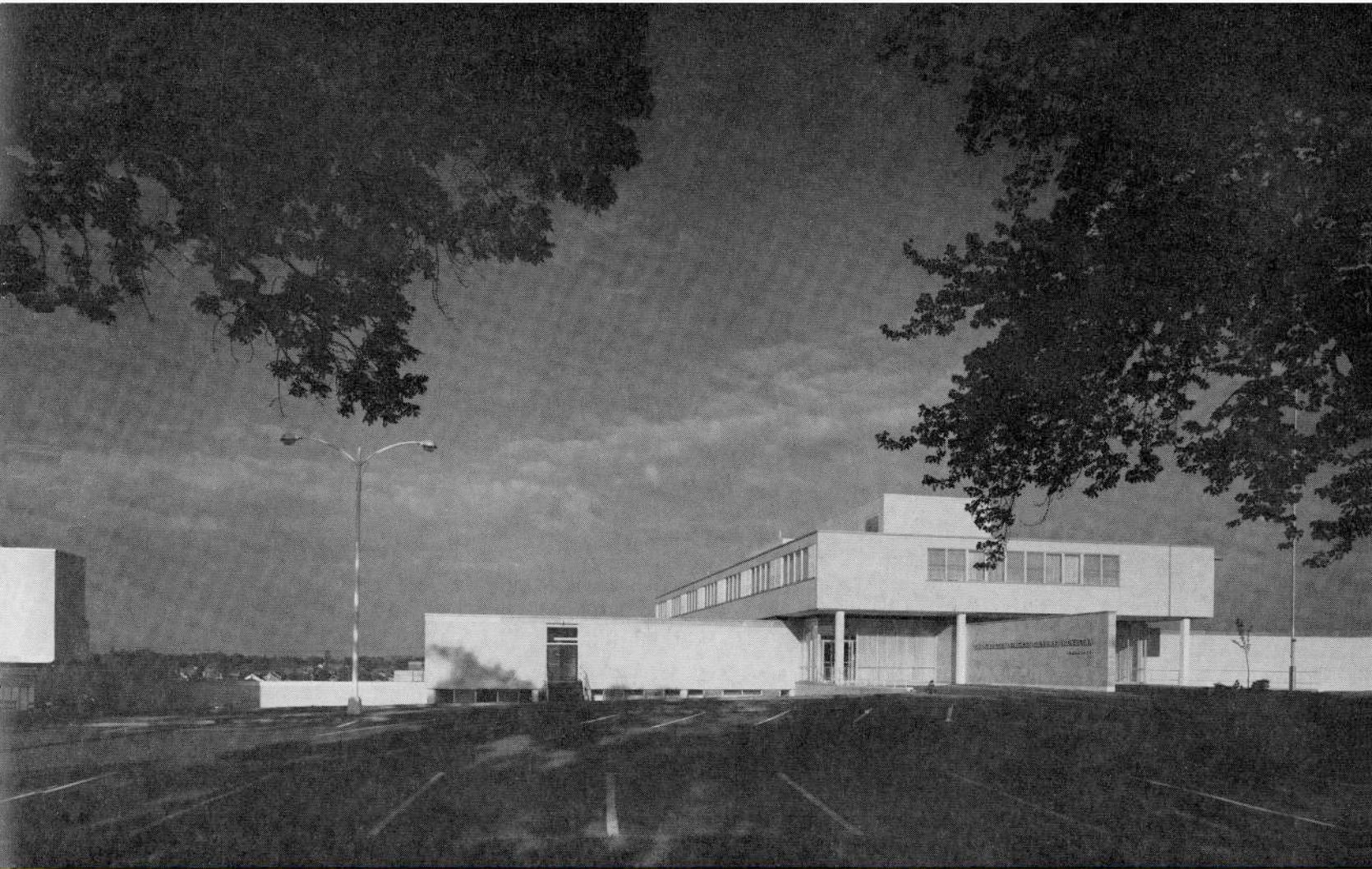


RAIC NOVEMBER 1959 **JOURNAL**



ROYAL ARCHITECTURAL INSTITUTE OF CANADA

INSTITUT ROYAL D'ARCHITECTURE DU CANADA

FORECAST:

year-round
working comfort
in this *modern*
structure,

thanks to air-conditioning and heating by

Hamilton's new City Hall will always be one of the most outstanding civic buildings in Canada.

Modern in outside appearance, but even more important, *modern in interior comfort!* "Climate-controlled" throughout by TRANE, for utmost working comfort and efficiency, 365 days a year.

New, striking structures such as this are constantly shooting up in Canadian cities.

For them, the sound economy of air-conditioning by TRANE has its start on the drawing boards of modern-minded architects and engineers. You'd be wise to let TRANE "Climate-control" your next structure!

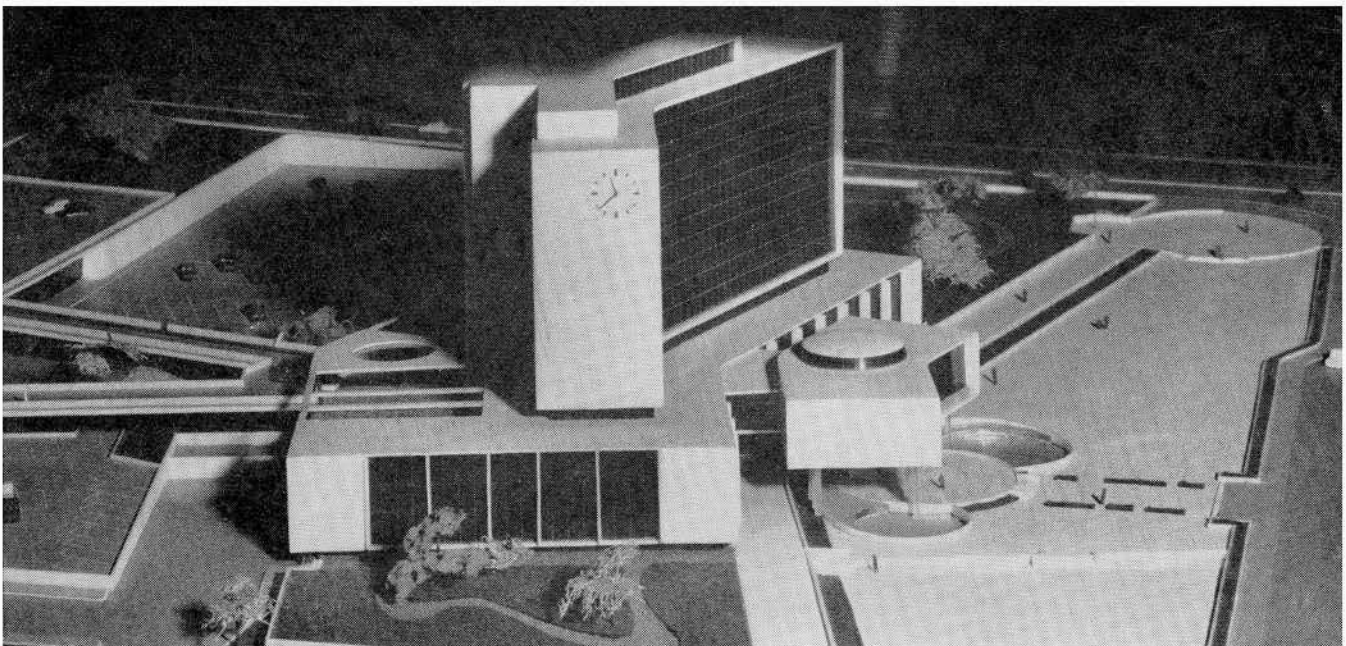
Modern TRANE equipment in Hamilton's new City Hall:

Fans CenTraVac Climate Changer
Coil Torrivent Induction UniTrane

TRANE

COMPANY OF CANADA LIMITED, TORONTO 14

Manufacturers of equipment for air conditioning, heating, and ventilating



FUTURISTIC NEW CITY HALL, HAMILTON, ONTARIO

Architect: S. M. Roscoe, Hamilton

Consulting Architects:

Fleury, Arthur & Barclay, Toronto

Consulting Mechanical Engineer:

L. H. Schwindt Co. Ltd., Hamilton

Associate Consulting Engineer:

C. S. Leopold Engineers Inc., Philadelphia

Mechanical Contractor:

Goodram Brothers Ltd., Hamilton

RAIC JOURNAL

NOVEMBER, 1959
Serial No 411, Vol. 36, No 11

EDITORIAL	
A Capital Crime	372
HOSPITALS	
The Greater Niagara General Hospital, Niagara Falls <i>Architects, John B. Parkin Associates, Toronto</i>	374
Canadian Forces Hospital, Kingston <i>Architects, Shore & Moffat, Toronto</i>	382
Royal Victoria Hospital, Montreal <i>Architects, Barott, Marshall, Merrett & Barott, Montreal</i>	385
Jewish General Hospital, Montreal <i>Architects, Fleming & Smith, Montreal</i>	389
The Planning of Welland County General Hospital, Welland <i>Architects, Agnew, Ludlow & Scott, Toronto</i>	393
Saint John General Hospital Additions, Saint John <i>Architects, Alward & Gillies, Mott & Myles, Saint John</i>	396
Two Small Hospitals — Invermere & Castlegar, B.C. <i>Architects, Smith & McCulloch, Vancouver & Trail</i>	398
PROJECT	
Head Office Building, Ford of Canada Ltd, Oakville <i>Architects, Allward & Gouinlock, Toronto</i>	399
FROM THE EXECUTIVE DIRECTOR'S DESK	400
VIEWPOINT	402
INSTITUTE NEWS	403
LETTERS TO THE EDITOR	405
OBITUARIES	406
COMING EVENTS	407
INDUSTRY	403
INDEX TO JOURNAL ADVERTISERS	56

COVER

PANDA



THE GREATER NIAGARA
GENERAL HOSPITAL,
NIAGARA FALLS, ONTARIO

Architects:
John B. Parkin Associates
Toronto

*The Institute does not hold itself responsible for the opinions
expressed by contributors*

ROYAL ARCHITECTURAL INSTITUTE OF CANADA

EDITORIAL BOARD

ROBERT C. FAIRFIELD, CHAIRMAN WALTER B. BOWKER, MANAGING EDITOR
ERIC R. ARTHUR, PROFESSIONAL ADVISER

J. D. Annett, *Edmonton*; Howard D. Chapman, *Toronto*; Peter Collins, *Montreal*; Ronald A. Dick, *Toronto*; P. A. R. Dickinson, *Toronto*; Henry Fliess, *Toronto*; D. C. Haldenby, *Toronto*; Tinos Kortés, *Saskatoon*; Douglas E. Kertland (F), *Toronto*; J. S. MacDonald, *Halifax*; H. Claire Mott (F), *Saint John*; Earle C. Morgan (F), *Toronto*; Forsey Page (F), *Toronto*; S. M. Roscoe, *Hamilton*; Norman C. H. Russell, *Winnipeg*; Wm. J. Ryan, *St. John's*; L. E. Shore (F), *Toronto*; Denis Tremblay, *Sherbrooke*; John H. Wade (F), *Victoria*; John G. Wasteneys, *Toronto*; G. Everett Wilson, *Toronto*.

J. F. SULLIVAN, PUBLISHER

All correspondence should be addressed to the Editor

EDITORIAL AND ADVERTISING OFFICES, 600 EGLINTON AVENUE EAST, TORONTO 12
Authorized as Second Class Mail, Post Office Department, Ottawa

A CAPITAL CRIME

IT IS A MATTER FOR REGRET that the avoidable loss of buildings of architectural and historic merit in Ottawa is regarded as a local, rather than a national matter. We remember the Sparks house, and the old Supreme Court building which were destroyed without a voice of protest, so far as we know, from outside the Capital. The latter was removed to provide a parking lot. We remember vividly the threat to the West Block of the Parliament Buildings. Had such a threat involved a wing of the Houses of Parliament at Westminster, we are quite sure that the protest would have been a national one, but the alarm for the West Block was confined, so far as we know, to the Ottawa Press and the RAIC *Journal*.

A new disaster has befallen the Capital. It is true, a minor one, but one of a series of which we do not know the end. It is also, in a sense, a major disaster because it affects a street, Sussex, that is in many ways not less important than Wellington Street or Elgin.

For the Canadian, the limited stretch of Wellington Street will always be important because of Parliament, but Sussex Street has a significance and a charm unique in Canada. It is the home street of the Prime Minister, of the Governor-General, of the Mint and of numerous embassies. Architecturally, its dignity has been enhanced by the presence of the new city hall on Green Island.

Such a street, in Europe, would be entered through an arch or a Brandenburg Gate. It would be foreign to our democratic ideas to enter it between the lodges that flank Kensington Palace Gardens, but, yesterday, we entered Sussex Street past a gas station. Today, we have allowed an old hotel to be destroyed, and its place taken by a second gas station.

Gouldens Hotel was built about 1850, and, if it had little history behind it, it had a very definite architectural quality. The building has been described as having the typical street front of Lower Town, but it was a front that matched most harmoniously La Salle Academy, on one side, and the house of the Grey Nuns on the other. Both these buildings are of architectural and historical interest, and they face property where important Government buildings will eventually be erected.

The demolition of the hotel raised an intense newspaper controversy in the Capital in which the Government, the National Capital Commission and the City came in for criticism. Knowing something of the membership of the N.C.C. one can assume the most sympathetic treatment for the hotel, and an understanding of the architectural possibilities for the street. The Government was in the embarrassing position of knowing that, if the gasoline company were refused the permit for the Gouldens site, the company could have bought a site further up the street — even opposite the Prime Minister's house!

Such a situation is, of course, intolerable, and stems from the fact that the City of Ottawa lacks a comprehensive central zoning by-law. The N.C.C. has already taken emergency steps in pressing the City to establish an interim zoning by-law for a period of eighteen months. It is to be hoped that the lesson of the Gouldens Hotel will shame the municipality into passing the interim by-law at the same time it prepares a by-law that will prevent such tragedies as we have recently witnessed ever occurring again.

E.R.A.

UN CRIME . . . CAPITAL

IL EST REGRETTABLE que la perte inutile d'immeubles offrant un certain intérêt par leur architecture et leur histoire, à Ottawa, soit considérée comme une affaire d'intérêt local plutôt que national. Rappelons-nous la maison des Sparks et l'édifice de l'ancienne Cour suprême qui ont été détruits sans un mot de protestation, à notre connaissance, hors d'Ottawa. Et ce dernier immeuble a été démoli pour faire place à un terrain de stationnement. Nous nous souvenons bien du sort dont était menacé l'édifice de l'Ouest, des édifices du Parlement. S'il s'était agi d'une aile du Parlement de Westminster, nous sommes persuadé qu'il y aurait eu des protestations dans toute l'Angleterre; mais seuls les journaux d'Ottawa et le *Journal* de l'Institut ont fait entendre des cris d'alarme lorsqu'il s'est agi de la démolition de l'édifice de l'Ouest.

Un nouveau malheur vient de s'abattre sur la capitale. Non pas un grand malheur, sans doute, mais l'un d'une suite de malheurs dont on ne connaît pas la fin. D'une certaine façon c'est peut-être aussi un grand malheur puisqu'il atteint une rue, la rue Sussex, qui n'est pas moins importante, à bien des égards, que la rue Wellington ou la rue Elgin.

Aux yeux du Canadien, une partie de la rue Wellington sera toujours importante à cause du Parlement; mais la rue Sussex possède une signification et un charme uniques au Canada. C'est là qu'habitent le premier ministre et le gouverneur-général; c'est là aussi que l'on voit l'Hôtel des monnaies ainsi que plusieurs ambassades. Du point de vue architectural, la rue vient d'acquérir un nouvel intérêt avec la construction de l'hôtel de ville sur l'île Verte.

En Europe, on accéderait à une rue de cette importance par un arc de triomphe ou une porte monumentale. Il serait contraire à nos idées démocratiques d'y pénétrer en passant entre les loges qui flanquent Kensington Palace Gardens, mais hier nous entrions dans la rue Sussex en passant près d'un poste d'essence. Aujourd'hui, on a laissé démolir un vieil hôtel et aménager un autre poste d'essence à sa place.

L'hôtel Gouldens a été construit vers 1850, et si l'histoire ne l'a pas effleuré il avait quand même des qualités architecturales incontestables. On a dit que l'hôtel avait la façade typique des maisons de la basse-ville, mais c'est une façade qui s'harmonisait bien avec l'Académie de La Salle d'un côté et la résidence des Soeurs Grises de l'autre. Ces deux derniers immeubles sont intéressants tant du point de vue historique que par leur architecture, et ils s'élèvent en face de terrains où le gouvernement érigea un jour d'importants édifices.

La démolition de l'hôtel a soulevé une vive controverse dans la capitale, au cours de laquelle on a critiqué le gouvernement, la Commission de la capitale nationale ainsi que les autorités municipales. Connaissant un peu les membres de la Commission, on peut être assuré qu'ils auraient traité l'hôtel avec tous les égards, et qu'ils comprennent quel parti l'on peut tirer de cette rue et de son architecture. Le gouvernement se trouvait dans une posture fort embarrassante car il savait que si la compagnie se voyait refuser le permis d'aménager son poste d'essence sur l'emplacement de l'hôtel Gouldens, elle pouvait acheter un autre terrain un peu plus loin, même en face de la résistance du premier ministre.

Une telle situation est évidemment intolérable; elle provient de ce que la ville d'Ottawa ne possède pas de règlement uniforme et unique sur le zonage. La Commission de la capitale nationale a déjà pris des mesures d'urgence en pressant la ville d'établir un règlement de zonage provisoire, d'une durée de dix-huit mois. Espérons que les autorités municipales, honteuses de l'aventure de l'hôtel Gouldens, s'empresseront d'adopter leur règlement provisoire en même temps qu'elles prépareront un règlement qui empêchera de se reproduire des malheurs comme ceux dont nous avons été récemment témoins.

E.R.A.

THE GREATER NIAGARA GENERAL HOSPITAL

Niagara Falls, Ontario

Architects & Engineers

John B. Parkin Associates, Toronto

Hospital Consultants

Agnew, Peckham & Associates, Toronto

General Contractors

*Smith Brothers Construction Limited
Niagara Falls*

by John E. Owen

THE NEW GREATER NIAGARA HOSPITAL, serving the municipalities of Niagara Falls, Stamford and Chippawa, replaces the original hospital built in 1908.

An early survey by consultants Agnew, Peckham and Associates reviewed the possibility of expanding the original building and resulted in the conclusion that a new hospital must be built. The consultants' survey indicated generally that a hospital of approximately 250 beds was required and that expansion would be necessary in the immediate future. The survey also included facilities for the nurses' residence and training school capable of housing some 60 students.

During the very early discussions relative to the building program, the former Provincial Minister of Health, Dr Mackinnon Phillips, had completed studies which lead to the adoption by the Board of Governors of his idea for a "flattened-out" hospital. The studies were aimed at reduc-

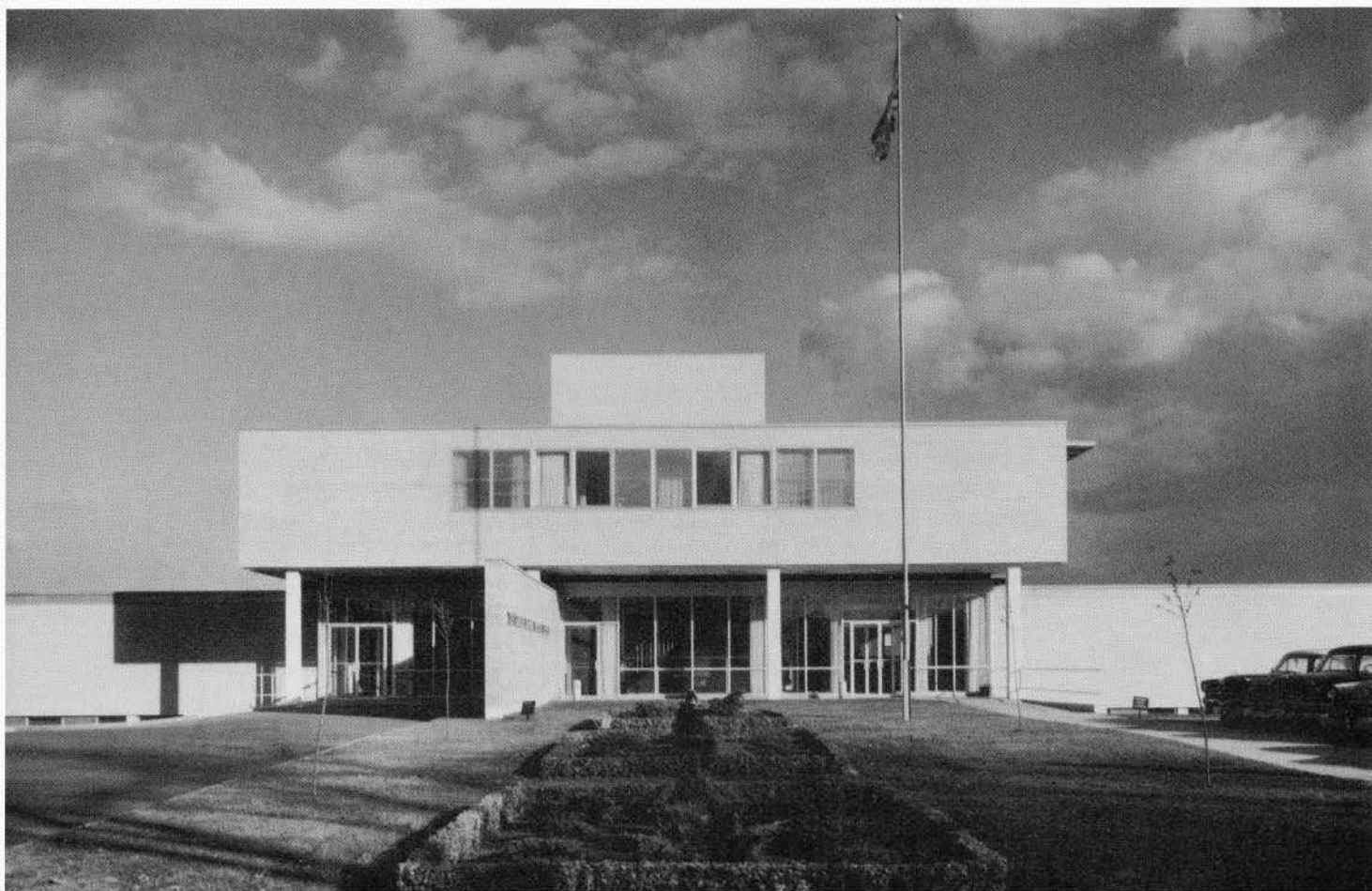
ing the construction costs without hampering the efficient operation of the hospital.

