

CHIA ADDENDUM



GORE BUILDINGS 18-30 KING STREET EAST HAMILTON, ONTARIO

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INTRODUCTION

This *Heritage Impact Assessment (HIA) Addendum* has been prepared by heritage consultant Megan Hobson on behalf of Hughson Business Space Corporation to assess impacts of a revised development proposal for 18-30 King Street East prepared by David Premi Architects. The purpose of this HIA Addendum is to ensure that heritage attributes identified in the *Designation By-law* are conserved and that the conservation approach is consistent with the *Standards and Guidelines for the Conservation of Historic Places in Canada*.

The proposal includes a conservation strategy for preserving three architecturally significant stone façades at 18-22 King Street East (Kerr Buildings) and 28 King Street East (Glassco Building) and replicating one severely deteriorated and heavily modified brick façade at 24 King Street East (Skinner Building). The conservation strategy is based on a detailed condition assessment and recommendations provided by heritage engineer Jonathan Dee of John G. Cook & Associates, heritage masonry contractor Jeff Feswick of Historia Restoration and construction manager Henry Schultuis of Shultuis Construction. A summary of the engineer's findings and recommendations are included as an Appendix to this report.

The revised architectural drawings show how the heritage façades will be seamlessly integrated into the proposed 6-storey building. Design measures have been successfully employed so that all new work is visually compatible with the heritage façades. The proposal provides an opportunity to rehabilitate three architecturally significant facades and to maintain an important historic streetwall that defines the south side of the Gore Park Cultural Landscape. Architectural drawings by David Premi Architects are included as an Appendix of this report.

DEVELOPMENT APPLICATION HISTORY

In December 2012, a demolition permit was issued for 18-30 King Street East and the building at 30 King Street East was demolished under that permit. Due to community interest in the heritage value of the remaining buildings, demolition was halted so that an alternative development proposal could be developed. Discussions included offers of financial assistance from the City of Hamilton under Hamilton Heritage Property Improvement Grant Program and the GORE Building Improvement Grant Program, if the properties were not demolished and/or Designated under Part IV of the *Ontario Heritage Act*. In 2013, the buildings were Designated under Part IV of the *Ontario Heritage Act*.

A revised development proposal was given Conditional Site Plan approval on November 27, 2017 with an addendum containing further conditions being added on August 2, 2018. A *Cultural Heritage Impact Assessment and Conservation Plan* prepared by Goldsmith Borgal Architects was submitted and heritage permits were issued based on recommendations in those reports.

The following Heritage Permits have been issued and reflect the evolution of the proposal in response to heritage interests:

- HP 2016-027
 - for façade retention and penthouse addition to 18-22 King Street East
- HP 2016-028
 - for demolition of the buildings at 24 & 28 King Street East

- HP 2018-035
 - for retention and restoration of the front portion of 24 & 28 King Street East and a 5th storey addition
- HP 2020-002
 - for renewal of previously approved HP2016-027 for 18-22 King Street East

In 2019, the building permits and heritage grant offer were extended to allow the applicant more time to complete the requirements of the Conditional Site Plan Approval, with an understanding that all the facades will be conserved and integrated into the proposed development. Since that time, further investigation of the condition of the masonry of 24 King Street East (Skinner Building) has determined that the brick has deteriorated to such an extent that retention of this façade is not feasible. The current proposal provides a strategy for meeting the intent of the earlier agreement through replication of this façade with new brick. This approach is appropriate because the original work and materials can be easily replicated and because it is already understood that this façade does not have architectural value. The ornate cornice that is the only original decorative feature remaining on this façade has architectural value but is in poor condition. This original feature will be repaired and will be reinstated on the replicated façade.

KING E	PHOTO	HERITAGE VALUES	2016 CHIA (GBCA)	2018 REVISED CHIA (GBCA)	2021 HIA ADDENDUM (HOBSON)
18-22 KERR BULDINGS		Historical Architectural Contextual	Façade retention <i>in situ</i>	Façade retention <i>in situ</i>	Façade retention <i>in situ</i>
24 SKINNER BUILDING		Historical Contextual	Demolition	Façade retention <i>in situ</i>	Façade replication
28 GLASSCO BUILDING		Historical Architectural Contextual	Demolition	Façade retention <i>in situ</i>	Façade retention dismantling & rebuilding

TABLE 1.0 – evolution of the conservation strategy

HERITAGE RECOGNITION

In December of 2013, the City of Hamilton passed *Designation By-law 18-321* to designate lands located at 18-22 and 24-28 King Street East (Gore Buildings). The *Reasons for Designation* are included in the Appendix of this report

The Pre-Confederation stone façade at 18-22 King Street East attributed to William Thomas and the stone façade at 28 King Street East by an unknown architect have historical, contextual and architectural value. The brick façade at 24 King Street East has historical and contextual value but is not Designated for its architectural value, because it has been heavily altered.

The following heritage attributes are identified in the *Designation By-law*:

Heritage Attributes

18-22 King Street East (Kerr Buildings)

- All stone blocks, coursing, quoins and voussoirs on the second and third levels of the front façades;
- All window surrounds, sills and hood mouldings on the second and third levels of the front façades;
- The stone cornices and parapet walls of both buildings;
- All surviving original stone materials and features remaining under the existing storefront cladding and signage on the ground level; and,
- The gable roof and dormers of 18-20 King Street East.

24 King Street East (Skinner Building)

- The brick façade of the third and fourth levels of the front façade;
- The window openings and stone sills on the third and fourth levels of the front façade;
- The cornice and stone end brackets;
- All surviving original brick and stone materials and features remaining under the existing storefront cladding and signage on the ground and second levels; and,
- The parapet walls

28 King Street East (Glassco Building)

- All stone masonry walls and pilasters on the second, third and fourth levels of the front façade;
- All window openings and sills on the second, third and fourth levels of the front façade;
- The original two-over-two wood window sashes and frames in the third and fourth level window openings;
- The wood framed picture windows and leaded transoms in the second level window openings;
- The projecting stone horizontal mouldings between the second and third levels and the third and fourth levels;
- The cornice and parapet walls;
- A stone pilaster at the northeast corner of the ground level; and,
- All surviving original stone materials and features remaining under the existing storefront cladding and signage on the ground level.

REVISED DEVELOPMENT PROPOSAL

The revised development proposal consists of a 6-storey office building with retail on the ground floor and one level of below-grade parking. The new building will be timber frame construction and will have an internal courtyard. Access to the underground parking garage will be located on the alleyway behind the building. The lot where 30 King Street East formerly stood, will remain open as publicly accessible amenity space.

The architecturally significant stone facades of 18-22 King Street East (Kerr Buildings) and 28 King Street East (Glassco Building) will be preserved and integrated into the development. The severely deteriorated and heavily modified brick façade of 24 King Street East (Skinner Building) is too deteriorated to be preserved and will be replicated with new brick.

The two floors to be added above the heritage façades will have a generous setback, so that the ornate cornices of all the buildings and the front roof slope and rounded dormers of the Kerr Buildings can be retained. New storefronts will be introduced so that individual storefronts for each building are maintained and will be framed by the surviving masonry piers on the ground floor.



GORE BUILDINGS - Rendering of the proposed development for 18-30 King Street East [David Premi Architects]

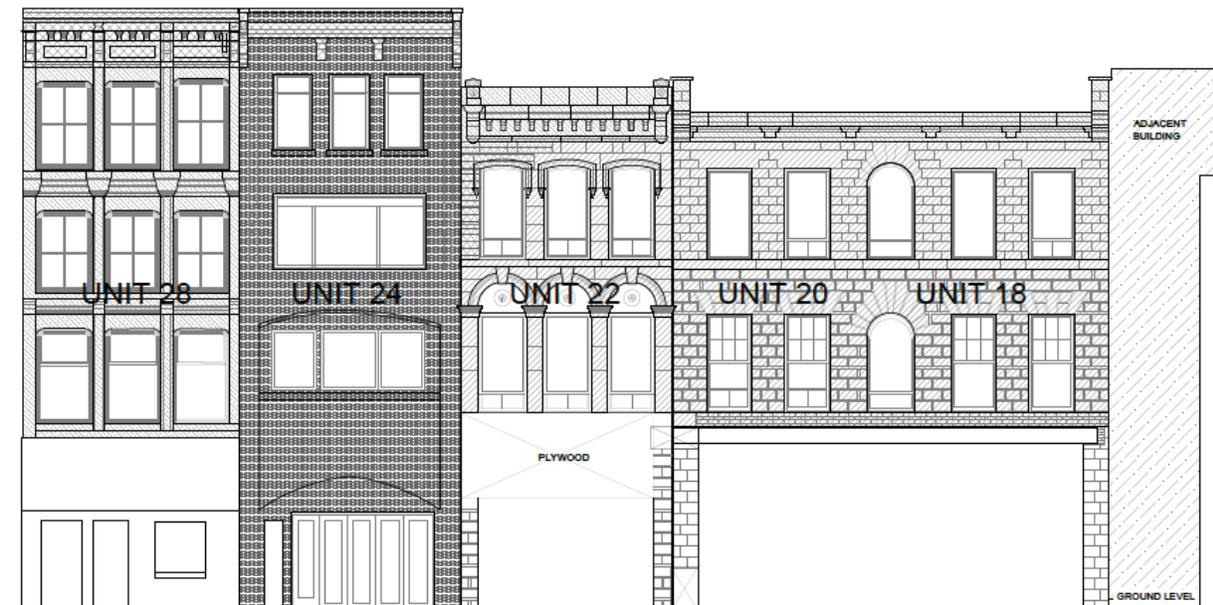
CONSERVATION STRATEGY

The heritage facades will be integrated into the development according to the following conservation strategy:

- **18-22 King Street East (Kerr Buildings)**
 - the stone façade will be conserved *in situ* and will be temporarily supported on a façade retention frame during construction of the new building
 - the stone cornice will be dismantled and will be reinstated when the façade is secured to the new building
 - the front slope of the roof will be rebuilt with three dormers to restore it to its original appearance
- **24 King Street East (Skinner Building)**
 - the brick façade will be replicated and the original window openings on the 2nd & 3^d floor will be restored
 - the original metal cornice will be dismantled and will be reinstated on the replicated façade
- **28 King Street East (Glassco Building)**
 - the stone façade and metal cornice will be dismantled and rebuilt

LEGEND

	EXISTING FACADE MASONRY TO BE REBUILT PRIOR TO BEING RETAINED IN-SITU.
	EXISTING FACADE MASONRY TO BE RETAINED IN-SITU.
	EXISTING FACADE MASONRY TO BE DISMANTLED, SALVAGED, REPAIRED AS REQ. OFF SITE, AND RESET.
	EXISTING FACADE TO BE DISMANTLED, REPLACED WITH NEW MATERIAL.
	DECORATIVE ELEMENTS (METAL CORNICE AND SIM.) TO BE REMOVED, SALVAGED AND REINSTATED



GORE BUILDINGS – conservation strategy for heritage facades [John G. Cooke & Associates]

The conservation strategy outlined in this *HIA Addendum* is consistent with guidance in the *Standards and Guidelines for the Conservation of Heritage Places in Canada* pertaining to rehabilitation projects because it is based on an understanding of the current condition of the heritage façades, an appreciation of heritage values associated with each façade and the requirements of the architectural program. The benefits of the proposal include a continuous floor plate from 18-28 King Street East for more flexible interior space, new street level amenity space, new private amenity spaces on the roof terraces and creation of additional frontages for retail spaces along the entire length of the west elevation and opening onto the interior courtyard. Risks associated with the proposed interventions are significant but can be successfully mitigated through a detailed *Conservation Plan* and *Construction Management Plan* that provides a framework for coordination of heritage conservation work, demolition, dismantling and new construction. Risks associated with doing nothing and allowing the buildings to further deteriorate is a significant concern, given that the buildings have been vacant with services disconnected since 2013.

