

Inclusion on the City of Toronto's Heritage Register and Intention to Designate under Part IV, Section 29 of the Ontario Heritage Act - 100 College Street

Date: August 7, 2020

To: Toronto Preservation Board

Toronto and East York Community Council

From: Senior Manager, Heritage Planning, Urban Design, City Planning

Wards: Ward 11 - University-Rosedale

SUMMARY

This report recommends that City Council state its intention to designate the property at 100 College Street under Part IV, Section 29 of the Ontario Heritage Act and include the property on the City of Toronto's Heritage Register.

The Banting Institute at 100 College Street, is located on the north side of College Street in Toronto's Discovery District, on the southern edge of the Queen's Park/University of Toronto precinct, opposite the MaRS complex and the former Toronto General Hospital. Following the Nobel-Prize winning discovery of insulin as a life-saving treatment for diabetes in 1921-1922, the Banting Institute was commissioned by the University of Toronto to accommodate the provincially-funded Banting and Best Chair of Medical Research. Named for Major Sir Charles Banting, the five-and-a-half storey, Georgian Revival style building was constructed according to the designs of the renowned architectural firm of Darling of Pearson in 1928-1930. The importance of the historic discovery was recently reiterated in UNESCO's 2013 inscription of the discovery of insulin on its 'Memory of the World Register' as "one of the most significant medical discoveries of the twentieth century and ... of incalculable value to the world community."¹

Following research and evaluation, it has been determined that the property meets Ontario Regulation 9/06, which sets out the criteria prescribed for municipal designation under Part IV, Section 29 of the Ontario Heritage Act, for its design/physical, historical/associative and contextual value.

The Province and the City's policies seek the conservation of cultural heritage resources. Designation supports conservation as it enables City Council to review

¹ UNESCO. <http://www.unesco.org/new/en/communication-and-information/memory-of-the-world/register/full-list-of-registered-heritage/registered-heritage-page-8/the-discovery-of-insulin-and-its-worldwide-impact/>

alterations to the site, enforce heritage property standards and maintenance, and refuse demolition.

RECOMMENDATIONS

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

1. City Council include the property at 100 College Street on the City of Toronto's Heritage Register.
2. City Council state its intention to designate the property at 100 College Street under Part IV, Section 29 of the Ontario Heritage Act, in accordance with the Statement of Significance: 100 College Street (Reasons for Designation) attached as Attachment 3 to the report, August 7, 2020, from the Senior Manager, Heritage Planning, Urban Design, City Planning.
3. If there are no objections to the designation in accordance with the Ontario Heritage Act, City Council authorize the City Solicitor to introduce the necessary bill in Council.
4. If there are objections in accordance with the Ontario Heritage Act, City Council direct the City Clerk to refer the proposed designation to the Conservation Review Board.
5. If the designation is referred to the Conservation Review Board, City Council authorize the City Solicitor and appropriate staff to attend any hearing held by the Conservation Review Board in support of Council's decision to designate the property.

FINANCIAL IMPACT

There are no financial implications resulting from the adoption of this report.

DECISION HISTORY

The property at 100 College Street (the Banting Institute) was identified for its potential cultural heritage value in the Heritage Inventory for the University of Toronto St. George Campus Secondary Plan adopted by the City of Toronto in 2018.

<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2018.TE34.88>

BACKGROUND

Heritage Planning Framework

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. Cultural heritage resources are considered irreplaceable and valuable assets that must be wisely protected and managed as part of planning for future growth under the Provincial Policy Statement (2020) and A Place to Grow: Growth Plan for the Greater Golden Horseshoe (2019). Heritage Conservation is enabled through the Ontario Heritage Act. The City of Toronto's Official Plan implements provincial policy regime, the Planning Act, the Ontario Heritage Act and provides policies to guide decision making within the city.

Good planning within the provincial and municipal policy framework has at its foundation an understanding and appreciation for places of historic significance, and ensures the conservation of these resources are to be balanced with other provincial interests. Heritage resources may include buildings, structures, monuments, and geographic areas that have cultural heritage value or interest to a community, including an Indigenous community.

The Planning Act establishes the foundation for land use planning in Ontario, describing how land can be controlled and by whom. Section 2 of the Planning Act identifies heritage conservation as a matter of provincial interest and directs that municipalities shall have regard to the conservation of features of significant architectural, historical, archaeological or scientific interest. Heritage conservation contributes to other matters of provincial interest, including the promotion of built form that is well-designed, and that encourages a sense of place.

The Planning Act requires that all decisions affecting land use planning matters shall conform to the Growth Plan and shall be consistent with the Provincial Policy Statement, both of which position heritage as a key component in supporting key provincial principles and interests.

<https://www.ontario.ca/laws/statute/90p13>

The Provincial Policy Statement provides policy direction on land use planning in Ontario and is to be used by municipalities in the development of their official plans and to guide and inform decisions on planning matters, which shall be consistent with the Provincial Policy Statement. The Provincial Policy Statement articulates how and why heritage conservation is a component of good planning, explicitly requiring the conservation of cultural heritage and archaeological resources, alongside the pursuit of other provincial interests. The Provincial Policy Statement does so by linking heritage conservation to key policy directives, including building strong healthy communities, the wise use and management of resources, and protecting health and safety.

Section 1.1 Managing and Directing Land Use to Achieve Efficient and Resilient Development states that long-term economic prosperity is supported by, among other considerations, the promotion of well-designed built form and cultural planning, and the conservation of features that help define character. Section 2.6 Cultural Heritage and Archaeology subsequently directs that "significant built heritage resources and significant cultural heritage landscapes shall be conserved". Through the definition of conserved, built heritage resources, cultural heritage landscape and protected heritage property, the Provincial Policy Statement identifies the Ontario Heritage Act as the primary legislation through which heritage conservation will be implemented.

<https://www.ontario.ca/page/provincial-policy-statement-2020>

A Place to Grow: Growth Plan for the Greater Golden Horseshoe (2019) builds on the Provincial Policy Statement to establish a land use planning framework that supports complete communities, a thriving economy, a clean and healthy environment and social equity. Section 1.2.1 Guiding Principles states that policies in the plan seek to, among other principles, "conserve and promote cultural heritage resources to support the social, economic, and cultural well-being of all communities, including First Nations and Metis communities". Cultural heritage resources are understood as being irreplaceable, and are significant features that provide people with a sense of place. Section 4.2.7 Cultural Heritage Resources directs that cultural heritage resources will be conserved in order to foster a sense of place and benefit communities, particularly in strategic growth areas. Strategic growth areas include the downtown urban growth centre where this property is located.

<https://www.ontario.ca/document/place-grow-growth-plan-greater-golden-horseshoe>

The Ontario Heritage Act is the key provincial legislation for the conservation of cultural heritage resources in Ontario. It regulates, among other things, how municipal councils can identify and protect heritage resources, including archaeology, within municipal boundaries. This is largely achieved through listing on the City's Heritage Register, designation of individual properties under Part IV of the Ontario Heritage Act, or designation of districts under Part V of the Ontario Heritage Act.

Section 27 of the Ontario Heritage Act gives municipalities the authority to maintain and add to a publicly accessible heritage register. The City of Toronto's Heritage Register includes individual heritage properties that have been designated under Part IV, Section 29, properties in a heritage conservation district designated under Part V, Section 41 of the Act as well as properties that have not been designated but City Council believes to be of "cultural heritage value or interest."

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.

<https://www.ontario.ca/laws/statute/90o18>
<https://www.ontario.ca/laws/regulation/060009>

The City of Toronto's Official Plan 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. Indicating the integral role that heritage conservation plays in successful city-building, Section 3.1.5 of the Official Plan states that, "Cultural heritage is an important component of sustainable development and place making. The preservation of our cultural heritage is essential to the character of this urban and liveable City that can contribute to other social, cultural, economic and environmental goals of the City."

Policy 3.1.5.4 states that heritage resources on the City's Heritage Register "will be conserved and maintained consistent with the Standards and Guidelines for the Conservation of Historic Places in Canada, as revised from time to time and adopted by Council." Policy 3.1.5.6 encourages the adaptive re-use of heritage properties while Policy 3.1.5.26 states that, when new construction on, or adjacent to, a property on the Heritage Register does occur, it will be designed to conserve the cultural heritage values, attributes and character of that property and will mitigate visual and physical impacts on it.

<https://www.toronto.ca/city-government/planning-development/official-plan-guidelines/official-plan/>

<https://www.historicplaces.ca/media/18072/81468-parks-s+g-eng-web2.pdf>

Heritage Impact Assessments (HIA) will be required for development applications that affect listed and designated properties. An HIA shall be considered when determining how a heritage property is to be conserved.

The Ontario Heritage Toolkit also provides guidance on designating properties of municipal significance. The Tool Kit provides direction on the purpose of designating heritage properties for identifying and protecting places in our communities that have cultural heritage value and is an important part of planning for the future, and of helping to guide change while keeping the buildings, structures and landscapes that give each of our communities its unique identity.

University of Toronto Secondary Plan Amendment

In regard to the heritage conservation of built resources, at its meeting of July 23, 24, 25, 26, 27 and 30, 2018, City Council endorsed the following principles for the Secondary Plan area, to guide the development of the Secondary Plan and Urban Design Guidelines:

- c. conserve built heritage resources and cultural heritage landscapes
- e. affirm that the institutional uses, collection of heritage resources and public realm network are character-defining elements of the area; and
- f. ensure that the Secondary Plan area will continue to grow and evolve in a way that positively contributes to the character-defining elements of the area.

<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2018.TE34.88>

COMMENTS

BANTING INSTITUTE, 100 COLLEGE STREET

Research and Evaluation according to Ontario Regulation 9/06

Photos of the Banting Institute, showing the principal (south) elevation and side (east) elevation (top), central bay with forecourt and landscaped setting (middle) (Heritage Planning [HP] 2019)





Photos of the Banting Institute, showing the entrance and forecourt (bottom, left) and side, (east) elevation base and first floor details (Heritage Planning [HP] 2019)

1. DESCRIPTION

100 COLLEGE STREET – THE BANTING INSTITUTE	
ADDRESS	100 College Street
WARD	Ward 11 – University-Rosedale
LEGAL DESCRIPTION	PLAN D18 PT LOTS 22 & 23
NEIGHBOURHOOD/COMMUNITY	Queen's Park – University of Toronto
HISTORICAL NAME	The Banting Institute
CONSTRUCTION DATE	1928-1930
ORIGINAL OWNER	University of Toronto
ORIGINAL USE	Teaching and Research Facility
CURRENT USE*	Research
ARCHITECT/BUILDER/DESIGNER	Darling & Pearson
DESIGN/CONSTRUCTION/MATERIALS	Brick and Stone Cladding
ARCHITECTURAL STYLE	Georgian Revival
ADDITIONS/ALTERATIONS	Additions: Rear stair case and connecting bridge to 112 College Street (demolished)
CRITERIA	Design, Associative, Contextual
HERITAGE STATUS	n/a
RECORDER	Heritage Planning: Marybeth McTeague
REPORT DATE	August 2020

2. BACKGROUND

This research and evaluation section of the report describes the history, architecture and context of the property at 100 College Street, and applies evaluation criteria as set out in Ontario Regulation 9/06, under the headings of historical/associative, design/physical and contextual value to determine whether it merits designation under Part IV, Section 29 of the Ontario Heritage Act. The application of the criteria is found in

Section 3 (Evaluation Checklist). The conclusions of the research and evaluation are found in the Conclusion of the report. Maps and Photographs are located in Attachment 1. The archival and contemporary sources for the research are found in Attachment 2. The Statement of Significance is contained in Attachment 3.

i. HISTORICAL TIMELINE

Key Date	Historical Event
1827	Bishop Strachan secures a royal charter to establish King's College, the Town of York's first university. 150 acres including the north 50 acres of Park Lot 11 are purchased for the university
1850	The Parliament of Canada passes a law to secularize King's College. The charter, lands and building are now owned by the newly named University of Toronto (UofT)
1887	The Faculty of Medicine is re-established in partnership with the private Toronto School of Medicine as a means to standardize medical qualifications with the granting of degrees occupying the 1850s building located north-west of the intersection with College Street and University Avenue.
1913	Following the construction of the Toronto General Hospital (TGH) at the south-east corner of College Street and University Avenue, the University uses the TGH as a teaching hospital
1922	Dr. Frederick G. Banting and Charles H. Best conduct a series of experiments resulting in the ground-breaking discovery that insulin can be an effective and life-saving treatment of diabetes in the laboratory of Professor J. J. R. McLeod, the Head of the Department of Physiology, UofT, located at TGH
1922	The UofT Faculty of Medicine awards Banting and Best the annual Reeve Prize in recognition of their achievement in developing insulin as a treatment for diabetes
1923	The Nobel Prize is awarded to Banting and McLeod for the discovery of insulin as a treatment of diabetes With funding from the Province, the UofT establish the Banting and Best Chair of Medical Research. Banting is Canada's first Research Professor
1928	The UofT commissions the firm of Darling & Pearson to design the Banting Institute at 100 College Street opposite the TGH. The new facility houses the Banting and Best Chair of Medical Research and several other University of Toronto medical departments providing laboratories, an autopsy suite, lecture halls and a library.
1930	The Banting Institute was formally opened by Lord Moynihan of Leeds, President of the Royal College of Surgeons of England
1934	Dr. Banting receives a knighthood from King George V
1947	Dr. Best is honoured with the American Legion of Merit Medal for meritorious service in the field of scientific research and development

1950	The first successful electronic pacemaker experiments which lead to the use of cardiac pacemakers in humans are conducted by Drs. Wilfred Bigelow and John Callaghan at the Banting Institute
1953-4	The University of Toronto commissions the firm of Mathers and Haldenby to design the Best Institute at 112 College Street adjacent to the Banting Institute (demolished 2019)
1962	The original windows are replaced
1994	Banting and Best are inducted into the Canadian Medical Hall of Fame
2013	UNESCO inscribes the discovery of insulin on its Register calling it "one of the most significant medical discoveries of the 20th Century" ²

ii. HISTORICAL BACKGROUND

The following section outlines the history and facts related to the property which are the basis for determining 'Historical and Associative Value' according to O. Reg. 9/06 Criteria.