Analysis indicated that a large percentage of beds in a general hospital were occupied by chronic, convalescent and non-acute cases, including normal maternity, and not as commonly assumed by the acutely ill. The advent of health insurance schemes, the welfare state, modern medicine and other trends have helped to bring about this situation.

The "Phillips plan" envisaged a series of one-storey wings radiating from a central core which could house patients requiring a minimum of care. Those patients admitted for treatment requiring intensive care were to be housed in nursing units close to the core of the building where the diagnostic, treatment and supply departments were at hand and where skilled personnel were readily available.

It will be noted from the plan illustrated that the hospital is divided into a series of one-storey nursing wings con-

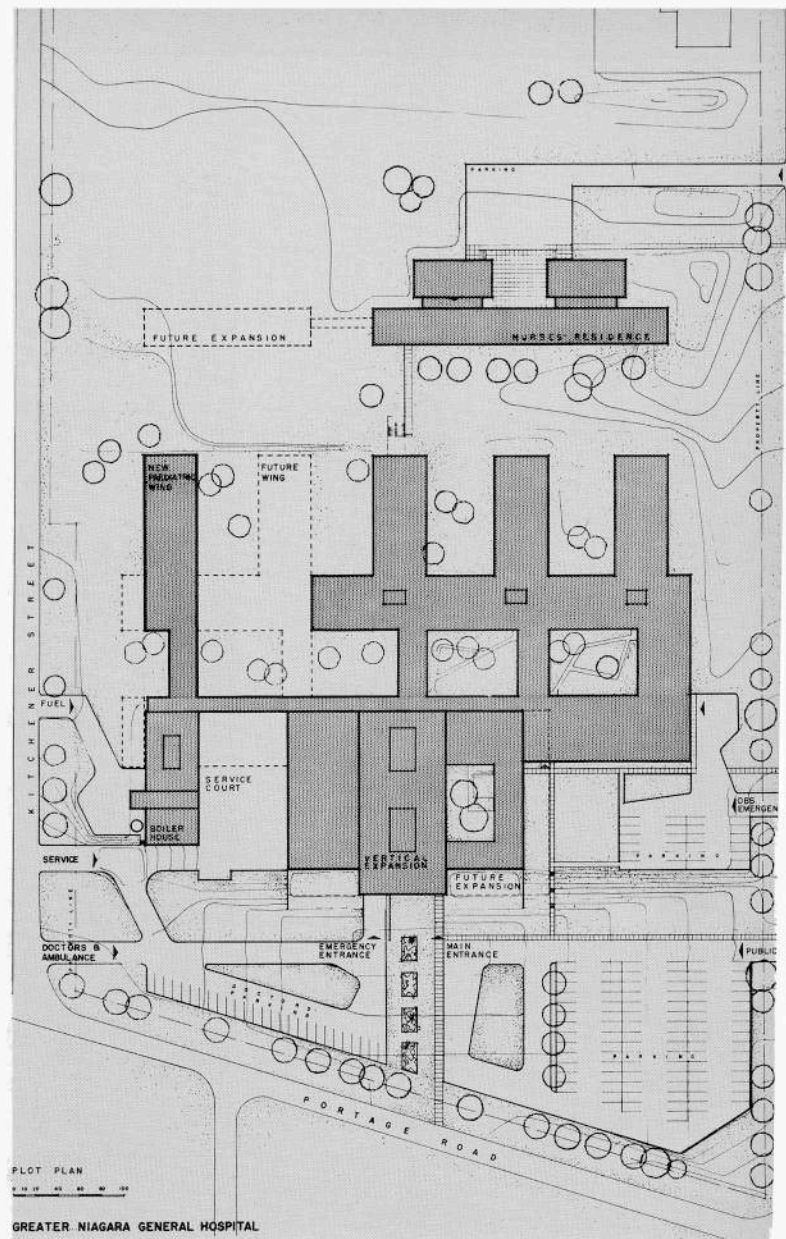
PANDA



Right: plot plan.

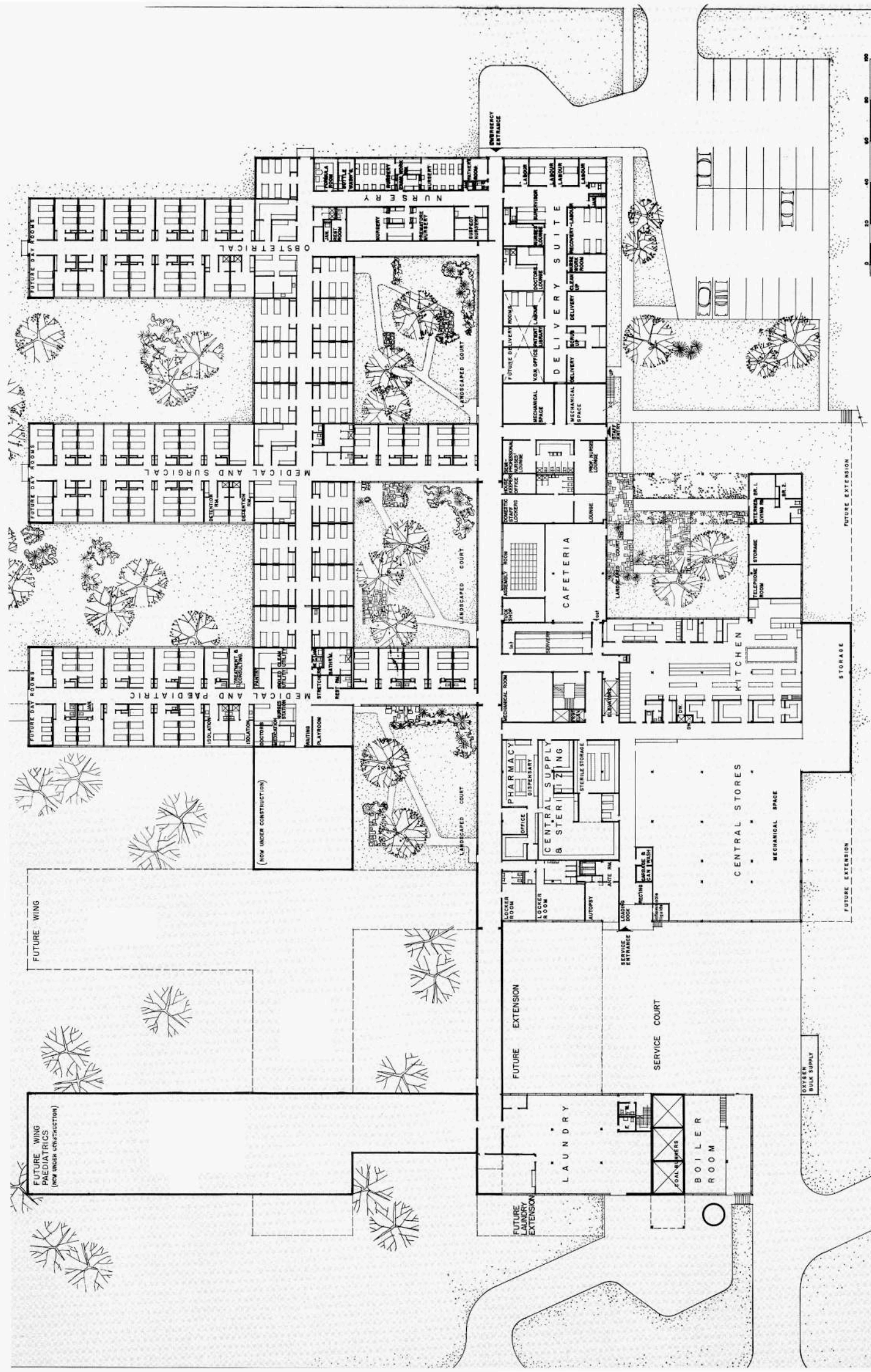
Left: head-on view of entrance, emergency on left, exit stair centre and lobby entrance right.

Below: close-up from North Street approach.



PANDA





GREATER NIAGARA GENERAL HOSPITAL
FIRST FLOOR PLAN

November 1959

FUTURE WING
PAEDIATRICS
(NEW UNDER CONSTRUCTION)

FUTURE WING

(NOW UNDER CONSTRUCTION)

FUTURE DAY ROOMS

OBSTETRICAL

MEDICAL AND SURGICAL

FUTURE DAY ROOMS

PEDIATRIC AND MEDICAL

NURSERY

DELIVERY SUITE

MECHANICAL SPACE

MECHANICAL SPACE

MECHANICAL SPACE

MECHANICAL SPACE

MECHANICAL SPACE

MECHANICAL SPACE

MECHANICAL SPACE

MECHANICAL SPACE

MECHANICAL SPACE

MECHANICAL SPACE

MECHANICAL SPACE

MECHANICAL SPACE

MECHANICAL SPACE

MECHANICAL SPACE

MECHANICAL SPACE

MECHANICAL SPACE

MECHANICAL SPACE

MECHANICAL SPACE

MECHANICAL SPACE

MECHANICAL SPACE

MECHANICAL SPACE

MECHANICAL SPACE

MECHANICAL SPACE

MECHANICAL SPACE

MECHANICAL SPACE

MECHANICAL SPACE

MECHANICAL SPACE

MECHANICAL SPACE

FUTURE EXTENSION

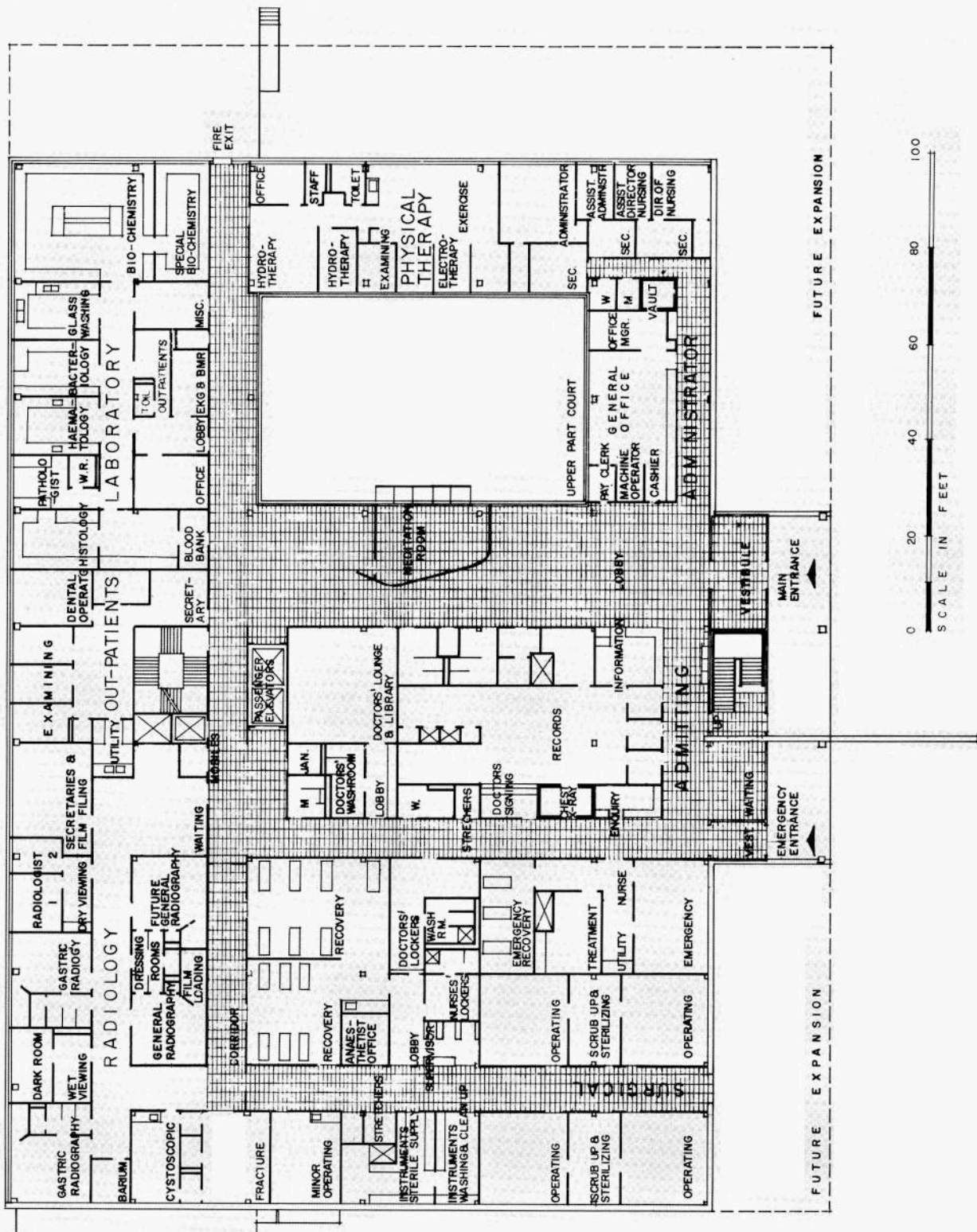
STORAGE

FUTURE EXTENSION

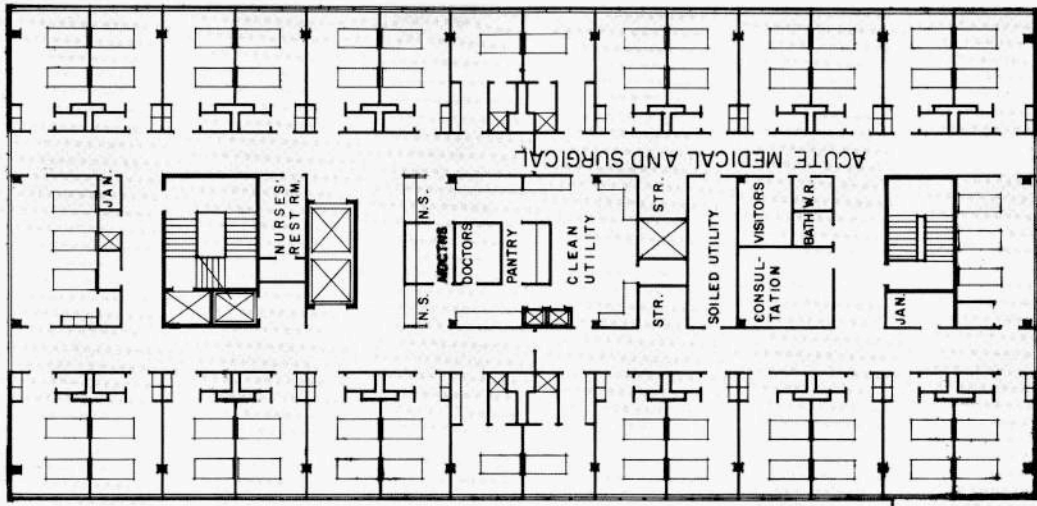
OXYGEN BULK SUPPLY



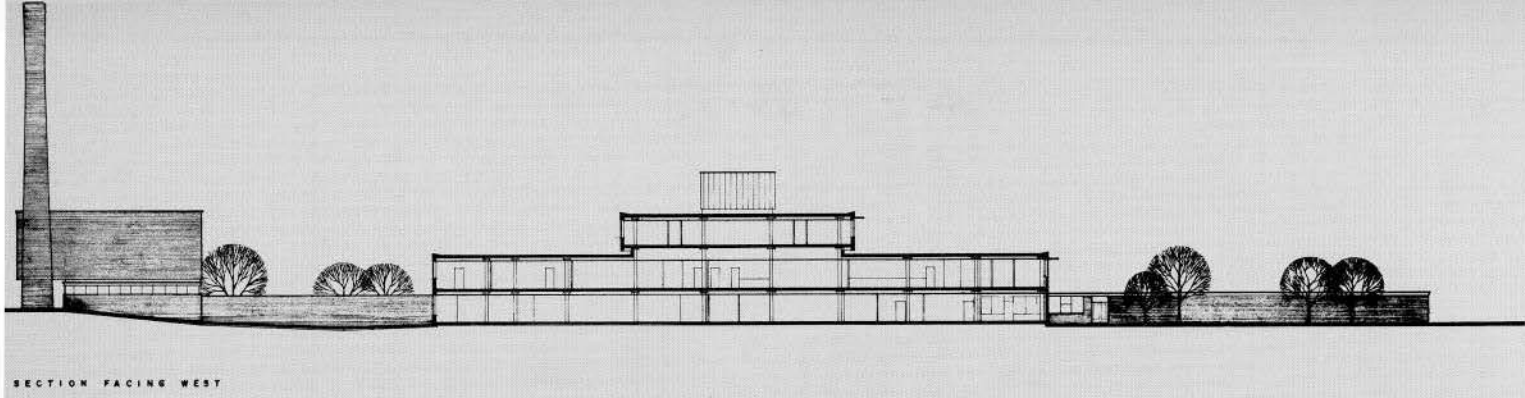
GREATER NIAGARA GENERAL HOSPITAL



Second floor plan



Third floor plan



connected to a block or central core. The central block contains three levels. A 58-bed double-corridor nursing unit comprises the third floor, all diagnostic and active treatment services are on the second floor, and the processing and supply departments (i.e. laundry, sterile supply, pharmacy, central stores, kitchen) are on the first floor. The plot plan shows the Nurses' Residence and Training School top right. It is connected to the hospital by underground corridor. At the left is the laundry and power plant.

Services and Patients in Horizontal Contiguity

In solving the planning problem, the architects paid heed to the basic requirements of "convalescent wings" and "high-powered" core and carried the idea to a logical solution in dealing with all phases. Supplies and services are essential to the less acute as well as the acute patient and a hospital plan which would lose sight of this fact would be, without doubt, inefficient. All types of patients rely on the services in varying degrees for adequate care.

To place all services and supplies within reach of the patient and staff is much easier in a vertically planned hospital than in a "spread-out" hospital. With the Niagara plan, the architects have endeavoured to achieve this through horizontal contiguity. Generally, it has been accomplished by locating the process and supply departments on the same level as the majority of patients and directly under the intensive care and treatment facilities. Goods can be easily routed vertically or horizontally without undue travel or delay. Horizontal travel for the wings was carefully analyzed. It was found that, on the average, horizontal travel would consume no more and, in fact, often less time than vertical travel in many hospitals. Patients in the horizontal wings would, therefore, be closer — in time — to the central core than if they were stacked above it.

Most hospitals find it necessary to expand their facilities at some time during their useful lifetime or, in growing communities, at frequent intervals. Designing a hospital which envisages 100 per cent expansion is, we feel, mandatory. A master plan was conceived for Niagara. To ensure flexibility in the master plan both vertical and horizontal expansion was allowed for. This enables the Hospital to expand the convalescent wing accommodation or the acutely-ill accommodation at will or as future demand dictates. The plans indicate positions for a fourth and fifth wing, affording an approximate addition of 140 beds. The foundations and superstructure are designed to carry a fourth and fifth floor, similar to the existing third floor, which will increase the capacity by another 116 beds. If Niagara grows to its ultimate capacity it will be able to accommodate 500 active treatment beds without compromising the master plan.

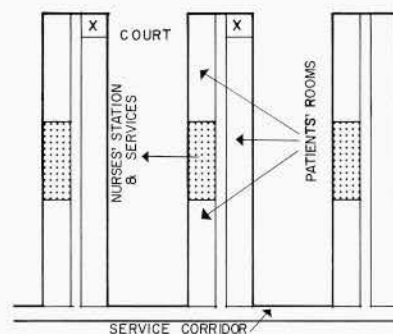
We must realize, of course, that beds alone do not make

a hospital. If beds are added, services usually have to increase. All hospital designers and consultants have witnessed the unfortunate plight brought about by the addition of beds without any consideration to the effect on services. The first impact of expansion at Niagara will require no change to the services. The "chassis" has been sized to handle upwards of 300 active treatment beds. When expansion of the chassis is required the master plan for enlarging various departments can be followed.