CURRENT CONDITIONS

The proposed conservation strategy is based on detailed site investigation undertaken by heritage engineer Jonathan Dee of John G. Cooke & Associates, construction manager Henry Schultuis of Schultuis Construction, and heritage masonry contractor Jeff Feswick of Historia Restoration. Previous technical reports were reviewed and several site visits were undertaken to identify condition issues and identify the most feasible approach for integrating the façades into the new development. The roof and masonry façades of 18-22 King Street East (Kerr Buildings) were inspected from a boom lift and the masonry façade of the 28 King Street East (Glassco Building) was inspected from scaffolding. 3-D scanning of the façades was undertaken by John G. Cooke and Associates, to supplement measured drawings already prepared by Goldsmith Borgal Architects.

A summary of the current conditions and the rationale for the conservation approach proposed for each façade is outlined by Jonathan Dee of John G. Cook & Associates and is included in the Appendix of this report.

Since the previous application, non-structural elements have been removed from the interior of the buildings as part of the remediation required prior to issue of a demolition permit for the rear portion of the buildings. Now that the interior partition walls and plaster have been removed, structural elements are fully exposed. This has allowed more detailed investigation of structural components to be undertaken and documentation of newly revealed heritage elements on the interior of the Kerr Buildings. These findings have informed the revised conservation strategy and are outlined below and supporting documentation is attached as an appendix.

Significant condition issues identified by heritage engineer Jonathan Dee of John. G. Cooke & Associates:

- **18-22 King Street East (Kerr Buildings)** – portions of the roof adjacent to the heritage façade have collapsed. This issue was identified in earlier condition assessments and continues to be a major concern. In order to protect the façade from further water damage and facilitate stabilization of the façade on the façade retention frame, dismantling of the stone cornice and the stone parapet walls above the roofline is recommended.

- **24 King Street East (Skinner Building)** - the brick façade is severely deteriorated due to water damage, to the extent that retention of this facade is not feasible.
- **28 King Street East (Glassco Building)** – the east pier and the upper courses of masonry have shifted because the east side wall is leaning eastward due to lack of lateral support provided by 30 King Street East since it was demolished in 2012, to the extent that the upper portion of the building will have to be dismantled and rebuilt. Given the extent of the damage, total dismantling and rebuilding is recommended as a more cost-effective approach.
- **18-22 King Street East (Kerr Buildings)** and **28 King Street East (Glassco Building)** - the windows have deteriorated due to exposure to the elements, to the extent that repair of original wood windows is not feasible.

Interior heritage elements identified by heritage consultant Megan Hobson:

- there are **7 Doric columns** on the 1st, 2nd & 3rd floors of 18-22 King Street East (Kerr Buildings) that may date from c. 1852 when the building was enlarged by William Thomas. These columns have been identified as elements that have potential for salvage and reuse in the new development.
- there are **ornate plaster cornices**, skylights and an arched window in a room overlooking the courtyard on the 1st floor of 18-22 King Street East (Kerr Buildings) that dates from c. 1852 when the building was enlarged by William Thomas. The plasterwork has been identified as a rare example of ornate plasterwork in a Pre-Confederation commercial building. This room will be documented prior to demolition.

CURRENT DEVELOPMENT PROPOSAL IMPACTS & MITIGATION

The impacts of the current proposal are similar to those evaluated in the 2018 Revised CHIA by GBCA. All of the heritage attributes of the Designated heritage facades will be preserved, with the exception of the parapet walls above the roofline.

HERITAGE ATTRIBUTES

- TO BE PRESERVED
- TO BE REPLICATED
- TO BE SALVAGED (parapet walls)

18-22 King Street East (Kerr Buildings)

- All stone blocks, coursing, quoins and voussoirs on the second and third levels of the front façades;
- All window surrounds, sills and hood mouldings on the second and third levels of the front façades;
- The stone cornices and parapet walls of both buildings;
- All surviving original stone materials and features remaining under the existing storefront cladding and signage on the ground level; and,
- The gable roof and dormers of 18-20 King Street East.

24 King Street East (Skinner Building)

- The brick façade of the third and fourth levels of the front façade;
- The window openings and stone sills on the third and fourth levels of the front façade;
- The cornice and stone end brackets;
- All surviving original brick and stone materials and features remaining under the existing storefront cladding and signage on the ground and second levels; and,
- The parapet walls

28 King Street East (Glassco Building)

- All stone masonry walls and pilasters on the second, third and fourth levels of the front façade;
- All window openings and sills on the second, third and fourth levels of the front façade;
- The original two-over-two wood window sashes and frames in the third and fourth level window openings;
- The wood framed picture windows and leaded transoms in the second level window openings;
- The projecting stone horizontal mouldings between the second and third levels and the third and fourth levels;
- The cornice and parapet walls;
- A stone pilaster at the northeast corner of the ground level; and,
- All surviving original stone materials and features remaining under the existing storefront cladding and signage on the ground level.

18-22 King Street East (Kerr Buildings)

The façade of 18-22 King Street East will be retained *in situ* on a 'façade retention frame' so that the rear portions of the buildings can be removed, the site can be excavated for the below ground parking level, and the foundation and structural framework for the proposed 6-storey building can be constructed. The heritage façades will then be physically attached to the new building using masonry anchors. Retention *in situ* is the recommended approach for this façade because of its early construction date and method of construction consisting of finely jointed and overlapping ashlar sandstone blocks with a rubble stone backing.



18-22 KING E (KERR BUILDINGS) – significant deterioration of stone cornice due to failure of the roof and gutters



18-22 KING E (KERR BUILDINGS)

Left: further failure of the roof behind the cornice



Right: significant masonry deterioration exposed on the interior now that finishes have been removed

The 'façade retention frame' will be designed by John G. Cooke & Associates, a firm that has experience designing and implementing retention frames for heritage façades. Structural drawing and further details

regarding the design and installation of the retention frame will be provided in a separate *Conservation Plan*. Historia Restoration, the heritage masonry contractor, will work in collaboration with John G. Cooke to ensure that heritage elements are safe and secure at all stages of the project. The exposed top of the wall will be capped and the rubble backing will be covered with plywood and a waterproof membrane to protect them from the elements. Regular monitoring will be carried out with regular reports provided to heritage staff.

Detailed investigation carried out by John G. Cooke and Historia Restoration confirm that the stone cornices and stone parapets on the roof are badly deteriorated. The stone cornices will be carefully dismantled prior to demolition of the rear portions of the buildings. Individual stones will be catalogued and labelled so that they can be reinstated in their original locations when the new roof is constructed. This approach allows for repairs to be made off-site in Historia's climate-controlled workshop over the winter and while site work and new construction are underway. Further details regarding the removal, safe handling and storage of dismantled elements will be provided in a separate *Documentation & Salvage Plan*.

Original masonry on the 1st floor of 18-22 King Street East (Kerr Buildings), previously covered with modern cladding, will be preserved and integrated into the new storefront. Further investigation is needed to determine if these elements will be stabilized *in situ* or dismantled and rebuilt. Dismantling may be preferable due to the considerable amount of repairs and cleaning that will be required and to facilitate installation of the new storefronts. Further details will be provided in a separate *Conservation Plan*. If a suitable stone cannot be sourced to restore the large amount of masonry that is missing on the ground floor, then an alternative design has been provided that references the original design and is constructed with wood panelling and glazing set in a metal clad wood frame, similar to the storefront design that was previously approved. Any original stone on the ground floor will be preserved in this option also.

24 King Street East (Skinner Building)

The brick façade of 24 King Street East is so extensively deteriorated that retention is not feasible. This façade has been extensively and irreversibly altered and most of the original features have been removed. Therefore, this façade will be rebuilt with new brick that replicates all of the original design details. The original cornice will be taken down and repaired off site by Historia Restoration and will be reinstated on the replicated façade. The replication of this façade will provide an opportunity to reinstate the original window openings on the 2nd & 3rd floor. This is considered an improvement that will restore the original rhythm of the fenestration and be more consistent with the adjacent heritage façades. More detailed information about the current condition of the brick and why repair is not recommended is provided by Jonathan Dee of John G. Cooke & Associates and is included in the Appendix of this report.



24 KING E (SKINNER BUILDING)

Left: cracked and delaminating cement render on the brick façade

Right: severe deterioration of the brick is evident now that finishes have been removed from the interior

28 King Street East (Glassco Building)

The stone façade of 28 King Street East has significant condition issues along the full height of the east pier. Investigation undertaken by John G. Cooke Associates and Historia Restoration confirms that there are open joints in the masonry due to eastward movement. The deflection of the east wall was measured using a plumb line and is significant and appears to be ongoing. Given the extent of the damage and the limited amount of masonry on this façade, dismantling and rebuilding is being proposed rather than stabilization *in situ*. Original masonry on the 1st floor of 28 King Street East (Glassco Building), previously covered with modern cladding, will be preserved and integrated into the new storefront. More detailed information about the current condition of this façade and the recommended approach to conserving it through dismantling and rebuilding is provided by Jonathan Dee of John G. Cooke & Associates and is included in the Appendix of this report.



28 KING E (GLASSCO BUILDING)

Left: temporary cabling installed to secure the masonry on the northeast corner has not prevented ongoing movement of the east wall

Right: the east pier of the masonry façade has now shifted to the east and separated from the window frame

New Construction

A new 6-storey timber framed building will be built behind the rehabilitated heritage façades. The new structure will have continuous floorplates to accommodate the proposed layout. The floor plates of the new structure will be consistent with existing masonry openings on 18-22 King Street East (Kerr Buildings) and 24 King Street East (Skinner Building). The only overlap will occur on the 4th floor of 28 King Street East (Glassco Building) where the new floor plate crosses the lower portion of the windows. The window opening will not be altered but the floorplate will be visible through the glazing. This is considered a minor visual impact because it is limited to 28 King Street East and occurs on an upper floor that will not be highly visible from ground level.



PROPOSED DEVELOPMENT – King Street East Elevation [DPAI] – yellow line indicates the continuous floor plates of the new building – the only area where the new floorplates are not consistent with existing window sill heights is on the 3rd floor of 28 King Street East (Glassco Building)

New windows will be installed that replicate the style and configuration of the original windows. Given the poor condition of the remaining original windows, replacement with a suitable replacement window is an appropriate conservation strategy. Adverse impact will be mitigated through the design of suitable replacement windows. Each façade has unique windows and the replacement windows will replicate the original windows for each building based on physical evidence and historic documentation.