The Banting Institute at 100 College Street was commissioned by the University of Toronto in 1928 to accommodate the Banting and Best Chair of Medical Research, which the university created in 1923 following the Nobel-Prize winning discovery of insulin as a treatment for diabetes by Dr. Frederick G. Banting and Dr. Charles H. Best. The new building would accommodate the new Chair and provide research and teaching facilities for other Faculty of Medicine departments which had been previously located at the Toronto General Hospital on the south side of College Street. Located on the north side of College Street, on land first surveyed as Park Lot 11 with the establishment of the Town of York in 1793, the Banting Institute is situated within the original University of Toronto precinct. It is acknowledged that it sits on the traditional lands of the Huron Wendat, the Seneca, other Anishinaabeg peoples and the Mississaugas of the New Credit First Nations. (Images 1-2)

The University of Toronto and Queen's Park Neighbourhood

In 1827, a charter to create the City of Toronto's³ first university, King's College, was secured by Bishop Strachan. In 1850 the Parliament of Canada passed a law to secularize the university so that it was no longer associated with the Anglican Church. The new University of Toronto (UofT) acquired the charter, lands and buildings of King's College. (Image 3)

At the time of the creation of King's College, 150 acres was purchased for the university's development. The property comprised the north half of Park Lots 11, 12 and 13 and was bound by Bloor Street to the north, and to the south, by College Street (then known as University Street). A grand boulevard extending south from College Street to Queen Street West (then known as Lot Street) was laid out between Lots 11

² UNESCO, <http://www.unesco.org/new/en/communication-and-information/memory-of-the-world/register/full-list-of-registered-heritage/registered-heritage-page-8/the-discovery-of-insulin-and-its-worldwide-impact/>

³ In 1827 Toronto was still known as the Town of York which was incorporated as the City of Toronto in 1834.

and 12. The boulevard was named College Avenue and is today known as University Avenue. In the late 1850s the university leased the city a large portion of the property to the City of Toronto for use as a park which was laid out on axis with University Avenue and formed a green space at the heart of the university. It was named Queen's Park, in honour of Queen Victoria and opened by her son, Edward, the Prince of Wales in 1860. (Image 4) The park was also intended as the proposed site for provincial legislature buildings. To this end, University College was built to the west at the current site of King's College Circle and the University Avenue would terminate instead at the legislature buildings instead of the university. In 1880, a portion of the park was given to the Government of Ontario for the new Legislature building (1886-1892). Over time, additional government buildings were constructed on the east side of Queen's Park Crescent between College Street, Wellesley Street West and Bay Street.

With the process of secularization of King's College, the medical and law faculties were closed down. They returned as part of the UofT's teaching faculties in 1887 at which time the Faculty of Medicine was re-established in collaboration with the private Toronto School of Medicine. In 1903, the Trinity College School of Medicine merged with the new medical faculty. The new faculty was re-established in the former medical school building which is now the site of the current Medical Sciences building, at the south-east corner of King's College Circle, to the north and west of the intersection of College Street and University Avenue. (Image 4, as above)

It had been the intention of the Faculty of Medicine to follow the model of John Hopkins University and incorporate a teaching hospital within the campus. Access to a hospital became possible in 1913, when Toronto General Hospital relocated to the south-east corner of College Street and University Avenue, within walking distance of the Faculty of Medicine building. The hospital accommodated the university's departments of Pathology, Medicine, Surgery and Physiology. (Images 5-6)

The Discovery of Insulin

From 1921-22, Dr. Frederick G. Banting and his colleague Dr. Charles H. Best were provided with accommodation in the Department of Physiology laboratories by the head of the department, Professor J. J. R. McLeod. It was here that, through a painstaking sequence of experiments, they discovered insulin. The discovery was announced in May 1922 and by August, 1922, the transformative effects of insulin on diabetic patients were being widely reported in the Canadian press and were soon having an impact in medical research and healthcare circles in the United States and Britain. In November of 1922, Banting released the patents for his discovery to the University of Toronto for \$1.00 with the undertaking that they were to be fully available to the medical profession and the public.⁴ This allowed for more expedient mass-production and world-wide distribution of insulin. (Images 7-14)

In October of 1923, the significance of this discovery was acknowledged when the Nobel Prize committee in Stockholm announced that it would award the prize for outstanding medical research to Banting and Macleod. Banting gave half of his prize to Best and Macleod, in turn, shared his with Dr. J. B. Collip who had, from 1922, assisted

⁴ Toronto Daily Star, 1 November, 1922, p 23.

with the production of insulin. This was the first Nobel Prize to be received by Canadians and Banting was the youngest person to receive the prize for medicine.

At the time of the announcement, the President of the University of Toronto, Sir Robert Falconer stated, "It is a very high honor that has come to the University of Toronto, one of the greatest honors that could come...It must be a great satisfaction to (Dr. Banting) that he has been privileged to confer such a great boon on humanity."⁵

The full impact was summarized by Michael Bliss in his monograph on the subject:

The discovery of insulin at the University of Toronto in 1921-22 was one of the most dramatic events in the history of the treatment of the disease. Insulin's impact was so sensational because of the incredible effects it had on diabetic patients. Those who watched the first starved, sometimes comatose, diabetics receive insulin and return to life saw one of the genuine miracles of modern medicine. They were present at the closest approach to the resurrection of the body that our secular society can achieve and at the discovery of what has become the elixir of life for millions of human beings around the world.... Insulin symbolized and stimulated our century's commitment to medical research. There have been few more fitting awards than that of the 1923 Nobel Prize in Medicine for the discovery of insulin.⁶

The discovery's importance was twofold – its continuing beneficial impact on millions of diabetics around the world and its impetus to support and fund modern medical research. In 1923, recognizing the latter, with Provincial funding, the University of Toronto created the Banting and Best Chair of Medical Research which was initially located at the Toronto General Hospital.

By 1928, however, with hospital expansions and the need for more space for its own departments, the University commissioned a new building on the north side of College Street opposite the hospital to accommodate numerous departments including Pathology, Medicine, Surgery, Obstetrics, Bacteriology and Physiology with a separate floor for the Banting and Best research department. The new building, designed by the firm of Darling and Pearson, included laboratories, libraries and lecture halls, an autopsy theatre, operating suites, and offices. A portrait of Lord Lister (1827-1912), who had been a pioneer in establishing the importance of antiseptics and sterilization hung over the library fireplace which also incorporated a brick from Lister's Glasgow Royal Infirmary, presented by Professor Irving H. Cameron. On September 18, 1930, as an indication of its importance, the Banting Institute was formally opened by Lord Moynihan of Leeds, President of the Royal College of Surgeons of England. (Image 15) The event was recorded in TIME magazine, describing the construction of the "splendidly equipped" Institute as a concrete compliment to Banting for his discovery of insulin's application in the treatment of diabetes.⁷

In his book on the history of the Toronto General Hospital, Dr. W. G. Crosbie writes, "In all the long association of the University of Toronto and the General Hospital there was

⁵ Toronto Daily Star, 26 October, 1923, p.3.

⁶ Bliss, The Discovery of Insulin.

⁷ TIME magazine.

never a more memorable occasion than the opening of the Banting Institute... For the first time, operating rooms and animal quarters were available to clinical investigators as well as for the scientists attracted to the Institute."⁸ On the significance of the building itself, Crosbie concluded, "The Banting Institute will always recall those hot summer months in 1921 when Banting toiled with Best in the cramped quarters of Professor J. R. R. Macleod's laboratory... by November, literally living on the job... they reached their goal – insulin controlled diabetes."⁹

Amongst the research conducted at the Banting Institute was the pioneering pacemaker work done, in Room 64, by Drs. Wilfred Bigelow and John Callaghan. In 1950, using a combination of implanted electrodes and an electronic pacemaker, they were successful in pacing the heart of a dog. Their device was developed by Dr. John Hopps, at the National Research Council of Canada and led to the human use of cardiac pacemakers, establishing the importance of electronic devices in medicine, and is considered to be a milestone in electrical engineering and computing.¹⁰

In 1953-4, the University expanded the medical faculty facilities again with the construction of the Best Institute building at 112 College Street to the west of the Banting Institute. Dr. Best had served as co-director of the Banting and Best Research Chair from 1930, succeeding as the sole director after Banting's death in 1941. He continued to make significant medical research discoveries including those related to anaemia and anti-coagulant medications. Designed by Mathers and Haldenby to complement the Banting Institute, the new building emphasized the importance of the legacy of this pioneering research partnership. As of 2009, the lobby still contained a portrait of Dr. Best as well as a colorimeter, an instrument used by Banting and Best in their insulin research.¹¹ The Banting Institute continued to be used as the Banting and Best Department of Medical Research until 2005. It is now used as a swing facility and is currently occupied by more than 50 start-ups.¹² The Best Institute was demolished in 2019.

Banting and Best

Sir Frederick Grant Banting (1891-1941) was born and grew up in Alliston, Ontario before enrolling in the medical school at the University of Toronto. With his classmates he had an accelerated graduation from his medical studies in 1917 to meet the demand for doctors in Europe during World War I. Enlisted in the Canadian Medical Corps, he initially worked as a surgeon in England before being sent to France in 1918 as a battalion medical officer. After being wounded during an enemy attack, he was awarded the Military Cross for his "valour under fire."¹³ Returning to Canada, he underwent a year of surgical training at the Hospital for Sick Children before setting up practice as a general practitioner in London Ontario, where he lectured part-time in physiology at the University of Western Ontario.

⁸ Crosbie, p. 181.

⁹ Op cit., p. 183.

¹⁰ Institute of Electrical and Electronics Engineers plaque at the Best Institute, 112 College Street, 2009.

¹¹ Richards, 2009, p. 188

¹² Richards, p. 187 and <http://entrepreneurs.utoronto.ca/space/history/>

¹³ Bliss, Banting.

Banting had a persistent interest in research and in late 1920 an article about diabetes in a medical journal sparked a research proposal of his own. He returned to the University of Toronto in May 1921 to discuss his ideas with Professor J. J. R. Macleod, the head of the Department of Physiology. Macleod provided him with a laboratory and a summer intern, Charles Herbert Best (1899-1978) who had just completed his BA in bio-chemistry and physiology. The results of their work which, with the assistance of Dr. J. B. Collip who contributed to the purification of insulin for human application in 1922, culminated in an effective therapy which did not cure *diabetes mellitus*, but greatly transformed the health and well-being as well as the longevity of those afflicted by it; "An invariably fatal disease was now controlled and long life became the expected result."¹⁴

The awarding of the Nobel Prize to Banting and Macleod, instead of Banting and Best, created some controversy regarding the originators of the discovery of insulin, however, in newspaper coverage at the time, Professor Macleod was consistent with his acknowledgment of Banting as the originating source of the research which finally proved the effectiveness of the substance known as insulin.¹⁵ Together, Banting and Best received the University of Toronto, Faculty of Medicine's Reeve Prize in 1922 for their development of a treatment for diabetes. The international value of Banting's discovery was further substantiated with his knighthood of 1934, given by George V.