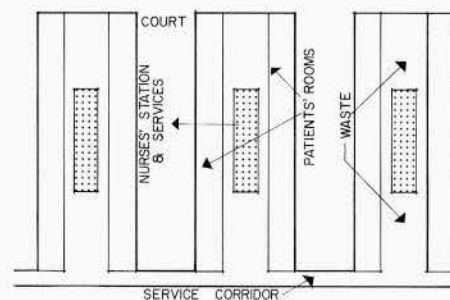
Schemes Considered

Diagrams illustrate the schemes considered for the one-storey wings. Scheme (a), representing single-corridor nursing units, presented corridors which were too long, nursing stations that were too far from the visitors' entrance at one end, unpleasantly long courts between wings and excessive walking distances between points marked "X".

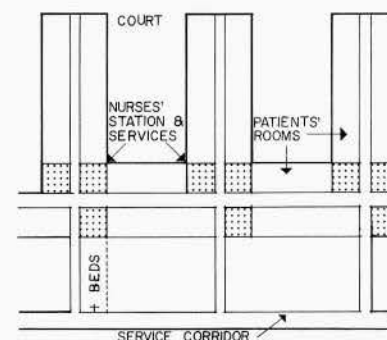
Scheme A

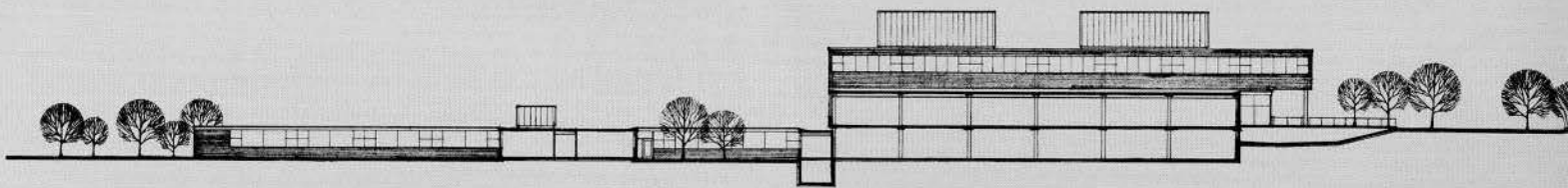


Scheme B



Scheme C



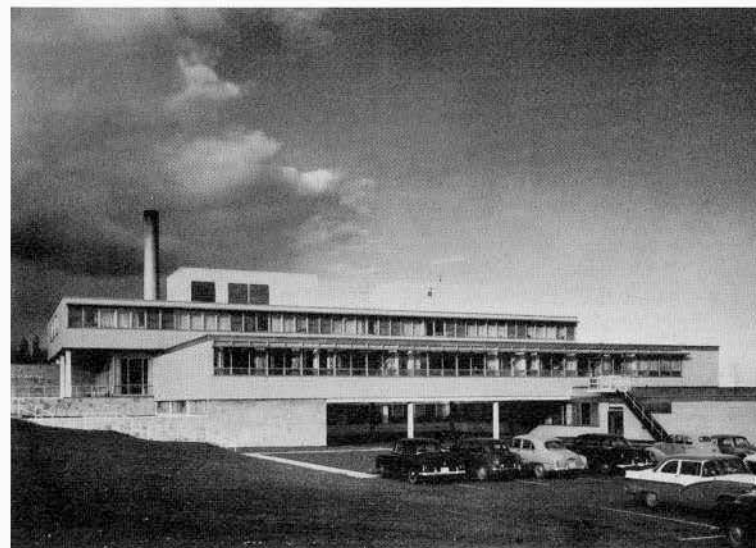
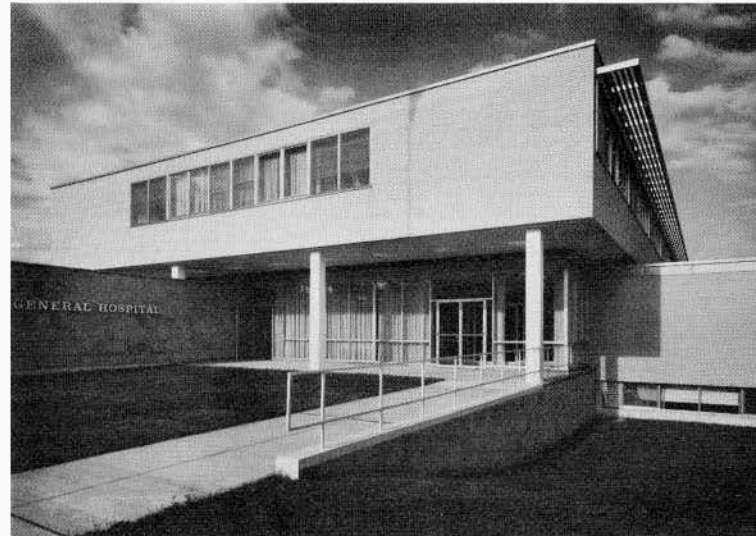


SECTION FACING NORTH

Scheme (b), indicating the shortening of wings by the use of double-corridor nursing units, was discarded as unsatisfactory because it left wasteful, unused central space and narrowed the courts excessively. Scheme (c), finally adopted, used connecting links of four-bed wards across the courts with service rooms located at the intersection of corridors. The final scheme gave reasonable length to corridors, afforded good control from the nurses' station, created courtyards more pleasant in proportion and shortened walking distances. The scheme used also gave a measure of flexibility because the four-bed wards can be re-allocated between nursing units if the requirements vary.

By utilizing to advantage the gradual west to east slope in the site, a grade-level entrance was created at the second floor. Both the main and emergency entrances are located here. The grouping of the two entrances channels all patients, whether ambulatory or not, through areas adjacent to the records and admitting department. This provides, together with the information and switchboard, a control point or nerve centre for all traffic. Visitors and ambulatory admissions enter through the lobby to one elevator while stretcher cases using the emergency entrance are routed down a separate corridor to the second elevator. With the grouping of entrances, the reduction of staff for night duty creates no problem in manning a "front door" and a "back door".

The second floor houses all departments concerned with diagnostic procedures and treatment for both in-patient and out-patient. Out-patients need not wander about seeking out departments on other floors. The emergency department is immediately adjacent to the entrance and is within easy reach of the facilities and technical staff of the x-ray department, fracture room, surgical suite and laboratory. The recovery room is centrally located to receive cases from surgery, emergency and dental operating. The departments for examination and treatment of out-patients are conveniently grouped – physical therapy, laboratory, radiology, etc. Out-patient traffic is handled from the same control point as was mentioned above. The generous and comfortable lobby, which opens on to a garden court, makes

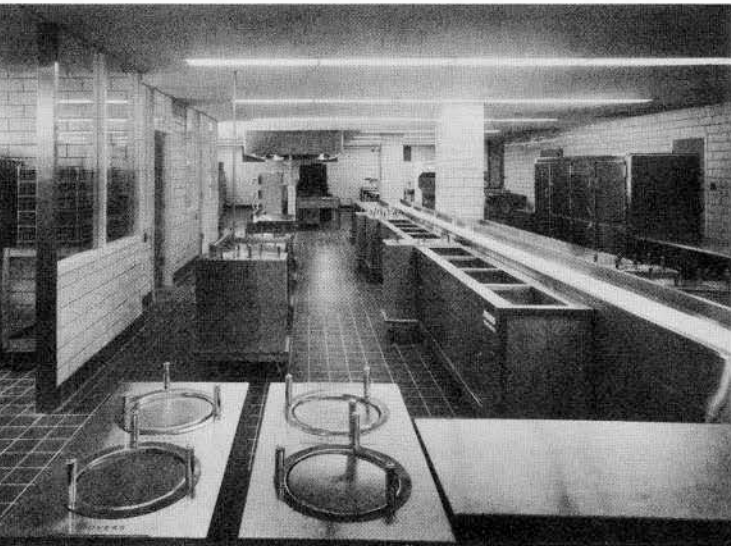
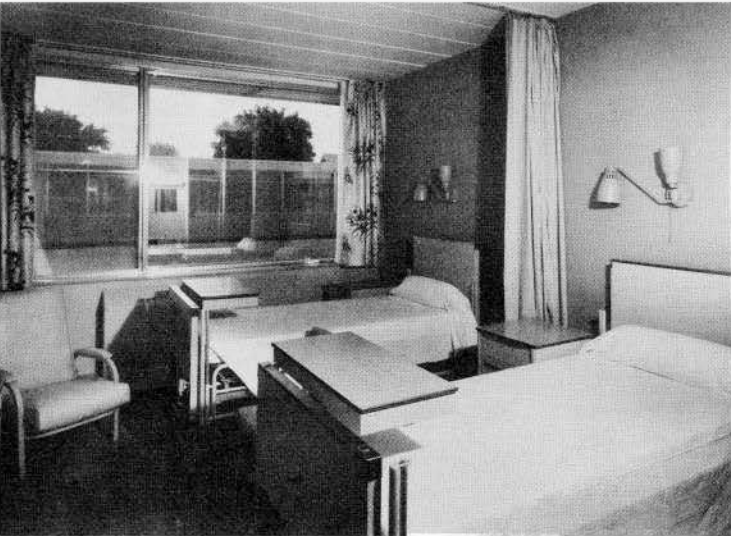
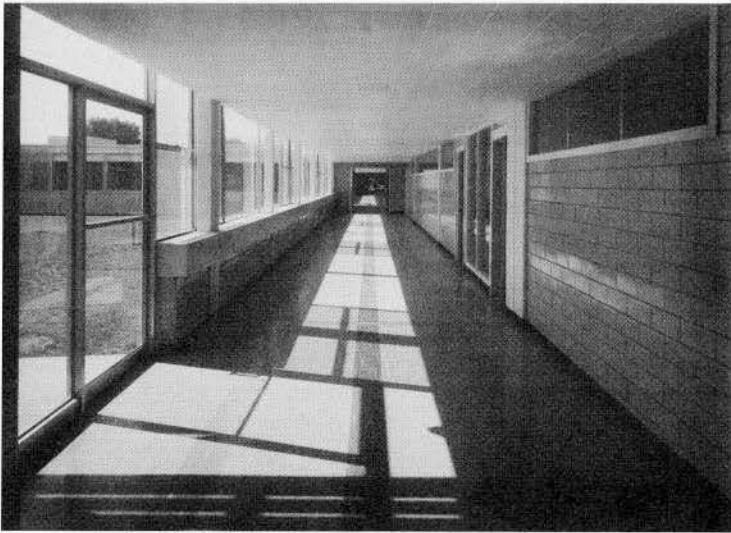


PANDA

Top: close-up of main entrance. Columns support end of third floor nursing unit forming portico.

Centre: looking from emergency fire exit towards vestibule of emergency entrance, with protective stone wing wall behind.

Bottom: view of three storey main block from south. Main entrance at second floor level is under overhanging third floor on left.



PANDA

Top: a wide, light and airy corridor connects all patient wings to the main block.

Centre: typical semi-private room in one storey wings looking out double glazed window to courtyard.

Bottom: view of kitchen with tray set-up on right. Mobile lowerators are moved into place along serving belt from dishwashing on left.

the horizontal grouping of departments possible and the control of traffic feasible.

The third floor, as previously noted, contains 58 acute medical and surgical beds. The double-corridor principle is utilized. The service areas are placed between corridors with patients' rooms on the periphery. The floor is so planned that with a longitudinal division each of the nurses' stations carries only up to 29 beds. This is a relatively small number which leaves the staff with sufficient time to devote to the nursing of the acutely ill. During the less active night hours, from the same location in plan, one supervisor can control the entire floor – an economy in operation.

Horizontal planning helped us build for less at Greater Niagara. In the single-storey portions there are no basements and the floors are slab-on-grade. In lieu of a more expensive, fireproofed steel frame, all single-storey construction makes use of load-bearing masonry walls. There are fewer elevators than would be required for a multi-storied building. Elevators are expensive and there are usually too few for the traffic demand. The grouping of nursing units into wings on one floor eliminated the repetitive floor area required for elevators, stairs, lobbies and mechanical shafts.

Planning to aid in the reduction of annual operating costs was a thought foremost in our minds at all times during the development of Greater Niagara. The grouping of supply services horizontally on the first floor will facilitate handling and distribution. The horizontal contiguity of departments on the second floor can aid in staff reduction and help create ease of communication and circulation. An automatic-pneumatic-tube system interconnecting all departments is a further aid to ease of operation.

The apparent disadvantage of greater distances to be travelled is not as serious as would seem evident. Corridors within departments and within nursing units are no longer than in traditional hospitals. The difference in time and distance between departments on one level is no greater or even less. The long corridors required are those used less frequently.

The Greater Niagara General Hospital has been in operation for little more than a year. Another patients' wing is presently being added.

CONSTRUCTION COSTS:

Basic Contract Price

(including all site services, paved walks, roads, parking areas, sodding and seeding, landscaping)\$2,340,000

Group I Equipment

(together with installation and including laundry, kitchen and servery, x-ray, pneumatic tubes, sterilizers, laboratory and pharmacy, OR and OBS lights, physical and hydro therapy, autopsy and morgue)..... 470,000

Total construction cost..... 2,810,000

Total area 156,676 sq. ft. cost per sq. ft. \$17.90
 Total cubage 1,844,175 cu. ft. cost per cu. ft. \$ 1.52

Total bed count for government grants:

239 active beds	— 239
44 bassinets (3 = 1 bed for grant purposes)	— 14
13 surgical recovery beds	— 13
3 emergency recovery beds	— 3
4 obstetrical recovery beds	— 4
6 labour beds	— 6
12,000 sq. ft. auxiliary services area (300 sq. ft. = 1 bed for grant purposes)	— 40
Total	319 beds

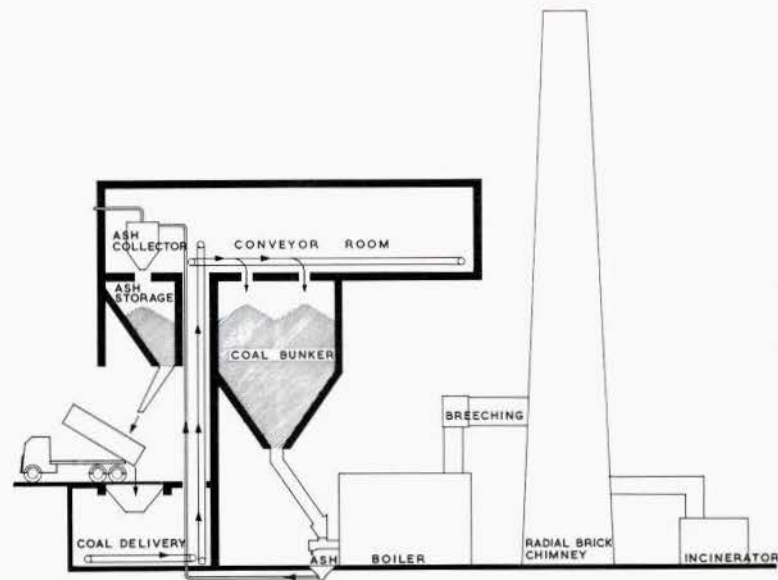
CONSTRUCTION OUTLINE:

1. Structural clay tile bearing walls with precast concrete roof and slab on grade for wings.
2. Fireproofed steel columns supporting reinforced concrete flat slab floors for the main building.
3. Partitions — structural clay tile plastered.
4. Glazed structural clay tile walls for all corridors, operating and delivery rooms, pantries and utility rooms.
5. Exterior is cream-coloured face brick.
6. Window frames, aluminum, with double glazing.

POWER PLANT AND MECHANICAL SERVICES

THE MOST IMPORTANT FACTORS in designing the power plant were its location relative to the hospital building itself and the ultimate capacity it would be called upon to carry. Because 100% expansion was contemplated and designed for at the outset, we can see from the plans that the location is such that there will be no interference with the ultimate scheme.

Basically there are two high-pressure steam boilers of the water-tube type with space left for the addition of a third as the hospital grows. The addition of the 4th and 5th wings will not necessitate addition of the third boiler. It is not until the upper floors are added that this will be necessary. The power plant is so located on the site that prevailing winds from the south and south-west carry all chimney smoke and gases away from the building. Topography of the site is such that fuel may be brought in at a level approximately one storey above the boiler room floor. From here it is conveyed vertically into coal bunkers and fed by gravity into the boilers. From the service court side a mezzanine in the boiler room opens at grade level through an overhead door for ease of access to equipment for servicing. All piping from the power plant to the hospital travels by underground corridor to a distributing point in the centre of the building. No patient rooms are adjacent to or facing the power plant wing, so the noise and activity of the plant will not affect the comfort of the patients. Although separated from the main portion of the building, the power plant is, nevertheless, located in such a position that the high pressure steam lines travel the shortest possible length to a mechanical room which is located in the heart of the building. In this room the steam pressure is reduced for the various services, such as sterilizing, kitchen equipment, heating and ventilating. There are two or three sets of pressure reducing valves depending on the seasonal load. Above the basement-level mechanical room is another mechanical room for the distribution of heat to the various zones. This room contains converters and circulating pumps for distributing hot water throughout the building via heating mains which supply hot water convectors in the wards.



The ward heating is controlled by zone thermostats.

Each of the ward wings has a general fresh air supply and exhaust system, the equipment for which is located in pent-houses over the utility rooms. In addition to this general ventilating system there are ventilating systems for specialized areas such as the central sterilizing department, kitchen, cafeteria, pharmacy, lab, X-ray suite and so on. The air-handling equipment for these areas is housed in pent-houses on the third floor roof.

The delivery suite, nursery and surgical suite are equipped with air-conditioning systems which incorporate filtering, ventilation, heating, cooling, humidifying and dehumidifying with the equipment for each system located adjacent to the area served.

In choosing fuel for the firing of the boilers all types were considered. The conclusions reached after various reports by the architects and engineers were in favour of coal. It was found that a considerable yearly saving could be made by using coal and that this would easily offset the additional cost to install automatic fuel and ash-handling equipment. The dust and dirt which usually accompanies bituminous coal is thus eliminated. The diagram indicates graphically how this is accomplished through a system of hoppers and conveyors. The ash from the boilers is handled by a pneumatic under-floor system which stores ashes in a bin over the coal receiving hopper. The truck delivering coal could, when empty, load up with ashes from the overhead storage bin. Electrical power is supplied to the transformer vault adjacent to the boiler room by two underground high-voltage cables. There are two separate transformers connected to an automatic-high-voltage switching device which will maintain service in the event that either a transformer or a high voltage cable fails. In addition, there is a diesel-powered, emergency-generator system which, in the event of a power failure, automatically "cuts in" and supplies the hospital with emergency power.

Some of the other mechanical features in the hospital include automatic audio-visual nurse-call system, automatic pneumatic-tube system interconnecting all departments, fire alarm and detection system with manual and automatic stations, doctors' register and paging.

There is piped oxygen throughout the building supplying all patient and treatment rooms. In addition to the piped oxygen, the delivery and operating rooms are supplied with piped vacuum and nitrous oxide.

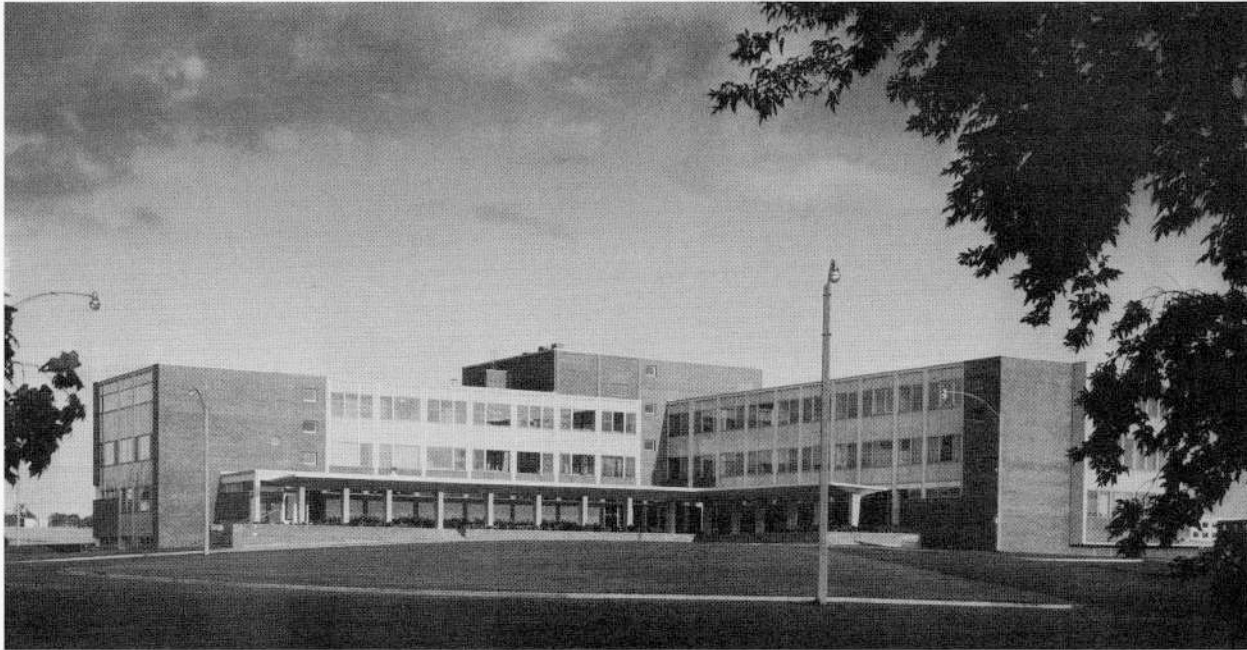
*John E. Owen,
 J. Ewart Mews, P. Eng.*

CANADIAN FORCES HOSPITAL

Kingston, Ontario

Architects
Shore & Moffat
Toronto

Contractors
M. Sullivan & Son
Arnprior & Kingston



NATIONAL DEFENCE PHOTOGRAPHS

1st floor plan



A 125-bed hospital for the armed forces at Barriefield Military Camp on the eastern outskirts of the City of Kingston. The contract value was \$2,475,000.

