. Note that if any replacement of galvanized metal is required, extensive preparation of the new metal surface, ranging from 'pickling' to 'roughing up' is required to remove oils and allow for a durable bond between metal and finish coating. Any fabrication of new decorative metal work (e.g., a dentillated panel), will require a contractor that specializes in this kind of work.

The other key surviving 'metal' feature at the façade of 19 Queen Street is the iron sconces. These will require careful conservation involving the arresting of corrosion

(application of rust passivity coating); application of a zinc rich primer and application of a specialized industrial coating system (epoxy/urethane) to ensure longevity. Conservation should take place in the shop and be followed by re-wiring. The historic photos show that the sconces took a globe type shade (note that they are pointed downward in 1924 and upward in 1950 as today) as still present at the Hydro Building, and that shade type should be matched. The re-illumination of the sconces will be a key feature of the project from both the symbolic (as the site is the 'birthplace' of Kingston's electrification) and aesthetic perspectives, well beyond the expense involved.

## 7.0 Documentation

It is important that this period of major change for the heritage site be well documented, so as to become part of its historic record and interpretation (see below). The base drawings and photos completed for the Inventory provide a starting place. However depending on the time that elapses between the preparation of this document (Winter 2013) and the actual commencement of the project, it may be necessary to undertake a new set of photos to accurately depict its extant condition.

In addition photos of the progress of construction and its transformation of the site will become important archival material and should be taken at regular intervals.

# 8.0 Interpretation

The site has had a long history and built form evolution, of which this project will become a major chapter. A strategy for interpreting this history to the public will greatly enhance its appreciation (many do not now remember its industrial origins). It can also assist in explaining some of the key decisions underpinning the project and in the viewer's understanding of what constitutes the conserved original elements and those that have been replicated. This strategy may be as simple as a self-guided tour through the site incorporating a number of stations with graphic and textual material (historic maps, plans, photos, record drawings etc.) regarding the site's past and the construction process.

# Part IV: Integrative Guidelines for New Design

## 1.0 Introduction

To a large degree, the building footprint and volume will be the result of new construction, yet its special character will be generated by the presence of the restored historic complex, particularly along its south, downtown face. It is essential, then, that the new design recognizes and engages with that reality. That is not say that the new design should be in any way derivative or *faux historic* – indeed, ideally the new work will be vital in its own terms – but also exhibit a thoughtful understanding of its context, as manifest in its form, lay-out, scale, proportion, its colour and material palettes and, of course, the manner with which it knits the historic complex into the overall plan.

The following attempts to provide some direction in that regard understanding that there is no ready formula for good contextual design – which ultimately must come from a deep appreciation of the site, an understanding of its technical challenges and economic realities and, finally, inspiration with regard to the forms which should arise in that particular place.

# 1.1 Rear Setback/Courtyard

Aside from the importance of preserving the Queen Street façade, the most important aspect in the appropriate treatment of the historic complex is to allow the full structure(s) delineated for preservation to have sufficient 'breathing space' in order to continue to be appreciated and understood as an entity (rather than simply the façade). This means that building directly over the existing ridge is not to be considered; that building directly abutting the north wall, except possibly for specific purposes and in a limited area (to the rear of 19 Queen Street), is not be considered, and that anything built in close proximity to the rear wall not exceed the height of the existing ridge.

Ideally the area to the rear of 21 and 23 Queen Street will form a courtyard with the east wall of the Hydro Building as its west side and the addition to 21 Queen Street along with the stone wall of the former gas holder, the east side. This treatment could be undertaken in association with the reopening of the original carriageways from Queen Street to provide an evocative and historically authentic access to the heart of the site, mid-cross block pedestrian connection through the site, a link between the existing and the new design as well as providing required public open space. Even without the carriageway restoration, access through the existing lane to the east would allow for this courtyard treatment. Thus, a 19<sup>th</sup> century urban form that already characterizes the existing heritage core of the City would form a major feature/amenity in the new design. As noted in the Design Guidelines for Block 4, a minimum setback of 21 m from the rear wall of 21-23 Queen Street to any new construction would provide an effective distance for this purpose.



Fig.1: Pedestrian lane into the Chez Piggy/Toucan courtyard

There is the possibility of an atrium/pavilion treatment of the courtyard area, though the interface of the framing for such a structure with the existing heritage buildings would have to be carefully worked out (See also Roof, Roofing and Associated Features in the PDG) and would have to remain below the ridge of the complex at that point and well beyond.

## 1.2 Street-Wall

The façade of the heritage complex, as is typical throughout the historic downtown, forms a street-wall. New construction at the Queen Street/Ontario Street corner and extending northward along King Street from the rear of the Hydro Building would ideally continue this street-wall treatment at a scale, and utilizing materials, which can integrate visually with the historic architecture. Allowing for separation of the complex from the new construction by the existing lanes, this could take the form of a street face height of up of up to 17 metres stepping back to 25.5 metres and/or possibly as a podium for a taller structure(s). The historic Smith Robinson Building provides a visual precedent in this regard. While the separation provided by the lanes allows for less constraint in the façade treatment than would be the case for new work directly abutting the existing, it is still important that apparent floor heights and height of fenestration should complement the existing construction.



Fig. 2: Heritage street-wall with contextual infill at Jarvis St. and King St. E. corner, Toronto

# 1.2.1 Adjacent Street-wall along Queen Street

The historic complex will necessitate a sensitive treatment extending east along Queen Street, made more challenging by the presence of the one storey 19 Queen Street, anomalous height-wise even relative to the rest of the heritage block. The optimum approach would be to retain the historic lane access into the block adjacent to 19 Queen Street as a side setback – thus continuing to allow the historic complex to be read as its own entity and mitigating the challenge of having the new street-wall construction of different scale and materials, directly adjacent to it. The lane space should be made sufficient to allow the gable of 21 Queen Street to be able to still be viewed clearly from just south of the Ontario Street /Queen Street intersection. At the Ontario Street corner a 17 metre street-wall would be reasonable, the approximate height of the historic Smith Robinson Building one block to the south. The new built form at the southeast corner should reflect/extend the apparent floor heights and heights of window banding established by the heritage buildings. Note that this also includes the Hydro Building which offers a very different scale, form of fenestration and solids to voids ratio than the stone complex. The result can thus be potentially more complex and varied as exemplified in Fig.2.

## 1.2.2 Adjacent Street-wall along King Street

While the Hydro Building is not formally included in the development it is, in fact, the heritage anchor building at the King Street/Queen Street corner. In this case the historic

lane entering Block 4 from King Street directly to its rear is definitely being retained under an easement by Hydro. This will again have the affect of providing separation between the heritage row and the treatment to its north helping to mitigate changes in scale and materials. The height at the street-wall would continue to be 4 storeys though potentially stepping up from that point either following the 39 degree angle to the currently zoned 6 storeys (25.5 m) or possibly something taller with the street wall forming its podium. The monumental tall arched windows and brick niches and the large expanse of glazing (void) to masonry (particularly Queen street façade) which characterize the Hydro Building establish the vocabulary for the façade of the new construction along the adjacent section of King Street though materials and forms derived from the stone complex can also be interwoven such that it might feel as a continuation of the pattern of alternate primary wall materials. The rhythm of the bays and of the cornice/parapet height should be referenced in the new adjacent composition.

