GBCA
ARCHITECTS

HERITAGE IMPACT ASSESSMENT

for

505 University Avenue

Toronto, ON

(GBCA Project No: 22035)

prepared for:

Cartareal Corporation N.V.
c/o PJMR Property Management Inc.
505 University Avenue
Toronto, ON, M5G 1X4

prepared by:

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EXECUTIVE SUMMARY

GBCA Architects (Goldsmith Borgal & Company Ltd. Architects) was originally retained by Cartareal Corporation N.V. (**"Cartareal"**) in June of 2022 to prepare a Heritage Impact Assessment (**"HIA"**) in support of a rezoning application for a development site located at 505 University Avenue (the **"Subject Site"** or "Site").

The Subject Site is located on the northeast corner of University Avenue and Edward Street. The site is occupied by an existing high-rise office building dating to 1958. Designed in the Modern Classical style, and originally constructed for the Shell Oil Company, it is currently occupied by offices above retail uses at its base.

South of the Site is the Maclean-Hunter Building, a designated property, which is currently the core of a new mixed use high-rise development that will conserve the base of that designated building.

The revised design proposal for the Subject Site seeks to demolish the existing property to accommodate a proposed 63-storey tower plus a mechanical penthouse ("**MPH**"). Subsequent to the filing of the rezoning application, the Subject Site was Designated under Part IV of the Ontario Heritage Act which City Council enacted in by-law 505-2024 in May of 2024. On 2 July 2024 Cartareal, through its solicitors, filed a Notice of Appeal of the passing of Designation By-law 505-2024.

The building is described, in part, as a reminder of the Modern Classical style with the scale, materials and features that exemplify urban design guidelines originally established for University Avenue.

This revised HIA has been amended from our previous submission of August 15, 2022. In principle, the revised development proposal will maintain a similar relationship between the massing of the new development and the heritage structure as proposed in the 2022 application. However, the building height and commemoration strategy have been revised pursuant to comments received by municipal planning, urban design and heritage staff which included detailed engineering discussions. The Architectural drawings provided by BDP Quadrangle Architects (date 12 June 2025 and attached at Appendix VI and VII) have been revised to address the resolution developed through the mediation process.

The proposed demolition of the building does not constitute conservation within the City's Official Plan definitions. Advancing this approach rests primarily on issues discovered by structural investigations and analysis undertaken subsequent to the first HIA submission. Issues found in the investigations were not fully understood at the time of the original HIA and informed a more developed consideration for the proposed approach to the Site. Structural review of the building found an imbalance in the stiffness between the flexibility of the structural steel frame and that of the stiff Queenston Limestone masonry exterior. The stone is "over-stressed" causing consequent façade cracking from torque induced by wind and thermal loads on this tall thin structure. While internal building safety is currently not affected, the eventual outcome would require upgrades and replacement of the exterior of the building due to damage caused by the interaction between the tightly placed steel and stone. The long-term performance implications were not fully understood in the mid-20th century at a time when construction was transitioning between traditional to modern methods and, particularly, as it relates to this tall thin design.

In addition to fundamental façade structural issues, updated reasons for the proposed dismantle/reconstruct process reflect the existing deteriorating condition of the building facade. The long-term impact of on-going piecemeal and substantial repairs and replacements represents a degradation of the original design intent of, originally, a thin tower of monochromatic limestone (Queenston Limestone). Necessary replacements of façade components have created a patchwork of mis-matched stones from alternate sources due to unavailability of the original – and this patchwork appearance will amplify as stones continue to deteriorate. The result will be an accelerating loss of heritage value.

The revised rationale seeks demolition of the Site's heritage attributes with demolition activities being in the form of an orderly dismantling to preserve its physical attributes. Reconstruction of the building would then occur in a manner duplicating the original design using the original dismantled materials to allow for a commemoration of re-constructed significant portions of public-facing

facades to the full height of the original building. The reconstruction would be in the original location, of the original height, and incorporate original design details and original stone materials.

The intended mitigation strategy therefore rests largely on commemoration, which strategy will be elaborated through a Reconstruction and Commemoration Plan.

The most notable changes from the original submission are listed below:

1) The original structure will be demolished and the new structure will be located on the location of the original structure.

2) A change in tower height from 64+MPH Storeys, to 63 Storeys (+MPH), with a narrower floor plate (~950sq. m) to be compatible with the dimensions of the original tower (~1100 sq. m);

3) As the property at 505 University Avenue was Designated under Part IV of the *Heritage Act*, the mitigation strategy is proposed to demolish the existing 20-storey building through a strategy of dismantling, salvage and reconstruction using original materials while adhering to the original design. Identified attributes including the stone skin; the design of the original building and its features; and the location of the original building on the Site will be recreated and thus commemorated. When completed the remaining reconstructed portions of the building will constitute a faithful reconstruction save for very minor details which are noted in the report and include a handrail at the podium roof and windows and glass enclosure at the base at the first floor. A larger intervention will be the provision of windows on the east façade to support residential occupancy on the first 20 floors of the building.

4) The new tower massing is stepped back on the east, south and west sides to allow for the new tower to appear subordinate to the original re-created building.

5) A substantial return of the original facade on the east and west ends of the north wall will be provided, to continue to reflect and support the building and its prominence along University Avenue.

6) Revisions to materiality, fenestration and relationship between new tower and existing structures.

As a result of the mediation, several reports have been prepared by consultants including the above-mentioned structural investigations. This HIA discusses these, and the studies are appended to this report.

The area near the building is undergoing significant intensification as a result of its proximity to a the central business district and mass transit (St. Patrick Subway Station). Redevelopment of the Site is therefore reasonable and consistent with provincial policies for intensification. The alteration of the existing building must be balanced with other policies that relate to the Site including mitigation of hazardous materials; policy directives for intensification; and the creation of environmentally-sustainable development leveraging access to mass transportation.

While the demolition of the heritage building is a significant adverse heritage impact, the loss of its heritage attributes will be mitigated with a commemorative approach for the proposed redevelopment. This will involve significant material salvage and reconstruction of the full volume of the original building using original materials and designs. In this current proposal, the proposed new building design will incorporate the reconstructed heritage building

This HIA has been prepared in accordance with HIA Terms of Reference as required on the City of Toronto's web-site and evaluates the impact of the proposed development on existing heritage resources.

1. INTRODUCTION

1.1 Property Description

The Subject Site is located on the northeast corner of University Avenue and Edward Street and includes the following:

505 University Avenue: a 20-storey stone-clad office building dating to 1958. The upper seven storeys were added in 1966.

Adjacencies

- To the north is a 14-storey office building, dating to the early 1990s.
- To the west, across University Avenue, are mid to high rise office buildings dating to the 1970s
- To the south, across Elm Street, is the Maclean-Hunter Building, a designated property under Part IV of the OHA. This building is currently subject to a development where the existing building will be retained and surmounted with additional storeys. The development (The United Building) will include retail and offices at the base and residential units above.
- To the east is a large four-storey institutional brick building.

1.2 Present Owner and Contact Information

Owner: Cartareal Corporation N.V.
c/0 PJMR Property Management Inc.
505 University Avenue
Toronto, ON, M5G 1X4

1.3 Location Plan

Aerial view of the subject site (in red) with surrounding context.

Adjacent heritage properties include:

1. *481 University Avenue*
   ***Maclean-Hunter Building**, 1961, Marani & Morris*
2. *210 Dundas Street West*
   ***Maclean Publishing Company Building**, 1910, Sproatt & Rolph*
   1928 addition, Murray Brown

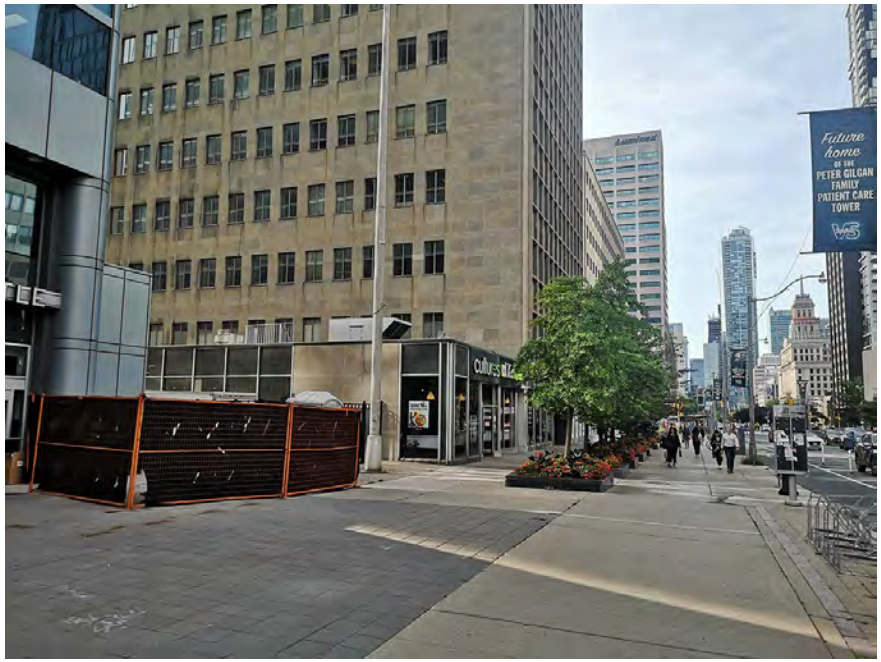
Both above referenced properties are designated under Part IV of OHA (By-law 1393-2017)

1.3 Site Context

All photos were taken by GBCA Architects in August 2022.

Looking south along University Avenue from the intersection with Gerrard Street. The subject site is on the east side of the avenue, indicated by the red arrow. The tall building on the west of the avenue is the residences of 488 University Avenue.

Looking east from the intersection of University Avenue and Elm Street. towards the subject site (the building on the right of the image). The subject building at 505 University Avenue is 20 storeys. The 14-storey building on the left (north of the subject site), 525 University Avenue, dates to the early 1990s.



Top left:
Looking south along University Avenue, towards the north elevation of subject building.

Top right:
Looking east along Edward Street Avenue, towards the one-storey base of the subject site and a portion of the north elevation.

Bottom right:
Looking northeast from the intersection of University Avenue and Edward Street.

Left:
Looking east towards the subject building, from the west side of University Avenue. The tower portion of the subject site is located at the center of the site and is flanked by one-storey volumes fronting the avenue.

Top right:
Looking northeast towards the subject site. The 1961 Maclean-Hunter building is visible in the photo and is currently undergoing restoration and rehabilitation to accommodate a new high-rise and mixed-use development.

2. BACKGROUND RESEARCH

Located on the northeast corner of University Avenue and Edward Street, the Subject Site is an existing 20-storey office building. It was constructed as the Canadian offices of the Shell Oil company and dates to 1958. The upper seven storeys were added in 1966.

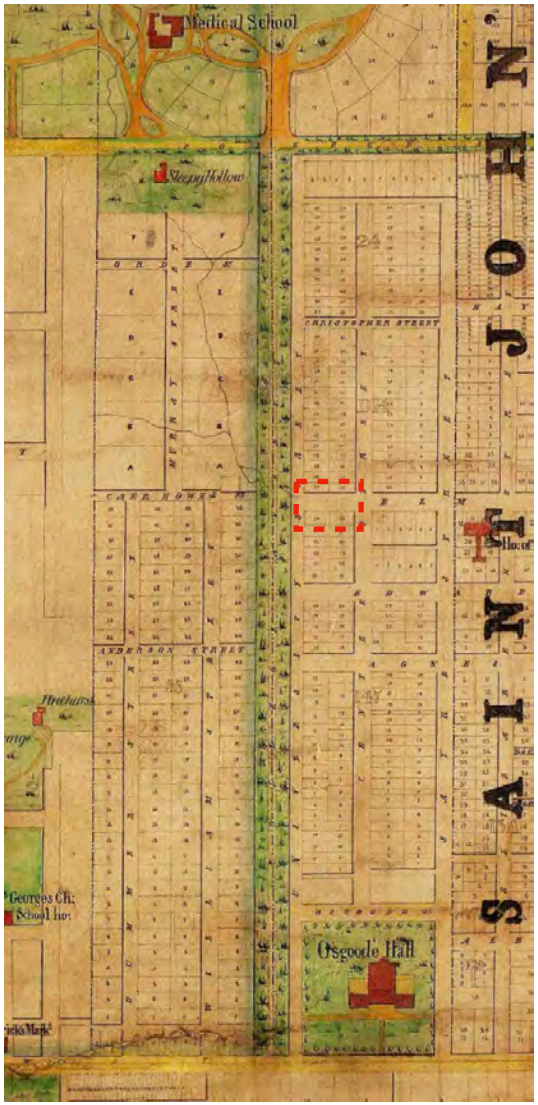
2.1 Historical

University Avenue

When the City of Toronto was surveyed, lands north of Queen Street (then Lot Street) and south of Bloor Street (Concession Line) were divided into 100-acre Park Lots and granted to government and military officials. University Avenue is located on what was historically Park Lot 11.

Through grants, subdivisions and sales, John Beverley Robinson came to own 50 acres of the 100-acre Park Lot 11. Robinson subdivided his portion and left at least two lasting legacies - in 1828 he sold the six southerly-most acres to the Law Society of Upper Canada for the site of Osgoode Hall and, in 1842, laid out a publicly accessible north/south street called Park Lane, later University Street, running from Queen Street north to College Street. Public accessibility was important given that a parallel street (laid out in 1829), to the immediate west of his lane, was privately owned by King's College/the University of Toronto and known as College Avenue.

For many years, these two parallel streets, lined with rows of chestnut trees, were separated by a fence. The southern end of College Avenue (which came to a "T" at Queen Street) was marked by entrance lodges to the University grounds – one on the western side of the Avenue and one on the eastern side of the Avenue. By the late nineteenth century, College Avenue, which had been laid out for the grandest possible effect, was described as one of the finest "park drives in the world." It was thought of as a processional approach to the University grounds inspired by famous European counterparts.



***Plan of the City of Toronto, showing the Government Survey and the Registered Subdivision into Lots*, H.J. Browne, Civil Engineer and Surveyor, 1862** - Both the private College Avenue and the adjacent public University Street ended at Queen Street. The subject site was surveyed into building lots east of the public University Street.

From the beginning, the privately-owned College Avenue's isolation from traffic was carefully maintained, both in the interests of an ideally secluded collegiate life and to preserve the tranquility of the grounds. No streets were permitted to cross College Avenue but in a growing city dedicated to the development of commerce and accustomed to the regularity of a grid system of streets, College Avenue came to be seen as a barrier to both commerce and development. In 1859 the city took a 999-year lease on the avenue, finally opening up College Avenue to general traffic.

By the turn of the century, College Avenue, running from Queen Street northward to College Street, was combined with the adjacent University Street (the former Park Lane) and was renamed University Avenue. The broad thoroughfare was dominated by residential structures interspersed with institutional buildings such as the additions to Osgoode Hall in the 1890s and the Armouries in 1893. And, with the opening of the Provincial Parliament Buildings at Queen's Park in 1892, University Avenue became the ceremonial passage to the Ontario Legislature. The avenue itself was widened and designed with a boulevard dividing northbound and southbound roadways.

The Baptist Church at the northeast corner of University Avenue and Edward Street was built in 1907, and according to the City Directory of that year, that property was referenced as the ''Colored Baptist Church''.

First Baptist Church (1907), University Avenue, northeast corner Edward St *(Source:TPL)*

Fire Insurance Plans of the City of Toronto (Charles E. Goad), *for the dates indicated.* The subject site was occupied by a range wood-framed buildings, later replaced by brick buildings.

In the early twentieth century, University Avenue became the focus for Toronto's experiment with the City Beautiful Movement. As with American cities of the time, major Canadian cities were experimenting with planning schemes that included dramatic axial streets and spacious squares lined with grand buildings with related designs. University Avenue was anticipated as the city's "greatest and most imposing traffic artery." To ensure its success, the City Planning Commission proposed that all buildings along University Avenue be subject to architectural and aesthetic restrictions. A Planning Commission report of 1929 urged City Council to require a uniform cornice line and control of materials. They went as far as suggesting that density and zoning bonuses be given to encourage high-quality design. A report by the city planning commissioner and the city architect (J.J. Woolnough) to the Toronto Board of Control in 1931 recommended the appointment of a committee or jury to pass upon the design of all buildings or additions to be erected on University Avenue. This represented the first definite attempt in architectural control for the design of streets in Toronto.

In 1931 City Council adopted the University Avenue Bylaw (By-law 13409) to control the design, height, set-backs, materials and types of new buildings on University between Front and College Streets. All buildings, according to the provisions of the report, would be built out to the street line, with the exception of buildings occupying the whole block, in which case the building could be set back. Recommendations were also made regarding the use of buildings along University – they had to be offices and financial buildings, retail businesses, hotels, theatres, clubs, municipal buildings or educational buildings.

The Canada Life Building, on the west side of University Avenue just north of Queen Street (1931), was among the first large-scale commercial edifices that appeared on University Avenue following the introduction of the architectural guidelines. If not for the Depression, many more similarly styled buildings would have been constructed at this time.

City of Toronto Archives, Fonds 1244, Item 7349

1929 *Bird's eye view of University Avenue looking north* *toward the Ontario legislature. The subject site is indicated on the image. At this time, the site was occupied by low-rise residential buildings fronting University Avenue as well as the First Baptist Church.*

After WWII, when the thoroughfare's lanes and the adjoining sidewalks were widened and additional public monuments were introduced to the central boulevard, another wave of construction began. It was during this period that the subject property was developed. In the 1950s, several nineteenth century residential buildings, including the 1907 First Baptist Church building were sold off to the Shell Oil Company and incrementally demolished to make way for their new Canadian headquarters at 505 University Avenue. The headquarters remained in Toronto for 26 years until its relocation to Calgary in 1984. The building has since been occupied by a variety of offices with retail uses at grade.

First Baptist Church, *c1955 shortly before demolition. Note the residential buildings to the north of the Church have been demolished, with a sign noting the future development (Source: Wikipedia)*

<u>Shell Oil Company</u>

The Shell Oil Company was started in London in the 1830s by Marcus Samuel who imported sea shells from the Far East to Europe, to capitalise on their popularity in the interior design industry of the time. Upon his death in 1870, the business was passed to his sons, who expanded it into an oil exporting business starting in the 1880s They achieved innovations in the way oil was transported: costs could be reduced substantially by bulk transportation in tankers. The company went through a merger and name changes in the early 20th century, culminating in the current name.

In 1911, Shell began its operations in Canada, opening its first facilities in Montreal and Longe-Pointe, Quebec. The Canadian headquarters was located in Montreal as of 1925. The company expanded to the West Coast in 1915 and the Prairies in 1939. In 1958, the Company moved the head office to Toronto, on University Avenue. The headquarters remained in Toronto until 1984, when it was relocated to Calgary.

2.2 Architectural

Shell Oil Canada moved its headquarters to Toronto in the 1950s, on a site that was becoming favourable for new offices, and hired the firm of Marani & Morris. The firm, had recently completed, in 1955, the Bank of Canada Building at the southeast corner of University Avenue and Queen Street West.

The 13-storey steel-framed building is designed in the Modern Classical style, as a point tower over a one-storey base for commercial purposes. The tower is centrally located over this one-storey building, thus setback from the north and south property lines. In accordance with the by-law at the time, which regulated the built form and materials of buildings facing University Avenue, the exterior of the building is clad in Queenston limestone panels on all sides. The west (principal) elevation is articulated uniquely with recessed spandrel panels of similar size to the windows, emphasizing the verticality of the design. The 1956 drawings by Marani and Morris indicate the one-storey base is clad with Norwegian blue granite, suggesting this material was an important part of the design vision.

<u>1966 addition</u>

In 1966, seven stories were added on top of the original 13-storey building, which was originally designed to accommodate an upward extension. This addition was designed by the successor firm of Marani and Morris - Marani, Rounthwaite & Dick. The additional storeys are very similar in design and materiality to the original building: the distinction can be made with the 13th storey (original to 1958) is in fact a mechanical level with sculptured metal screens, with the additional seven storeys above this level. The top of the building was capped with a modern stone coffered cornice.

The structural steel required for these additional storeys was contracted to York Steel Construction under Jackson-Lewis Co. Ltd., acting as General Contractors. A separate tower, mounted on a mobile crane and laterally supported with prestressed cables, was built and a jib at the top of a crane was used to hoist steel to 300 feet (100m) above. This was described by the engineer from York Steel as ''one of the greatest breakthroughs in crane technology''.

City of Toronto Archives, Fonds 1128, Series 380, Item 393

505 University Avenue under construction - 1957. Note the site of the Maclean Hunter Building, on the right of the image, is excavated. The image was inverted in Photoshop from a negative found at the City of Toronto Archives *(Source: CTA).*

Maclean Hunter Building under construction - 1958. Note the Shell Building on the left of the image is nearing completion with the upper floors remaining to be clad in stone. The image was inverted in Photoshop from a negative found at the City of Toronto Archives *(Source: CTA).*

Under-construction addition *(Source: CTA).*

Under-construction addition. *Note the two storeys above the mechanical floor (noticeable by the taller window openings) are visually different (Source: CTA).*

Under-construction addition, showing the north elevation and the crane used to hoist the steel to the new upper storeys *(Source: CTA - Engineering and Contract Record, December 1965).*

1956 Archival drawing *of the west elevation, showing the 13-storey building centred over a one-storey base (Source: CTA). The original podium followed the sidewalk with no canopy.*

Marani and Morris

The partnership of Marani and Morris was formed by Ferdinand Herbert Marani (1893-1971) and Robert Schofield Morris (1898-1964).

Marani's practice dates to 1919. After studying architecture at the University of Toronto, he trained in the offices of Eden Smith and Sproatt and Rolph. He worked alone for five years before embarking on the first in a series of seven partnerships:

- Marani & Paisley (1924-1925);
- Marani, Lawson & Paisley (1926-1928);
- Marani & Lawson (1928-1929);
- Marani, Lawson & Morris (1930-1941);
- Marani & Morris (1941-1959);
- Marani, Morris & Allan (1959-1964); and,
- Marani, Rounthwaite & Dick (1964-1971).

Marani's various partnerships can be credited with the design of hundreds of buildings across Canada. According to the Biographical Dictionary of Architects in Canada, the longevity and success of Marani's practice can be attributed to his ability to associate himself with talented partners who shared his interest in the conservative Classical and Neo-Georgian styles of architecture, strongly favoured by his clients that included banks, insurance companies, hospitals, and private schools.