At the Institute, Banting became Canada's first professor of medical research¹⁶ and continued research related to cancer and silicosis. By the late 1930s, a combination of his national fame and dedication to research resulted in Banting effectively becoming the head of Canadian medical research.¹⁷ His researches focused on various aspects of aviation medicine including the psychological impact of high altitude flights on pilots. With this research, at the start of World War II, Banting rejoined the Royal Canadian Army Medical Corps and was a member of the War Technical and Scientific Committee, researching anti-gravity suits, oxygen masks and mustard-gas treatments. In 1941, while on his way to England "on a mission of high national and scientific importance"¹⁸ Major Banting died in a plane crash.

Banting received numerous honours and was made a fellow of both the Royal Society in London and the Royal Society of Canada. Considered a hero, he was the most famous Canadian in the 1920s and has been commemorated in numerous ways with Canadian schools and a crater on the moon bearing his name.¹⁹ Along with being an internationally renowned medical researcher, Banting was also an accomplished painter, joining A.Y. Jackson, a member of the Group of Seven, on his sketching trips and became a member of the Toronto Arts & Letters Club. His home in London Ontario, where he first conceived of the idea for the use of the substance called insulin, is now the Banting House National Historic Site of Canada.

¹⁴ Crosbie, p. 184.

¹⁵ Toronto Daily Star, 7 September, 1922, p.2, Toronto Daily Star, 10 November, 1922, p 21.

¹⁶ Bliss, Banting

¹⁷ Bliss, Banting

¹⁸ Crosbie, p. 240.

¹⁹ Bliss, Banting

Following his research work on insulin with Banting, Dr. Charles Best (1898-1978) pursued graduate work in England completing doctorates in both medicine and physiology. In 1929, he succeeded Macleod as the Head of the Department of Physiology and in 1930 joined Banting as co-director of the Banting and Best Medical Research Department. After Banting's death in 1941 he was appointed Chair of the department until his retirement in 1967. Best was an active researcher, achieving success in isolating heparin, an anti-coagulant, and in a partnership with Dr. E. W. McHenry, new treatments for anaemia. His research contributed to the war effort in its focus on night vision and seasickness. Best co-authored a text book on physiology and became a director of graduate studies. He served as Advisor to the United Nations World Health Organization's Medical Research Committee. In 1947, he was honoured with the Legion of Merit Medal for meritorious service in the field of scientific research and development presented by the U. S. Consul-General, Arthur C. Frost, on behalf of President Harry S. Truman and received eighteen honorary degrees from universities around the world.

In 1994, both Banting and Best were inducted into the Canadian Medical Hall of Fame. In 2013 the discovery of insulin was inscribed on UNESCO's Memory of the World Register as "one of the most significant medical discoveries of the twentieth century and ... of incalculable value to the world community." ²⁰

Architects: Darling & Pearson

Formed in 1891, the partnership of Darling & Pearson, 'Toronto's pre-eminent architectural firm'²¹ in the early 20th century, created an extensive body of work of the highest design quality. Frank Darling (1850-1923) and John Andrew Pearson (1867-1940) worked together in a variety of partnerships (Darling, Curry, Sproatt & Pearson, Darling, Sproatt & Pearson, Darling & Pearson) from 1891 to Darling's death in 1923. The firm retained the name until 1935 when they became Darling, Pearson & Cleveland. During their 45 years, the partnership was prolific with the bulk of the work centred in Toronto but also extending across Ontario, and as far away as Winnipeg and Nova Scotia. The firm had many institutional projects, including the Toronto General Hospital, 1909-1919 (now the MaRS Centre, 2005, 2013), the first Royal Ontario Museum (1914) and the Museum of Toronto (now the Art Gallery of Ontario, 1918) over 100 bank projects, including the Canadian Bank of Commerce Building, 1929-1930, church projects and grand houses. Some of their finest landmarks are within the University of Toronto precinct where, as Larry Richards points out, "Darling and Pearson were responsible for most of the university's major buildings in the first years of the twentieth century."²² The works include Convocation Hall (1906), Flavelle House (1902, now the Faculty of Law), Sanford Fleming Building (1907), Trinity College (1914), the Electrical Building (1920, now the Roseburgh Building), Thermodynamics Building (1909 now the Mechanical Engineering Building), Simcoe Hall (1922-23), Anatomy Building (1925, now the McMurrich Building), Forestry Building (1925, now the Physical Geography Building), the Pathology Building (1928). With the commission to supervise the reconstruction of the Ottawa Parliament Building Centre Block and Peace

²⁰ UNESCO.

²¹ Richards, p. 67.

²² Richards, p. 19.

Tower (1919-1926),²³ the firm received national recognition. Individually, Frank Darling was the first Canadian to receive a Gold Medal from the Royal Institute of British Architects in 1916 and Pearson the first Canadian to receive a honorary Doctor of Architecture from the University of Toronto in 1932.

iii. ARCHITECTURAL DESCRIPTION

The following section provides an architectural description and analysis related to the property which will establish the basis for determining 'Design and Physical Value' according to O. Reg. 9/06 Criteria.

The Banting Institute is a fine representative of the professional faculty and research building typology constructed in a Georgian Revival style by the University of Toronto between 1900 and 1940. "To establish a consistent style and character to the public face of the institution, the administration had mandated since 1920 that all new buildings along College and St. George streets (which were the west and south boundaries of the campus) be "Georgian in character".²⁴

Located on the north side of College Street, the building is designed on a U-shaped plan with a raised basement and sub-basement. The central and principal south section is five-and-a-half storeys accommodating offices, small research laboratories, treatment rooms and the library, while the two-and-a-half storey east wing contains the lecture hall and the west wing is four-and-a-half storeys to accommodate the larger volumes of the lecture spaces and laboratories. The principal circulation and offices are contained within the south section of the U, parallel to College Street. (Images 16-29)

The Georgian Revival style is evident in the red brick cladding and stone and brick details as well as in the composition of the building's massing and facades. The principal (south) elevation is composed of a grid of office windows and a main entrance but the application of the Georgian Revival style introduces subtle modulations through symmetry, hierarchy and classical elements. The elevation is symmetrical with a central projecting bay. The raised basement which has window wells, is clad in a smooth limestone which terminates at the first floor in a handsome roll mould and functions as a base for the upper floors. Classical hierarchy is present in the emphasis given to the first floor which is taller than the others and the principal entrance bay which is clad in stone. The first floor also features more elaborately detailed windows which are taller, with stone surrounds and keystones and sills supported by stone console brackets flanking stone panels. A stone staircase leads to the principal entrance which is composed of a pair of panelled doors with a moulded wood door case of classical motifs including the 'lamp of learning' on the frieze of the entablature, narrow sidelights and a tall transom light with curving tracery studded with rosettes. The doorway is given further emphasis as it is encased by a richly moulded stone door surround, with a central console bracket and a lantern supported by a pair of curving metal brackets with decorative tracery. The upper level of the first floor terminates with a stone belt course with a substantial decoratively moulded projection.

²³ In partnership with the architect Jean O. Marchand.

²⁴ Richards, p. 49.

Above the first floor, each of the three bays has 5 windows, the central three are grouped more closely together and feature moulded brick panels beneath their sills and, at the top floor, stone keystones. All the corners feature Georgian brick quoins. The top of the building terminates in a traditional classical means with a moulded stone frieze with a projecting copper corner above which is a brick parapet with copper coping.

The east and west elevations of the south wing reveal the same elevational treatment and the west face includes a secondary entrance, which with its double doors, transom light and stone door case is a minor variation of the principal south entrance. The rear, north elevation retains some of the features of the principal (south) elevation including the keystones, and brick panels, projecting stone belt course and a stone band at the cornice. In their different massing, and arrangement of windows according to interior uses of theatres and laboratories, the east and west side wings are more modern in their expression as they reflect internal functions important to the purpose of the institution. This is seen on the west elevation with larger windows and spandrel panels which still integrates classical symmetrical composition, the banding of the windows together as a giant order and Georgian details. The elevations of the east wing are simpler, with a plain stone band for a cornice and square blocks marking the corners of the windows.²⁵

Interiors

The interiors of the building represent a combination of an honorific palette of classical stone and wood details and the practical and progressive materials of a research facility. The traditional elements are seen especially in the entry stair hall and the adjacent lobby with their stone clad walls with relief panels and richly moulded door jams and the library which with its wood panelling, furniture and portrait of Lord Lister and a fireplace with a brick from Lister's Royal Glasgow Infirmary played homage to the legacy of medical research on which the progress of current research would be founded. The pragmatic elements are presented in the painted or glazed brick walls lining the tiled-floor corridors, the large lecture/autopsy hall with its plainly expressed structure of rectilinear columns and beams with large windows for optimum lighting in an unadorned space. (Images 30-34)

Setting

The setting of the Banting Institute is characteristic of those buildings that are part of the University's professional faculty and research building typology which are typically set back from the street so that the principal elevation is framed by landscaped foreground of lawns, trees and low plantings as seen at the Banting Institute. At the main entrance, a semi-circular paved area large enough to accommodate benches provides a small forecourt to the entry stair case.

The setting of the professional faculty building types reveals the changing nature of the university and its relationship to the city throughout the 19th century. Initially, as with the medieval colleges of Oxford and Cambridge, the university property and University College were set a distance from the centre of the Town of York, just as medieval

²⁵ The plans and photographs published in Construction in February 1930 indicate that this east wing was part of the original building. See pages 55, 69 and 70.

colleges were constructed outside of the local town's walls. University College was situated in a bucolic Picturesque landscape facing King's College Circle and the later colleges which would be affiliated with the university were located in a circular disposition around Queen's Park. One of the benefits of being affiliated was having access to the university's scientific and research faculties that individual colleges could not afford. Throughout the 19th century, professional accreditation became an important issue. The buildings associated with the professions moved away from the medieval model popular for educational building types and were located on urban streets indicating their active integration and professional role in society after graduation. In parallel, their architectural style also shifted from the medieval and adapted Classical Revival styles which, along with the Georgian Revival had been adapted for other emerging institutional and professional building types, the earliest of which in Toronto was the Law Society's Osgoode Hall, which was joined by banks, courthouses, city halls, St. Lawrence Hall etc. in their adaptation of the Georgian Revival as an appropriate expression of a civic institution. As discussed above this Georgian character was mandated by the University.

iv. CONTEXT

The following section provides contextual information and analysis related to the property which is the basis for determining 'Contextual Value' according to O. Reg. 9/06 Criteria.

The Banting Institute is located on the north side of College Street, which is the southern edge of the original precinct of the University of Toronto, facing south to the city's downtown core and original town centre. As the most important line of urban interface between the city and the university, from the early 1900s the university built many professional faculty buildings along College Street. (Images 35-42)

To the west of University Avenue, the UofT has continuously constructed buildings devoted to medical sciences, in particular the Leslie L. Dan Pharmacy Building, (2005) and Tanz Neuroscience Building (1931), 144 College Street, the FitzGerald Building (1925, former School of Hygiene), 150 College Street, the Terrence Donnelly Centre for Cellular and Biomolecular Research (2005), 160 College Street, the Royal College of Dental Surgeons (1909, later the Architecture Faculty building and now the Student Commons), 230 College Street, which was adjacent to the Grace Hospital at 250 College Street, since replaced by the CAMH Building. The north side of this stretch of College also includes other professional faculties including the Mining Building (1905), 170 College Street, and the Wallberg Memorial Building (for chemical engineering, 1949), 184 College Street.

On the south side of College, west of University Avenue, the building at 155 College Street contains the Health Sciences Building, (1961, formerly the Toronto Board of Education Centre) with the School of Public Health, the Faculty of Nursing and the Institute of Health, Policy, Management and Evaluation. The Toronto Athletic Club (1891-4) contributes to the character, scale and materiality of the area.

To the east of University Avenue, is Toronto's Discovery District including the Banting Institute. The concentration of medical buildings continued on both the north and south

sides of College Street and included already established medical institutions such as the Victoria Hospital for Sick Children, 1890, (now Canadian Blood Services) at 67 College Street and the Toronto General Hospital 1909-1919, now part of the MaRS Centre, 2005, 2013, at 101 College Street where many UofT medical departments were located before the Banting Institute was constructed, as well as the Toronto Psychiatric Hospital (1925) to the north on 2 Surrey Place. This eastern stretch of College Street also includes the Joint Centre for Bioethics (1883, formerly the Zion Congregational Church), at 88 College Street.