The building, which was opened this summer, is a T-shaped structure consisting of three storeys and a ground floor about 281' x 50' and 136' x 50'.

Construction is reinforced concrete on a reinforced concrete foundation and brick and perma-enamelled panel wall. Roof is 20-year bonded tar and gravel. Floors are mostly terrazzo and partitions are glazed facing tile. Heating is by hot water from a central heating plant. The building contains private, semi-private and multi-bed rooms, two major operating rooms, an emergency workroom, one central sterilizing supply centre and a complete hospital kitchen. Other features include a dental clinic, eye, ear and throat clinic, occupational therapy, hydro therapy, radiography and pathology, autopsy room, compounding and dispensing pharmacy and X-ray services. Out-patient services also are provided for.

The hospital has sufficient surrounding space to allow a helicopter ambulance to land close by. In emergencies, patients are flown in by the RCAF rescue group stationed at Trenton, Ontario.



Helicopter ambulance emergency service

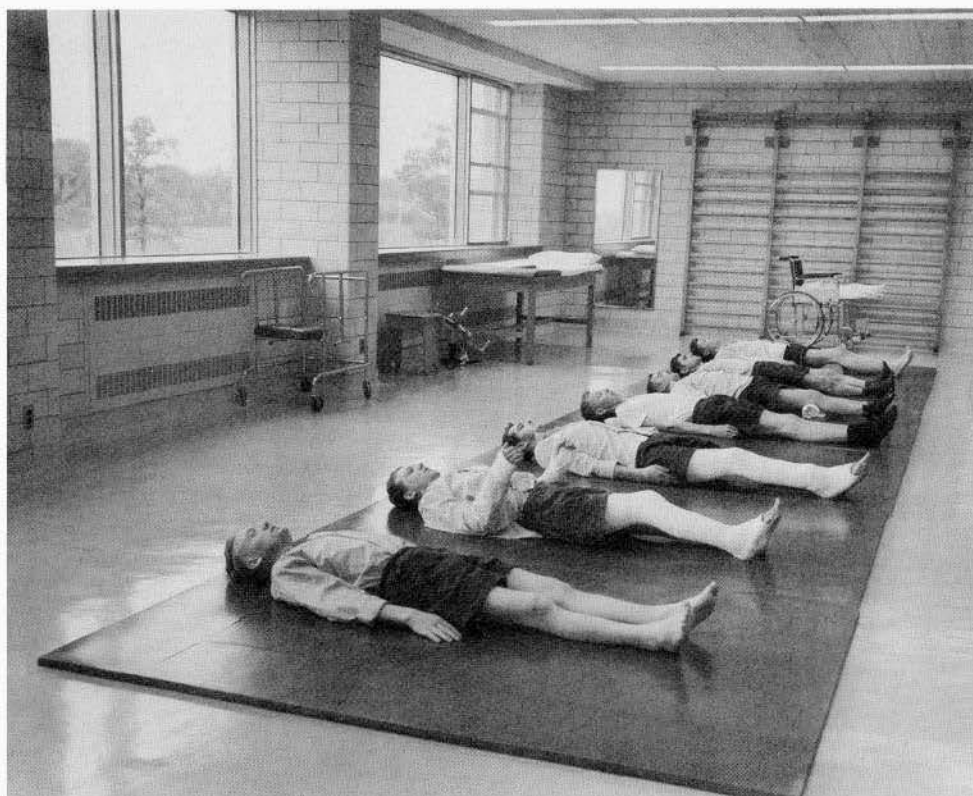
3rd floor plan



CANADIAN FORCES HOSPITAL



View of main lobby through decorative wooden divider



Physiotherapy class doing leg exercises

*Left: typical ward
Right: physiotherapy department*



ROYAL VICTORIA HOSPITAL

Montreal

THE MODERNIZATION PROGRAM

Architects

*Barott, Marshall, Merrett & Barott
L. Spector, Structural Engineer*

Mechanical & Electrical Engineers

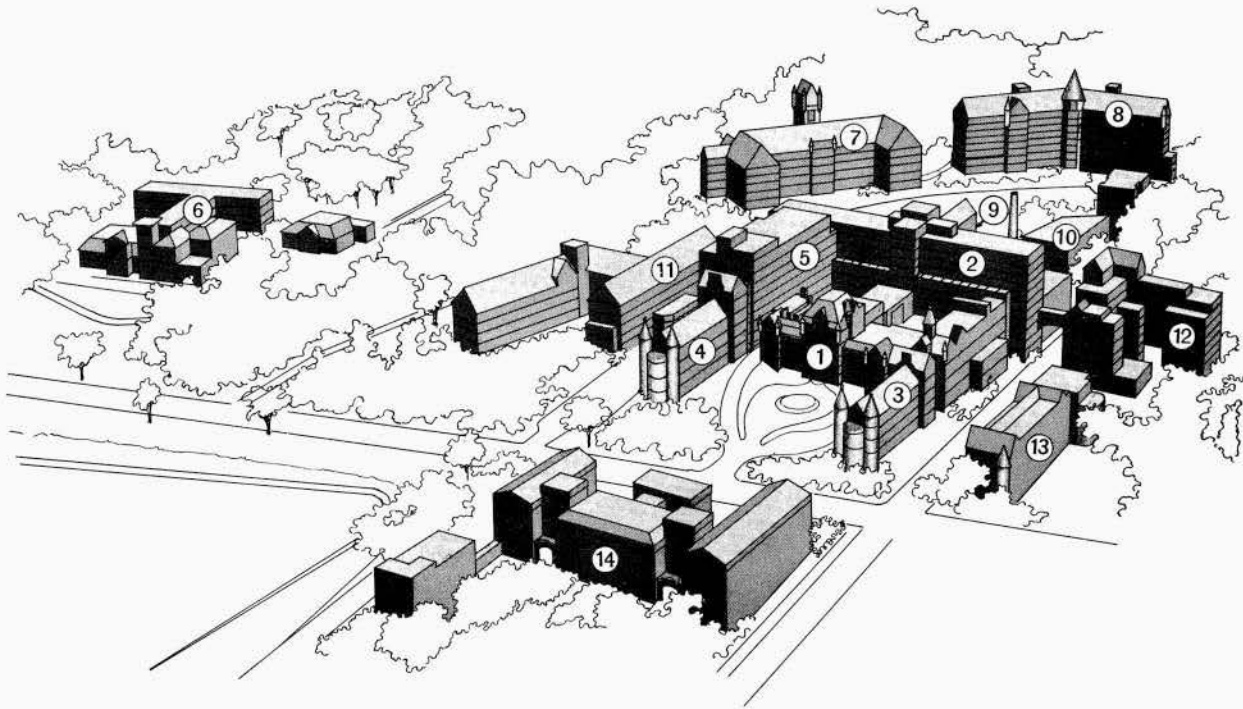
McDougall & Friedman

Contractors

New Surgical Wing — Angus Robertson Limited

New Medical Building — Anglin-Norcross Quebec Limited

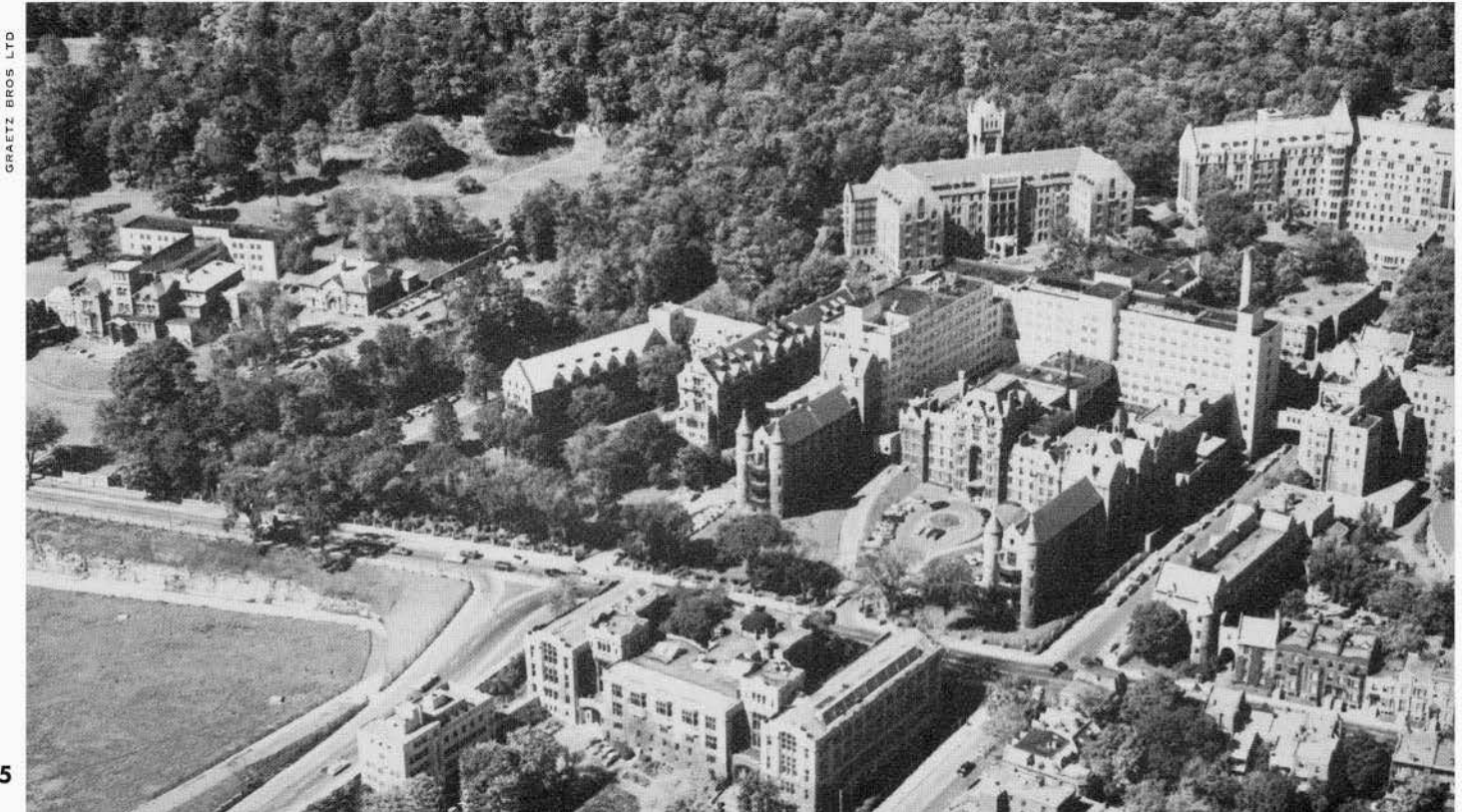
ROYAL VICTORIA HOSPITAL



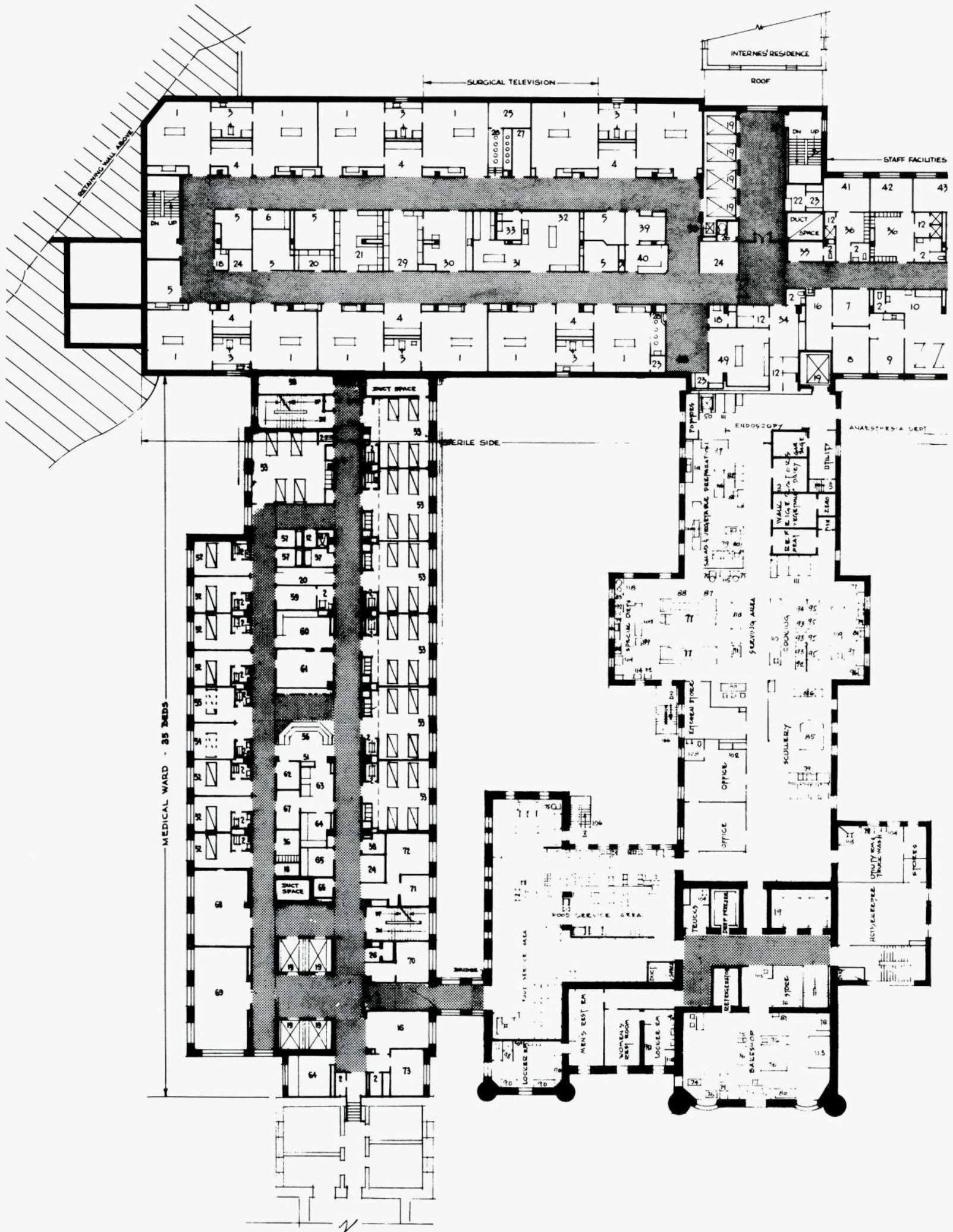
- 1. MAIN BUILDING
- 2. NEW SURGICAL WING
- 3. OLD MEDICAL WING AND OUTDOOR DEPARTMENT
- 4. OLD SURGICAL WING
- 5. NEW MEDICAL WING

- 6. ALLAN MEMORIAL INSTITUTE
- 7. ROSS MEMORIAL PAVILION
- 8. WOMEN'S PAVILION
- 9. INTERNS' RESIDENCE
- 10. POWER HOUSE AND LAUNDRY

- 11. NURSES RESIDENCE
- 12. MONTREAL NEUROLOGICAL INSTITUTE, MCGILL UNIVERSITY
- 13. PATHOLOGICAL INSTITUTE OF MCGILL
- 14. MEDICAL BUILDING, MCGILL UNIVERSITY



GRAETZ BROS LTD



274 new beds as well as a complete floor of twelve operating rooms with all ancillary areas; a complete floor for Radiology; another for a central cafeteria and its services, and lecture and conference rooms; four ward floors and other departmental facilities.

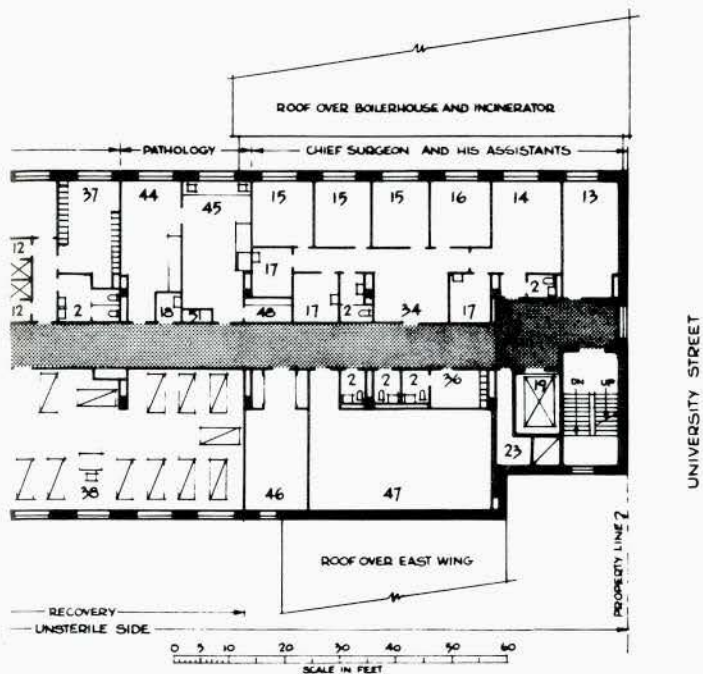
This unit was built in the centre of the existing complex of old buildings which originated in 1854, and spanned across the north ends of the three wings of the old building. It had to serve, at one key level "C", as the main connection or crossroads of passages linking the central wings with the Ross Memorial (private patients') Pavilion and the Women's Pavilion to the north, and the Montreal Neurological Institute across University Street to the east. This problem, together with the difficulties of elevations brought about by the steeply rising site on the south slope of Mount Royal, and the necessity of synchronizing new construction with considerable remodelling of existing buildings without disrupting hospital activities, resulted in many complexities of planning and structural co-ordination.

The second unit of the program is the new Medical Building, which was occupied on October 18th, 1959. This building replaces part of the original west wing, which housed the old operating suite and wards, and at its north end abuts the westerly end of the new surgical wing. 245 new beds are provided in the new unit, including 53 pediatric beds and 47 beds allocated to other specialties; together with a floor devoted to investigative ward and cardiac laboratories, and added facilities for work with radioactive isotopes. 250 feet long and a total of eleven storeys including the lowest level elevator lobby connecting directly with the Hospital's main entrance, this building is planned on the double corridor system partly dictated by the limitations of the available site in the midst of existing construction. Continuation of the "C" level communicating passages is provided between the old main building and the existing nurses' home to the west. There are seven ward floors including a special investigative ward, a metabolic ward and the pediatric ward at the top, and provision has been made for two additional future floors.

Whereas the Surgical Wing wards were designed as single corridor units, with two nursing units per floor, one each side of a central elevator tower, the Medical Building's double corridor plan provides one central nursing station per floor with all ancillary rooms concentrated in two interior islands. The elevators are toward the south end, on axis with the main cross corridor of the old original hospital. South of the elevators are day rooms, up-patients' dining rooms, doctors' offices, visitors rooms and some teaching rooms; and on one floor an "overnight stay" suite of four rooms is provided for patients required to remain overnight only for diagnostic tests and who thus need only the equivalent of a hotel bed and no nursing care. As part of the Medical Building contract, there is provided an auditorium of 140 seats completely equipped for teaching (including transmission to ear phones at each seat of heart beats of a patient on the stage), a smaller lecture room, and also a small chapel seating 60.

In both new buildings the great majority of beds are in 4-bed wards, with some single rooms and very few 2-bed wards. Patient rooms have each a toilet and washbasin and built-in clothes lockers with cupboards above for suit-cases.