## 1.3 Northeast Corner

This location, across from the Ferry Terminal, forms the approach from Highway 2 from the North into the downtown. It also sits 'kitty corner' to Fort Frontenac with its campus of heritage buildings and ongoing military presence. This situation suggests that the creation of a public park at this corner, as has been recommended in the previous North Block study (2008), and outlined in the Block 4 Design Guidelines, may be the most appropriate treatment. The formalizing of open space at that location, rather than continuing the street-wall or other building type, would provide a 'window' of openness, a view into the block and beyond, as part of the experience of driving into town from the northeast. This would be heightened by its contrast to the sense of 'narrowness' driving by the K-Rock and the Fort Frontenac wall immediately before hand.

With regard to the relationship with Fort Frontenac it would assist in ensuring a reasonable setback from the site, particularly to any taller structure that might be viewed as inappropriate in such close proximity to the low scale historic architecture of the campus.

Additionally it could become the terminus or 'staging' point for walks or cycle trips that extend through the site as well as being a location which offers some perspective view on the K-Rock Center.

# 1.4 Taller Structures (See also Street-wall section)

With an appropriate setback (courtyard) from the historic buildings as described above (including those of Fort Frontenac), a complementary street-wall treatment adjacent to the historic buildings, the property's distance from Kingston's iconic domes and steeples and given that currently there are very few residents and/or occupants west of the site whose views to the water would be obstructed, it is possible to consider building taller on the site than might be deemed acceptable in other circumstances.

Height itself is less of an issue (to a point) than overall form. Any structure(s) above the currently zoned 6 storeys (25.5 m) should be designed to allow for a sense of space and transparency through the site rather than appearing overly massive or monolithic. Coming into the city along Highway 2/Ontario Street from the north, one should be

engaged by a view into the block and its variety of forms as an urban precinct. At this location, space at grade for public and occupant movement around and through the site is a more important consideration than building height alone. As any tower(s) would have a high degree of visibility within the downtown, from the water and as a gateway into the city from Highway 2, a thoughtful distinctiveness of design is important.

## 1.5 Materials

It is important that the palette of materials selected for the exterior cladding of the new construction allow for the whole block, including the historic buildings, to be appreciated as an integrated coherent composition.

This sense of complementary materials between existing and new construction is most important at the street-wall, while at upper storeys, different emphasis may come into play, though still carrying forward and/or referencing the main themes established at street level.

Over the last decade many new city buildings, e.g. K-Rock, and those of other major Kingston institutions, such as Queen's University, have incorporated the local Kingston limestone into their exterior treatment as a conscious link to the past and as a material obviously sympathetic to the heritage fabric around it. Here again, where the main heritage complex is of local limestone the opportunity presents itself to, in some measure, work Kingston limestone into the exterior treatment – as an accent band course, as a foundation treatment etc. particularly along Queen Street. It should be noted that freshly quarried Kingston limestone is initially a dark charcoal gray or blue gray, the surface only taking on the characteristic white after some years of weathering.

Other types of limestone have been used to good affect in several, recent projects (Queen's, RMC) establishing similar character and texture to the historic material but also inherently differentiating new and old. These include 'white' limestones from Wiarton and Orillia area quarries. As well, Queenston limestone, which was an important building material in Kingston through much of the 20<sup>th</sup> century, is once again being quarried.

The strong red brick presence of the Hydro building provides a basis for the use of that material in the street-wall treatment, particularly along the King Street.

Poured and /or precast concrete when used thoughtfully can 'stand in' for and/or work in concert with limestone walling and/or as an accent in red brick construction.

Copper, present as the roofing at 23 Queen Street, offers both a sense of tradition with performance and durability. An expensive roofing/cladding, none-the-less it can also be aesthetically effective as an accent material even when primarily functional as in copings and wall flashings.

Other traditional materials, either well represented on site or more broadly in downtown heritage architecture, which could also lend themselves to use throughout the property in a variety of ways, both echoing tradition and wholly modern include: slate, wood, terra cotta, pressed metal, wrought and cast iron.



Fig. 3: Typical street-wall scale, bay rhythm combined with innovative expression,

Museé du Quai Branly, Paris

It is fully anticipated that these historic materials will be used in combination with a variety of more clearly modern materials - to form a contemporary expression. Beyond the street-wall/podium height and particularly in the upper storeys the playing off of existing architectural forms/materials/ bay rhythms/fenestration can give way to a more purely modern treatment.

## 1.6 Above Grade Parking Structures

Should above grade parking need to be incorporated into the site, it is essential that it be housed in thoughtfully designed structures that fit contextually with the general architectural treatment. This can range from the unobtrusive well-screened modest structure to a larger structure that complements and blends into the street wall with commercial below.



Fig.4: Parking garage, Charleston Historic District

# 1.7 Exterior Lighting and Street Furniture

Given that this site is so deeply associated with the evolution of lighting in Kingston, it is appropriate that the lighting treatment both for the heritage complex and the site as a whole be given very careful consideration in terms of the integration of historic and modern approaches and fixtures.

As noted in the Inventory and PDG, the original cast iron light sconces still flank the entrance to 19 Queen Street. Similarly, more elaborate tripartite sconces, with their milk glass ball shades intact, still survive at the entrance to the Hydro Building. Furthermore historic photos (Fig.6, 7 PDG) show that between c.1924 and 1950 cast iron sconces were present to either side of every arch at the Hydro Building and the c.1924 photo clearly shows the design of the streetlamps along Queen Street at that time. With this level of surviving fabric and photo documentation it is recommended that the sconces for 19 Queen Street be conserved, upgraded and re-illuminated (as already noted in the PDG) and that the form of streetlamp along the Queen Street frontage extending around the corner along King Street (at least) to the northern edge of the Hydro Building replicate the actual historic design. This combination of period sconce and streetlamp type would then be extended into the carriageways/walkways (if reinstated), within the courtyard and along the mid-block walkway. North of those locations a transition to more contemporary fixtures and/or the city's existing street lamp design at the Tragically Hip Way would be reasonable. It is also hoped that Kingston Hydro would be amenable to the conservation of its existing historic fixtures and reinstatement of the many sconces no longer present at 29 Queen Street as part of a comprehensive block approach but that is beyond the current scope. It should be noted that theses fixtures were always intended for electricity as Kingston had electrified prior to 1900 through the Kingston Light Heat and Power Company based at the site.

