TORONTO

REPORT FOR ACTION

150 College Street (Medical Sciences Building - 1 King's College Circle) - Notice of Intention to Designate a Property under Part IV, Section 29 of the Ontario Heritage Act

Date: September 25, 2025
To: Toronto Preservation Board
From: Senior Manager, Heritage Planning, Urban Design, City Planning
Wards: 11 - University-Rosedale

SUMMARY

This report recommends that City Council state its intention to designate the property located at 150 College Street (Medical Sciences Building - 1 King's College Circle) under Part IV, Section 29 of the Ontario Heritage Act for its cultural heritage value according to the Statement of Significance which includes a description of heritage attributes found in Attachment 1.

The Medical Sciences Building was constructed between 1966 and 1970. The asymmetrical massing of the building complex, which generally varies between three and seven storeys, fronts onto the southeast portion of King's College Circle, between King's College Road and Queen's Park Crescent West. A location map and current photograph of the heritage property are found in Attachment 2.

The distinct appearance of this massive concrete complex is achieved through the highly sculptural manipulation of its precast concrete panel cladding designed by Canadian artists Robert Downing and Ted Bieler, in collaboration with the project architects (Govan, Kaminker, Langley, Keenleyside, Melick, Devonshire and Wilson with Somerville, McMurrich & Oxley, including Peter Goering) and the fabricator, Beer Precast. The subject property represents a significant example of the University of Toronto's post-war growth and expansion, during which the institution was focused on becoming a global leader among public universities for teaching and research. The building complex is located within an area of the University of Toronto's St. George Campus that has been a site for biomedical research and teaching space since as early as 1850 and is considered a landmark on campus and within the City of Toronto.

In 2018, the Medical Sciences Building was identified as having potential for inclusion on the Heritage Register as part of the work to advance a new Secondary Plan and Urban Design Guidelines for the University of Toronto St. George Campus that were adopted by City Council in July 2022. Through its identification in that report, City

Council requires a Heritage Impact Assessment to be submitted for any development applications that affect the building.

In 2020, the University of Toronto announced plans to provide additional education and research facilities for the Faculty of Medicine through a partial redevelopment of the building. ERA Architects, acting as the Heritage Consultant for the University of Toronto, submitted a Cultural Heritage Evaluation Report (March 27, 2025) for the Medical Sciences Building to Heritage Planning staff, and in support of dialogue with the City, in advance of development of the lands.

Staff have determined that the property at 150 College Street (Medical Sciences Building - 1 King's College Circle) has cultural heritage value and meets 8 of the 9 Ontario Regulation 9/06 criteria prescribed for municipal designation under Part IV, Section 29 of the Ontario Heritage Act. Property may be designated under Part IV, Section 29 of the Ontario Heritage Act, if it meets two or more of the nine criteria.

The designation of the subject property under Part IV of the Ontario Heritage Act will inform the understanding of the cultural heritage value of the Medical Sciences Building prior to planning for change and considering interventions to it.

RECOMMENDATIONS

The Senior Manager, Heritage Planning, Urban Design, City Planning recommends that:

1. City Council state its intention to designate the property at 150 College Street (Medical Sciences Building - 1 King's College Circle) under Part IV, Section 29 of the Ontario Heritage Act in accordance with the Statement of Significance for 150 College Street (Medical Sciences Building - 1 King's College Circle) (Reasons for Designation) attached as Attachment 1 to the report (September 25, 2025) from the Senior Manager, Heritage Planning, Urban Design, City Planning.

2. If there are no objections to the designation, City Council authorize the City Solicitor to introduce the Bill in Council designating the property under Part IV, Section 29 of the Ontario Heritage Act.

FINANCIAL IMPACT

City Planning confirms there are no financial implications resulting from the recommendations included in this report in the current budget year or in future years.

The Chief Financial Officer and Treasurer has reviewed this report and agrees with the information as presented in the Financial Impact Section.

DECISION HISTORY

In 1973, City Council included the property at 150 College Street on the Heritage Register, including the buildings located at the following convenience addresses:

- 164 College Street (formerly 4 Taddle Creek Road (Electrical Building))
- 12 Hart House Circle (Observatory)
- 7 King's College Circle (University of Toronto Library)
- 9 King's College Circle (Samuel Sigmund Library)
- 15 King's College Circle (University College)
- 27 King's College Circle (Simcoe Hall)
- 31 King's College Circle (Convocation Hall)
- 5 King's College Road (Mechanical Engineering Building)
- 6 Queen's Park Crescent West (Botany Building and Greenhouse)
- 12 Queen's Park Crescent West (Anatomy Building)
- 14 Queen's Park Crescent West (Canadiana Gallery)
- Queen's Park Crescent West, south of Hart House Circle (Canadian Volunteers Memorial)

In 1976, City Council designated the property at 150 College Street (convenience address 170 College Street, Mining Building) under Part IV of the Ontario Heritage Act.

In 1977, City Council designated the property at 150 College Street (convenience address 10 King's College Road, Sandford Fleming Laboratory) under Part IV of the Ontario Heritage Act.

In 1990, City Council designated the property at 150 College Street (convenience address 7 Hart House Circle, Hart House and Soldiers' Tower) under Part IV of the Ontario Heritage Act.

In 2007, City Council designated the property at 150 College Street (Hygiene Building, also known as the Fitzgerald Building) under Part IV of the Ontario Heritage Act.

In 2018, City Council endorsed a set of principles for the University of Toronto St. George Campus Secondary Plan area, including the principle to conserve built heritage resources and cultural heritage landscapes. Council also directed the Senior Manager, Heritage Planning, to report to the Toronto Preservation Board and the Toronto and East York Community Council on the possibility for inclusion on the City's Heritage Register of the potential heritage resources identified in the study area as illustrated in Attachment 7 to the report. The Medical Sciences Building at 1 King's College Circle was identified in that attachment.
TE34.88 - University of Toronto St. George Campus - Official Plan Amendment Application - Status Report

In July 2022, City Council adopted the Official Plan Amendment, University of Toronto St. George Campus Secondary Plan, with amendments, and the University of Toronto St. George Campus Urban Design Guidelines, respectively included as Attachments 7 and 8 to the report (June 13, 2022) from the Director, Community Planning, Toronto and

East York District. At the same meeting, Council also directed the Senior Manager, Heritage Planning, to report to the Toronto Preservation Board and the Toronto and East York Community Council on the possibility for inclusion on the City's Heritage Register of the potential cultural heritage resources identified in the University of Toronto St. George Campus Secondary Plan Area, included as Attachment 9 to the report. Council directed that Heritage Impact Assessments will be required for development applications that affect the property identified on that map. The Medical Sciences Building at 1 King's College Circle was identified in that attachment.
https://secure.toronto.ca/council/agenda-item.do?item=2022.TE34.8

POLICY AND REGULATION CONSIDERATIONS

Provincial Plans and Policies

The conservation of cultural heritage resources is an integral component of good planning, contributing to a sense of place, economic prosperity, and healthy and equitable communities. Heritage conservation in Ontario is identified as a provincial interest under the Planning Act. https://www.ontario.ca/laws/statute/90p13

Further, the policies and definitions of the Provincial Planning Statement (2024) identify the Ontario Heritage Act as the primary legislation through which heritage evaluation and heritage conservation will be implemented.
Provincial Planning Statement, 2024 (ontario.ca)

Ontario Regulation 9/06 sets out the criteria for evaluating properties to be designated under Part IV, Section 29 of the Ontario Heritage Act. The criteria are based on an evaluation of design/physical value, historical and associative value and contextual value. A property may be designated under Section 29 of the Act if it meets two or more of the provincial criteria for determining whether it is of cultural heritage value or interest.
https://www.ontario.ca/laws/regulation/060009

Official Plan

The City of Toronto's Official Plan implements the provincial policy regime and provides policies to guide decision making within the City. It contains a number of policies related to properties on the City's Heritage Register and properties adjacent to them, as well as the protection of areas of archaeological potential. The Official Plan should be read as a whole to understand its comprehensive and integrative intent as a policy framework for priority setting and decision making. The Official Plan can be found here:
https://www.toronto.ca/city-government/planning-development/official-plan-guidelines/official-plan/

COMMENTS

Several buildings on the University of Toronto St. George Campus are included on the Heritage Register, including over a dozen buildings located on the property parcel at 150 College Street, which is a broader property that encompasses many other buildings identified as part of the broader campus landscape. Additionally, some buildings on the property parcel at 150 College Street have been designated under Part IV of the Ontario Heritage Act, including the Mining Building, the Sandford Fleming Library, Hart House (including Soldiers' Tower), and the Hygiene Building.

In 2018, City Council endorsed a set of principles for the University of Toronto St. George Campus Secondary Plan Area, including the principle to conserve built heritage resources and cultural heritage landscapes. In 2022 Council adopted the Official Plan Amendment, University of Toronto St. George Campus Secondary Plan and associated Urban Design Guidelines, and also directed the Senior Manager, Heritage Planning, to report to the Toronto Preservation Board and the Toronto and East York Community Council on the possibility for inclusion on the City's Heritage Register of the potential heritage resources identified in the study area as illustrated in a map attached to the report. The Medical Sciences Building at 1 King's College Circle was identified in that attachment.

In 2020, the University of Toronto received a $250-million gift from the Temerty Foundation in support of the Faculty of Medicine and its affiliated hospital network. As part of the funding announcement, the University introduced plans to provide additional education and research facilities through a partial redevelopment of the Medical Sciences Building. In 2023, the University announced the selection of an architectural team to lead the design of the project.

To further the implementation of the principles adopted for the Secondary Plan area, staff have been engaging in dialogue with the University of Toronto to advance the evaluation of buildings with cultural heritage value for designation under Part IV of the Ontario Heritage Act. This report recommends that the Medical Sciences Building (convenience address at 1 King's College Circle) be added to the Part IV designated properties located on the property parcel at 150 College Street.

Permit applications to alter the building are forthcoming. ERA Architects, acting as the Heritage Consultant for the University of Toronto, submitted a Cultural Heritage Evaluation Report to Heritage Planning as a component of the Heritage Impact Assessment in advance of these applications. The designation of the building under Part IV of the Ontario Heritage Act will inform the understanding of the cultural heritage value of the Medical Sciences Building prior to planning for change and considering interventions to it.

Evaluation Analysis

The following evaluation analysis is based on the comprehensive research conducted on the property at 150 College Street (Medical Sciences Building - 1 King's College

Circle) (see Attachment 3) and provides the rationale for the recommendation(s) found in this report.

The property at 150 College Street (Medical Sciences Building - 1 King's College Circle) meets the following 8 out of 9 criteria:

The property has design value or physical value because it is a rare, unique, representative or early example of a style, type, expression, material or construction method

The subject property has design and physical value as a unique example of precast concrete construction in Ontario. The sculptural quality of this material is visible in the distinctive precast panels that comprise large portions of the building envelope of the Medical Sciences Building and by several integrated precast artworks that elevate the design excellence of this Modernist complex. The subject property serves as a significant example of this architectural material, helping to highlight and promote the versatility and sculptural possibilities of concrete that were being explored in the field of architecture and design during the late 1960s.