On the block occupied by the Banting Institute, the buildings share a similar built-form character and scale. To the east of Banting is a parking lot (a pair of semi-detached houses was demolished in 2016) and the late Victorian Style red-brick clad, Zion Congregational Church. Opposite, on the south side of College Street, is the former Toronto General Hospital, also designed by Darling and Pearson in a more elaborate Georgian Revival style of yellow brick but sharing the landscaped set back and scale. From the Blood Services Building to the east, as far as the former Royal College of Dental Surgeons buildings to the west, the majority of these professional sciences building share scale and massing, classical detailing in stone and brick creating a strong contextual presence of form, function and period stretching from 1890-1930. While late 20th century buildings, such as the new glazed, mid-rise towers that form MaRS, that have been added to College Street indicate the continuing advances in research and technologies, those buildings constructed approximately 100 years earlier represent the earliest days of ground-breaking, Nobel-Prize winning medical research which would give this stretch of College Street its nascent identity as Toronto's Discovery District.

3. EVALUATION AND APPLICATION OF O.REG 9/06 CRITERIA

The following evaluation applies Ontario Regulation 9/06 made under the Ontario Heritage Act: Criteria for Determining Cultural Heritage Value or Interest. The criteria are prescribed for municipal designation under Part IV, Section 29 of the Ontario Heritage Act, and the City of Toronto also uses these criteria when assessing properties for inclusion on the City of Toronto Inventory of Heritage Properties. There are three categories for a total of nine criteria under O. Reg 9/06. A property is only required to meet one criteria to warrant designation. As demonstrated below, the property at 100 College Street meets several criteria amongst the three categories.

The evaluation table is marked "N/A" if the criterion is "not applicable" to the property or X if it is applicable to the property, with explanatory text below.

DESIGN OR PHYSICAL VALUE

Design or Physical Value	
i. rare, unique, representative or early example of a style, type, expression, material or construction method	X
ii. displays high degree of craftsmanship or artistic merit	N/A
iii. demonstrates high degree of scientific or technical achievement	N/A

Representative example of a style

The Banting Institute has design value as a well-designed and carefully-crafted professional medical faculty building constructed in 1928-1930 in the Georgian Revival style which balances traditional architecture with the growing influence of the Modern Movement and its more minimal aesthetic in the interwar period. "To establish a consistent style and character to the public face of the institution, the [University of Toronto] administration had mandated since 1920 that all new buildings along College and St. George streets be "Georgian in character".²⁶ Elements of the Georgian Revival style are expressed in the classical, symmetrical composition of the principal south facade with its projecting central bay, the taller height and more elaborately decorated first floor set on a raised basement, the substantial copper cornice with stone frieze and a traditional combination of brick and stone cladding. The style is further evident in the details; the stone cladding of the base, stone surrounds, panels and volute brackets of the first floor windows, the brick quoins, raised panels, stone keystones. Of particular note is the emphasis given to the principal entrance facing College Street, which is set in a projecting stone-clad first floor bay and surrounded by a richly moulded stone frame with a volute keystone supporting the projecting cornice. A classically-moulded, wood door frame includes narrow sidelights, a transom light with inset diamond pattern and a panelled double-door. The modern movement influence is present in the massing of the u-shaped building which is expressive of the internal functions with the lower volume of the lecture hall of the east wing and the taller volumes of laboratories expressed in the elevations of the west wing. The modern aesthetic is further present in the elevations with the regular gridded rhythm of fenestration on the main block and the varied window patterns on the wing which relate to internal function, a flatter surface relief generally and, specifically in the minimal surface relief of the decorative elements.

Representative example of a type

The building has further value as its Georgian Revival design is characteristic of the University of Toronto professional faculty building type and is expressive of the Professional Faculty theme on the university campus. The professional faculty building type relates to buildings constructed in the early to mid-20th century, a time during which the University was expanding its academic offerings through the construction and enlargement of various faculties including medicine, engineering, and astronomy, typically employing architectural styles rooted in the language of classical architecture with elements of the growing modern movement. The building's set back from the street providing a landscaped setting of grass and trees with a small semi-circular forecourt in front of the entrance is another characteristic of this building type.

²⁶ Richards, University of Toronto Campus Guide, (2013), p. 49.

HISTORICAL OR ASSOCIATIVE VALUE

Historical or Associative Value	
i. direct associations with a theme, event, belief, person, activity, organization or institution that is significant to a community	X
ii. yields, or has the potential to yield, information that contributes to an understanding of a community or culture	X
iii. demonstrates or reflects the work or ideas of an architect, artist, builder, designer or theorist who is significant to a community	X

Direct association with an event that is significant to a community and yields information that contributes to an understanding of a community or culture

The Banting Institute is valued for its association with the ground-breaking and Nobel-prize winning discovery of insulin as a life-saving treatment for diabetes during 1921 and 1922 and the culture of medical research in a university setting. Over the past century, the discovery has had a global impact by improving the lives of millions of diabetes sufferers as well as on the recognition of the importance of medical research. The discovery was made by Sir Frederick G. Banting, and his assistant Dr. Charles Best (1899-1978) with doctors J. R. R. McLeod and James Collop. The importance of the discovery was immediately recognized by the University of Toronto through their Medical Faculty award of the annual Reeves Prize to Banting and Best in 1922. This was followed in 1923 by the Provincially-funded University of Toronto Banting and Best Chair of Medical Research which signified a renewed commitment to medical research and its importance to humanity and finally in 1928, by the University's construction of the Banting Institute. The importance of the research chair and the dedicated research and teaching facilities was indicated by the opening of the Banting Institute by Lord Moynihan of Leeds, the President of the Royal College of Surgeons of England in 1930. Banting and Best served as co-directors of the Chair of Medical Research and both continued their research at the institute.

Direct association with a person that is significant to a community

The Banting Institute is valued for its association with Sir Frederick Grant Banting KBE, MC, FRS, FRSC (1891-1941) for whom it is named. Following the discovery of insulin, and the award of the Nobel Prize, Banting became Canada's first professor of medical research at the University of Toronto and the co-director with Dr. Best of the Banting and Best Chair of Medical Research. His research focused on silicosis, cancer and aviation medicine. When he rejoined the Royal Canadian Army Medical Corps at the start of World War II, he continued his research on mustard gas, oxygen masks and anti-gravity suits. In 1941, Major Banting died when his plane crashed while on route to collaborate with British medical associates in the war effort. Banting's importance is signalled by the numerous honours he received including the Military Cross for his

World War I service and being made a fellow of both the Royal Society in London and the Royal Society of Canada. In 1934, he received a knighthood from King George V. Many Canadian schools – even a crater on the moon - bear his name. His house, in London Ontario where he first conceived of the idea for the use of the substance called insulin is now the Banting House National Historic Site of Canada. Following his death, the American Diabetes Association created the Banting Medal for Scientific Achievement, awarded to those who have made long-term contributions to diabetes research and treatment.

Direct association with a person that is significant to a community

Dr. Charles Best (1899-1978), with whom Banting personally shared the Nobel Prize, was the sole director of the Chair of Medical Research following Banting's death in 1941, and served as the Head of the Department of Physiology from 1929. Best was successful with research on anticoagulants and treatments for anemia and served as Advisor to the World Health Organization's Medical Research Committee. In 1947, Best was honoured with the American Legion of Merit Medal for meritorious service in the field of scientific research and development, presented on behalf of President Harry S. Truman, and was the recipient of eighteen honorary degrees from universities around the world during his lifetime. In 1954, the University commemorated the contributions and leadership of Dr. Charles Best with the construction of the Best Institute at 112 College Street to the west of the Banting Institute. It was in the lobby of the Best Institute that the colorimeter used by Banting and Best in their insulin research was displayed.²⁷ The Best Institute was demolished in 2019.

Direct association with organizations that are significant to a community

The Banting Institute is also valued for its association with the internationally prestigious Nobel Prize, awarded in 1923 to Banting and Dr. J. R. R. Macleod, of the Faculty of Medicine, marking the first instance of the award to Canadians. The importance of the discovery was recently recognized with UNESCO's 2013 inscription of the discovery of insulin on its 'Memory of the World Register' as "one of the most significant medical discoveries of the twentieth century and ... of incalculable value to the world community."²⁸

Direct association with an event that is significant to a community

The Banting Institute is further valued as the location where research to create heart pacemakers was undertaken by Drs. Wilfred Bigelow and John Callaghan with success first reported with the successful implant of a pacemaker in a dog in 1950.

Direct association with an organization that is significant to a community

As part of the University of Toronto, the Banting Institute has value as it represents a prominent theme in the historic evolution of the university which was the emergence of

²⁷ Richards, 2009, p. 188

²⁸ UNESCO. <http://www.unesco.org/new/en/communication-and-information/memory-of-the-world/register/full-list-of-registered-heritage/registered-heritage-page-8/the-discovery-of-insulin-and-its-worldwide-impact/>

professional faculties between 1900 and 1940. These faculties were often formerly independent schools devoted to a specific profession which affiliated with the university in the early to mid-20th century, providing standardized accreditation and new course offerings for a growing student body. Professional faculty buildings were characteristically distinguished by their use of a classical Georgian Revival architecture, instead of the traditional Gothic or Romanesque styles associated with the university. Typically they engaged directly with the city and faced onto a major city street differing from the traditional quadrangle buildings located in a more bucolic and enclosed setting of the Oxford and Cambridge university models.

Demonstrates or reflects the work or ideas of an architect, artist, builder, designer or theorist who is significant to a community

The Banting Institute has value for its association with this distinguished and prolific Toronto architectural firm of Darling and Pearson who were selected by the University of Toronto for this prestigious project. The firm, originally based on the partnership of Frank Darling (1850-1923) and John A. Pearson (1867-1940), was responsible for the Toronto General Hospital, 1909-1919, (opposite on the south side of College Street) as well as numerous University of Toronto landmark buildings including Convocation Hall, 1905, Simcoe Hall, 1922-23 Trinity College, 1925, and the Physical Geography Building, 1925. The Banting Institute, constructed in 1928-1930, represents an evolution in the firm's work with a more restrained and minimal representation of Georgian Revival architecture reflective of both the building's professional faculty typology and the growing influence of the modern movement. Frank Darling was the first Canadian to receive a Gold Medal from the Royal Institute of British Architects in 1916 and Pearson the first Canadian to receive an honorary Doctor of Architecture from the University of Toronto in 1932.

CONTEXTUAL VALUE

Contextual Value	
i. important in defining, maintaining or supporting the character of an area	X
ii. physically, functionally, visually or historically linked to its surroundings	X
iii. landmark	N/A

Important in defining, maintaining or supporting the character of an area

Located on the north side of College Street, on the south-east quadrant of a block framing Queen's Park and the Ontario Legislative Building, the Banting Institute has contextual value as it defines and maintains the character of the area, known as Toronto's Discovery District. The Discovery District is a unique part of Toronto that is characterized by a high concentration of hospitals, University of Toronto faculty buildings and research institutes particularly related to biotechnology. This section of College Street between Elizabeth and St. George streets has a distinct character as it is predominated by University of Toronto institutions, particularly related to medical research and health care. Many of the buildings housing these institutions were

constructed in the early 20th century (including 101, 144, 160 and 170 College Street) and are characterized by a height of four to seven stories, constructed in the classical Georgian Revival style with a combination of brick and stone cladding and often with a landscaped set back from College Street. The Banting Institute is a contributor to this historic character, with its five-and-a-half storey height, and Georgian Revival style character evident in its symmetrical composition and brick and stone cladding with classical details which reinforce its role within the Discovery District enclave. The dignified but unostentatious styling of this scholarly research building is indicative of the historical role it has played in the development of the University of Toronto as a centre of outstanding research and the Discovery District as the primary location for health-care innovation.

Physically, functionally, visually or historically linked to its surroundings

The Banting Institute has heritage value as it is physically, functionally, visually and historically linked to its surroundings. As it commemorates the globally and historically significant discovery of insulin and the resultant commitment and investment to support medical research by the Province of Ontario and the University of Toronto in the 1920s with the construction of a dedicated research and teaching facility and the creation of the Banting and Best Chair of Medical Research, the Banting Institute is a key contributor to Toronto's Discovery District.

