*City Hall, Hamilton*
*Architect, Stanley Roscoe, Hamilton*

SERIAL 427, VOLUME 38, NUMBER 3, MARCH, 1961

# ROYAL ARCHITECTURAL INSTITUTE OF CANADA JOURNAL



THE OFFICIAL PUBLICATION OF THE ROYAL ARCHITECTURAL INSTITUTE OF CANADA PUBLISHED AT 600 EGLINTON AVENUE EAST, TORONTO 12, TELEPHONE HU 7-4714.

Subscriptions: Canada, Commonwealth and U.S. (12 issues) $7.00; foreign, $8.00





Authorized as Second Class Mail, Post office Department, Ottawa

CCAB Member of the Canadian Circulation Audit Board Incorporated.

# The Royal Architectural Institute Of Canada

*Founded 1907 • Patron Her Majesty The Queen*

**OFFICERS 1960-61**

PRESIDENT, HARLAND STEELE (F), *Toronto*
VICE-PRESIDENT, JOHN L. DAVIES (F), *Vancouver*
HONORARY SECRETARY, F. BRUCE BROWN (F), *Toronto*
HONORARY TREASURER, R. C. BETTS (F), *Montreal*
EXECUTIVE OFFICES: 88 METCALFE STREET, *Ottawa*
EXECUTIVE DIRECTOR, ROBBINS ELLIOTT
SECRETARY, LEONARD FALLIS

**COLLEGE OF FELLOWS**

CHANCELLOR, A. T. GALT DURNFORD (F), *Montreal*
DEAN, J. Y. MCCARTER (F), *Vancouver*
REGISTRAR, F. BRUCE BROWN (F), *Toronto*

**REPRESENTATIVES TO COUNCIL**

ALBERTA ASSOCIATION OF ARCHITECTS — G. B. MCADAM, T. A. GROVES, D. G. FORBES, J. B. BELL, H. L. BOUEY.

ARCHITECTURAL INSTITUTE OF BRITISH COLUMBIA — JOHN L. DAVIES (F), W. G. LEITHEAD, C. E. PRATT (F), C. D. CAMPBELL, P. M. THORNTON (F), J. H. WADE (F).

MANITOBA ASSOCIATION OF ARCHITECTS — J. E. SEARLE, N. M. ZUNIC, G. A. STEWART, N. C. H. RUSSELL.

ARCHITECTS' ASSOCIATION OF NEW BRUNSWICK — N. M. STEWART (F), J. R. MYLES.

NEWFOUNDLAND ASSOCIATION OF ARCHITECTS — W. J. RYAN, E. A. STEINBRINK.

NOVA SCOTIA ASSOCIATION OF ARCHITECTS — J. L. DARBY, L. J. PAGE.

ONTARIO ASSOCIATION OF ARCHITECTS — F. B. BROWN (F), E. C. S. COX (F), G. D. GIBSON (F), C. H. GILLIN, D. E. KERTLAND (F), G. Y. MASSON (F), N. H. MCMURRICH, W. T. PENTLAND, A. R. PRACK (F), W. G. RAYMORE, H. STEELE (F), G. E. WILSON (F).

PROVINCE OF QUEBEC ASSOCIATION OF ARCHITECTS — M. PAYETTE (F), R. C. BETTS (F), H. MERCIER (F), P. MORENCY (F), G. VENNE (F), F. J. NOBBS (F), H. A. I. VALENTINE (F), P. G. BRASSARD (F), R. E. BOLTON (F), E. FISET (F).

SASKATCHEWAN ASSOCIATION OF ARCHITECTS — G. H. KERR, J. PETTICK, G. R. FORRESTER.

**CHAIRMEN OF STANDING AND SPECIAL COMMITTEES**

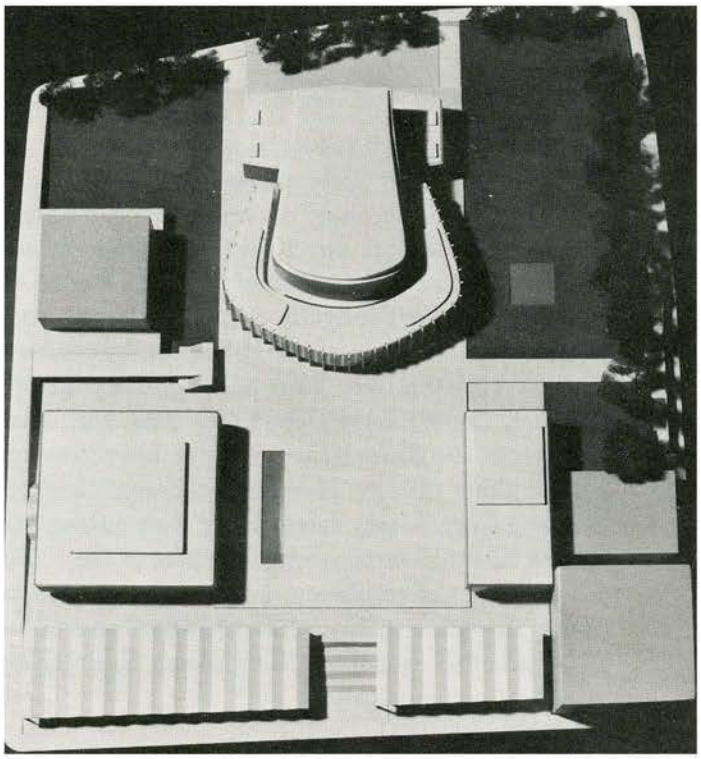
ARCHITECTURAL EDUCATION, JOHN L. DAVIES (F), *Vancouver*
BUILDING RESEARCH, S. A. GITTERMAN, *Ottawa*
PROFESSIONAL USAGE, HARLAND STEELE (F), *Toronto*
SCHOLARSHIPS, A. T. GALT DURNFORD (F), *Montreal*
DUTY ON PLANS, L. E. SHORE (F), *Toronto*
EDITORIAL BOARD, R. C. FAIRFIELD, *Toronto*
EXHIBITION AND AWARDS, A. R. PRACK (F), *Hamilton*
JOURNAL COMMITTEE, EARLE C. MORGAN (F), *Toronto*
LEGAL DOCUMENTS, MARVIN ALLAN, *Toronto*
SPECIAL COMMITTEE ON THE PRESERVATION OF HISTORIC BUILDINGS, E. R. ARTHUR (F), *Toronto*
MASSEY MEDALS COMMITTEE, J. A. RUSSELL (F), *Winnipeg*
PACKAGE DEAL COMMITTEE, COLIN H. COPEMAN, *Montreal*
PUBLIC INFORMATION, G. Y. MASSON (F), *Windsor*
COMMITTEE ON HOUSING, JAMES A. MURRAY, *Toronto*
ARCHITECTURE ABROAD, HARLAND STEELE (F), *Toronto*
ARCHITECT-ENGINEER RELATIONS, RANDOLPH C. BETTS (F), *Montreal*
RAIC-CCA COMMITTEE ON BUILDING MATERIALS, ERNEST J. SMITH, *Winnipeg*
PLANNING FOR 1967 CENTENARY, PETER THORNTON (F), *Vancouver*

# PROJECT

Plans have been approved and tenders called for initial construction of the Place des Arts, a $13,500,000 development to occupy a city block in central Montreal. The project, to be carried out over a ten-year period by the Sir Georges Etienne Cartier Corporation, is being financed by the Province of Quebec, the City of Montreal and the remaining third by public subscriptions.

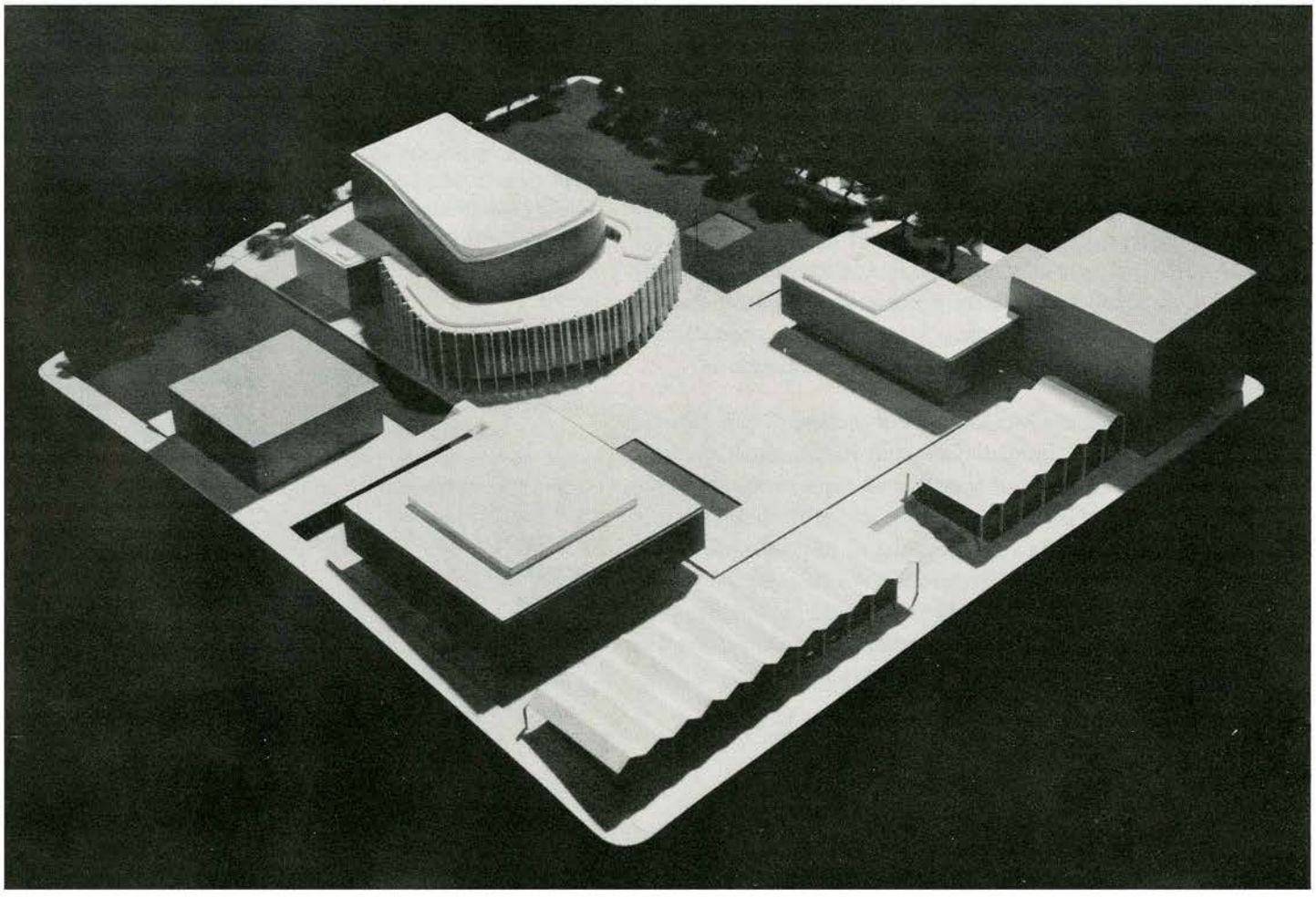
The first unit is the $7,500,000 concert hall, for which the commission has been awarded to Affleck, Desbarats, Dimakopoulous, Lebensold, Michaud and Sise. Similar in function to the O'Keefe Centre in Toronto, the concert hall will be followed by a theatre, park, auditorium culture centre and an underground parking garage.