The existing storefronts have been heavily modified in a manner that is not complimentary to the heritage façades. Therefore, the renewal of the storefronts will have a positive impact. Original masonry that survives on the 1st floor of 18-22 King Street East (Kerr Buildings) and 28 King Street East (Glassco Building) will be preserved and integrated into a new storefront design.

The proposed setback of the 5th & 6th floors is respectful of the heritage facades and will allow the ornate roof cornices of the heritage buildings to remain visually prominent from the street. The proposed

alterations and additions will support the new use and will not have a significant impact on heritage value. Adverse impacts have been successfully mitigated by the setback, material and design of the upper floors that includes replication of the roof slope above 18-20 King Street East (Kerr Buildings). The replicated roof offers an opportunity to restore the third dormer that is currently missing that will have a positive impact.

The design of the 5th & 6th floor and the new storefronts is contemporary and distinguishable in a manner that is complementary and deferential to the heritage façades. These alterations are consistent with design guidelines for buildings adjacent to the Gore Park Cultural Landscape and will support a new use that includes conservation of heritage façades that are currently at risk and in need of significant investment to ensure their long-term conservation.

COMMEMORATIVE STRATEGY

Adverse impacts due to demolition of the rear portion of the buildings will be mitigated through documentation of the layout and interior features prior to demolition. A number of interior elements have been identified as potential salvage items that could be incorporated into the new development. These artefacts can be used to tell the story of the occupants and commercial activities associated with these buildings. A number of strategies will be considered for integrating salvaged items into the new development including the following:

- Salvaged beams can be used to build landscape features in the outdoor amenity spaces
- Salvaged brick can be installed on the lower portion of the east wall to enhance the outdoor amenity space
- Doric columns can be used as architectural elements in the courtyard area
- Fragments or photographs of ornamental plaster work can be displayed in the interior

Further details will be provided in a separate *Conservation Plan*.

POTENTIAL SALVAGE ITEMS



18-22 KING E (THE KERR BUILDINGS) – photo-documentation of ornamental plasterwork and Doric columns on the 1st floor revealed during remediation work

RECOMMENDATIONS

In order to mitigate the risks of the proposed conservation strategy, the following conditions of approval are recommended:

- Conservation Plan that includes further details regarding:
 - structural drawings for the façade retention frame
 - demolition and dismantling plan that provides the methodology for labelling, dismantling, re-locating and storing heritage elements and the location and description of the storage location
 - inventory of items to be dismantled and stored
 - masonry key plan that shows the original location and condition of individual stones
 - monitoring plan for regular monitoring of stored elements and providing updates to heritage staff
 - protection and monitoring measures for elements to be retained *in situ* based on the project timeline
 - repair methodologies and materials for heritage fabric including masonry specifications for suitable repair mortars and replacement stone
 - structural and architectural drawings for integration of the heritage façades into the new structure, including detailed drawings and masonry specifications for the method for securing the heritage façade to the new building, wall assembly of the integrated building envelope, roof flashings and gutters by a qualified professional
 - window specifications for replacement windows to be installed in the heritage façades
 - construction management plan that includes protection & monitoring of the façade retention frame and sequencing & co-ordination of conservation work, demolition work and new construction
 - project schedule and cost estimates for the proposed conservation work

It is also recommended that securities be required such as:

- a Heritage Easement Agreement between the owner and the City to ensure that conservation of the heritage façades is carried out in accordance with the Heritage Permit
- a Security Deposit held by the City based on cost estimates for the proposed conservation work. This deposit can be returned in increments, as work is completed to the satisfaction of the Director of Development Planning, but a significant portion should be retained until occupancy has been achieved.

SUPPORTING DOCUMENTATION

- Appendix A: Gore Buildings: Reasons for Designation
Appendix B: Engineer's Report, Jonathan Dee, John G. Cooke & Associates
Appendix C: Architectural Drawings, David Premi Architects

Schedule "B(i)"

To

By-law No. 18-321

THE GORE BUILDINGS (24-28 King Street East):

**The Skinner Building
24 King Street East, Hamilton**

**The Glasco Building
28 King Street East, Hamilton**

**STATEMENT OF CULTURAL HERITAGE VALUE AND DESCRIPTION OF HERITAGE
ATTRIBUTES**

Statement of Cultural Heritage Value or Interest

The four storey buildings located at 24-28 King Street East, Hamilton possess cultural heritage value due to their historical associations with the growth and commercial prosperity of the City of Hamilton in the nineteenth century and contextual associations with Gore Park and the King Street East streetscape. 28 King Street East also has physical design value as an example of the Victorian Style of architecture.

24 King Street East was constructed in 1875-6 for James A. Skinner. Skinner was a crockery merchant who opened his "China Palace" at another location around 1850 and the current building was built as an expansion. James A. Skinner and Co. was recognized as "the largest importer of crockery, glassware, etc. and largest shippers to Manitoba, British Columbia and the Northwest". Later, Minden's Ladies Wear operated in this location between 1924 and 1951.

The building at 24 King Street East was originally designed and constructed in the Victorian Style of architecture with vertical brick coursing, stone window sills, metal hood mouldings and a metal cornice. Several alterations have been undertaken to the building and only the brick façade (painted), three window openings on the fourth level and the cornice and brackets remain.

28 King Street East was constructed in 1874 for William H. Glassco & Sons to house their furrier business, established in 1843 and first located in a building further to the east along King Street East. The building housed a large cold storage vault that was considered to be advanced at time. G.F. Glassco & Co. operated in this location until 1931 and a succession of other furrier businesses subsequently operated out of the building.

The composition, design and materials of the building at 28 King Street East provide a representative example of Victorian architecture. At the time of its construction, the building was less elaborate than the buildings on either side; however, the building has retained most of its original architectural features on the upper levels of its front façade.

The buildings face Gore Park and are integral components of the King Street East streetscape and the character of the 'Gore' area. Gore Park is surrounded by largely intact groupings of three to four storey commercial row buildings, many displaying early architectural styles and high levels of craftsmanship in both design and construction.

Description of Heritage Attributes

24 King Street East (The Skinner Building):

The heritage attributes of the four storey building are derived from its historical and contextual value. The heritage attributes include the upper levels of the front façade of 24 King Street East, including, but not limited to:

- The brick façade of the third and fourth levels of the front façade;
- The window openings and stone sills on the third and fourth levels of the front façade;
- The cornice and stone end brackets;
- All surviving original brick and stone materials and features remaining under the existing storefront cladding and signage on the ground and second levels; and,
- The parapet walls.

Notwithstanding the above list of heritage attributes any alterations to the existing storefronts, entrances and signage on the ground and second levels and any structural changes to the building that are likely to affect the heritage attributes shall be regulated through the City's Heritage Permit process.

28 King Street East (The Glasco Building):

The heritage attributes of the four storey building are derived from its built heritage value as an example of the Victorian Style of architecture. The heritage attributes include the upper levels of the front façades of 28 King Street East, including, but not limited to:

- All stone masonry walls and pilasters on the second, third and fourth levels of the front façade;
- All window openings and sills on the second, third and fourth levels of the front façade;
- The original two-over-two wood window sashes and frames in the third and fourth level window openings;

- The wood framed picture windows and leaded transoms in the second level window openings;
- The projecting stone horizontal mouldings between the second and third levels and the third and fourth levels;
- The cornice and parapet walls;
- A stone pilaster at the northeast corner of the ground level; and,
- All surviving original stone materials and features remaining under the existing storefront cladding and signage on the ground level.

Notwithstanding the above list of heritage attributes, any alterations to the existing storefronts, entrances and signage on the ground level and any structural changes to the building that are likely to affect the heritage attributes shall be regulated through the City's Heritage Permit process.

Schedule "B(ii)"
To
By-law No. 18-321

THE GORE BUILDINGS (18-22 King Street East):

**The Kerr-Thomas Building
18-20 King Street East, Hamilton**

**The Smith-Thomas Building
22 King Street East, Hamilton**

**STATEMENT OF CULTURAL HERITAGE VALUE AND DESCRIPTION OF HERITAGE
ATTRIBUTES**

Statement of Cultural Heritage Value or Interest

The three storey buildings located at 18-22 King Street East, Hamilton possess cultural heritage value due to their historical associations with the growth and commercial prosperity of the City of Hamilton in the nineteenth century, their physical design associations with the architect William Thomas and the Renaissance Revival Style of architecture, and contextual associations with Gore Park and the King Street East streetscape.

18-20 King Street East was constructed circa 1840 and early occupants were Archibald and Thomas C. Kerr, who established their successful wholesale dry goods business there as early as 1848. 22 King Street East was constructed circa 1840 for H. E. Smith. By the 1850s, both buildings were under single ownership.

Architect William Thomas was considered a key figure in Canadian architecture, designing important buildings throughout Ontario as well as in other Provinces. The building's composition, design and materials provide a representative example of Renaissance Revival architecture dating to the pre-Confederation period and display a high-degree of craftsmanship. The buildings retain their original architectural features on the upper levels of their front façades and are among very few pre-Confederation stone commercial buildings remaining in Hamilton.

The buildings face Gore Park and are integral components to the King Street East streetscape and the character of the 'Gore' area. Gore Park is surrounded by largely intact groupings of three to four storey commercial row buildings, many displaying early architectural styles and high levels of craftsmanship in both design and construction.

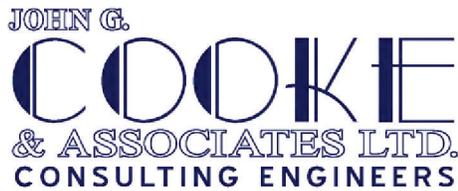
Description of Heritage Attributes

The heritage attributes of the three storey buildings are derived from their built heritage value as examples of the Renaissance Revival Style of architecture as designed by William Thomas,

architect. The heritage attributes include the upper levels of the front façades of 18-20 King Street East and 22 King Street East, including, but not limited to:

- All stone blocks, coursing, quoins and voussoirs on the second and third levels of the front façades;
- All window surrounds, sills and hood mouldings on the second and third levels of the front façades;
- The stone cornices and parapet walls of both buildings;
- All surviving original stone materials and features remaining under the existing storefront cladding and signage on the ground level; and,
- The gable roof and dormers of 18-20 King Street East.

Notwithstanding the above list of heritage attributes, any alterations to the existing storefronts, entrances and signage on the ground level and any structural changes to the building that are likely to affect the heritage attributes shall be regulated through the City's Heritage Permit process.



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July 5, 2021

Attn: Mr. Jeff Feswick
(jeff@historiarestitution.ca)

Project No. 21063

**Re: Gore Park Façades
18 to 28 King St E – Consolidated Approach and Rationale**

Dear Mr. Feswick,

We have previously written three letters with respect to the façades at 18 to 28 King St. E, relaying our initial thoughts and further developing the approach to these façades in line with our scope of work. Given the further developments in our understanding, and pursuant to the request from Megan Hobson for the upcoming heritage permit application she will be making on behalf of the project, we hereby provide this letter which may be considered as a consolidated and updated report, reflecting our present understanding of the façades and the approach for each. This letter is meant to supplement but also replace the letters we have previously issued, and make it unnecessary to read the latter in the context of a heritage application that otherwise provides the broader context. There is some repetition of text from previous letters. The conclusions arrived at herein do not differ significantly from those that we communicated previously.