Future Proposals for the Banting Institute Property at 100 College Street

The University of Toronto is proposing to redevelop the properties at 88-112 College Street as the 'Schwartz Reisman Innovation Centre' and demolished the Best Institute at 112 College Street in 2019 as part of this redevelopment. Plans for the Banting Institute have not been finalized at this time and no formal application has been received. City Planning has endorsed retention of the Banting Institute in future proposals for this property.

CONCLUSION

Staff have completed the Research and Evaluation Report for the property at 100 College Street and determined that the property meets Ontario Regulation 9/06, the criteria prescribed for municipal designation under Part IV, Section 29 of the Ontario Heritage Act under all three categories of design, associative and contextual values.

The Banting Institute, at 100 College Street, has strong associative and historical values. It is associated with, and named for, Major Sir Charles Banting (1891-1941) who, with his colleague Dr. Charles Best and assisted by doctors J. R. R. McLeod and James Collop, made the ground-breaking discovery of insulin as a treatment for diabetes. This historic discovery, which was inscribed on the UNESCO Register in 2013 as "one of the most significant medical discoveries of the 20th century", has, over the past century, improved the quality and life expectancy of millions of people around the world. The discovery resulted in the first award of the Nobel Prize to a Canadian in 1923. The institute building (1928-1930) has associative value as, it was constructed to accommodate the Banting and Best Chair of Medical Research, created following the discovery of insulin and the receipt of the Nobel Prize, and funded by the Province of Ontario, recognizing the significance of medical research, as well as providing dedicated accommodation for the University of Toronto (UofT) Faculty of Medicine departments. The building has further associative value as it was designed by "Toronto's pre-eminent architecture firm"²⁹ of Darling & Pearson who were the architects of many of the university's landmark buildings as well as the Toronto General Hospital, opposite on the south side of College Street.

The building has design and physical value as it is constructed in the Georgian Revival style which the university administration had "mandated since 1920 that all new buildings along College and St. George streets be "Georgian in character"...to establish a consistent style and character to the public face of the institution."³⁰ The building has further design value as it is a fine representative of the UofT professional faculty and research building typology which was designed in the Georgian Revival style and characteristically set back from the street with landscaped setting and paved forecourt. The characteristics of the style are evident in the low-rise, five-and-a-half storey height, the symmetrical massing with a projecting central entrance bay, the regular and symmetrical arrangement of the windows, the greater height of the first floor and combination of brick cladding with a stone base and classical detailing of the entrance, the corner, window surrounds and cornice.

Located in Toronto's Discovery District, which owes its reputation for world-class Nobel-prize winning research to medical discoveries such as that of Banting and Best, the Banting Institute building contributes to the character of the district as a historically distinguished centre for ground-breaking discoveries which continues to represent excellence in medical care, research and innovation.

If designated, City Council can review alterations to the site, enforce heritage property standards and maintenance, and refuse demolition.

²⁹ Richards, p. 66.

³⁰ Richards, p.49.

The Statement of Significance (Attachment 3) for 100 College Street (the Banting Institute) comprises the Reasons for Designation, which is the Public Notice of Intention to Designate.

CONTACT

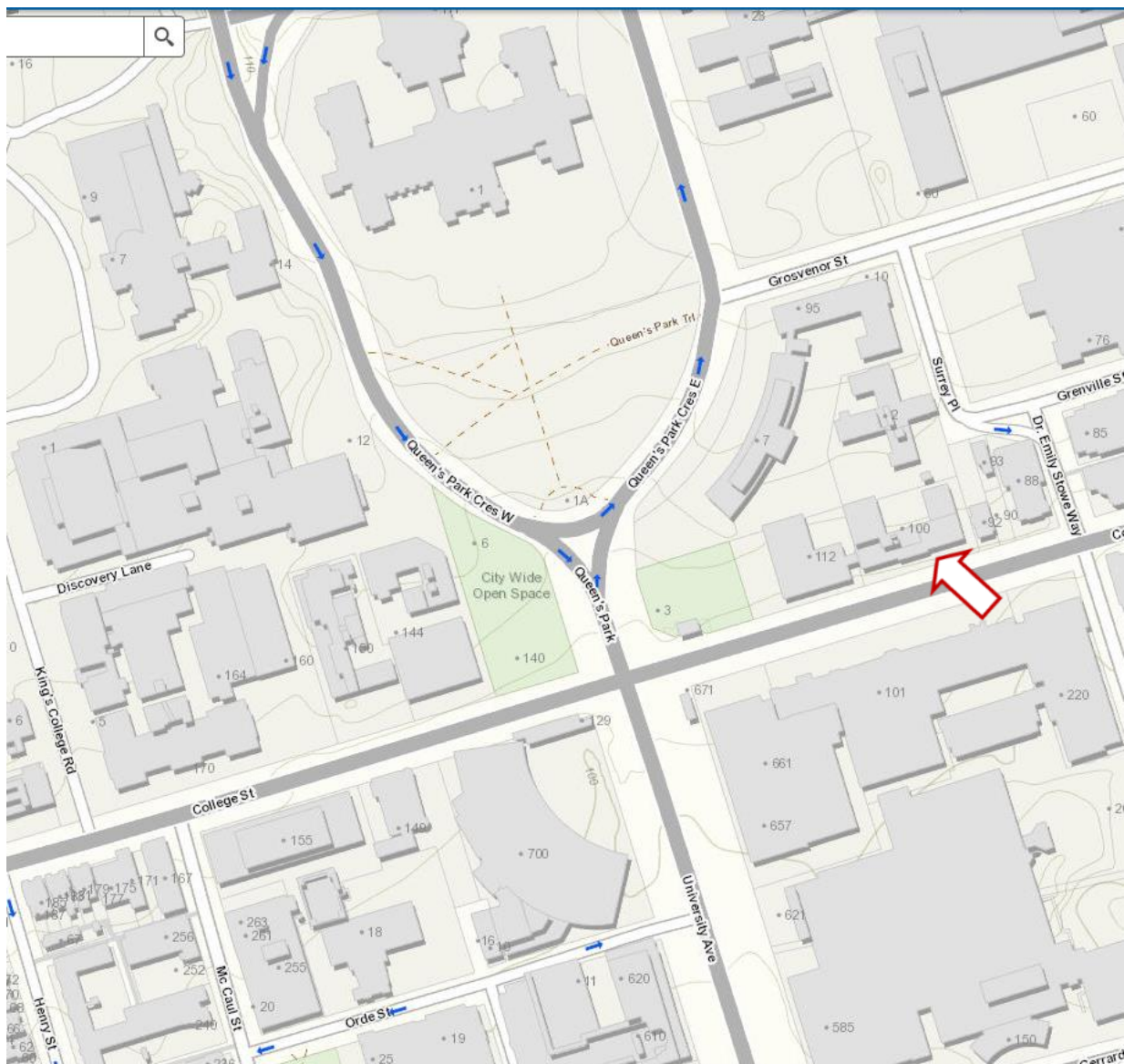
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SIGNATURE

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ATTACHMENTS

Attachment 1 – Maps and Photographs
Attachment 2 – List of Research Sources
Attachment 3 – Statement of Significance (Reasons for Designation) 100 College Street

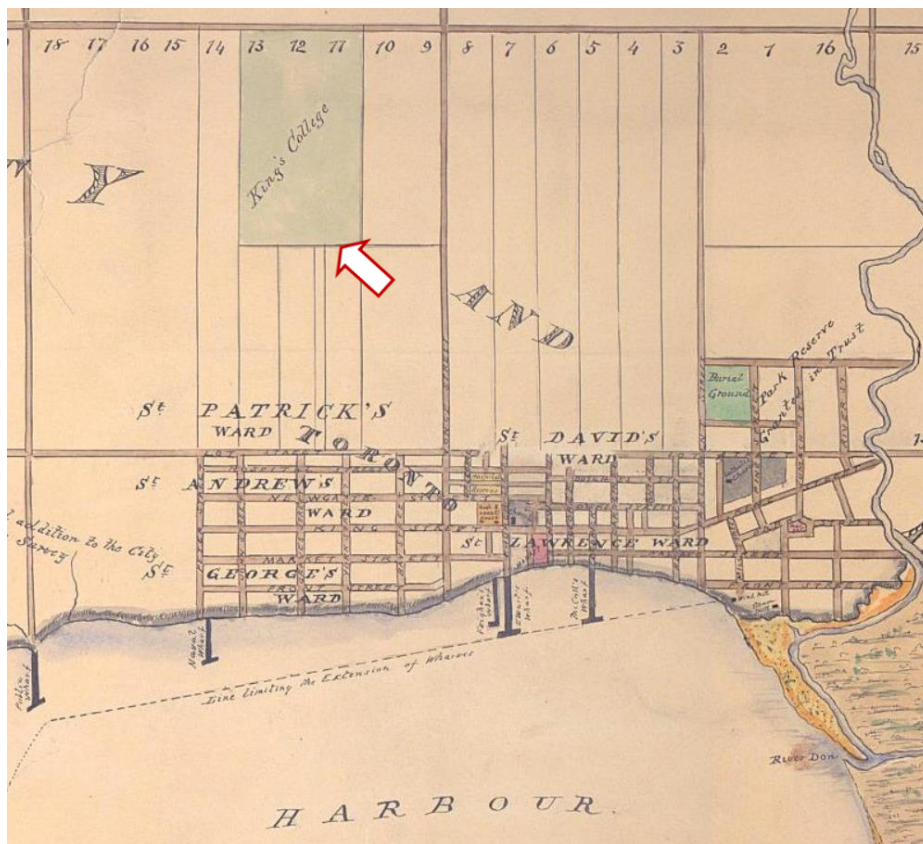


1. This location map is for information purposes only; the exact boundaries of the property are not shown. The arrow marks the site of the property at 100 College Street between University Avenue and Dr. Emily Stowe Way (City of Toronto, I-View Map, 2019)

Please note: all maps are oriented with north at the top, unless otherwise indicated



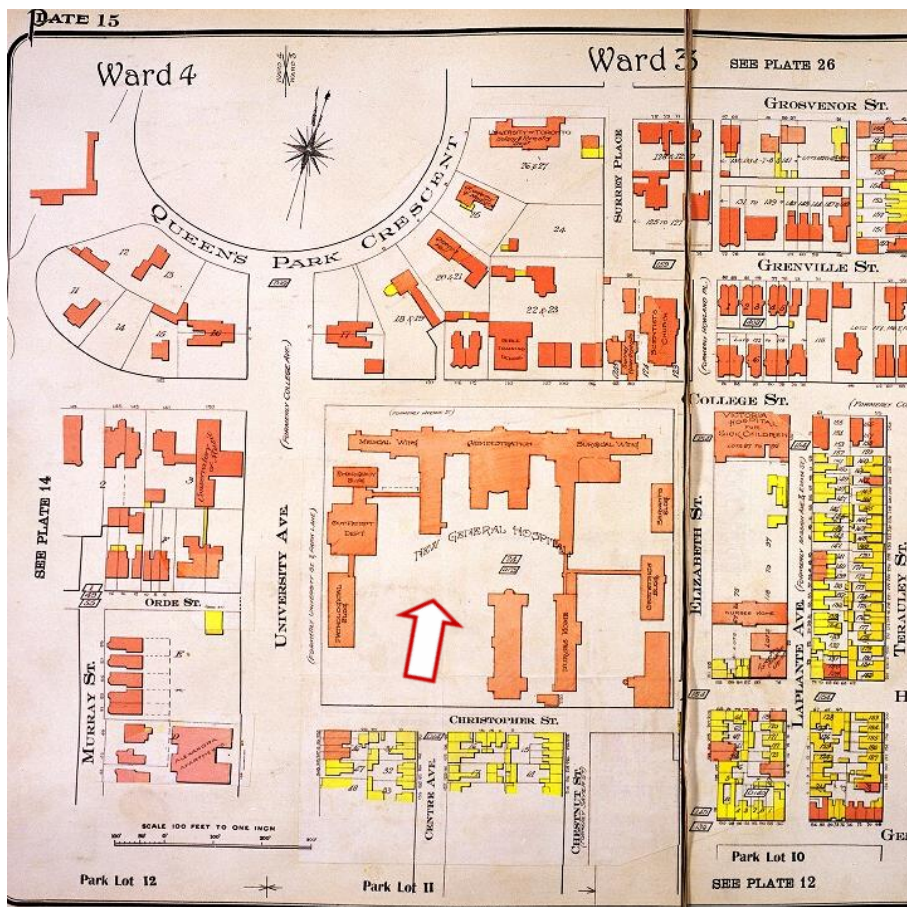
2. Aerial view of Queen's Park and the University of Toronto precinct north of College Street at the intersection with University Avenue. (Google Maps, 2019)



3. J. G. Chewett, *City of Toronto and Liberties* (detail) 1834, showing the property owned by King's College on the top half of Park Lots 11, 12 and 13 and the laying out of the broad College Avenue, now known as University Avenue. This map indicates the importance of the establishment of the university to the city. (Ng)



4. Map of the University of Toronto Campus with Queen's Park, 1859 showing the extend from College Street in the south to Bloor Street on the north. At this date University College and King's College Circle have been laid out. The Medical Faculty Building is marked with a dashed arrow.
(Ng, University of Toronto Archives, 2003-42-3 MS)



5. Goad's Map, 1913 showing the location of the "New General Hospital" at the south-east corner of University Avenue and College Street. The buildings along University contained the UofT's Pathological Building, while the block parallel to College contained Administration with the Medical Wing to the west and Surgical Wing to the east. (CTA)



6. Toronto General Hospital, photographed in 1920, now part of the MaRS Centre. (Richards, p. 246)

**U.S. STATESMAN'S CHILD
TAKING TORONTO CURE**

Daughter of Charles E. Hughes
Being Treated Here for
Diabetes.