The Place des Arts project was located on a downtown rather than suburban site in order to rehabilitate a blighted section of the central area.



# PLACE DES ARTS, MONTREAL

ARCHITECTS: **Affleck, Desbarats, Dimakopoulous, Lebensold, Michaud & Sise, Montreal**



## CRITICISM IS IN THE AIR

IT IS NO DOUBT A WEAKNESS on our part going back to some childhood party where we were slighted, that we do not, as a rule, enjoy conventions – certainly not to the extent that does our Roving Reporter on another page. But the annual meeting of the OAA was an exception. A young and sprightly council under the youngest chairman in history attracted to the convention so many of their kind that grey hairs and beardless age seemed definitely in the minority. And they came not to hear an analysis of the financial report or to know how we are getting along with the plumbing section of the National Building Code – they came armed with resolutions that caused no little alarm among members of the Establishment. The chief resolution, passed by a good majority, had to do with criticism which the OAA council is now empowered to encourage and endorse by every known means of communication.

Criticism has been in the air ever since. York University which has a carefully considered plan failed to remember the heated controversies of some years ago when the speculative apartment house builders showed how vulnerable were the Toronto ravines. The York proposal involved the use of the banks and the flats bordering the river, and the outcry came as before from conservationists, naturalists and citizens of all classes. The dust has now settled, buildings must not approach by less than fifty feet the "dreadful outer brink", the banks and flats are held inviolable in perpetuity, and, still quiet, flows the Don.

Of equal significance is a recent demonstration of architectural students at McGill aimed not at a good plan that went too far, but at an indifferent one (if there is one) that did not go far enough. The students were "deeply concerned by the danger of haphazard development", and gave expression to their concern by marching in a dignified and orderly procession round the campus and through neighbouring streets before presenting a brief to the Secretary of the Board of Governors.

Readers of the McGill student section of this Journal will appreciate, immediately, that independent thought, along with freedom of speech and expression, are taken as a matter of course at McGill, and will, therefore, not be surprised at the student effort to improve, with their elders, the "urban environment". We can understand the slight embarrassment of Professor Bland and his staff, but, equally, their justifiable pride in their hopefuls. The brief and a picture of the marchers appear on another page.

## L'ATMOSPHÈRE EST À LA CRITIQUE

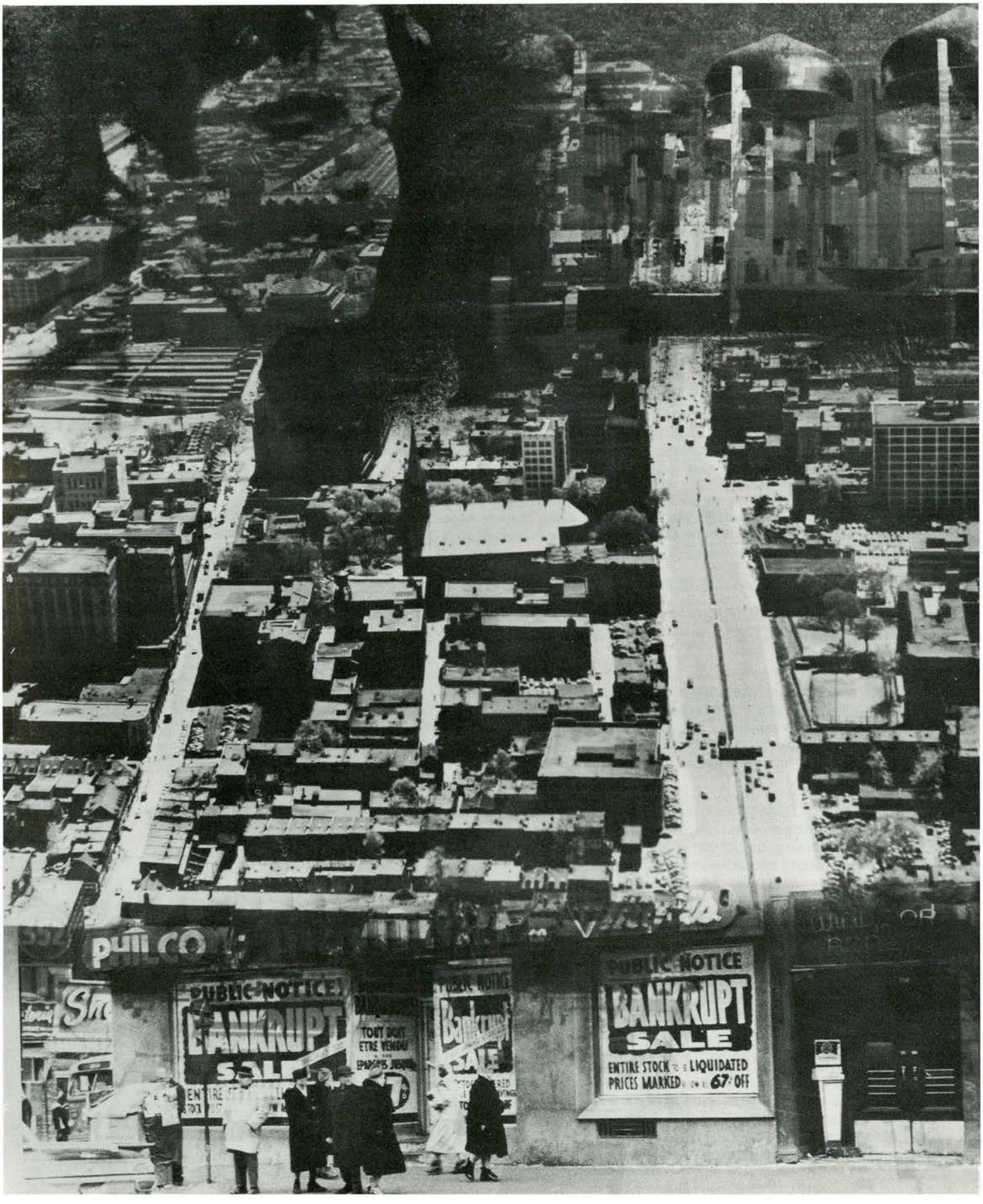
C'EST PROBABLEMENT QUE, tout jeunes enfants, nous avons été frustrés dans des réunions de bambins de notre âge, mais le fait demeure qu'en général nous ne sommes pas très friands des congrès, sûrement pas au même point que notre reporteur vagabond auteur d'une autre colonne. Toutefois, il est nécessaire de faire exception pour l'assemblée annuelle de l'Association des architectes de l'Ontario. Là, un conseil jeune et actif, dirigé par le plus jeune homme qui ait encore occupé le fauteuil présidentiel, avait réuni un si fort groupe de personnes du même âge que les cheveux gris et les mentons rasés étaient nettement en minorité. Et ces jeunes étaient venus, non pas pour entendre la lecture des états financiers ni pour savoir où en était rendue la rédaction du chapitre du Code national du bâtiment relatif à la plomberie, mais pour présenter des projets de résolutions qui n'ont pas manqué de causer une vive commotion chez les membres de l'Association. La principale de ces résolutions, et elle a été adoptée à une forte majorité, visait la critique que le conseil est maintenant autorisé à favoriser et à appuyer par tous les moyens de communication.

Depuis lors, l'atmosphère est demeurée à la critique. L'Université d'York avait soigneusement mûri un projet mais en oubliant les vives controverses qui ont eu lieu il y a quelques années lorsque la construction, à des fins de spéculation, de maisons d'appartements a révélé l'état dangereux des ravins de Toronto. L'Université avait projeté d'utiliser les talus et les vallons le long de la rivière et, encore une fois, l'opposition est venue de ceux qui voulaient garder ces lieux intacts, des naturalistes et de toutes les classes de citoyens. Maintenant le cas est réglé: aucun bâtiment ne peut être érigé à moins de cinquante pieds du bord dangereux de la rivière, les talus et les vallons sont protégés à perpétuité et le Don continue de suivre paisiblement son cours.

Mentionnons un autre événement non moins révélateur. Récemment, les étudiants en architecture de McGill ont décidé de protester non pas contre un bon projet de trop grande envergure mais contre un projet indifférent (si on peut parler de projet) qui n'allait pas assez loin. "Profondément émus par les dangers d'un aménagement au petit bonheur", ils ont manifesté leur sentiment en formant un défilé digne et ordonné et en paradant autour du terrain de l'Université et dans les rues avoisinantes avant d'aller soumettre un mémoire au secrétaire du Bureau des gouverneurs.

Les lecteurs de la section de notre *Journal* consacrée aux étudiants de McGill constateront immédiatement que l'indépendance de pensée ainsi que la liberté de parole et d'expression sont choses établies à McGill. Ils ne seront donc pas surpris de voir les étudiants travailler de concert avec leurs aînés à l'amélioration de leur "milieu urbain". Si nous comprenons facilement l'embarras du professeur Bland et de son personnel, nous comprenons aussi leur fierté dans leurs hommes de demain. On trouvera dans une autre page le texte du mémoire et la photographie des manifestants. *E.R.A.*

# TIME FOR STOCK-TAKING




McGILL UNIVERSITY SCHOOL OF ARCHITECTURE STUDENTS' ISSUE

Until a few decades ago it was considered that the duty of a School of Architecture was to teach standard principles and current practices. After the architectural revolution of the 1920's it was demonstrated that current practices were behind the times, and that the schools should primarily be concerned, like the Bauhaus, with giving a lead to the profession. Now, suddenly, both the schools and the profession seem equally irresolute and no group is more aware of this than we, the students, who turn to each for guidance.

Last November McGill University was visited by Paul Rudolph, head of one of the leading schools of architecture in North America. He admitted — almost boasted — that he had no idea of the direction in which he was going; that he was searching but had no conception of what he was searching for.

In school we must clarify for ourselves objectives and principles as we learn to assume professional responsibility. If the leaders of the profession are in the dark, who is to guide us in our pursuit? We must try to find out the reason or reasons for the apparent lack of direction in architecture.

THE TIME HAS COME FOR STOCK-TAKING!

Our cultural environment, its economic, social, and political manifestations, shape our outlook. Our work, which is subject to this influence, dissatisfies us. We are alarmed by the results of our efforts; we are alarmed by the efforts of the profession. Observations of our environment, and a study of architectural literature reveal that, in North American architecture, the primary considerations of human needs have been overshadowed by a petty regard for novelty of form and personal fame, to say nothing of materials and structure. Much of today's work does not provide us with the leadership we seek as students.

A CHANGE OF THINKING IS REQUIRED —
A RE-EXAMINATION OF WHAT IT TAKES TO PRODUCE ARCHITECTURE!

Questionnaires were sent to all the graduates of the McGill School of Architecture this summer. In this questionnaire they were asked to state their professional position and experience, appraise their education and give personal advice to students. The students at the school were given questionnaires in which they were asked to discuss their curriculum.

The graduates' questionnaire gave us a picture of conflicting and ambiguous views. It would be difficult to draw many constructive conclusions from the answers. The one conclusion which we arrived at was to ask ourselves: "Where do we fit into the profession of architecture upon graduation?" The confusion on the international architectural scene is emphasized by the statements of our graduates.

What is the reason for this state of affairs?

IS IT BECAUSE OF A GAP IN OUR EDUCATION?

IS IT THE RESULT OF OUR CULTURAL ENVIRONMENT?