The refurbishment of the cast iron fixtures and the restoration of cast iron street lighting both support the use of iron, either in period and contemporary forms, for street-furniture within the historic precinct. While this might include such elements as period cast iron benches, bollards, fountains etc. it also would embrace features such as clearly modern,

wrought iron gates and sculpture. Again a gradual transition between a more purely historic treatment at the façade, mixed with subtly contemporary elements at the courtyard then moving toward a contemporary approach through the remainder of the site is envisaged.

## 1.8 Signage

The documentary photos indicate that façade signage was historically minimal with, apparently, the large painted wall sign at the east gable end as the main form of advertising, but even that was post 1950.

It is, however, assumed and accepted that the heritage complex may be occupied by diverse commercial entities and that façade signage will be an important aspect of their promotion. There are a range of signage types that would be acceptable including:

- Traditional painted wood or sheet metal (including decorative pressed sheet metal) storefront cornice frieze signs;
- Traditional applied wood or metal lettering on storefront cornice frieze sign;
- Traditional wood or metal letters applied directly to façade (non-staining/non corroding anchors in mortar joints only);
- Extended iron bracket with wood or sheet metal hanging sign (must be 'engineered and approved by City);
- Neon/tube neon as cornice, window or engineered marquis.

It is important that the City of Kingston Sign By-Law be reviewed and referenced in developing signage proposals.

The original ornate marquis at 19 Queen Street was itself a form of signage and its restoration would again make that building unique as well as forming a 'cornice/frieze' to accept an actual sign.

Not acceptable for the façade would be roof mounted, billboard, animated, plastic and/or pixilated signs.

As well as the use of traditional materials and signage/lettering types, unique and artistic expressions are encouraged.

The development of a consistent signage vocabulary across the site will depend, to some extent, on the number and range of enterprises based there. As in many aspects of the site the tension between consistency and diversity, traditional forms and creative expression will be essential in establishing the identity of the site to the public.

DRAFT SUBJECT TO REVIEW 26/09/2013









## **Preface**

#### Intent of the Document:

This document is meant to augment the Kingston Residential Intensification/ New Community Design Guidelines and Kingston Downtown and Harbour Architectural Guidelines as they relate to the future development of Block 4.

These design guidelines are to be read in conjunction with other studies and reports for Block 4 including;

- Heritage Preservation Guidelines (Inventory, Preservation Component, Design Guidelines and Technical Conservation)
- Pedestrian, Bicycle and Traffic Analysis
- Environmental Assessments

## **Purpose of the Document:**

This document will act as the guiding document on design of development proposals that will be prepared in response to the Request for Proposals from Purchasers/Developers of Block 4, and is organized into two parts: Required Components that must be addressed by proponent bids and; Desired Components that will be used, in part, to rank the design proposals submitted.

## **Previous Design Studies:**

The North Block District Community and Business Enhancement Opportunities Study completed in 2009 for the City of Kingston provides several design scenarios for the North Block District and specifically Block 4. While these scenarios will not be used precisely as a basis for evaluation of proposals, many of the recommendations in this study have been carried forward into the Design Guidelines.

#### Official Plan Height Requirements:

The Official Plan under Section 3.18.22 a. requires that any building proposals in excess of 25.5 metres (approximately 6 storeys) are subject to an urban design study. The study must show that the development will;

- Not overshadow surrounding buildings to be discussed further with planning
- Be compatible with the scale and massing of buildings in the surrounding built form context
- Satisfies all other Official Plan policies

# Block 4: Design Guidelines

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#### 1.0 Context and Vision for Block 4

#### 1.1 Site Context and Location

Block 4 is a feature block in the North Block District of downtown Kingston with close proximity to the waterfront and the northern gateway to the Downtown. The site context is as follows;

To the **North** of the site are the Tragically Hip Way and the K-Rock Centre. The Rogers K-Rock Centre is a 7000 seat arena which hosts the Kingston Frontenacs, concerts and other large events in the City. Slightly further north of the Rogers K-Rock Centre is the Calarough River, which is also the southern end of the Rideau Canal system, a UNESCO World Heritage Site.

To the **East** of the site are Ontario Street, the Wolfe Island ferry terminal and Fort Frontenac. Ontario Street serves as a key access to downtown Kingston with Block 4 serving as a gateway site into the historic downtown. The ferry terminal to Wolfe Island is a free service and runs hourly.

To the **South** of the site are Queen Street and the Princess Street retail district. Princess Street and Market Square are located within 2 blocks to the south of Block 4 providing a strong retail market base for future development. Immediately to the south of Block 4 lies Block 5 of the North Block District, a privately owned property which has been identified for partial future site redevelopment.

To the **West** of the site are King Street and some large format retail. Adjacent to the King Street frontage are Food Basics grocery store, an LCBO store and Goodlife Fitness Centre. It is anticipated that this area will also be subject to further intensification as the North Block District is developed.

Block 4 includes heritage-designated properties owned by the City of Kingston, a substation building owned by Kingston Hydro, as well as a City owned surface parking lot. Contaminated soils on site have been partially remediated by the City of Kingston. The property is 0.82 hectares in area, or 2.02 acres.



Photo 1: Wolfe Island Ferry

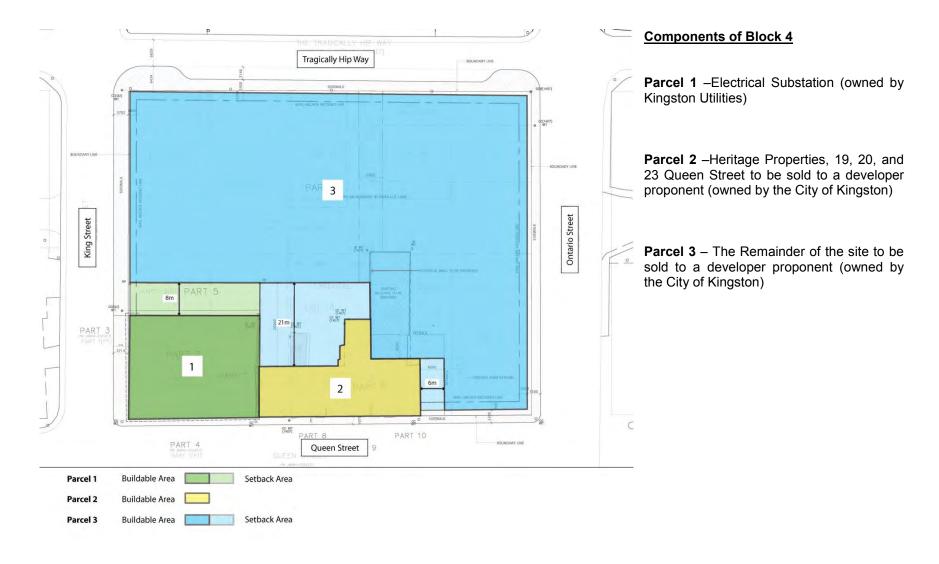


Photo 2: City Hall and Market Square



Photo 3: Rogers K-Rock Centre

1



**Image 1:** The subject property is made up of three Parcels as listed above. Parcel 1 is to remain under the ownership of Kingston Hydro and requires an 8m rear-yard setback. Parcel 2 is to be sold to a developer proponent and includes the built boundary of preserved heritage buildings on site. Parcel 3 is currently a public parking lot and is to be sold to a developer proponent along with Parcel 2. Parcel 3 contains several setbacks from the heritage buildings in Parcel 2 as shown above.