A SERUM TREATMENT

Under Care of Dr. F. G. Banting,
M.D., and Mr. C. H. Best,
M.A., of Toronto.

The fifteen-year-old daughter of
Charles Evans Hughes, secretary of
state for the United States, and Mrs.

NEW YORK EXCITED OVER NEW CURE FOR DIABETES

Discovery of Dr. Banting of
Toronto Is Discussed in
American Press.

PUBLIC INTERESTED

Treatment of Miss Hughes
Focuses Attention of Amer-
ica on Toronto Experiments.

Special to The Star.
New York, Oct. 17.—The Banting
treatment for diabetes during the last
few days has come in for wide discus-
sion here with the general public as
well as in the medical profession.
The fact that a daughter of the sec-
retary of state is in Toronto under-

7. The news of the discovery for a treatment for diabetes begins to spread as one of the earliest recipients is Miss Hughes, the daughter of the U. S. Secretary of State, Charles Hughes.

(Toronto Daily Star, August 18, 1922, p. 3 (left) and October 17, 1922, p. 17(right))



8. "Research Men Win Reeve Prize," announcement of the award of the Reeve Prize by the University of Toronto Faculty of Medicine which recognizes the contribution of both "Dr. F.G. Banting (left) and Mr. C.H. Best". (Toronto Daily Star, October 17, 1922 p.17.)

Medical World Spotlight On Banting's Diabetes Cure

*U.S. Doctors on Tip-Toe Over Now-Famous Toronto Discovery
—New York World Publishes Complete Account—Lead-
ing Physicians of Continent Approving Treatment.*

A recent issue of the New York World publishes the following complete account of the origin and nature of the so-called "insulin"

won his way from private to captain, was awarded the Military Cross, and was wounded at Cambrai. He served on the staff of a local military hospital and in 1920 obtained an appoint-

9. Report of Banting's lecture in Boston providing an account of the research and processes that lead to the discovery. (Toronto Daily Star, November 1, 1922, p.23)

31ST YEAR.

DEFEAT OF DIABETES DEFINITELY DECLARED

Famous British Medical Scientist Writes of Experiments in University of Toronto and Asserts That "Insulin Cures Diabetes"—Triumph for Man's Unconquerable Mind.

JUST A STEP ON WAY TO GREATER RESULTS

"The Defeat of Diabetes" is the title of a striking article in the New Statesman, a British periodical, of which the 14 signed by "Lens." It

much glucose, they must remove the excess. But whence and why is this excessive and ultimately disastrous accumulation of a sugar in itself, and in due degree, not only useful but

10. The success of insulin treatment spreads to the United Kingdom. (Toronto Daily Star, December 14, 1922, p. 23.

Banting Given an Ovation By Assembly of Scientists

Dr. Murlin of Rochester Says His Feelings are of Mingled Pain and Admiration, But Noted Medical Men Pay Tribute to Toronto Discoverers—Murlin Criticized for Not Purifying Pancreas Extract.

A scene unparalleled in the history of the federation marked the closing session of the convention of federated American societies for experimental biology at the University of Toronto yesterday afternoon. For

conclusions that resulted from this comparison made the whole session an epochal one in the history of scientific medical research. It has not yet been definitely established that insulin is a positive cure for diabetes, but there is not the least

11. The article provides further indication of the tremendous impact of Banting and Best's discovery on the scientific community. (Toronto Daily Star, Dec. 30, 1922, p. 27.)

DRS. BANTING AND BEST.

T. To the Editor of The Star.

(Sir: Almost every day we take up
some sort of a paper or magazine
and read of the increasing applause
and records of the great achieve-
ment of those two great men of To-
ronto University, Drs. Banting and
Best. Surely, as one great American
scientist has said, "They have put
Toronto on the map," and it is a
truth, for many people who never
heard of Toronto have learned where
it is, and what it does.

Should they not have a great pub-
lic civic acknowledgment? Here is
a poetic suggestion with a hint.

Banting and Best,
Let us have their crest
Inscribed on our roll of fame,
And soon as you can
Let us have each man
Hung up in a golden frame
On a prominent wall
In our city hall,
Where Canadians all can see;
And foreigners, too,
Can have a view
Of this famous double "B."
Yes, it was their lot,
For to face the shot,
Where democracy took its stand.
Now they've done the same,
Since they came home
To their own native land.
Can we measure the zest
Of their heroic test
As the shot they both received,
When into their veins
Went the fruit of their brains
That humanity might be relieved,
No selfishness theirs,
After these long years
Of study and strain and test;
They have handed it o'er
For the rich and the poor,
"Good old" Banting and Best.
Now to you we look,
Who have power to book
The "means" from out your wealth,
Let the world ring and the healed
ones sing,
Insulin gave us health.

J. WARREN.

Lambton, Jan. 16.

12. Poem written to celebrate Banting and Best's achievement. The line "As the shot they both received when into their veins, went the fruit of their brains that humanity might be relieved" refers to Banting and Best's injecting themselves with insulin before testing it on other humans. (TDS, January 17, 1923, p. 6.)

NOBEL PRIZE AWARDED FOR INSULIN RESEARCH

Dr. Banting and MacLeod
First Canadians to Ever
Receive This Honor

Insulin has come into its own. For the first time in history, the highest award in the whole field of medical science has fallen to the lot of Canada. It is to Doctors F. G. Banting and J. J. R. MacLeod of the University of Toronto that the privilege of being thus so signally honored has come.

At a meeting of the council of teachers of the Karolinska Institute at Stockholm last night it was unanimously decided to present the coveted Nobel prize for outstanding service in medical research to the discoverer of insulin, Dr. Banting, and his co-worker, Dr. MacLeod. The total value of the award, which has been given on a joint basis, is \$40,000.

The only other time that the Nobel prize in medicine was ever won on the American continent was in 1912, when Dr. Alexis Carrel was honored for his work in connection with the transplantation of tissues.

NOBEL PRIZE AWARD HONOR TO TORONTO

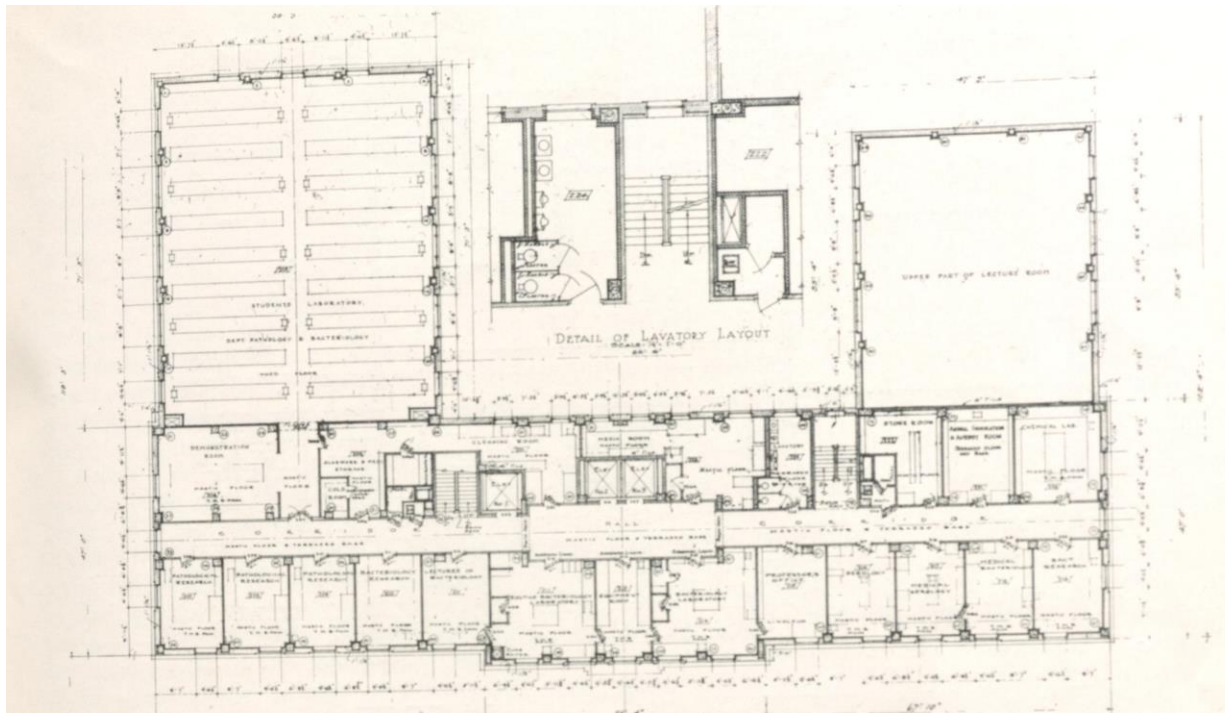
Sir Robert Falconer, president of the University of Toronto, made the following statement regarding the granting of the Nobel Prize to Dr. Banting and Dr. MacLeod.

"It is a very high honor that has come to the University of Toronto—one of the greatest honors that could come. To the members of the staff and the graduates, it is a profound satisfaction that two such men as Dr. Banting and Dr. MacLeod should be at work in our laboratories. Dr. Banting's modesty and quiet bearing have won the appreciation of everyone, and it must be a source of satisfaction to him and to his friends that he has been privileged to confer such a great boon on humanity. I propose to suggest to the board of governors of the university that in the near future a dinner may be arranged to do honor to these two distinguished gentlemen."