At the time of the design of the building at 505 University Avenue, Marani was in practice with Robert Schofield Morris, a British-born designer who brought to the firm emerging modernist ideals. In 1950 the firm received one of the first Massey Silver Medals for Architecture for the design of the outdoor Grandstand at the Canadian National Exhibition (built 1947-48; demolished). Morris was later awarded the prestigious Gold Medal from the Royal Institute of British Architects in 1958, one of only two Canadian architects ever to receive this award. While under the Marani and Morris partnership, the firm also garnered work outside of Canada, notably Canada House in New York City (a skyscraper on Fifth Avenue – 680 Fifth Avenue), 1955-1957; and a Military Joint Staff Building in Washington, D.C. (on Embassy Row) in 1958.

The firm continued to produce conservatively-styled buildings well after the 1950s. Contemporary with the Shell Building at 505 University Avenue, Marani and Morris designed several large buildings along major thoroughfares, including:

- Crown Life Insurance Building, 120 Bloor Street East, 1953;
- Bank of Canada Building, 250 University Avenue, 1955
- Confederation Life Insurance Company Building, 333 Bloor Street East, 1956;
- Traders Building, 625 Church Street, 1956.
- Dominion of Canada General Insurance Building, 165 University Avenue, 1958; and,
- Maclean Hunter Building, 481 University Avenue, 1961

With all of these commissions, Marani and Morris' design aesthetic thus became a part of the University Avenue streetscape.

In 1964, Morris passed away and the partnership merged with Cyril Frederic Thomas Rounthwaite and Ron Dick to form the firm of Marani, Rounthwaite & Dick. When Marani passed away in 1971, the firm was joined by Glenn Hadley. The firm eventually got rebranded as RDHA, and remains in operation.

2.3 Contextual

By the 1960s, almost every building lot along University Avenue had been developed. In that context, 505 University Avenue forms part of an institutional and office district which was developed during a fairly confined time period and is therefore harmonized in its application of Modern styling and its use of contemporary design and materials. The 1960s buildings along University Avenue range in height from 8 to 14 storeys.

- #165 - Dominion of Canada General Insurance Company, Marani & Morris, 1958, 10 storeys
- #250 - Bank of Canada Building, Marani & Morris, 1955, 8 storeys
- #361 - Toronto Court House, F.H. Marani, 1966, 7-storeys
- #481 - Maclean Hunter Building, Marani & Morris, 1961, 9 storeys
- #505 - Shell Building, Marani & Morris, 1958, 12 storeys + 7 storeys
- #555 - Hospital for Sick Children, Govan et al, 1949 – 12 storeys
- # 200 - Sun Life Building, John B. Parkin Associates, 1961, 14-storeys
- #330 - Canada Life Building, Sproatt and Rolph, 1931, 15-storeys
- #550 - Toronto Rehab Hospital, Kaplan & Sprachman, 1952, 12-storeys

Another phase of development happened during the 1970s, with newer office towers replacing some of the earlier remaining 1930s buildings.

City of Toronto Archives. Series 1465, File 266, Item 20

Looking north on University Avenue *between 1980 and 1999, showing the overall context of University Avenue (Source: CTA).*

3. HERITAGE STATUS

3.1 Current Status

The property was designated by Toronto City Council under Part IV of the OHA in May of 2024, and is subject to an appeal to the Ontario Land Tribunal - the contents of the Designation By-law for the Subject Site are included here, with the full by-law included in Appendix I of this report.

3.2 Designation By-law 505-2024:

Attributes that contribute to the value of the property at 505 University Avenue as representative of the Modern Classical architectural style include:

- The placement, setback and orientation of the building at the northeast corner of University Avenue and Edward Street;
- The scale, form and massing of the 20-storey building on a T-shaped plan that includes the ground-storey podium set parallel to University Avenue and perpendicular to the tower;
- The materials, with the Queenston limestone cladding and stone, metal and glass detailing;
- The flat roof of the tower with its deep, coffered stone cornice on the underside;
- The one-storey, glazed mechanical penthouse atop the tower roof with its lozenge-shaped form and surmounted by a gently-curved roof;
- The organization of the principal (west) tower elevation fronting on University Avenue with its twelve bays of evenly spaced, punched openings alternating with limestone spandrels between the second and nineteenth storeys;
- The raised and attached stone "fins" both framing the fenestration on the principal (west) tower elevation and vertically delineating each of the twelve bays of fenestration within the raised stone frame;
- On the north and south elevations, the regular rhythm of the evenly-spaced punched window openings between the second and nineteenth storeys;
- On the west, north and south elevations, the tall, rectangular openings on the thirteenth storey (mechanical level) which are distinguished by

their decorative metal screens

- At ground level on the principal (west) elevation, the location of the main entrance centred in the one-storey podium clad in Norwegian Blue Granite;

- At ground level, the north and south returns of the one-storey podium, also clad in Norwegian Blue Granite.

Attributes that contribute to the value of the property at 505 University Avenue as demonstrating high technical achievement include:

- The 7 uppermost storeys plus the 1-storey rooftop penthouse, whose vertical addition in 1966 to the 1958 building was enabled by the development of a novel ground-located tower crane capable of hoisting the necessary structural steel up to 300ft above grade;

- Attributes that contribute to the contextual value of 505 University Avenue as maintaining and supporting the character of the University Avenue precinct, and as being historically and visually linked to its surroundings include:

  - The placement, setback and orientation of the building at the northeast corner of University Avenue and Edward Street with its primary entrance on University Avenue;

  - The materials, with the Queenston limestone cladding and stone, metal and glass detailing.

3.3 Adjacent heritage properties

481 University Avenue & 210 Dundas Street West

The above properties include a collection of buildings belonging to the Maclean Publishing Company. They are all Designated under Part IV of the OHA (By-law 1393-2017).

The Designation includes the 1910 original building (offices and printing plant) with 1928 addition at 210 Dundas Street West and the 1961 addition (known as the Maclean-Hunter Building) at 481 University Avenue.

The property is currently under development as it will accommodate a new mixed-use building, on top of the existing 1928 and 1968 buildings, where their facades will be conserved and incorporated to a new structure. The project is marketed as the United Building and is noted to be the tallest heritage retention project in Canada[1]

Images of the adjacent building are included on the following page.

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[1] *https://www.constructioncanada.net/construction-begins-on-canadas-tallest-heritage-retention-project/*

View looking northeast towards the Maclean-Hunter Building, under development. The facades will be incorporated to a new mixed-use building.

Rear view of the Maclean Publishing Company site (looking southwest from the intersection of Centre Avenue and Edward Street). The property was under development when the image was taken.

4. CONDITION REVIEW

4.1 Overview

A high-level visual review was conducted in August 2022 which was subsequently expanded by reviews in late 2024 by Clifford Restoration and GBCA. The building was found to be fully operational with commercial occupancies at grade (a restaurant and a printing shop) and offices in the upper storeys. It is our understanding that the building is 60% leased by tenants of departments of the Government of Ontario.

This material has since been supplemented by a Site Investigation Report, prepared by Clifford Restoration Limited, October 8, 2024 included in Appendix V. The August 2022 review was based on the following:

- visual on-site review (non-destructive)
- review of the 1956 drawings by Marani & Morris (made available at the City of Toronto Archives).
- review of the 2021 Asbestos re-assessment survey by T. Harris Environmental Management

For the purpose of this review, the following definitions apply:

Good

- The element is intact, structurally sound and performing its intended purpose
- There are few or no cosmetic imperfections
- The element needs no repair other than minor/routine maintenance

Fair

- The element is generally structurally sound and performing its intended purpose
- There are early signs of wear, failure, or deterioration
- Up to 25% of the element is in need of repair and/or replacement

Poor

- The element shows some structural instability however is still performing its intended purpose
- There are significant signs of wear, failure, or deterioration
- There is failure of a subcomponent of the element
- Up to 50% of the element is in need of repair and/or replacement

Very Poor

- The element shows severe structural instability and is no longer performing its intended purpose
- The element shows signs of imminent failure or breakdown
- The element requires immediate major repair/replacement
- Deterioration or damage affects more than 50% of the element

4.2 General Physical Description

505 University is a 20-storey office building dating to 1958, with the top seven stories added in 1966.

The building has an elongated tower with the wide section running east/west and the narrow end facing University Avenue. The base is a T-shape plan, with one-storey volumes fronting University Avenue (forming the horizontal portion of the ‘‘T’’ shape) and hiding a surface-level parking garage at the rear.

The 20-storey component is centrally located on the Site with wide margins to the property lines and streets on all sides.

The building consists of a steel structural frame intimately bonded to rigid exterior walls of brick which are, in turn, bonded to the exterior face cladding of Queenston Limestone (as well as Norwegian blue granite at the one storey base). Floor slabs are reinforced concrete.

Main west elevation of 505 University Avenue

4.2.1 Interior

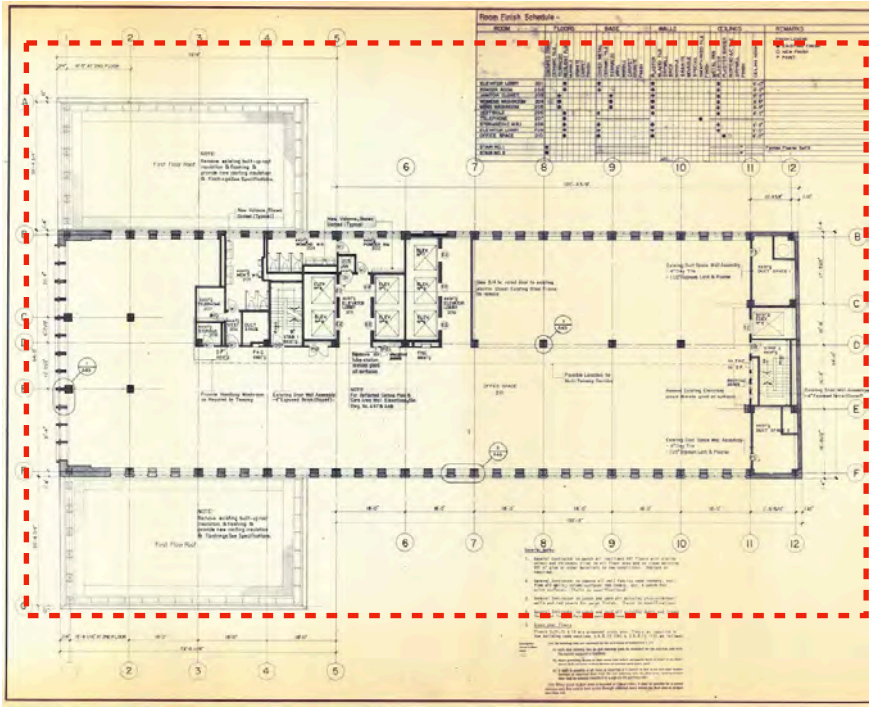
The **basement** occupies only one level below grade and is occupied by a series of mechanical rooms and building management offices. Mechanical equipment appeared to be original and operational (although discussed by the building manager to be nearing their end-of-life), with some new equipment installed. Some of the partition walls were noted to include hollow terra cotta tiles, which is consistent with standard construction for the time period of the original construction.

The ground level **lobby** includes includes black and white marbles and new gypsum ceilings.

The upper storey interiors are laid out as offices. As is typical for office occupancies, interiors are often altered to suit tenant requirements resulting in simple finishes given anticipated changes. Original plaster finishes were found in some areas and components such as doors, door frames and some lighting appear to date to the original construction depending on the floor level.

After our initial inspections, the interior face of the exterior walls were exposed in selected locations in vacant areas to avoid disruption of tenants (investigations and photo documentation is found in the Clifford Report in Appendix II). Archival drawings provided an understanding of anticipated materials prior to the Clifford investigations particularly related to the locations of backing bricks and location of steel frames.

Exposure of the core of the walls in the Clifford Report revealed the intimate bond between the flexible steel structural system and the exterior solid masonry – in effect the two incompatible systems are connected while each is acting in an opposing manner.



Second Floor Plan (April 1985 drawing of proposed renovations to 505 University, prepared by Young+Wright Architects). The drawing shows a typical office layout. The tower is centrally located on the site (red dashed boundary) but not occupying the whole property. The floor plate layout is not currently considered to be optimal.

Overall view of original mechanical equipment (heat pumps). The partition walls on the left of the photo are painted hollow terra cotta tiles.

Overall view of the ground level lobby. Finishes inside include some modern interventions

4.2.2 Exterior

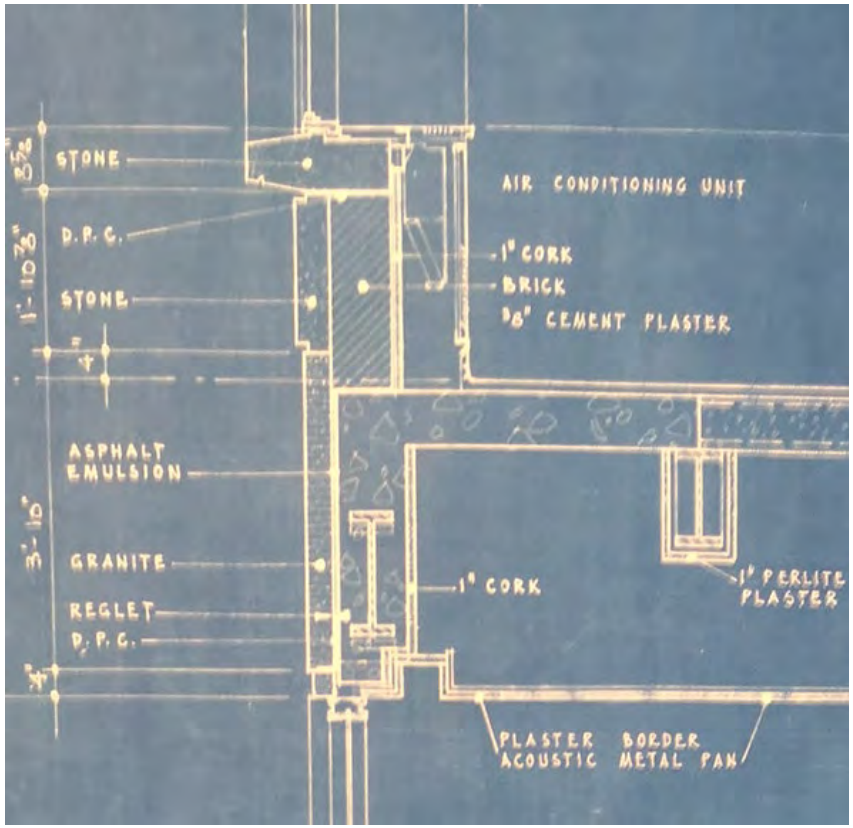
4.2.2.1. Exterior Queenston Limestone Walls

Bronze anchored tones vary from 4 to 8 inch thickness and are toothed into brick backing of from 5 to 9 inch thickness, for a total of 13 inches (excluding interior finishes). Exterior edges of floor slabs are turned down to encapsulate exterior beams. These are hidden by the stones with the brick backing acting as a substrate for anchoring the stone. Stone blocks appear in fair to good condition, with these observations:

- General soiling of the stone, due to water run-off. Soiling is more prominent below window openings, at the sill corners, where water runs off. Aluminum ions from the window frames have been absorbed into the stone at and below the sills rendering cleaning a challenge. Stones from floors 13 to 20 appear denser with less water absorption than those of the original. Although the same quarry, extra density is a result of newer stones quarried from a deeper level subject to heavier overburden during formation of the stone.
- Localised areas of eroded or porous stone. It is not fully known how this condition has occurred, although it is possible the stone panel's surface was of inferior quality. These areas include delaminated stone, particularly at the lower floors of the west elevation.
- Significant repairs and replacement of original Queenston Limestone (now unavailable) with Indiana Limestone patches. These patches do not match the Queenston in colour and soiling and thus, over time, a patchwork appearance has developed on the exterior. In addition, a significant number of replacement stones have been inserted into the southeast and northeast corners due to on-going cracking and damage.

4.2.2.2. Exterior granite walls

These are located at the one-storey base and appear on the drawings as 4 inches in thickness. They are supported by reinforced concrete backing (for their upper portions) and brick backing (for the lower portions). The 1956 drawings indicate the granite is Norwegian blue granite which suggests the material, specified for this detail, was important in meeting the architects' design vision (unlike the upper building, which was simply labelled as ''stone''). The granite is polished and is in good condition with some soiling on the surface. Some discolouration of the stone was noted at the base.



1956 Wall section detail of the main (west) wall where the granite meets the stone, noting materials composing the exterior walls. Behind the granite cladding is reinforced concrete and behind the stone is brick backing (Drawing retrieved at CTA).

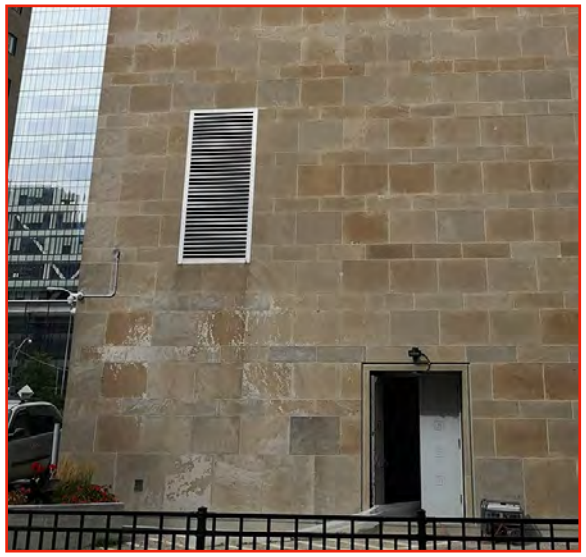
Close-up view of the west elevation, looking up towards fenestration pattern. Drip edges carved into the underside of the stone sills are visible and were added to deflect water away from the walls. These appear to have worked on all areas below window sills. Below the window sill of the bottom left window (red circle), some water run-off is visible, suggesting a potential issue in this area. This is associated with the wall section from the previous page where the stone cladding meets the granite cladding below. However, in the current condition, the granite is not in the same plane as the stone (it is in front of the stone) which differs from the 1956 drawing, suggesting a potential difference in the backing of the granite cladding.

North elevation view, showing (at the bottom of the image) a portion of the one-storey volume with stone and granite cladding. Note the stone is in fair condition. Soiling is notable near the joints. Of note are some porous panels, which appears to be a natural imperfection of the stone and has not caused deterioration. On the north elevation of the tower, soiling below the window sills is noticeable at the corners, due to a lack of proper edge detailing.

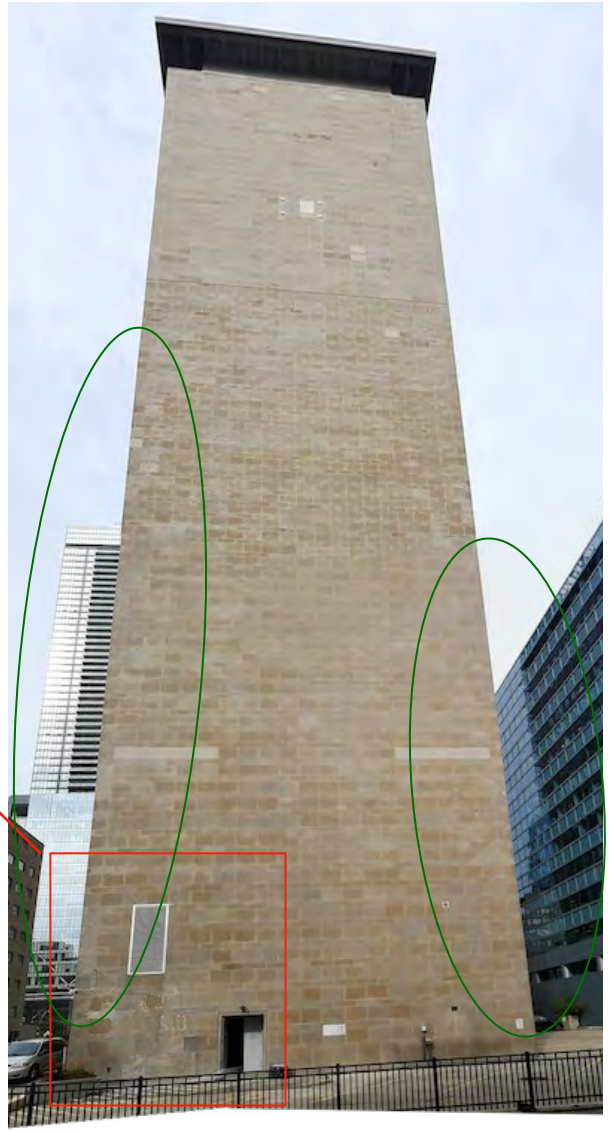
Looking east on Edward Street, showing the bottom portion of the south elevation that is set back from Edward Street. The parking garage is at grade and located underneath the second storey of the building. This parking is hidden by the one-storey base volume (not visible in the photo). The low-rise stone barriers in the foreground are later additions. Note similar conditions of the stone to that found on the north elevation, with soiling evident at the bottom of the sills.