The property has design value or physical value because it displays a high degree of craftsmanship or artistic merit

The subject property demonstrates a high degree of craftsmanship and artistic merit through the design and fabrication of the precast concrete panels and sculptures, which were produced through a collaborative process involving sculptors Robert Downing and Ted Bieler, the project architects (Govan, Kaminker, Langley, Keenleyside, Melick, Devonshire and Wilson with Somerville, McMurrich & Oxley, including Peter Goering), and Beer Precast, a prominent local precast manufacturing company. Structural considerations of framing the window openings and manufacturing capabilities influenced the design of the precast concrete cladding panels from the outset, resulting in a collection of several patterned and highly three-dimensional variations of modular components that could be efficiently installed on site. Similarly, the artworks in precast concrete integrated into the east and north exterior walls of the lobby (*Cube Wall* and *Medallion)*, the terrace (*Muskoka Piece*), and forecourt (*Helix of Life*) by the same artists were conceived with consideration for ease of installation as well as the location of each piece within the complex. In part for his contributions to the subject property, Bieler was awarded the 1969 RAIC Allied Arts Medal for outstanding achievement for artwork designed to be integrated with architecture.

The property has design value or physical value because it demonstrates a high degree of technical or scientific achievement

The Medical Sciences Building also demonstrates technical expertise in its construction methods as an early application of rainscreen principles in the detailing of its envelope design. The concept of an air cavity with means of equalizing the air pressure between the cavity and the exterior to prevent the ingress of water was first presented in a National Research Council of Canada publication in 1963. These concepts were increasingly researched and evaluated through the 1970s, making the Medical Sciences Building, constructed between 1966 and 1970 to the designs of Govan, Kaminker,

Langley, Keenleyside, Melick, Devonshire and Wilson with Somerville, McMurrich & Oxley, among the first major buildings in Canada to incorporate this technology. An innovative approach was also applied to the planning and management of the project, led by Canadian Bechtel Limited. They adopted a fast-track project delivery method for construction before it was commonplace in the institutional sector by overlapping between the demolition, design, and construction phases of the project, thereby completing the complex ahead of the project schedule.

The property has historical value or associative value because it has direct associations with a theme, event, belief, person, activity, organization or institution that is significant to a community

Through its physical form as a Modernist complex, the subject property is directly associated with the University of Toronto's (U of T) expansion during the 1960s, a period in which the U of T developed into a globally leading centre of teaching and research among public universities. It reflects the design principles that characterise this period through its materiality and functional massing. By enabling the expansion of programs in the medical field and consolidating related biomedical disciplines with similar programmatic requirements within a single research facility, the Medical Sciences Building was foundational in the establishment and growth of the system of teaching hospitals affiliated with U of T. It is also representative of a broader theme of large-scale academic building projects that occurred in response to increased demands for access to post-secondary education across Canada, particularly in healthcare education as Canada worked towards establishing a universal, publicly funded healthcare system.

The property has historical value or associative value because it demonstrates or reflects the work or ideas of an architect, artist, builder, designer or theorist who is significant to a community

The subject property reflects the work of Canadian artists Ted Bieler and Robert Downing, who each made significant contributions to the visual arts in Ontario. Bieler had a long career as an educator and completed a number of commissions for large-scale public art in Toronto and elsewhere. In the years prior to the work for the Medical Sciences Building, he created several sculptural concrete pieces for Expo 67 in Montreal. Downing, who worked for a time as Bieler's assistant, was the first Canadian artist to hold a solo show at a major European art gallery, the renowned Whitechapel Gallery in London, England. Held in 1969, the exhibition comprised a study of cube-oriented geometry through 108 sculptural works, which became his most well-known project among his body of work. Two of the pieces created for the Medical Sciences Building, *Rolling Cube* and *Cube Wall*, were part of this series.

The subject property also demonstrates the work of Beer Precast, the country's foremost fabricator of precast concrete products in the 1950s - 1970s. The company was known for their innovation in developing new products as well as manufacturing processes that still enabled a high degree of customization, during an era when concrete was becoming more widely used in the construction industry. Along with the Medical Sciences Building, their well-known projects include the Beth David Synagogue (1957), the CIBC Building in Montreal (1960-61), and Toronto City Hall (1959-1964). In

1967, the company received an award from the Ontario Government for its leading role in the precast concrete industry.

The property has contextual value because it is important in defining, maintaining or supporting the character of an area

Contextually, the subject property is valued for supporting and maintaining the institutional character of the southeast corner of St. George Campus, a longstanding site providing space and facilities dedicated to science, engineering, and medical research and teaching. Fronting onto King's College Circle, the Medical Sciences Building's articulated massing defines the northern boundary of a biomedical and health sciences hub within this precinct, which generally comprises the buildings on the north side of College Street up to King's College Circle, and from Queen's Park Crescent West to King's College Road, which functions as the ceremonial entrance to St. George Campus. Through its monumentality and architectural design, the Medical Sciences Building, which spans eastward to Queen's Park Crescent West, supports and maintains the institutional and ceremonial character encircling the Queen's Park's Legislative Assembly of Ontario and the ceremonial character extending north from University Avenue to the viceregal suite of the Lieutenant Governor of Ontario.

The property has contextual value because it is physically, functionally, visually or historically linked to its surroundings

As a purpose-built medical research and teaching facility, the subject property is historically linked to its surroundings within the southeast corner of St. George Campus, a use that has historically anchored this precinct of the University. Within the St. George Campus, the area in which the Medical Sciences Building is situated is also the closest in proximity to University Avenue, where several of the research and teaching hospitals affiliated with the University are located.

The property has contextual value because it is a landmark

Through its prominent location on King's College Circle, monumental scale, and distinctive appearance defined by its sculptural precast cladding, the subject property has contextual value as a landmark not only on the St. George Campus, but also within the city of Toronto.

See Attachments 1, 2 and 3 of this report for the Statement of Significance; Location Map and Photograph; and Research, Evaluation & Visual Resources pertaining to the property at 150 College Street (Medical Sciences Building - 1 King's College Circle), as all of these documents are integral to the recommendations made in this staff report.

CONCLUSION

Heritage Planning staff have determined that the property at 150 College Street (Medical Sciences Building - 1 King's College Circle) meets 8 out of 9 criteria in Ontario Regulation 9/06, the criteria prescribed for municipal designation under Part IV, Section 29 of the Ontario Heritage Act. As such, the property merits designation and staff

recommend that Council support the designation of this property to conserve its cultural heritage value.

The Statement of Significance: 150 College Street (Medical Sciences Building - 1 King's College Circle) (Reasons for Designation) attached as Attachment 1 to this report comprises the Reasons for Designation, which is the Public Notice of Intention to Designate.

CONTACT

Megan Albinger, Heritage Planner, Heritage Planning, Urban Design, City Planning
416-394-2789; Megan.Albinger@toronto.ca

SIGNATURE

Mary L. MacDonald, MA, CAHP
Senior Manager, Heritage Planning
Urban Design, City Planning

ATTACHMENTS

Attachment 1 – 150 College Street (Medical Sciences Building - 1 King's College Circle) - Statement of Significance (Reasons for Designation)
Attachment 2 – Location Map and Current Photograph
Attachment 3 – Research, Evaluation & Visual Resources

150 COLLEGE STREET **ATTACHMENT 1**

(MEDICAL SCIENCES BUILDING - 1 KING'S COLLEGE CIRCLE)

STATEMENT OF SIGNIFICANCE

(REASONS FOR DESIGNATION)

Description of the Property subject of this By-law

The subject property is defined to include the “Medical Sciences Building” which fronts onto King’s College Circle, extending from King’s College Road to Queen’s Park Crescent West, and comprises a sprawling, concrete-clad institutional building complex constructed between 1966 and 1970 with a raised outdoor terrace and a forecourt containing a freestanding concrete sculpture. The subject property is located within the University of Toronto’s St. George Campus at 150 College Street and is identified by its convenience address of 1 King’s College Circle. The asymmetrical and articulated massing of the Medical Sciences Building generally varies between three and six storeys above grade, with an additional two levels comprising a mechanical penthouse on the tower wings. It is situated among a collection of buildings, many of which are interconnected, that form a biomedical and health sciences precinct in the southeast area of the campus between College Street and King’s College Circle.

Design and Physical Value

The subject property has design and physical value as a unique example of precast concrete construction in Ontario. The sculptural quality of this material is visible in the distinctive precast panels that comprise large portions of the building envelope of the Medical Sciences Building and by several integrated precast artworks that elevate the design excellence of this Modernist complex. The subject property serves as a significant example of this architectural material, helping to highlight and promote the versatility and sculptural possibilities of concrete that were being explored in the field of architecture and design during the late 1960s.

The subject property demonstrates a high degree of craftsmanship and artistic merit through the design and fabrication of the precast concrete panels and sculptures, which were produced through a collaborative process involving sculptors Robert Downing and Ted Bieler, the project architects (Govan, Kaminker, Langley, Keenleyside, Melick, Devonshire and Wilson with Somerville, McMurrich & Oxley, including Peter Goering), and Beer Precast, a prominent local precast manufacturing company. Structural considerations of framing the window openings and manufacturing capabilities influenced the design of the precast concrete cladding panels from the outset, resulting in a collection of several patterned and highly three-dimensional variations of modular components that could be efficiently installed on site. Similarly, the artworks in precast concrete integrated into the east and north exterior walls of the lobby (*Cube Wall* and *Medallion)*, the terrace (*Muskoka Piece*), and forecourt (*Helix of Life*) by the same artists were conceived with consideration for ease of installation as well as the location of each piece within the complex. In part for his contributions to the subject property, Bieler was awarded the 1969 RAIC Allied Arts Medal for outstanding achievement for artwork designed to be integrated with architecture.

The Medical Sciences Building also demonstrates technical expertise in its construction methods as an early application of rainscreen principles in the detailing of its envelope design. The concept of an air cavity with means of equalizing the air pressure between the cavity and the exterior to prevent the ingress of water was first presented in a National Research Council of Canada publication in 1963. These concepts were increasingly researched and evaluated through the 1970s, making the Medical Sciences Building, constructed between 1966 and 1970 to the designs of Govan, Kaminker, Langley, Keenleyside, Melick, Devonshire and Wilson with Somerville, McMurrich & Oxley, among the first major buildings in Canada to incorporate this technology. An innovative approach was also applied to the planning and management of the project, led by Canadian Bechtel Limited. They adopted a fast track project delivery method for construction before it was commonplace in the institutional sector by overlapping between the demolition, design, and construction phases of the project, thereby completing the complex ahead of the project schedule.

Historical and Associative Value

Through its physical form as a Modernist complex, the subject property is directly associated with the University of Toronto's (U of T) expansion during the 1960s, a period in which the U of T developed into a globally leading centre of teaching and research among public universities. It reflects the design principles that characterise this period through its materiality and functional massing. By enabling the expansion of programs in the medical field and consolidating related biomedical disciplines with similar programmatic requirements within a single research facility, the Medical Sciences Building was foundational in the establishment and growth of the system of teaching hospitals affiliated with U of T. It is also representative of a broader theme of large-scale academic building projects that occurred in response to increased demands for access to post-secondary education across Canada, particularly in healthcare education as Canada worked towards establishing a universal, publicly funded healthcare system.