## 1.2 Current Policy Context

Block 4 is located within the City of Kingston's Central Business District Centre, which is intended to remain as the City's primary economic centre. Centre area policies with respect to intensification and heritage preservation are as follows;

"The Centre policies within the Central Business District apply to *infill* lots in the downtown core, including the North Block Area and recognizes the importance of maintaining and conserving the heritage buildings and character of the Lower Princess Street Heritage Character Area in accordance with Sections 7.3 and 10A of this Plan."

The North Block District is identified as **Site Specific Policy Area No. 22.** These policies recognize the special status of the North Block District and outline a number of provisions intended to guide the gradual intensification of the District. These provisions relate to such matters as: building heights; strengthening pedestrian access; ground floor building setbacks to allow for covered pedestrian walkways; amenity space requirements; maintaining waterfront views; replacement of surface parking with parking structures; requirements for traffic and parking impact studies; protection of heritage buildings; archaeological investigations and site remediation. The site is currently subject to the use of a Holding (H) Symbol for two aspects: i) All servicing issues have been resolved to the City's satisfaction and; ii) A Record of Site Condition must be completed.

The Official Plan provides more detailed policies for the **Downtown** and **Harbour Special Policy Area**. These policies are based on a number of other special studies, including: the Downtown Action Plan; Urban Growth Strategy; Downtown and Harbour Architectural Guidelines Study; Community Improvement Plan Brownfields Project Areas 1A and 1B; Kingston Transportation Master Plan; Cycling and Pathways Study; and, Core Area Transportation Review. The goal for the Downtown and Harbour Special Policy Area is: "To foster the continued prominence and function of the Downtown and Harbour Area as the principal mixed use business district or commercial

"Centre" and civic focus within the City, for both residents and visitors".

A wide range of commercial use is permitted, including all levels of retailing, offices, professional and service uses, hospitality uses and tourist accommodation, cultural, entertainment and recreation uses. Medium and high density residential uses are also encouraged in the Area. New industrial, automotive and low density residential uses are prohibited. Large-scale commercial uses and automobile sales or gas bars that are not compatible with the massing of historic buildings may be prohibited.

Particular policies in the Official Plan that affect Block 4 include:

- Identification of the half block south of Queen Street and the half block on the north side of Queen Street between King and Wellington Streets as Major Development sites on Schedule DH-2;
- Identification of King Street, Ontario Street, Barrack Street (between Ontario and King Streets) and Queen Street (between Ontario and King Streets) as Prime Pedestrian Streets on Schedule DH-3;
- Identification of Ontario Street, King Street, Queen Street, The Tragically Hip Way (Formerly Barrack Street) and Wellington Street (between Queen and Barrack Streets) as requiring mandatory commercial frontage on Schedule DH-3;
- A maximum building height of 25.5 metres (after employing angular plane setbacks) – higher building heights may be considered subject to submission of a site specific urban design study to the satisfaction of the City;
- Preserving views to the water from Barrack (The Tragically Hip Way) and Queen Streets;
- Conservation and re-use of existing heritage buildings; and
- New development to be compatible with the built heritage fabric and street-oriented pedestrian function of the Area.

Note: Official Plan policies referred to throughout this document will read as **OP 3.18.22.** 

#### 1.3 Current Zone Provisions

The site is currently zoned (H) C1-22 – Central Business System Zone, which permits a wide range of commercial uses as well as mixed commercial/residential developments. Minimum lot coverage is 50%; maximum lot coverage is 100%. Maximum density is 123 dwelling units per net hectare. The maximum permitted building height is 17 metres (55 feet) at the street line and 25.5 metres (83 feet) along the required angular plane (upper floor step-back). Specific provisions are also included for parking structures.

The site specific zoning places a <u>Holding (H) Symbol</u> on the entire District that will not be removed until such time as i) All servicing issues have been resolved to the City's satisfaction and ii) A Record of Site Condition has been registered in accordance with Provincial regulations.

The current zoning on the subject property allows for 123 units per hectare. Based on the site area of Block 4, only 101 units would be permitted on site under the current provisions. This requirement is proposed to be amended to allow for increased density on Block 4.

#### 1.4 Vision

Based on the previous design studies completed to date and the current initiative undertaken by council, the following represents a vision for the future of Block 4;

Block 4 is a vibrant urban space for residential and commercial use that engages users of Kingston's waterfront, downtown Kingston and the K-Rock centre. The site is mixed-use and complements the existing heritage structures on site while creating a distinct built form.



**Photo 4:** Existing structures on Block 4 including the Kingston Hydro substation and heritage buildings at 19, 21 and 23 Queen Street

# 2.0 Site Design Considerations

## 2.1 General Design Objectives

#### Sustainability

- Inclusion of sustainability throughout the project
- Provision of LEED Certified buildings is preferred
- · Adaptive re-use of existing heritage buildings on site
- Consideration to integrate Block 4 into a LEED Neighbourhood Development (ND) approach for the entire North Block District

## Crime Prevention through Environmental Design (CPTED)

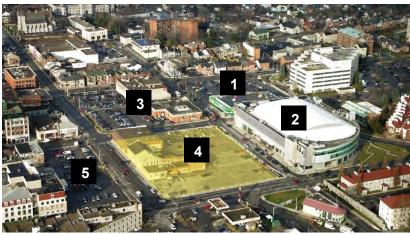
- Safe and accessible design for pedestrian areas
- Interior courtyard area and mid-block connection to be designed consistent with the principles of CPTED

#### Live/ Work/ Play Component

- Complete mixed-use design to include uses such as housing, vibrant commercial areas and unique gathering places
- Inclusion of a live-work component for use by local artists

# Hotel/ Convention Centre

May be required



**Photo 5:** The North Block District (Blocks 1-5) presents a good opportunity for a LEED ND approach to development.



Photo 6: Artist live-work spaces at Artscape's Wychwood Barns in Toronto

### 3.0 Street Level Interaction and Interface

# 3.1 Building Setbacks

### Required

- Minimum 8m setback from the Kingston Hydro substation
- Minimum 21m setback from the north façade of the preserved heritage buildings (21 to 23 Queen Street)
- Minimum 6m side yard setback from preserved heritage buildings
- Maximum 2m arcade setback for new buildings
- For buildings in excess of 10 storeys, public open space area at the intersection of Ontario and the Tragically Hip Way with an area 400m<sup>2</sup> but having no required dimensions