IS IT THE FAULT OF THE PROFESSION?

The forces acting on architecture are so powerful that they cannot be withstood. They stem from the increasing complexity of our civilization due to technological developments. The demands of technological civilization, the emphasis on production-consumption-profit and consequently obsolescence, the shaky position of man in all this, creates a battle for security. The pattern of life becomes a vicious circle. The challenge of a continuous rise of gimmicky standard of living must be met to keep one's place in technological society.

We are undergoing technological developments that are changing our way of life daily. The building industry, least affected up to now, is bound to be completely transformed. Economic pressures, unemployment, increasing cost of living are manifestations of these developments. Mass culture, mass communications, mass education are affecting our outlook and our work.

Population explosion is a world-wide phenomena. In North America this is coupled with immigration, producing a rate of urbanization never anticipated. By 1990 the world population will double at the present rate of growth, hence making obsolete our concepts of land use, housing, transportation, etc.

When we relate these developments to our own environment, serious inadequacies and shortcomings are revealed. There is an uneven application of technology and design to our physical environment. On one hand, exhibitionism and false prestige symbols lead to an empty rationale of forms. On the other hand, tens of thousands in our city are preposterously housed, and our city is strangled by its flow of traffic.

We all have to face these problems, in particular, we, as students of architecture; and it is only natural that we should feel concerned. We are grateful to our School and to the teaching staff who have made us aware of the many problems we have to confront. We believe that our statements reflect the spirit of the McGill School of Architecture at this moment, even more adequately than an artful display of our work. What we present in the following twelve pages is obviously not a solution; it is an investigation. It is a summary of our enquiry into what surrounds us.

# OUR GRADUATES TELL US:

## ABOUT ARCHITECTURE

**"That architecture is not the creation of an individual, but the result of many minds and efforts united. That form is the result of requirements and usefulness, and if its use is unjustified, then it is bad architecture."**

1928 Graduate

"Architecture is no longer an art but a form of engineering. Most buildings are monotonous, uninteresting in detail, unreasonable in glass area, eye-catching without being eye-pleasing, and eccentric. Modernistic architects are talking a language in their designs which no one, not even themselves, understand. Decoration is essential for art. No great school of architecture has ever developed without an accompanying good school of decoration."

**1924 Graduate**

## ABOUT EDUCATION

"A university is the moral and spiritual training ground of the architect and is the best possible place for this if it maintains the ideas, the convictions, and the spirit of challenge that it did in my experience of it. It sets the basis of truth, the ethics of design, creates the framework of appraisal, and establishes an attitude without which it would be impossible to develop. Knowledge comes only with experience."

1950 Graduate

**"In Schools of Architecture there is not enough contact with reality."**

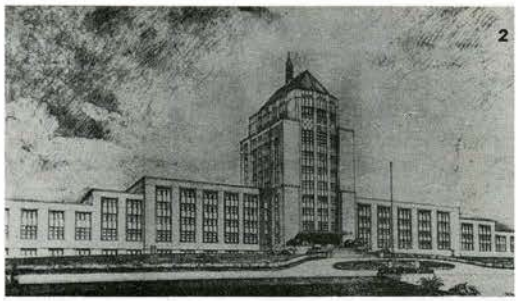
1953 Graduate

"The graduate usually does not have any idea of construction. His details are usually devoid of knowledge of actual material sizes used or common construction methods."

1951 Graduate

# WHAT OUR GRADUATES ARE BUILDING:


1


2

**"Capitalism has all but killed architecture as an art and is doing its best to kill it as a decent profession."**

1959 Graduate

"We architects have a most difficult selling job to do—we have a product which the public does not really understand and we are, by preference of the public, restricted to the most circumspect and indirect, and therefore, slow and expensive selling techniques."

**1946 Graduate**


3


4


5


6

**"What seems to be required (in education) is a concentration of fewer subjects and a presentation of these subjects based on philosophy, an approach which aims at a healthy embryo, rather than premature birth, the nurturing rather than the bloom, searching and receptiveness rather than the vanity of arrival."**

1947 Graduate

"I would strongly recommend that less emphasis be placed on design and presentation and much more on courses in specification writing, mechanical and electrical requirements, office management and public relations, etc."

1953 Graduate

**"Most people will say that training at a school is of little value and that you really begin to learn about building when you actually start work in an office. This is true, but it is also true that the first impressions on the mind and imagination of a new student are the ones which will remain with him for ever."**

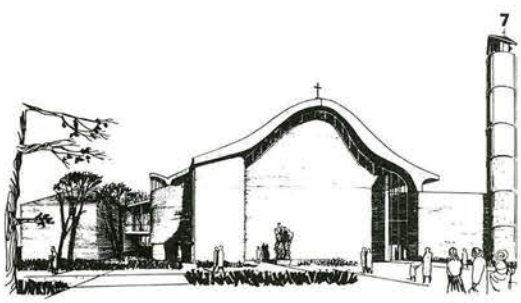
1941 Graduate

"I believe that the finest technical training is stillborn unless utilized in the creation of actual structures for living clients."

1953 Graduate

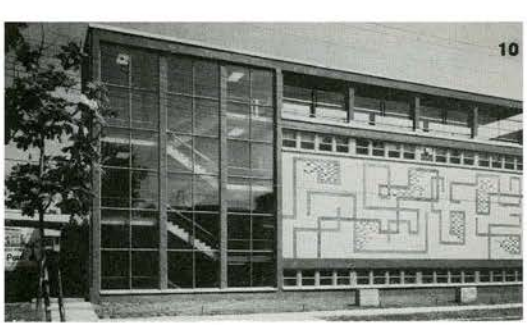
**"With a good basis in the humanities to keep developing awareness and consciousness of the world around us, and a solid technical background, design ability develops with experience and maturity. It is a great mistake to stress the importance of expressing oneself before one has anything to say."**

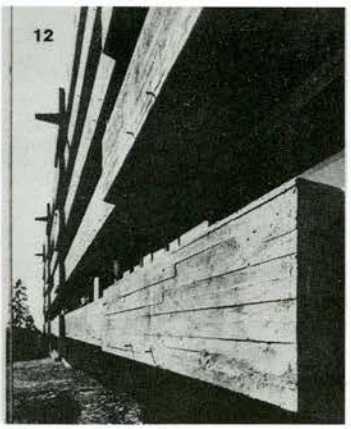
1955 Graduate


7

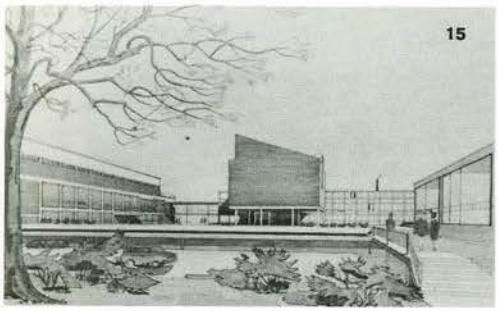

8


9


10




## TO THE STUDENT

**"By all means be an architect—it's a terrific way of living and enjoying life."**
1941 Graduate

"Learn why things are done, not how."
1950 Graduate

**"Join clubs and societies and take an active part in the affairs of your community so as to become well known."**
1916 Graduate

"Regard the study of architecture as a springboard from which you can launch a career in building, land development, real estate, etc." 1931 Graduate

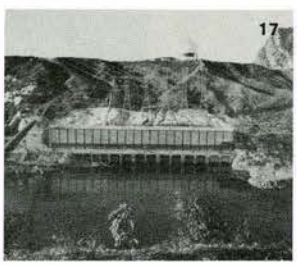
**"If it's money you want, be a stockbroker or something."** 1916 Graduate

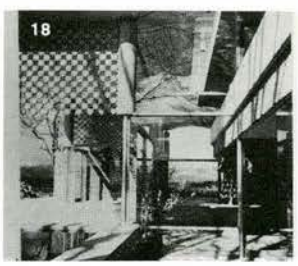
"Take courses in business administration and salesmanship." 1951 Graduate

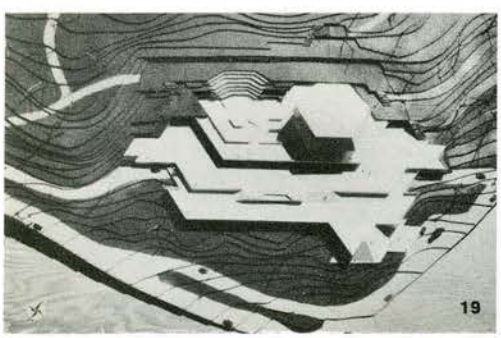
**"In design, COPY. Poor original creations at school are no substitute for learning the vocabulary of architecture which the Niemeyers, Jacobsons, Saarinens, Le Corbusiers, etc., can teach."**
1950 Graduate

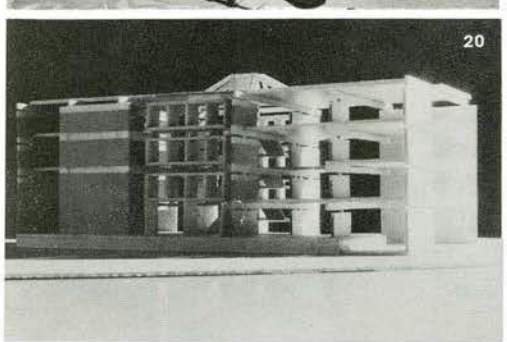
"Try every aspect of architecture to determine where you best fit in."
1954 Graduate

**"The field is becoming more specialized each year. Students should be made to realize that the ideal of becoming a designer and having a private practice is a possibility open to very few people. There are many other equally important positions to be filled."** 1953 Graduate


## SPONTANEOUS WORDS OF WISDOM from would-be architects

**What happens to naive idealism after graduation?**

GIVE BRIEFLY YOUR VIEWS ON THE ROLE OF THE ARCHITECT IN SOCIETY.

**6TH YEAR:**

**"He is a servant of the public who must do his best to improve its environment, as he has opportunity."**

"I cannot answer this question briefly."

**"Are you kidding?"**

"The architect must raise the standards of architecture by using the disciplines of function, structure, materials, etc, to create aesthetic buildings."

**"He has a very real responsibility to society which he must always keep in mind. It is not sufficient to build beautiful buildings: They must really serve society."**

**4TH YEAR:**

"Besides building, the architect has the responsibility of providing an environment of lasting value."

**"Good architecture, good environment."**

**5TH YEAR:**

**"He is the creator or inspiring force of various societies' dreams."**

"The architect must make life worthwhile for people."

**"The architect's role is to create a pleasant environment for people."**

"The architect is a servant of a society, but in such a way as to lead man eventually towards 'good' architecture."

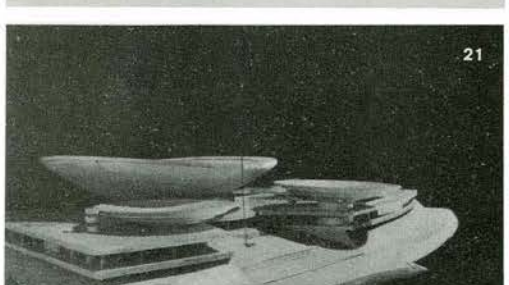
**"The architect's role is to express the way of life of people."**

**3RD YEAR:**

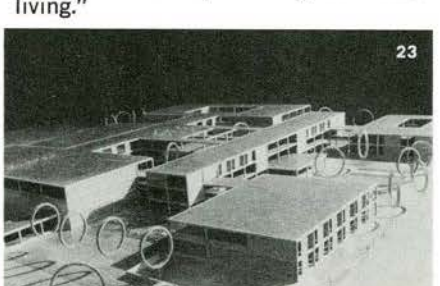
"His role is to try and put more beauty in the world."