The subject property reflects the work of Canadian artists Ted Bieler and Robert Downing, who each made significant contributions to the visual arts in Ontario. Bieler had a long career as an educator and completed a number of commissions for large-scale public art in Toronto and elsewhere. In the years prior to the work for the Medical Sciences Building, he created several sculptural concrete pieces for Expo 67 in Montreal. Downing, who worked for a time as Bieler's assistant, was the first Canadian artist to hold a solo show at a major European art gallery, the renowned Whitechapel Gallery in London, England. Held in 1969, the exhibition comprised a study of cube-oriented geometry through 108 sculptural works, which became his most well-known project among his body of work. Two of the pieces created for the Medical Sciences Building, *Rolling Cube* and *Cube Wall*, were part of this series.

The subject property also demonstrates the work of Beer Precast, the country's foremost fabricator of precast concrete products in the 1950s - 1970s. The company was known for their innovation in developing new products as well as manufacturing processes that still enabled a high degree of customization, during an era when concrete was becoming more widely used in the construction industry. Along with the Medical Sciences Building, their well-known projects include the Beth David Synagogue

(1957), the CIBC Building in Montreal (1960-61), and Toronto City Hall (1959-1964). In 1967, the company received an award from the Ontario Government for its leading role in the precast concrete industry.

Contextual Value

Contextually, the subject property is valued for supporting and maintaining the institutional character of the southeast corner of St. George Campus, a longstanding site providing space and facilities dedicated to science, engineering, and medical research and teaching. Fronting onto King's College Circle, the Medical Sciences Building's articulated massing defines the northern boundary of a biomedical and health sciences hub within this precinct, which generally comprises the buildings on the north side of College Street up to King's College Circle, and from Queen's Park Crescent West to King's College Road, which functions as the ceremonial entrance to St. George Campus. Through its monumentality and architectural design, the Medical Sciences Building, which spans eastward to Queen's Park Crescent West, supports and maintains the institutional and ceremonial character encircling the Queen's Park's Legislative Assembly of Ontario and the ceremonial character extending north from University Avenue to the viceregal suite of the Lieutenant Governor of Ontario.

As a purpose-built medical research and teaching facility, the subject property is historically linked to its surroundings within the southeast corner of St. George Campus, a use that has historically anchored this precinct of the University. Within the St. George Campus, the area in which the Medical Sciences Building is situated is also the closest in proximity to University Avenue, where several of the research and teaching hospitals affiliated with the University are located.

Through its prominent location on King's College Circle, monumental scale, and distinctive appearance defined by its sculptural precast cladding, the subject property has contextual value as a landmark not only on the St. George Campus, but also within the city of Toronto.

Heritage Attributes

Design and Physical Value

The following heritage attributes contribute to the cultural heritage value of the subject property as being a unique example of sculptural precast concrete that elevates the design excellence of this Modernist complex with a high degree of artistic merit and craftsmanship, and demonstrative of a high degree of technical achievement:

- The sculptural precast cladding comprising three interrelated groups of panels (main facing panels, penthouse panels, and balcony panels)
- The integrated sculptural elements of the complex, as part of the design of the wall cladding and as site-specific installations in the forecourt and on the terrace
- The deep horizontal voids created by the balconies at the seventh floor, separating the sections of the main facing panels from the penthouse panels
- The precast concrete panels on the south elevation of the auditorium wing with projecting vertical window fins

- The precast concrete panels that are an early, large-scale application of a pressure-equalized rain-screen system

Historical and Associative Value

The following heritage attributes contribute to the cultural heritage value of the subject property as being a Modernist complex directly associated with the University of Toronto's period of expansion during the 1960s:

- The scale and asymmetrical massing
- The extensive use of precast concrete on the Medical Sciences Building's exterior
- The expression of horizontality, emphasized through the arrangement of voids and window openings
- The recessed entrance on the north elevation below a canopy of tiered massings, framed on either side by solid, simple volumes

Attributes that contribute to the cultural heritage value of the subject property as being demonstrative of the work of Ted Bieler, Robert Downing, and Beer Precast Concrete:

- The site-specific, integrated artworks by Canadian sculptor, Ted Bieler:
  - *Helix of Life*, located in the forecourt of the north entrance
  - *Muskoka Piece*, located on the terrace adjacent to the south elevation of the auditorium wing
- The site-specific, integrated artworks by Canadian sculptor, Robert Downing:
  - *Cube Wall*, integrated into the wall adjacent to the north entrance and cascading onto the terrace beneath the covered canopy
  - *Medallion*, located on the east elevation of the north lobby, at the axial terminus of the approach to the terrace through the covered passageway from the east
- The sculptural concrete elements that represent the high degree of skill and range of expertise of Beer Precast, including the sculptural precast panels and artworks

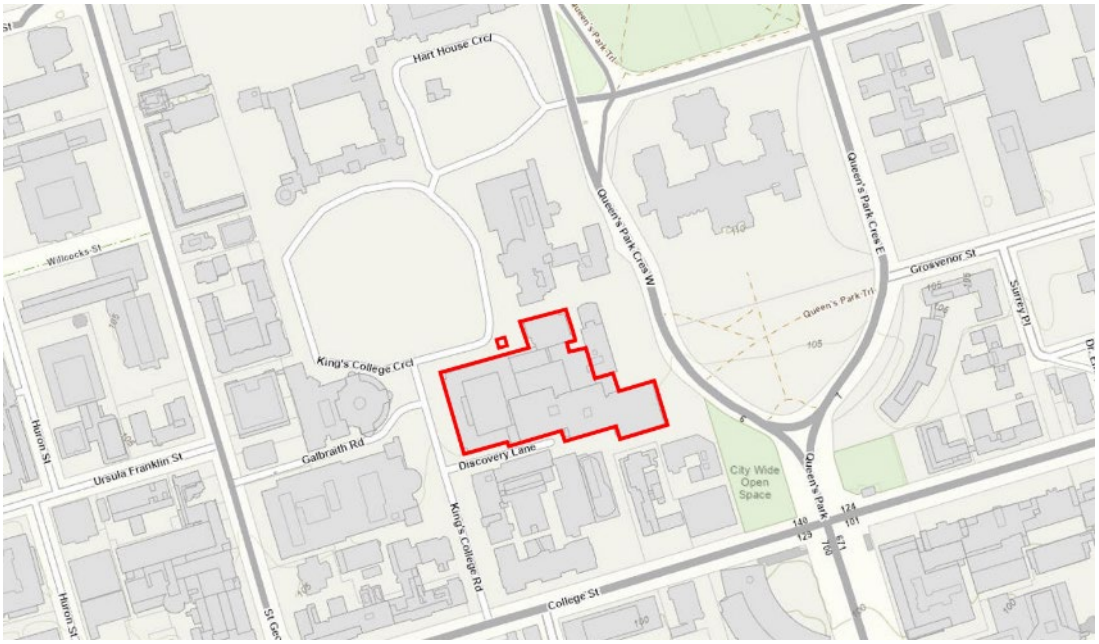
Contextual Value

The following heritage attributes contribute to the cultural heritage value of the subject property as supporting and maintaining the character of the biomedical and health sciences precinct in the southeast corner of St. George Campus and as being a landmark:

- The location of the Medical Sciences Building on the southeast corner of King's College Circle
- The composition of interconnected wings with articulated massing and a raised terrace that provides a passageway from King's College Circle to Queen's Park Crescent
- The scale of the Medical Sciences Building, which spans from King's College Road to Queen's Park Crescent West

LOCATION MAP AND CURRENT PHOTOGRAPH ATTACHMENT 2

MEDICAL SCIENCES BUILDING - 150 COLLEGE STREET (1 KING'S COLLEGE CIRCLE)



The Medical Sciences Building at 150 College Street (1 King's College Circle) and the approximate location of *Helix of Life* in the forecourt of the building complex are outlined in red. Note: This location map is for information purposes only; the boundaries of the property are not shown (City of Toronto Mapping).

The Medical Sciences Building at 1 King's College Circle, principal (north) elevation as viewed from King's College Circle lawn (Heritage Planning, 2025).

150 College Street (Medical Sciences Building - 1 King's College Circle)

In undertaking this research and evaluation, we recognize that the area now known as the City of Toronto is the traditional territory of many nations including the Mississaugas of the Credit, the Anishnabeg, the Chippewa, the Haudenosaunee and the Wendat peoples, and is now home to many diverse First Nations, Inuit and Métis peoples. Toronto is covered by Treaty 13 signed with the Mississaugas of the Credit (1805), and the Williams Treaties (1923) signed with multiple Mississaugas and Chippewa bands.

Medical Sciences Building, primary (north) elevation (Heritage Planning, 2025).

1. DESCRIPTION

1 King's College Circle - Medical Sciences Building	
ADDRESS	150 College Street (1 King's College Circle)
WARD	University-Rosedale - 11
NEIGHBOURHOOD/COMMUNITY	University
CONSTRUCTION DATE	1966-1970
ORIGINAL USE	Institutional (Faculty of Medicine)
CURRENT USE* (*This does not refer to permitted use(s) as defined by the Zoning By-law)	Institutional (Temerty Faculty of Medicine)
ARCHITECT/BUILDER/DESIGNER	Architects: Govan, Kaminker, Langley, Keenleyside, Melick, Devonshire and Wilson with Somerville, McMurrich & Oxley (including Peter Goering) In collaboration with: Ted Bieler (artist), Robert Downing (artist), Beer Precast

	Concrete (fabricator), Canadian Bechtel Ltd. (construction manager)
ADDITIONS/ALTERATIONS	See Section 3
LISTING DATE	NOL

2. ONTARIO REGULATION 9/06 CHECKLIST:

CRITERIA FOR DETERMINING CULTURAL HERITAGE VALUE OR INTEREST

The following checklist identifies the prescribed criteria met by the subject property at 150 College Street (Medical Sciences Building - 1 King's College Circle) for municipal designation under Part IV, Section 29 of the Ontario Heritage Act. There are a total of nine criteria under O. Reg 9/06. A property may be designated under Section 29 of the Ontario Heritage Act if the property meets two or more of the provincial criteria for determining whether it is of cultural heritage value or interest.

The evaluation table is marked “N/A” if the criterion is “not applicable” to the property or "✓" if it is applicable to the property.

150 College Street (1 King's College Circle)

1.	The property has design value or physical value because it is a rare, unique, representative or early example of a style, type, expression, material or construction method.	✓
2.	The property has design value or physical value because it displays a high degree of craftsmanship or artistic merit.	✓
3.	The property has design value or physical value because it demonstrates a high degree of technical or scientific achievement.	✓
4.	The property has historical value or associative value because it has direct associations with a theme, event, belief, person, activity, organization or institution that is significant to a community.	✓
5.	The property has historical value or associative value because it yields, or has the potential to yield, information that contributes to an understanding of a community or culture.	N/A
6.	The property has historical value or associative value because it demonstrates or reflects the work or ideas of an architect, artist, builder, designer or theorist who is significant to a community.	✓
7.	The property has contextual value because it is important in defining, maintaining or supporting the character of an area.	✓
8.	The property has contextual value because it is physically, functionally, visually or historically linked to its surroundings.	✓
9.	The property has contextual value because it is a landmark.	✓

3. RESEARCH

This section of the report describes the history, architecture and context of the property. Visual resources related to the research are located in Section 4. Archival and contemporary sources for the research are found in Section 5 (List of Sources).