#### **Desirable**

- Increased setback from designated heritage buildings to allow for interior courtyard space
- For buildings below 10 storeys, public open space area at the intersection of Ontario and the Tragically Hip Way with an area 400m<sup>2</sup> but having no required dimensions

# 3.2 Building Entries

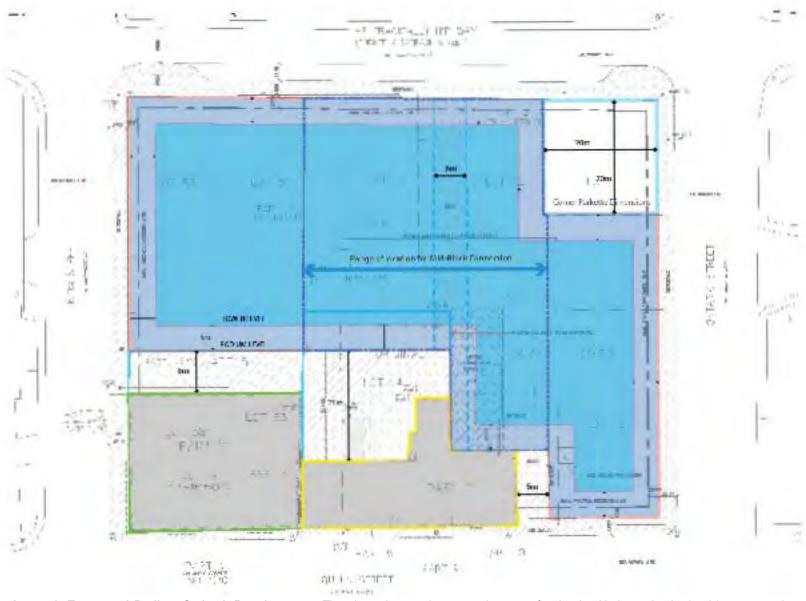
# Required

- All main entrances at grade
- Principal entry point for residential and retail space faces a public street
- Create clearly visible building entries from public sidewalks
- Clear identification of parking and loading entries from King Street

- Functional building entries occur at an average of 10-20 metres or less
- Unique architectural/ landscape entrances for retail uses



**Photo 7:** 'The Shops' development in Waterloo creates an engaging retail setting for pedestrians by providing active frontages and regular building entries.



**Image 2, Tower and Podium Setback Requirements**: The above image shows requirements for the 8m Hydro setback, the 21m rear yard heritage setback, the 6m sideyard heritage lane setback and the 400m<sup>2</sup> corner parkette at the corner of Ontario and the Tragically Hip Way. The image demonstrates a 5m tower setback from podium edge which applies for buildings in excess of 25.5m (6 stroreys).

### 3.3 Ground Level Retail Interface with street

### Required

- Retail facades must include at least 60% glass between 1 and 2.4 metres above grade.
- Retail facade windows must be kept visible at night

#### **Desirable**

- Patio or café uses where possible
- Use of awnings to provide a sense of enclosure and human scale
- Animated retail facing into courtyard where possible

#### 3.4 Ground Level Live-Work Interface with street

### Required

- · Clearly identifiable residential lobby areas
- Residential Lobby- Accessible from Street face

### **Desirable Uses**

- Differentiate residential lobby areas from commercial areas through architectural treatments
- Provide space for live-work uses

# 3.5 Ground Floor Heights

# Required

- Minimum podium level of 17m
- Maximum podium level of 20m (subject to rezoning)

### **Desirable**

 Raised ground floor ceilings for retail and lobby space (4.5m preferred except for special architectural features such as atriums)

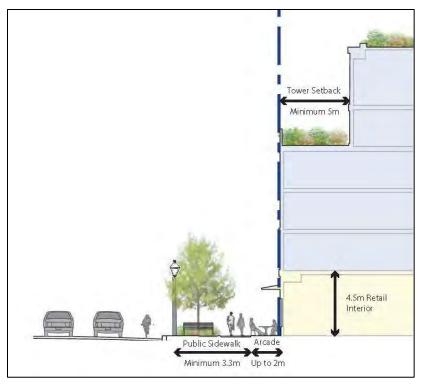


Image 3: Ground Level Retail Street Interface

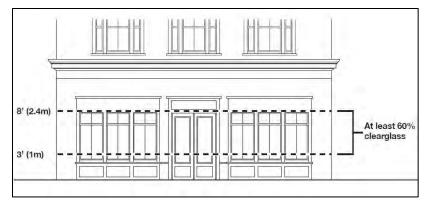


Image 4: Retail Façade Design

# 4.0 Open Spaces Interface

"Courtyards, as spaces and shortcuts, offer considerable texture to the pedestrian experience, as well as significant development frontages additional to the facing streets." – Kingston Downtown Action Plan

### 4.1 Mid-Block Courtyard

### Required

- Historic Buildings Minimum Rear Yard Set-back of 25 m (82 ft)
- Historic Buildings Minimum Side Yard Setback of 6 m (20 ft)
- Safe and accessible design

### **Desirable**

- 30% tree canopy coverage in mid-block courtyard
- Hard Surface ground treatment with border planting areas
- Optimize sun exposure into mid-block courtyard through massing and setbacks
- Connection to as many public streets/ sidewalks as possible
- Inclusion of public art
- Active space by design inward facing retail/ restaurant uses

**Photo 8:** Chez Piggy Courtyard in Kingston creates an intimate patio space with a physical connection to heritage buildings on-site. A mix of hard and soft landscaping features helps to break up the space.

### **4.2 Mid-Block Pedestrian Connection**

# Required

- Connection extends from Queen Street to the Tragically Hip Way
- Pedestrian connection in buildings a minimum of 6m in width
- Provide rhythmic architectural/ landscape features along the mid-block connection (animated space)
- Minimum volume of 6m (width) by 8m (height)
- Minimum 50% open to sky
- Connection of pedestrian route to central courtyard area
- Commercial access for interior portions of pedestrian connection

- Residential Access, Commercial Glass Store Fronts
- Utilize at least one of the previous historical carriage way locations for the pedestrian connection (4m in width)
- Designed in conjunction with the restored historical wall of the gas holder
- Pedestrian connection 100% open to air



**Photo 9**: Trinity Square Park in Toronto includes heritage structures with modern construction to create an intimate urban space. The area acts both as an urban courtyard and as a pedestrian connection to retail in the Eaton's Centre.