Looking towards the overall south elevation and the consistent soiling below the sills. Localized areas of mortar repointing appear to have been inappropriately completed (red circle) and some localized panels appear to be damaged (green circle)

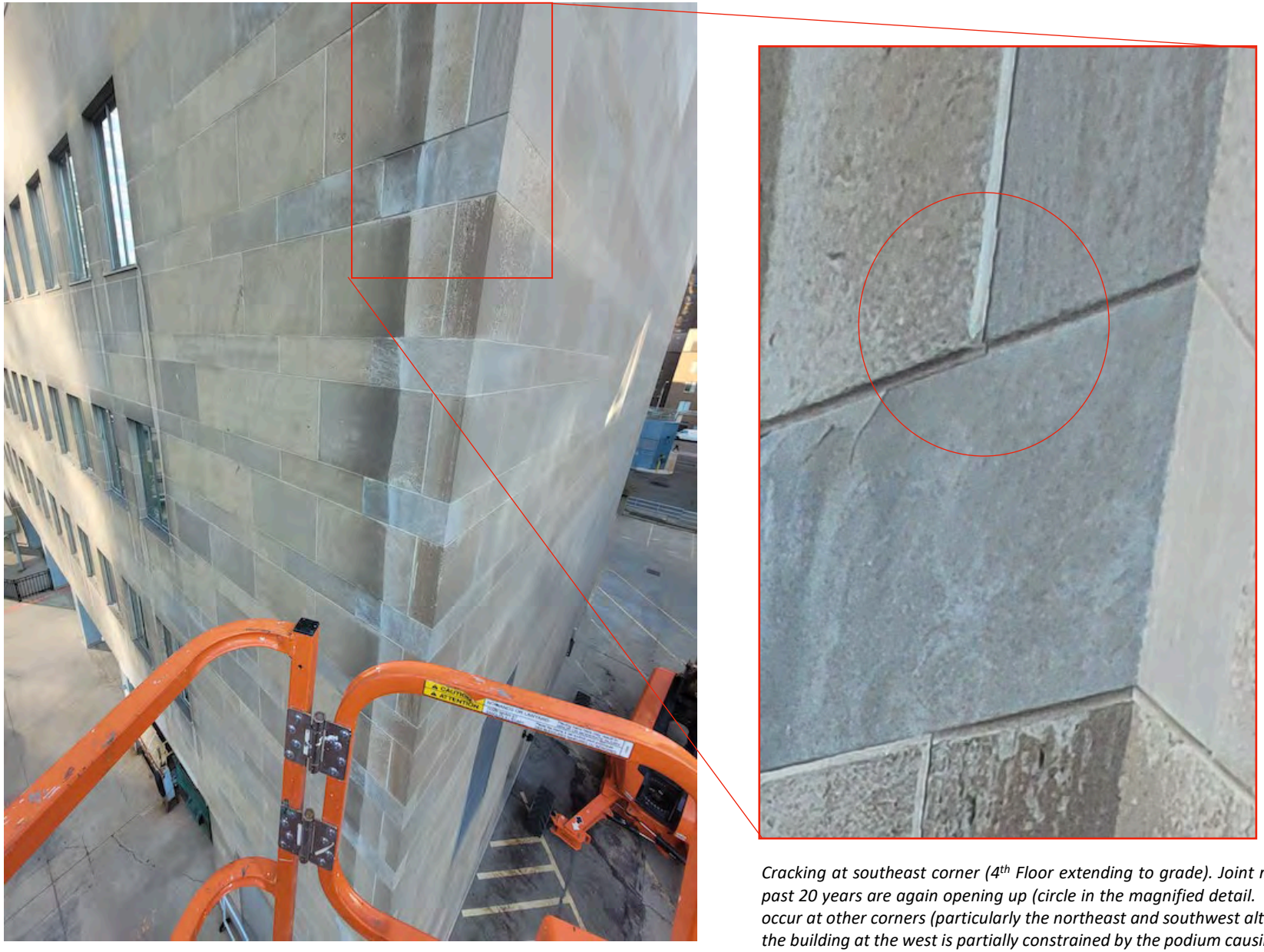
Lower portion of the one-storey volume, facing University Avenue, showing a discoloured granite panel (arrow).



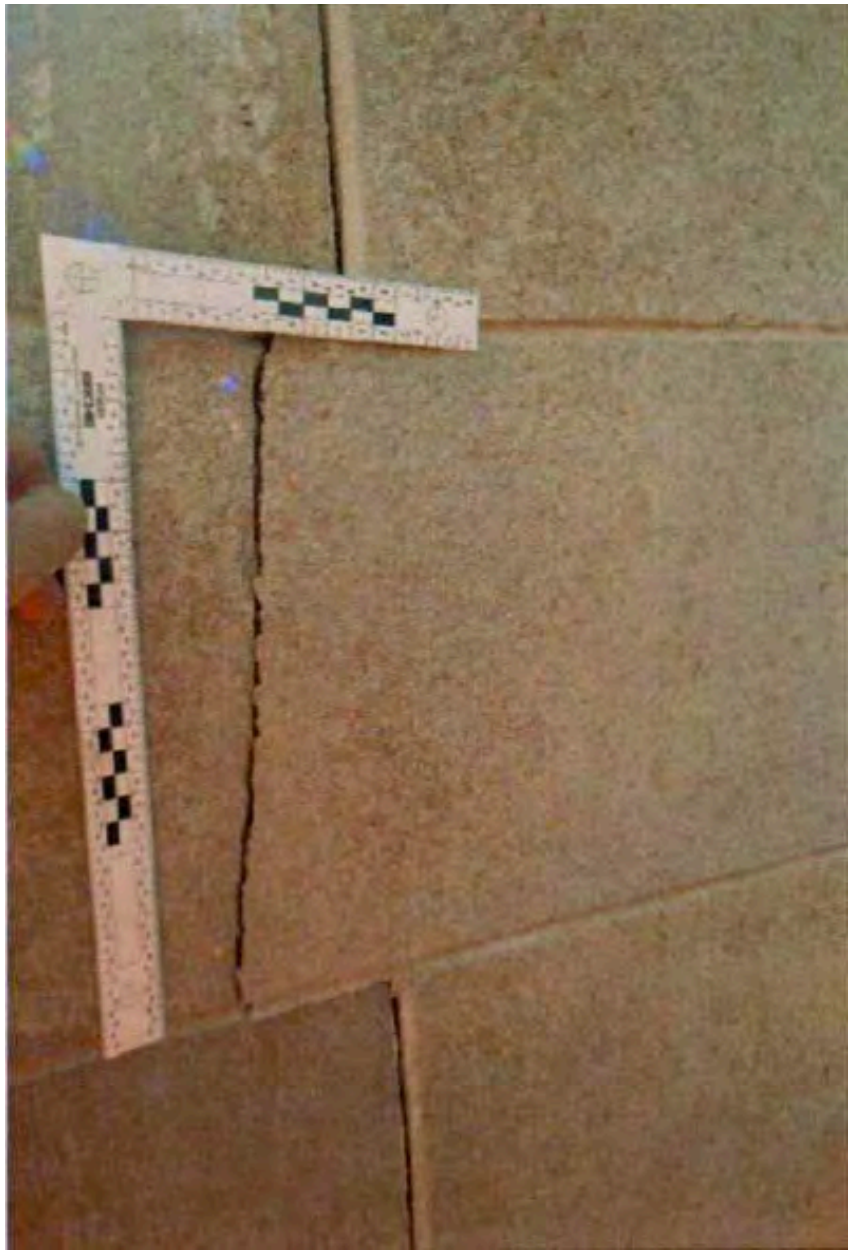
Near right: Close-up of the bottom portion of the wall, showing deteriorated stone panels immediately below a venting grille. Damage is due to freeze/thaw cycles due to condensation of exhausting interior warm air.



Far right: Overall view of east elevation, showing visible stone replacement (light coloured Indiana limestone). Ovals represent extent of corner cracking which was originally thought to be oxide jacking of embedded steel at the bottom of the wall but, with more detailed engineering analysis, appears to be caused by torquing of the building under load. A detailed view of the southeast corner is found on the following page.



Cracking at southeast corner (4th Floor extending to grade). Joint repairs within the past 20 years are again opening up (circle in the magnified detail. Similar conditions occur at other corners (particularly the northeast and southwest although the base of the building at the west is partially constrained by the podium causing less damage at the west corners).



Above - Through-stone cracking at northeast corner (3rd floor)

At right - Through stone crack and joint de-bonding (4th Floor).

This cracking, repaired previously, extends from the 5th floor to grade and includes outward displacement of stone by as much as 8mm.

Images are from the Clifford Restoration report.

4.2.2.3 Windows

Generally the building retains the original aluminum-framed windows. The surface of the aluminum, particularly in the punched windows at the upper storeys above the podium, are heavily etched. Water runoff from limestone is alkaline and etches uncoated aluminum. The windows were originally single-glazed (based on the archival drawings and the time of construction of the building) and non-operable. They do not meet current energy performance requirements. They will require re-sealing if retained.

Windows at the ground level do not appear to have been modified from their original design (aluminum frame and single-glazing), save for the main entrance, which is a modern intervention with automatic sliding doors.

4.2.2.4 Metal Grilles

Metal Grilles at the 13th floor mechanical level are intact and original but are also etched by water run-off.

4.2.2.5 The Central Metal Canopy

This canopy, located at the main entrance, is a more modern intervention, but existed at the time of the purchase of the property by the current owners in 1984. While not a part of the original design of the building it is an essential element needed to protect visitors from runoff and ice falls from the west facade which is flush with the entrance. The curved element echoes the lozenge-shaped mechanical penthouse above the 20th floor.

Interior views of the exterior walls at the 13th floor mechanical level. The aluminum grilles are hidden from view by exterior stone screens. This is the original configuration based on the 1956 drawings.

Close-up of the west elevation, showing the regular fenestration pattern and two-pane design of the windows. Aluminum metal screens on the 13th floor hide a mechanical floor and grilles. The red circle highlights what appears to be localised water runoff, which would be investigated prior to preparation of reconstruction plans and is due to a damaged stone sill.

Above - Detail of exterior of exterior of 13th floor mechanical grilles.

At right - Detail of typical window on north elevation. The surface of the aluminum is rough rather than the original "mill finish" with more extensive discolouration of the sill due to alkaline run-off.

Images are from the Clifford Restoration Report.

4.2.3 Structural Assessment

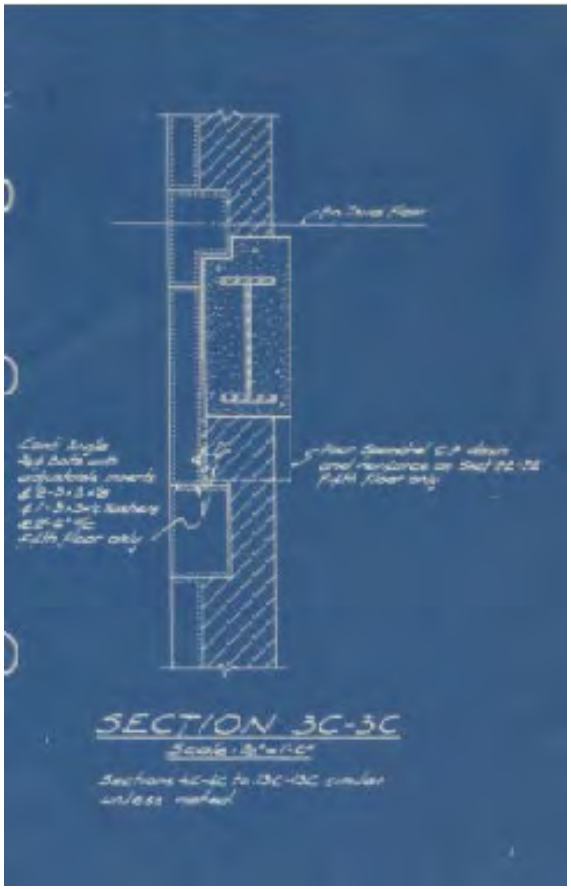
4.2.3.1. General

A structural report was completed by Jeff Watson P. Eng. of Jablonsky Ast and Partners on 25 November 2024. (The report is included at Appendix II). Observations and conclusions in this report are critical to an understanding of the structure and are fundamental in informing its recommended disposition.

The structural report included a review of the original construction drawings as well as an assessment on site of the observed performance of the building.

The report observes that:

- the building was constructed of structural steel beams and columns with precast floor panels supported by the steel.
- The exterior walls are composed of solid brick masonry which is bonded or toothed into the facing stone (which is regionally sourced Queenston Limestone). This monolithic[2] construction is built tightly around the beams and columns. As there are no shelf angles[3] at each floor, it appears that the exterior walls are partially load bearing[4] in combination with the embedded steel structure. There are no shelf angles as supports for the exterior walls and, due to the manner of construction, these stiff exterior walls also interact and engage with the flexible steel frame. A wall section from the original drawings as well as a photograph of the construction is presented at right.
- The steel structure is laid out in a grid pattern which is "fairly" regular meaning that there are some variations in placement of the columns to accommodate the requirements of services. There are three rows of columns running in the east to west direction with the north row inside the north masonry wall; the south row inside the masonry south wall and a row of columns which is offset from the central axis of the building and which also runs east/west. There are 12 rows of three columns running north/south to form the structural grid. A structural plan of the building is provided on the following page.



- Steel frames need diagonal, or lateral support or reinforced corners to prevent them from "tipping" over or racking. In this case, there is a combination to accommodate this:

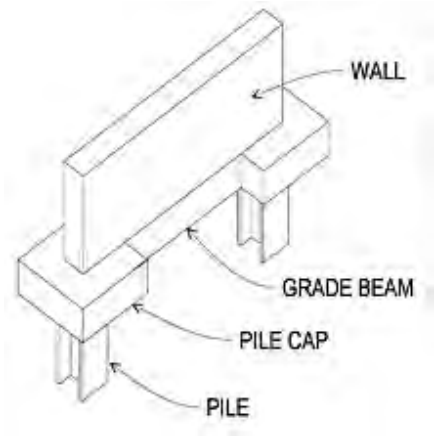
[2] *Monolithic - Means formed of a single block of stone but in this context means that the stone and masonry into which it is toothed act as a single block of masonry.*

[3] *A shelf angle is a steel angle attached along the edge of each floor which supports exterior masonry in a manner that allows for movement of the facade. In this type of construction, the building frame carries the loads of the building and the masonry is load bearing only above and between the shelf angles. Modern construction codes require these angles on tall buildings framed of steel or concrete for a variety of reasons including thermal performance and movement. Shelf angles were not installed at this Site.*

[4] *Load bearing walls support their own weight for the full height of a building and, traditionally, the loads of all of the floors at each level and the roof loads.*

- The exterior stone masonry walls which act as shear walls[5]
- Interior moment frames[6]

- The steel frame is supported at each column on caissons [7]. which extend to bedrock and support grade beams[8] and caps. These support the steel columns. The grade beam is the foundation for the exterior walls and locks-in the placement of the piles at each column location. A grade beam is seen at right (caissons are represented by H section steel piles in the illustration):



The original building was constructed to a height of 13 storeys but was planned to accommodate the additional 7 storeys added later.

4.2.3.2 Findings

Substantial renovations to the building would require amending and upgrading the flexible steel frame even if the provisions of Part 11 of the Building Code are applied[9]. One option to determine if the building performs according to the analysis or meet the requirements of the Code would be to perform load tests. These are difficult on a building of this size and configuration to achieve. Another method is to use the long-term performance approach where it is assumed that a 40 year exposure of the building to all loads without visible distress would substitute for a load test. However, it has been found that distress has occurred as seen in the visible cracks found at the northeast and southwest corners of the building. This is confirmation that the building is performing in a manner consistent with the modern calculated values and would not pass a load test. Findings of the engineering analysis also include the following:

- **Ability of the building to support additional loads:**
  The lateral load resisting system (consisting of the steel moment frames) was found not to be effective in resisting loads in accordance with current codes and practices. It is non-compliant in its current form. The rigid exterior masonry contributes to the lateral load resisting system and we are not aware if it that was intended in the design or a practical consequence of the construction.

  Although the building has performed in an acceptable manner to date, with noted deficiencies, it is clear that the existing building cannot support additional vertical or lateral loads based on the calculations.

- **Addition of a vertical addition over the building:**
  If a new vertical addition were to be inserted within the existing floor plate, installation of new columns could not increase the lateral load resistance of the building. Such new columns would also have to be extended to the shale layer underground - it would not be possible to place the required installation machinery inside the existing building to install the caissons or piles.
- **Cracking:**

[5] *A shear wall is defined as a structural wall used to resist lateral forces. A solid wall cannot rack or tip, for instance, while a wall made of sticks can collapse without a solid panel, diagonal bracing or reinforced corners to keep the sticks in their vertical and horizontal positions.*

[6] *A moment frame is a set of steel beams and columns which are reinforced at the corners to prevent racking or bending when a horizontal force is applied. By this means, a shear wall is not needed as the assembly is prevented from movement by the reinforced joints.*

[7] *Caisson - a watertight box or cylinder that is sunk into the ground and filled with concrete to form a deep foundation support for superimposed columns*

[8] *A grade beam spans between the tops of the caissons and is at or just below "grade" or ground level.*

[9] *Part 11 of the Code permits compliance alternatives where an earlier type of system can be used and amended in a manner that meets current requirements or an alternative to those requirements.*

A review by GBCA and Clifford Restoration Limited revealed cracking for over five storeys at the northeast, southeast and southwest corners of the facades as noted above. It has been determined that the masonry facade is very stiff and contributes to the lateral stiffness of the building. This was not considered in the original design. Seismic[10] loads and heavy wind loads on the long walls put pressure on the structure[11] and are resisted by the masonry rather than the structural moment frame system, the latter of which is not fully engaged before the loads are absorbed by the masonry. While Toronto is in a low-level seismic zone, minimal provisions for seismic movement were made in the original design. As the building is thin in the north to south direction, there is less stiffness in the end walls than the long walls. The result is that the building is subject to torsional, or twisting, loads with the bending most severe at the corners at the lower portion of the tower. Movement induced by these loads results in observed cracking, typical for masonry in these conditions, which has already been repeatedly repaired.

4.2.3.3 Summary

Seismic events, although less frequent than wind events, tend to cause more deflection in a building than wind. The current Building Code recognizes this and has a greater allowance for deflection for seismic than for wind events. The deflection associated with seismic events has a direct impact on the observed cracking. This cracking, as previously referenced, is as a result of the stiffness of the exterior wall assembly and signifies that the capacity of the exterior wall assembly has been exceeded.

Given that the walls are cracked, and now have a reduced capacity, the resistance against wind events that occur (more frequently with climate change) will be reduced. This will cause the cracking to continue to extend or new cracks will form during both wind and seismic events. The repairs that have been performed in the past attempted to address the result of this problem but could not address the root cause. As well, repair material was usually of a lower strength than the original stone and cracked more easily as observed.

If left unattended, the cracking will continue to be exacerbated with wind and seismic events and, the more the walls crack, the weaker the exterior assembly will become, resulting in further cracking. Since the available material for repair is of a lower strength than the original, it will not be possible to restore the exterior wall to its original strength.

In addition, given the close bond between the steel embedded in the exterior walls and the masonry, there are no drainage channels to remove water and, where water ponds, it can freeze and increase the size of the cracks. When cracks open, water can also sit against the steel columns and initiate corrosion. Steel can expand to over 400% of its thickness over time when corroding putting great force on the adjacent masonry and thus also exacerbating cracks and, again, water penetration.

Identified deterioration will grow exponentially with time - the current status is at the lower level of the curve, and cosmetic repairs can be done over a few years. However, it is our prediction that within 30 years substantial damage will have occurred with consequent larger and larger areas of masonry subject to repairs and an accelerated rate of damage. Fundamental issues cannot be solved with the building standing with the result that the identified heritage attributes will degrade at a quickening rate.

[10] *Seismic means "related to earthquakes or other movements of the earth"*

[11] *Small seismic events over the years have caused much of the swaying and cracking of the building but, as movement occurred, the impact of wind loads is becoming more significant. It is interesting to correlate wind pressure with horse power to illustrate the force applied in windy conditions - a normal car has roughly 150 horsepower; a small 30 foot sail boat produces roughly 40 horsepower from roughly 400 square feet of sail; the Cutty Sark, a Clipper ship, had roughly 32,000 square feet of sail and produced approximately 3,000 horse power at maximum speed in stiff winds. The area of the south wall of the subject building is over 50,000 square feet which can imply a force in a stiff wind of over 5,000 hp which, although adjusted for wind shadowing from other structures, may increase exponentially with severe wind events.*

4.2.3.4 Discussion

The original building has a flexible steel frame intimately bonded to stiff and inflexible load-bearing exterior walls. Steel used during the original construction time was of lower strength than used today. The result is more potential flexibility in the frame and a greater divergence between the performance of the exterior masonry walls and the steel frame. When this type of system was used for relatively short and thick structures (masonry on steel frame with no provision for movement), significant issues were minimal. Construction of this type includes the Centre Block on Parliament Hill in Ottawa which has a steel frame with stone cladding bonded to clay tiles for its exterior. Inherent in successful examples of this type is a separation between the exterior masonry and steel frame which allows for structural movement between the stiff and flexible components and reduces the potential for significant movement from wind and seismic activity.

The subject building represents the culmination of a period of transitional structural design dating from the late 19th century to the latter 20th century. The interaction between flexible steel structures and stiff masonry was not fully understood. In the years after the Site's construction introduction of improved building science and construction techniques appeared. Working Stress Design[12] was employed for the original design. In 1960, Ultimate Strength Design[13] was adopted and changed again in 1970 to Limit States Design[14]. Each approach advanced designers' ability to determine appropriate solutions - particularly for composite buildings which saw the adoption of shelf angles, soft joints and the ability of exterior elements to tolerate structural movement. Newer approaches also allowed for a more sophisticated understanding of the performance of existing buildings which in turn has allowed for an understanding of visible damage as a result of performance issues.