Indigenous Communities

For time immemorial, Toronto has been home to Indigenous peoples. Ojibway oral histories speak of Ice People, who lived at a time when ice covered the land.[1] Following the retreat of glaciers approximately 13,000 years ago, small groups of Indigenous peoples moved from place to place, hunting and gathering the food they needed according to the seasons. Over millennia, they adapted to dramatically changing environmental conditions, developing and acquiring new technologies as they did so. Waterways and the lake were vital sources of fresh water and nourishment, and shorelines and nearby areas were important sites for gathering, trading, hunting, fishing, and ceremonies. Long-distance trade moved valuable resources across the land.

After maize and squash were introduced to Southern Ontario, by approximately 500 CE, horticulture began to supplement food sources. By 1300 CE, villages focused on growing food became year-round settlements surrounded by crops. These villages were home to ancestors of the Huron-Wendat Nation, who would continue to occupy increasingly larger villages in the Toronto area and beyond. These villages were connected to well-established travel routes which were part of local and long-distance trail networks, including the Carrying Place trails on the Don, Rouge and Humber rivers that connected Lake Ontario to Georgian Bay. Beads made from seashells from the eastern seaboard were found at the Alexandra site in North York, which was a community of 800-1000 people in approximately 1350.

By 1600, the Wendat had formed a confederation of individual nations, and had concentrated most of their villages away from Lake Ontario, in the Georgian Bay area. Following contact with French explorers and missionaries in Southern Ontario in the early 1600s, European diseases decimated First Nations. Competition for furs to trade with Europeans and the desire to replenish numbers through absorption of captives, among other factors[2], contributed to the Beaver Wars, which after 1640, saw the Haudenosaunee Confederacy expand into Southern Ontario, dispersing the Wendat. Within the boundaries of today's Toronto, the Haudenosaunee Confederacy then occupied villages on the Carrying Place trails on the Humber and Rouge Rivers from approximately the 1660s to the 1680s.

In the late 1680s, the Haudenosaunee Confederacy chose to leave their village in the Toronto area and returned to their homelands in upstate New York. As evidenced by the 1701 Great Peace of Montreal, the 1701 Nanfan Treaty, and the Dish with One Spoon Treaty, the Haudenosaunee continued to have an interest in the resources of the area.

Anishinaabe people from the Lake Superior region then moved into the Toronto area. While the Wendat and Haudenosaunee people lived in year-round villages surrounded by crops, the Anishinaabe people continued to live primarily by seasonally moving across the land to hunt, fish and gather resources that were available at a specific time, including migrating birds and maple syrup. To the west of Toronto, the Anishinaabe

1 With thanks to Philip Cote for the reference to Benton-Banai, Edward, The Mishomis book: The voice of the Ojibway (Indian Country Press, 1985), p. 26.

2 https://histindigenouspeoples.pressbooks.tru.ca/chapter/chapter-5-colonial-wars-looking-east; Gary Warrick, "The Aboriginal Population of Ontario in Late Pre-history," in Munson and Jamieson, eds., Before Ontario: The Archaeology of a Province (McGill-Queen's University Press, 2013), p. 72.

people became known as the Mississaugas of the Credit. To the east, they became known as the Chippewas of Beausoleil, Georgina Island and Rama and the Mississaugas of Alderville, Curve Lake, Hiawatha, Scugog Island.[3]

In 1787, as the British began to prepare for an influx of colonists into the area following the American Revolution, the British Crown negotiated the Toronto Purchase with the Mississaugas of the Credit First Nation to obtain title to the land. The flawed and poorly documented agreement was invalidated, and Treaty 13 was negotiated in 1805 for lands now including much of the City of Toronto. In 1923, the Governments of Ontario and Canada signed the Williams Treaties for over 20,000 km2, including portions of eastern Toronto, with seven First Nations of the Chippewa of Lake Simcoe (Beausoleil, Georgina Island and Rama) and the Mississauga of the north shore of Lake Ontario (Alderville, Curve Lake, Hiawatha and Scugog Island).

The Mississaugas, Chippewa, the Haudenosaunee, or the Wendat did not traditionally regard land as a commodity to be sold. Following the Toronto Purchase, the British government quickly set out to survey the land into lots which were either sold or granted into private ownership of settlers. In 2010, the Government of Canada settled the Toronto Purchase Claim with the Mississaugas of the Credit after agreeing that the Mississaugas were originally unfairly compensated. In 2018, the Williams Treaties First Nations settled litigation about land surrenders and harvesting rights with the Governments of Canada and Ontario.

The City of Toronto remains the traditional territory of many nations including the Mississaugas of the Credit, the Anishnabeg, the Chippewa, the Haudenosaunee and the Wendat peoples and is now home to many diverse First Nations, Inuit and Métis peoples. Toronto is also covered by Treaty 13 signed with the Mississaugas of the Credit, and the Williams Treaties signed with seven Mississaugas and Chippewa First Nations.

The area that would become the University of Toronto's St. George Campus would have been largely forested and was bisected by Ziibiing, later renamed by settlers as Taddle Creek, which cut a ravine through the landscape originating to the northwest of the future university and emptying into Lake Ontario near the foot of Parliament Street. There were no active Indigenous settlements located within this immediate area by the time of European colonization in the late 18th century. Approximately 600 metres to the northeast, on the grounds of the former Elmsley Estate (Clover Hill), the location of a possible Late Woodland period (1000-1650 C.E.) Indigenous village was registered as an archaeological site in 1971. However, the registration was made on the basis of a nineteenth-century account without supporting physical evidence or spatial information.[4]

The creek was dammed by the University in 1859 to create McCaul’s Pond before being subsequently buried in 1884 due to severe sewage issues. Today, parts of the waterway are now buried beneath Hart House and Philosopher’s Walk. Recent campus

3 Mississaugas of the Credit, "The History of Mississaugas of the New Credit First Nation." n.d.
4 ASI, 43.

revitalization and research projects have focused on the waterway and its significance to Indigenous communities. [5]

i. HISTORICAL INFORMATION

The following section outlines the history and facts related to the properties which are the basis for determining historical or associative value of Criteria 4, 5 or 6 according to O. Reg. 9/06 Criteria.

University of Toronto St. George Campus

The Medical Sciences Building is located on the southeast portion of King's College Circle, with its main entrance facing the open space of the University of Toronto's Front Campus - the historic, symbolic, and ceremonial focus of the campus.

A historical summary of the St. George Campus can be found in the appendices to the Urban Design Guidelines for the area:
https://www.toronto.ca/legdocs/mmis/2022/te/bgrd/backgroundfile-227526.pdf[6]

Medical Sciences Building Site

The first building constructed on the site of the subject property was a brick structure constructed in 1850. The building, visible on several maps published during the 1850s, housed the University of Toronto's Faculty of Medicine (Figure 1), and was later known as Moss Hall.[7] Originally founded in 1843, the Faculty of Medicine was eliminated ten years later as part of government legislation that divided the University's teaching and administrative functions, and was not re-established until 1887.[8] During this interim period, Moss Hall (Figure 2) was used for a variety of purposes as the University began to expand around it. To the northwest of Moss Hall, University College was completed in 1859. To the west, the School of Practical Science (for students studying mining, engineering, mechanics and manufacturing), was opened in 1878. This building was also known as the "Little Red Schoolhouse", and it was oriented towards the east.

Shortly after the Faculty of Medicine was officially reinstated in 1887, plans were made to expand the biology program. Moss Hall was demolished in 1888, and a new, larger building for the Biology department was constructed in its place, partially sited on top of the former Ziibiing/Taddle Creek. Like the School of Practical Science, the new building's primary entrance faced east, fronting onto Queen's Park Crescent rather than the rest of the campus.

---

5 For more information, refer to the University of Toronto Libraries' research guide for the subject of Indigenous presence on what is now University land. https://guides.library.utoronto.ca/university-of-toronto-history/indigenous-presence

6 The historical summary of St. George Campus was prepared by Heritage Planning staff in 2022.

7 Friedland, 34.

8 Throughout the period between 1853-1887, the University continued to set examinations and grant medical degrees, but did not teach students. At this time, a university degree was not a requirement to practice medicine (Friedland, 126). Some maps published during this timeframe still identify the building as the Medical School.

In the early 1900s, the picturesque character of the University evolved into a more formalized Beaux-Arts design under the direction of the architecture firm Darling and Pearson. Significant changes to the southeast section of King's College Circle included the northward extension of King's College Road as a ceremonial entrance, framed by several new buildings, including Convocation Hall (1906-7) and the Physics Building (1907, now named the Sandford Fleming Building). The new street ran parallel to the rear of the Practical Science building where it intersected with King's College Circle. During this period, a new Medical School Building (also designed by Darling and Pearson) was constructed (1903). It was located on the east side of King's College Circle between the Biology Building and the University Library Building (known today as the Gerstein Information Centre) and unlike the earlier Biology Building and School of Practical Science, the main entrance of the Medical School Building faced west (Figure 3).

Over the next 50 years, the southeast portion of the campus was gradually infilled as several buildings were expanded and constructed, including a new Anatomy Building completed in 1923 just east of the Medical Building.[9]

In 1964, a committee was established to report on the future of the Faculty of Medicine. The committee recognized that expanded and updated facilities were needed to capitalize on government research funding, which had increased between the mid-1950s and 60s, and it was felt that expanding the University of Toronto's program and facilities would be cheaper than opening a second medical school in the Toronto area.[10] Proposals to build a new complex south of College Street were debated, but ultimately the decision was made to demolish the existing School of Practical Science, the Biology Building, and the Medical Building to make way for the new Medical Sciences Building. Demolition started in 1966, and staff and students began occupying the new facilities in 1968 while portions of the building complex were still under construction (Figure 4). It was completed in 1970.

Post-Secondary Expansion, Healthcare Education, and Funding in the 1960s

The Medical Sciences Building is part of a larger legacy of campus growth and development that came into fruition in the early 1960s. Foreseeing a dramatic increase in the student population resulting from the post-World War II baby boom, planning for the expansion of the campus began in 1949. Over the next decade, the University expropriated many properties along St. George Street and north of Harbord Street, setting the stage for significant growth. This unprecedented level of expansion was part of a broader trend as post-secondary institutions across the province reacted to the anticipated doubling of enrollment by the end of the 1960s.[11]

A successful fundraising campaign in 1957 spearheaded by newly appointed president of the University, Claude Bissell, initiated the largest amount of building the University had ever seen in a concentrated period of time. The Galbraith Building (designed by

9 The Anatomy Building, known today as the McMurrich Building, was also designed by Darling and Pearson.
10 The Province was initially considering opening a second medical school at York University. Friedland, 507-508.
11 Drushka, 7.

Page and Steele, 1960), Sidney Smith Hall (John B. Parkin Associates, 1961), the Laidlaw Wing of University College (Mathers and Haldenby, 1964), and the McLennan Physical Laboratories and Burton Tower (Shore & Moffat, 1967) are some examples of buildings erected by the University as a result.[12] Residences were constructed to house the increased student population, including Massey College (Ron Thom, 1963) and New College (Macy Dubois of Fairfield & Dubois, 1964). Planning for a major new research library was also initiated in the early 1960s, which would result in the construction of Robarts Library completed in 1973 (Warner, Burns, Toan, and Lunde with Mathers & Haldenby).