# Possible Carriage Way/ Pedestrian Connection Points



**Image 5:** Identified above are two possible locations for an entrance point to the mid-block connection from Queen Street. Entrance 1 represents the most historically accurate location of a past carriage way within the heritage buildings on site. Entrance 2 is believed to have been a carriage way but has not been architecturally confirmed. The internal space behind entrance 2 is a large hallway space which may allow for the most simple construction/ engineering option.

### 4.3 Public Space and Sidewalks

**Per the Official Plan 3.18.22 c)** In order to encourage a more pedestrian friendly form of retail development along King Street, the ground floor building face may be set back from the sidewalk to allow for an arcade form of development, characterized by a covered pedestrian walkway with supporting columns.

### Required

- Maintain 3.1 m (9.5ft) wide bus lay-by on the Tragically Hip Way (will require a 1.1m setback from the property line on Tragically Hip Way)
- Ontario Street sidewalk minimum 3.3 m (10ft) unobstructed width curb to building face (will require up to a 1.1m setback from the property line on Ontario Street)
- The Tragically Hip Way sidewalk minimum of 3.3 m (10ft) unobstructed width curb to building face
- King Street sidewalk minimum of 3.3 m (10ft) unobstructed width curb to building face
- Queen Street maintain sidewalk as existing at 1.97 m (6.5ft) unobstructed width curb to building face
- Widen the portion of Queen Street sidewalk not affected by heritage buildings to 3.3m (10ft).

#### **Desirable**

- Comfortable walking and seating conditions along streets and at appropriate courtyard and parkette locations
- Locate trees and pedestrian lighting along public sidewalks to encourage pedestrian traffic
- Street furniture responds to the surrounding historic context

# Ontario Street Public Space

• Maximum 2 m (6.5ft) arcade recess from Ontario Street

# Tragically Hip Way Public Space

- Introduce Right Turn lane and Stacking for two vehicles
- Maximum 2 m (6.5ft) Arcade Recess



**Photo 10:** Pedestrian focused streetscape including awnings and tree cover. The red brick demonstrates an optional arcade recess that could be utilised on Block 4

### King Street Public Space

- Special Surface Treatment at Vehicular Crossing, Approaching Vehicle
- Maximum 2 m (6.5ft) Arcade Recess

# Queen Street Public Space

• Maintain existing sidewalk width

#### 4.4 North-East Corner Parkette

### Required

- For building heights above 35m (10 storeys)
- Located on the corner of Ontario Street and the Tragically Hip Way
- Minimum Size of 400m<sup>2</sup>
- Primarily hard surface landscape

#### **Desirable**

- Increased dimensions as appropriate
- Incorporate public art elements
- Design to support the role of Block 4 as part of the northern gateway into downtown Kingston

# 4.5 Private Amenity Areas

**Per the Official Plan 3.18.22 d)** Reduction of amenity space requirements as required in the Downtown and Harbour Zoning Bylaw may be considered, subject to the provision of alternate common amenity space, such as on rooftops, in internal courtyards, or midblock walkways designed to improve pedestrian movement.

# Required

Outdoor podium amenity space when building over 35m (10 storeys)

- Green Roof incorporating urban garden area
- Increased amenity space with increased height



**Photo 11:** Trinity Park in Toronto includes a pedestrian labyrinth and grade changes to create a unique space in the City.

# **5.0 Heritage Interface**

Please refer to the Block 4 Heritage Preservation Inventory, Integrative Guidelines for New Design, Preservation Design Guidelines and Technical Conservation Guidelines for a more detailed indication of required and desired measures with respect to designated heritage buildings on Block 4.

**Per the Official Plan 3.18.22 h)** Heritage buildings within the study area must be protected and conserved in accordance with Section 7, of this Plan, and deviations from this requires consultation with the Kingston Municipal Heritage Committee and approval of City Council.

### 5.1 Integrative Guidelines for New Design

### Required

- Preservation of the Queen Street designated heritage building envelope
- New design recognizes and engages with historic context
- New design shall not be faux historic but instead stand on its own merits

#### Desirable

 New design should exhibit a thoughtful understanding of its context manifest in its form, lay-out, scale, proportion, and its colour and material palettes

# 5.2 Rear Setback/Courtyard

# Required

- Minimum setback of 21m from the rear wall of 21-23 Queen Street (less from the retained addition of 19 Queen Street)
- No new structures may be constructed over top of the heritage buildings
- Any new structures in close proximity to the rear wall of 19 Queen Street shall not exceed the height of the historic buildings
- The area to the rear of 21 and 23 Queen Street will form a courtyard with the Hydro Building as its west wall and the

retained portion of the addition to 19 Queen Street as the east wall.



Photo 12: Heritage street-wall with contextual infill: Jarvis St, Toronto

### **Desirable**

- Integration of courtyard area with the reopening of the original carriageways from Queen Street to provide an evocative and historically authentic access to the heart of the site and a link between the existing and the new design.
- Creation of an atrium/pavilion treatment of the courtyard area though the interface of the framing for such a structure with the existing heritage buildings.

# 5.3 Street-Wall Design

### Adjacent Street-wall along Queen Street

# Required

 Continue street-wall treatment at an appropriate scale and make use of materials which integrate visually with the existing historic architecture

- New construction at the corner of Queen Street extends the historic street-wall along Queen Street and onto Ontario Street
- New built form at the corner should reflect/extend the apparent floor heights and heights of window banding established at 21 and 23 Queen Street, or the Kingston Hydro Building
- Retain the historic lane access into the block adjacent to 19
   Queen Street as a side setback. The lane space should be
   made sufficient to allow the gable of 21 Queen Street to be
   able to still be viewed clearly from just south of the Ontario
   Street /Queen Street intersection.
- Re-establisment of carriage way
- The rhythm of bays existing in the heritage buildings should be referenced but not duplicated



Photo 13: Existing Carriage Way, Kingston

# Adjacent Street-wall along King Street

# Required

 Maintenance of the Kingston Hydro right of way and access from King Street

#### Desirable

- The height at the street-wall could continue to be 4 storeys and potentially stepping up from that point either following the 50 degree angle already zoned (to 6 storeys) or possibly something taller with the street wall forming the podium.
- The rhythm of the bays and of the cornice/parapet height should be referenced in the new adjacent composition, but not duplicated
- Visual connections from buildings to street
- Screening of parking

# **Northwest Corner**

- Inclusion of the corner park as required by height and density zoning
- Recognition of historic elements from the adjacent Fort Frontenac



**Photo 14:** Typical street-wall scale, bay rhythm combined with innovative expression, Museé du Quai Branly, Paris

# **6.0 View Protection and Microclimate**

# **6.1 Protection of Key Views**

### Required

- Protection of key views to City Hall along public streets
- Orientation of building massing to allow for permeability and views to the sky from the street level
- Restrict views to the interior of the officer's guarters area
- Protection of views to the waterfront from Queen Street, and the Tragically Hip way

### 6.2 Sun Access

### Required

- Sun/ shadow study for the 4 seasons
- Natural light provided for all residential units in mid-rise or high-rise development scenarios