**"The architect's role is to give people houses that are not symbols of prestige but suitable to their needs."**

"Architecture is pioneering for better living."







# WHY ARE THINGS AS THEY ARE? — is it education?

## THE GAP IN EDUCATION

Professional education always reflects the state of the profession for which one is being trained. Recently there has been discontent with architect-designed buildings around us and consequently there has been discussion concerning architectural education. The weakness of a professional education is caused by the weakness in the profession. The schools are one of the places where the shortcomings can be corrected.

Two major criticisms have been voiced concerning architectural training as related to current practice, and architectural training as related to anticipated developments within the profession:

"Private architecture in Canada employs 5,000 plus people. At any given time, 900 are administrators, 2,000 are technicians, 1,400 are in supporting roles. The 1,000 left are practising architecture in the full sense that the schools of architecture seem to be educating for."
(Canadian Architect, 11/60)

This statistical fact has been elaborated upon by Professor Collins in Architecture et Batiment: "In the larger offices, specialization has become inevitable, so that such important activities as specification writing, site organization and administration are almost autonomous departments in themselves. The schools of architecture must adapt themselves to these conditions. . . . Nothing but lifelong frustration awaits the student, endowed with other architectural gifts or abilities, who is led to believe that a genius for composition offers the only possible chance of success."

The profession of architecture will continue to exist only if it shows its usefulness in a technological civilization. Is the program of the schools today designed to prepare the student to assume this responsibility? George Banz states: "The trend is clear: it points to a much more definite specialization in the design field. It is part of the continuing general trend towards increasing specialization which started with recorded history itself. Industrialization will catch up with building methods and design and the practising architect of today will disappear the same as the corner grocer and the general store have disappeared. There will be a greatly increased demand for specialized planners, architectural engineers and designers, less demand for architects. If the latter is to remain at the top of the building hierarchy, the schools of architecture must anticipate developments of the near future and train the technicians needed to give tomorrow's architecture a sound, broad basis."

We are in sympathy with such views, which reflect clear thinking on a subject that has troubled many in the profession. As students, however, we can discuss this subject only within our limited perspective. Our education is strongly influenced by the profession, in that we too have tendencies to create a dream world of paper designs and graphic gimmicks, and have a general disregard for the integration of all building parts. But in the schools, we go one step further: we avoid the remaining limiting forces which the profession cannot overlook: the realistic client and his programmatic demands; the economics of a building in a competitive society; and the actual construction of a building.

We are in school, living in a dream world within a dream world. Our work does not have to stand the test of reality. Will we, as architects, be able to stand this test after graduation?

The conflict is clear and becomes apparent every time a school design problem is based on a real project and the two solutions compared. One such example is the McLean Park Public Housing Project in Vancouver which was designed by CMHC and was also given to our fifth-year students, who were obliged to adhere to the program (below). Are the students' projects promising works of architecture? Are their aesthetic qualities conditioned by the fact that they did not have to face up to the major and minor demands of the program, the approval of committees, the prejudices of the public, and most important of all, the battle of capital and maintenance costs versus rents and subsidies.

This is the dilemma. The schools cannot hope to give the student all the knowledge he will need in practice. This was never possible in the past, and it is certainly impossible today. Nor can the schools create within themselves a model environment in which all the forces acting on the profession are reproduced. The situation is too complex; the circumstances ever changing.

What, then, can the schools teach?

They must instil in the student a sense of morality and integrity towards his work. This attitude must be so deep in the student that it will be able to withstand the pressures and temptations that come with practice.

They must stimulate and develop creativity in the student in all its forms, creativity in all facets of the student's work and not only the limited aspect of spatial imagination. This will prepare the student to tackle, in later years, problems under different conditions in this rapidly changing technological economy.

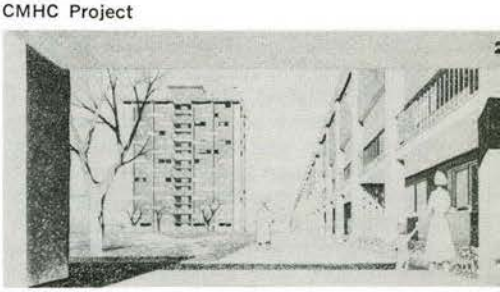
They must make the student aware of the limitations which affect building in practice, and prepare him to be able to cope with these limitations upon becoming an architect.

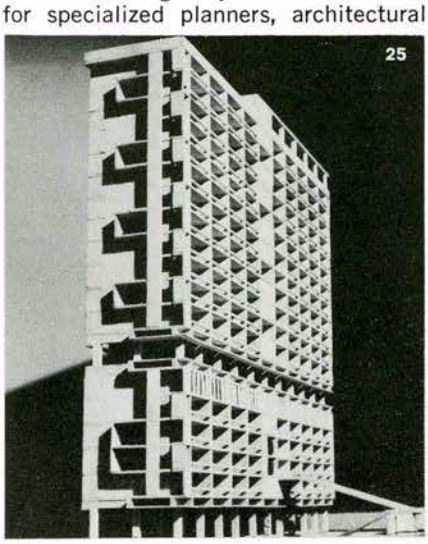
## A STUDENT'S VIEW

**Should students accept their professional education in Schools of Architecture if:**

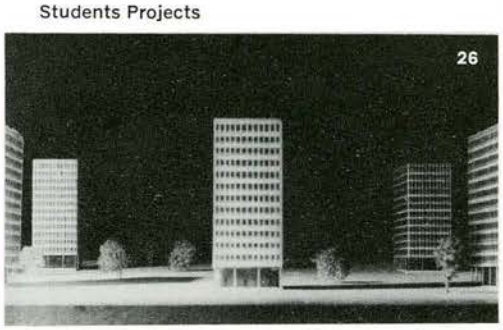
1. **the schools disguise architectural education as simply a study of forms that requires no serious effort in any other disciplines?**
2. **the students are in an artificial dreamland, wildly emotional?**
3. **the students are not made aware of the prejudices so that they can learn to exercise their analytical faculties freely?**
4. **the schools fail to keep a balance between all the aspects of architectural design, drawing and supervising?**
5. **the schools do not provide close and lengthy contacts with leaders in active private practice?**
6. **the schools forget that creative imagination is not injected but developed, and this not only through lectures but through the whole school environment?**
7. **the schools do not make any positive effort to bring the students' attention on all human needs, quantitative and qualitative, material and spiritual?**

CMHC Project






Students Projects




## ANOTHER STUDENT'S VIEW

"We are teaching the acceptance of forms congenial to current taste rather than the ability to analyse a problem from its basic needs." The culture in which we live and our absorption, as individuals, into society are strong factors influencing selections or preferences in architecture, painting, sculpture, and music, as well as clothes, food, dwellings, and automobiles. The selections an individual makes—and which reflect his taste — must depend upon his cultural background, his total learning.

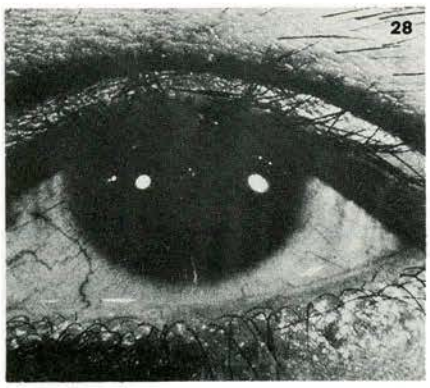
There has always been a tendency in Schools of Architecture to try to condition students so that their preferences in the field of architecture conform to those which the teaching staff think are forms in good taste. The criteria cannot be in harmony with every individual's personality or background. Those students interested in professorial approval will accept the dogma and hence the forms offered. But even when a student does not accept the proferred doctrine and has the courage to insist on other values which are closed to his personality, the high emphasis on "taste" and "form" in his education encourages him to accept the tastes and forms developed by others. This becomes dangerous when the solution of one design problem is accepted as being valid for a totally different problem, as when a high court in India is modified to become a museum for McGill University, a Parliament for Brazil become a sports centre for Montreal, or the chapel at Ronchamp become a house. In each case the forms are the same, only the problems are different.

As the great Professor of Architecture, J. F. Blondel, said two hundred years ago: "The ancients can teach us how to think but we must not think as they did." Similarly, our own masters can help us to develop principles of design, but not supply us with form catalogues.

If such irrational plagiarism is evidence of a superficial approach to architecture, what should the universities teach instead of the tastes of Masters of Modern Architecture? One approach would be to demand a more searching analysis of each problem. This should be as important as the resulting form. In any case, if the analysis of the problem is deep enough and the basic needs of the problem are satisfied, the solution indicates itself in terms of space, light, shelter, construction, and so on. In other words, the form will be generated in a natural, unrestricted way. This is not to say that we should not concern ourselves with those aspects of form which distinguish architecture from building. Form is an integral part of a design solution and as such is intuitive, not scientific. The searching analyses of design problems will further architecture. Unquestioning acceptance of fashionable shapes will only retard it and lead at best to eclecticism and at worst to a new battle of the styles.

■■■■■■■■■■■■■■■■■■■■■■■■■■■■

# is it culture?




**The picture presented thus far of the architectural profession today is an aspect of North American culture. Architectural students are also influenced by this cultural environment and are therefore concerned with its architectural implications. In accordance with our process of examination and evaluation, the following article is concerned with some of the general aspects of our culture and those motivating forces which are influencing architecture either directly or indirectly.**

**Why do North Americans remain unconscious and insensitive to actual changes in their environment and to the factors causing these changes?**

**Excessive and inaccurate advertising has saturated most people to the point that their sense of value, purpose and responsibility has deteriorated. Our mass media, including newspapers, magazines, televisions and radios are so involved with advertisers that they often tend to overlook their obligations to society and we in turn are not demanding that they meet their responsibilities. We are becoming a generation of spectators content to sit back and watch. Our general apathetic attitude to current problems and to our individual responsibility in society is dulling our vitality, and what little vitality remains is being directed towards selfish goals.**

**Why are the ambitions of most "North Americans" directed towards materialistic ends?**

**This motivating force in our society is a result of our search for financial security in order to maintain current living standards. It is aggravated indirectly by an atmosphere of general insecurity caused by political, social, and economic pressures. Through mass media more people have become aware of disturbing factors such as "cold war" propaganda, prejudice and discrimination, growing unemployment, and a higher cost of living. More directly, this search for security in North America can be attributed to the emphasis placed on consumer spending and high standards of living in order to support our economy. The cost of living has gone up consistently since the last war and it now includes an ever increasing list of new "essentials" which makes this search for security a never ending process. These new "essentials" not only require initial or prolonged financial outlays but also involve continuous payments. Cars, television sets, deep freezers, and electric can-openers are all subject to power and maintenance costs. Although we may own one of these new "essentials" we must continue to pay for its use and it is therefore impossible to estimate the cost of financial security. Very few people can afford to feel secure and ignore their materialistic wants if they choose to accept modern living standards.**

**Why do North Americans feel the need to conform or to accept modern living standards?**

**It seems Madison Avenue has found it necessary to brain-wash people in order to permit our economy to continue thriving on consumer consumption. Advertising has made people believe in concepts such as "newness for its own sake" or social prestige through the display of status symbols. Superficial needs have been created. "In what sense did the North American house-wife have an innate desire for an electric can-opener, a seventy-piece set of plastic dishes, or a garden-full of aluminum furniture before ingenious corporations developed these products and promoted them? Did the North American consumer yearn for the TV dinner, the stereophonic phonograph, or the chemise?[a] One result of the superficial demand advertising has created for privately consumed commodities is a disregard for "social wants". Although the increased sale of air-conditioners and electronic air-filters has reaped large profits to its manufacturers, it has not improved the problem of air pollution in any way. Similarly we are getting "more suburban barbecue pits but fewer public parks.[b] Hence advertising is one significant reason behind our selfish concern for the annual fashion or the latest style. True comfort and convenience either individual or social, is ignored. We are willing to live in the "Dream House of Tomorrow" and forget the real problems of today.**

**Furthermore, this motivating drive to conform or to adopt the statistical norm in North America is a direct result of our physical environment, which lacks individuality and an honest consideration of human needs and desires. Since we live and become educated in a stagnant and visually inarticulate environment, naturally we are influenced and tend to adopt some of its debased characteristics. What is needed is an environment based on human needs, local traditions, and existing site and climatic variations rather than a superficial dreamland.**



Why do those individuals specifically concerned with shaping our environment show little or no responsibility to society?