Accompanied by Historia Restoration staff, the undersigned recently visited the site with Megan Hobson on Friday June 25, 2021, as an opportunity to further review conditions and discuss the approach to the façades further. Your staff was able to remove interior finishes in several areas which advanced our understanding. We are also now in receipt of the 2015 report on conditions at 24 and 28 King prepared by Tacoma Engineers.

The buildings in question include four distinct façades, at 18-20, 22, 24, and 28 King St. E. For each, it is understood that the project intent is to demolish the building behind. Below, each façade is discussed in turn, beginning with a description of the condition and construction, the recommended conservation approach (where we believe this is possible), and some details we have identified to be developed further as the project proceeds to design development.

Façade at 18-20 King St E

Construction and Condition

This façade consists of ashlar exterior stone with an interior wythe of squared rubble stone backup built to course. The exterior ashlar appears to consist of sandstone, likely Whirlpool Sandstone which was in apparently common use in the City in the era of construction, though conclusively determining this would require the appropriate laboratory analysis. The facade is load-bearing and includes wood window headers and beam connections set into the backup masonry. The interior wythe includes inset bands of wood, to act as a nailer strip for fastening interior finishes and windows. The exterior wythe is self-supporting, with round arches or lintels (sometimes with false joints to appear as a flat arch) to span window openings. The lower level of masonry is mostly nonexistent, having been removed to presumably accommodate a large storefront opening. During this previous intervention steel beams were introduced below the 2nd floor window piers, as well as steel columns to the foundation wall.

The façade is generally intact and plumb but some out-of-plane movement is apparent at the west end. Though the displacement does not register conclusively on the 3D scan, the façade is quite clearly separating from the west return wall and a continuous crack is visible at the interior from the third floor where the return wall is constructed of brick (see Fig. 1). On the most recent inspection, interior finish removals allowed access to view the keying/interface between at the second floor, which at this level

consisted of stone masonry. While at this level keying of the stone was again noted, the continuation of the crack was visible (see Fig. 2). The separation of the façade from the return wall would be a significant concern if left unaddressed. As the conservation intent, described below, is to introduce both temporary and permanent lateral restraint to the faced, and we understand the plan is to move forward with the project promptly, we believe the interim risk posed by this condition is relatively low.



Fig 1: 18-20, 3rd floor, West return wall separation



Fig 2: 18-20, 2nd floor, West return wall separation

Generally, the wall masonry is in fair-to-good condition, with the notable exception of the upper courses. These are in poor condition, owing to the water entry from the failed roof along the full length of the wall. The roof includes a gutter profile along its edge, which was roofed using the same shingles as the balance of the roof, and which has rotted and failed along the full length. This is directing all water that flows down the roof onto the tops of the cornice stones. These cornice stones and the courses immediately under them have many washed out joints and must be reset. The stones themselves are in better condition than one might otherwise expect, and are repairable. The piers to either side of the upper masonry must also be rebuilt. See Figures 3, 4, and 5.



Fig 3: 18-20, failed roof rotted framing above cornice



Fig 4: 18-20. Failed roof, pier at upper corner of façade

The large amount of water that has been directed at this wall has resulted in areas of efflorescence on the façade. This is caused by moisture within the wall being transported to the surface of the masonry, where it dries. When the water dries it leaves behind any dissolved salts on the surface. We expect that the masonry is currently quite saturated and masonry can take many years to dry fully. As a result,

we would expect that even if removed from the surface today, these salt deposits will quickly return. See Figure 6.



Fig 5: 18-20, cornice and bands of stone below.



Fig 6: 18-20, upper façade, efflorescence noted

The ground level masonry that remains was not treated with much consideration during previous interventions. Generally, stones were chipped or partially cut to receive new material, including the beams. If the intention were to restore this stone to its original appearance, a large number of Dutchman and other similar repairs would be required, introducing new material matching to the old. Paint is also present and ought to be removed. See Figure 7.



Fig 7: 18-20 & 22, example of ground level masonry

It is understood that the round dormers in the roof, set back from the wall are required to be retained for heritage purposes but it is clear that the framing for these is compromised. The roof framing all around them is also compromised and much of it is rotted. While preserving the existing framing and material for these dormers is not feasible, their general profile and position on the building was captured in the 3D laser scanning data and their form could be replicated with new material.

Wood elements that are embedded throughout the backup masonry, such as beam ends, lintels, and nailer strips, are in varying condition. Rot is evident on some. Other elements appear to have fared well. While rotted elements must naturally be addressed, there is also the potential for hidden rot, either internally, or at the side of the member facing the interior of the wall (and so not visible). The nailer strips introduce weak points in the wall and these will be removed.

Conservation Approach

The proposed approach is to stabilize the façade and to retain it in-situ for eventual permanent attachment to the new building to be constructed on the site. A temporary steel frame would be erected on the sidewalk in front of the building, to temporarily support the façade during demolition and construction. We recommend the installation of a permanent steel “skeleton” at the interior of the existing masonry, following the pier and spandrel lines. This would consist of vertical and horizontal steel members, regularly anchored to the existing masonry. Aside from providing a convenient means by which to attach to the temporary and permanent structures for lateral stability that is independent of existing floor levels, the steel framing would tie together the façade elements. This would help ensure it behaves as a unit during subsequent modifications to remove embedded structural elements or modify load paths for gravity loads.

The conservation work would occur in two phases, with an initial *stabilization* phase and a future *conservation* phase. The final stone repairs, finishpointing, window installation, etc. would occur in the latter.

The intended minimum scope for *stabilization* phase work at the 18-20 King façade is as follows:

- Removal and salvage of cornice and upper level masonry for off-site storage and repairs.
- Repointing of several courses of masonry below the upper level to be removed (to be completed in advance of removals above in order to limit removal extent).
- Install stainless steel helical anchors, located at mortar joint intersections (to minimize damage to stone arrises), at several piers where out-of-plane deformation is apparent.
- Localized rebuilding and separation of return walls, to suit extent of return wall to be retained, which is to be coordinated with new construction.
- Protect the top of the wall (below removals) with a plywood cover and peel-and-stick membrane.
- Removal of all interior finishes to expose interior masonry.
- Selective repointing of interior masonry and of exterior masonry throughout.
- Removal of all wood nailer strips and replacement with masonry.
- Install permanent steel ‘skeleton’ frame anchored to interior of the masonry, following the spandrel and pier lines. This frame will be used to link the façades at 18-20 and 22 King together, ensure integrity of the façade masonry is maintained, as well as provide an attachment point for temporary and permanent restraint of the façade for lateral loads.
- Install temporary steel framing to retain façade prior to demolition of building behind.
- Ensure gravity loads are brought to foundations, or provide new permanent foundation system, depending on coordination with new construction.
- Install survey targets and/or vibration monitors for monitoring façade for movement/vibration during new construction (depending on foundation conditions, soil conditions, construction methodologies).

Details to be Developed and Other Considerations

While this is not comprehensive, investigations and discussions to date have determined that there are a number of known aspects that require further development by the project team:

- Wall Assembly: The masonry is saturated in many upper areas and we expect this to take many years to fully resolve. While the damage to the stone from observed efflorescence appears to be fairly minimal so far, and we wouldn’t expect this to change, the result of continuing efflorescence would not be very attractive. If this is a serious concern, we believe that providing a means for moisture to dry towards the interior would help mitigate the issue. This could be done formally by having a building science consultant design a dynamic buffer zone, or less so by ensuring the project architects leave an air space with some natural ventilation on the interior side of the masonry wall. Though contrary to sustainability goals in general, the more waste heat that can be allowed to pass through this wall will help with overall drying, and mitigating future deterioration.

- **Embedded Wood:** The wood elements embedded in the wall must be assessed individually and thought put to the potential for future rot (and how to then address) if any wood is to remain embedded in the masonry. We do not believe wholesale replacement of backup masonry lintels with new stainless steel loose lintels is at all inappropriate if desired. The wood nailers will be addressed and replaced with masonry, in order to achieve as much masonry integrity as possible prior to temporarily stabilizing the façades.
- **Ground Level Masonry:** Given the condition of the ground level masonry, a high percentage of stones will require Dutchman or other repair. While this is more of an architectural consideration, we can confidently say that a perfect match between new and existing materials will be very difficult to achieve, and an imperfect result may give a mottled or otherwise unpleasant look. It may be appropriate to leave these stones as an artifact, or integrate them into the new façade material in a way that is complementary, and without expecting them to look perfect.
- **Foundation Wall:** It is understood that a new concrete foundation wall will be constructed below this façade for lower level parking. We believe construction is achievable, and that a methodology can be developed using the existing steel beams and columns at the ground floor level, whereby the existing foundation wall is removed and replaced sequentially. This will need to be coordinated with the new construction details.
- **Construction Monitoring:** For façades conserved in-situ, monitoring is often required depending on soil conditions and construction methodologies. Coordination is required to determine these. For vibrations we often recommend following the limits established in the DIN 4150-3 Standard, per line 3 of Table 1, copied below. While these limits are quite conservative, and are sometimes prone to being exceeded, we could make further determinations on limits based on observations before or during construction.

Table 1: Guideline values for vibration velocity to be used when evaluating the effects of short-term vibration on structures

Line	Type of structure	Guideline values for velocity, v , in mm/s			
		Vibration at the foundation at a frequency of			Vibration at horizontal plane of highest floor at all frequencies
		1 Hz to 10 Hz	10 Hz to 50 Hz	50 Hz to 100 Hz*)	
1	Buildings used for commercial purposes, industrial buildings, and buildings of similar design	20	20 to 40	40 to 50	40
2	Dwellings and buildings of similar design and/or occupancy	5	5 to 15	15 to 20	15
3	Structures that, because of their particular sensitivity to vibration, cannot be classified under lines 1 and 2 and are of great intrinsic value (e.g. listed buildings under preservation order)	3	3 to 8	8 to 10	3

*) At frequencies above 100 Hz, the values given in this column may be used as minimum values.

Building and settlement monitoring may also be advisable depending on excavation, excavation shoring, and soil conditions. Often monitoring of excavation shoring for lateral movement is already a project requirement, and it may be possible to add scope to include targets placed along any retained facades. Depending on soil and foundation conditions it may also be advisable to seek comment from geotechnical consultant regarding the potential for settlement due the lowering of the groundwater table that may be caused by the excavation and/or the future below-grade structure. Some soils are especially prone to this issue.

Façade at 22 King St E

Construction and Condition

The façade of 22 King is generally similar to that of 18-20 King, except that it is non-loadbearing and the backup material is brick. Like 18-20, steel framing was introduced to dispense with much of the original ground level masonry. Wood elements are similarly embedded in the interior masonry.