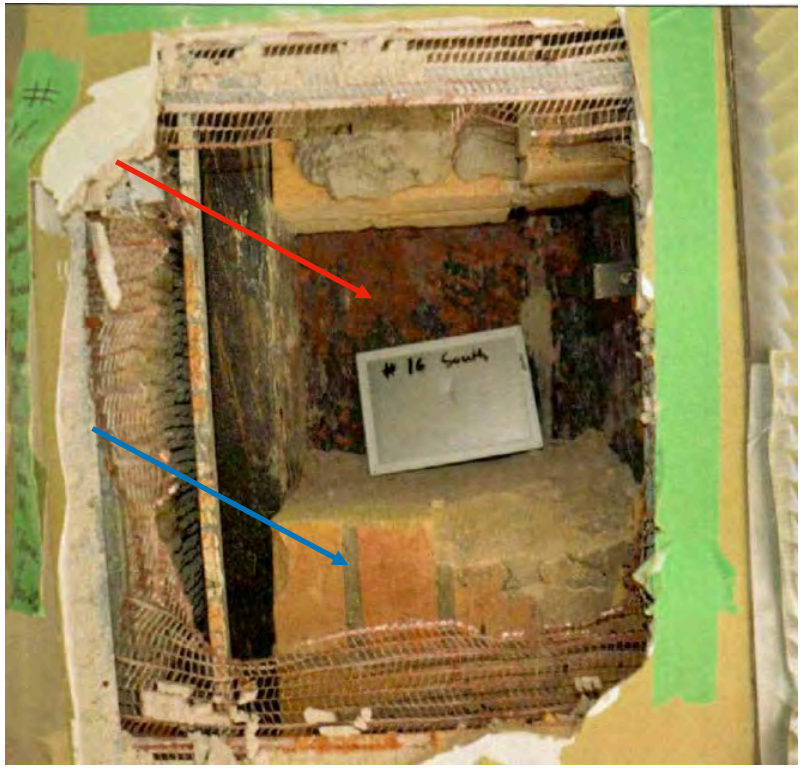
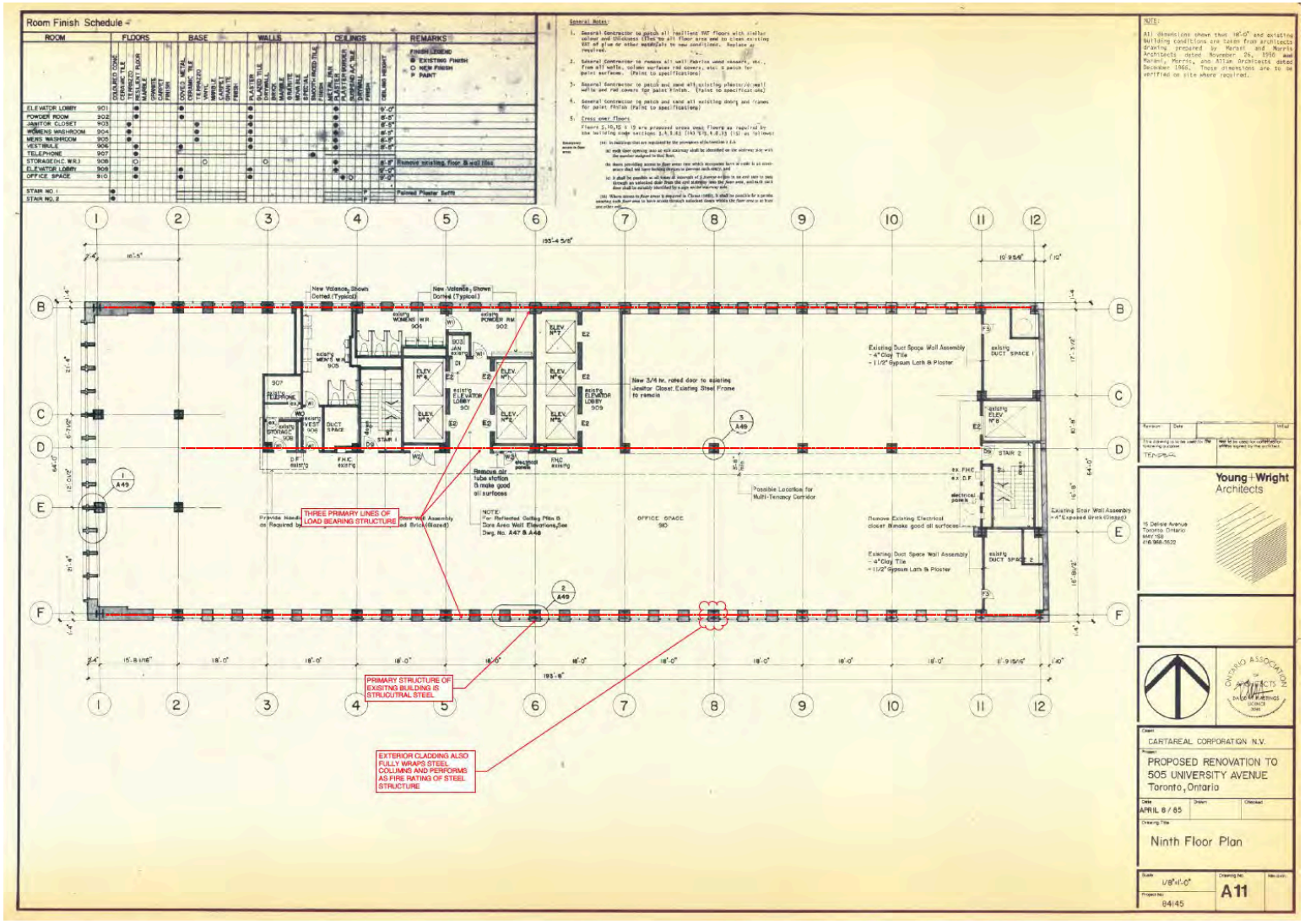


Illustration from the Clifford Restoration report. The red arrow points to the web of a steel H column into which masonry (blue arrow) has been built. The masonry is built tight to the flanges and web of the column. The steel is corroding at this middle level floor – lower floors will see greater levels of corrosion due to ponding of water.

[12] *Working Stress Design was intended to keep material stresses in construction below a predetermined limit under expected service loads - under normal conditions*

[13] *Ultimate Strength Design utilizes reserves of strength resulting from a more efficient distribution of stresses allowed by plastic [flexible] strains in the concrete and reinforcing steel*

[14] *Limit State Design involves estimating the subjected loads on a structure, choosing the sizes of members to check, and selecting the appropriate design criteria.*



The 1985 plan of the ninth floor of the building prepared by Young + Wright Architects. The column lines in the east/west direction are found on grid lines B, D and F. The columns are located on these lines intersected by north/south grid lines 1 to 12. Note the variation in spacing in both directions.

5. PROPOSED DEVELOPMENT

5.1 Objectives of the Development

The Subject Site is located at the corner of Edward Street and University Avenue. The Site is a good location for intensification and would be compatible with Provincial Intensification policy as it is in proximity to a TTC station (St. Patrick); within walking distance to the 505 Dundas Street Car; and near to important commercial and institutional activities. The proposed development therefore aims to achieve the following objectives:

- Intensify the site

  The current tower occupies approximately 50% of the property, with additional area occupied by the ground floor podium. The portion under and to the north of the tower is a surface parking lot with landscaped area to the south facing Edward Street. Additional massing is proposed to intensify the site.

- Add a significant number of residential units to the site with ground floor retail and some reinstated non-commercial.

  Residential use is in compliance with the Official Plan's land use designation. Given the Site's proximity to transportation networks as well as commercial and institutional areas (such as the University of Toronto), this is an appropriate location for this occupancy.

- Recognize the cultural heritage value of the site

  The property was designated under Part IV of the OHA by City Council in by-law 505-2024 on May 23, 2024 although this is the subject of an appeal to the OLT. Based on the provisions of the Provincial Planning Statement 2024 ("**PPS**") and the Toronto Official Plan ("**OP**"), conserving cultural heritage value needs to be balanced with other provincial and City policy objectives.

With the down turn in office occupancy in Toronto, this Class C to B building is competing with much superior buildings at the same rates. Conserving the heritage value the building with limited economic ability to maintain or upgrade the facility in a declining market is a challenge. Exterior repairs and interior refurbishment (such as mechanical and electrical systems) will create costs that will meet safety and usability needs but would still see erosion of heritage values. Commemoration and intensification would be, in our opinion, an appropriate response to the policies of the PPS and the City's OP while meeting many heritage objectives.

However, the structural issues have primacy as on-going structural deterioration will see the loss of heritage value regardless of substantial interventions. A balance between preservation, commemoration and intensification of the site would enable the project to be in line with the objectives of both the policies of the PPS and the City's OP.

While the design innovations provide heritage value, their application was functionally problematic due to structural issues not originally anticipated or understood..

Key attributes of the site, such as the use of Queenston limestone; the design aesthetic; and the central location of the existing building on the site should be commemorated to mitigate the adverse impacts of the proposed strategy resulting from structural findings.

5.2 Exploration of Options and Associated Viability

To achieve intensification and meet heritage requirements, a number of options were pursued for the intensification of this site. Each option/scenario for the Site has a potential heritage impact, whether positive or adverse. These are discussed and evaluated:

1. **Do nothing:** In the long term, significant upgrades and maintenance to the existing building will be required to keep it commercially viable and safe. These must be done to position the building in a market where there has been a significant decline in demand for office space. While this, on its face, does not appear to be a heritage argument it is, in fact, framed by historical

events that are on-going and include post-COVID market conditions. Therefore, leveraging the viability of the site is critical to providing the financing to keep this heritage building visible and viable in the community.

The structural evaluation has shown that the cutting edge design of the building in the 1950's over-reached in terms of the analytical tools available creating an internal struggle between a flexible frame and inflexible perimeter. Resulting damage from this non-reconcilable conflict has been identified and this damage will continue to grow at a gradually increasing (exponential) rate. Required interventions will, in the long-term be so extreme that the heritage values of the site will be eroded, at an increasing rate.

The important role of residential intensification in this discussion must be considered once the current lease cycle of the building is complete.

The above issues cannot be examined in isolation from one another. A combined examination is required by the PPS and the Toronto OP.

Assessment: While a do-nothing approach would conserve the Designated building as is and in place. Piecemeal repairs will result in diminished integrity of the Site's heritage value culminating in significant repairs, if possible, that will all but erase such value. If protection of the attributes represented by this structure is the objective, doing nothing is not an option.

2. **Partial Retention:** Use of the existing building frame to support any retained exterior walls as a part of a redevelopment.

   Assessment: Retention of exterior walls above the fourth floor of the building would not be possible based on engineering analysis. The results of the analysis indicated that there would be substantial movement and cracking if a retention scheme was carried above 4 storeys due to thermal expansion and contraction of the retention system. The upper portions of the building would require dismantling and reconstruction.

   Even if such a plan was adopted, the frame of the original building would remain imbedded within the exterior walls with consequent structural complications. The only option would be to demolish the existing building and reconstruct.

3. **Full Height Partial retention:** The objective was to determine if the full 20 storeys of the building could be retained on the exposed faces if a new addition was added to the back of the structure. In this option, the full height of the heritage building would be retained with a new tower constructed behind and above.

   Assessment: As with scenario 3 above, structural analysis was conducted to determine if a partial retention/reconstruction of the building was possible. New footings and piles would be required to be placed within the footprint of the twenty-storey structure. Significant amounts of structure would have to be removed to accommodate the equipment needed to place the piles - the thin profile of the building combined with only 3 column lines running east/west would result in the destabilization of the building and would not be viable. The only option would be to demolish the existing building and reconstruct

4. **Construction on top of the existing building:** This would see an addition to the top of the existing tower. Nearby examples of this form of intervention are examined as precedents on the following page:

Assessment: Two developments on the north-east and north-west corners of University Avenue and Dundas Street at St. Patrick station are overbuild developments. One includes the retention of the existing heritage structure, and the other involves the retention of the structure with a redesign of the facade.

480 University Avenue: The Icon Condos (55- storey)

The former Global House building by WZMH (1968) featured a concrete grille facade in the style of Minoru Yamasaki, which was removed during the overbuild process. A new structural frame to carry the new weight - designed by Sigmund Soudack & Associates – was installed as the concrete facade was removed. An additional 4 levels of underground parking levels were added to the existing 2 levels.

The existing18-storey office building base was re-clad, and a 37-storey condominium tower built above it. None of the appearance or original volume of the building is discernible which would result in a significant adverse heritage impact if a similar approach was to be used to retain 505 University in situ.

481 University Avenue: The United Condos (52-storey)

This project involved retaining, restoring, and enhancing two large and significant buildings that once comprised the Maclean Hunter headquarters. The first is a 1930s collegiate gothic building by Toronto architect Murray Brown, designed with New York's Schultze & Weaver. The second, designed by Marani & Morris architects (1961) is a 9-storey midcentury modern stone office tower.

The lower height and box-like volume of the heritage structures has permitted retention of the lower facades by the partial re-use of the original structure as supports. This cannot be done with the thin floor plate of the

The re-cladding 480 University, with the Global House (1968) to the immediate north, and 522 University Ave. beyond this (Core Architects).

481 University Avenue (under construction at left, and in rendering at right). In the distance is the complete 55-storey tower including overbuilt structure at the Icon Condos (480 University Avenue).

subject property. In addition, the thin profile of the building precludes the setbacks required for the addition of a tower on top of the existing building.

In addition, the methodology for construction of such a tower would be the use of cast-in-place concrete which would not work in concert with the soft steel moment frame of the existing building both in terms of loads imposed and the reaction of the disparate parts to wind and seismic pressures.

Construction of a tower over the building would require the introduction of support columns within the existing building which is virtually impossible due to the existing dimensions restricting use of required equipment.

5. **Construction of a new building adjacent to the existing**

   Assessment: This is not possible due to the dimensions of the property around the subject building. The existing building does not occupy the full site. The 20-storey tower is centrally located on the site with north and south setbacks. As the approximate gross floor area (GFA) of a typical office floor is 12,000 sq. ft. and the site is just under 36,000 sq. ft., the tower therefore occupies approximately a third of the site. While it is recognized that this is the original massing and location of the building on the site (which are considered attributes), conserving the existing building challenges the potential for meeting the objectives of intensification for which, based on the PPS and the Toronto OP, must be weighed together with the objectives of heritage policies. While additional massing may be incorporated to the north of the building, this change will require alterations to the original building that cannot be structurally achieved with the existing structural arrangement.

6. **Insertion of a new structure to the north of the existing building:** There are many precedents for such an intervention in Toronto.

   Assessment: The issue remains that any such addition would be incompatible with the existing structural arrangement of the subject building as any such addition would be constructed of concrete and would be stiffer than the original. To implement this option, the existing building would have to be disassembled and reconstructed.

7. **Insertion of a new structure to the north of the existing building by dismantling and reconstructing the heritage building**

   Assessment: The Standards and Guidelines do not support this approach unless an significant issue exists which would preclude restoration, renovation or rehabilitation. This approach would normally not be a potential one save for the over-riding structural issues identified since the first HIA submission. As it has been determined that structural issues will eventually cause the loss of heritage value and that the issues cannot be solved without a drastic intervention, this approach appears to be the most reasonable. It will allow for commemoration of heritage value and permit intensification of the site in line with Provincial policy. It is therefore recommended. A more detailed analysis follows.

5.3 Analysis

While demolition and reconstruction serves the purposes of intensification of the site, it does not, on its face, serve objectives of the City of Toronto's heritage policies. This would be the case if the existing structure was to have a life span well into the future with only modest cyclical repairs to ensure its integrity. However, as observed in the structural and condition survey, a significant set of design flaws limit the building's potential overall lifespan and, when the maximum damage is reached, there would be no funding to support any form of aggressive reconstruction. It has been determined, with extensive structural analysis, that the existing building can neither be conserved as a part of any proposed development on the site to meet the objectives of intensification nor, as noted below, can the long-term viability of the building be assured due to flaws in its design.

Therefore, the preferred approach is that the existing building is not proposed to be conserved in situ. As the property was found to have cultural heritage value and is Designated under Part IV of the Ontario Heritage Act and on the Heritage Register, the demolition of the building will have an adverse heritage impact.

Regardless, by keeping the original position of the building on the site and reconstructing other attributes, it is our opinion that a significant number of heritage objectives can be achieved. Option 7 has therefore been selected as the best option to balance conflicting issues of intensification and heritage value.

Several reasons for our conclusions are noted above, but we feel it necessary to delve into more detail in support of the proposed approach. These are discussed in the following points.

1. The Parks Canada "Standards and Guidelines for the Conservation of Historic Places in Canada" says:

   > "Understanding an historic place is an essential first step to good conservation practice." And to "evaluate the existing condition of character-defining elements to determine the appropriate intervention needed. Respect heritage value when undertaking an intervention." The Standards state to, "Repair rather than replace character-defining elements. Where character-defining elements are too severely deteriorated to repair, and where sufficient physical evidence exists, replace them with new elements that match the forms, materials and detailing of sound versions of the same elements."

   We are not replacing the character defining elements - the original design will be reconstructed and visible to the public realm using the original and visible Queenston limestone exterior walls. These will be re-installed along with other components. Understanding of the historic place was amplified by the thorough structural evaluation of the building. As a result, we are of the opinion that the proposed development meets the intent of the standards given the nature of the building's construction and apparent modes of deterioration.

2. The reasons for demolition outlined in the original application were not based on a full understanding of the building as the HIA did not include the structural issues discovered since that time. The HIA stated that demolition was being sought to:

   - Intensify the entire extent of the site;
   - Add residential units and create a mixed use building; and to
   - Improve the office layout and amenities.

   This current HIA incorporates the information developed subsequent to the original HIA specifically related to identified structural problems. Proposed modifications to the earlier design commemorate the original structure by the reconstruction and re-use of original character-defining elements in their original configuration, massing and original position on the property.

3. Structural issues that result from dichotomy between the stiffness of the structural steel interior and that of the Queenston Limestone exterior is resulting in the stone becoming "overstressed" and that this is limiting the life expectancy of the building. The long-term physical viability of the building will be compromised by the stiffness of the exterior masonry walls as it interacts with the flexible steel framing system.

4. It is difficult to predict the speed at which the condition will become unsafe as it depends on a number of unknown/changing factors such as seismic and wind events. However it is likely to require significant intervention within the next 30 years. The building will deteriorate at an ever-increasing rate and would require significant interventions in approximately 30 years or, in the worst case, demolition.

5. The only way to stiffen the steel interior prior to re-cladding would be to add significant cross-bracing. Such repairs will reduce visible damage in the short term but the damage will recur. The flexible steel frame cannot be disconnected from the brick/stone cladding without demolition of the building and its reconstruction. The long-term physical viability of the building will be compromised by the stiffness of the exterior masonry walls as they interact with the flexible steel framing system.

6. Installation of cross-bracing would cause significant and intrusive interventions at the interior of the building. While it would reduce the rate of damage in the short term, the damage will recur. The flexible steel frame cannot be disconnected from the brick/stone cladding without demolition of the building and reconstruction. The entire interior would be degraded by large steel members (which would require additional thickness by the addition of fireproofing) and affected to a level that the core of the original building would only marginally be useable. The most prominent

intervention of this type, the seismic upgrade of a Vancouver Post Office, has been used for several decades as specifically what not to do in terms of building preservation.

7. The existing Queenston limestone will continue to be overstressed if retained on the existing steel frame. The limestone cladding will continue to move and crack in the areas identified causing ever increasing degradation of the system of which it is a part. The location of the damage will compromise the integrity of the building in the identified time frame. If the existing Queenston limestone remains on the existing steel frame it will continue to crack. Repairs to any cracks will only be a temporary stop-gap measure and will add further stress to the Queenston limestone, resulting in more cracks and ultimately the need to replace the stone with consequent loss of heritage value. The flexible steel frame cannot be disconnected from the brick/stone cladding without demolition of the building and reconstruction.

8. As Queenston limestone is no longer available it would need to be replaced with a different stone. Rep-lacement of the Queenston limestone has already occurred using Indiana. The replacement materials are not the same density as the original; they weather differently; and they do not match the colour of the Queenston limestone. Such a replacement is contrary to the quoted statement from the Standards and Guidelines which recommends use or retention of original materials. Sufficient original material will be salvaged from the north side of the building to ensure that all immediate and future repairs will have a stockpile of original material to draw from. The demolished material from the east, south, west and north wall returns will be reconstructed on a new frame thus conserving this important attribute. This type of replacement with non-matching material will result in an ongoing degradation of the appearance and thus the heritage value of the original design which is, in our opinion, a significant attribute. The monolithic presentation of the stone building, all of one material, would be lost over time - this process is already apparent with patches using Indiana limestone. If left to fully degrade, the future becomes a challenge as even Indiana stone is limited by the size of the quarry - it is completely feasible that, in the event of major required repairs to retain the building in 30 years, limestone products may not be available in quantity. The result could be the use of pre-cast panels such as was done recently with the replacement of the 1950's marble cladding at the Hamilton City Hall. By re-designing the current cladding to form a rainscreen and using original salvaged material to replace patches of inferior stone, we can predict a life span of the commemorative building of more than 100 years using modern cladding detailing.

9. If the Queenston limestone was replaced with a different stone. This would not meet the recommendations of the Standards and Guidelines as this alternate material would not weather or appear the same as the Queenston limestone. Total replacement would be an intervention that would destroy an important attribute - that of an Ontario-sourced and installed material that is fundamental to the expression of this structure.

10. If all of the Queenston Limestone was removed in order to stiffen the steel frame, and then put back as a non-structural cladding, the invasiveness of the process and scale of intervention required would essentially equate to that of demolishing and reconstructing the building. This would only accord with the Standards and Guidelines for Historic Places in Canada as the response would be the correction of a significant built-in flaw. This is not significantly different from the proposed approach.

11. It is the opinion of GBCA that the proposal to dismantle the building entirely and reconstruct it re-using the salvaged Queenston Limestone is an appropriate way to continue to convey the building's cultural heritage and values for generations to come. This, in our opinion, is the best manner in which to conserve the identified heritage value of the building. While what is being proposed is defined as a demolition in the City's OP, it would an orderly and recorded dismantling of the building in a manner that its heritage attributes and value can be conserved and commemorated by reconstruction. The proposed approach will allow the reconstructed commemorative building to perform to an extended date whereas, in its current condition, its longevity is limited. All of this would be prepared in the form of a Reconstruction and Commemoration Plan.

12. A commemorative approach will allow for the re-introduction (after demolition) of a significant number of the heritage attributes (identified in the Designation) to the public realm in a manner that will allow them to last indefinitely with appropriate maintenance. In the absence of this approach, the resource will continue to degrade to a point where attributes and heritage value will be lost as maintenance cannot solve the underlying structural issues.

5.4 Description of Proposed Development

The proposal for 505 University Avenue includes a 63-storey (plus MPH) mixed-use residential building with a ground floor area of 2,180 square meters. The overall site area is 3,328 square meters.

The proposed change to the site consists of demolishing the existing building and replacing it with the proposed tower which will be cut into the rear of the reconstructed facades of the heritage building. The heritage building will be demolished and the proposed new building's exterior, up to 20 storeys, will be constructed to commemorate the visual appearance of the original structure. Demolition will take place by careful dismantling[15] of identified attributes in a manner that the building can be reconstructed to commemorate the original building.

The proposal has two options:

- Option 1 will replace 16.3% of non-residential GFA at levels 3 to 4.
- Option 2 will replace 3.9% of non-residential GFA[16].

In both options, the proposed reconstructed lobby in the podium at grade will offer non-residential space to the south and lobby space to the north. The lobby and podium is included in the 20-storey commemorative component of the reconstructed original building. Over the 20 storey building an additional 43-storeys of residential units will be constructed above and to the rear of the 20 storey commemorative reconstruction.

The current development scenario will include the following:

1. In order to clear the land for construction, the existing structure will be demolished under the definition of the Toronto OP.
2. The site will be excavated to one level below grade for parking.
3. The new tower, including the 20 - storey commemorative reconstruction, will then be constructed.
4. Access to loading will be located from Edward Street.
5. Entry to residential units will be located through a vestibule facing Edward Street. A potential separate lobby is illustrated for both options for the north end of the podium facing University Avenue for access to amenity or as a secondary point of entry/exit for tenants.
6. Non-residential, leasable, space is proposed on the ground level on the southern part of the retained heritage podium.

Images of the development and massing follow on subsequent pages of this HIA. A full set of drawings for Option 1 is found in Appendix VI and for Option 2 in Appendix VII.

5.4.1 Design of Tower

The reconstructed 20 - storey tower will duplicate the original building's current design using the original exterior materials. Windows on the south, west and north returns will duplicate the design of the original (non-repairable) units – they cannot be repaired or re-used due to their condition and Code requirements save for the following:

1. Minor changes will be made with the addition of two small new south-facing windows in the stone walls at the ground floor to accommodate building management office.
2. The open access through the base of the reconstructed building will be glazed to enclose the area. Glazing will duplicate the current arrangement of pillars in the open area to allow the original design to be legible when viewed from the street.
3. Windows will be inserted into the east face of the reconstructed 20 - storey tower to accommodate dwelling units. Windows at the 3rd

Image at right: the west elevation facing University Avenue. The reconstructed building is separated from the new tower by setbacks and the aesthetic of the new tower.