The investment in new facilities played a significant role in attracting and retaining faculty members and permitted greater student enrollment in graduate-level programs, ensuring the University's reputation for excellence in teaching and research. When the Medical Sciences Building opened, the top two floors were allocated to the Institute of Medical Science, a new graduate program for all the clinical departments at the University that enabled academic physicians to supervise graduate (MSc and PhD) students and to foster interdisciplinary research. In addition, four major teaching centres at local hospitals were established for medical students in the second half of their program, further increasing the effectiveness of the program.[13]

Concurrently, the Government of Canada was beginning to make substantive progress towards publicly-funded health services following the passage of the 1966 Medical Care Act, which established a framework to enable the federal government to share the costs of provincial insurance programs. To support the delivery of healthcare through this model, the federal government established the Health Resources Fund, which was in effect between 1966 and 1982. At the time of its conception in 1965, the fund was intended to increase the capacity and output of the country's current medical schools (of which there were twelve at the time including the University of Toronto), and to improve the geographical distribution of healthcare education by supporting the development of four new schools.[14] To achieve these aims, the fund provided capital grants for the construction, renovation and basic equipment of research establishments, teaching hospitals, medical schools, and training facilities for other health personnel.[15] In September 1967 after construction was already well under way, it was announced that the University of Toronto would receive $18.5-million through this fund to help finance "what will be the largest medical sciences building on any Canadian campus".[16]

Architectural and Design Team

The design of the Medical Sciences Building was the result of a collaboration between practitioners of several different disciplines, including architecture, manufacturing, and fine arts. The architectural firm Govan, Kaminker, Langley, Keenleyside, Melick, Devonshire and Wilson worked with Somerville, McMurrich & Oxley to design the structure and interior spaces of the complex. Peter Goering, project architect with

12 The construction boom also extended to the University's affiliated colleges, with several other buildings constructed by them. Friedland, 425.
13 Gerard, 5.
14 Hacon, 5.
15 Operating costs were not eligible for funding.
16 Gillan, 3.

Somerville, McMurrich & Oxley worked closely with Beer Precast, a concrete fabricator, and local artists Robert Downing and Ted Bieler to execute the distinctive sculptural cladding panels and other integrated artwork. Michael Hough & Associates completed the landscaping design.

Govan, Kaminker, Langley, Keenleyside, Melick, Devonshire and Wilson

The architectural firm Govan, Kaminker, Langley, Keenleyside, Melick, Devonshire and Wilson went through several iterations as its various partners joined or left the practice and is known by several names. Its primary founder, James Govan (1882-1963) originally trained with John M. Lyle after immigrating to Canada from Scotland. After running his own practice for over 15 years, during which he specialized in the design of residential hospital facilities, he entered into a partnership with William Ferguson in 1931, and subsequently Harold Lindsay in 1932. Several additional partners joined the firm in 1947, including Patrick Keenleyside.[17] The firm continued to specialize in the design of hospitals and medical facilities, and their work can be found across Canada.

The Hospital for Sick Children (completed 1950) is among their best known projects, which also include the main wing of Toronto Western Hospital (1935 with later additions), Toronto's Mount Sinai Hospital (1949, with Kaplan & Sprachman), and the Salvation Army Grace Hospital (1956). Their projects vary in scale, materiality, and architectural style. The firm remained active into the 1980s.

Robert Downing's memoirs identify Bernard Langley, one the partners at the firm, as the "chief architect on the [Medical Sciences Building] project".[18] Langley is a Fellow of the Royal Architectural Institute of Canada.[19]

Somerville, McMurrich & Oxley Architects

The architectural firm of Somerville, McMurrich & Oxley was founded in 1953. The firm's three partners included William Lyon Somerville, Loren Arthur Oxley (b. 1917)[20] and Norman Hay McMurrich (b. 1920). Although Somerville died in 1965, the firm name remained unchanged until 1980. McMurrich and Oxley continued their partnership until its dissolution in approximately 1987.[21]

Their work, which is concentrated in Ontario, was frequently completed in collaboration with other firms for large institutional clients and typically features a Modernist design approach. Projects include Clairlea Park Presbyterian Church in Scarborough (1957), the Gerald Larkin Academic Building (1960) for Trinity College, the north wing of the Trinity College Quadrangle, comprising Cosgrave House and Seager House (1962),

---

17 Patrick Meredith Keenleyside (1914-1987), who was active in the Ontario Association of Architects (OAA) and served as its president, is recognized by the OAA by being listed on their Honour Roll, which is only bestowed upon those who have made a significant contribution to the province's architectural heritage, either through their body of work or their influence in the wider community of design, education, and/or publication.
18 Downing, 78.
19 A Fellow of the RAIC College is a member of the RAIC who has achieved professional eminence or has rendered distinctive service to the profession or to the community at large.
20 Oxley is the son of James M. Oxley, who is best known for his work with A.H. Chapman.
21 Archives of Ontario.

and a Master Plan for the Queen Street Mental Health Centre (Centre for Addiction and Mental Health) (1968). The Gerald Larkin Building was a finalist for the 1961 Massey Medal for Architecture. The firm was also involved with restoration efforts for Fort Henry, Fort George, and Fort Erie. All three partners are Fellows of the Royal Architectural Institute of Canada.

Robert Downing's memoirs indicate that one of his initial meetings on the project for the Medical Sciences Building was with Peter Goering and Norm McMurrich, during which he and Ted Bieler were asked to provide an estimate for all the sculptural work for the building.[22]

Beer Precast Concrete

Beer Precast Concrete was Canada's leading fabricator of precast concrete products in the 1950s - 1970s, when concrete was becoming more widely used in the construction industry. The multigenerational family company was started in 1945 by Fred T. Beer as the Toronto Cast Stone Company but officially changed its name to Beer Precast Concrete in 1963 to better reflect the range of products and services the company offered. Beer's knowledge of the industry was developed through his time spent working for his father's business, Peerless Artificial Stone Company,[23] and later for the Smith Monument Company during the Depression years. Among the major projects that Peerless Artificial Stone Co. contributed to include several structures at the CNE, including the Princes' Gates (1927) and the Automotive Building (1929). Fred T. Beer's two sons, Fred A. and Doug Beer, would eventually take on leadership roles in his own business until the company was sold in 1976.

Beer Precast was widely acknowledged as the national leader in their industry, recognized for their innovation in developing new products and manufacturing processes. An early example of a project demonstrating this unique capability is the sculptural wall panels fabricated for the Beth David Synagogue (1957) on Yeomans Road in North York. Other projects with notable technical achievements include the CIBC Building in Montreal (1960-61), which at the time of construction was the world's tallest precast curtain wall, and the Lonsdale Apartment Tower (1965) at 619 Avenue Road, which strategically engineered and utilized the precast cladding panels as the formwork for the building's structural columns.[24] For Toronto City Hall (1965), Beer Precast invented an automated process that would allow the panels to be made using unskilled labour, resulting in significant cost and time savings for the project. In 1967, the Ontario Government awarded the company for its leading role in the precast concrete industry.

Ted Bieler

Ted Bieler (1938-) was born in Kingston, Ontario and expressed an early interest in the study of art. At fifteen, Bieler studied sculpture in France under Ossip Zadkine, and also completed a brief apprenticeship with Jean Lurçat, primarily known for his work in tapestry, before enrolling in the Slade School of Art in London, England. After returning

22 Downing, 76.
23 There were several variations on the company name over the years of operation.
24 Hulse, 47.

to Canada, Bieler worked as a sculptor for a few years before following in the footsteps of his father by becoming an educator.[25] As a professor of visual arts, Bieler taught at the Albright-Knox Art School at the University of Buffalo (1961-62), the University of Toronto (1962-67), and York University. At the University of Toronto, Bieler "developed the first courses in the history and practice of sculpture"[26] for the department of art and archaeology. Many of his pieces are large-scale public art commissions for private clients, using rigid materials such as stainless steel, wood. He also used cast concrete and ciment fondu to create flowing, abstract organic forms. Bieler also exhibited several pieces at Expo 67 in Montreal, including sculptural concrete pieces for the News and Administration Building and Canadian Pavillion (Figure 5).

Robert Downing

Robert Downing (1935-2003) worked in a variety of mediums, including sculpture, painting, printmaking, photography, performance art, and digital art. Born and raised in Hamilton, Ontario, he briefly served in the Canadian navy (primarily as a photographer) and the Hamilton police force prior to focusing on art. Although self-taught, he was the first Canadian artist to have a solo exhibition at the widely respected Whitechapel Art Gallery in London in 1969,[27] and his work is in the collections of the National Art Gallery of Canada, Art Gallery of Ontario, National Gallery of Singapore, and several other smaller galleries across Canada. Many of his pieces feature geometrical and other mathematical influences. He is best known for his explorations of cuboid forms and their permutations (Figure 6).

Like Bieler, Downing found work as an instructor in fine arts at several post-secondary institutions, although none for extended periods of time. In his later years, Downing struggled financially as an artist, citing his lack of formal training as a significant factor in his inability to receive grant funding to support his career.[28]

ii. ARCHITECTURAL DESCRIPTION

The following section provides an architectural description and analysis related to the property which will establish the basis for determining design or physical value of Criteria 1, 2 or 3 according to O. Reg. 9/06 Criteria. Some of the information and content in this section was taken from pages 11-34 and 59-72 of the CHER prepared by ERA Architects (March 27, 2025). City staff have verified the accuracy of the information and have provided additional, independent analysis relating to the design and physical value of the property.

The CHER prepared by ERA Architects provides a thorough description of the Medical Sciences Building, a "sprawling composition of seven wings that create internalized passageways, and which is connected to the adjacent McMurrich Building to the east and the Donnelly Centre to the south."[29].

25 Ted Bieler's father was the celebrated Swiss-Canadian artist, activist, and teacher André Charles Biéler.
26 Goldfarb Gallery
27 Cooper, F8.
28 Cooper, F8.
29 ERA, 11.

The seven wings generally correspond to different programmatic requirements and are clearly articulated by the massing of the building complex. Most of the building complex was constructed between 1966 and 1969, including three interconnected tower blocks containing all faculty and administration offices as well as a three-storey wing containing laboratory spaces on the west side of the building (Figure 7). A second construction phase, which included the demolition of the former medical school, the completion of the north lobby, and the construction of the Macleod Auditorium, began in 1969 and finished in 1970.

The main entrance and lobby comprise a portion of the north elevation of the Medical Sciences Building (Figures 8-9). Due to the staged demolition of the earlier Medical Building, these interconnected spaces were constructed in two phases. Supported by columns, the second floor shelters the recessed entrance, and provides a covered passageway to the terrace in the centre of the complex. A shallow balcony faced with sculptural panels creates a tiered effect in combination with the three towers of the complex to the south. The entrance is clearly demarcated from the laboratory wing to the west by a stairwell that projects forward slightly from the rest of the building. The stairwell is faced with smooth, precast concrete panels that feature grooves formed into the surface to add some visual interest, with the arrangement emphasizing continuous horizontal lines.