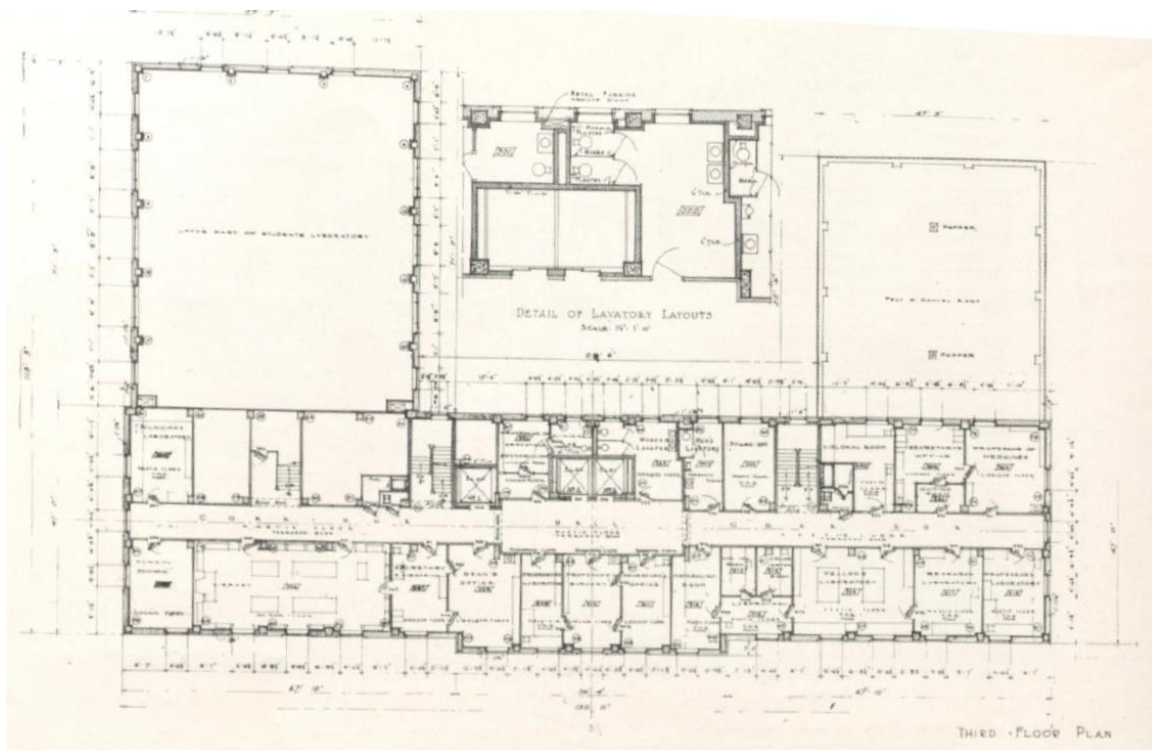
13. Reports following the announcement of the award of the Nobel Prize. (Toronto Daily Star, October 26, 1923, p. 11 and p. 3)



14. Dr. Charles Best and Sir Frederick Banting in an undated photograph. (University of Toronto Libraries)



17. Darling & Pearson, Second Floor Plan, Banting Institute, showing the individual research labs on the south side, upper level of the lecture hall on the east side and large double-volume, student laboratory on the west side. (Construction, February 1931, p. 69)



18. Darling & Pearson, Third Floor Plan, Banting Institute, showing the main offices, main library and additional laboratory spaces on the south side, roof of the lecture hall on the east side and upper level of the student laboratory on the west side. (Construction, February 1931, p. 70)



City of Toronto Archives, Fonds 1244, Item 7025

19. "Banting Institute, College Street, 1930" showing the principal (south) and side (west) elevations. (City of Toronto Archives, Fonds 1244, Item 7025)



20. Banting Institute, principal (south) elevation facing College Street, viewed from the west. (HPS, 2019)



21. Banting Institute, rear (north) side showing the east lecture hall block (left) the rear elevation of the central block (centre) and the west laboratory and library block (right) (HPS, 2019)



22. Banting Institute, east (side) elevation showing the end of the main block and the rear lecture hall (HPS, 2019)



23. Banting Institute (left) showing the side (west) elevation, the side entrance and the bridge to the later Best Institute prior to its demolition. (HPS, 2019)



24. Banting Institute, principal, (south elevation), with the central bay of the south block and principal entrance (HPS, 2019)



25. Banting Institute, entry forecourt, south elevation facing College Street showing the stone details and cladding of the raised basement and first floor of the central block (HPS, 2019)



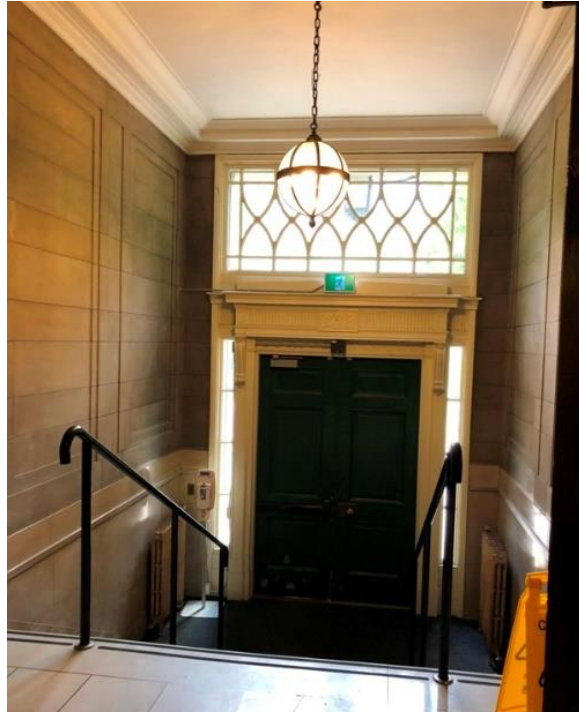
26. East (side) elevation, raised basement and ground floor, showing the stone cladding and classical details of the raised basement and stone surrounds with panels and keystones of the first floor windows with the projecting stone band between the first and second floors (HPS, 2019)



27. Principal entry showing the double panelled doors, wood surround with side lights and tracery in the transom light above, the finely crafted stone of the door frame and cornice with the suspended lantern (HPS, 2019)



28. Detail of the principal entrance to the Banting Institute showing the various details of the wood door frame and transom including the 'lamp of learning' on the lintel (HPS, 2019)



29. Secondary entrance on the west elevation with corresponding wood and stone details to match the principal entry on the south elevation (above left; HPS, 2019)

30. Banting Institute, principal entry from College Street showing the stone clad walls with relief panels and polished dado. (above right; HPS, 2019)



31. Banting Institute, Principal Entry showing the stone clad walls with relief panels and double wood entry doors with sidelights and transom light. (HPS, 2019)



32. Main entry lobby with stone walls and moulded door openings with brick clad corridors beyond (HPS, 2019)



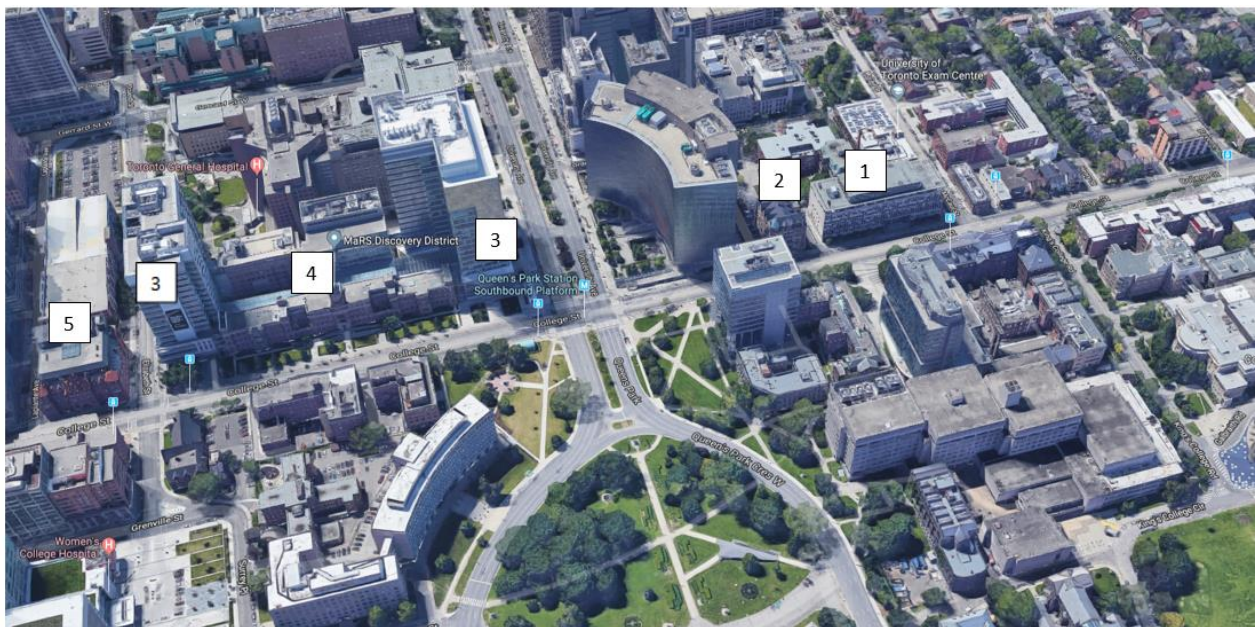
33. Banting Institute, Lecture Hall/Autopsy Theatre in the East Wing (HPS, 2019)



34. Banting Institute, Library showing the portrait of Lord Lister above the fireplace with the brick from Lister's Glasgow Royal Infirmary (Construction, February 1931, p. 58)



35. Aerial View of the north side of College Street, marking the southern boundary of the original park lots occupied by the University of Toronto and with the following professional and medical faculties on College Street: 1. Leslie L. Dan Pharmacy Building, 2005, 2. Tanz Neuroscience Building, 1931, the FitzGerald Building, 1925, the Terrence Donnelly Centre for Cellular and Biomolecular Research 2005, the Mining Building, 1905 and the Wallberg Memorial Building, 1949. On the east side of University Avenue are 7. Best Institute, 1953-4 8. Banting Institute, 1928-1930, 9. 2 Surrey Place, 1925, 10. Joint Centre for Bioethics, 1883. (Google Maps, 2019)



36. Aerial View of the south side of College Street (looking south), west of University Avenue, 1. Health Sciences Building, 1961, and, 2. The Athletic Club, 1891-4. On the east side of University Avenue: 3. MaRS Centre (2005, 2013) incorporating 4. the former Toronto General Hospital (1909-1919) and 5. the Victoria Hospital for Sick Children, 1890. (Google Maps 2019)



37. College Street east of University Avenue: Victoria Hospital for Sick Children, 1890, Darling and Curry, (now Canadian Blood Services), at 67 College Street (HPS, 2019)



38. College Street context east of University Avenue: Toronto General Hospital, 1909-1919, Darling and Pearson (now the MaRS Centre) at 101 College Street (HPS, 2019)



39. College Street area context: The Toronto Psychiatric Hospital, 1925, G. F. W. Price, (now Surrey Place) at 2 Surrey Place, north of, and adjacent to, the Banting Institute (HPS, 2019)



40. College Street context east of University Avenue: Zion Congregational Church, 1883, Smith & Gemmel architects, (now the Joint Centre for Bioethics) at 88 College Street with the Banting Institute to the left (HPS, 2019)



41. College Street, east of University Avenue: The Best Institute, 1953-54, at 112 College Street (demolished 2019) with the Banting Institute seen at the right. (HPS, 2019)



42. College Street looking east with the Best and Banting institutes on the left and MaRS Centre (2005, 2013) and the former Toronto General Hospital (1909-1919) on the right (HPS, 2019)

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 - "Gives Dr. Banting Credit for 'Insulin'," September 7, 1922, p. 2.
 - "New York Excited over New Cure for Diabetes," October 17, 1922, p. 17.
 - "Medical World Spotlight on Banting's Diabetes Cure," November 1, 1922, p. 23.
 - "Defeat of Diabetes Definitely Declared," December 14, 1922, p. 23.
 - "Banting Given an Ovation by Assembly of Scientists," December 30, 1922, p. 27.
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<http://entrepreneurs.utoronto.ca/space/history/>

The property at 100 College Street, containing the Banting Institute, a medical research and educational building, is worthy of designation under Part IV, Section 29 of the Ontario Heritage Act for its cultural heritage value, and meets Ontario Regulation 9/06, the provincial criteria prescribed for municipal designation under all three categories of design, associative and contextual value.

Description

The Banting Institute, a five-and-a-half storey, Georgian Revival style, brick and stone-clad building, at 100 College Street, is located in Toronto's Discovery District, on the north side of College Street opposite Toronto General Hospital. Its name commemorates Sir Frederick Banting who, with his fellow doctors, Charles Best, J. R. R. McLeod and James Collop, made the internationally, ground-breaking, discovery of insulin which has, over the past century, saved and dramatically improved the lives of diabetes sufferers world-wide. The award of the Nobel Prize in 1923 marked the first receipt of this internationally prestigious prize by Canadians. The award reinforced the importance of scientific research and its immeasurable value to humanity. The discovery and its resulting impact and recognition resulted in a renewed commitment to medical research and directly led to the University of Toronto, with funding from the Province, establishing the Banting and Best Chair of Medical Research. In 1928-1930 the university constructed the Banting Institute to provide teaching and research facilities for the Faculty of Medicine, devoting one floor to the Banting and Best Chair of Medical Research. Banting and Best served as co-directors of the Chair of Medical Research, and both continued their research at the Institute until Banting died unexpectedly in 1941. After Banting's death, Best served as the Chair of Medical Research and continued his research at the Institute until his retirement in 1967. The Banting Institute building with the adjacent Best Institute (1953-4) continued to serve as the Banting and Best Department of Medical Research until 2005.