The food distribution system used in the 4-year old Surgical Wing was based on floor pantries or sub-kitchens supplied direct by elevator and dumbwaiter from a new main kitchen built at the same time as the wing over the rear portion of the old central building. With the new Medical Wing,



OPERATING FLOOR,
MEDICAL WARD
LEVEL "E"

ROYAL VICTORIA HOSPITAL

THE FIRST NEW CONSTRUCTION to be undertaken as part of the Royal Victoria Hospital's main extension and modernization program was the new (Surgical) Wing, occupied in December 1955. (The Allan Memorial Institute, the hospital's psychiatric unit, removed from the main group of buildings, added a new extension wing in 1953.) This building, 375 feet long and 10 storeys high, provided

- | | | |
|-------------------------|------------------------|--------------------------------------|
| 1 OPERATING ROOM | 10 JANITOR | 35 ORDERLIES |
| 2 TOILET | 19 ELEVATOR | 36 LOCKERS |
| 3 SUB STERILIZING | 20 LINEN/CLEAN | 37 DOCTORS' LOCKERS |
| 4 SCRUB UP | 21 STERILE STORAGE | 38 RECOVERY RM. |
| 5 ANAESTHESIA RM. | 22 INFORMATION | 39 OFFICE |
| 6 ANAESTHESIA STORAGE | 23 STORE | 40 SUPERVISOR |
| 7 ANAESTHETIST'S OFFICE | 24 SKETCHERS | 41 NURSES' LOUNGE |
| 8 ANAESTHETIST CHIEF | 25 TELEVISION CONTROL | 42 INTERNES' LOUNGE |
| 9 ANAESTHESIA WORK RM. | 26 LINEN CLOSET | 43 DOCTORS' LOUNGE |
| 10 SUB UTILITY RM. | 27 DRUGS & SOLUTIONS | 44 PATHOLOGY SECRETARY'S MICROSCOPES |
| 11 SHOWER | 28 OBSERVATION GALLERY | 45 PATHOLOGY LABORATORY |
| 12 DRESSING | 29 INSTRUMENT RM. | 46 OPERATING DEPT. SECRETARY |
| 13 COFFEE BAR | 30 CLEAN UP | 47 PATHOLOGY SEMINAR RM. |
| 14 SURGEON IN CHIEF | 31 CASP ROOM | 48 BLD BAY |
| 15 ASSISTANT SURGEON | 32 FRACTURE RM. | 49 ENDOSCOPY |
| 16 SECRETARY | 33 DASH RM. | 50 DUMBWAITER |
| 17 EXAMINING | 34 WAITING RM. | 51 PNEUMATIC TUBE STATION |

- MAIN KITCHEN
- | | |
|-------------------------|------------------------|
| 24 FREEZER | 39 LOCKERS |
| 25 W. H.B.E. | 40 SAUN' MALE |
| 26 WORK TABLE | 41 BROTHERS |
| 27 TABLES | 42 FRIGS |
| 28 W. H. B. E. | 43 COMBINATION OVEN |
| 29 SINK | 44 CONT. COFFEE |
| 30 PEPPER | 45 CABINET TABLE |
| 31 SAID SINK | 46 SINK |
| 32 REACH IN REFRIGERATE | 47 FREEZING |
| 33 CUPBOARD | 48 VEGETABLE KEEP SINK |
| 34 HOT & COLD WATER | 49 SALED PREP. SINK |
| 35 HOT & COLD WATER | 50 LINEN CUPBOARD |
| 36 HOT & COLD WATER | 51 DRAIN DRAIN |
| 37 HOT & COLD WATER | 52 W. H. B. E. |
| 38 HOT & COLD WATER | 53 W. H. B. E. |
| 39 HOT & COLD WATER | 54 W. H. B. E. |
| 40 HOT & COLD WATER | 55 W. H. B. E. |
| 41 HOT & COLD WATER | 56 W. H. B. E. |
| 42 HOT & COLD WATER | 57 W. H. B. E. |
| 43 HOT & COLD WATER | 58 W. H. B. E. |
| 44 HOT & COLD WATER | 59 W. H. B. E. |
| 45 HOT & COLD WATER | 60 W. H. B. E. |
| 46 HOT & COLD WATER | 61 W. H. B. E. |
| 47 HOT & COLD WATER | 62 W. H. B. E. |
| 48 HOT & COLD WATER | 63 W. H. B. E. |
| 49 HOT & COLD WATER | 64 W. H. B. E. |
| 50 HOT & COLD WATER | 65 W. H. B. E. |
| 51 HOT & COLD WATER | 66 W. H. B. E. |
| 52 HOT & COLD WATER | 67 W. H. B. E. |
| 53 HOT & COLD WATER | 68 W. H. B. E. |
| 54 HOT & COLD WATER | 69 W. H. B. E. |
| 55 HOT & COLD WATER | 70 W. H. B. E. |
| 56 HOT & COLD WATER | 71 W. H. B. E. |
| 57 HOT & COLD WATER | 72 W. H. B. E. |
| 58 HOT & COLD WATER | 73 W. H. B. E. |
| 59 HOT & COLD WATER | 74 W. H. B. E. |
| 60 HOT & COLD WATER | 75 W. H. B. E. |
| 61 HOT & COLD WATER | 76 W. H. B. E. |
| 62 HOT & COLD WATER | 77 W. H. B. E. |
| 63 HOT & COLD WATER | 78 W. H. B. E. |
| 64 HOT & COLD WATER | 79 W. H. B. E. |
| 65 HOT & COLD WATER | 80 W. H. B. E. |
| 66 HOT & COLD WATER | 81 W. H. B. E. |
| 67 HOT & COLD WATER | 82 W. H. B. E. |
| 68 HOT & COLD WATER | 83 W. H. B. E. |
| 69 HOT & COLD WATER | 84 W. H. B. E. |
| 70 HOT & COLD WATER | 85 W. H. B. E. |
| 71 HOT & COLD WATER | 86 W. H. B. E. |
| 72 HOT & COLD WATER | 87 W. H. B. E. |
| 73 HOT & COLD WATER | 88 W. H. B. E. |
| 74 HOT & COLD WATER | 89 W. H. B. E. |
| 75 HOT & COLD WATER | 90 W. H. B. E. |
| 76 HOT & COLD WATER | 91 W. H. B. E. |
| 77 HOT & COLD WATER | 92 W. H. B. E. |
| 78 HOT & COLD WATER | 93 W. H. B. E. |
| 79 HOT & COLD WATER | 94 W. H. B. E. |
| 80 HOT & COLD WATER | 95 W. H. B. E. |

the hospital has changed to a central food distributing system from a service area just completed adjoining the kitchen and serving all ward areas of the hospital by food trucks using the heated briquette system. The floor pantries of the Surgical Wing will now be converted to other uses.

Both new buildings are of reinforced concrete, faced with limestone. The materials used in interior finishes are more or less standardised in both: ward corridors have vinyl tile flooring with terrazzo projecting bases, and acoustic ceilings; ward rooms have linoleum tile floors and plaster ceilings; ceramic and quarry tile, terrazzo and vinyl wall coverings are used in service areas, washrooms and wherever usage demands, and stainless steel is used for certain dados and for corner guards. The main entrance lobby and passages, and the elevator lobbies on all floors, are finished in marble. Colours of materials have been carefully selected to provide a variety of interest and cheerfulness, with different colour schemes being used for the corridors and lobbies at different floors, and for all the ward rooms on each floor.

Mechanical and electrical services are typical of modern hospital construction, being unusual only in the complexities of altering and enlarging the old existing power house, and tracing, replacing and re-routing of existing service lines and connecting to and extending them into the new structures.

Radiators are convector type in fully recessed custom-built metal cabinets with integral aluminum window sills. Artificial ventilation is provided for interior areas and for all rooms where special uses call for positive ventilation, and air-conditioning for the Operating Suite to maintain 80 degrees F. with up to 60 per cent relative humidity.

The usual medical service outlets from central installations are provided at all bed-heads, and telecart telephone service is available to all patients, as are pillow radio speakers fed from a central receiving system. There is also television reception piped to the day-rooms, and provision in two of the operating rooms for televised transmission of operations to other parts of the hospital for teaching purposes.

Pneumatic tube transmission of documents, requisitions, x-ray films, and specimens serves all floors of the new buildings and is carried also through the existing buildings to key points such as the business office, medical records, kitchens, etc., and even across the street to the McGill Pathological Building.

A central incinerator, connected to the boiler house stack, is directly accessible from the main intercommunicating corridor at level "C" connecting all buildings.

Structural Problems

Structurally, three problems in particular which arose during the planning of the new buildings required particular ingenuity on the part of the architects, engineers and contractors. Access to the Surgical Wing from the hospital's main entrance on Pine Avenue had to be achieved by an open-cut tunnelling process almost 300 feet long in the rock directly under the ground floor of the central block of the old main building; and later a similar but much shorter passage was cut westward from the main lobby to the lowest elevator lobby of the new Medical Building. Communication, at level "C", between all the existing buildings had to be maintained free and uninterrupted for continuous use by pedestrian and internal wheel traffic, and this corridor system converged more or less in the centre of the new Surgical Wing, which thus had to be built around it. When the Medical Building was built the new Operating Suite air-conditioning equipment room which, of necessity had been located in the basement of the old West Wing, had to be maintained intact and in operation while the old building was demolished around it and the new building constructed on top of it.

Many similar, if perhaps less spectacular, feats of planning and construction have been achieved throughout the



Main Entrance, Elevator Lobby, Surgical Wing

10 years since the program of modernization of the old Royal Victoria Hospital was initiated. To date a total of some \$12,000,000 has been spent on new building and alterations to old, in the entire hospital group. It required considerable heart-searching on the part of the hospital authorities to decide the relative merits of replacement versus remodelling. The original idea had been a new extension to the Allan Memorial Institute and the New Surgical Wing of the main group, with a program of remodelling all other buildings, some dating back nearly three generations. The only major remodelling which has been done was in the central block of the old main building, which has been extensively and successfully altered to accommodate not only the new main kitchens referred to above, but also new laboratories for the University Clinic; new rehabilitation and therapy facilities; new allergy department, blood bank and other services; new receiving area and general stores, and improved and enlarged administration and business offices.

But the arguments in favour of new construction as more economical in the long term view, even if more costly (though not very much more) than alteration and remodelling, have proven correct, and it is unlikely that anything more than temporary alteration for short life will be attempted again on the older buildings. Instead, it is hoped that a scheduled development to replace them and provide additional facilities will proceed gradually as funds permit, in accordance with a master plan now being studied by the doctors' committee and the architects, which is based in turn on a thorough analysis of the future long-term needs of all the hospital's expanding departments and services. ♡

JEWISH GENERAL HOSPITAL

Montreal

Architects

Fleming & Smith, Montreal

Consulting Engineers

McDougall & Friedman, Montreal

Food Service Consultant

Howard L. Post, New York

General Contractor

J. L. E. Price, Montreal

WHILE THE BED CAPACITY was increased from 350 to 420, the main purpose of the alterations and additions was to increase the ancillary services in keeping with the modernization of hospital technique: special treatment, diagnosis and laboratories, nurseries and maternity, operating facilities, recovery areas, administration and accounting, reception areas, kitchen, cafeteria, dietary and other food service arrangements, personnel and help's quarters, storages.

Stages of work, located on the photo below, were as follows:

- | | |
|---|------|
| 1. Original Hospital | 1930 |
| 2. Nurses' Residence | 1947 |
| 3. West Wing | 1952 |
| 4. 5th & 6th Floor Addition to North Wing | 1956 |
| 5. 7th & 8th Floor Addition to West Wing | 1957 |
| 6. Addition of 6th Floor — Main Wing | 1957 |
| 7. Alterations to Main Entrance | 1957 |
| 8. Extension of East Wing | 1958 |
- (Stages 4, 5, 6, 7, 8 included complete interior modifications, additions and relocations.)





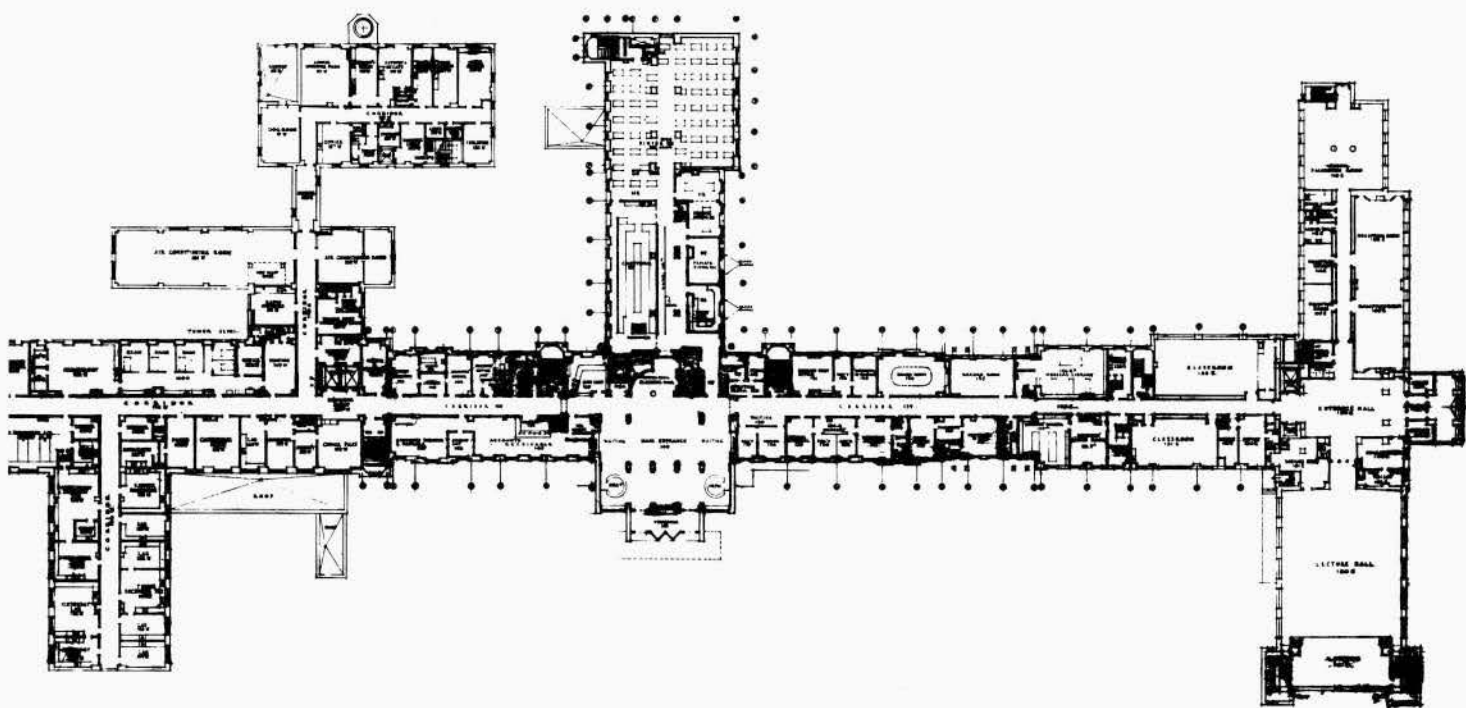
ACP PHOTO

Main Entrance and East Wing

Problem was to carry out program with the minimum possible interference with the functioning of hospital services, for example: operating suite located on the 3rd Floor, North Wing, was increased from four to eight areas with their services, including replanning of existing rooms. This was achieved by confining surgical traffic to one side of the

corridor and blocking off the other whilst work was in progress, transferring surgical staff to the completed area and remodelling of the other half.

Surgical areas on 3rd Floor were brought up to date to include an eleven-bed recovery ward, including subservices, for post-operative care.



Ground Floor Plan

Nurses' Station is a departure from usual practice in so far as this area has more than a supervisory function. It has been planned as a distinct unit doubling its supervisory aspect with a work area for a fairly large number of people, with rest areas, offices, and medicine rooms being provided.

On the 5th Floor are located complete nursery and obstetric facilities with separate areas for suspect and premature cases. Nurseries are planned as a unit comprising two six-bed wards on either side of chart and exam areas.

Accommodation on the 2nd Floor has been provided for special treatments including a diabetic department with its metabolic kitchen and day room, where diabetic cases are instructed in the special diets particular to their individual requirements.

Replanned facilities include:

Basement: New physical medicine department with gymnasium, treatment tank, wax therapy, E.E.G., occupational therapy, autopsy and morgue, replanning of laundry, alterations to mechanical and tank rooms.

Ground Floor: New E.C.G. Department, help accommodation, replanning of kitchen and storage areas.

1st Floor: Main entrance, administration, accounting, cafeteria.

2nd Floor: Special treatment, cardiology, pulmonary and diabetic, metabolic kitchen, allergy, endoscopy and vascular clinics.

3rd Floor: Operating suites, recovery group with its own utilities and staff.

4th Floor: 16-bed Psychiatry with treatment and consulting rooms, day and dining rooms, occupational therapy.

5th Floor: Relocation and replanning of delivery rooms, nurseries.

Extension of West Wing, Stage 8, presented a problem in so far as the ground floor was existing and could not in any way be interfered with. The solution was to build the five floors over it, very much like a bridge, with structural members at exterior walls only. This accounts for the 2'6" projection seen in the aerial photograph.

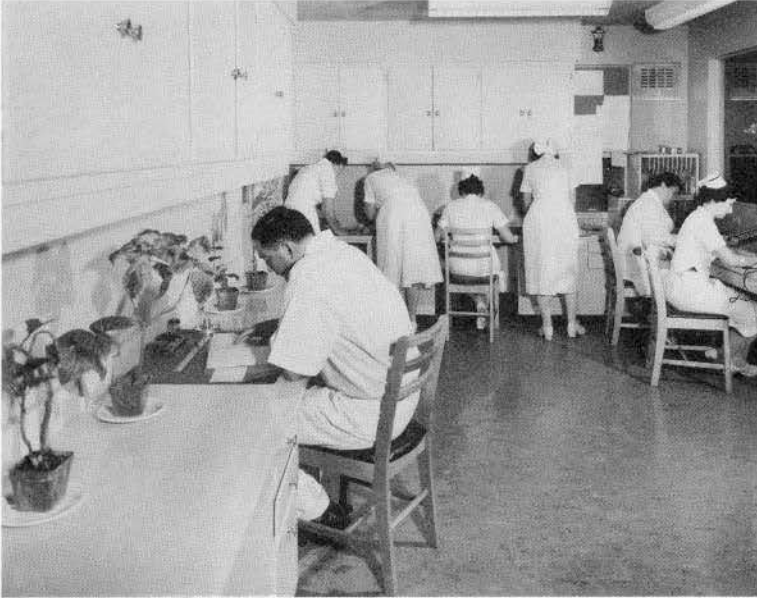
An interesting feature of the transformation was the lifting of the general grade on Cote St. Catherine. Originally this was at a much lower elevation. With the growing of the City, the street became a main east-west thoroughfare and was substantially elevated, giving a sunken feeling to the original design. The original first floor thus became the new ground floor.

Entrance: the alcoves are meant to receive murals depicting aspects of life in Canada



RAPID GRIP & BATTEN

RAPID GRIP & BATTEN



Jewish General Hospital

Nurses' Section

RAPID GRIP & BATTEN



Kitchen, showing double service line

ACP PHOTO



Semi-Private Ward

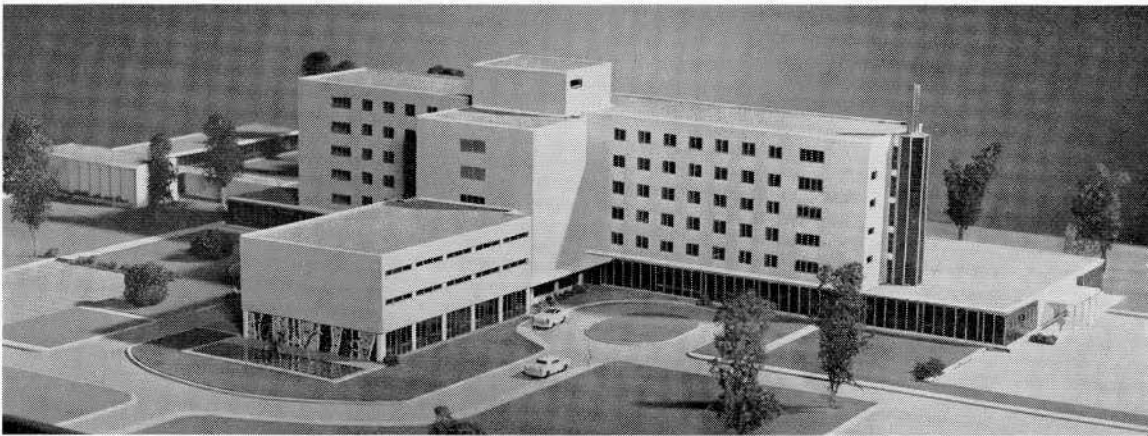
The Planning of

WELLAND COUNTY GENERAL HOSPITAL

Welland, Ontario

Architects,

Agnew, Ludlow & Scott



Due for completion next February 1st is a new hospital in Welland, Ontario, having 238 active adult and paediatric beds.

A hospital of this size presents a satisfactory set of requirements. All of the functions in a General Hospital are necessary, yet no one department is of sufficient size that it need be divided into parts, as, for example, in utilizing several storeys of a building for one service. It was possible for the final plans of the building to match almost exactly the disposition of the departments as first developed on the flow diagram.

One of the first considerations was whether or not to utilize a basement for any hospital departments. Location of hospital services such as laundry, stores, etc. in a basement would require a depressed roadway to serve them. If departments such as x-ray, labs, etc. were located at this level they would not have close liaison with hospital administrative offices, such as the admitting department. With these considerations, it was planned to construct no basement except a small one for dead storage purposes.

It was decided that for a general hospital of this size, the best functional arrangement would be one wherein all of the elements of the hospital were grouped together on one floor, except for the patient ward areas and the

operating, delivery, and central sterile supply suites. Breaking this down further, the delivery rooms should be adjacent to the obstetrics' beds, the operating rooms with the acute surgical beds, and the central sterile supply somewhere near either of the two surgical functions.

Consideration then was given to where these last functions, nursing services etc., should be located. Either they should be accommodated in finger wings extending out from the building on the ground floor level, or should be stacked one above the other over the large base which would be formed by the amalgamation of all the first mentioned elements of the building. Studies indicated that the vertical stacking scheme should be used. Minimum distances would be obtained between nursing units and other parts of the hospital and considerable economies would be obtained by grouping of mechanical and electrical services, including pneumatic tubes, piped oxygen, etc.