Located directly north of the main entrance, the Macleod Auditorium is a four-storey structure, although it reads as a two-storey structure from within the terrace due to the topography of the site (Figures 10-11). With the canopy over the entrance, the auditorium's elevated and enclosed pedestrian connector bridge frames the passageway to the terrace. There are two entrances to this wing on the auditorium's south elevation, one from the covered passageway and a second interior connection above-grade via the connector bridge. A series of vertically-oriented windows set between deep, precast concrete fins distinguishes the south elevation framing the terrace.

The west portion of the Medical Sciences Building complex is a three-storey volume with frontage on King's College Circle, the laneway to the south, and King's College Road (Figures 12-14). A mechanical penthouse on the roof of the wing steps back from the north and west elevations and the whole wing is clad in unadorned precast concrete panels. Horizontal bands of window openings span the entire north elevation at each level, wrapping around the corner onto the west elevation. On the interior, these windows provide natural light to single-loaded corridors that serve classroom and laboratory space.

The west elevation of this wing features expressed stairwells at the north and south corners, and a small projecting balcony at each storey centred on the elevation. Both stairwells function as entrances, although the doors actually face to the north and south and include a narrow strip of vertically-oriented glazing spanning all three floors. Corner windows wrap around the southwest corner of the building in the same style as on the north. Five small square windows on the third floor are the only other openings on the south elevation of this wing.

The tallest and most visually distinct portion of the Medical Sciences Building complex comprises three interconnected, tower wings approximately square in plan, and slightly offset from one another in a stepped configuration (Figures 15-17). They rise six storeys above grade with an additional two levels comprising a mechanical penthouse. The common areas on the main level feature a high proportion of glazing. Pairs of vertically-oriented windows are generally found on the next five storeys. A band of deep horizontal relief bays separates the penthouse level from the shafts of the three interconnected towers. Loading and service access for the complex is located at the south elevation of these wings.

The defining feature of the tower wings is the patterned sculptural precast panels that clad the exterior nearly in full, including two variations at the base of the building, six variations across the middle storeys, and three further variations forming a modernist interpretation of a frieze across the uppermost penthouse level. The panels were produced through a collaborative process involving sculptors Robert Downing and Ted Bieler, the project architects, and the fabricator, Beer Precast (Figures 18-19). In his memoirs, Robert Downing likened the process to an exercise in industrial design, due to the various constraints that factored into the design of the panels.[30] These included a requirement for a certain panel depth and thick window fins for structural reasons, as well as the need for modularity for ease of manufacturing and installation. According to Downing, the width of the window fins became the prevailing element in the main panel design, with the dimensions of the window space forming the inspiration for the penthouse panels. Similarly, practical considerations to make the panels lighter in weight led to the inclusion of negative space in the balcony panels.

When interviewed about the architectural design of the building just after the completion of the administration and laboratory wings, architect Norm McMurrich said the Medical Sciences Building is "a bold treatment of precast concrete. I think when people get used to it, the only thing against it esthetically will be its size". Bernard Langley, another architect involved in the structure further commented that they had not received "any adverse comments as to its appearance".[31]

The Medical Sciences Building has not been significantly altered since it was originally constructed, but some projects on adjacent sites have impacted the building complex to some degree. In 2005, the construction of the Donnelly Centre for Cellular and Biomolecular Research added two physical connections to the south side of the building via a glazed pedestrian walkway at the main level and an overhead bridge at the fifth storey (Figure 20). More recently, the transformation of King's College Circle through the Landmark Project altered the grading and materiality of the front entrance, forecourt, and pedestrian connection to Queen's Park via the terrace. In addition, interior renovations completed at an unknown date resulted in the removal of a sculpture by Robert Downing called *Rolling Cube*, which was originally located on the main floor.

A news article in the Globe and Mail while the building was under construction indicated that the building was structurally engineered to support four additional storeys if future expansion was needed,[32] but no additional floor space has been added to date. Robert

30 Downing, 77-78.
31 Parliament, 7.
32 Parliament, 7.

Downing also noted that he was aware of this prior to designing the sculptural panels for the 'penthouse' level of the tower wings.[33]

Modernism and University Campus Planning

Coinciding with Canada's Centennial and an investment in public and institutional infrastructure and programs, the late 1960s were a time of architectural exploration. The creation of entirely new institutions meant that university planners and architects could apply Modernist ideas to institutional campuses and buildings in bold new ways, moving away from the desire for universality that marked the International style popularized earlier in the Modernist period. Many of the buildings designed during this period are characterised by their monumental scale and use of concrete, which was increasingly being explored as an architectural material during the latter half of the decade.

A strong theme emerging from campus master plans of this era includes an emphasis placed on the spaces outside and between buildings and lecture halls, creating gathering places and sites of informal interaction between students of different faculties to encourage learning outside of the classroom.[34] Rather than following conventional, pre-war models where different academic programs were each given their own discrete pavilion within a larger setting, the modernist approach to campus planning featured greater integration between buildings and the surrounding landscape and context.[35] This was often manifested through the integration of courtyards, plazas, and terraces, either sheltered or not, as part of the design program.

The Medical Sciences Building exemplifies this Modernist approach in the articulation of its massing relative to its immediate context. The footprint of the complex spans the topography of the former Ziibiing/Taddle Creek ravine that is evident on the west side of the campus. By slightly elevating the main floor of the building, the raised terrace functions like a bridge over the depression of the ravine and the high level of pedestrian traffic provides opportunities for casual meetings. Similarly, the design intent from the start of the project was to ensure opportunities for interdisciplinary research and interaction within the three tower blocks of the complex by bringing multiple health sciences departments into one shared facility.[36]

Additional Artworks

In addition to the collaborative work that created the distinctive precast cladding panels, Downing and Bieler each created multiple sculptural pieces as part of the design scheme, which are integrated into the design of the building and its siting (Figures 21-24). All the sculptures are precast concrete, complementing the materiality and expression of the building.

---

33 Downing, 78.
34 Landrum, 94.
35 For example, these principles are particularly exemplified in the designs for Trent University (Ron Thom, 1964-1968), Simon Fraser University (Arthur Erikson and Geoffrey Massey, 1963), University of Toronto Scarborough campus (John Andrews with Page and Steele architects, 1966), and York University (UPACE).
36 Gerard, 5.

Downing's contributions include the prominent *Cube Wall* on the principal (north) elevation adjacent to the building's main entrance off King's College Circle. The piece is part of Downing's *Cube Series*, for which he created 108 cube-related sculptures between 1966 and 1968.[37] The sheltered location under the entrance canopy only allows indirect sunlight to illuminate the wall, and part of the original installation was a moving spotlight that created a deliberate interplay between light and shadow. A second artwork, entitled *Medallion* is located in an east-facing alcove that forms the view terminus when entering the terrace from Queen's Park Crescent. Similar to *Cube Wall*, the sculpture is integrated into the surface of the exterior wall panels and comprises a geometric arrangement of pyramidal forms. An additional piece designed by Downing entitled *Rolling Cube* was originally located in a student lounge space inside the building but was later removed during a renovation.

Bieler's two pieces include the iconic, free-standing *Helix of Life* in the forecourt, and *Muskoka Piece* (also referred to as *Wave*), installed on the terrace. Among the collection of sculptures created for the Medical Sciences Building, *Helix of Life* is the only sculpture that directly references the biomedical sciences. Its thin, curving precast elements evoke the double helix structure of a DNA strand, which was famously proposed in 1953. The sculpture was fabricated by Beer Precast and presented as a gift to the University in 1970. Although the landscaping treatment of the forecourt was redesigned as part of the University of Toronto's Landmark Project (completed 2024), *Helix of Life* was retained in situ and maintains the same location relative to the building as originally installed in 1970.

Muskoka Piece is integrated with the terrace adjacent to the south elevation of the Macleod Auditorium. The four, smoothly convex forms were constrained to the same trapezoidal footprint as the paving slabs selected for the terrace (which have since been replaced) and originally rose from the hard surface like the granite islands of the Canadian Shield they were inspired by. The rounded organic shapes contrast with the crisp geometric forms of the vertical window fins of the auditorium wing that provide a backdrop to the installation. Presently, the section of the terrace containing *Muskoka Piece* has been re-landscaped with ground cover plants that partially obscure the forms. In part for his contributions to the Medical Sciences Building, Bieler was awarded the 1969 RAIC Allied Arts Medal, which "honours a Canadian artist or designer for outstanding achievement for artwork created to be integrated with architecture".[38]

Precast Concrete Cladding system (Rainscreen)

As recollected by architect Peter Goering, the Medical Sciences Building was "the first major building in Canada to use the 'rain screen' concept", which generated significant interest when the project was tendered.[39] Rainscreens were increasingly being researched and studied by building scientists through the 1960s and 1970s. The seminal publication that introduced the concept of a pressure-equalized rainscreen was authored by G. K. Garden in 1963, for the Canadian Building Digest, a publication by the National Research Council of Canada, Building Research Division. While layered cladding systems or the general model of having a cavity within the wall construction

37 Cooper, F8.
38 RAIC.
39 Hulse, 76.

were widespread prior to the 1960s, this was the first time a comprehensive scientific theory to prevent water ingress through the provision of a ventilated air space was laid out. Early studies and antecedent examples primarily explored the theory using brick walls and aluminum curtain wall systems. The Medical Sciences Building, which began construction in 1966, is therefore an early application of rainscreen principles using large, precast concrete cladding panels.

Project Delivery

The planning and management of the project was led by R. Harvey Self of Canadian Bechtel Limited. As project manager, the firm was instrumental in supervising the entire process from the conceptual design stage to occupation and their approach allowed for minimal disruption to the students and faculty by completing portions of the new building before the old medical building was demolished. This type of fast tracking the project delivery by overlapping the demolition, design, and construction phases was not yet commonplace in the construction industry, making it a potentially risky approach for an institutional building project. However, it proved to be highly effective for the construction of the Medical Sciences Building, which was completed 18 months ahead of schedule despite a combined total of 8.5 months of labour strikes by various trades involved in the project.[40]

iii. CONTEXT

The following section provides contextual information and analysis related to the property which is the basis for determining contextual value of Criteria 7, 8 or 9 according to O. Reg. 9/06 Criteria. Some of the information and content in this section was taken from pages 49-51 of the CHER prepared by ERA Architects (March 27, 2025). City staff have verified the accuracy of the information and have provided additional, independent analysis relating to the contextual value of the property.

The City of Toronto Property Data Map attached (Attachment 2) shows the site of the Medical Sciences Building at 1 King's College Circle.

Situated within the southeast quadrant of the University of Toronto's St. George Campus, the Medical Sciences Building fronts onto King's College Circle, the historic, symbolic, and ceremonial focal point of the Front Campus. During the institution’s early years, the University-owned land abutting College Street and Queen's Park Crescent accommodated residential dwellings, including homes for prominent local figures such as businessmen, lawyers, and politicians. By the late 19th century, the south portion of the campus experienced the University's first major wave of institutional expansion, coinciding with the establishment of new faculties and professional schools. Several of the earliest buildings constructed during this period supported science and engineering programs, including the Biology Building, the School of Practical Science, and the original Medical Building. Additional institutional structures were organized around what would become King’s College Road, while buildings such as the Lassonde Mining Building (1905) provided a transition between the landscaped campus interior and the evolving urban streetscape along College Street. The removal of a cluster of residential

40 Miller, 240.

buildings at the junction of College Street and Queen’s Park Crescent in 1930 to accommodate the new Botany Building and its associated greenhouses completed the transformation of the southeastern portion of campus to a wholly institutional character.