### **Desirable**

- Southern sun exposure to new public space at the rear of the historic buildings along Queen Street
- Minimum 50% sun exposure to mid-block courtyard
- Sun exposure for the corner parkette where appropriate

### **6.3 Reduction of Wind Effect**

# Required

- Pedestrian level wind study for comfortable walking conditions
- Protected/ sheltered sitting areas
- Integrate wind mitigation measures into building design
- Measures to prevent venturi/ down draft effects at street level

### 6.4 Noise Reduction

# Required

 Noise impact study required if any low level generator or HVAC systems are proposed



Image 6: Key views of waterfront and City Hall

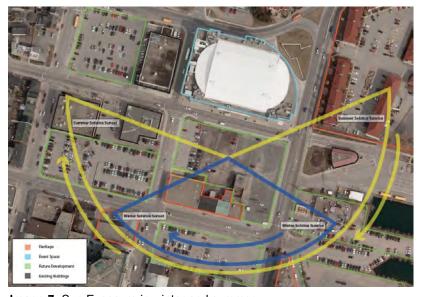


Image 7: Sun Exposure in winter and summer

# 7.0 Building Massing and Articulation

### 7.1 Podium Design and Activation

### Required

- Locate podium buildings parallel to street facades
- 11.5m 15m (3 4 storey) Level Podium Street Face
- Provide views/ access from the podium levels into both the street and interior courtyard public realms

### **Desired**

- Design of podium to provide appropriate scale with neighbouring properties including low density residential and the Rogers K-Rock Centre
- Respect the massing and height of existing heritage buildings on the site when designing the podium level
- Materials Limestone, Smooth and Cut Face, Glass, Aluminum Curtainwall

# 7.2 FSI Requirements

# Required

- Site development must respect the limit of 5.5 FSI;
- The intent of the FSI requirement is to encourage the following;
  - 1. Optimize public open space at grade
  - 2. Minimize massive blocky building design
  - 3. Encourage tall buildings to have smaller floor plates to promote slender towers.

#### 7.3 Definitions FSI Calculation

### "FLOOR AREA, GROSS"

means the sum total of the gross horizontal areas of all floors of all buildings or structures on a lot, measured from the interior faces of the exterior walls as defined by the City of Kingston Zoning Bylaw including any area used for parking structure above grade and mechanical/electrical uses above grade.

For the purposes of this Block 4 development Floor Area, Gross includes any area below grade used for parking, storage or mechanical uses unless the height of the below grade use extends more than 600 mm above grade.

#### "NET LAND AREA"

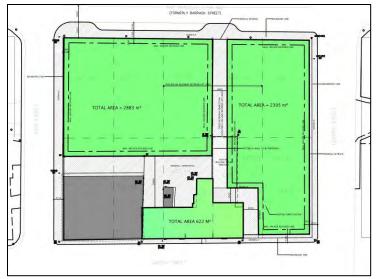
means the area of a lot owned by a proponent less any lands which have been or which will be dedicated to the City for public roads, public pathways, public open space, municipal parkland or public community facilities as defined by the City of Kingston Zoning By-law.

For the purposes of this Block 4 development the Net Land Area includes Heritage Buildings sold as part of the development, and does not include the minimum land area dedicated for, sidewalk widenings, the mid-block connection, and land dedicated as public open space at the corner of Tragically Hip Way for buildings over 9 stories in height. For the purposes of the Block 4 Development net land area is calculated to be as follows:

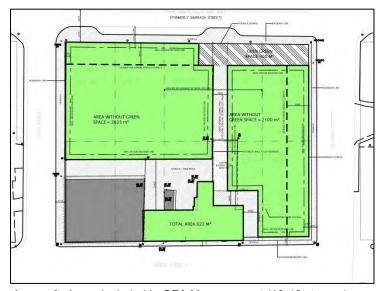
For buildings under 9 levels plus mechanical penthouse: 6095 sq. m. For buildings over 10 levels to 18 levels plus mechanical penthouse - 5695 sq. m.

### "FLOOR SPACE INDEX"

as defined by the Kingston Zoning By-law means the ratio of gross floor area (GFA) permitted within a building or structure to the net land area of the lot on which the building(s) or structure(s) is (are) situated.



**Image 8:** Areas included in GFA Measurement (6-9 storeys)



**Image 9:** Areas included in GFA Measurement (10-18 storeys)

# 7.4 Low-Rise Building (6 storeys)

### Required

- Setback of 5<sup>th</sup> and 6<sup>th</sup> storeys on a 50<sup>0</sup> angular plane from podium level
- 4 storey podium level
- Appropriate and Compatible with Waterfront Exposure
- Through block pedestrian connection
- Massing must be active on all sides due to the buildings exposure at both the street level and the interior courtyard

### **Desirable**

- Articulation of exterior façade (can be achieved through use of balconies, terraces, exterior shading, fenestration, etc.)
- · No external blank walls or internal to the courtyard area



# Required

- Towers setback from podium level by 5m
- 4 storey podium level
- Appropriate and Compatible with Waterfront Exposure
- Through block pedestrian connection
- Massing must be active on all sides due to the buildings exposure at both the street level and the interior courtyard

- Refined Shape and Elegant Use of Materials
- Maximize views along waterfront.
- Materials Glass and Aluminum beyond 4 storey podium
- Corner park located at Ontario Street and the Tragically Hip Way (20m x 20m)
- Articulation of exterior façade (can be achieved through use of balconies, terraces, exterior shading, fenestration, etc.)
- · No external blank walls or internal to the courtyard area



Image 10: Conceptual massing for 25m (6 storeys) building



Image 11: Conceptual massing for two 39m (10 storeys) towers

# 7.6 High-Rise Building (10-18 storeys)

### Required

- Appropriate and Compatible with Waterfront Exposure
- Through block pedestrian connection
- Corner park
- Setback of towers a minimum of 5m from the street edge of the podium level

#### Desired

- Refined Shape and articulated use of materials
- · Maximize views along waterfront.
- Glass and aluminum materials beyond 15m (4 storey) podium
- Density split into two (2) towers. Any structure(s) above the currently zoned 6 storeys should be designed to allow for a sense of space and transparency through the site rather than appearing overly massive/ monolithic
- Two tower proposals should separate towers by a minimum of 20m and show a relationship between the two towers
- Recognition of design context and vocabulary surrounding the site

# 7.7 Architectural Mid-Rise and Caps

# Required

- New tall buildings must integrate mechanical systems located on the roof into the architecture
- Towers must be active on all sides due to the buildings exposure at both the street level and the interior courtyard
- Towers over 35m (10 storeys) should have a distinctiveness in their design to provide new landmarks along Kingston's waterfront
- Screening of mechanical uses

- Design building floor plates to respect the dimensions and orientations of the site
- Articulate massing of large floor plates to reduce the bulk of buildings on the site



Image 12: Conceptual massing for two 65m (18 storeys) towers

# 8.0 Building Facades

New buildings on Block 4 must complement the existing character of the area through the integration of materials, lighting and signage where appropriate.