In term of general stability, the façade at 22 King appears to be plumb in the out-of-plane direction. However, the upper level appears to have moved laterally, in-plane, to the east, towards the building at 24 King. This is most evident at the third-floor pier adjacent to that building, where one stone has slid along its bed joint with the stone below (see Figs 8 and 9). The stones above have slid east, towards the building at 24, while the stones below have remained in place. There is a significant crack visible in the interior backup brick at this location.



Fig 8: 22, cornice and bands of stone below. Sliding indicated. Fig 9: 22, sliding at base of 3rd flr pier, E side.

The differential movement at the upper level of the façade is due to differences in construction between levels. Within the second level, the third floor framing is visible and is supported by a series of beams and piers along the east and west sides of the building. These piers and the façade backup masonry appear to be independent from the building at 24 King. However, at the roof framing, this condition is different. The roof joists are let into the brick return wall to the east (24 King) and plaster removals revealed keying between the façade backup and the east return wall. We believe this difference in construction and connectivity explains the observed displacement. It suggests that the upper level of 22 King is being pulled eastward by 24 King. The lower levels are structurally separate and are not.



Fig 10: 22, beam and piers underside 3rd floor framing



Fig 11: 22, roof framing, connected to adjacent bldg's.

The effect of the movement from 24 King appears is most pronounced at but is not be limited to the easternmost pier. Some stress has been put on the other piers of this façade. For both intermediate piers, finish removals uncovered a very slender brick backup pier, and both were slightly, but visibly rotated. We believe that these intermediate piers may be stabilized in-situ, but not so for the easternmost pier, which would require rebuilding.



Fig 12: Cornice and stones above, at 22 King



Fig 13: Deteriorated stone below cornice.

Aside from the above issue, much of the masonry of the façade is in fairly good condition given the circumstances, and certainly is repairable in-situ, with the notable exception of the cornice and the courses immediately above and below it. As with 18-20 King, the upper courses must be removed and reset, and we again recommend they be removed off-site for repair, with the wall to be capped temporarily. Unlike 18-20 King, the band of stones immediately below the cornice is in very poor condition in this case, and the stones are not repairable. Small corbels set into this band of stone are similarly deteriorated. This has been caused by moisture transmission leading to subflorescence and possibly freeze-thaw damage, resulting in extensive flaking and delamination of the stone. In some places it is possible to remove a delaminated piece of the sandstone and expose a layer of white salt behind it. This band of stone will require replacement with a new stone units, cut from a similar sandstone. See Figures 12 to 14.



Fig 14: Subflorescence and stone flaking

Conservation Approach

As for 18-20, the proposed approach is to stabilize the façade and to retain it in-situ, with the same overall approach. Given the slender piers and stress from the movement of 24 King, the use of a steel skeleton frame is, in our view, critical in this case. Again, the conservation work would occur in two phases, with an initial *stabilization* phase and a future *conservation* phase, with the upper level masonry to be removed in the former and reinstated in the latter. Like 18-20, the construction would include a

foundation wall replacement, and this would be facilitated by sequencing and making use of the existing storefront beams.

The intended minimum scope for stabilization phase work at the 22 King façade is as follows:

- Removal and salvage of cornice and upper level masonry for off-site storage and repairs.
- Removal of the band below the cornice and eventual replacement with new stone cut to suit.
- Repointing of several courses of masonry below the upper level to be removed (to be completed in advance of removals above in order to limit removal extent).
- Rebuild easternmost pier, for two uppermost storeys, plus selective removal and shoring of masonry above it to accommodate.
- Protect the top of the wall (below removals) with a plywood cover and peel-and-stick membrane.
- Removal of all interior finishes to expose interior masonry.
- Selective repointing of interior masonry and of exterior masonry throughout.
- Removal of all wood nailer strips and replacement with masonry.
- Install permanent steel 'skeleton' frame anchored to interior of the masonry, following the spandrel and pier lines. This frame will be used to link the façades at 18-20 and 22 King together, ensure integrity of the façade masonry is maintained, as well as provide an attachment point for temporary and permanent restraint of the façade for lateral loads.
- Install temporary steel framing to retain façade prior to demolition of building behind. Unlike 18-20 King, this building does not have its own return walls to contribute to lateral stability during construction and this will be taken into account.
- Ensure gravity loads are brought to foundations, or provide new permanent foundation system, depending on coordination with new construction.
- Install survey targets and/or vibration monitors for monitoring façade for movement/vibration during new construction (depending on foundation conditions, soil conditions, construction methodologies).

Details to be Developed and Other Considerations

As for 18-20 King.

Façade at 24 King St E

Construction and Condition

The façade of 24 King consists of stuccoed multi-wythe brick. The stucco is failing and has debonded and spalled in many areas. Aside from the ground floor interventions, the intermediate windows piers at levels 2 and 3 have been removed and a steel beam introduced bearing on slender piers that do not appear to be keyed into the adjacent piers. Original pressed-metal window hoods once present at all second through fourth level windows have been removed. It appears as though concrete may have been introduced into the wall in some areas, but this is not confirmed.

The preceding description of differential in-plane movement at 22 King are suggestive of a problem with the building at 24 King. The previous interventions on the façade at 24 King to remove piers and create large window openings at three of the four floors is likely a contributing factor, especially as it looks as though the remaining piers at each end were built with some stack bonded brick to more easily create the reveals in their profile. Notably, the ground level pier at the interface with 28 was also removed once a steel column was installed below storefront beams, despite that pier being present for all levels above. This represents a significant lack of vertical continuity of stiffness in this façade. Overall, the previous interventions with respect to pier removals have significantly impacted the façade's in-plane lateral strength and stiffness. We believe this is a contributing factor to issues observed at 22 King and possibly at 28 King, and we suspect that there could also be some interaction or interdependence between the façades at 24 and 28 King.

Though the uppermost two floor levels were not accessed due to safety concerns about severe water damage at the floor structure (see Fig. 15), the lower two levels were accessed. The interior of the brick

masonry piers in these locations was noticeably saturated throughout. This is causing significant deterioration of the brick – not just spalling, but complete loss of integrity in many cases – likely due to repeated freeze-thaw cycles while in a saturated condition (see Fig. 16).

The exterior brick was noted to have been roughened with a chipper to help with the application of the existing stucco. The piers at either end of the façade include stack-bond masonry over much of their height, affecting their integrity and their resistance to in-plane lateral loads. There is evidence that these stack bond bricks at the piers are delaminating and the continuous vertical mortar joints have opened up.



Fig 15: 24 King, 3rd floor level, severe water damage.



Fig 16: 24 King, saturated, deteriorated brick.

Conservation Approach

We do not believe it is reasonable to retain and conserve this façade in-situ. In fact, it is likely a contributor to the issues on adjacent façades. Similarly, we do not advise salvaging and reusing the existing masonry material given the possibility of introducing saturated or otherwise compromised brick into a new assembly. Previous use of non-permeable cement parging products has retained moisture and resulted in damaged and saturated bricks that may not be suitable for re-use.

It is understood that the project intent is to dismantle the existing façade, salvage the stamped metal cornice at roof level, and rebuild the façade with new material. We support this approach from a technical perspective. We leave the decision on replication of previous conditions more to the architectural and heritage planning members of the project team, though we are confident that this is feasible from a technical point of view.

Details to be Developed and Other Considerations

New material selection is likely the top priority here, as well as providing a suitable substrate for reattachment of the salvaged and repaired decorative metal elements. This aspect is primarily driven by other members of the project team, including the architect and building structural engineer.

Façade at 28 King St E

Construction and Condition

The façade of 28 King is constructed of ashlar stone, again believed to be Whirlpool Sandstone. The façade is non-loadbearing, except for a very small strip of flooring. The stones are generally very large, and stacked. Notably, there is very little interior backup masonry, except for some brick backup around windows. Piers have no backup masonry and interior finishes are affixed directly to the interior face of the pier stones.

The façade at 28 King has an obvious and significant issue with respect to the stability of the masonry, especially at the northeast corner. The east wall of the building is moving outward (towards the east), bringing part of the north façade masonry along with it. It is our understanding that existing risks of

collapse have already been considered by the project engineer and municipality, and mitigated by closing the adjacent laneway (at 30 King St E) and the sidewalk in front of the building, and so we are not commenting further in that regard.

The entire easternmost pier and easternmost spandrel panel of the façade at 28 are displaced and in need of rebuilding. The east pier stones are keyed into the east wall which itself is significantly out of plumb. The east wall has pulled on the façade, causing issues that are most apparent in the east bay (see Figs. 17 and 18). The uppermost level remains a question, and we expect significant rebuilding to be required here too. Finally, there is evidence of racking in this façade.

The uppermost level remains a question, and we expect significant rebuilding to be required here too.



Fig 17: 28 King, E-most pier, looking down, note rotation, and gaps



Fig 18: 28 King, E-most pier/spandrel, looking up note gaps in head joints.

The condition of the masonry units themselves is generally quite good and is generally repairable, with the notable exception of the ground level masonry. The latter is mostly missing and damaged following the previous creation of large storefront openings as was done for other façades here.

Conservation Approach

While the stone itself is in good condition, the general stability concerns are such that a departure from the in-situ retention approach, as established for 18-22, is recommended in this case. In keeping with the minimal intervention approach to heritage conservation, the next step would be to salvage the existing material, which is of high quality, and to reinstate it. We recommend systematically dismantling the stone façade, identifying and labeling each stone, and transporting these to an off-site storage facility for repairs and to wait until the new construction is ready to receive them back on the site. This approach is not an uncommon one – for example, the stones for the entrance portals of the now-demolished IBM/Celestica buildings at Don Mills & Eglinton in Toronto are presently in storage for eventual reinstatement on an entirely new building.

Given the possibility of inter-reliance between this façade and 24 King, as well as the east return wall, the demolition/dismantling methodology will be such that work proceeds sequentially between the buildings across all levels.

The new construction at this facade would include a new concrete foundation wall built to receive both the new stones and an interior steel framing system, complete with a new anchorage and lateral support system for the existing stone, tied in turn to the new building structure.

It is fortunate that the nature of the construction of 28 facilitates rebuilding, with large ashlar stones and minimal backup material, as opposed to the rubble stone backup present throughout 18-22. The removal and reinstatement will also allow construction with an appropriate system for lateral anchorage and attachment, which we suspect is absent in the existing construction. The large size of the existing

stone units, with stones extending for full pier heights for example, and the lack of backup masonry result in a façade that is particularly well to removal and reinstatement using a crane and slings or even existing lewis pin holes, and working from a lift if to avoid the risks of working from scaffolding.

We are aware that some community members or authorities having jurisdiction may advocate for in-situ retention for this façade as well. We do not believe such an approach is advisable. A significant amount of stone is known to be required to be removed and reset already. However, we believe it is very likely that during the course of work we will find that additional stones have compromised bed joints or have been displaced, and are required to be reset. We can also foresee issues with a mason attempting to rebuild a significant portion of the façade while matching it to the lines of a retained portion, which is out of plumb/level. It will also be awkward working a new permanent framing and anchorage system around and into an existing assembly, especially at inwardly projecting stones and where the tops of stones are not accessible for new anchorage, as discussed in the section below. Finally, though secondary, is our opinion that the alternative, with two partial approaches, would be asking the Owner to carry additional cost and significant additional, and in our view unreasonable, construction risk.