The first stylistic departure from the predominantly Edwardian and Beaux-Arts character of this part of the campus happened in the 1940s, when an early Modernist addition to the Mechanical Engineering Building (5 King’s College Road) was constructed. The construction of the Medical Sciences Building further contributed to an evolving collection of architectural styles that define the area today. Since the 1960s, efforts to modernize and update the University have continued to follow a redevelopment pattern characterised by infill. For example, the Terrence Donnelly Centre for Cellular & Biomolecular Research (2005) infilled Taddle Creek Road to the south of the Medical Sciences Building. However, despite the variety of architectural styles evident in the built form, each consecutive wave of development in this area of campus has reinforced it as a location for biomedical research and education (Figure 25).

The surrounding context encircling Queen's Park and along University Avenue is also institutional in character (Figure 26). The ceremonial role of University Avenue as the route to the Provincial Legislative Buildings and viceregal suite of the Lieutenant Governor of Ontario was established in the early 1890s when the city combined College Avenue and University Street, which ran parallel to each other between Queen Street West and Queen's Park. Many significant healthcare institutions developed along or within proximity to University Avenue, including the former Toronto General Hospital complex at College Street (c.1909, now the MaRS Building). Several continue to retain their affiliation to the University of Toronto, including the relocated Toronto General Hospital, the Princess Margaret Cancer Centre, Mount Sinai Hospital, and the Hospital for Sick Children (SickKids).

The Medical Sciences Building's prominent location, its articulated massing, and its distinct sculptural precast panels create a significant built-form presence at the southern terminus of King’s College Circle. The building complex's east elevation, visible from Queen's Park Crescent also provides a recognizable point of reference and serves as a gateway to King's College Circle for people arriving from the east. Altogether, these qualities make the Medical Sciences Building a landmark on the St. George Campus and within the city of Toronto.

4. VISUAL RESOURCES

Figure 1: Plan of the University Park, c.1859. Note the Medical School Building on the east side of the creek, indicated by the arrow. (University of Toronto Archives).

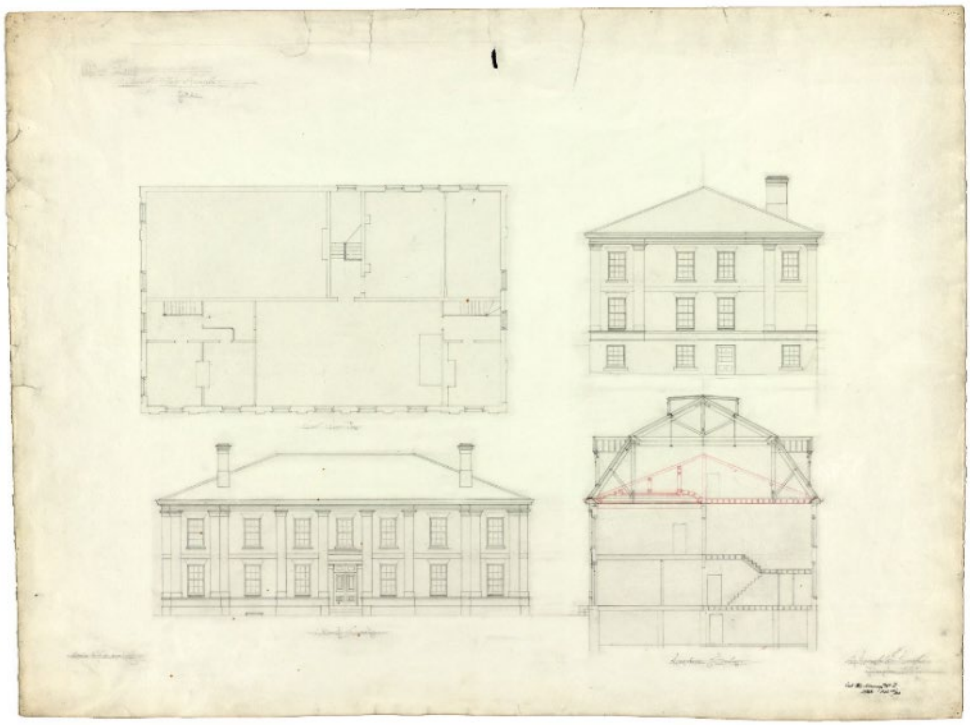


Figure 2: Drawings of Moss Hall, the first building constructed on the site for the Faculty of Medicine, created by David B. Dick, 1887. (University of Toronto Archives).

Figure 3: The Medical School Building, view from southwest; the building was designed by Darling and Pearson and constructed 1903. Photograph c.1922 (University of Toronto Archives).

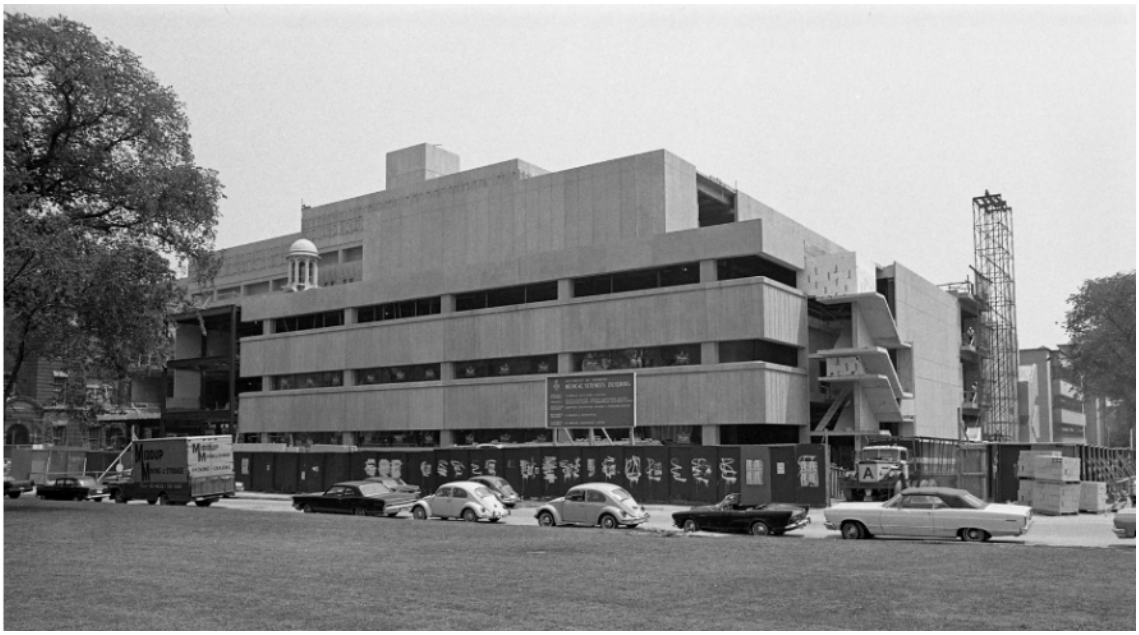


Figure 4: The Medical Sciences Building during construction, prior to the demolition of the old Medical School Building, which is visible towards the left of the image. (University of Toronto Archives).


Figure 5: Works by Ted Bieler.
Left: Fibreglass Reinforced Plastic reproduction of *Female Wall*; the original cast concrete version was created for the Canadian Pavilion at Expo 67 in Montreal (Dittwald Photo Collection).
Right: *Canyons*, 1978, aluminum wall sculpture installed at Wilson Station (Ng).

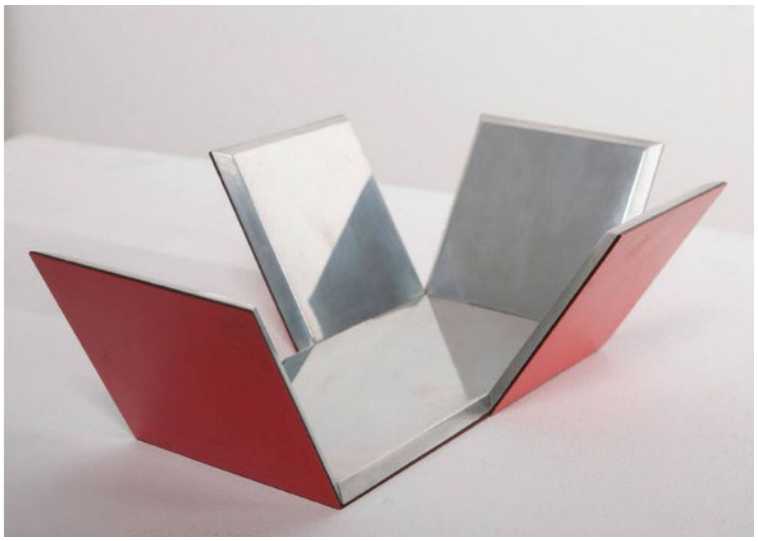



Figure 6: Works by Robert Downing.
Left: *Cube Edge #1*, 1968, aluminum; collection of York University (Goldfarb Gallery).
Right: *Cube Cell*, 1968, aluminum with red Formica; collection of Art Gallery of Guelph (Art Gallery of Guelph).

Figure 7: Artist’s illustration of the proposed Medical Sciences Building looking southeast (c. 1965) (ERA CHER, page 3, original source, University of Toronto Archives).

Figure 8: Detail of the main entrance on primary (north) elevation, showing the tiered massings framed by the Macleod Auditorium and stairwell (Heritage Planning, 2025).

Figure 9: View of the terrace, from the passageway created by the main entrance canopy (Heritage Planning, 2025).

Figure 10: West elevation of Macleod Auditorium (Heritage Planning, 2025).

Figure 11: South elevation of Macleod Auditorium, showing the vertically-oriented windows with projecting window fins (Heritage Planning, 2025).

Figure 12: North elevation of west wing housing laboratory space (Heritage Planning, 2025).

Figure 13: West elevation of west wing, view from across King's College Road (ERA, November 2023).

Figure 14: South elevation of west wing (ERA, November 2023).

Figure 15: North elevation of middle tower wing, from courtyard (Heritage Planning, 2025).

Figure 16: East elevation (Heritage Planning, 2025).

Figure 17: View east along laneway south of Medical Sciences Building, from King's College Road (Heritage Planning, 2025).