# 8.1 Walls, Windows, Materials and Colour

### Required

- All 4 sides of the building must be vibrant and include transparent windows/ active uses
- Use of historic materials in combination with a variety of modern materials to form a contemporary expression at the podium level.

### **Desirable**

- The palette of materials selected for the exterior cladding of the new construction should be appreciated as an integrated coherent composition including the heritage buildings.
- Inclusion of Kingston limestone in the podium level architecture through accents or building materials.
- Poured and /or precast concrete when used thoughtfully can 'stand in' for and/or work in concert with limestone walling
- Use of copper, present as the roofing at 23 Queen Street, as an accent material

# 8.2 Building Lighting

# Required

- Pedestrian level interior courtyard lighting
- Pedestrian focused lighting for public sidewalks
- Reduction of spill over light
- Night sky protection

#### **Desirable**

• Use of lighting to express different levels of the building and highlight architectural features

# 8.3 Building Signage

# Required

Refer to City of Kingston Sign By-law

- Create clear signage at the pedestrian level
- Integration of heritage elements in signage



Photo 15: Context sensitive signage, Kingston



Photo 16: Pedestrian scale lighting, Distillery Toronto

# 9.0 Site Mobility Features

### 9.1 Pedestrian

### Required

• Protected pedestrian environment through the inclusion of weather protection measures

#### Desirable

- · Co-ordinated pedestrian canopies between retail store
- Inclusion of landscaped and architectural elements to create an engaging pedestrian realm
- Pedestrian comfort areas including benches and public washrooms

# 9.2 Bicycle

# Required

 Public and private bicycle parking provided as per City of Kingston standards

### **Desirable**

- · Provision of change room facilities
- Provision of one secure enclosed bicycle storage space for each new residential unit constructed
- Provision of one secure enclosed bicycle storage space for each new retail space

### 9.3 Transit

# Required

Pedestrian connections to adjacent Rapid Bus stops

- Allocation of introductory transit passes for new residents
- Car-share co-op membership/ support



Photo 17: Engaging Pedestrian Connection, Ottawa



Photo 18: Covered Bike Parking, Brussels

# 10.0 Site Parking

\*A total of **40 Public Parking spaces are required** to be provided on Site. This provision may be completed by a combination of underground, at grade or above grade structures.

Per the Official Plan 3.18.22 f) As redevelopment takes place over time, the intent of these policies is to support the replacement of parking lots with above-grade parking structures, subject to the same build-to planes, minimum building height and minimum lot coverage provisions, as currently apply to other building forms in the area. Large structures such as a parking garage or a transportation terminal will be subject to design considerations in accordance with the policies of this Plan. Design considerations may include a façade treatment that will be harmonious with the intended massing and rhythm of design elements of the more traditional residential or office uses planned for the area.

# 10.1 Underground Parking Design

# Required

- · Clear, 24 hour motion censored lighting
- Access from King Street
- Provision of a minimum of 100 parking spaces below grade

# 10.2 At Grade Parking Design

# Required

- Clear, 24 hour lighting with motion sensors
- Only allowable if associated with Block 4 Commercial or residential uses
- Maximum 25% of Block Area
- · Access from King Street

#### Desirable

• No surface parking on-site



Photo 19: Underground parking lighting, Germany

# 10.3 Above Grade Parking Design

# Required

- Clear, 24 hour lighting
- Screen parking area by providing commercial uses at grade
- Access from King Street

### **Desirable**

- Exterior Surfaces to provide decorative screening using finished metal screen, plant material or other approved artistic expression
- Housed in thoughtfully designed structures that fit contextually
  with the general architectural treatment. This can range from
  the unobtrusive well screened modest structure to a larger
  structure of a quality to work into the street wall with
  commercial below
- Inclusion of an elevated enclosed walkway available for use during K-Rock Centre Events

# 10.4 Service Delivery

# Required

- Indoor garbage/ recycling storage
- Loading Bays, delivery and maintenance vehicle access from King Street only



Photo 20: Parking garage with architectural screening, Charleston

# 11.0 Sustainability

The implementation for many of the guidelines addressed within this report would assist the developer of the site in achieving LEED Neighbourhood Development certification and LEED New Construction certification. The achievement of these designations is desirable as they would assist the City of Kingston towards reaching the goal of becoming Canada's most sustainable city.

### 11.1 Smart Site Principles

The development of the site will involve the retention of the existing two heritage buildings, continuation of the hydro substation portion as well as the construction of new mixed use buildings throughout major portions of the site fronting on to King Street, the Tragically Hip Way, Ontario Street and a portion of Queen Street. LEED-ND Neighbourhood Development certification can be considered for this site. The requirements for LEED-ND are identified by The Canada Green Building Council in collaboration with the US Green Building Council and the Congress for the Urbanism. Under these requirements for ND certification there is no minimum or maximum size for a LEED-ND project boundary. It is recommended that the minimum size area include two habitable buildings. Block 4's preexisting conditions including infill site potential and its location on a previously developed brownfield site lends itself to meeting the necessary prerequisites and scoring points for LEED-ND certification.

#### **Desirable**

LEED-ND Certification

# 11.2 Sustainable Building Principles (for new construction)

### Required

- Natural Ventilation (i.e. exterior balconies, sliding glass doors, pivoting windows)
- Orientation and massing of buildings to optimize passive solar and natural light, and reduce shading/ heat gain
- On-Site Storm Water Management







Image 13: LEED Projects in Canada that have achieved Gold and Platinum Levels. The LEED ND logo represents a new category of LEED which includes a broader analysis to include several buildings and larger site areas.

### **Desirable**

- LEED NC Silver Certification
- LEED Operations and Maintenance Certification
- On site Renewable Energy Sources (Active Solar and Wind Energy Generation)
- Heating/ Cooling/ Electrical/ Water Demand Reduction
- Reduced heat island effect
- · Minimize night sky pollution
- Use of local/ regional materials and resources
- Waste stream reduction (recycling/ compost facilities)
- Public education or unique/ innovative sustainable design features

### 11.3 Green Roof

# Required

• Inclusion of extensive green roof on podium level for buildings over 35m (10 storeys)

#### **Desirable**

 Dedication of intensive green roof (i.e. permanent community garden space for residents) on podium level for buildings over 35m (10 storeys).

#### 11.4 Green Infrastructure

- Green Infrastructure elements to improve the quality of the environment and contribute to reduced greenhouse gas emissions, clean water, and clean air
- Waste management strategy during construction and during building operation



Photo 21: Mountain Equipment Co-op extensive greenroof, Toronto