The incentive towards growth or change in our environment is often dominated by limited personal views and materialistic ambitions, rather than an honest consideration of existing conditions. With the notion of free enterprise and open competition in the building industry, the truth of the above statement becomes apparent, especially with regard to land and building speculation. What is needed in the building industry is a clearly defined set of objectives for all phases of planning and construction so that responsibility could be demanded. Similarly, the primary concern of most North Americans is to attain professional status and financial security. Since the image of the professional architect is a man of wealth and power, this search for financial security is made all the more difficult.

On the basis of what has been discussed thus far a disturbing state of affairs is in existence. Up till now there has been no organized effort to cause change to take place. The majority of North Americans are evidently insensitive to their environment and they are apathetic towards their responsibilities in a democratic society. Architects in particular are guilty of the above mentioned attitude, and this fact becomes apparent if we note their emphasis on novelty in design. The architectural magazines have made matters worse. The profusion of publications, with their uncritical attitudes, their lack of responsibility to society, and their concern with advertisers, has managed to elevate many an architect's first buildings to unqualified fame, and has thus created a pressure for new designs and hence a concern for novelty of form and a superficial originality of concept. Furthermore, it seems that the leadership of architectural professional associations is in the hands of a conservative and contented element of the profession, since these associations have not reacted to the situation in a unified manner. The true architectural leaders are often found to exert little if no influence on these associations.

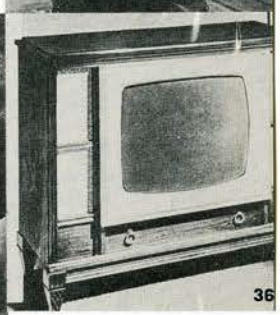
We must change in order to remedy this disturbing state of affairs. We must take stock in order to halt and organize the confusion. Perhaps we can begin by limiting the importance of personal taste in architecture and emphasizing the value of a complete program, which includes both physical and inspirational requirements. We must realize that a well-designed building is a thoroughly resolved building, and this requires a great amount of work and the solution of a great number of problems.

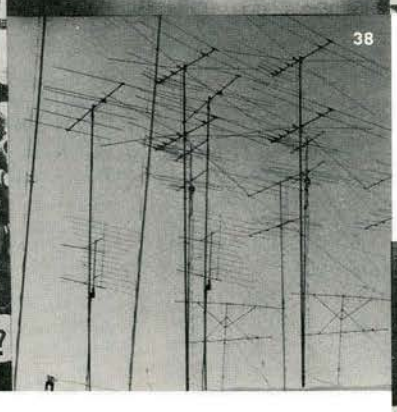

32


33

34 37


35


36

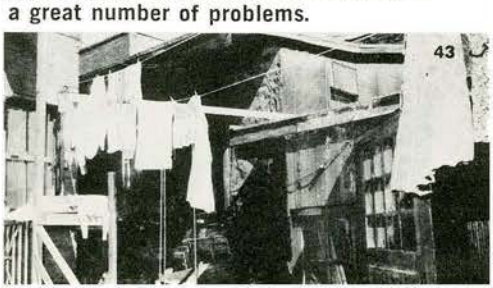

38


39

40

41


42


43


44


45


46

## STATUS & ARCHITECTURE

Culture refers to man's entire social heritage, all the knowledge, beliefs, customs and skills he acquires as a member of society. It is a distinctive way of life of a people, their complete design for living.

North America contains not one homogeneous culture, but many regional, ethnic, and occupational sub-cultures. Despite this heterogeneity, the North American "way of life" is distinctive per se.

Examining the sociological aspect of our culture, Vance Packard, author of "The Status Seekers" has concluded that the average middle-class North American is continually striving to elevate his position in society. To accomplish this, he surrounds himself with "status symbols", for example, a new automobile or house. These symbols, in many cases, are beyond the financial means of the person concerned. Hence he is creating a false environment.

Perhaps a parallel can be drawn between this behavioural phenomenon and the art of building. Louis Kahn, Paul Rudolph, and Eero Saarinen are "upper-class" architects. Middle-class architects would include students and all aspiring Kahns, Rudolphs, and Saarinens of the profession. Their status symbols are the curtain wall, concrete shells, or a "new brutalist" philosophy.

Their buildings are "modern" and up-to-date. What the middle-class architect lacks, however, is a fundamental system of design principles. In other words, he is more concerned with making his designs "original" and "contemporary" than with making them good.

The automobile industry of North America, through extensive advertising and the cooperation of the consumer, has had decided effect on the building industry, and it seems to be the tendency of automobile manufacturers to change the "style" of their produce from year to year. The motor of the car may change very slightly, yet the car has a new grille or "completely new lines". Advertising magnifies this change and the consumer is soon driving an automobile with a "forward-look".

Similarly, the middle-class architect, in his efforts to be original, is, in the spirit of an automobile designer, now creating his "1962" buildings. This feat can be accomplished by merely using fashionable folded-plate roof or curtain wall. These features are not to be condemned per se, but the spirit in which they are employed is too often basically superficial. Modern architects have learned to frown on 19th century eclecticism or the arbitrary choice of style, yet are practising it themselves.


## ADVERTISING AND ARCHITECTURE

The high-pressure salesmanship that has been used overwhelmingly in the last decade by the tycoons of Madison Avenue has influenced every phase of modern living and as a result, architecture, to use one of their characteristic phrases, is suffering from "tired blood".

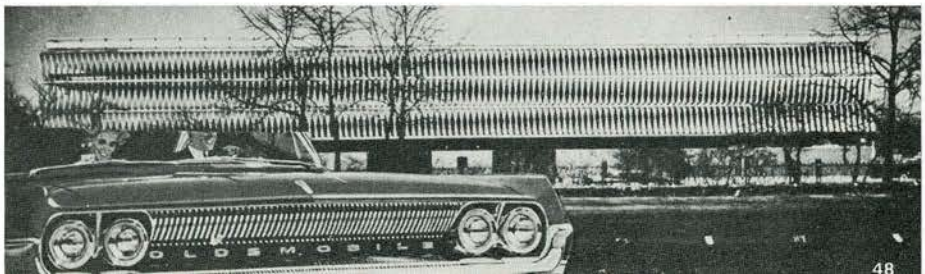
Our buildings are becoming too dependent upon clichés. The metal and glass curtain wall owes its popularity to its 'well-groomed' appearance, and is now a symbol of 'modernity' — a term which has become, through the techniques of advertising, increasingly abstract. Not only is the curtain wall being indiscriminately applied to new buildings, one even finds it being used as a cosmetic to face-lift an "out-of-date" structure by its simple application as a veneer onto the existing masonry walls.

The idea of the status symbol has always been a favourite gimmick of advertising wizardry. It has managed to elongate the chrome-encrusted automobile beyond any sensible proportions, and it has induced the clothing industry to focus on the design of bigger and better labels. Now, the symbol of social prestige is the essential means by which house builders manage to sell their creations. The machine for living has become the machine to tell others how well you live.

Similarly, the concept of expendability of style, which has been promoted by automobile advertising, has seeped into architectural thought. Architects are intent on creating newness for its own sake.

The shell structures with which the present generation of architects are infatuated are being used wastefully to announce raucously the presence of restaurants and gas stations, even as the power of such compelling shapes is being quickly drowned out by association with neon signs.

In short, the standards of advertising are deplorably low, and the same must be said of architecture and its dubious future if it remains tied to such superficiality. It is a sad thing when one sees the ideals of the Bauhaus subjugated by those of the "sociables".

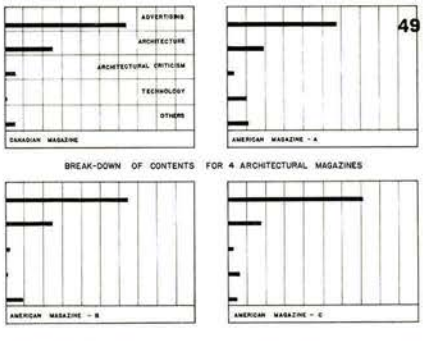



## CONCERNING THE MAGAZINES

It seems unnecessary to state that architectural magazines have a strong influence on architectural design. By keeping the architect informed about the happenings in the world of architecture, the magazines carry out a function no other group can perform, a function of vital importance to our evolving culture.

Among the leaders of architecture in North America, it has become an indication of success to have one's building "published" while the lesser architects look for magazines for help with their design problems. The extent of the magazine's influence was vividly illustrated to us when, in answering a recent questionnaire, no less than 85% of the students of architecture of McGill admitted that while they did not use them merely as sources for ideas, magazines were essentially of importance to them in their design problems. The percentage was highest among students in higher classes.

It goes without saying that any group which has so much influence, bears at the same time a very great responsibility. In this case, the magazines have a vital responsibility to architecture. We question if the magazines, in their present form, are carrying out this responsibility. The most disturbing result of a study of contents of five leading architectural magazines in North America was the startling lack of criticism whether favorable or unfavorable. It seems a sad state of affairs when a group in such an important position of leadership appears unable or unwilling to express opinions. It is even more disturbing when one thinks of the vital role honest criticism could play in eliminating the present architectural chaos.



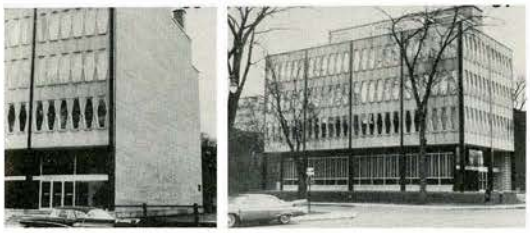
BREAK-DOWN OF CONTENTS FOR 4 ARCHITECTURAL MAGAZINES

One might take the stand that the role of the magazines should not be to criticize, but rather to merely describe buildings leaving the reader to assess them. This approach raises two questions:

1. Is the selective and slanted presentation of a small percentage of current buildings calculated to allow architects to judge objectively for themselves?

2. Are the buildings presented in magazines adequately and accurately described, and are these descriptions of any value to an architectural designer?