As a flat-on elevation drawing, this image is deceptive in that the new tower is more dominant than it will seem when viewed in perspective from the street. Due to perspective, the new tower will be event less dominant than noted above.

(Images by BDP Quadrangle)

[15] Dismantling will involve the careful disassembly of elements that constitute and contribute to the heritage attributes of the building. The processes is described later in this HIA.

[16] In both instances non-residential space is shown on the floor plans of both Option 1 and Option 2 with a potential separated lobby to the north of the podium portion facing University Avenue.

and 4th floors on this elevation may be omitted for non-residential uses. No windows will be inserted at the 13th floor amenity space.

4. The canopy facing university avenue will be included in the proposed new building and updated with a new design or could be restored. It is needed to protect visitors during inclement weather.

5. The new tower will be set back from the face of the reconstructed building by approximately 3.6 m from the south façade, approximately 9.7m from the west and 5.03 m from the east as noted opposite and the next page.

The aesthetic of the proposed tower, whether Option 1 or 2, is of a regular pattern of windows developing an image that is both monolithic and subordinate to the original tower. The design is proposed to reference the original tower's design but to allow the new tower to be subordinate to the original. Subordination is also realized by the tower's setback from the reconstructed building facades on the south, east and west with a .

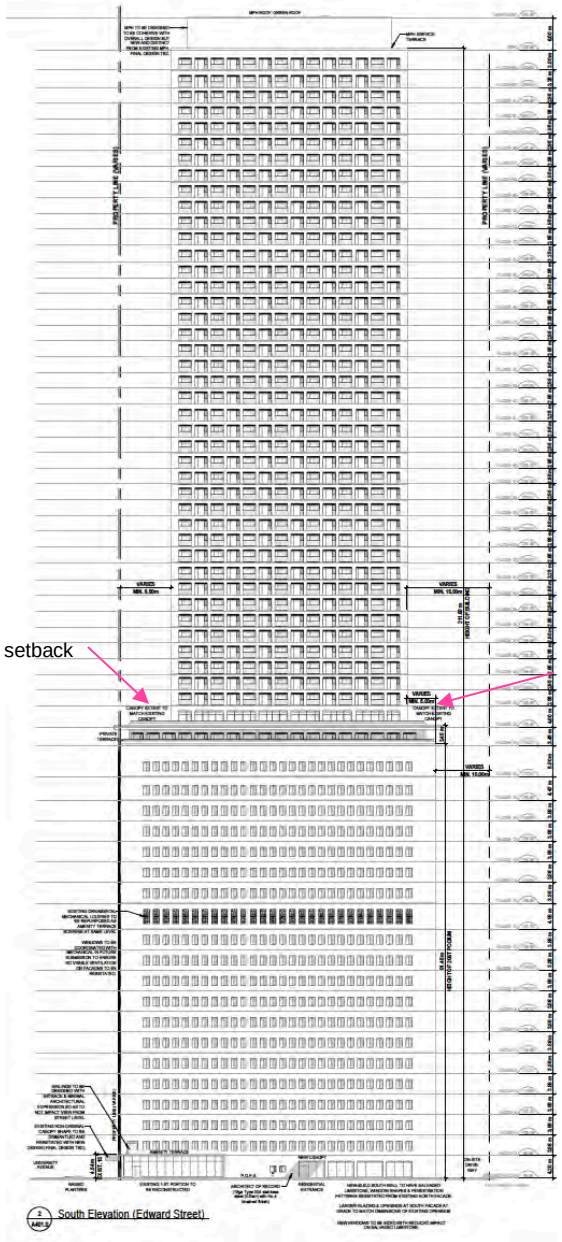
Images of the overall composition are presented on this and the following page. It is expected that further design discussions will be held with the City to refine the tower expression and ensure that it meets the objectives of enhancing the presence of the original tower. These discussions will also inform the details to be included in the Reconstruction and Commemoration Plan.

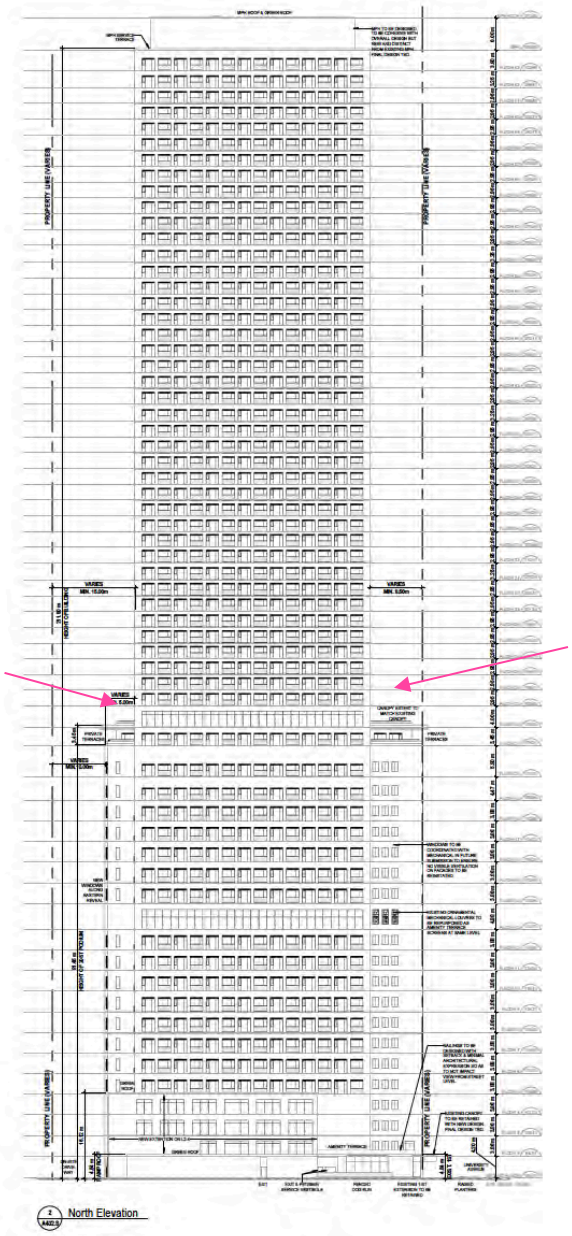
Options 1 and 2 are sufficiently similar that there will be no change to the assessed heritage impact whichever is chosen.

Immediate right image is the south elevation facing Edward Street. The reconstructed 20 storey building is clearly isolated from the new tower by virtue of design and setbacks.

Far right is the elevation facing north with the new tower prominent visually isolated from the public realm. Portions of the 20 storey structure can be seen to the lower left and right of the new tower structure.

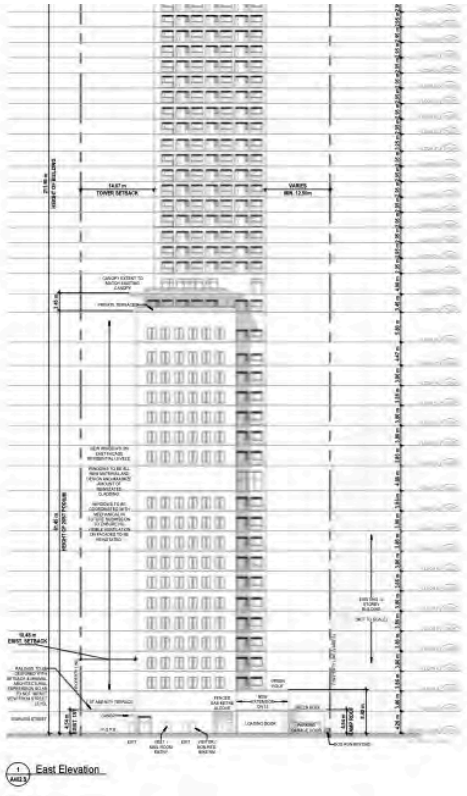
(Images by BDP Quadrangle)



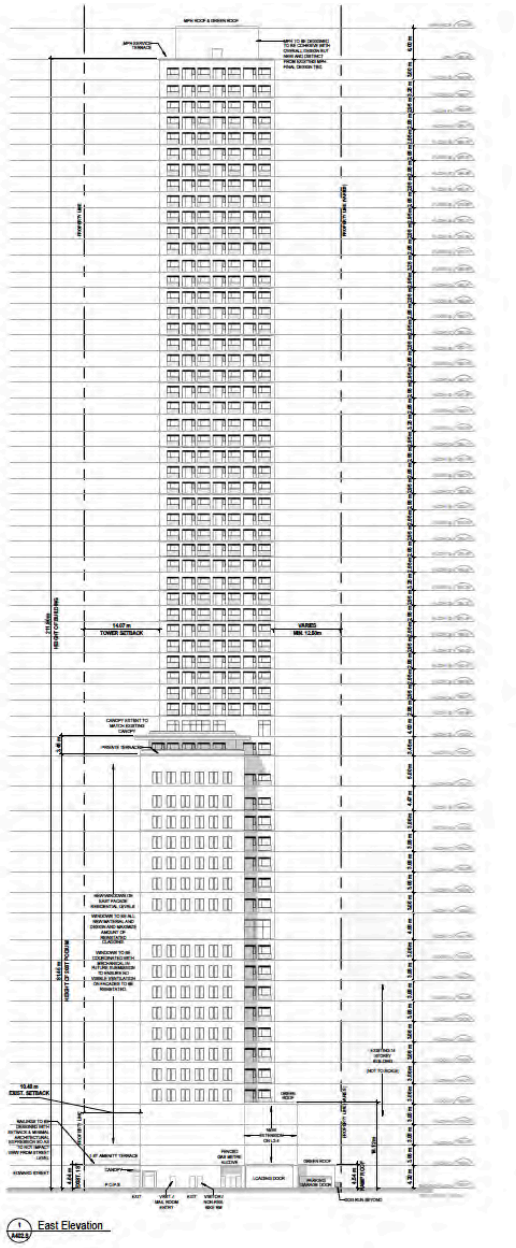


5.4.2 East Elevation

To accommodate dwelling units at the east end of the original tower, windows will be required. Several options were examined with the preferred option depicted on this page. The objective is to denote the windows as a modern intervention of its own time and place but respect the proportions and rigorous geometry of the original tower. As noted, if the option for office space on the lower floors is adopted, east facing windows on those floors would not be installed. In the images below/at right the east wall of the Option 2 tower is shown at left and that of Option 1 at right. Two floors of new windows at the 3rd and 4th floors are removed for Option 1. The visual impact is negligible.



Immediate right is the lower portion of the east elevation from the Option 2 scheme. Note the fenestration at the lower floors of the 20 storey building (Image by BDP Quadrangle).

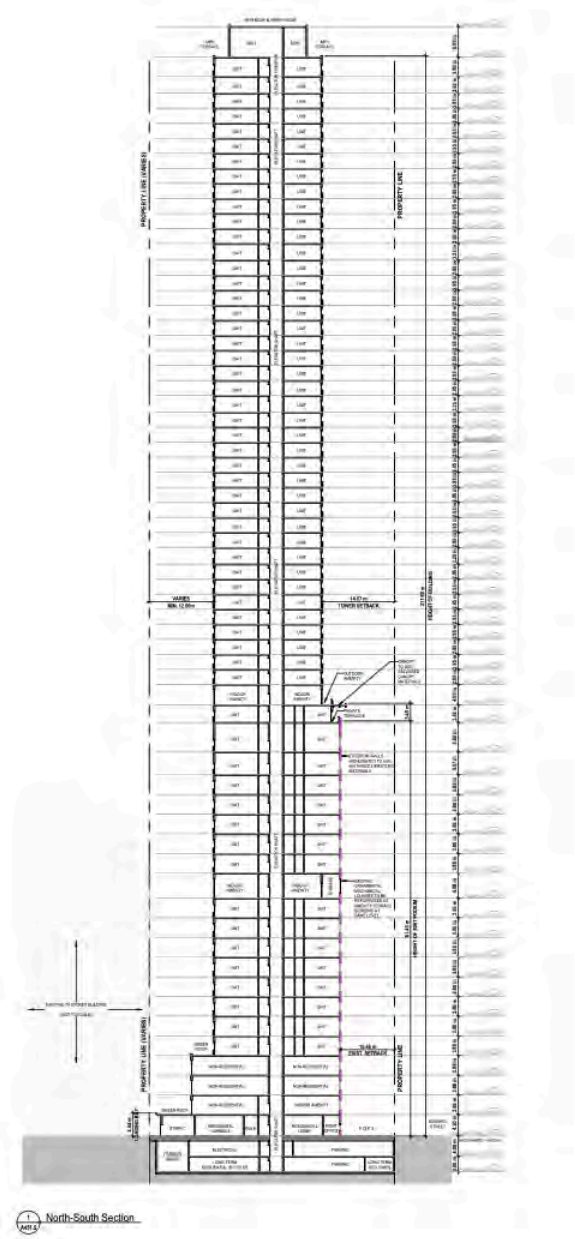


Far right is seen the elevation of the Option 1 scheme east wall – note that floors 3 and 4 of the east wall of the 20 storey building are not fenestrated (Image by BDP Quadrangle)

5.4.3 Building Section

To accommodate the higher floor to floor heights of the 20 storey portion of the building, the floor plates in the attached new tower are also adjusted. This avoids floor levels being set at the wrong height internally to accommodate the exterior fenestration levels of the original building.

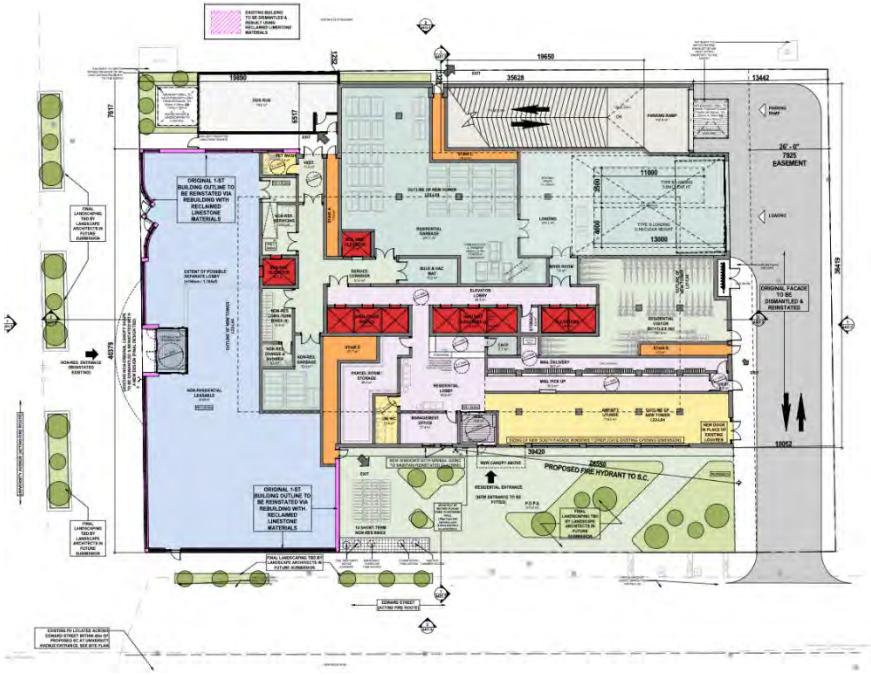
Exterior walls of the 20 storey building will be reconstructed and are highlighted in pink in the section.

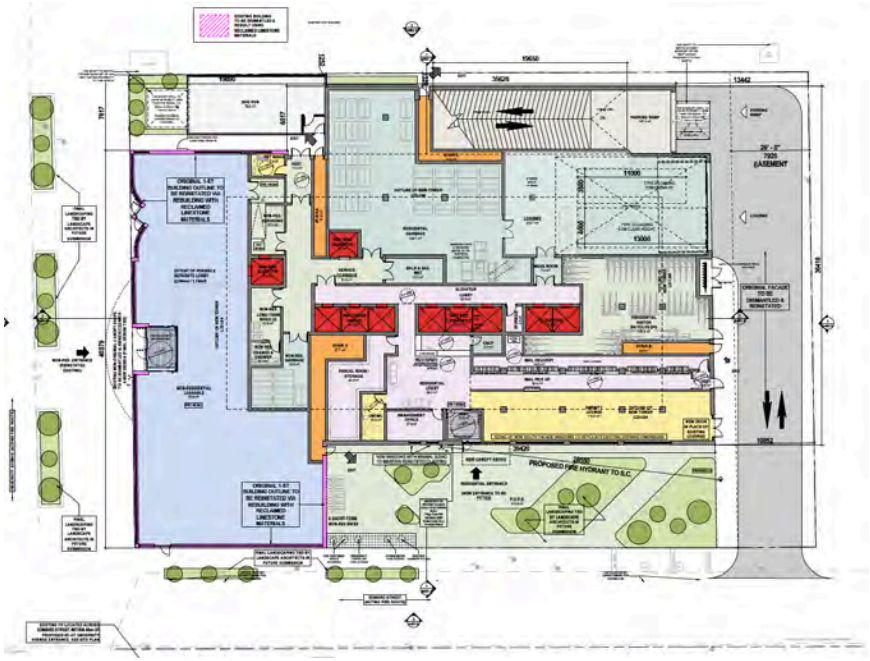


Section through proposed building from north to south.
Note pink portions of lower wall illustrating reconstruction of original 20 storey tower (Image by BDP Quadrangle).

5.4.4 Typical Floors

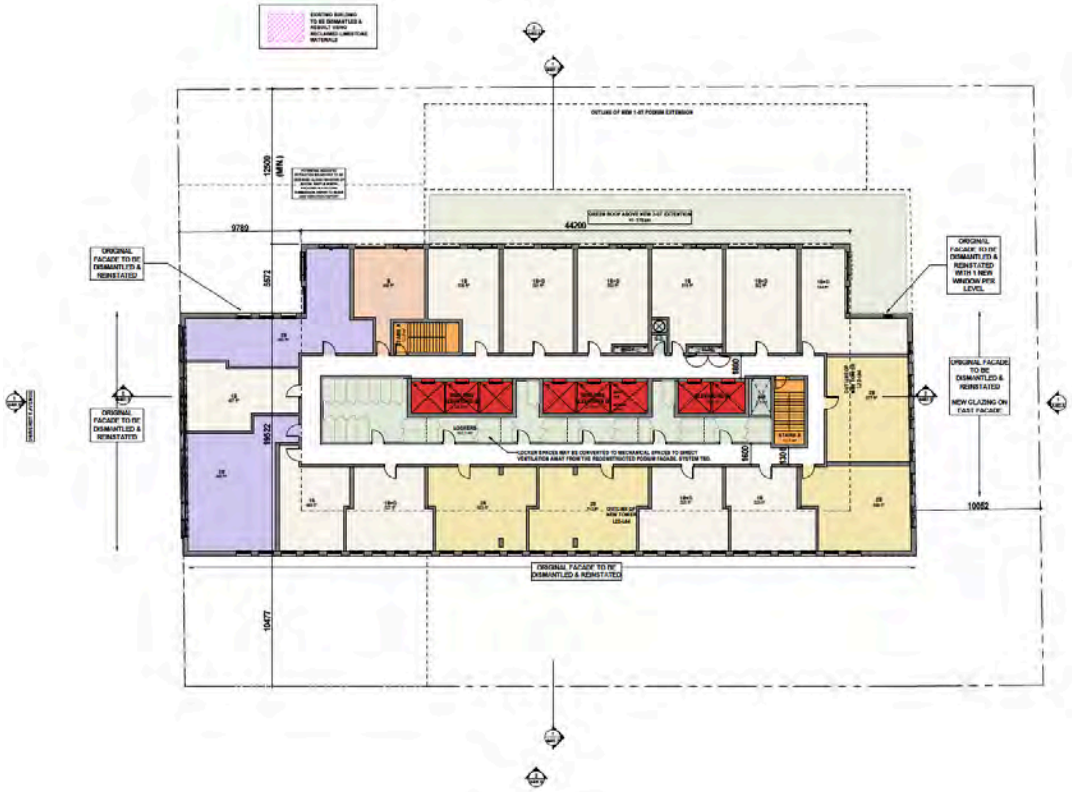
Typical floor plans are included in the drawing sets included in the Appendices.
A few of these are presented below.





At upper left is the ground floor plan for Option 1 showing the reconstructed podium and commercial space at the left facing University Avenue. The north portion of the commercial space can be divided into a separate lobby to provide access to the 2nd, 3rd and 4th floor non-residential (Images by BDP Quadrangle).

At upper right is the ground floor plan for Option 2 showing the reconstructed podium and commercial space at the left facing University Avenue. The north portion of the commercial space can be divided into a separate lobby to provide access to the 2nd floor non-residential (Images by BDP Quadrangle).



At upper left is the second floor for Option 1 showing non-residential space in the middle north side. The 3rd and 4th floors are non-residential space as seen in the lower image at left – no windows from these floors face east (Images by BDP Quadrangle).

At right is the typical floor plan for Option 2 floors 3 to 12 showing residential units inserted into the volume of the reconstructed original building (Images by BDP Quadrangle).

5.5 Summary of changes since 2022 Submission:

Through the OLT mediation process, a number of issues were raised relating to appropriate conservation in accordance with the provincial and municipal heritage policy framework. The current proposal for demolition does not constitute conservation within the City's Official Plan definitions. However, it is the engineering opinion that demolition is deemed to be the only reasonable approach and rests on identified structural issues. Input to this approach was developed through the course of investigations that revealed issues not fully understood prior to the original HIA.

The revised rationale proposes demolition of the heritage building with reconstruction and commemoration of the massing and facades to their full height and in the original location. Updated reasons for demolition reflect the existing condition of the building and the long term impact of piecemeal repairs.

The proposed mitigation strategy is discussed at a high level later in this HIA and would be elaborated on through a Reconstruction and Commemoration Plan later in the development process. This plan would replace the typical Conservation Plan due to the nature of the interventions.

The most notable changes to the development proposal are listed below:

1. A change in the tower height to 63 Storeys (+MPH), with a narrower floor plate (~950 sq. m) to be compatible with the dimensions of the original tower (~1100 sq. m);

2. A reconstruction and commemoration strategy to reconstruct the exterior of the 20-storey building and maintain the existing site placement and setbacks from University Avenue and Edward Street.

3. Step backs of the proposed new tower massing on all sides including east and west reveals on the north elevation of the heritage building.