Grouping of Departments

Attention was then given to dividing the hospital's required departments into groupings, the parts of which would relate one to the other. For this hospital these were found to be:

I. Services: Truck dock, laundry, boiler room and incinerator, workshops and general employees' facilities,

morgue, general store rooms (supplies), and kitchen. Each of these sections has three things in common. They all require ready access to trucking facilities, easy communication with the rest of the hospital by private corridors insofar as possible, and none requires hospital traffic by visitors, nurses or doctors. The floor should be off the exterior grade by the height of the truck dock at this point.

2. *Cafeteria*: Adjacent to the kitchen, and in a position where it is conveniently private yet available to convalescent patients (should the trend of up-patient cafeteria meals develop further). At the same time visitors to the hospital should be able to find the cafeteria without difficulty and without entering a private hospital area.

3. *Diagnostic and treatment facilities*: Radiology, pharmacy, laboratories, physical medicine, emergency and out-patient department examination, et cetera. These departments work together in varying degrees, and also should have convenient private access to the remaining hospital without transgressing upon visitors' or administrative areas. Since emergency physical medicine and out-patient department facilities all require direct access by patients coming to the hospital from outside, the positioning of these on the ground floor received additional justification.

4. *Admitting Office*: For maximum control with a minimum staff, day and night, this office should exercise visual control both over the emergency entrance and the main entrance and lobby. For convenience it should be en suite with the main business offices.

5. *Administration*: Administrative office, general office, medical records, and doctors' reporting and lounge. Convenient access for the public to the offices is essential, and it is most desirable if the visitors do not have to enter any other part of the building. The ideal placement of the administrative areas, therefore, appeared to be immediately off the main entrance and lobby.

6. *Nursing Areas*: It was concluded that the patients' floors should be planned to be most convenient for the nursing staff, and also to provide the best possible atmosphere for the patients. For ease of nursing and close control, it was decided that, since team-nursing was not a consideration in this hospital, each nursing unit should consist of not more than 30 beds. Each such unit should incorporate its own nurses' station, utility rooms, patients' bathrooms, et cetera, at its exact centre.

7. *Operating Rooms, Delivery Rooms, and Central Sterile Supply*: It was thought that for maximum protection, the operating rooms and the case rooms should be in a somewhat isolated location, with central sterile supply nearby. It was, of course, considered mandatory that these three services be separate and distinct one from the other. As is usually the case, it was found that the requirements for the operating suite required an area which was greater than that necessary for the delivery suite. It was possible therefore to accommodate both the case rooms and the central sterile supply rooms on the floor below the surgical suite, in the same wing.

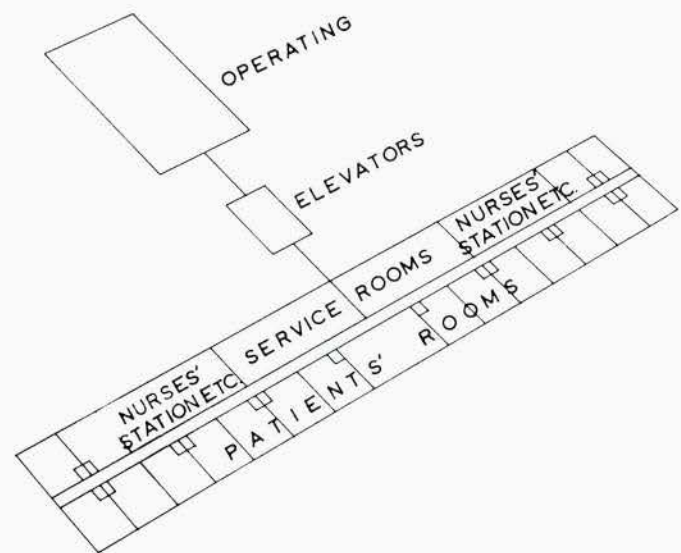


DIAGRAM 1

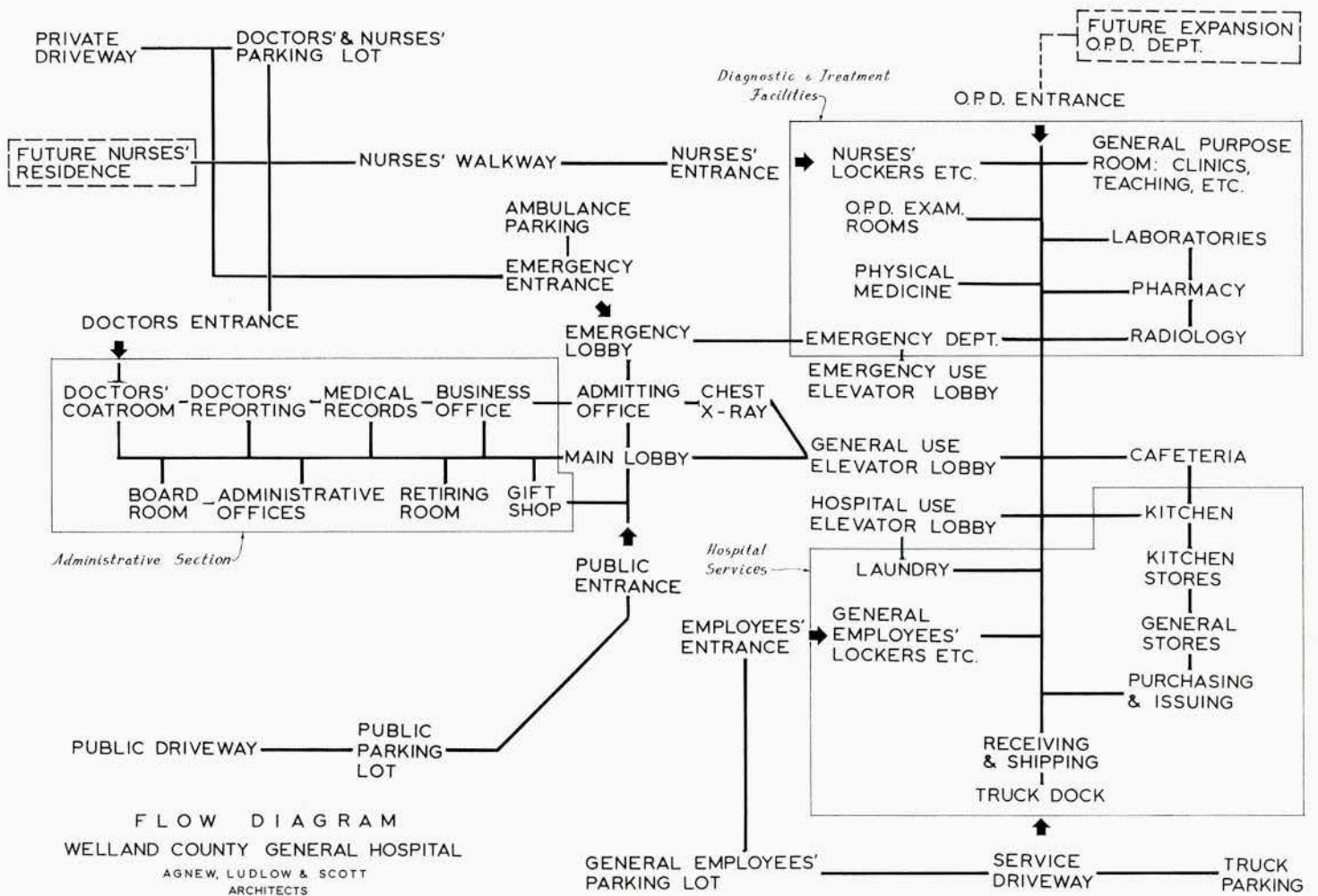
With the above groupings having been determined, it was possible to develop several flow diagrams. For the upper floors, they all resembled diagram 1. The second and third floors were similar to the sketch shown, the fourth, fifth and sixth consisted only of the elevators and the patients' wing. With few exceptions, all patients' rooms were located to give the preferred orientation (south) with the north side being utilized for nurses' facilities and service rooms.

The flow diagram for the ground floor (diagram 2) is self-explanatory and incorporates the groupings previously described.

The final conception of the hospital when detailed planning began therefore was of a building consisting of a five-storey vertical block which contained the nursing units, sitting on top of an extensive one storey platform which contained most of the other hospital departments. Off the second and third floors would extend respectively, the delivery and operating suites.

Herbert R. Agnew

DIAGRAM 2



SAINT JOHN GENERAL HOSPITAL ADDITIONS

Saint John, N.B.

Architects

*Alward & Gillies
Mott & Myles
Saint John*

Electrical & Mechanical Consultant

*A. G. Moore
Montreal*

Hospital Consultant

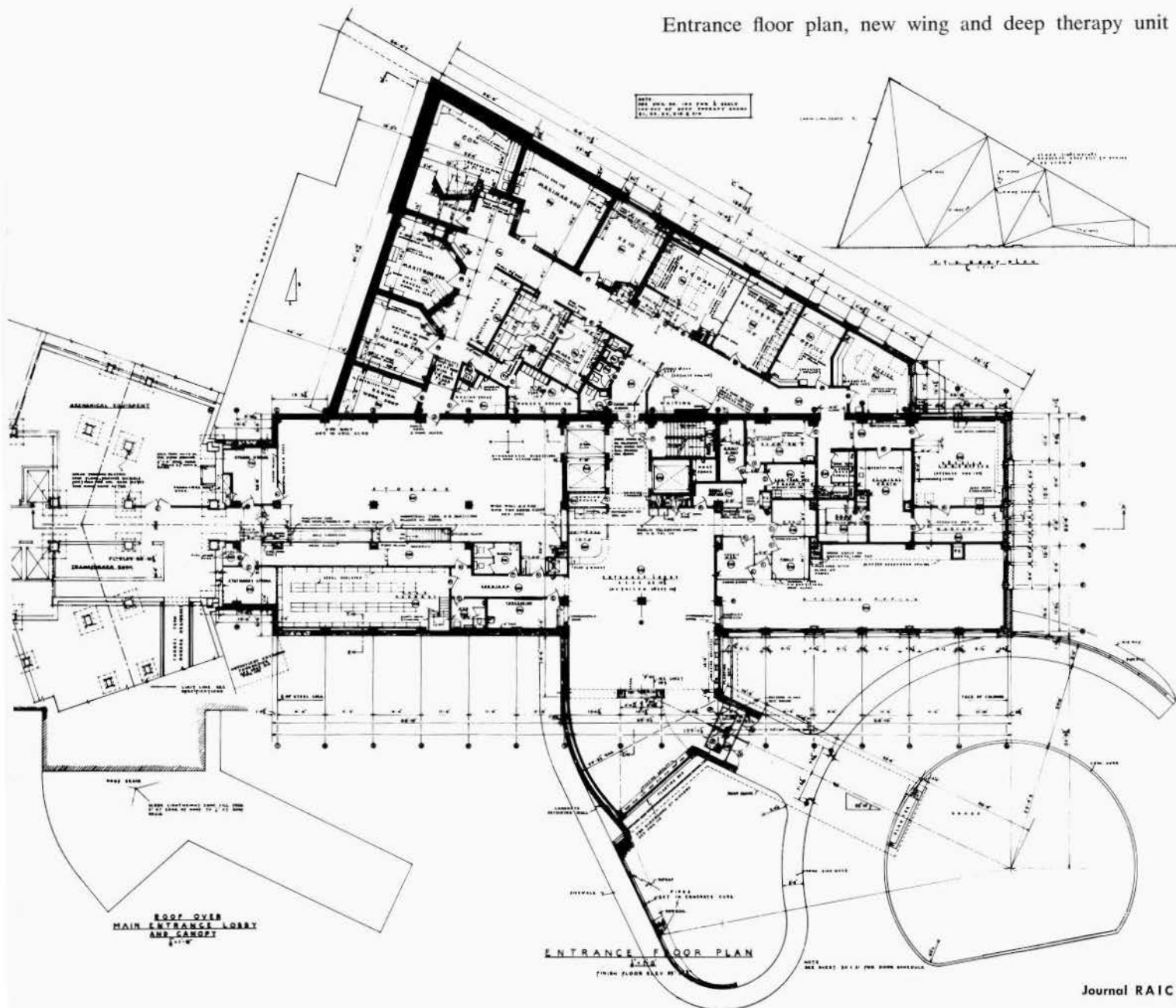
*Dr Basil C. MacLean
Rochester, N.Y.*

General Contractor

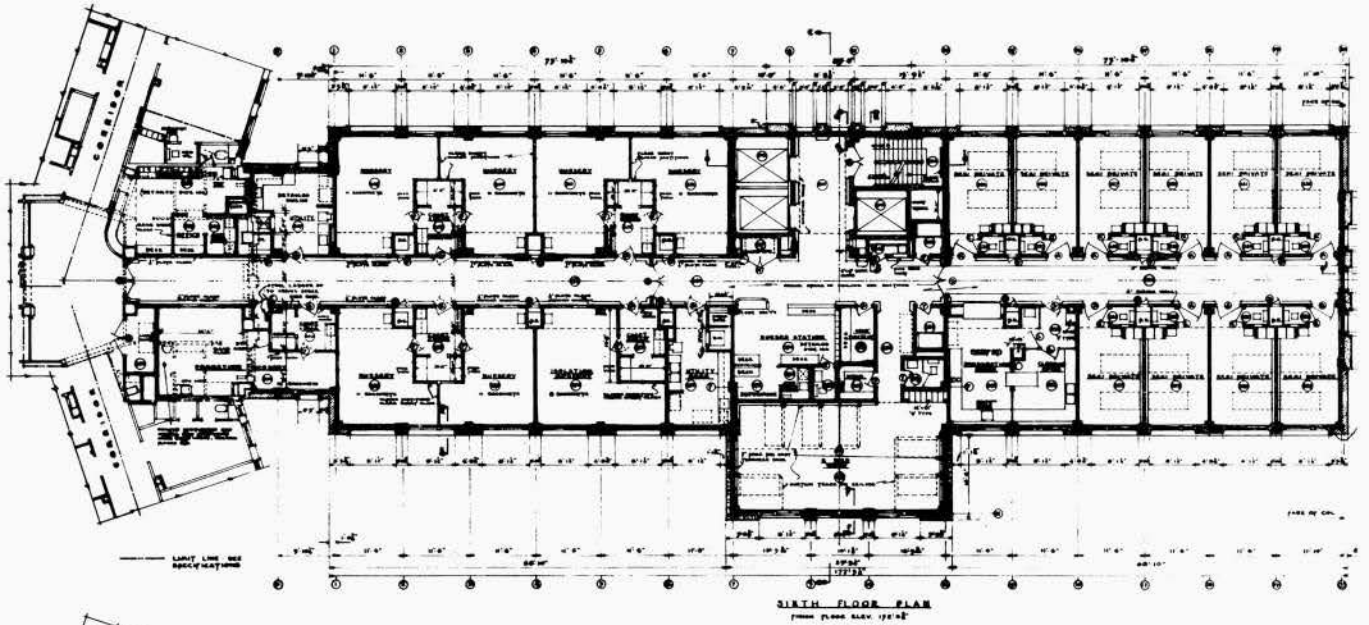
*Acme Construction Co.
Saint John*



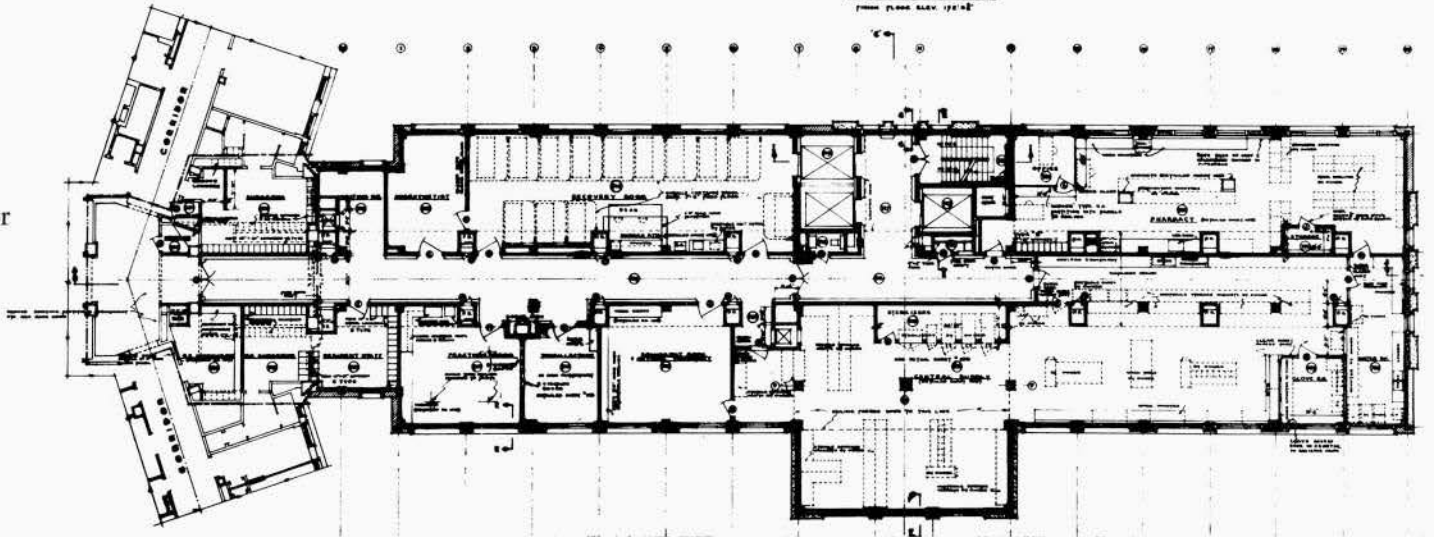
Entrance floor plan, new wing and deep therapy unit



Sixth floor plan



Seventh floor plan



The original "General Public Hospital" in Saint John was erected from plans prepared in 1854 by Matthew Stead, a Shropshire architect who settled in New Brunswick earlier in the century. In 1928 the old building was demolished and a new eight storey building of reinforced concrete frame was erected on the same site. The building, designed by Pond and Pond, Martin and Lloyd of Chicago with Alward and Gillies of Saint John as associate architects, was published in the *Journal* in August 1930.

The post-war population growth of the city, the demand for hospital beds and specialized services added to the hospital function as a clinical centre for New Brunswick, led in 1952 to the present additions. These include the enlargement of the power plant; a 120-bed addition to the nurses' home; kitchen and laundry additions and the new wing and deep therapy unit.

The New Wing projects to the South from the centre of the 1930 building where the entrance lobby was previously located, and due to the contours of the site two additional storeys are gained at a lower level. The new entrance lobby is one storey below the former main entrance of the building and on its axis a new bank of high speed elevators has been provided. The deep therapy department is directly accessible from the new main entrance and on the same level. It is triangular in plan and projects to the North East of the New Wing, advantage being taken of the rocky site to obtain full protection from dangerous radiation to the outside. Rooms on the nursing floors are of the semi-private type with a few four-bed wards and all are provided with

oxygen and vacuum outlets, intercommunication to nurse's station, radio and television outlets. On the operating room floor the existing operating and case room will still be used and only two new operating rooms are provided in the New Wing, but a large new central supply department, pharmacy and recovery room have been added at this level. The new nurseries and accommodation for the mothers, are on the sixth floor level. The eighth floor is an extension of the 1930 Paediatric section.



Two Small Hospitals

Architects

Smith & McCulloch
Vancouver and Trail, B.C.

Invermere, B.C.

A 24-bed general hospital, completed in 1957, for the Windermere and District Hospital Society.

Construction is wood frame over a reinforced concrete basement. Contractors were Oland Construction Company Limited, Lethbridge, Alberta.

Cost:	\$240,000.00
Cost per cu. ft:	1.11
Cost per bed:	10,333.00

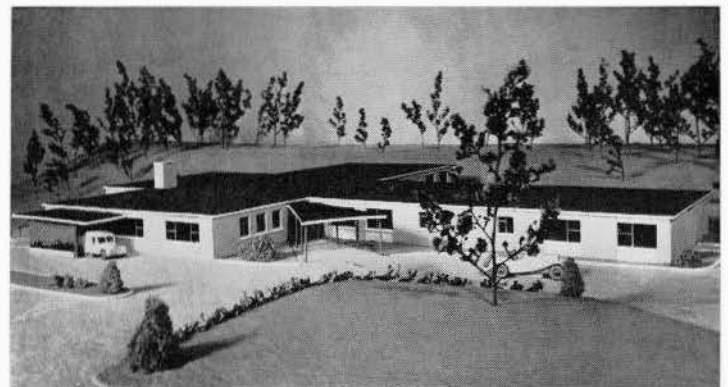


A problem in the design of small hospitals is the location of the one nurses' station in relation to the nursing and administration areas and to the main entrance for night control. Two solutions to the problem are illustrated.