Details to be Developed and Other Considerations

- The projecting cornice and sill band stones are noted to have counterbalancing interior cantilevers, to mitigate their tendency to rotate outward. The interior projections will likely conflict with This will need to be addressed when reinstating the stones and in the design. We propose to recut the backs of the stones, and restrain them from rotating by way of the new stainless steel anchorage system. A similar approach was developed by the undersigned at the Sir John A. Macdonald Building and lobby addition to the American Embassy, both in Ottawa, ON.
- Similar consideration to addressing the ground level masonry will be required, as noted for 18-20 King, as the stone at this level has a fair amount of damage.

We trust the above provides a comprehensive description of the approach to the façades at 18-28 King St. E., and that while there certainly remains work to be done, the information and opinions herein are helpful in the team's application for permits and approvals from authorities having jurisdiction. As always, if there are any questions that follow from the above or if there is additional input that you might find helpful, please don't hesitate to contact the undersigned.

Sincerely,

JOHN G. COOKE & ASSOCIATES LTD.



Jonathan Dee, P.Eng., ing., CAHP
Associate

JD/jd
21063/ltr_4

SEAL

no.	FOR REVIEW	description	date
1	APR 23, 2021		

PROJECT: GORE BLOCK FACADES
 HAMILTON, ONTARIO
 RETENTION PROJECT

DRAWING: NORTH FACADE ELEVATION

DESIGNED BY: ID

DRAWN BY: RC

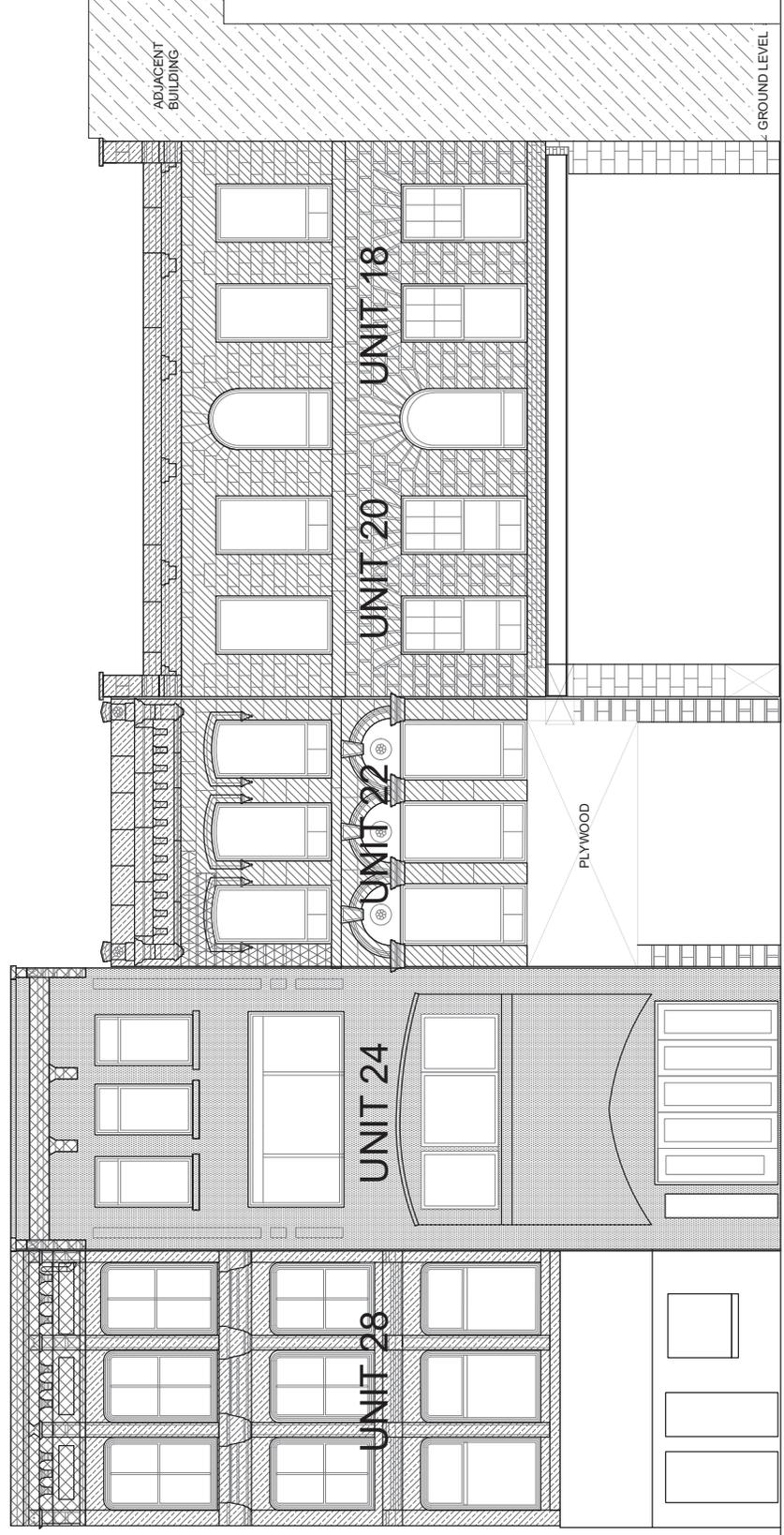
SCALE: NTS DATE: 04-26-2021

PROJECT No: 21063

DRAWING No: SK-S1

LEGEND

-  EXISTING FACADE MASONRY TO BE REBUILT PRIOR TO BEING RETAINED IN-SITU.
-  EXISTING FACADE MASONRY TO BE RETAINED IN-SITU.
-  EXISTING FACADE MASONRY TO BE DISMANTLED, SALVAGED, REPAIRED AS REQ. OFF SITE, AND RESET.
-  EXISTING FACADE TO BE DISMANTLED, REPLACED WITH NEW MATERIAL.
-  DECORATIVE ELEMENTS (METAL CORNICE AND SIM.) TO BE REMOVED, SALVAGED AND REINSTATED



1
 SK-S1

NTS NORTH FACADE ELEVATIONS

A03.11



1 Drawing No.

2 Scale: 1/8" = 1'-0"

3 Date: 2021-05-27

4 Checked By: [Signature]

5 Project No.: 192702

6 Book: 11

7 Drawing Title: PRELIMINARY FLOOR PLANS

8 Client: [Signature]

9 Date: 2021-05-27

10 Drawing No.: 11

11 Scale: 1/8" = 1'-0"

12 Checked By: [Signature]

13 Project No.: 192702

14 Book: 11

15 Drawing Title: PRELIMINARY FLOOR PLANS

16 Client: [Signature]

17 Date: 2021-05-27

18 Drawing No.: 11

19 Scale: 1/8" = 1'-0"

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21 Project No.: 192702

22 Book: 11

23 Drawing Title: PRELIMINARY FLOOR PLANS

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25 Date: 2021-05-27

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29 Project No.: 192702

30 Book: 11

31 Drawing Title: PRELIMINARY FLOOR PLANS

32 Client: [Signature]

33 Date: 2021-05-27

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45 Project No.: 192702

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52 Checked By: [Signature]

53 Project No.: 192702

54 Book: 11

55 Drawing Title: PRELIMINARY FLOOR PLANS

56 Client: [Signature]

57 Date: 2021-05-27

58 Drawing No.: 11

59 Scale: 1/8" = 1'-0"

60 Checked By: [Signature]

61 Project No.: 192702

62 Book: 11

63 Drawing Title: PRELIMINARY FLOOR PLANS

64 Client: [Signature]

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238 Book: 11

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241 Date: 2021-05-27

242 Drawing No.: 11

243 Scale: 1/8" = 1'-0"

244 Checked By: [Signature]

245 Project No.: 192702

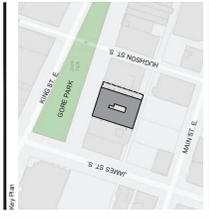
246 Book: 11

247 Drawing Title: PRELIMINARY FLOOR PLANS

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 Conversion
 Mixed-Use Building
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 Hamilton, ON L8P 1A5, CANADA

cpai | 905-522-0220
 100 Wellington Street West
 Suite 1000
 Hamilton, ON L8P 1H1
 www.cpaiconsultants.com
 interior architecture
 urban design

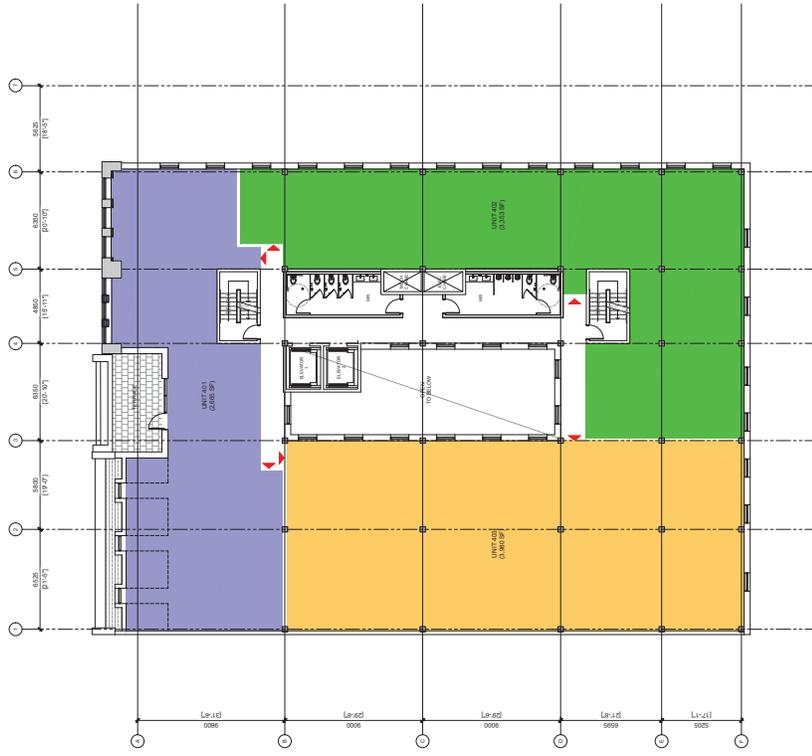
Drawings are not to be scaled.
 Contractor must verify all dimensions on the job and report any discrepancies immediately. Discrepancies are the responsibility of the contractor. The contractor must be advised of the completion of the work.
 This drawing is not to be used for construction without the approval of the architect.
 Scale



02	ISSUED FOR INFORMATION (2)	2021-07-05
01	ISSUED FOR INFORMATION	2021-06-01
No.	Issue/Revisions	Date
01	Issue/Revisions	Date
Drawing Title		
PRELIMINARY FLOOR PLANS		
Project No. 152102		
Scale		
Sheet No.		
Drawing No.		