Statement of Cultural Heritage Value

Physical and Design Value

The Banting Institute has design value as a well-designed and carefully-crafted professional medical faculty building constructed in 1928-1930 in the Georgian Revival style which balances traditional architecture with the growing influence of the Modern Movement and its more minimal aesthetic in the interwar period. "To establish a consistent style and character to the public face of the institution, the [University of Toronto] administration had mandated since 1920 that all new buildings along College and St. George streets be "Georgian in character".³¹ Elements of the Georgian Revival style are expressed in the classical, symmetrical composition of the principal south facade with its projecting central bay, the taller height and more elaborately decorated first floor set on a raised basement, the substantial copper cornice with stone frieze and

³¹ Richards, University of Toronto Campus Guide, (2013), p. 49.

a traditional combination of brick and stone cladding. The style is further evident in the details; the stone cladding of the base, stone surrounds, panels and volute brackets of the first floor windows, the brick quoins, raised panels, stone keystones. Of particular note is the emphasis given to the principal entrance facing College Street, which is set in a projecting stone-clad first floor bay and surrounded by a richly moulded stone frame with a volute keystone supporting the projecting cornice. A classically-moulded, wood door frame includes slender sidelights, a transom light with inset diamond pattern and a panelled double-door. The modern movement influence is present in the massing of the u-shaped building which is expressive of the internal functions with the lower volume of the lecture hall of the east wing and the taller volumes of laboratories expressed in the elevations of the west wing. The modern aesthetic is further present in the elevations with the regular gridded rhythm of fenestration on the main block and the varied window patterns on the wing which relate to internal function and a more minimal surface relief in the decorative elements.

The building has further value as its Georgian Revival design is characteristic of the University of Toronto professional faculty building type and is expressive of the Professional Faculty theme on the university campus. The professional faculty building type relates to buildings constructed in the early to mid-20th century, a time during which the University was expanding its academic offerings through the construction and enlargement of various faculties including medicine, engineering, and astronomy, typically employing architectural styles rooted in the language of classical architecture with elements of the growing modern movement. The building's set back from the street providing a landscaped setting of grass and trees with a small semi-circular forecourt in front of the entrance is another characteristic of this building type.

Historical and Associative Value

The Banting Institute is valued for its association with the ground-breaking and Nobel-prize winning discovery of insulin as a life-saving treatment for diabetes during 1921 and 1922. Over the past century, the discovery has had a global impact by improving the lives of millions of diabetes sufferers as well as on the recognition of the importance of medical research. The discovery was made by Sir Frederick G. Banting, and his assistant Dr. Charles Best, with doctors J. R. R. McLeod and James Collop. The importance of the discovery was immediately recognized by the University of Toronto through their Medical Faculty award of the annual Reeves Prize to Banting and Best in 1922. This was followed in 1923 by the Provincially-funded University of Toronto Banting and Best Chair of Medical Research which signified a renewed commitment to medical research and its importance to humanity and finally in 1928, by the University's construction of the Banting Institute. The importance of the research chair and the dedicated research and teaching facilities was indicated by the opening of the Banting Institute by Lord Moynihan of Leeds, the President of the Royal College of Surgeons of England in 1930. Banting and Best served as co-directors of the Chair of Medical Research and both continued their research at the institute.

The Banting Institute is valued for its association with Sir Frederick Grant Banting KBE, MC, FRS, FRSC (1891-1941) for whom it is named. Following the discovery of insulin, and the award of the Nobel Prize, Banting became Canada's first professor of medical research at the University of Toronto and the co-director, with Dr. Best, of the Banting and Best Chair of Medical Research. His research focused on silicosis, cancer and

aviation medicine. When he rejoined the Royal Canadian Army Medical Corps at the start of World War II, he continued his research on mustard gas, oxygen masks and anti-gravity suits. In 1941, Major Banting died when his plane crashed while on route to collaborate with British medical associates in the war effort. Banting's importance is signalled by the numerous honours he received including the Military Cross for his World War I service and his being made a fellow of both the Royal Society in London and the Royal Society of Canada. In 1934, he received a knighthood from King George V. Many Canadian schools – even a crater on the moon – bear his name. His house, in London Ontario where he first conceived of the idea for the use of the substance called insulin, is now the Banting House National Historic Site of Canada. Following his death, the American Diabetes Association created the Banting Medal for Scientific Achievement, awarded to those who have made long-term contributions to diabetes research and treatment.

Dr. Charles Best (1899-1978), with whom Banting shared the Nobel Prize, was the sole director of the Chair of Medical Research following Banting's death in 1941, and served as the Head of the Department of Physiology from 1929. Best was successful with research on anticoagulants and treatments for anemia and served as Advisor to the World Health Organization's Medical Research Committee. In 1947, Best was honoured with the American Legion of Merit Medal for meritorious service in the field of scientific research and development, presented on behalf of President Harry S. Truman, and was the recipient of eighteen honorary degrees from universities around the world during his lifetime. In 1954, the University commemorated the contributions and leadership of Dr. Charles Best with the construction of the Best Institute at 112 College Street to the west of the Banting Institute. It was in the lobby of the Best Institute that the colorimeter used by Banting and Best in their insulin research was displayed.³² The Best Institute was demolished in 2019.

The Banting Institute is also valued for its association with the internationally prestigious Nobel Prize, awarded in 1923 to Banting and Dr. J. R. R. Macleod, of the Faculty of Medicine, marking the first instance of the award to Canadians. The importance of the discovery was recently recognized with UNESCO's 2013 inscription of the discovery of insulin on its 'Memory of the World Register' as "one of the most significant medical discoveries of the twentieth century and ... of incalculable value to the world community."³³

The Banting Institute is further valued as the location where research to create heart pacemakers was undertaken by Drs. Wilfred Bigelow and John Callaghan with success first reported with the successful implant of a pacemaker in a dog in 1950.

As part of the University of Toronto, the Banting Institute has value as it represents a prominent theme in the historic evolution of the university which was the emergence of professional faculties between 1900 and 1940. These faculties were often formerly independent schools devoted to a specific profession which affiliated with the university in the early to mid-20th century, providing standardized accreditation and new course offerings for a growing student body. Professional faculty buildings were typically

³² Richards, 2009, p. 188

³³ UNESCO. <http://www.unesco.org/new/en/communication-and-information/memory-of-the-world/register/full-list-of-registered-heritage/registered-heritage-page-8/the-discovery-of-insulin-and-its-worldwide-impact/>

distinguished by their use of a classical Georgian Revival architecture, instead of the traditional Gothic or Romanesque styles associated with the university. Typically they engaged directly with the city and faced onto a major city street differing from the traditional quadrangle buildings located in a more bucolic and enclosed setting of the Oxford and Cambridge university models.

The Banting Institute has value for its association with this distinguished and prolific Toronto architectural firm of Darling and Pearson who were selected by the University of Toronto for this prestigious project. The firm, originally based on the partnership of Frank Darling (1850-1923) and John A. Pearson (1867-1940), was responsible for the Toronto General Hospital, 1909-1919, (opposite on the south side of College Street) as well as numerous University of Toronto landmark buildings including Convocation Hall, 1905, Simcoe Hall, 1922-23 Trinity College, 1925, and the Physical Geography Building, 1925. The Banting Institute, constructed in 1928-1930, represents an evolution in the firm's work with a more restrained and minimal representation of Georgian Revival architecture reflective of both the building's professional faculty typology and the growing influence of the Modern Movement.

Contextual Value

Located on the north side of College Street, on the south-east quadrant of a block framing Queen's Park and the Ontario Legislative Building, the Banting Institute has contextual value as it defines and maintains the character of the area, known as Toronto's Discovery District. The Discovery District is a unique part of Toronto that is characterized by a high concentration of hospitals, University of Toronto faculty buildings and research institutes particularly related to biotechnology. This section of College Street between Elizabeth and St. George streets has a distinct character as it is predominated by University of Toronto institutions, particularly related to medical research and health care. Many of the buildings housing these institutions were constructed in the early 20th century (including 101, 144, 160 and 170 College Street) and are characterized by a height of four to seven stories, constructed in the classical Georgian Revival style with a combination of brick and stone cladding and often with a landscaped set back from College Street. The Banting Institute is a contributor to this historic character, with its five-and-a-half storey height, and Georgian Revival style character evident in its symmetrical composition and brick and stone cladding with classical details which reinforce its role within the Discovery District enclave. The dignified but unostentatious styling of this scholarly research building is indicative of the historical role it has played in the development of the University of Toronto as a centre of outstanding research and the Discovery District as the primary location for health care innovation.

The Banting Institute has heritage value as it is physically, functionally, visually and historically linked to its surroundings. As it commemorates the globally and historically significant discovery of insulin and the resultant commitment and investment to support medical research by the Province of Ontario and the University of Toronto in the 1920s with the construction of a dedicated research and teaching facility and the creation of the Banting and Best Chair of Medical Research, the Banting Institute is a key contributor to Toronto's Discovery District.

Heritage Attributes of the Banting Institute at 100 College Street are:

- The placement of the property on the north side of College Street, set back from the street with a landscaped setting and paved entrance court contributes to its design and contextual value as these features are representative of the early 20th century, medical, institutional or university professional faculty buildings that characterize the southern edge of the University of Toronto campus stretching from Elizabeth Street to St. George Street in the Discovery District
- The scale, form and massing of the five-and-a-half-storey building contributes to its design and contextual value as they are characteristic of a professional faculty building type and maintain the early 20th century character and scale of this section of College Street in the Discovery District
- The composition of the building constructed on a u-shaped plan with a central rectangular five-and-a-half storey main block with projecting central bay, parallel to College Street, with two rear wings completing the 'u,' including a two-and-a-half-storey auditorium wing on the east side and four-and-a-half-storey wing on the west side of the 'u' combine the classical Georgian revival symmetry of the main block with the modernist, functionally determined massing of the east and west wings
- The principal south façade facing College Street defines and maintains the early 20th century professional faculty and institutional character of the building and the context as it is designed in a brick and stone clad Georgian Revival style with a symmetrical composition with a projecting central bay, raised basement clad in stone and prominent entrance with classical detailing in stone and wood
- The principle entry features the Georgian Revival style as it is centred symmetrically in the central bay of the south facade, with a moulded stone door case, suspended metal lamp, wood door frame with transom light with curving geometric tracery and rosettes, side lights, mouldings including a frieze featuring the "lamp of learning" in relief, and a pair of double doors, each with three fielded panels
- The side entrance on the west facade is representative of the Georgian Revival style with its moulded stone door case with projecting stone cornice, wood frame including a transom light with geometric tracery and rosettes, a decorative frieze below the transom light and a pair of double doors, each with three fielded panels
- The Georgian Revival style is represented in the brick cladding including decorative elements such as quoins, relief panels beneath the windows and the raised brick panels between the four upper floors suggesting pilasters on the south, east and west facades
- The stone cladding and details are representative of the Georgian Revival style and include the cladding of the raised basement terminating in a substantial roll moulding, the moulded, stone window frames with keystones, and beneath the sills moulded panels flanked by corbel brackets at the south, east and west facades of the first floor, the projecting stone belt course between the first and second floor, the stone frieze wrapping around all four facades under the projecting copper cornice
- The projecting copper cornice on the east, south and west facades of the central block and west wing and the copper coping on the parapets of all sections of the building are representative of the Georgian Revival style
- The arrangement of the windows on the central main block of the 'U' including its west, south and east facades, as a series of regularly spaced rectangular openings, originally with 4x4 rectangular panes set in metal sashes for the upper four floors,

with 4x5 rectangular panes in metal sash for the principal first floor corresponding to its taller height, represent the influence of the modern movement in their repetitive grid and the Georgian Revival style in their preservation of the traditional importance of the first floor indicated by the larger 4x5 windows. The arrangement of windows on the north facade of this block is not included as a heritage attribute

- The arrangement of the windows on the east and west facades of the east (auditorium) wing, with two wider openings, flanked by two narrow openings of corresponding height (the one to the south has been bricked in) and a smaller opening on the north facade which has been partly bricked-in are representatives of the traditional Georgian Revival style in their symmetry and the modern movement in the greater simplicity of the details surrounding the windows.
- The arrangement of the west facade of the west wing, with the stone-framed, regularly spaced windows of the first floor (corresponding to the main block) expressing the Georgian Revival style and the upper glazed sections with spandrel panels spanning between the brick pilasters, representing the functional influence of the modern movement, flanked on either side by single window openings matching the windows of the main block in the Georgian Revival style
- The arrangement of the windows on the rear, north facade of the west wing with stone framed windows of the first floor, windows with brick panels above and at the top floor, keystones connecting with the stone frieze at the cornice all expressing the Georgian Revival style