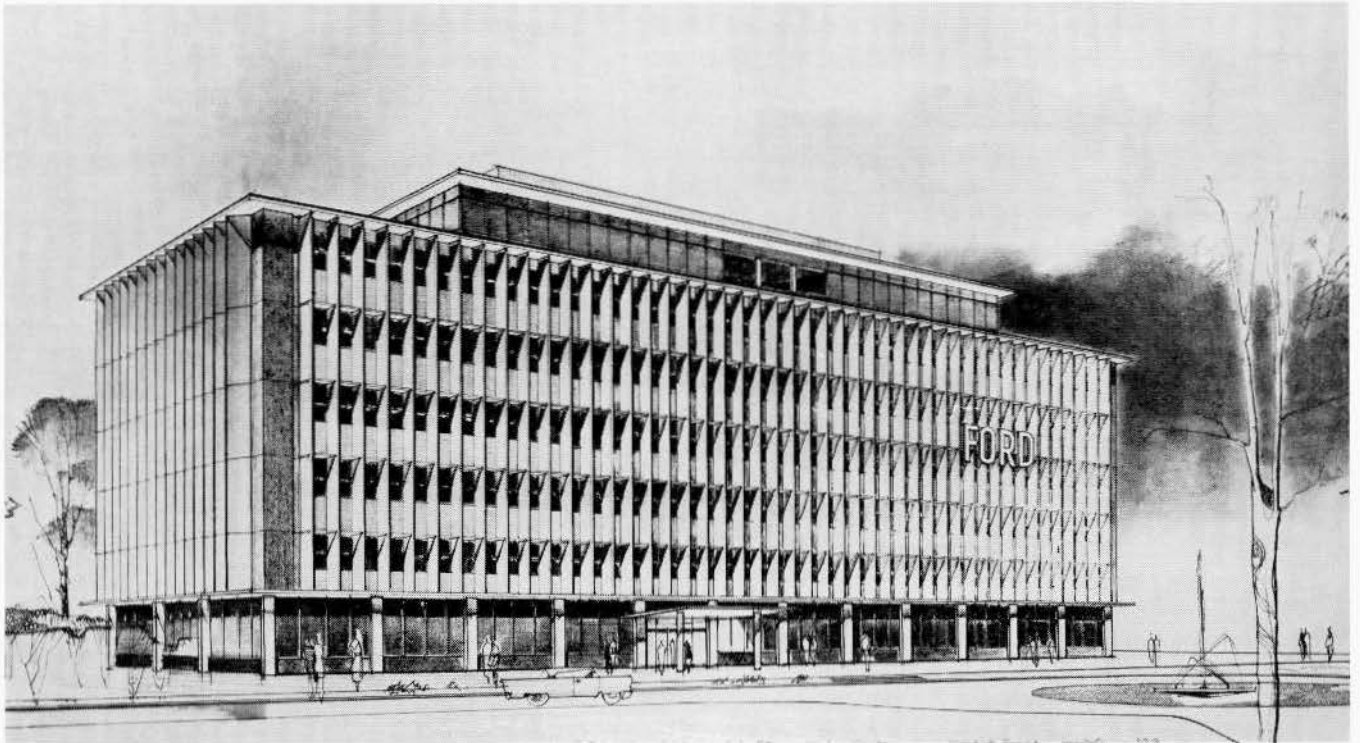
Castlegar, B.C.

A 33-bed general hospital, completed in 1958. The building is constructed of reinforced concrete and designed for future vertical expansion. Contractors were Imperial Builders Limited, Burnaby, B.C.

Cost:	\$403,089.00
Cost per cu. ft:	1.49
Cost per bed:	12,215.00



PROJECT



Architects
Allward & Gouinlock
Toronto

New head office building for Ford of Canada Ltd, to be started next year near the Company's automobile assembly plant at Oakville, Ont.

THE RAIC AND PUBLIC RELATIONS

AN OBSERVER of the architectural profession has suggested that, applied to the practice of architecture, *public relations may be defined as competence and communication*. The architect has two important jobs which directly concern his public relations. He must perform and he must communicate. It is a waste of time to talk with nothing to say; it profits little to perform well without letting the world know.

The application of public relations to the practice of architecture — to the work architects do — is not clearly understood by many members of the profession. But essentially, in one way or another, almost every action of every practitioner involves contact with a representative of the public. Client-architect relations are important, but manufacturers' representatives, engineers, municipal officials, lawyers and contractors join the broad group with whom maintenance of good relations is important.

All the professional time and money in the world will fail to offset the damage done to the profession by a member who errs in his cost estimating, who neglects proper supervision of a project, or whose building fails to perform satisfactorily. The question of competence is one which no architect who is interested in himself and his profession will take lightly.

It is in this setting of what we term "internal" relations, or the state of health within the profession, that I ask you to consider the elements which should comprise a national public relations program for the profession.

First of all, is a central policy on public information necessary? Unquestionably, it is. One reason is that the profession must speak with one voice. To achieve this difficult objective the first goal must surely be a close continuing relationship between the Executive Director and chairmen of Public Relations Committees in the Provincial Associations.

The formation of a central coordinating committee was strongly recommended by the Ontario Association of Architects in 1958 so as to "correlate the efforts of the individual Provincial Associations". Accordingly, the committee now exists with a twin purpose:

(1) Funnel information to members of the profession and assist the public relations efforts of individual architects.

(2) Acquaint the general public with the aims and objectives of Canadian architecture and explain, by every possible means, the nature of the service the profession is equipped to render.

These two objectives closely parallel the objects of the Royal Institute as set out in its Act of Incorporation. Chief among these is the aim to establish and maintain a bond between the societies recognized by the Royal Institute as component associations, and to promote the welfare of the architectural profession in Canada.

The first national conference of Public Relations Committee chairmen was held at the Royal Alexandra Hotel in Winnipeg on March 1, 1959. The committee met again at Windsor in May. The Winnipeg conference concluded that:

(a) A necessary preliminary to successful public relations within the profession must be the appointment of full-time administrative personnel in all associations;

(b) that media in the form of pamphlets and brochures should be standardized and released by the RAIC on behalf of component bodies.

My visits to all nine Provincial Associations early in 1959 will be followed by repeat visits in January and February of 1960. I welcome the opportunity of meeting and talking to as many RAIC members as possible.

Coupled with attendance at annual meetings of the component societies is a year-round, week in and week out, correspondence with Public Relations Committee chairmen in the Provincial Associations. To date in 1959, the RAIC has issued two Newsletters which are calculated to supplement Institute news items appearing in the *Journal*. A further illustration of the effort to unite the public relations efforts of the RAIC, the Provincial Associations and the *Journal*, is the publication of this column each month.

In attempting to build a public relations policy and program for the architectural profession (within the restrictions of a limited budget), one is reminded that the over-riding problem is a lack of public understanding of the architect — who he is, what he does, and how he contributes to the community, both aesthetically and economically.

It is certain that an elaborate effort on the national level will not automatically guarantee good public relations at the community level. In the chapter the profession has its best organizational unit through which to make personal contact with the community. After all, publicity is not something you get, but something you do.

To illustrate, this office has recorded hundreds of press clippings as a result of the activities of the RAIC Committee of Inquiry on the Residential Environment. Clippings are not enough. The public will be far more impressed if they see concrete evidence of improvements to our suburban developments after the forthcoming 1960 report of the Committee has been tabled. Accordingly, any success achieved by the Committee will benefit the profession, and every member in it.

Everyone has differing opinions on what public relations is, or should be. I would appreciate hearing from members of the Institute as to whether the policy and program stated on this page is shaped to meet the needs of today.

Robbins Elliott

L'IRAC ET LES RELATIONS AVEC LE PUBLIC

UN OBSERVATEUR a fait remarquer qu'en architecture, le domaine des relations avec le public repose sur deux données: la compétence et la communication. L'architecte a deux tâches importantes en ce qui regarde ses relations avec le public: il doit accomplir quelque chose et il doit révéler ce qu'il accomplit. C'est peine perdue que de parler lorsqu'on n'a rien à dire; il est peu profitable de bien oeuvrer si l'on ne fait pas connaître son oeuvre.

Beaucoup d'architectes ne comprennent pas très bien comment l'art des relations avec le public s'applique à la pratique de l'architecture, au travail que font les architectes. Mais règle générale, presque tous les gestes d'un architecte comportent, d'une façon ou d'une autre, quelque communication avec le public. Les relations d'architecte à client sont importantes, mais les représentants des manufacturiers, les ingénieurs, fonctionnaires municipaux, avocats et entrepreneurs sont également en communication avec l'architecte.

Tout le temps et tout l'argent que l'architecte peut consacrer à sa tâche ne compenseront jamais le dommage que subit la profession s'il se trompe dans l'estimation du coût de son oeuvre, s'il néglige de surveiller une entreprise de façon satisfaisante, ou si l'immeuble qu'il a conçu ne rend pas les services qu'on pouvait en attendre. Le problème de la compétence ne saurait laisser indifférent aucun architecte intéressé à son travail et à sa profession.

C'est dans ce cadre des relations "intérieures", c'est-à-dire de la santé de la profession, que j'aimerais que vous examiniez les éléments dont un programme national de relations de votre profession avec le public devrait être composé.

D'abord, est-il nécessaire d'avoir une ligne de conduite uniforme pour l'information du public? Sans aucun doute, et l'une des raisons en est que les architectes doivent s'exprimer à l'unisson. Pour obtenir ce résultat difficile il faudra établir des relations constantes entre le directeur exécutif et les présidents des comités de relations extérieures des associations provinciales.

La création d'un comité central de coordination a été fortement recommandée par l'Association des architectes d'Ontario en 1958 afin de "coordonner les efforts des diverses associations provinciales". Ce Comité a donc été établi et il a une double tâche:

(1) Recueillir et transmettre des renseignements aux architectes et aider les architectes dans leurs propres relations avec le public.

(2) Faire connaître au public les buts et objectifs vers lesquels tend l'architecture au Canada et expliquer, de toutes les façons, la nature des services que les architectes sont en mesure de rendre.

Ces deux tâches ressemblent beaucoup aux objets que poursuit l'Institut royal et qui se trouvent énoncés dans sa loi constitutive. Parmi ces objets, le premier consiste à créer et maintenir un lien entre les sociétés reconnues par l'Institut royal comme associations constituantes, et à favoriser le bien-être de la profession d'architecte au Canada. La pre-

mière réunion nationale des présidents des comités de relations extérieures a eu lieu à l'hôtel Royal Alexandra, à Winnipeg, le 1er mars 1959. Ce Comité s'est réuni de nouveau à Windsor en mai. A la réunion de Winnipeg on en est venu aux conclusions suivantes:

(a) le succès des relations des architectes avec le public dépend d'une condition préalable: la nomination d'employés à plein temps dans toutes les Associations; et (b) les moyens de communication tels les brochures et bulletins devraient être uniformisés et publiés par l'IRAC au nom des sociétés constituantes.

Mes visites aux neuf associations provinciales au début de 1959 se répéteront en janvier et février 1960. Il me fait plaisir d'avoir ainsi l'occasion de rencontrer le plus grand nombre possible de membres de l'Institut, et de causer avec eux.

En plus de la participation des sociétés constituantes aux assemblées annuelles, il faudra maintenir à l'année une correspondance hebdomadaire régulière avec les présidents des comités de relations extérieures des associations provinciales. Jusqu'ici, en 1959, l'Institut a publié deux Bulletins destinés à compléter les nouvelles que donne le *Journal* au sujet de l'Institut. La parution de la présente chronique chaque mois est un autre exemple de notre tentative pour unifier les relations extérieures de l'Institut, des associations provinciales et du *Journal*.

Dans tout effort en vue de tracer une ligne de conduite et un programme en matière de relations avec le public pour les architectes (dans les limites d'un budget restreint), il faut se rappeler que le problème fondamental est l'ignorance dans laquelle le public se trouve de la nature de l'architecte — de ce qu'il est, de ce qu'il fait, de ce qu'il apporte à la société aux points de vue esthétique et économique.

Il est certain que tous les efforts déployés au niveau national n'assureront pas automatiquement de bonnes relations extérieures au niveau local. C'est dans le groupe local que les architectes ont leur cellule la plus efficace et c'est par lui qu'ils peuvent le mieux établir des relations personnelles avec leur milieu. Après tout, la publicité n'est pas quelque chose que l'on obtient, mais quelque chose que l'on fait.

Ainsi notre bureau a recueilli des centaines de découpages de journaux se rapportant aux travaux du Comité d'enquête de l'Institut sur les conditions de l'habitation. Mais des découpages en elles-mêmes ne produisent rien. Le public sera beaucoup plus vivement impressionné lorsqu'il verra la preuve concrète d'une amélioration de nos banlieues après que le comité aura déposé son rapport en 1960.

Par conséquent, tout succès obtenu par le Comité rejallira sur la profession et sur chacun de ses membres.

Chacun possède sa propre conception des relations avec le public. J'aimerais que les membres de l'Institut me disent si la ligne de conduite et le programme énoncés ici répondent aux besoins de notre temps.

Robbins Elliott

Viewpoint

“Do you agree that, if architects had always given the public and their clients what they wanted, buildings would have never developed beyond the stone age?”

I certainly think that the question is put in an ugly way. There is a lot of presuming. Certain monuments and art of the Stone Age compare well with modern effort. The game is far from finished and it may be discreet for us all to live again in the ground.

If I agree that buildings would never have developed beyond the Stone Age had architects always given the public and their clients what they wanted, I should also agree that buildings would not have developed beyond that state if architects had always designed as they saw fit.

The question intended is “To what extent should an architect insist upon cleaving to his decision on a matter when it conflicts with that of the public or his client?” The answer is: He shall with sympathy and imagination, and without conceit, appraise the other’s view. Then, if he finds no merit in it, he shall by all tricks, bluff, charm, pandering and even deceit, dissuade the other. If this fails, he shall bow to the wishes of this employer and do the best he can. It is very simple.

John A. MacDonald



An elaborate answer to this question will be a redundant repetition of thoughts expressed by architectural writers in defence of the client.

Too many architects design for other architects and for themselves (often they themselves cannot stand living in their creation), and when problems are placed to detract from their preconceived solution they rant about the lack of taste in their clients and the public.

Good architecture is a result of joint effort. It is a crystallization of the architect’s understanding of not only the climatical and geographical conditions, but of the client’s human needs; and the client’s understanding of the architect’s sincerity, self-respect and needs. It requires understanding, and ability to give and take.

Great architecture is achieved through greater respect for each other, for the basis of creation is philosophical. There is discontent at the illnesses of the time and place; there is deep curiosity to seek the truth; and there is courage and stamina to persist in finding the solution and to carry the job out to the last detail. There is no single hero; there is no culprit.

An architect with a strong principle, I therefore feel, is one with ability to understand, one with serenity in his beliefs, and one who can change in balance.

There is an ancient poem, the translation of which I like to quote:

A skilful soldier is not violent;
An able fighter does not rage;
A mighty conqueror does not give battle;
A great commander is a humble man.

You may call this pacific virtue;
Or say that it is mastery of men;
Or that it is rising to the measure of God;
Or to the stature of the ancient.

Raymond Moriyama

BOOK REVIEWS

“UPPERCASE 2”, Edited by Theo Crosby. 80 pp., 56 ll., 12 mo., 1959; published by Whitefriars, 26 Bloomsbury Way, London, WC1. Price 70¢.

Though not a magazine for those with a passing interest in typography, Uppercase 2 is a remarkable production. It is published by a commercial English printing firm that is to be congratulated for its courage and certainly for its craftsmanship, if this issue is any example.

Imagine a printer to industry devoting twenty-two pages of its periodical to a translation and typographic interpretation of Marcel Duchamp’s Green Box, fourteen pages to a well illustrated article on Kurt Schwitters and the rest of the issue to the work of an experimental painter-typographer Edward Wright.

Whether or not the contents inspired the design approach, there is a surprising lack of “Englishness” to Uppercase 2. In fact, one has the feeling that it was produced in Switzer-

land rather than the United Kingdom, which is a refreshing change from the neo-Victorian school of English typography. Mr Wright, the subject of the first article, set the pattern for this issue and England has need of him.

One could quarrel, however, with his practice of running paintings off the edges of the page, his own included. We have seen enough of this Bauhaus device to realize that it does nothing for a work of art and, due to the wide tolerance of the paper guillotine, often destroys the original proportions.

Still, this is a small criticism of an otherwise stimulating and valuable publication.

The editor, Mr Theo Crosby, states in his introduction regarding how to communicate in print, ‘The first necessity is to be comprehensible, the second to be significant . . .’. Mr Crosby and his contributors certainly prove the point in Uppercase 2.

Allan R. Fleming

INSTITUTE NEWS

ANNUAL MEETING OF SASKATCHEWAN ASSOCIATION OF ARCHITECTS

The 1959 Annual Meeting of the Saskatchewan Association of Architects was held October 30th and 31st at the Hotel Saskatchewan in Regina. The meeting marked the end of a busy and successful year for the Association, so busy in fact that the first item on the agenda dealt with the pressing need for an executive secretary as it has become apparent that a practising architect could no longer devote the time necessary for this work. It was decided to advertise for an executive secretary capable of doing the work on a part-time basis.

Mr Howard Bouey, President of the Alberta Association of Architects and representative of the Prairie Provinces on the RAIC Executive Council, addressed the members on the subject of the proposed increase in the per capita levy to the RAIC. He gave a brief outline of the history of the RAIC since its establishment in 1907 and outlined the services provided by the Institute to Provincial Associations, services which have grown to the point where increased revenues are necessary if Institute services are not to be curtailed. After discussion the membership agreed to the proposed increase.

Of major importance to the membership was a proposed increase in annual dues from \$25 to \$50 to provide additional revenue to cover the Association's more comprehensive program for 1960. This change to the bylaws was approved and it was further decided to institute a change in the Provincial Act to provide for further increases in the Association fees at a later date, up to a maximum of \$200.

Mr Walter Bowker, Managing Editor of the RAIC *Journal*, was invited by President K. Izumi to speak on the subject of the reorganization of the RAIC *Journal*. Mr Bowker outlined plans for re-vitalising the *Journal*, including a comprehensive promotional program, new staff organization, including the appointment of four Associate Editors, and the responsibilities of Provincial Editorial Committees. He also pointed out that the *Journal* becomes the property of the Institute in 1960 and that its future success, therefore, becomes more than ever a matter of personal concern to every member of the Institute.

Various committee reports were read and it was noted that the Association intends to adopt the RAIC Syllabus of Study with effect from January 1st, 1960; that the Bid Depository system was functioning satisfactorily in the City of Regina; that a Bid Depository had recently been set up in the City of Saskatoon, and that public relations was playing an increasing part in the activities of the Association.

In the Presidential report, K. Izumi outlined the activities of the Association throughout the year and his participation, as President, in such functions as the School Trustees' Convention, the RAIC Committee of Enquiry into Residential Environment, and the Geriatrics Convention. He reported also on the visit of Robbins Elliott, Executive Director of the RAIC, and on the work of the Standing Committee on Professional Usage.

At the conclusion of the two day Annual General Meeting an election of Council members was held and the following is the new slate of officers for 1959-1960:

President, George H. Kerr; First Vice-President, J. Pettick; Second Vice-President, G. J. Berry; Secretary-Treasurer, G. R. Forrester; Council Members, F. J. Martin, G. R. Arnott, A. H. Douglas (University Representative). The retiring President, K. Izumi, serves in an ex officio capacity.

An informal reception and buffet supper was held for members and invited guests following the first day's Meeting, with a dinner for out-of-town ladies. The Annual Meeting terminated with a dinner-dance at the Hotel Saskatchewan.

George H. Kerr

FORMATION OF A MONTREAL CHAPTER

The first meeting of the Montreal Chapter took place in the Board Room of the C.B.C. Building on 10th November. The following officers were elected: President, Peter Dobush; Vice-President, Gilles Marchand; Secretary, Gilles Gagnon; Treasurer, Henri P. Labelle.

It was decided that the official name of the organization shall be Montreal District Chapter of the Province of Quebec Association of Architects.

The By-Laws as set forth by the Steering Committee were accepted without any change.

The question of the formation of committees was discussed at some length and there seemed to be a difference of opinion as to whether committees should be formally set up at this time, or should gradually come into being as the activities of the Chapter develop. The majority of those present seemed to favour the latter approach.

All agreed that the meetings should be held in an informal and friendly atmosphere and that they should be so programed as to maintain a high level of interest. The President and Executive have agreed to draw up such a program for the next meeting, which is to take place on 1st December.

Peter Barott

PQAA PAST PRESIDENTS' DINNER

The annual dinner honouring the Past Presidents of the Province of Quebec Association of Architects was held in the Sheraton Mount-Royal Hotel on Thursday evening, 5th November. It was an informal stag affair which was very well attended.

The President presented certificates to the new members admitted to the Association during the past year. Speeches were kept to a minimum with progress reports being given by certain committee members and by the President.

WINNIPEG HONORS RAIC COMMITTEE

Members and the RAIC Committee of Inquiry on the Residential Environment were received in the office of the Mayor of the City of Winnipeg on Friday afternoon, October 30th, 1959. Mayor Juba expressed the appreciation of the city, for the work the committee is doing and for them having held hearings in Winnipeg. He expressed his personal interest in their effort towards finding a solution to problems confronted in Residential Housing and Urban Re-development, and outlined his thoughts on the problem as it concerns the City of Winnipeg.

As a tribute to the Committee, the Mayor made the Chairman of the Committee an Honorary Citizen of the City and presented him with a framed scroll inscribed:

Know Ye, that in the name of, and by the authority vested in me by the City of Winnipeg, I have named, by those present

PETER DOBUSH
HONORARY CITIZEN

of the City of Winnipeg, with all the rights and privileges appertaining thereto, as recognition of the high esteem in which he is held by the people of Winnipeg.

Given under my hand and seal this 30th day of October, 1959.

Stephen Juba
Mayor.

Other Members of the Committee were given City of Winnipeg lapel pins.

RAIC COMMITTEE OF ENQUIRY REPORTS PROGRESS

At the end of November the RAIC Committee of Enquiry on the Residential Environment will have moved by quick stages from the oil fields of Alberta to the rolling farm lands of southern New Brunswick. The Committee hearing at Moncton on Monday, November 30, marked the eighth major Canadian city to be visited by the Institute group since the Enquiry commenced at Edmonton on October 19.