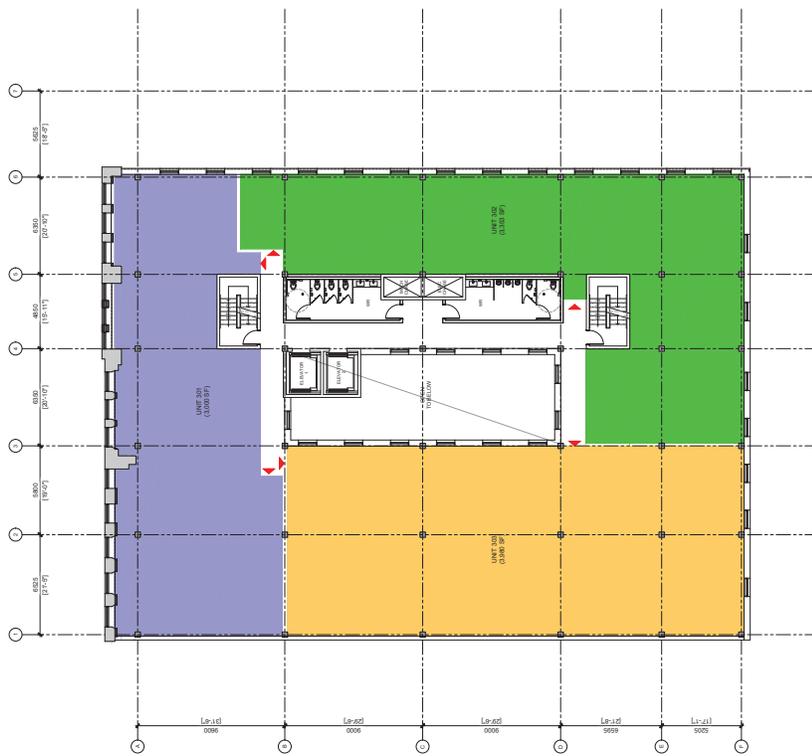


A03.02



FLOOR PLAN STATISTICS:	
UNIT 401	2,665 SF
UNIT 402	3,333 SF
UNIT 403	3,254 SF
UNIT 404	9,098 SF
LEASABLE AREA:	922.83 M ²
GFA:	1,160.00 M ²

2 FOURTH FLOOR PLAN
 SCALE: 1/32"



FLOOR PLAN STATISTICS:	
UNIT 301	3,000 SF
UNIT 302	3,302 SF
UNIT 303	3,002 SF
UNIT 304	10,333 SF
LEASABLE AREA:	800.00 M ²
GFA:	1,216.00 M ²

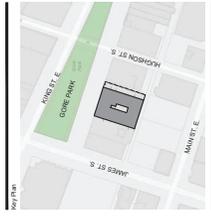
1 THIRD FLOOR PLAN
 SCALE: 1/32"

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 100 Wellington Street West
 Suite 1000
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 info@cpai.ca
 www.cpai.ca
 interior architecture
 urban design

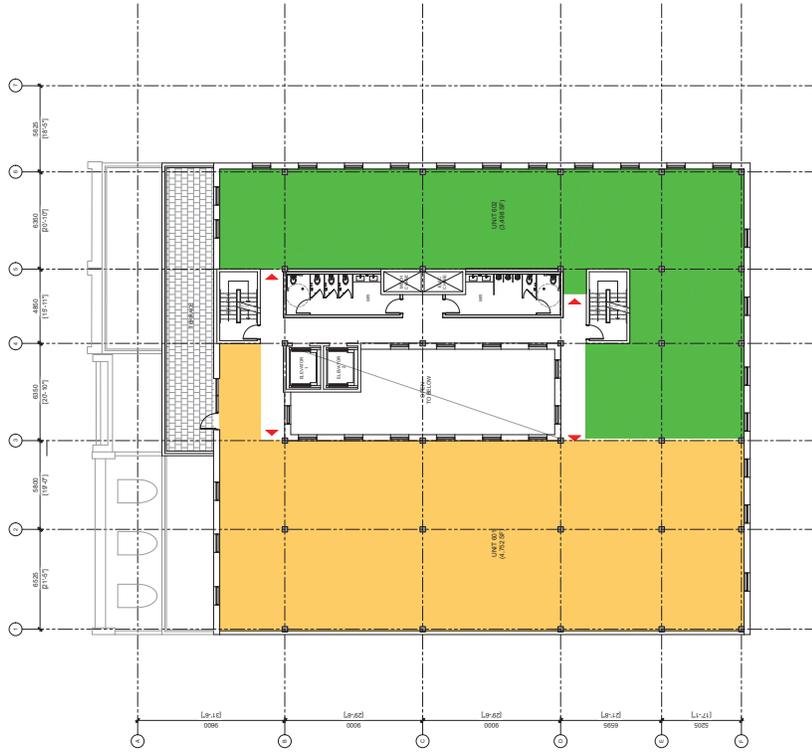
Drawings are not to be scaled.
 Contractor must verify all dimensions on the job and report any discrepancies immediately. Errors in drawings are the responsibility of the architect. The architect shall not be held liable for the construction of the work.
 This drawing is not to be used for construction without the approval of the architect.
 Date: _____
 Scale: _____



02	ISSUED FOR INFORMATION (2)	2021-07-04
01	ISSUED FOR INFORMATION	2021-06-04
No.	Issue/Revisions	Date
Drawing Title:	PRELIMINARY FLOOR PLANS	
Project No.:	152102	
Sheet No.:	05	
Checked By:	[Signature]	
Project No.:	152102	Sheet No.:
Drawn No.:	152102	Scale:

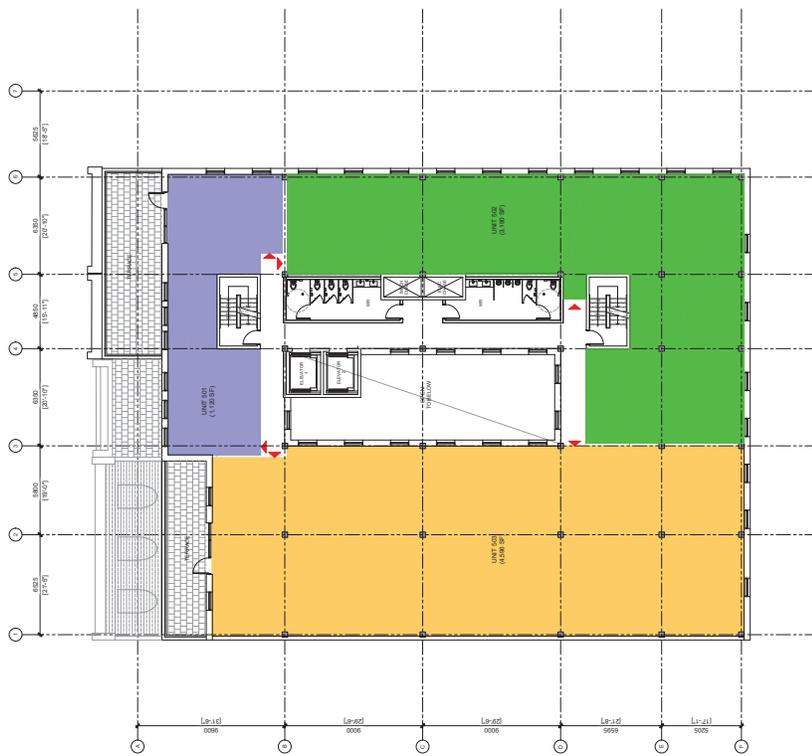


A03.033



FLOOR PLAN STATISTICS:	
UNIT 601	4,792 SF
UNIT 602	3,483 SF
UNIT 603	4,792 SF
UNIT 604	4,792 SF
UNIT 605	3,483 SF
LEASABLE AREA:	766.45 M2
GFA:	992.38 M2

2 SIXTH FLOOR PLAN
 SCALE: 1:50



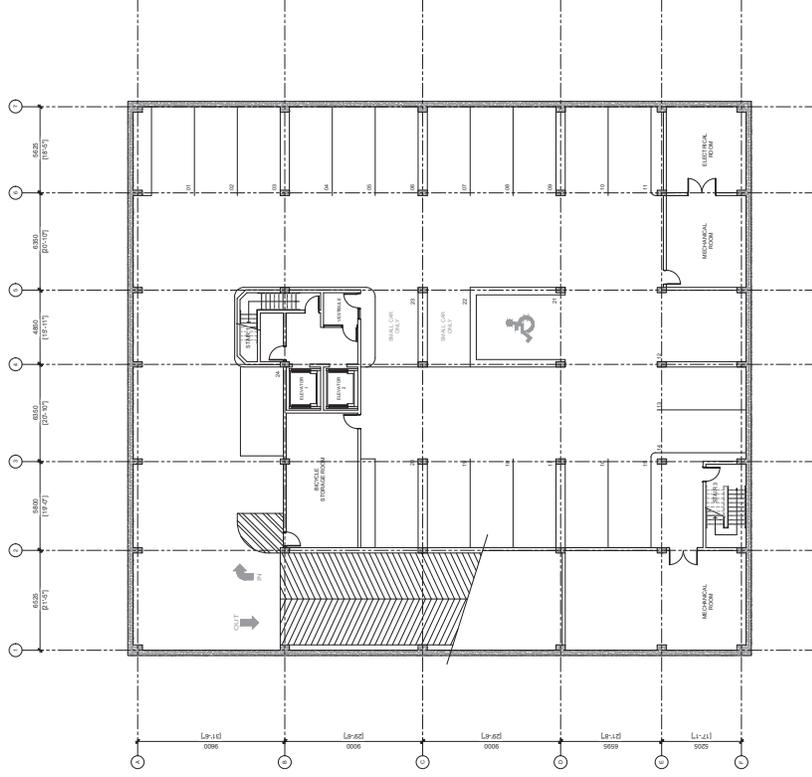
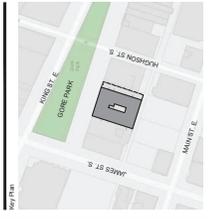
FLOOR PLAN STATISTICS:	
UNIT 501	1,130 SF
UNIT 502	3,130 SF
UNIT 503	4,792 SF
UNIT 504	4,792 SF
UNIT 505	3,483 SF
LEASABLE AREA:	157.62 M2
GFA:	1,595.62 M2

1 FIFTH FLOOR PLAN
 SCALE: 1:50

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interiors
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urban design

Changes are noted in red.
 Contractor must verify all dimensions on the job and report any discrepancies immediately. Dimensions shown on drawings are for information only and are not to be used for construction without being confirmed by the contractor. This drawing is not to be used for construction without being confirmed by the contractor.
 Scale



1 UNDERGROUND PARKING LEVEL
 SCALE: 1/8" = 1'-0"

02	ISSUED FOR INFORMATION	2021-07-05
01	ISSUED FOR INFORMATION	2021-06-02
No.	Issue/Revisions	Date
Drawing Title:		
PRELIMINARY FLOOR PLANS		
Project No.: 182102		
Scale:		
Drawing No.: A03.04		