4. Revisions to materiality, fenestration and relationship between new tower and the reconstructed building.

2022 *- Overall view of the proposed development, showing the 12-storey base. The right portion of the base (the portion that is shown as clad in stone material), is the ''reinterpreted Shell Building'', and located on the southern portion of the site (Image by BDP Quadrangle).*

2025 *- Overall view of the proposed development, showing the revised tower with full-height reconstruction of the original building including its limestone panels. At grade level, the retained 1-storey volume maintaining the original location on the site (Image by BDP Quadrangle).*

2022 - Overall view of the proposed development at 505 University Avenue (building on the left of the image) in its context with the adjacent Maclean-Hunter building, repurposed as part of the United Building project (Image by BDP Quadrangle).

2025- Aerial view of the proposed development at 505 University Avenue. Showing the reduced tower height, full-height re-use of limestone panels, and central canopy and 1-storey volumes at grade (Image by BDP Quadrangle).

2025 - Overall views of the tower looking from the north at grade (above), and from a birds-eye view from the southwest (right). (Images by BDP Quadrangle).

6. RECONSTRUCTION STRATEGY

6.1 Overview

Given the proposed approach of demolition and commemorative reconstruction, an analysis is essential to establish the base-line for an assessment of heritage impact as a result of the proposed development. To do this, we have examined the list of attributes which forms a part of the Designation By-law. These are enumerated on the following pages together with the proposed approach to each individual attribute. Later in this document we will discuss how the approach to each individual approach as well as the overall approach defines our opinion related to the Heritage Impact Assessment for the development.

6.2 Attributes

Building elements	Heritage value	Material value	PROPOSED INTERVENTION	Action
ABOVE-GRADE STRUCTURE				
Reinforced concrete floors	low	low	dispose	reinforcing steel bars can be recycled and concrete can be crushed into aggregates.
Steel structural grid	medium	high	dispose	steel can be recycled.
ENVELOPE				
Queenston limestone	high	high	partial salvage	restore/repair individual stones or panels and reinstate into reconstructed building. Excess stone can be added to a salvage pool for Queenston limestone specific repairs elsewhere in the City.
Granite stone	high	high	partial salvage	restore/repair individual pieces and reinstate into reconstructed building. Excess stone can be added to a salvage pool for repairs elsewhere in the City.
Brick backing	low	medium	dispose	can be crushed into aggregates and recycled.
Windows	medium	low	dispose and replace	replacement windows of same muntin and frame profiles will be installed. Heavily corroded existing frames and glass can be recycled,.
Metal screens	high	medium	partial salvage and reinstallation	restore/repair individual panels and reinstate into reconstructed building. Excess to needs can be recycled.
INTERIOR GROUND LEVEL LOBBY				
marble flooring and cladding	low	medium to high	re-install or salvage	Excess can be added to a salvage pool.

The approach to attributes is per the tables on the following pages. Attributes are identified and listed in the Designation By-law included in Appendix I. While demolition of the building removes inherent attributes, the proposed dismantling/reconstruction commemoration approach will see that not only are the majority of these attributes are commemorated, but will be reinstated using the original components and will be done to the original design.

	Attribute	Proposed intervention	Commemorative Integrity of Proposed Intervention
1	The placement, setback and orientation of the building at the northeast corner of University Avenue and Edward Street	Building will be reconstructed incorporating addition to the rear but to the full volume of the existing in terms of placement, setback, and orientation.	Reconstruction in place therefore yields a commemoration of the placement, setback and orientation.
2	The scale, form and massing of the 20-storey building on a T-Shaped plan that includes the ground-storey podium set parallel the University Avenue and perpendicular to the tower. [While this is verbatim from the By-law, the plan of the building is only T-Shaped at the one storey podium].	Building will be reconstructed to the 20 storey scale, form and massing on top of the reconstructed ground floor T-Shaped podium plan set parallel to University Avenue and perpendicular to the tower using the original materials.	Reconstruction and therefore commemoration of the scale, form and massing of the tower and the podium.
3	The materials, with the Queenston limestone cladding and stone, metal and glass detailing.	All stone materials will be dismantled and reconstructed. These will be located and numbered and logged prior to dismantling; carefully stored and repaired after demolition; and then, for the reconstructed portions of the building, and reinstalled in their original locations save for repair materials which will be discarded and replaced with Queenston limestone salvaged from the portion of the building to be infilled with new construction. Where possible, original metals, glass and glazing materials will be carefully dismantled during demolition then reconstructed with the original materials. If this is not possible, replacement materials will be selected to have the same profile, finish, and colouration as the original,	Reconstruction using original materials commemorates the importance of the original regionally sourced Queenston limestone by its re-use and reinstallation in its original locations. Metals, glass and glazing during the period of construction were also likely sourced in Ontario and their re-use, where feasible is also a commemorative process. Matching original profiles and materials where replacements are required commemorates the original design intent for the building.

	Attribute	Proposed intervention	Commemorative Integrity of Proposed Intervention
4	The flat roof of the tower with its deep, coffered stone cornice on the underside	This will be reconstructed as a part of the overall reconstruction.	The original design and materiality of this feature will be retained to commemorate the design.
5	The one-storey, glazed mechanical penthouse atop the tower roof with its lozenge-shaped form and surmounted by a gently curved roof.	Due to the design of the proposed additions and intensification of the site, this feature will be lost. Some design work will be completed to determine if the mechanical penthouse can be referenced in the tower addition.	Save for acknowledgement in the proposed design of the newer tower, this feature will not be commemorated.
6	The organization of the principal (west) tower elevation fronting on University with its twelve bays of evenly spaced, punched openings alternating with limestone spandrels between the second and nineteenth storeys.	The attribute will be fully reconstructed using the original materials in their original locations. However, heavily damaged material (especially sills) or replacement materials (typically Indiana limestone which does not match the colour, density, or weathering appearance of Queenston limestone) will be replaced with Queenston limestone salvaged from the unreconstructed area of the building at the rear.	The original design and materiality of this feature will be retained as commemoration.
7	The raised and attached stone “fins” both framing the fenestration on the principal (west) tower elevation and vertically delineating each of the twelve bays of fenestration within the raised stone frame.	The attribute will be fully reconstructed using the original materials in their original locations. However, heavily damaged material or replacement materials (typically Indiana limestone which does not match the colour, density, or weathering appearance of Queenston limestone) will be replaced with Queenston limestone salvaged from the unreconstructed area of the building at the rear.	The original design and materiality of this feature will be retained as commemoration.

	Attribute	Proposed intervention	Commemorative Integrity of Proposed Intervention
8	On the north and south elevations, the regular rhythm of the evenly-spaced punched window openings between the second and the nineteenth floors	This will be reconstructed as a part of the overall reconstruction.	The original design of this feature will be retained to commemorate the design.
9	On the west, north and south elevations, the tall rectangular openings on the thirteenth storey (mechanical level) which are distinguished by their decorative metal screens	Due to the design of the proposed additions and intensification of the site, this feature will be lost on the north wall.	These will be retained elsewhere
10	At ground level on the principal (west) elevation, the location of the main entrance centred in the one-storey podium clad in Norwegian blue granite.	The attribute will be fully reconstructed using the original materials in their original locations. Norwegian blue granite is still available and, in the event that repairs are require to individual stones, replacement in kind will be completed.	The original design and materiality of this feature will be retained as commemoration.
11	At ground level, the north and south returns of the one-storey podium, also clad in Norwegian blue granite.	The attribute will be fully reconstructed using the original materials in their original locations. Norwegian blue granite is still available and, in the event that repairs are require to individual stones, replacement in kind will be completed.	The original design and materiality of this feature will be retained as commemoration.

In addition to the above commemoration of attributes, additional work will be completed to commemorate the original building. This work will include:

- Careful dismantling and reconstruction of the stone-clad main lobby
- Infill of the piers at grade at the base of the building with windows in a manner that clearly retains the original appearance of these elements
- Careful design of new or applied elements to ensure that the original design is clearly evident and the new elements, designed to be of their own time and place, do not detract from the reconstructed appearance of the base building.
- The east wall, which is blank, is not listed as a heritage attribute and will be carefully fenestrated for units with this exposure. The design of the fenestration has been completed with input from City staff.

6.3 Mitigation Strategies

To mitigate the impact on cultural heritage attributes, the proposal focuses on careful dismantling followed by reconstruction using original materials where possible. The proposed building design will maintain the building's design features, including floor to floor heights and fenestration patterns save for the

east wall.

6.3.1 Process for mitigating the loss of site attributes

A series of steps are crucial to allow for the reconstruction of the building while using the original materials. This will lead to a better future understanding of the building, and properly commemorate heritage attributes:

6.3.1.1 Photographic and Drawing Recording

Exterior and interior photographs of the current attributes and features of the buildings. Preliminary photos have been taken and included in this HIA. More extensive photography of all exterior surfaces will be taken at the stage of the Reconstruction and Commemoration Plan to fully document all areas of the building, including connection details of stone and granite panels.

6.3.1.2 Archival drawing research

The original 1956 drawings by Marani and Morris are available in hard copies at the City of Toronto Archives. A full set can be made digitally for recording purposes and select drawings can be consulted and reviewed in detail for the purposes of the Reconstruction and Commemoration Plan. Further research will be done as required.

6.3.1.3 High-level condition review

An initial visit to the building was conducted to do a preliminary review of the exterior and select interior conditions; to confirm and validate what was noted on the available archival drawings; and to provide further direction for future investigative work. No destructive testing was conducted at this time given the current usage of the building. A more detailed study was undertaken by Clifford Restoration Limited and also Jeff Watson, P. Eng of Jablonsky, Ast and Partners. Both of their reports are appended with this HIA. These studies (included in the Appendices) were invasive and allowed for a greater understanding of the core of the exterior walls. For the purposes of the Reconstruction and Commemoration Plan, further research will be done as required.

6.3.1.4 Design coordination

The proposed new design of the building is subject to refinements as it is coordinated with other disciplines. At this current stage, the design has received input from various disciplines on a high level. Given the significant removals proposed, additional coordination will add refinements and clarity to the proposed design, and further solidify the reconstruction strategy including details of dismantling and reinstatements. This will require precise coordination with the new design so that panels are appropriately relocated and well detailed onto the new structure as part of the Reconstruction and Commemoration Plan to be completed.

6.3.1.5 Salvage and reconstruction Methodology

The following represents a preliminary methodology for an orderly dismantling of the building during the demolition stage. In order to retain the facades at 505 University Ave a retention solution that ensures the short-term protection of the heritage attributes, and site access during the construction phase must be considered. In response to these issues, the current proposal seeks to panelize components of the facade.

1. Number all exterior elements to coincide with record drawings and photographs.
2. Carefully disassemble/remove faces of all elevations and panelize components per the illustrations on the following pages. Remove by crane and transport to a protected storage area.
3. Store and spot repair individual panels off site. This solution addresses issues related to the lack of long-term storage space on the site, as well as protection of the limestone panels over the span of time that construction will be required. A preliminary storage plan is included in the following pages. It is proposed that the panels be re-introduced in a phased manner following the tower reconstruction. Final touch-up restoration of each panel would be carried out after reconstruction.

There are a number of deteriorated blocks (often projecting sills, lintels or mullions) that will require some repair or possible replacement and some cracked stones which will require consolidation repair in other areas (structural cracking at the corners).

Panelization has been successfully employed on several heritage sites in downtown Toronto, allowing for the retention of original sections of the building and allowing for efficient re-assembly of the original components.

6.3.2 Commemoration

A variety of options are typically available for the mitigation of changes to historic sites. These range from full restoration of extant heritage buildings to simple commemoration of what previously existed. In this case a robust commemorative strategy is proposed to ensure that the site's heritage attributes remain a part of the public realm.

The objective of this commemorative approach is to return as much of the identified attributes to the public realm in their original configuration. These can be intangible attributes such as location on site, massing, architectural design and features or they can be specific attributes that can be touched - notably, in this case, the original Queenston limestone. Such an approach can be supplemented by site signage describing the history of the site, its designers, the culture of the time and location, and physical items such as the source of the stone.

This strategy has become more frequently discussed within the heritage conservation community as it mitigates impacts related to demolition (where demolition is the only reasonable outcome). It must be recognized that not all buildings or structures (such as bridges) can be retained as they are subject to many evolving factors - particularly deteriorating engineering and performance considerations such as are identified in this HIA. As a result, when conditions point to the requirements for demolition, the value of the attributes should be examined and efforts made to commemorate those assets as a part of the evolution of the site.

6.3.3 Reconstruction and Commemoration Plan

The Reconstruction and Commemoration Plan will be submitted as a condition of site plan approval (under S.34(1)2 of the OHA that allows for the demolition of the building) to the satisfaction of the Senior Manager, Heritage Planning. The Plan will be packaged as a report and will include a description of the detailed research completed on the buildings to provide the necessary background information for the design. It may include historic photographs, on-site testing and physical examination, paint colour research, test cleaning patches for removal of paint from masonry, and portions of this current HIA as background.

The research and background information will inform the drawings and specifications prepared for the work including the panelization of the north, east, south and west portions of the buildings, as well as the 1-storey ground level pavilions. These documents will be included in the Reconstruction and Commemoration Plan report for review by the Senior Manager, Heritage Planning and will be the same documents submitted for the Building Permit application.

At this stage, we can determine that the Reconstruction and Commemoration Plan will include the following work:

1. The original facades, where reconstructed, will be commemorated by an exact reconstruction of the exterior to 20 storeys with the use of panelization around the lower floors of the new building.
2. Elements found to be a later addition and not character-defining, will be carefully removed (a full condition assessment will be prepared as part of the Reconstruction and Commemoration Plan).
3. All interiors will be removed, including steel framing, interior partition walls, and all interior floors. Floors will be reconstructed of concrete.
4. All existing windows will be removed and replaced with new energy efficient units, using framing materials of the same style, based on site examples, archival photography and drawings. Current units are aluminum framed, single-glazed (and match the original based on archival drawings and the date of construction of the building) and non-operable. Given the configuration of the existing windows (double light with a single vertical

glazing bar) it is possible to have the new windows match the glazing pattern while providing operability by using either casement or awning sash with the vertical dividing bar.

5. It is possible to create new dies for the manufacturing of aluminum window framing - these can be made to match the current visible framing profiles of the original windows while introducing operability and thermal separations for better energy performance.

6. If it is assumed the reconstruction would be to a specific period, we suggest that it be to the mid 1980's when the front door canopy was installed. However, options would be to restore to the date of completion of the original building. In such a case, a new canopy would be designed to be of minimal visual impact and compatible with the character of the original building. Details would be included in the Reconstruction and Commemoration Plan and would be discussed with City staff to ensure their satisfaction with the design.

7. The building will be reconstructed in its original position on the site with the new tower tucked into its north side. Thus, the prominent views from both Edward Street and University Avenue will be retained.

8. The open arcade under the building leading to the parking area will be glazed with the glazing sized and detailed to match the current size and spacing of the portals in the arcade.

9. The east wall will be fenestrated to provide light and air to the east units in the 20 storey tower.

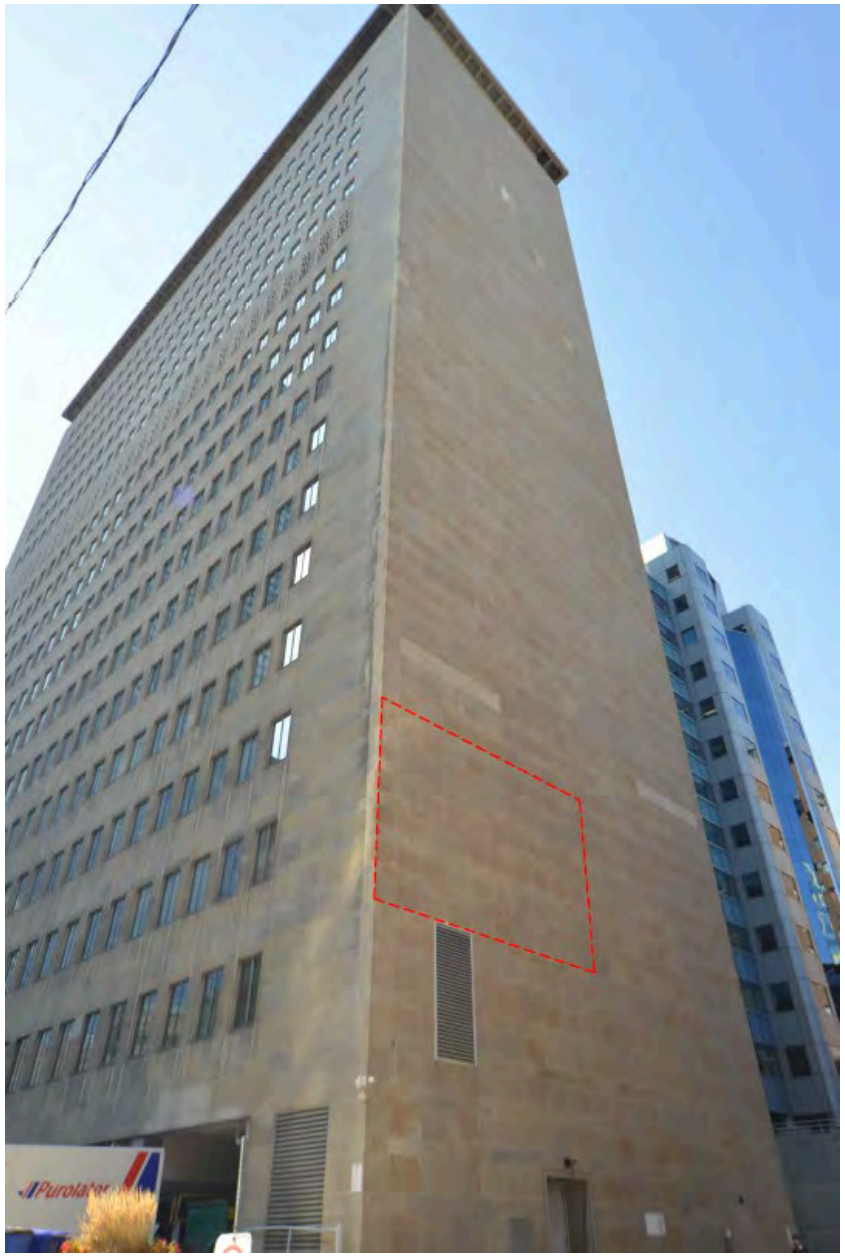
10. Two small windows will be provided in the stone wall panel to the east of the podium and west of the residential entrance on the south facing wall of the ground floor for the purposes of the new tower office.

11. The metal grilles will be salvaged and reinstalled on the south facade and, where not obscured by the new tower, on the north facade. These will be used, in part, for a consolidated venting system for the interior to avoid installation of new vents on other portions of the reinstated exterior walls. Venting proposals will be reviewed with City staff to ensure that the final result is to the satisfaction of the City.

12. The roof overhang at the top floor will be reinstated to its original design. A new railing on top of the roof, for associated new amenity space, will be carefully designed to be primarily transparent with a discrete solid cap rail to minimize visual impacts when viewed from the public realm. The rail design will be reviewed and completed to the satisfaction of City staff.

13. Ground floor pavilion clad in Norwegian Blue Granite, framing and entrances will be removed, restored, and reconstructed using the same design as the original.

14. All viable Queenston limestone from the demolition that will not be required for repairs or long-term maintenance will be preserved for use by others over the long term where Queenston limestone is required to make a proper repair at other sites. Any non-original (repaired areas) replacement Indiana Limestone material would not be salvaged as this material will not be reused.