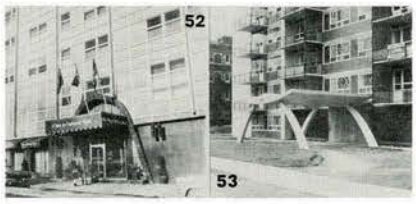
The answer to the first is obviously NO. The buildings illustrated are selected according to the tastes of the editorial



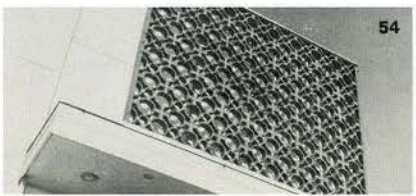
boards, and these boards have a duty not only to justify their tastes, but to illustrate and criticize buildings of which they disapprove.

In answer to the second, we would say that the articles and pictures which now appear as descriptions of buildings are of little value to the designer, certainly of less value than they could be. The problems facing the designer of the building are rarely explained fully enough for the reader to assess the building in terms of a solution to a specific set of requirements. Furthermore, the buildings usually appear to have been presented in a way most favourable to the architect. Problems such as car parking, relationships to adjacent buildings, etc., are rarely mentioned unless the designer has arrived at a particularly good solution. Rather than mislead the architect by photographic gimmicks, magazines should make him aware of these critical aspects of building.

Furthermore, the architectural magazines are having an adverse effect on design. They have in fact become fashion magazines. All around us we see illogical forms appearing which serve no purpose, but are in the latest styles and fashions. This is not limited to architecture but is evident in all aspects of life. Thus the stabilizer of an airplane becomes the fin on a Cadillac; a pierced concrete sunscreen appears six inches in front of a blank wall; an arch capable of supporting an entire building carries a flimsy canopy. This would be less tragic if buildings became obsolete and were "traded in" before they went out of style; but since a building must last, so must authentic virtues have some quality of permanence.




From this, we must conclude that the magazines are not living up to their responsibilities. We realize that the publishers of these magazines have another responsibility which is of greater importance to them, namely, a responsibility to the advertiser, whose money alone enables them to survive. Unfortunately, the aims of each are in conflict, and the magazine is thus made part of a vicious economic circle in which architectural values are constantly debased so that profits can continue to rise.




## ARCHITECTURAL LINGO

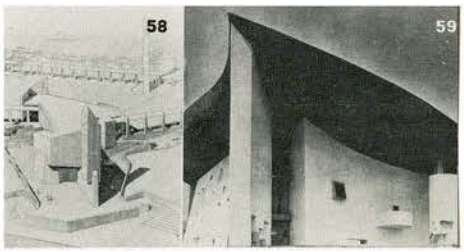
It is a difficult task to express in words the complex ideas of architecture since one is using one artistic medium — namely, literature —to express the values of another. Throughout history we have had great poets who excelled in architectural disciplines, such as Ruskin. Oscar Wilde even went so far as to claim that criticism was itself a fine art.

Today the architectural press sets the architectural terminology, which is adopted by the profession, and of course, the students. The architects' language indicates the vague, if not meaningless, criteria which are used to appraise a building. It reflects the art historian's tendency to label and classify everything. Thus a gaudy mixture of gold, black and silver anodized aluminium is DELIGHT, the exposed surface of poured concrete — BRUTAL. As students, we are all the more guilty of this abuse of words.


**THE NEW BRUTALISM**
**(Prog. Arch. May/59)**


**A DELICATELY SCREENED FACTORY**
**(Forum Feb./60)**

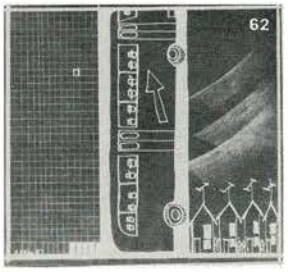

**BUILDING FOR SPACE AGE**
**(Forum Sept./60)**



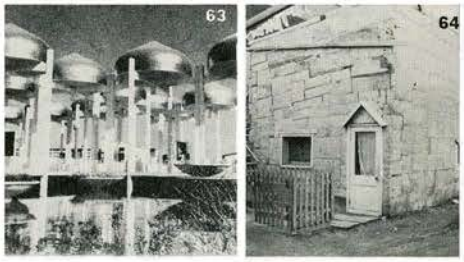

**SANCTUARY OF SCULPTURED CONCRETE** **(Forum Sept./60)**


**CONTINUITY WITHOUT COMPROMISE** **(Forum Feb./60)**


**CAN MODERN ARCHITECTURE MAKE A SYMBOL?** **(Forum June/57)**




**WHITE COLLAR HABITAT**
**(Canadian Architect March/60**




**COMPACT DELIGHT**
**(Arch. Record May/58)**


**SERENITY AND DELIGHT IN THE NEW ARCHITECTURE**
**(RAIC Journal July/59)**

# is it the profession?

## CONCERNING THE STUDENT

What kind of student is found in the school of architecture today? Is he the young radical whose ideas continually conflict with those of society? Is he continually struggling to find some truth in life?

No.

The average architectural student is quite content. He differs little from others of our society. He is disciplined. An honest intellectual integrity is not a requisite today. One's respect in the neighbourhood is more assuredly gained by conforming; by becoming a "good" citizen.

An architectural student must proceed through a required number of college years. He then obtains his degree and diploma and proceeds, presumably, to move into his slot in society. While in college, few things really excite him. He goes with 2,000 other fans to cheer his football team. In general, however, he is content to let things be much the same as they always have been.

Apathy.

It is the product of a man with no intellectual integrity. This is the basic want in all members of our society, and, not least, in the architectural student.

**Throughout our course in university we are in continuous contact with the profession outside. Our observations of the profession are based primarily on summer work in architects' offices but also from architects' lectures at the school, from architects' writing in the magazines including this one, from our work in the building industries, and from the built work we see around us. When these experiences of a group of students are collated we arrive at a rather unique cross-sectional view of the profession. We are not pleased with what we see.**

**We observe that for the few conscientious, capable, and responsible architects, there are an alarming number of bungling incompetents — irresponsible, unscrupulous hypocrites. A high proportion of these are of the rising generation of architects. This prompts us to challenge the profession to look at itself, to examine its regulations and its fabric. Further it prompts us to question the preparation we receive for this profession.**

**We see architects take work on a partial service basis for minimum fees with little or no supervision of construction. The partial fee was intended as a means of terminating a contract and not as a means of coping with an owner-builder who wants plans only. The fact that it is used as a technical means of providing a drafting service within the Architects' Act produces at once the basis of wholesale corruption within the profession as a result of fee shopping on the part of unscrupulous contractors, and fee cutting to meet competition under pressure on the part of the architects involved. We see the results in the sometimes badly constructed and always badly detailed buildings around us. We feel the ridiculous pressures this creates in the drafting room where there is no time to detail anything, "don't make problems; let the builder work it out; he is going to build it his way anyhow".**

**We hear architects blame pressure from clients for all kinds of compromises that result in bad buildings, but we observe that in most cases this is really the result of the architect's own weakness in the presence of the client. These problems usually stem from inadequate analysis of the problem and program in the first place, from lack of any real conviction in the development of the idea, and from a real fear of showing his weakness to the staff he hires. How often have we experienced the principal in the office who never gives all the information to his staff who are to design his building for him, but withholds it and metes it out when it gives him the advantage in argument by altering the whole basis of the design. We suggest that this is not entirely a human failing.**

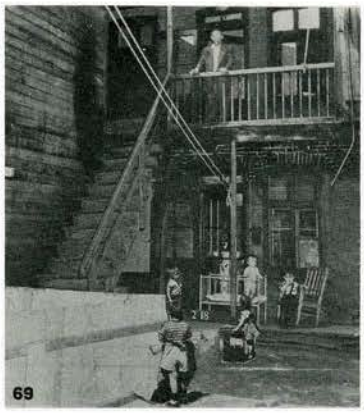
**We see the profession spending large sums of money on public relations to try and create a public image of the architect as a "master builder", capable of solving any problem related to the visual environment. We suggest its real function is to cover up the damage that malpractice and incompetence have wreaked to the status that architects used to enjoy. This can only be cured by improving the quality and amount of service to the community by building better buildings. This can only be achieved by full supervision of the construction of good designs and by charging full fees to allow proper time for design in the first place. We suggest the image is false to begin with and this, because of the way architects are prepared for practice at this time.**

**We hear architects expending a great amount of time and energy bickering about engineers and contractors; about the awful things they are doing, making inroads into the architect's territory through the medium of the package deal and owner-builder combinations. The arguments we have heard advocate protective closed shop measures to outlaw them. They do not indicate a creative response to what is obviously an economic necessity considering the direction business, finance, and urban development is going. As we see it, there is nothing built-in to these methods of building that precludes bad design; it is just that present professional laws do not allow these owner-builders to include designer-architects in their companies at the management level where they could be effective. We see the tremendous achievements of the architect-engineer-contractor organization in Italy headed by Nervi, and similar organizations elsewhere in Europe and in South America. Although we realize they are not exactly parallel to our package dealers, we wonder why the profession is not taking more vigorous steps to reconsider its position with respect to contractors and engineers. It seems to us that this is the most urgent problem facing the profession today in the face of the increasing industrialization of the building industry, the coming huge demand for housing that will probably be our major concern, and the complex architectural problems arising out of increasing urbanization. Architects are currently losing the opportunities to build, as building types are being more efficiently handled by package dealers using free-lance design talent. The architects have a choice—they can reduce the scope of practice to the few "focal" prestige buildings that are still built within the conventional architect-client-contractor competitive bidding framework, and draw the professional boundary here, tightening up the legislation to eliminate partial service except as it is necessary to terminate a contract, and hence remove the cancer at the core of the profession—or they can reassess their position and find new partnership-team combinations with planners, engineers, industrial designers, contractors and others to meet the constantly changing demands of a technological society.**

# FACTORS LEADING TO CHANGE — what we see


67


68

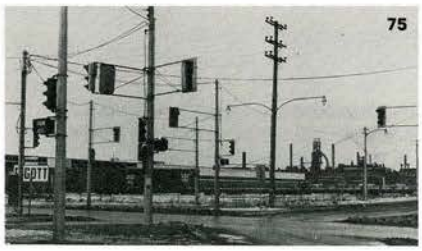

69

## HOUSING

This man earns
$2,000 per annum
He has six children
He must be rehoused
Is this the answer?
What is the answer?


71


74


75

## TRAFFIC

"Our buildings are no longer directly related to man, for in many parts of our greatest cities they appear to be floating within a lake of cars."