The series of national hearings will culminate for 1959 at St John's, Newfoundland, on December 7. Committee members Peter Dobush (Chairman), John C. Parkin, and E. C. Pratt, accompanied by Committee secretary, Alan Armstrong, have listened to dozens of interested persons express their opinions about the positive aspects, and the inadequacies of Canada's suburbia.

The Committee has digested briefs from architects and planners, builders, developers, lenders, consumer groups, and the high point of the visual survey of the residential environment came at Toronto during the week of November 2. Commencing January 21, the group will re-assemble in Vancouver and afterward visit Victoria. Briefs from national organizations will be received at Ottawa on February 10.

EXCELLENT RESPONSE TO JOURNAL QUESTIONNAIRE

The response of the members of the Institute to the President's letter of November 5, with accompanying *Journal* questionnaire, has proved encouraging and helpful to the management of the Institute and *Journal*. Early returns were reviewed at monthly meetings of the Editorial Board and *Journal* Committee in Toronto on November 17 and 18. This is the first time in several years that Institute members have been asked to express opinions about the contents and format of their official publication, the degree to which the *Journal* represents Institute policy, and the aims and objects of the profession.

Within less than three weeks several hundred architects have submitted constructive suggestions and proposals respecting all phases of the *Journal's* publication. The Managing Editor and his staff have been gratified by the size of the response and express a hope that it will be possible to implement several proposals or recommendations in the near future.

POSITIONS WANTED

Architect with diploma in architecture awarded by All India Council for Technical Education, Government of India, seeks position as architectural assistant or draftsman in Canada. Experience includes three years as a draftsman and assistant, and over three years as an assistant lecturer in architecture at Delhi Polytechnic, Government of India. Please address enquiries to Rattan Singh, N.Dip. Arch., AIIA, Department of Architecture, Delhi Polytechnic, Delhi 6, India.

Architect, registered in the Philippines, graduate of Mapua Institute of Technology, Manila, 1951, seeks position with firm in Canada. Experience includes practice as an architect from 1951 to 1956, and employment in Honolulu branch office of Harland Bartholomew & Associates from August 1956 to September 1959. Object of employment in Canada is to further training in architecture and town planning. Please address replies to Ignacio J. Villarta, PIA, Room 309, Laperal Building, Rizal Avenue, Manila, Philippines.

POSITION VACANT

Architectural designer required. Must be graduate architect fully competent in preliminary design studies and presentation. Working drawing and detailing experience required. Permanent position and top salary with benefits for qualified applicant. Please address applications to Smith Carter Searle Associates, P.O. Box 1244, Winnipeg 1, Manitoba.

Positions Wanted or Vacant advertisements are printed without charge as a service to the profession. Box numbers available on request.

LIVERPOOL CATHEDRAL COMPETITION

The Liverpool Metropolitan Cathedral Committee invite architects who are British subjects, Commonwealth citizens or citizens of Eire wherever resident who are corporate members of the Royal Institute of British Architects or the Royal Institute of Architects of Ireland or those in the United Kingdom whose names are on the Statutory Register of the Architects Registration Council of the United Kingdom, or corporate members of overseas societies allied to the RIBA, to submit designs in competition for the new Metropolitan Cathedral of Christ the King, proposed to be erected on a site on Brownlow Hill, Liverpool.

Conditions may be obtained on application to the Competition Secretary, Liverpool Metropolitan Cathedral Committee, 152 Brownlow Hill, Liverpool 3, England. Last day for questions, December 15, 1959; last day for submitting designs, August 3, 1960; deposit £2.

TECHNICAL ADVISER TO N.H.B.A.

Samual A. Gitterman of Ottawa, chairman of the RAIC Special Committee on Technical Problems, has been appointed technical advisor to the National House Builders Association. Until recently Mr Gitterman was advisor on house construction for CMHC, a post he assumed five years ago after serving since 1946 as the Corporation's Chief Architect and Planner.

LETTERS TO THE EDITOR

Editor, RAIC *Journal*

Dear Sir:

Knowing the interest which the *Journal* takes in the preservation of important old buildings, I venture to write to you about a matter which was drawn to my attention a short time ago.

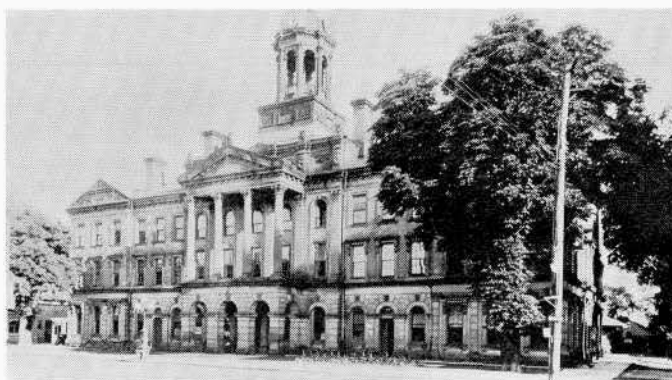
I was both surprised and distressed to hear that there is some danger of the Cobourg Town Hall being demolished. There was, I believe, some mention of this a few years ago, but now I gather there is renewed danger of this distinguished building being pulled down.

I need not remind readers of the *Journal* how important this old building is as a fine piece of 19th century architecture. There are indeed few structures comparable to it in the province. It also possesses considerable historic importance. The old Town Hall is a precious link with our past and an embellishment of our present. To lose it would, in my view, be a tragedy. It not only belongs to the heritage of its own local community, but is a source of pride to everyone in the Province who believes in the preservation, where possible, of the fine things of the past and their influence on those growing up today.

We have lost countless buildings over the years which we could ill afford to allow to disappear, and I feel we should do all that is possible to preserve those which are left.

I am writing to you because I believe the *Journal* can play an important part in influencing public opinion in relation to the future of this fine old building.

Vincent Massey, Port Hope, Ont.



THE COBOURG TOWN HALL

1 1 1

Editor, RAIC *Journal*,

Dear Sir:

The recent announcement by the Institute of the formation of a committee for inquiry into the residential environment in our urban areas is indeed commendable. However, I cannot disagree more with the Institute's judgement in

selecting the supposed experts. "The appointment of the committee is an exceedingly delicate undertaking and is too frequently based on age and geography. No weakness has been shown here — a team has been selected that represents all that is best in the profession".

It is my considered opinion that though we may have chosen the best in the profession, we have, by selecting only architects to this committee, neglected another phase which is broader and more comprehensive. We seem to have neglected the economic implications, social aspects, customs, habits, mores, and mostly the people. I believe it is unwise to suggest that one profession can be all things to all men, and that without the cooperation of people such as professional planners, sociologists, economists, geographers, landscape architects, philosophers, writers and editors, teachers and the like, the inquiry will remain only shallow and myopic.

Surely in the interests of such a broad public we could have found a team of experts whose collective backgrounds could better evaluate environment and living.

Boyle F. Schaeffer, Winnipeg

1 1 1

Editor, RAIC *Journal*

Dear Sir:

"What Next In School Design?" I read this with some interest, with more than usual interest at any rate; although I enjoy all your editorials and your "style".

I believe there may be an approach to this problem which has not been stressed. I mean to say that far from trying to reduce expenditure on school buildings, we should increase expenditure. Schools here are built far too cheaply. They are poor buildings. I am sure the Communists in Russia are not quibbling about a ten per cent reduction in the unit cost of school construction. Are we not a rich country? Maybe since we are a young nation and have nothing built we are a poor country. Then let us display ourselves internationally as just that and seek aid from others and the United Nations, instead of posturing as a rich man and supporting Columbo Plans, etc.

Also, is there really a need for us to concern ourselves with obsolescence? Cannot the ability to learn be taught today in a 200 year old ivy covered English county school, as well as in a postless, beamless, optically correct, project cubicle trimmed classroom of today?

I am sure that the School Boards could cut their maintenance costs twenty per cent immediately, if they hung a long black strap high on the wall behind the teacher, in every classroom.

John A. MacDonald, Edmonton

OBITUARY

JAMES ARTHUR GIBSON EASTON, F.R.A.I.C., P. ENG., 1896-1959, died at his home in Lorne Park, Ontario, on Friday evening, October sixteenth, having carried on strenuously with his many important activities to the end without regard for the fact, known only to those close to him, that he had been far from well for two or three years.

Born in Moffat, Dumfries, Scotland, he received his early education at the Milngavie Academy before coming to Canada with his mother and his father, who was an engineer, and his sister, now Mrs Forbes Craib, and his brothers Kenneth C. Easton, and the late Eric Easton, all of Toronto.

As a youth, he worked with the C.P.R. for a short time in St Johns, Quebec, and then with Toronto Terminals as a surveyor. He studied architectural draughting under Arthur J. Stringer at the Toronto Central Technical School. His studies there included engineering and mathematics.

Being rejected for active service in World War I, he joined Canadian Aeroplanes in the experimental department and continued in this work with Erickson Aircraft after the war, first in Leaside and later in New York City.

From 1923 to 1926 he was a member of the engineering firm of Ferguson, Easton and Kenniger in Toronto.

In 1925, he married Marie Friedmann of West Montrose, Ontario, who became his constant companion and helper on his many projects and trips throughout the world, on behalf of the Ontario Department of Education.

He took his teacher training at the Ontario Training College for Technical Teachers in 1926-1927.

He became a member of the Ontario Association of Architects in 1935 and in recognition of his distinctive service to the profession, was elected a Fellow of the Royal Architectural Institute of Canada in 1952.

For ten years, from 1927, he was a teacher at Toronto Danforth Technical School, teaching Auto Mechanics and Architectural Draughting, and became the Director of Shops and Architectural Draughting in that school. During this time he advanced his professional standing as a teacher by attending summer courses.

He spent the next eight years at the Ontario Training College for Technical Teachers in Hamilton, in charge of the development of Training of General Shop teachers, and was adviser to the Commandant of the Army Trade School and Supervisor of Training in Industry under the War Emergency Programme.

From 1944 to 1947 he was in charge of construction and renovation of the R.C.A.F. Quarters which were converted into an advanced War Emergency School, then into a rehabilitation school which ultimately became the Ryerson Institute of Technology, Toronto, and finally spent the last twelve years of his life as Technical Adviser to the Ontario

Department of Education. During this period he served as Chairman of a Panel on 'Exits' for the National Building Code of Canada, and was a member of the Canadian National Exhibition Committee, a member of the National Council on School House Construction, and for the past ten years has been a very active and valuable member of the Ontario Association of Architects' Committee on School Room Planning. He was editor of the book published in 1948 and 1955, entitled "Suggestions for the Layout and Construction of Schools in Ontario" which is a record of the finding of that Committee.

The beautifully hand-printed notes he made of the information he gathered on his many trips, form a reference book of school design, planning, construction, equipment, management, cost and financing, that can be read with profit by architects and others interested in the school trends of the past decade.

Mr Easton was also co-author of "Automobile Construction and Operation" published in 1932, 1940 and 1951, and co-author of "General Shop Work" published in 1940 and 1959.

It would seem that all of these activities would leave little time for recreation, but he was also a very fine amateur photographer, gardener, and an expert designer and craftsman in the making of fine furniture.

For a long time, Art's many architect friends will miss his generous and practical wise counsel and help, and the Ontario Department of Education will long be indebted to him for his great ability, his forthright character and his unflinching effort on their behalf.

Burwell R. Coon

† † †

CHARLES A. KILLINGBECK, a native of New Rockland, near Montreal, died suddenly at his home in New Minas, N.S. on September 4th, 1959 of a heart attack.

He received his early education in Montreal and later graduated from the Ecole des Beaux Arts, Montreal. He came to Kentville, N.S. as assistant to the chief architect of the Canadian Pacific Railway when the Cornwallis Inn was being built in 1930 and later returned to set up his own office in 1936.

During his practice he designed public buildings, schools, churches and residences in Kentville and throughout the province. He was keenly interested in community affairs and was a member of the Glooscap Curling Club, Kentville Lodge No. 58, A.F. & A.M., a former member of the Rotary Club and a member of the United Church of St. Paul and St. Stephen.

Ronald Peck, Wolfville, N.S.

COMING EVENTS

Annual Convention, Architectural Institute of British Columbia Vancouver	Friday and Saturday December 11 – 12, 1959
Annual Meeting Manitoba Association of Architects Fort Garry Hotel Winnipeg	Saturday January 16, 1960
69th Annual Convention Province of Quebec Association of Architects Sherbrooke	Friday and Saturday January 29 – 30, 1960
Annual Convention Nova Scotia Association of Architects Halifax	Monday and Tuesday February 1 – 2, 1960
Annual Meeting Newfoundland Association of Architects St John's	Wednesday February 3, 1960
Annual Meeting New Brunswick Association of Architects Saint John	Friday and Saturday February 5 – 6, 1960
70th Annual Convention Ontario Association of Architects Royal York Hotel Toronto	Thursday Friday and Saturday February 18 – 19 – 20, 1960
Banff Session '60, Banff School of Fine Arts Banff, Alberta	Sunday to Saturday February 21 – 27, 1960
Annual Convention Alberta Association of Architects Banff School of Fine Arts	Saturday February 27, 1960
53rd RAIC Assembly Fort Garry Hotel Winnipeg	Wednesday to Saturday June 1 – 4, 1960

ANNOUNCEMENT OF SESSION '60

The Alberta Association of Architects in conjunction with the Extension Department, University of Alberta, organizers of the now famous Banff Sessions announce that Session '60 will be held at the Banff School of Fine Arts, in the Canadian Rockies, February 22nd to 27th, 1960.

The Banff Sessions have proved since their inception in '56, to be both mentally stimulating and physically relaxing. Architects have come to Banff from across the country to discuss the basic questions of their art, in ideal surroundings of natural beauty.

Sessions '56 and '57 had as their key speaker, Richard J. Neutra; Session '58 had Paul Rudolph. Session '60 is being arranged to have a number of prominent personalities from the related fields of Architecture and Engineering lead discussion on the topic, 'Architecture & Structure.'

Address inquiries to the Alberta Association of Architects, 312 Northern Hardware Building, Edmonton, Alberta.

MR LANE KNIGHT

When we last wrote something in the *Journal* about Mr Lane Knight, it was the occasion of his being named president of the Master Builders Company. On this occasion, we are pleased to announce that he is now president of the newly formed Master Builders International, a subsidiary of the American Marietta Company. It was with less pleasure that we learned that Mr Knight will leave Canada for Nassau from which the manufacturing and marketing facilities in foreign countries will be directed.

Lane Knight will be greatly missed in architectural circles. For many years, he has directed the exhibition of building materials at the annual meetings of the OAA. They were invariably successful and have come to be associated with his name. One can only hope that as a director of the Canadian Company, Lane Knight will so arrange his affairs that meetings will be called when the OAA is sitting and the trout are rising.

E.R.A.

THE INDUSTRY

Automatic Package Unit Boilers

A new line of fully automatic package unit boilers, specially designed for heating of schools, churches, apartment buildings and smaller commercial and industrial establishments has been introduced by Dominion Bridge Co., Ltd, Montreal.

Available in sizes for 15, 20, 25 and 30 h.p. capacities, 15 psig. steam or 30 psig. water, the new line extends the Company's package unit range from 15 h.p. to 500 h.p. for small to large industrial applications. Previously, the 35 h.p. package unit was the smallest in production. Engineered specifically for pressurized firing conditions, the boilers are a simple two-pass design assuring maximum thermal efficiency of 80 per cent or over.

Designed with convenience and space-saving in mind, the new low pressure, oil or gas-fired unit stands only 57" high, with an outside diameter of 41", and is available in two lengths, of 7'1" and 8'1". Hinged and insulated front and rear doors allow inspection, cleaning or removal of tubes from either end. Lifting lugs are conveniently located at the front and rear to facilitate unloading and handling, and structural steel skids allow ease of movement into the boiler room. The conventional external smoke-box has been relocated inside the 37" diameter cylindrical shell with an outlet designed to take a standard 8" diameter gas duct. For convenience, gauges have been moved from the front to the side.



Horizontal Shoring

Sarnia Scaffolds Ltd, supplier of scaffolding, hoists and related products for the construction industry, announces the introduction of SarniaSpan Horizontal Shoring.

This newest type of all-steel horizontal shoring is designed to save time and money on all kinds of poured concrete slab construction, replacing the many variations of vertical shoring now being used on most jobs. It may be used in structural steel or re-inforced concrete construction. The new horizontal shoring leaves free work areas below for sub-trades as well as for storage.

Light in weight, consisting of two members; a lattice section and a plate section which telescopes into the former, SarniaSpan is readily adjusted to spans from 8'9" to 27'7". The unique "wedge lock" feature provides rigid locking of the two members by the stroke of a hammer, thus allowing the most rapid length adjustment of any type of horizontal shoring. Deep-forged bearing prongs welded into each end transfer the full load to vertical supports for strength and safety.

Further information and consultation on design and layout may be obtained from Sarnia Scaffolds Ltd, St Catharines, Ontario.

Dehumidifiers for Large Buildings

A new line of 127 sizes in both low- and high-pressure blow-through sprayed coil dehumidifiers is now available from American-Standard Products (Canada) Ltd.

Expanding the established Canadian Sirocco line of draw-through dehumidifiers, the new blow-through models are designed for medium and high-velocity all-air systems in multi-storey buildings. Units range in capacity from 2,310 to 45,900 CFM and for operation to 9-in. w.g. static pressure.

The heavy-duty units feature a casing designed to give air- and water-tight protection when used in single zone, multi-zone or dual duct blow-through systems. They are available with either direct-expansion Type X coils or chilled water Type W coils. Both ends of the cooling coils are sealed inside the casing to eliminate sweating and dripping due to condensation. The sprayed coil dehumidifiers are designed to permit convenient removal of the coil units for maintenance or service. A separate section fastened to the air entering end of the dehumidifier contains inlet louvers with removable blades. On dual duct or multizone systems, the louvers prevent spray from backsplashing when the system air is passing through the bypass duct or hot deck above the sprayed coil dehumidifier.

Bulletin #9427 describing the new line is now available from American-Standard, 1201 Dupont St, Toronto 4.



Extruded Aluminum Grilles

Hart & Cooley Ltd, manufacturers of diffusers and grilles announce the addition of a series of extruded aluminum grilles to be known as the Imperialine.

Single units can be supplied up to 72" in length or as butted sections for continuous runs. Widths range from 1½", 2", 3", 4" etc. up to 18" and two designs — standard flat and beveled margin — are available.

Installation is extremely simple — no screws are required — units snap into place.

The wide range of sizes makes them ideal for any type of installation including sidewall, sill, floor and ceiling. Specifications including dimension data may be obtained from Hart & Cooley Manufacturing Co. Ltd, Fort Erie, Ontario.



Room Divider Hardware

Kirsch of Canada has developed a rolled steel track ideally suited for institutional use as a room divider or bed screening hardware. Equipped with nylon slides for silence and long life this track is available in aluminum finish or a choice of colours.

Kirsch bed screening hardware is available with the "Safe-Snap" system of drapery hanging. Since the bed screens can be hung in the time it requires to snap the units together, Kirsch "Safe-Snap"

tape and bed screening hardware has been developed for institutions where it is necessary to make these changes often and quickly.

Available through any reliable home furnishings, decorating or installing firm. Further information may be obtained from Kirsch of Canada Ltd, Woodstock, Ontario.



Custom Colored Vinyl Flooring

Amtico has developed a new process through which its Renaissance dimensional, translucent all-vinyl flooring can be exactly matched with any decor color. Known as Renaissance Over-Tone, the product is a clear version of Renaissance Vinyl flooring with white marbled mottling. Any color sample can be matched with vinyl coloring, which is applied to the back of Renaissance tiles so that it shows through to the surface. Before each individual Renaissance Over-Tone order is fabricated, a sample color match is returned to the customer for approval. Standard sizes are 9" x 9" and 12" x 12", with other sizes available on special order. Further information may be obtained from American Biltrite Rubber Co. (Canada) Ltd, Amtico Flooring Division, Sherbrooke, Quebec.



12" x 12" Tilecraft

Of particular interest to hospitals, institutions, schools and large offices is Dominion Linoleum's new 12" x 12" Tilecraft, which has just been introduced. Its larger size simplifies area calculating, decreases labour and is low cost in unit thickness. Tilecraft's dust camouflaging, broad brush-stroke pattern exemplifies a new trend in linoleum, and goes along with the current vogue for bolder floors. The fabric-soft colour and non-glare finish inherent in linoleum gives even this bold pattern an aesthetic, pleasing subtlety.

Further information on Tilecraft may be obtained from Dominion Oilcloth & Linoleum Co. Ltd, 2200 St Catharine St E., Montreal.



Bathroom Wall Heaters

Markel Electric Products, Ltd, of Fort Erie, Ontario, manufacturers of portable and built-in electric heating equipment, announces the production of a new C.S.A. approved automatic or manual low-priced fan-forced built-in bathroom wall Heetaire (Series C-520).

The units have powerful fans that steadily and uninterruptedly force currents of air over resistance coil wire heating elements. Cool to the touch, Heetaires have a highly polished chromium front that extends 1¼" from the wall. They are available in 1250 and 1500 watt models (120 and 240 V/AC).

Details and literature are available at the factory in Fort Erie, Ontario.