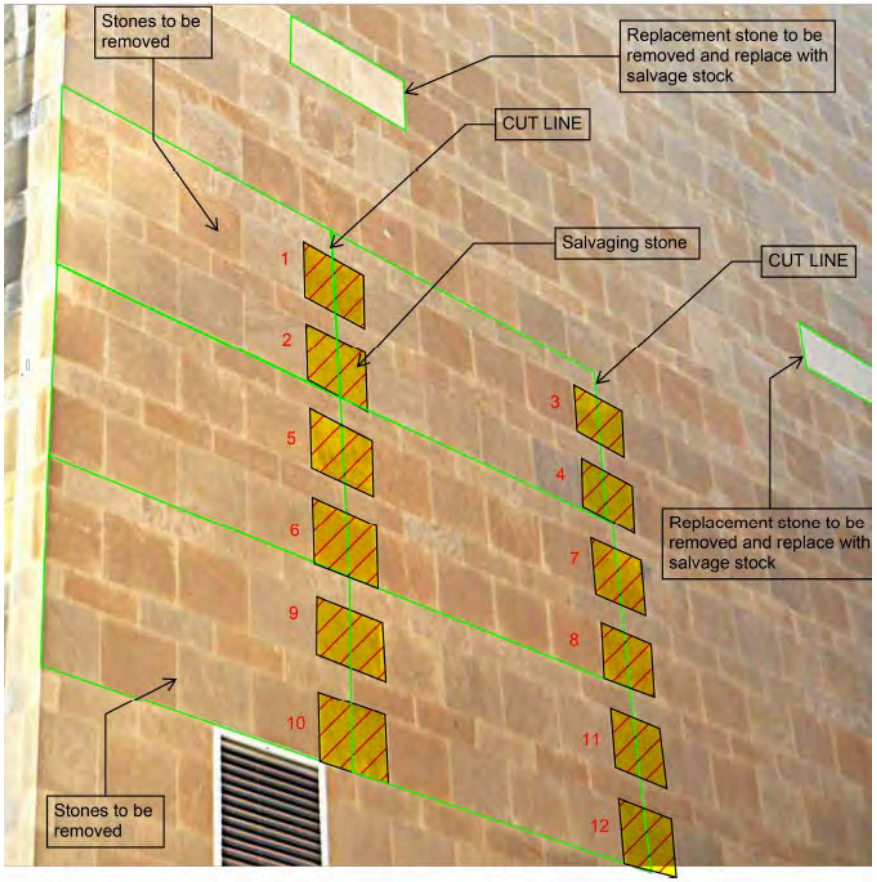


Image at left of the east facade showing location of inset above. Panels are shown in green. The short stones bond both the face stones and the bricks behind as they are through stones. The panel cut lines pass through joints between the short stones and through the faces of the taller stones - most of the panels will be removed intact save for the tall stones that are cut - these will be replaced with salvaged stones when the panels are finally re-set in their original positions. Source: Clifford Restoration

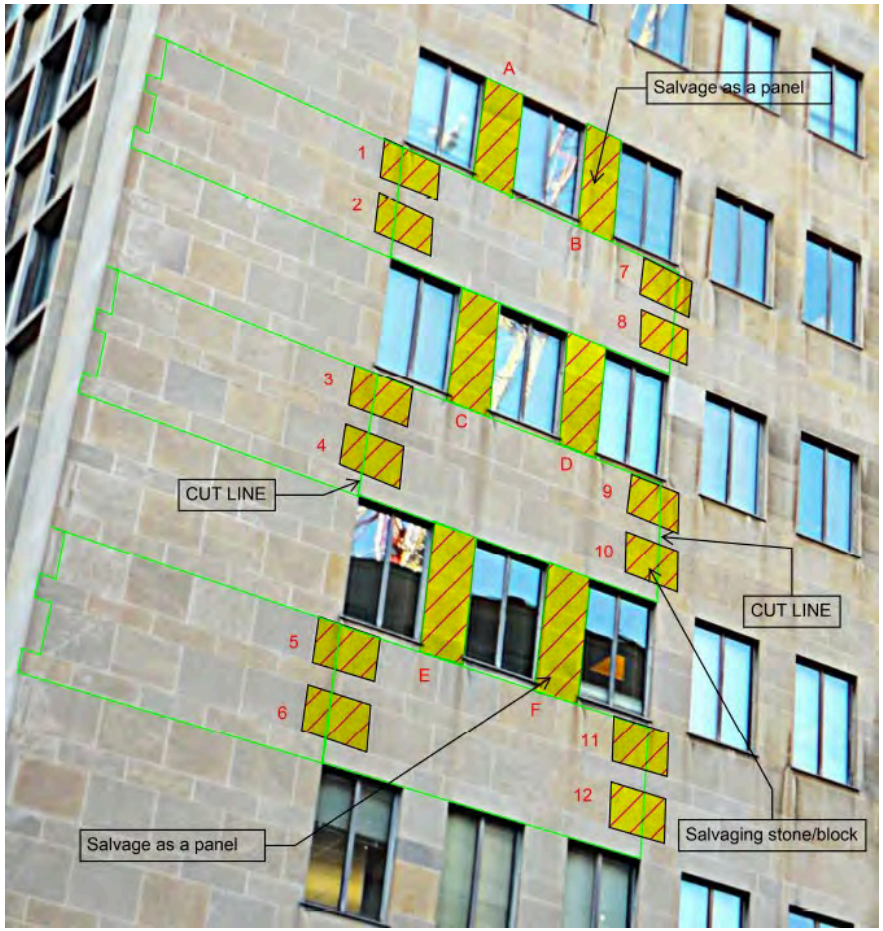


Image at right of the south facade showing location of inset above. Panels are shown in green. The short stones bond both the face stones and the bricks behind as they are through stones. The panel cut lines pass through joints between the short stones and through the faces of the taller stones - most of the panels will be removed intact save for the tall stones that are cut - these will be replaced with salvaged stones when the panels are finally re-set in their original positions. The full panels between the windows will be removed and later reinstalled in their original locations. Source: Clifford Restoration

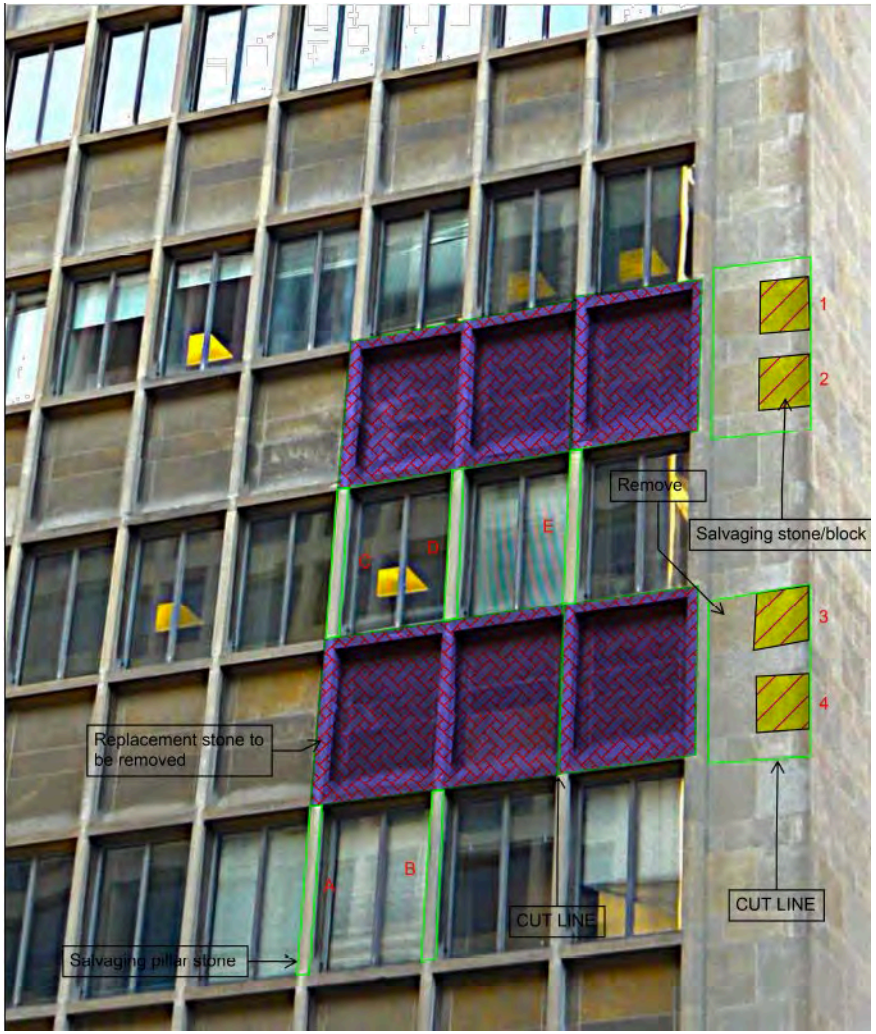


Image at left of the west facade showing location of inset above. Panels are shown in purple at the spandrels between rows of windows and in green at right.. The short stones bond both the face stones and the bricks behind as they are through stones. The panel cut lines pass through joints between the short stones and through the faces of the taller stones - most of the panels will be removed intact save for the tall stones that are cut - these will be replaced with salvaged stones when the panels are finally re-set in their original positions. The full panels between the windows will be removed and later reinstalled in their original locations.

Image at left illustrates panel storage plan in an inside and secure facility. Panels have already been inventoried and the storage plan would coincide with the sequence of dismantling followed by the sequence for re-erection. Source: Clifford Restoration

7. HERITAGE POLICY REVIEW AND ASSESSMENT

7.1 Policy Review

In accordance with City of Toronto requirements and standard practice, we have consulted several documents for the purpose of guiding the preparation of this current report. A review of key heritage policies relating to the proposed project is included in this Section.

Ontario Heritage Act (OHA)

The Ontario Heritage Act (R.S.O. 1990 as amended) is specific and prescriptive in terms of development that may have an impact on heritage resources. Whereas the PPS, as further detailed below, generally directs municipalities to take steps to protect heritage resources. The OHA is specific in terms of the measures that may be taken by municipalities to inventory and/or designate heritage properties and to ensure the protection of properties considered to be of Provincial interest.

This HIA has reviewed heritage considerations as they apply to this development in a manner that acknowledges and considers other applicable policies including intensification. The subject site is located on University Avenue, and near an important transportation hub (the St. Patrick subway station on the University Line of the TTC). The proposed intensification of the site is a reasonable approach to meet the intents of the PPS and is done in a manner that considers heritage conservation while addressing the current and future needs of the Subject Site as well as the realities of the office leasing industry.

Ontario Provincial Planning Statement (PPS) - October 20, 2024

The Ontario PPS came into force and effect on October 20, 2024 and *"is intended to be read in its entirety and the relevant policies are to be applied to each situation"* (PPS Part III). The statement consists of Provincial policy direction related to land use planning and development. Policy direction related to heritage sites and cultural assets is provided in Section 4.6 entitled *"Cultural Heritage and Archaeology".*

Policy 4.6.1, states that *"Protected heritage property, which may contain built heritage resources or cultural heritage landscapes, shall be conserved".* Key definitions in the PPS are as follows:

> ***Built heritage resource*** *means a building, structure, monument, installation or any manufactured or constructed part or remnant that contributes to a property's cultural heritage value or interest as identified by a community, including an Indigenous community.*
>
> ***Cultural heritage landscape*** *means a defined geographical area that may have been modified by human activity and is identified as having cultural heritage value or interest by a community, including an Indigenous community. The area may include features such as buildings, structures, spaces, views, archaeological sites or natural elements that are valued together for their interrelationship, meaning or association.*
>
> ***Conserved*** *means identification, protection, management and use of built heritage resources, cultural heritage landscapes and archaeological resources in a manner that ensures their cultural heritage value or interest is retained. This may be achieved by the implementation of recommendations set out in a conservation plan, archaeological assessment, and/or heritage impact assessment approved, accepted or adopted by the relevant planning authority and/or decision-maker. Mitigative measures and/or alternative development approaches should be included in these plans and assessments.*
>
> ***Significant*** *means, in regard to cultural heritage and archaeology, resources that have been determined to have cultural heritage value or interest for the important contribution they make to our understanding of the history of a place, an event, or a people.*

Policy 4.6.3 discusses development and site changes when they have an impact on built heritage resources and states: *"Planning authorities shall not permit development and site alteration on adjacent lands to protected heritage property unless the heritage attributes of the protected heritage property will be conserved."* Key definitions in the PPS are as follows:

> ***Heritage attributes*** *means, as defined under the Ontario Heritage Act, in relation to real property, and to the buildings and structures on the real property, the attributes of the property, buildings and structures that contribute to their cultural heritage value or interest.*

City of Toronto Official Plan (consolidated to June 2024) The City's Official Plan includes a directive for the process of listing heritage sites across the municipality, in accordance with the PPS and the OHA.

The wording in the Official Plan has been strengthened with the Official Plan Amendment 199 (OPA 199), enacted by by-law 468-2013. Its provisions are applicable to this development and supports the application of heritage issues in a manner that balances those issues with other provisions of the Official Plan in accordance with the intent of the PPS.

Part 3.1.6 – The Heritage Conservation section in the Official Plan lists a total of 52 policies that pertain to heritage conservation city-wide. The proposed development is evaluated against these policies.

Policies 1 to 3 deal with the establishment of the process of listing or designating heritage properties by the municipality and the maintenance of a Heritage Register.

Policy 4 states that *"Properties on the Heritage Register will be conserved and maintained consistent with the Standards and Guidelines for the Conservation of Historic Places in Canada, as revised from time to time and as adopted by Council."*

> **It is our opinion that the building, due to the inherent vice caused by identified structural issues, cannot be conserved or maintained to meet this policy. Where attributes or systems are deficient and cannot be restored or repaired in a manner that retains heritage value, there is flexibility in the Standards and Guidelines provided a thorough understanding of the site is reached and alternatives explored. Commemoration and mitigation strategies must be used to ensure that the identified attributes remain a part of the public realm.**

Policy 5 states that *"Proposed alterations, development, and/or public works on or adjacent to, a property on the Heritage Register will ensure that the integrity of the heritage property's cultural heritage value and attributes will be retained, prior to work commencing on the property and to the satisfaction of the City. Where a Heritage Impact Assessment is required in Schedule 3 of the Official Plan, it will describe and assess the potential impacts and mitigation strategies for the proposed alteration, development or public work."*

> **This current HIA satisfies, in our opinion, this policy. The proposed changes arising from this development ensures that the integrity of the property's cultural heritage value and attributes will be commemorated by a series of mitigative processes. Shadow impacts will not materially affect the heritage attributes of this and nearby heritage properties.**

Policies 6 and 7 deal with adaptive re-use and alterations to properties on the Heritage Register. Policy 6 states: "*The adaptive re-use of properties on the Heritage Register is encouraged for new uses permitted in the applicable Official Plan land use designation, consistent with the Standards and Guidelines for the Conservation of Historic Places in Canada."* Policy 7 states: "*Prior to undertaking an approved alteration to a property on the Heritage Register, the property will be recorded and documented by the owner, to the satisfaction of the City."*

> **An undertaking will be made in accordance with City approvals to fully record the property prior to development as is typical for approvals of this kind. The property was built for office purposes which has continued to this day. The proposed change recognizes significant changes in commercial office space use and intensifies the Subject Site with much needed new residential uses, all of which are permitted in the Official Plan and consistent with the change that is currently occurring nearby along University avenue.**

Policies 8 and 9 deal with City owned properties on the Heritage Register.

> **These policies are not relevant to the present application.**

Policies 10 to 12 deal with management of heritage by the City and direct the City to do certain tasks towards the conservation of heritage properties and enforcement of policies.

> **These policies are not relevant to the present application.**

Policy 13 deals with development of protocols related to First Nations' sites by the City.

> **As the above is the responsibility of the municipality, these policies are not applicable to the development.**

Policy 14 states: *"Potential and existing properties of cultural heritage value or interest, including cultural heritage landscapes and Heritage Conservation Districts, will be identified and included in area planning studies and plans with recommendations for further study, evaluation and conservation."*

> **The subject site is included on the heritage register and is not included in a Heritage Conservation District. The heritage value relating to the subject property has been considered and evaluated through this HIA.**

Policies 15 to 17 speak to raising heritage awareness, including the development of neighbourhood initiatives and commemoration of lost heritage sites.

> **As the above is the responsibility of the municipality, these policies are not applicable to the development.**

Policies 18 to 21 deal with various incentives that may be provided for the

maintenance and conservation of heritage properties.

As the above is the responsibility of the municipality, these policies are not applicable to the development.

Policies 22 to 25 speak about the requirements for Heritage Impact Assessments, and Conservation Plans, when required, in development applications to evaluate the impacts on heritage resources on or adjacent to a site and to determine how a heritage resource will be conserved.

This current Heritage Impact Assessment has been prepared for the proposed development to satisfy the requirement.

Policy 26 states: *"New construction on, or adjacent to, a property on the Heritage Register will be designed to conserve the cultural heritage values, attributes and character of that property and to mitigate visual and physical impact on it."*

This HIA recognises the impact of the removal of the existing building. To mitigate this removal, material salvage is proposed to be incorporated into a new commemorated building. Additional discussion on overall mitigation has been provided in the HIA.

Policy 27 states: *"Where it is supported by the cultural heritage values and attributes of a property on the Heritage Register, the conservation of whole or substantial portions of buildings, structures and landscapes on those properties is desirable and encouraged. The retention of facades alone is discouraged."*

The proposed mitigation work will include panelization of 505 University Avenue including structures in whole or in part for both use and commemoration. The degree of retention has been evaluated with regard to these issues. It is our opinion that the objectives of this policy have been achieved. For further information regarding the retention, please refer to Appendix II and III of this report.

Policy 28 states: *"The owner of a designated heritage property will be encouraged to enter into a Heritage Easement Agreement where the City considers additional protection beyond designation desirable due to the location, proposed alteration, and/or the nature of that property."*

As the above is the responsibility of the municipality, these policies are not applicable to the development.

Policy 29 states: *"Heritage buildings and/or structures located on properties on the Heritage Register should be conserved on their original location. However, where it is supported by the cultural heritage values and attributes of a property on the Heritage Register a heritage building may be relocated within its property or development site where: . . ."*

The commemorated part of the building proposed for the Subject Site will be constructed in situ. It is our opinion that the intent of this policy has been respected.

Policies 30 to 33 deal with Heritage Conservation Districts.

The development site is not included in any designated Heritage Conservation District these policies are not applicable to this development.

Policies 34 to 42 deal with archaeological resources.

These policies are not applicable to this development.

Policies 43 deal with cultural heritage landscapes.

This policy is not applicable to this development.

Policies 44 to 46 deal with identified views to heritage properties.

These policies are dealt with under Section 8.4 of this report.

Policies 47 to 52 deal with Heritage Places of Worship.

The proposed development site is not a heritage Place of Worship and, therefore, these policies are not relevant to the proposed development.

8. HERITAGE IMPACT ASSESSMENT

8.1 Heritage Building Impacts

An assessment of overall effects of the proposed development on the heritage attributes of the site is presented on this page and is based on the City of Toronto's Heritage Impact Assessment Terms of Reference (2021).

The table represents a high-level summary and is followed by a discussion in further detail on subsequent pages.

Possible Effect	Assessment
Destruction of any, or part of any, significant heritage attributes or features	The building will be demolished - a significant adverse heritage impact. Most of the attributes will be commemorated through reconstruction.
Alteration that is not sympathetic, or is incompatible with the historic fabric and appearance	The alteration is a change to the perception of the commemorated building with the new tower placed behind the retained facades. A rear location is frequently seen for additions to heritage buildings in Toronto. The proposed new tower placement, with setbacks on the west, east and south allows the new mass to be visually subordinated to the original building. The proposed tower will be distinguishable from the existing elevation.
Shadows created that alter the appearance of a heritage attribute or change the viability of an associated natural feature or plantings, such as a garden	Shadows cast by the new development will have transitory impacts on heritage resources in the vicinity. Landscape to the south of the original building will not be impacted.
Isolation of a heritage attribute from its surrounding environment, context or a significant relationship	The context is punctuated by development from throughout the 20th century. Existing adjacent heritage properties will not be affected by the proposed changes. No heritage attributes will be isolated from their context.
Direct or indirect obstruction of significant views or vistas within, from or of built and natural features	The proposed development is within protected views or vistas in the area described though OPA199. The proposed tower does not protrude beyond the tops of the east and west Towers of City Hall which would obstruct the established view and diminishing the building's prominence on the City Skyline.
A change in land use (such as rezoning a church to a multi-unit residence) where the change in use negates the property's cultural heritage value	The land use currently allows for a mix of uses, including residential. It is proposed in this development to intensify the residential with at grade related commercial and additional commercial uses on the lower floors.
Land disturbances such as a change in grade that alters soils and drainage patterns	Land disturbances as a result of this development will not impact cultural heritage value.

8.2 New Building Design Impact Assessment

By isolating the new tower notched into the volume of the reconstructed and commemorated building, the proposed tower is, in our opinion, placed in a reasonable location. Setbacks from the East, west and south allow the reconstructed building volume some prominence in the foreground and reduces the impact of the taller building which will allow it to be perceived to be subordinate. The final design of the new tower is still subject to input from City staff but will be done in a manner that allows it to fit within the overall context of University Avenue. The additional storeys above the reconstructed building will be distinguished in materiality and massing from the base building.

Floor to floor heights of the new tower will match those of the reconstructed building to ensure that the relationship of fenestration to facade massing is unchanged which allows for an appropriate commemoration. The full three-dimensional form of the original building, particularly as seen from University Avenue and Edward Street, will also be maintained as a commemorative approach and, in our view, this is also appropriate.

At the 21st storey, a substantial 9.5-meter setback (from University Avenue) will be provided along with a 3.6-meter setback from the Edward Street facade.

A new amenity space will be included at the roof level of the reconstructed building with a carefully designed railing installed set back from the walls. It will be primarily transparent, and include a thin cap rail to minimize visual impact. Likewise, the roof of the podium will also be used for exterior space and will be equipped with a similar railing. Design of these railings will be included in the Reconstruction and Commemoration Plan and will be discussed with City staff to refine the design to their satisfaction.

8.3. Commemorative Reconstruction

Demolition of a heritage building typically removes all traces of the heritage resource from a community. Size and massing, colouration, setbacks from streets, and rhythms of fenestration are all contributing factors generated by an historic site that informs the character and setting of its local place in a community. The expression of technical and design achievement as can be offered by an historic building cannot typically be replaced as such replacement would inevitably be done using new materials, changed design parameters, and a loss of the sense of time provided by the historic artefact. The demolition of such a site can therefore be considered a significant adverse heritage impact.

With such a loss, the creation of a facsimile structure, when it has been done in the past, typically creates a lesser than original sense of history. However, this is not what is being proposed here.

It is our opinion that there are fundamental structural reasons why this building has to be demolished as per the terminology of the Toronto OP. However, the approach taken will be to inventory, dismantle, store, repair and then re-erect the heritage building using the original design, location, and materials of the original. This, in our opinion, is a very reasonable and acceptable means of mitigating the loss of the original heritage structure and to commemorate its design and materials in a manner that will remain for interpretation for decades to come.

In our opinion, this presents a significant and appropriate mitigation of what would otherwise be a loss and is a reasonable solution to an otherwise difficult situation.

8.4 View corridor Impact Assessment

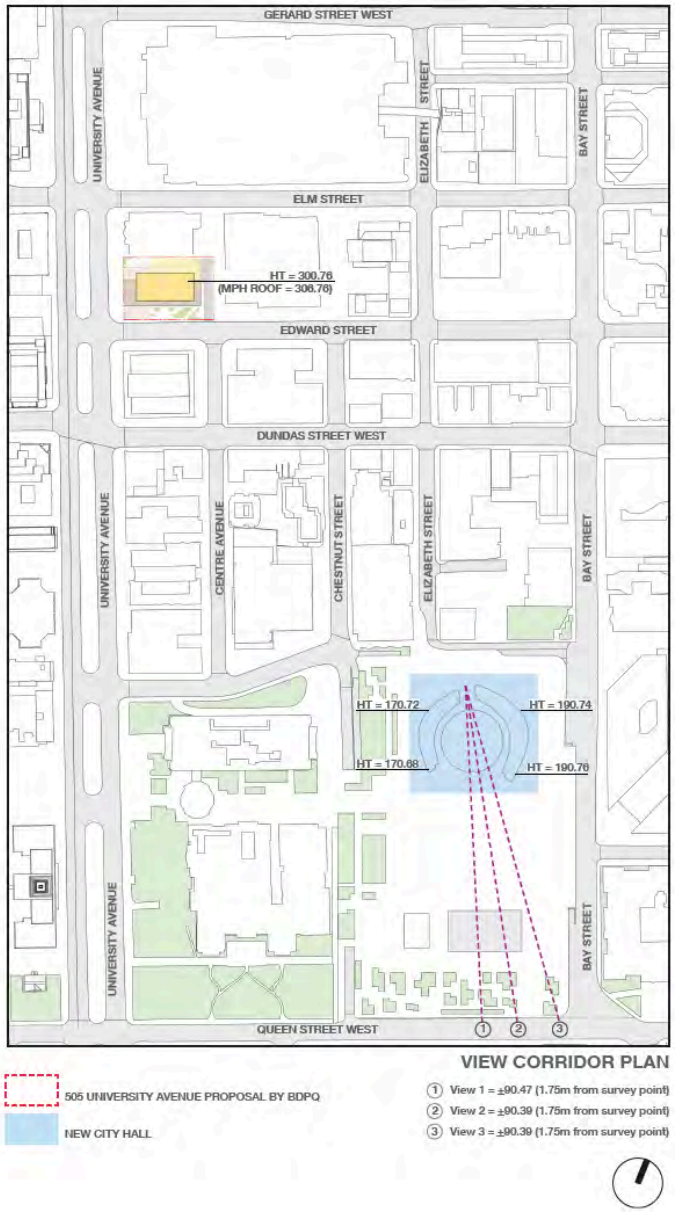
The Official Plan regards City Hall as a *"ceremonial site of exceptional importance and prominence"* (Section 3.1.6 policy 45) and protected views related to this are noted on maps 7b of the Official Plan and, in particular, view A3. The view of City Hall includes the east and west towers, the council chamber and podium of City Hall and the silhouette of those features as viewed from the north side of Queen Street West along the edge of the eastern half of Nathan Phillips Square.