A04.11

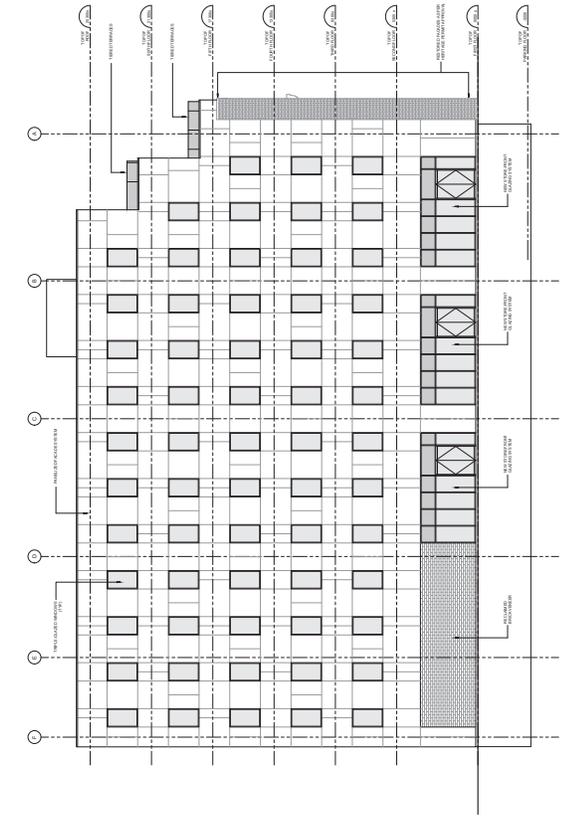
Hughson Business Space
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 15-30 King Street East
 Hamilton, ON L8P 1A5, Canada

CPAI
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 25 Wellington Street
 Hamilton, ON L8P 1H1

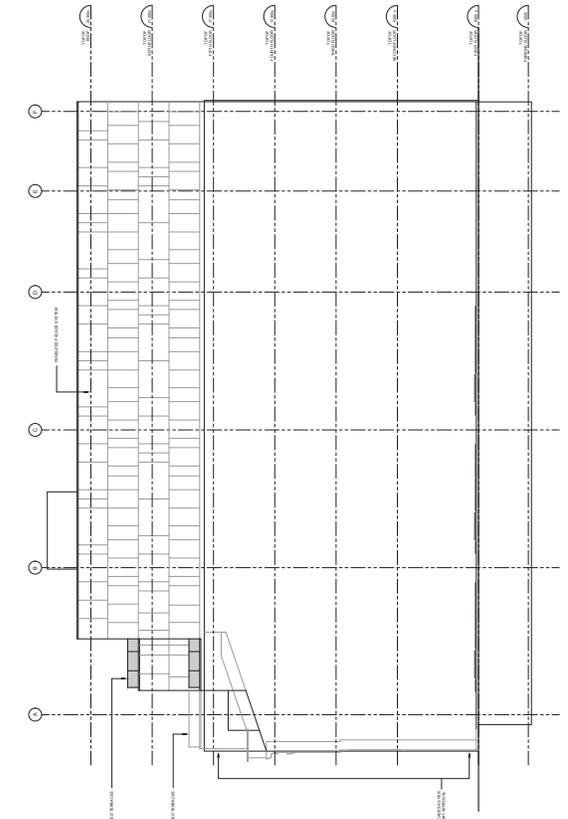
Drawings are not to be used for construction until the contractor has verified all dimensions on the job and reported any discrepancies to the architect in writing. The architect shall not be held responsible for any errors or omissions in the drawings. This drawing is not to be used for construction until the contractor has verified all dimensions on the job and reported any discrepancies to the architect in writing.



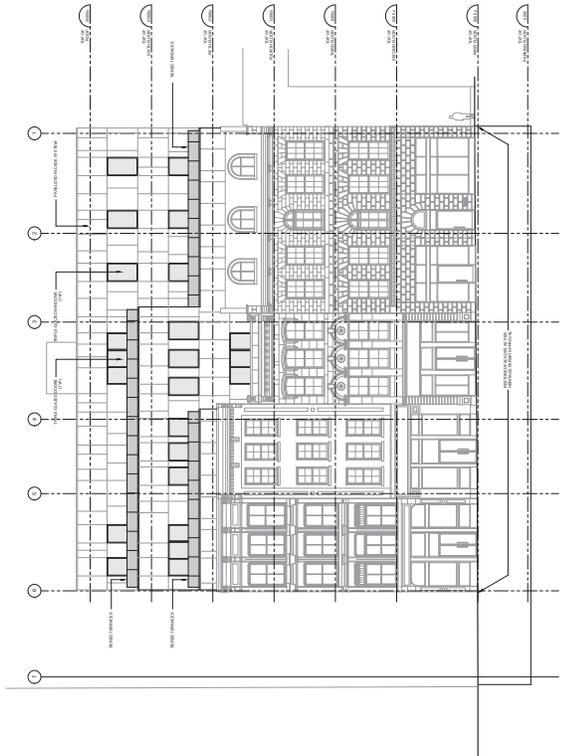
02	ISSUED FOR INFORMATION (2)	2021-07-01
01	ISSUED FOR INFORMATION	2021-06-01
Drawing Title: PRELIMINARY EXTERIOR ELEVATIONS		
Client Name:	03	Checked By:
Project No.:	152102	Scale:
Drawing No.:		



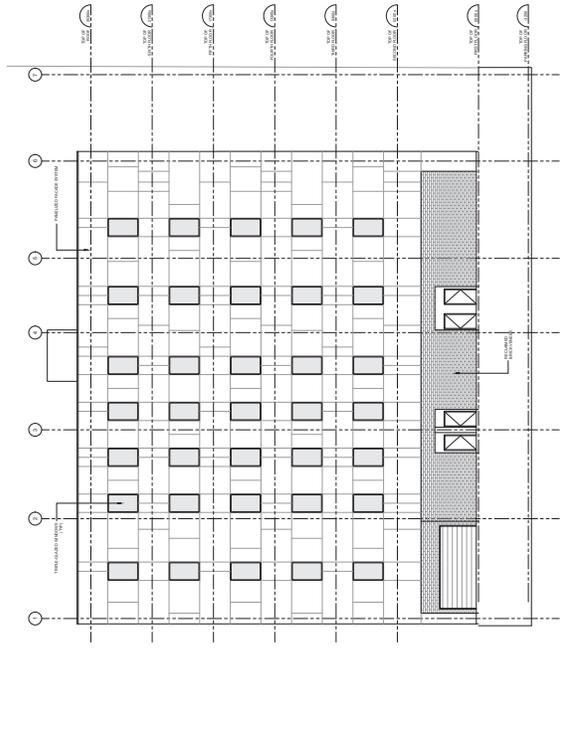
2 SIDE ELEVATION (EAST)
 SCALE 1/8" = 1'-0"



4 SIDE ELEVATION (WEST)
 SCALE 1/8" = 1'-0"



1 FRONT ELEVATION (NORTH)
 SCALE 1/8" = 1'-0"



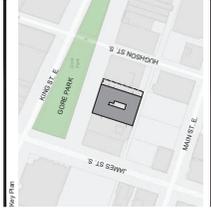
3 REAR ELEVATION (SOUTH)
 SCALE 1/8" = 1'-0"

A05.11

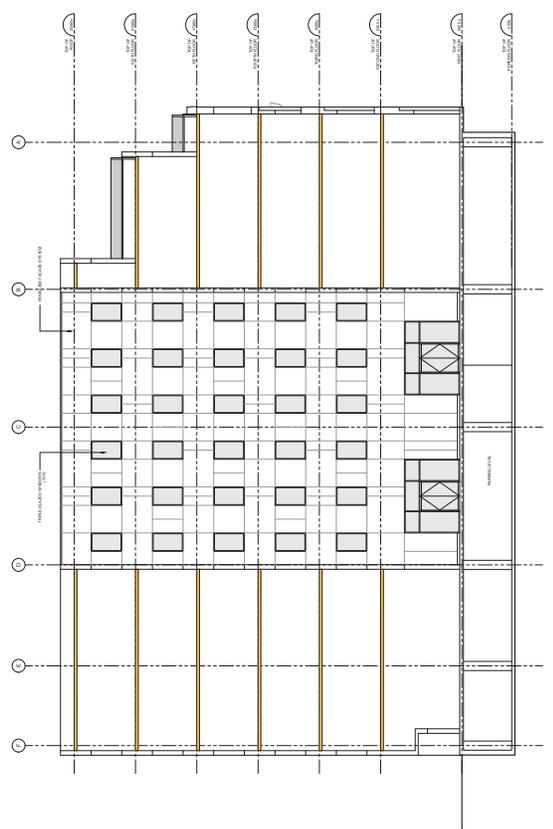
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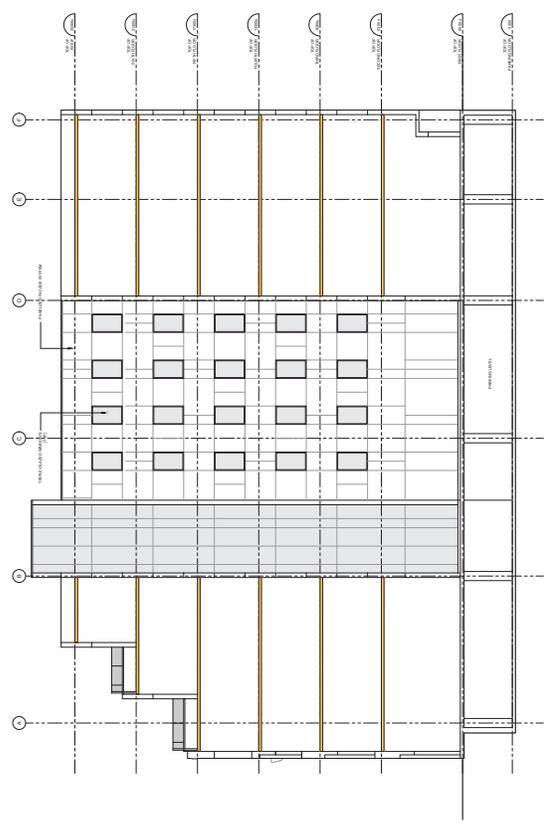
Drawings are not to be used for construction until the drawings are sealed.
Contractor must verify all dimensions on the job and report any discrepancies immediately to the architect. The architect is not responsible for any errors or omissions in the drawings. The architect shall not be held liable for any errors or omissions in the drawings. This drawing is not to be used for construction until the drawings are sealed.



02	ISSUED FOR INFORMATION (2)	2021-07-15
01	ISSUED FOR INFORMATION	2021-06-15
No.	Issue/Revisions	Date
Drawing Title		
PRELIMINARY BUILDING SECTIONS		
Sheet Name	Checked By	Date
005		
Project No.	152102	Book
1 Drawing No.		



1 BUILDING SECTION THROUGH COURTYARD - EAST
SCALE: 1/8" = 1'-0"



2 BUILDING SECTION THROUGH COURTYARD - WEST
SCALE: 1/8" = 1'-0"