76

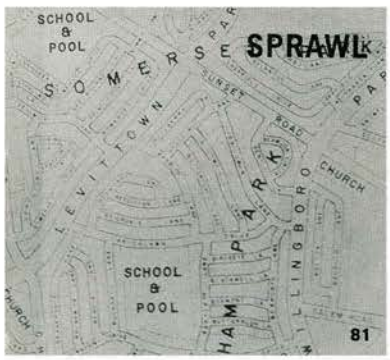
"The motor-car has changed our conception of the space we are living in. It has turned free human beings, the masters of their cities, into slaves of their cities, because it has taken over from them the best parts of their streets, elbowed them out of their courtyards and squares, and prevented them from looking at their buildings and approaching them in the proper way."
Doxiadis

77

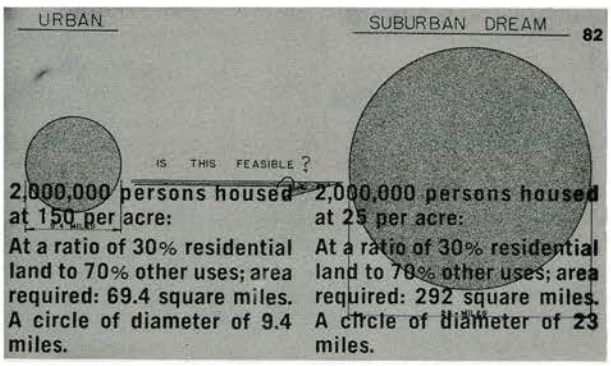
78

79

80



81

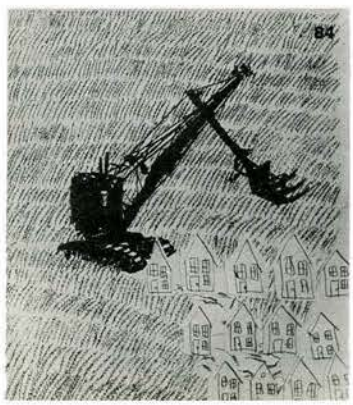


82

2,000,000 persons housed at 150 per acre:
At a ratio of 30% residential land to 70% other uses; area required: 69.4 square miles. A circle of diameter of 9.4 miles.

2,000,000 persons housed at 25 per acre:
At a ratio of 30% residential land to 70% other uses; area required: 292 square miles. A circle of diameter of 23 miles.


83


84


85

## RAPE OF THE LAND

"Urbanization alone destroys 1,000,000 acres per year in USA, which will never again produce a crop." Rickover


86

# what we hear

## TECHNOLOGY

**"Craft-building—in which each house is a pilot model for a design which never has any runs—is an art which belongs in the Middle Ages."** (B. Fuller)

"Standardization of the common necessities of life, clothing, and food has put a better range within the reach of all members of the population. None complained of that effect of standardization, and yet, for some reason, when anything like it is suggested for building, shrieks of protest are aroused. Gradually a whole range of building components will be standardized. It does not mean that their appearance will be monotonous—colour finishes, pattern and arrangement can vary within the same limits as before — as they do in bricks, which have always been a standardized component." (Richard Sheppard)

**"If shelter was to be given the economic advantages which derived from mass production, entire houses and apartment houses must be constructed in factories and delivered as totally assembled products like automobiles."** (Buckminster Fuller)

"If there are immediate advantages in standardizing building as far as may be practicable, there are equal dangers in the process. It can easily produce monotony and mediocrity as an accepted concomitant of building, until at last we begin to look elsewhere than in our cities and buildings for graciousness and elegance." (Sheppard)

**"The traditional methods and simpler types of construction with which we were formerly content are gradually giving way to complex architecture in which only modern methods and materials exist."**

## POPULATION INCREASE

"If the world's population continues to expand at its present rate—47,000,000 were added in 1958—it will double every fifty years." (E. J. McNaughton)

**". . . while the population grows faster and faster as modern medicine moves ahead, its increase is not paced by an equal increase in architectural activity so that many people are left without the necessary houses and buildings."** (Dr C. Doxiadis)

"A baby born today in the USA will see a population with densities as high as that of Europe." (Rickover)

## LAND SHORTAGE

**"Urbanization alone destroys 1,000,000 acres of land per year which will never again produce a crop."** (Rickover)

"We are making frightening mistakes in land use and we are guilty of a criminal waste of the land that God gave us." (P. Will)

**"Land has been the main villian in housing for a long time. Its high cost has become No. 1 reason homes cost so much."** (W. O. Duvall)

## NATURAL RESOURCES

"Our fossil fuel reserves may last no longer than 75 years. When it is gone, the 'age of fossil fuels' will be over not to be repeated for perhaps another 100 million years." (Brown)

**"As the cost of producing energy increases, the standard of living will decline."** (Rickover)

## OUR WAY OF LIFE

"With increasing necessity and demand for efficiency integration and minimizing of wastes in the economic world, there will be increasing demand for efficiency integration and minimizing of waste in the social world. These changes will have marked effects upon the ways in which men live. It seems clear that the first major penalty man will have to pay for his rapid consumption of earth's non-renewable resources will be that of having to live in a world where his thoughts and actions are ever more strongly limited, where social organization has become all pervasive, complex and inflexible and where the state completely dominates the actions of the individual." (Harrison Brown)

## HOUSING NEED

**"The human problem today is not more house for the money, but more housing for the money."** (Buckminster Fuller)

"If we proceed to look inside our habitat, our cities, and our buildings—that is at the way we are living—into the heart of our architecture as a whole, then we shall see the homeless and badly housed hundreds of millions, who constitute the majority of the people on the earth, living in very bad conditions indeed." (Doxiadis)

## ARCHITECTURAL APPROACH

**"Acknowledging this, we must turn our attention for a moment to something more substantial than architectural design, and that is to the question of how we live. We must find an approach to the problem not of how our architecture is to look, but of how it is to serve us."** (Doxiadis)

## PROFESSIONAL APPROACH

"Architecture used to be a highly comprehensive profession, but architects have ceded interiors to decorators, total responsibility for large-scale planning to land developers and builders. Some have even let house design go by default." (P. Will)

**"From the scientific side there is neither such caution nor such finesse. It appears always possible that at any unpredictable moment the unorganized hordes of uncoordinated specialists could flood over into the architects' preserves and, ignorant of the lore of the operation, create another Architecture by chance, as it were, out of apparent intelligence and the task of creating fit environment for human activities."** (Rayner Banham)

"We look to doctors to take care of our nation's health, lawyers to be concerned with law and order. Should not architects expect to take some responsibility for the shaping of our physical environment? The answer is, they must." (Phil Will)

**"It is surprising that architects do as well as they do, considering how much they have given away and how little they know about the fundamentals of human behaviour. Yet, here is where they are needed most. No plan for the well-balanced community can be made until we learn more about the human response to physical stimuli-reaction to space, form, light, colour, and texture."** (Phil Will)

"The fact can be lost sight of that architecture is a large, slow-moving body of historical thought, whereas industrial design is a far small band of diverse talents which have adapted themselves swiftly and cleverly to the changing demands of the U.S. economy." (Forum—April/60)

**"We are facing the largest gap between population increase and architectural production in quantity and quality than ever before, which has resulted in the worst possible situation."** (Doxiadis)

## POLITICS

"The region which needs replanning and rebuilding is usually a crazy patchwork of petty local authorities, strangling all development amidst the jungle growth of their regulations, loyalties, and jealousies." (Parkinson)

## QUANTITY vs. QUALITY

**"We must recognize that we have quantitative as well as qualitative problems to tackle, and perhaps it is timely to admit that the quantitative questions are usually left aside, our attention being directed to the qualitative ones."** (Doxiadis)

"For though technology, by its sheer mastery of external nature, has made possible unprecedented advances in architecture it has, by the same ironic token, made possible more bad architecture that the world has ever seen before. Architecture—unlike the fine arts—is at once the prince and the prisoner of the kingdom of necessity." (James M. Fitch)


WHAT ARE THE REAL ISSUES AT STAKE?
LET US FACE THEM!

## CREDITS

1. Edmonton Federal Public Building
   Architect: G. H. MacDonald
   Photo by McDermid Studios Ltd
2. Newfoundland Parliament Building
   Architects: Lawson, Betts and Cash
3. Hospital Sainte Justine Pour Les Enfants
   Architects: Labelle and Labelle
   Photo by students
4. Town of Mount Royal Post Office
   Architect: Ray Affleck
   Photo by Wal-Mir
5. Residence
   Architect: Arnold Shrier
   Photo by students
6. McConnell Engineering Building—McGill University
   Architects: Flemming & Smith
   Photo by student
7. St. Gerard Mayella Church
   Architect: Guy Desbarats
8. Beaver Lake Pavillion
   Architect: Sise & Desbarats
   Photo by O. Newman
9. Synagogue
   Architect: H. M. Tolchinsky
   Photo by students
10. Mgr Pigeon Sports Centre
    Architect: Louis J. LaPierre
    Photo by Studio Alain Enrg.
11. Office Building
    Architect: Reuben Fisher
12. Apartment in Bjornekollen, Sweden
    Architect: Robert Esdaile
    Photo by Bjorn Winsnes (Byggekunst)
13. Commercial Building — England
    Architect: Alan W. Walker
14. Super Market
    Architect: Max Roth
15. Proposed Civic Centre, Northampton, Eng.
    Architect: Enrico De Pierro
    Photo by Bruce Edwards
16. Wilderton Shopping Centre
    Architects: Eliasoph & Berkowitz
    Photo by students
17. Bersimis 2 Powerhouse
    H. G. Acres & Company — Consulting Engineers
    Chief Architect: J. A. Szarvas
18. Residence — Vancouver
    Architect: A. Erickson
19. A Music Centre for Montreal
    Student's Thesis — Sarina Altman
    Photo by student
20. Administration Centre—Assumption University
    Sixth year project — group of 5
21. Sports Centre for Montreal
    Student's Thesis — I. Mezes
    Photo by student
22. Car Museum
    4th year project — John Peng
23. Community Centre
    Student's Thesis — A. M. Balaz
    Photo by student
24. McLean Park Project — Vancouver
    Architects: CMHC
    Chief Architect: Ian Maclennan
    Project Designer: E. C. Cleve
25. McLean Park
    5th year Project — G. Pollowy
26. McLean Park
    5th year Project — L. Joyal
27. McLean Park
    5th year Project — M. Safdie
28. Closeup Study
    Photo by James McAnally
29. Reynolds Metals Co Head Office
    Architect: M. Yamasaki
    Photo by student
30. Photo by City of Montreal
31. Bedroom Interior
    Photo by City of Montreal
32. Family of Man
    Photo by Kobadaishi

35. Life Magazine
37. Look Magazine
38. City Environment
    Photo by student
39. Look Magazine
40. City Environment
    Photo by student
41. City Environment
    Photo by student
42. City Environment
    Photo by Melvin Charney
43. Photo by City of Montreal
44. Suburban Development
    Photo by student
45. Suburban Development
    Photo by student
46. City Environment
    Photo by student
48. Montage—Henry Ford Hospital—Parking Structure
    Architects and Engineers: Albert Kahn Associates
49. Graph by student
50 & 51. Office Building
    Architect: Zavi Kahn
    Photo by student
52, 53 & 54. Local Buildings
    Photo by student
56. Time Magazine
57. Photo by City of Montreal
58. Project for a Church
    Architect: Paul Rudolph
    Photo by student
59. Chapel at Ronchamp
    Architect: Le Corbusier
    "Complete Works—Le Corbusier"
    1952-1958
60. Suburban Development
    Photo by student
61. Sherbrooke Street
    Photo by student
63. Exhibition Building—India
    Architect: M. Yamasaki
    Architectural Record, Photo by architect
64. Photo by City of Montreal
67. Photo by City of Montreal
68. City Environment
    Photo by Melvin Charney
69. Montage by student
71. Suburban Development
    Photo by student
72. Housing
    Photo by student
73. Public Housing
    Photo by student
74. Parking in the Core
    Photo by student
75. Street Intersection
    Photo by student
76. Traffic in the Core
    Photo by student
77. City Environment
    Photo by student
79. Traffic in the Core
    Photo by student
80. City Environment
82. Graph by student
    Photo by student
83. Suburbia—RAIC Journal cover—May 1960
84. Montage
    Architectural Forum
86. Life Magazine—Ad.
87. Photo by City of Montreal

PAGE 44. a & b "John Kenneth Galbraith, Amiable Iconoclast" by Ian Drummond Waterloo Review, Summer 1959, Vol. 2. No. 1.