Section 3.1.6 policy 45 provides that: *"…Protection of views from the public realm to these three properties, identified on Maps 7a and 7b, will include the prevention of any further intrusions visible above and behind the building silhouette, as well as protecting the view to the buildings from any further obstruction. The identified views from the public realm, to and beyond these properties, will be conserved."*

A view corridor study prepared by BDP Quadrangle presented on the following pages provides analysis of proposed massing. The view corridor studies use, as a base, the City's provided 'terrain corrected' model. The massing and heights of the tower have been revised to lessen impacts on the protected silhouette of Toronto City Hall. The proposed towers will not project above the silhouette of Toronto City Hall when viewed from key points along Queen Street as outlined on Map 7a and 7b of the Official Plan, Schedule 4.

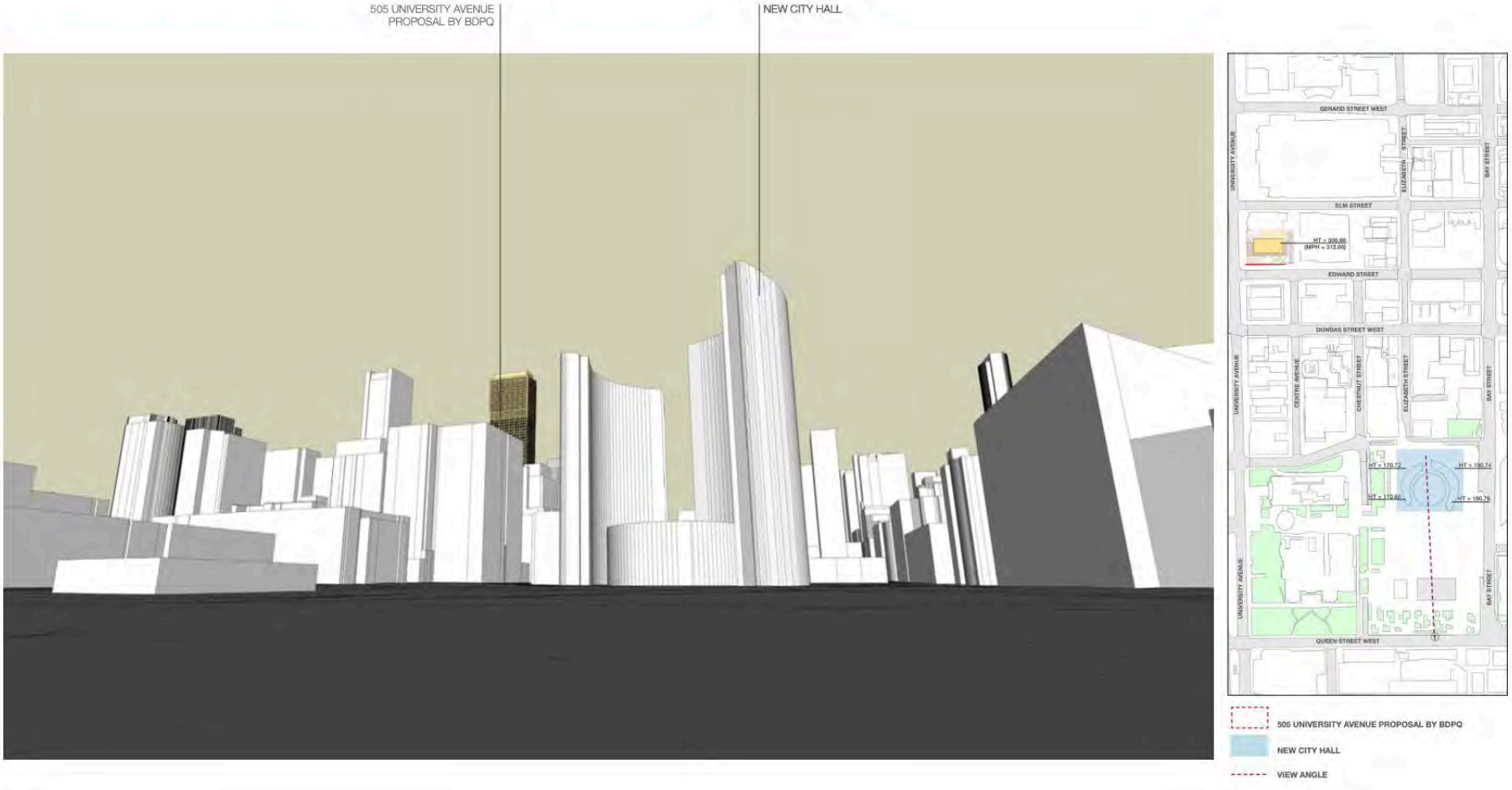
The proposed tower will be partially visible behind the silhouette of City Hall's west tower when viewed from the easterly portion of Nathan Phillips Square and Queen Street, nearing Bay Street. In our opinion, the proposed tower is acceptable in this instance as the impact on the protected silhouette is minimal, is not sufficient to undermine the visual prominence of City Hall, and the silhouette of the west tower of City Hall remains legible. As one moves west along Nathan Phillips Square, the proposed building is viewed separately from City Hall and no longer has an impact on the protected view.

Visual impacts will be mitigated through measures such as articulation of the building façade and materiality selection, chosen in consultation with City Staff, to ensure the development appears distinct from and subordinate to City Hall.



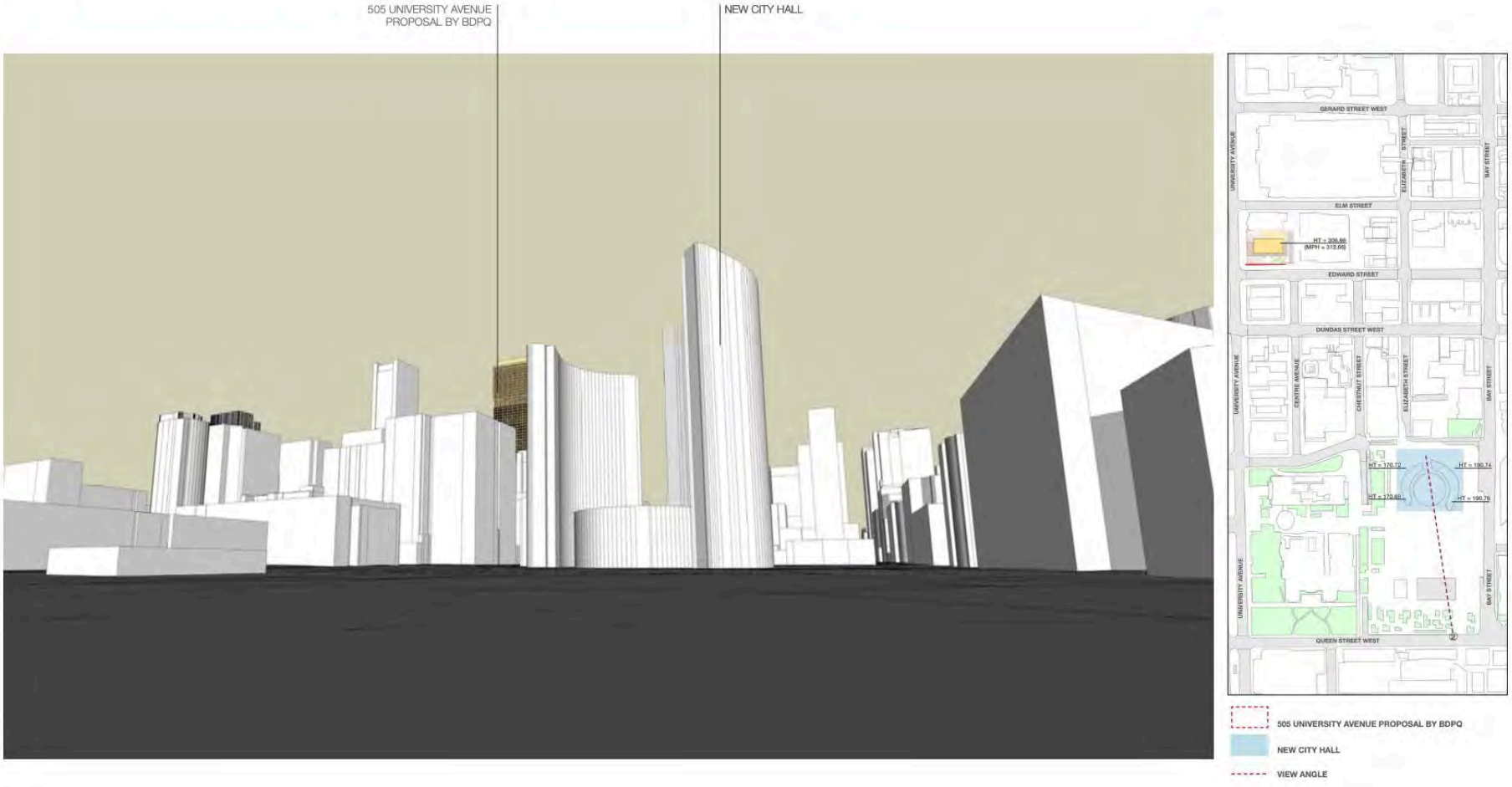
505 University Avenue

View Corridor from New City Hall 1 - Without 180 Dundas Street West Proposal



The revised proposal evolved with input from City Staff to reduce tower heights to 63 storeys with the reduction in height of the tower to significantly limit the intrusion behind the silhouette of City Hall. The proposed tower massing does not penetrate above City Hall in any of the views. The above view 1 and on the following pages views 2 and 3 does not include the massing of the approved 180 Dundas Street West proposal which would be in the foreground.

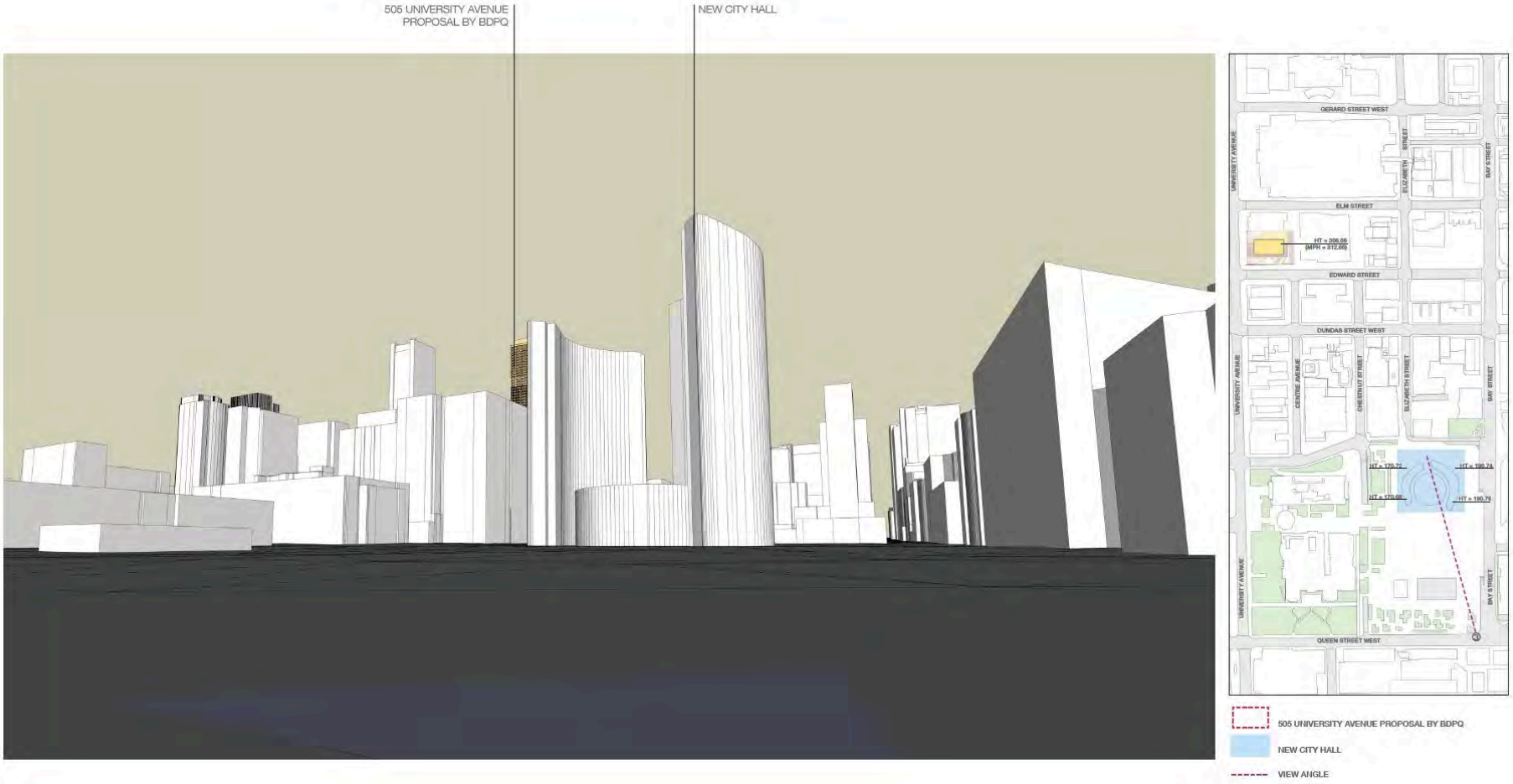
505 University Avenue
View Corridor from New City Hall 2 - Without 180 Dundas Street West Proposal



The revised proposal does show the east side of the building visually "touching" the west tower of City Hall. However, the building will be clearly distinguishable from the tower of City Hall due to its distance. As noted above, the proposed tower massing does not penetrate above City Hall.

505 University Avenue

View Corridor from New City Hall 3 - Without 180 Dundas Street West Proposal



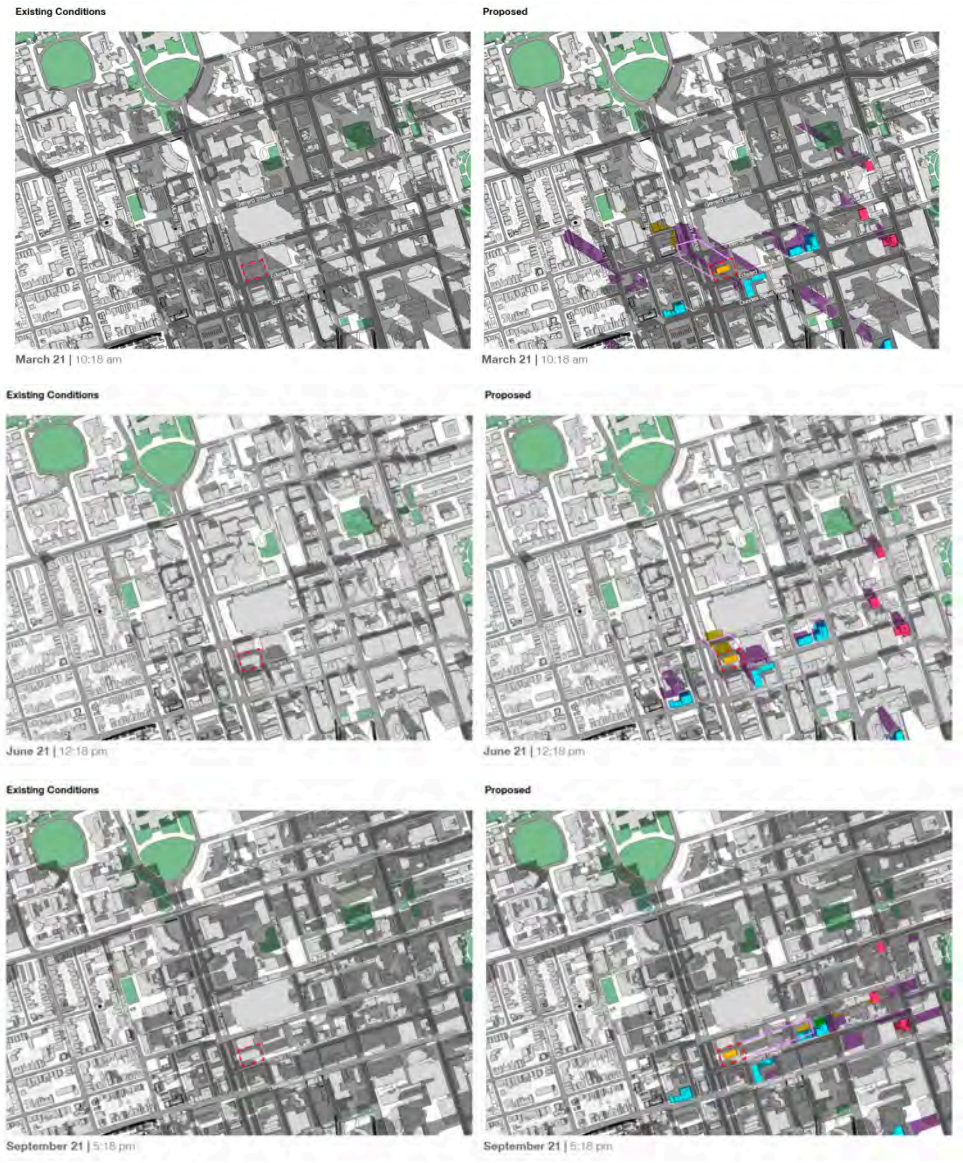
The revised proposal does show the east side of the building visually tucking in behind the west tower of City Hall. However, the building will be clearly distinguishable from the tower of City Hall due to its distance and detailing. As noted, the proposed tower massing does not penetrate above City Hall.

8.5 Shadow Impact Heritage Assessment

Shadows will be cast on the surrounding properties as a result of this new development. However, considering adjacent and proposed nearby high-rise buildings, shadows from this development will have no significant impacts on adjacent properties. This can be seen in images from the study shown at right. The complete shadow study is included as Appendix VIII.

Nearby heritage resources, located to the south, will not be impacted.

In consideration of the above, the proposed location in conjunction with its revised and slender massing allows the development to limit shadow impact on adjacent buildings.



9. CONCLUSION

There are provisions in the Provincial Planning Statement and the Toronto Official Plan regarding the need to review all policies related to each specific development proposal and to create an outcome that effectively balances all issues. To this end, issues surrounding potential intensification of this site have been examined with findings that virtually no options could allow for retention of the existing building on its site. In our opinion, the proposed option is a reasonable outcome resulting in a robust commemoration of the attributes of the site. Although the proposed approach to commemoration does not conform to the City's OP policies with respect to conserving heritage, it is reasonable given the structural findings – had the building been designed in a manner that would have ensured its longevity over a significant period, arguments for intensification would be difficult to make and thus contested with a potential outcome that could not be predicted.

However, over-riding the manner in which intensification could proceed is the manner of construction of the building itself. Its design and its response to physical events such as weather and ground movements has been determined to be causing progressive self-destruction of its exterior envelope. Preservation of the resource and its attributes in situ are rendered impossible due to built-in flaws which could not have been anticipated by the designers using the design tools available when it was first constructed.

This results in both a liability and an opportunity for the attribute. Demolition of the building presents an adverse heritage impact. However, an orderly process of dismantling and reconstruction of the original attributes presents an opportunity to commemorate and re-present original attributes within the public realm. This will allow the site to remain in this commemorative role into the foreseeable future.

Dismantling of the original building is considered by the City as a demolition. Although the building was a cutting-edge design for its day, it has been found to have been designed when the implications of its unique structure could not be anticipated by its architects and engineers. The result is a structural envelope that is becoming progressively more compromised due to its stiff exterior interacting with its flexible framing system. Observed and unstoppable damage, currently at acceptable levels, will develop exponentially in the coming decades. Visible damage can be repaired in a stop-gap fashion, but the underlying cause cannot. This will result in an erosion of the architectural expression of the building together with its design integrity.

This presents a conundrum from a conservation point of view. Retention will result in eventual loss of its attributes when it reaches a point where cosmetic repairs cannot be effective. Cosmetic repairs gradually erode the design attributes of the building. Demolition removes the original artifact such that its replacement could be considered not to be original.

However, the alternative is to demolish the building by careful and recorded dismantling and then to reconstruct it faithfully while using the original materials and exterior design but with appropriate engineering to counter the problems with its exterior. This will reclaim the height, massing, location on site and other significant attributes and commemorate the design of the original structure within the public realm. This, in our view, is a positive outcome in spite of the demolition process. In addition, this will free up a considerable amount of Queenston limestone for use in repairs going forward - both for the subject building and for other buildings in the City requiring the same material to effect on-going repairs. In our opinion, this represents a positive outcome despite the demolition.[17]

In our opinion, the proposed development represents a reasonable balance of outcomes for the site and includes some positive heritage outcomes. As a result of the manner in which the development is proposed, positive outcomes will balance adverse impacts caused by demolition.

[17] *This is a reasonable and traditional approach in some parts of the world - Japanese temples, for instance, are totally reconstructed at fixed intervals - such as 100 years - and this process is considered in that context to be an appropriate conservation activity because of the anticipated life span of the artefacts.*

10. SOURCES

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Clarification questions and response to Engineering Report. Correspondence between Jablonsky, Ast, and Partners and Heritage Staff. November 28, 2024.

Websites:
https://www.shell.ca/en_ca/about-us/who-we-are/canadian-history-timeline.html

11. CLOSURE

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APPENDIX I

Designation By-law 505-2024
23 May 2024

APPENDIX II

Heritage Retention Study
for
505 University Avenue Redevelopment
prepared by
Jablonsky, Ast, and Partners
25 November 2024

APPENDIX III

Stone cladding at 505 University Avenue. Memo
prepared by Clifford Restoration Limited
13 January 2025

APPENDIX IV

City Hall View Corridor Study
prepared by
BDP Quadrangle Architects
22 April 2025

APPENDIX V

505 University Avenue, Toronto - Site Investigation Report. Prepared by Clifford Restoration Limited
8 October 2024

APPENDIX VI

Mediation drawings
prepared by BDP Quadrangle Architects
Option 1
12 June 2025

APPENDIX VII

Mediation drawings
prepared by BDP Quadrangle Architects
Option 2
12 June 2025

APPENDIX VIII

505 University Shadow Study
prepared by BDP Quadrangle Architects
2 June 2025