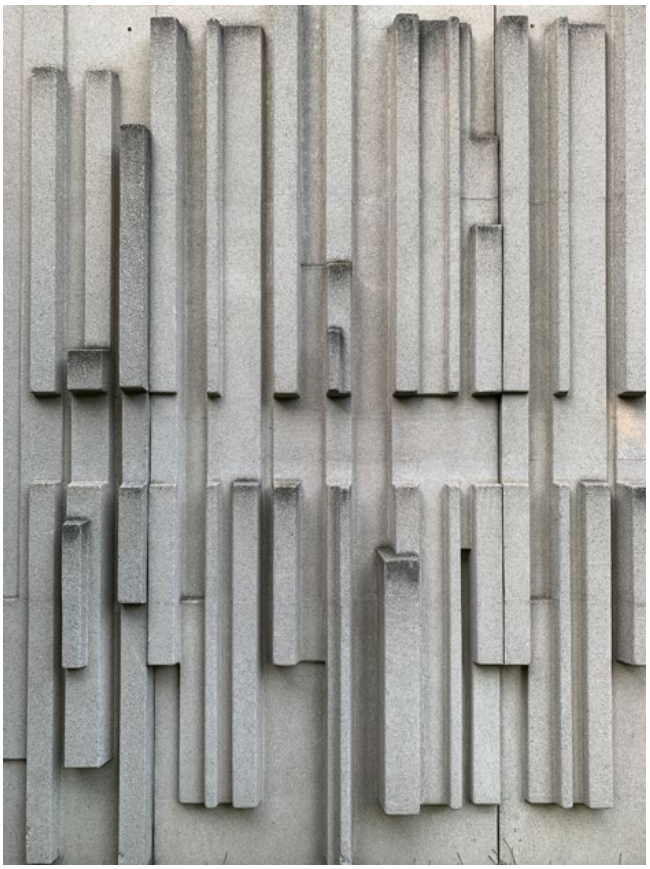


Figure 18: Panel detail (Heritage Planning, 2025).

Figure 19: Sculptor-designer Robert Downing watches Fred Beer and architect Peter Goering examine the first "B" type panel for the Medical Sciences Building (photographer Sara Gill, University of Toronto Archives).

Figure 20: Main level and overhead connection to Donnelly Centre for Cellular and Biomolecular Research (Heritage Planning 2025).

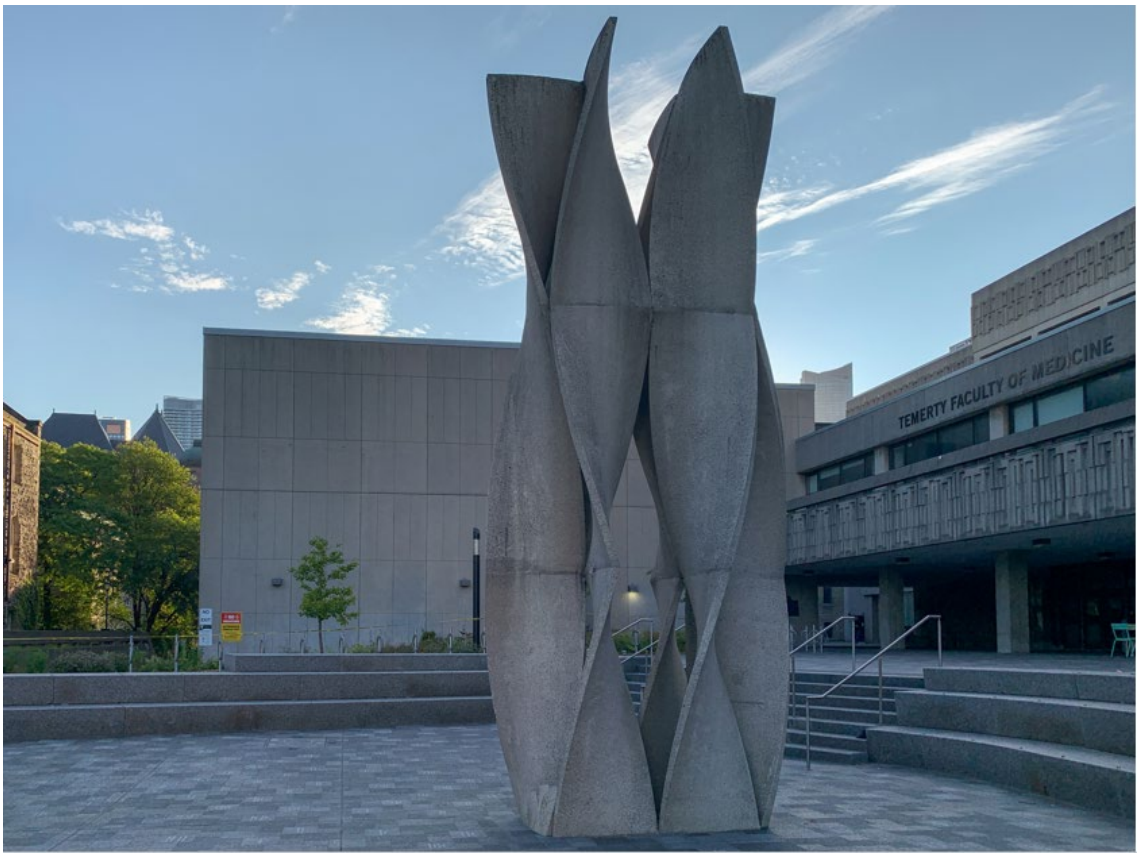


Figure 21: *Helix of Life*, Ted Bieler (Heritage Planning 2025).


Figure 22: *Muskoka Piece*, Ted Bieler
Left: Original installation condition integrated into trapezoidal paving slabs; date unknown (University of Toronto Art Museum).
Right: Current condition following with soft landscaping added around the four components (Heritage Planning 2025).

Figure 23: *Cube Wall*, Robert Downing (Heritage Planning 2025).

Figure 24: *Medallion*, Robert Downing
Left: The artwork during daylight (Heritage Planning 2025).
Right: Pictured at night, c.1970 (University of Toronto Archives).

Figure 25: The Medical Sciences Building viewed from College Street. In the foreground are other buildings part of the biomedical and health sciences hub, including the Terrence Donnelly Centre for Cellular and Biomolecular Research, the Fitzgerald Building (designated under Part IV of the Onterio Heritage Act; originally the School of Hygiene), and the Leslie L. Dan Pharmacy Building (Heritage Planning, 2025).

Figure 26: View of Medical Sciences Building (centre left) and Legislative Assembly of Ontario(right) looking northwest from University Avenue at College Street (Heritage Planning, 2025).

5. LIST OF SOURCES

ARCHIVAL SOURCES

- City of Toronto Archives [CTA], Photographic Collection.
- Downing, R. J. (1991). Confessions of a Canadian sculptor: The early memoirs of Robert J. Downing, R.C.A. [self published].
- Goad, Charles, Atlas of the City of Toronto and Suburbs, 1880-1924. (CTA)
- Library and Archives Canada [LAC], Image Collection
- Royal Architectural Institute of Canada [RAIC]. (2016). Allied Arts Medal: Awards of Excellence recipient list. https://raic.org/awards/allied-arts-medal.
- Toronto Public Library [TPL], Photographic Collection (Digital Archives).
- University of Toronto Archives & Records Management Services, Image Bank and Campus Photographers Collection [UTARMS].

SECONDARY SOURCES

- Aagaard, K. (2012). "Concrete Jungle: How the Medical Sciences Building got its Stripes". University of Toronto Magazine. Sep 10. https://magazine.utoronto.ca/campus/places/concrete-jungle-medical-sciences-building-karen-aagaard/
- Archaeological Services Inc. [ASI] (2014). University of Toronto St. George Campus Cultural Heritage Resource Assessment: Stage 1 Archaeological Resource Assessment.
- Archives of Ontario, "McMurrich and Oxley (firm)" (n.d.) https://aims.archives.gov.on.ca/scripts/mwimain.dll/144/ORGANIZATION_VAL_SYN/WEB_ORG_DET_OPAC?SESSIONSEARCH&exp=ORG_ID%20O2029
- Cooper, C. (2003). "Robert Downing 1935-2003: Artist focused on geometric shapes". *The Globe and Mail*, Aug. 23, F8.
- Dittwald Photo Collection. (2006). Works by Ted Bieler. https://www.dittwald.com/torontosculpture/search.php?Artist=Ted%20Bieler
- Drushka, K. (1964). "Construction boom grips universities: $600 million earmarked for 15 Ontario campuses". *The Globe and Mail*, Dec 30, 7.
- ERA Architects Inc., (2025). Medical Sciences Building, University of Toronto St. George Campus: Cultural Heritage Evaluation Report.
- Friedland, M. L. (2002). The University of Toronto: A History. Toronto: University
- of Toronto Press.
- Garden, G. K. (1963). Rain Penetration and its Control Originally. *Canadian Building Digest* (40).
- Gerard, W. (1966). "Sees U of T $36,156,000 medical complex continent's best". *The Globe and Mail*, May 28, 5.
- Gillan, M. (1967). "U of T gets $18.5 million building grant". *The Globe and Mail*, Sep. 19, 3.
- Goldfarb Gallery of York University art collection online. (n.d.). Artist entries for Ted Bieler and Robert Downing.

- Hacon, W. S. (1973). Health Manpower Development in Canada. *Canadian Journal of Public Health / Revue Canadienne de Santé Publique*, 64(1), 5–12. http://www.jstor.org/stable/41987099
- Hastings, J. E. F. (1971). Federal-Provincial Insurance for Hospital and Physician's care in Canada. *International Journal of Health Services*, 1(4), 398–414. http://www.jstor.org/stable/45130697
- "He started with a log and a hatchet". (1967). *Toronto Daily Star*, Oct 23, B45.
- Horowicz, J. H. (1966). The Development of Health Services in Canada During the Last Twenty Years. *Canadian Journal of Public Health / Revue Canadienne de Santé Publique*, 57(3), 123–125. http://www.jstor.org/stable/41983855
- Hulse, E. (2002). The Beers: Canada's first family in precast concrete. [Privately published by the Beer family].
- Kalman, H. (1994). A History of Canadian Architecture, Volume 2. Don Mills: Oxford University Press.
- Landrum, L. "Campus architecture: the radical medium of learning" in Lam, E., and Livesy, G., eds. (2019). Canadian modern architecture: 1967 to the present. New York: Princeton Architectural.
- Lost Rivers. (n.d.) "Taddle Creek." https://lostrivers.ca/content/taddlekey.html
- MacDonald, C. (1975). A dictionary of Canadian artists. Entries for Andre Charles Bieler and Ted Bieler.
- Madrid, J. F. (2020). Some notes for the history of rain-screen wall: Precedents of this constructive assembly (1950-1965). *Construction History*, 35(2), 113–132. https://www.jstor.org/stable/27135901
- Miller, A. “Building Med Sci,” in McClelland, M., & Stewart, G. (2007). Concrete Toronto: a guidebook to concrete architecture from the fifties to the seventies (1st ed.). Toronto: Coach House Books.
- McCracken, G. (1969). Trends in Facilities, Personnel, and Capital Funds in Canada and the United States. *Medical Care*, 7(6), 23–28. http://www.jstor.org/stable/3762438
- Ng, N. (2014). "Wilson". https://www.stationfixation.com/2014/12/wilson.html
- Parliament, M. (1968). "Sprawling Varsity gets an $85 million dollar facelift". *Toronto Daily Star*, Jul. 18, 7.
- Sorli, S. “Medical Sciences Building, Toronto’s Largest Modern Sculpture,” in McClelland, M., & Stewart, G. (2007). Concrete Toronto: a guidebook to concrete architecture from the fifties to the seventies (1st ed.). Toronto: Coach House Books.
- Straube, J. (2022). Rainscreens: When, Where, and Why? https://www.rdh.com/wp-content/uploads/2022/12/Rainscreens-When-Where-and-Why_2022-02-16.pdf
- University of Toronto Art Museum, Public art collection online https://collections.artmuseum.utoronto.ca:8443/advancedsearch/Objects/department%3APublic%20Art