## EDITORS:

## STAFF ADVISERS:

**John Bland**

**Peter Collins**

**Douglas Shadbolt**

**Stuart Wilson**

## CONTRIBUTORS:

# "THE ARCHITECT AND THE BUILDING COMMUNITY"

The four distinguished representatives of the construction industry who will participate in the seminar at Quebec in June have been invited to discuss their views on the subject in the four issues of the *Journal* preceeding the assembly.

*By W. N. Hall, BA Sc,*
*President,*
*Dominion Tar & Chemical Co Ltd,*
*Montreal*

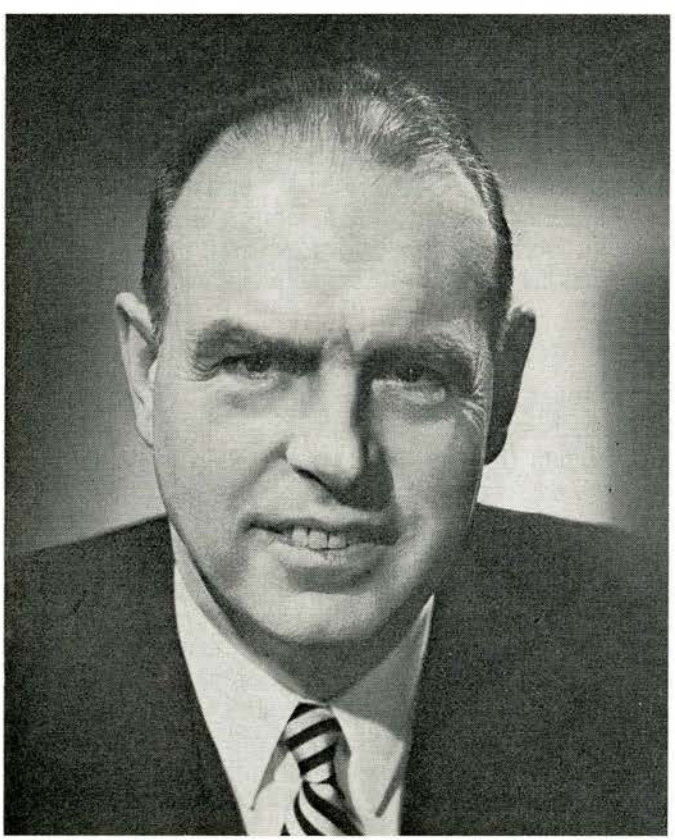
## NO. 3 "THE MANUFACTURER'S POINT OF VIEW"

THE ROYAL ARCHITECTURAL INSTITUTE OF CANADA in arranging for the building community – represented by the architect, the engineer, the producer of building materials and the contractor – to sit as a panel at the 1961 Annual Assembly, is taking another step forward to meet the challenge of technological change which is taking place around and in our industry. The RAIC, through such meetings and through its Committees, is providing the means for focusing attention on our problems and our objectives.

I have been asked to represent not only the views of the building supply industry but that of the customer, the client for whom buildings are built.

As integral parts of the building community, we have a common objective to improve the overall operation. Aside from individual efforts in our respective areas, which make a contribution to the whole, there are areas where a co-operative effort would bring greater benefits to everyone.

It is my interpretation that the definition of a manufacturer of building materials is one who produces products for the use of the industry rather than products for a specific project, as is done by sub-contractors. Manufacturers, such as ourselves, produce in large volume what we believe are quality materials at low prices. Specifications of these materials are developed by the industry and groups from the industry meet, as members of the Canadian Standards Association, to determine specification standards. Products are distributed through channels which have been historically developed and evolved for economic reasons.



In dealing with established products and procedures we may be able to get along reasonably well, each going our own way. If the architect specifies lumber, the engineer knows how it behaves structurally, the contractor knows how to use it and the lumber producer knows how to produce what is required.

To use or develop new products, cooperation amongst all is required – the more cooperation the more progress.

In the last few years many new and basic products have been introduced by manufacturers on a substantial scale. For example, prior to the war very few houses were insulated. Today, with very few exceptions, all new houses are insulated. Again, in the last twenty years, the use of gypsum lath has replaced wood lath almost completely in the housing field. Plastic laminates (Arborite or Formica), vinyl flooring, polystyrene insulating foams, plastic pipe, are examples of continuing developments. Manufacturers like ourselves are continuously seeking new products to develop, which is another way of saying we seek new needs to be satisfied and, in this respect, constantly seek the advice of the building community.

Though we have progressed, greater progress has to be made if we are to keep pace with general technological changes. The industry needs the results of research. It has been slow to change. Time has been the research tool—something new is accepted if it has stood the test of time. We need facilities for accelerated testing under controlled conditions. Without this basic tool new products are slow to be accepted and, as a result, slow to be developed.

Where, how and what kind of research do we need? We can and do have research in the building supply industry. It is, generally speaking, narrow – dealing only with specific products, and we have the National Research Council doing excellent work in a broader field.

The RAIC, I understand, has a research committee. How do we bring these forces together for the common benefit of the building community. One means might be to set up a research operation sponsored by the RAIC, but largely supported by the building supply industry and the National Research Council. Another, and perhaps the best approach, would be to set up a Canadian counterpart of the Building Research Institute in the United States.

This is an organization established under the auspices of the National Academy of Sciences – National Research Council. It is designed to bring together the various segments of the building industry, with the emphasis being placed on research activities. The Institute does not conduct research, but does provide a suitable forum for the discus-

sion of developments and problems of the building industry. With the complexity of the industry a great deal of information is available but scattered. The Institute serves as a medium to collect this information and communicate it to its members. Regular conferences are held on the different subjects concerned with the building industry.

There is a need for new and better products but, in fact, do we know how good are the products we are now using? We know in a general way – at least there are certain people who have this information on certain products. Functional efficiency, product life and maintenance costs are the measure of the quality of a product. To get accurate information on product performance will require a program of statistical research.

A question we might well ask is how long should a product last? I suppose the answer would be as long as possible. At a cost a product can be given greater life. This really leads us into the question as to the life for which a building should be designed. Here economics are the important factor. At a cost buildings can be designed to last indefinitely. How do architects resolve this problem? Do they ask how much money you want to spend or do they ask what is the life required? I suspect neither question is asked – in some cases the architect may be like an artist who paints the best picture he can. From a client's point of view cost is a very important element – a design without a cost is as useless as a truck without wheels – we cannot use either.

Discussing specifications on products as they relate to building life and economics, I would like to refer to the term "or equal". I would like to bring this into focus in the hope that we might develop a common interpretation of its meaning.

I see two interpretations which can be placed on it. One is that a product of another manufacturer of equal specifications can be used on the job and, two, the interpretation that a product of different specification, in fact a quite different product, but one which will perform the same function, can be used.

I would like to raise the issue as to what should be the correct interpretation of this term. Should the term mean "of the same specification", on the grounds that the relative product-function merits should have been examined before the specifications were written and bids closed, or should the specification be written to permit products of different specifications but with the same function to be substituted at any time?

In this building community there will be different points of view, and a healthy discussion of the many issues raised by each segment – the architect, the contractor, the engineer and the producer of building materials, will not only be constructive but, I am sure, stimulating and of great interest to all of us.

---

## *Competition*

### Civic Centre, Red Deer, Alberta

The City of Red Deer, Alberta, has announced a competition open to architects registered in any of the provinces of Canada, and approved by the RAIC and the AAA, for the design of a Civic Centre and City Hall. First prize is the commission and an advance of fee of $5,000; second and third prizes are $750 and $500 respectively. The professional adviser is Peter M. Thornton (F) who will conduct the competition and assist in the judging. Members of the Jury are Niall Carney, assistant planner, Red Deer, and adviser to the City on City Hall matters of design; Paul Thiery, FAIA, Seattle; Viljo Revell, winner of the Toronto City Hall competition; and Otto Safir, P.Eng, Vancouver.

Conditions of the competition may be obtained by writing The Professional Adviser, Civic Centre and City Hall Competition, City Hall, Red Deer. The fee is $5.00, and cheques should be made payable to "The City of Red Deer, Alberta". Conditions will be mailed April 1, and last day for registration (forms are included in the Conditions) is May 1. Application for Conditions will not be accepted after April 24. Last day for submission of entries is August 14, 1961.

The Civic Centre will occupy a city block in the heart of Red Deer. First stage of construction is expected to include the City Hall, with at least part of the site development. Second and later stages will include buildings for police, school board, welfare, health, library, museum, art gallery and some commercial development.

## *Canadian Conference of the Arts*

The first Canadian Conference of the Arts will be held at the O'Keefe Centre in Toronto from May 3rd to May 7th and will include a public art exhibition containing some 200 paintings by the winners of Canada Council Awards.

Alan Jarvis is national director of the Conference.

Sir Julian Huxley will join more than 60 of the world's cultural leaders in examining Canada's contributions to such fields as Literature, Dramatic and Visual Arts, and Music and Art in Society. These include Russell Lynes, Managing Editor of Harper's Magazine; Isamu Noguchi, world-famous sculptor; artists, Jacques de Tonnancour and B. C. Binning; and novelists, Morley Callaghan and Mordecai Richler.

Sir Julian will speak on "Man's New Vision of Himself" and panel discussions will be chaired by Louis Applebaum (Music), Alan Jarvis (Visual Arts), Mavor Moore and Andrew Allan (Drama), John C. Parkin (F) (Arts), and Robert Weaver (Literature).

The Canadian Conference of the Arts is the successor to the Canadian Arts Council, which was founded in 1945 and assisted in fostering the appointment of the Massey Commission, and, in turn, aided in establishing the Canada Council. The RAIC is a member of the permanent conference organization and is officially represented by Mr Parkin. It is expected that four additional architects will be appointed by the Institute to attend the sessions. Members are invited to attend the sessions.

THE INTEREST AND ATTENTION of architects from coast to coast should be focussed on remarks made by Alan Jarvis, former Director of the National Gallery of Canada, and now National Director of the Canadian Conference of the Arts, who decried public apathy and indifference about architecture in two syndicated articles appearing in several newspapers under date of February 4 and March 4. The profession can be grateful to Mr Jarvis for advocating that architects and architecture receive greater recognition.

In his February column, Mr Jarvis regretted the lack of public discussion about architecture, and said: "How will we ever get larger numbers of citizens to become aware of the architecture around them if there is so little public discussion?"

Mr Jarvis' comment that "informed and intelligent architectural criticism is almost non-existent in Canada, and there is a crying need for trained architectural critics and historians", indirectly precipitated a full-scale discussion about architectural criticism at the OAA Convention on February 10, when John Leaning of Ottawa submitted two stimulating resolutions.

Delegates to the OAA Annual Meeting voted in favour of encouraging Canadian newspapers and magazines and television to publicize intelligent criticism and discussion of Canadian architecture.

By way of commenting on the OAA action, Mr Jarvis wrote in his March column "It is easy to criticize the editors for 'deciding not to' promote more interest in architecture when the profession has been so indifferent to public interest and so scared of controversy or criticism. Perhaps now we may see a change of emphasis if the architectural profession really does try to encourage increased public discussion".

Surely any profession or society capable of organizing and directing a coast to coast Committee of Inquiry into the Design of the Residential Environment can hardly be characterized as "indifferent to public interest". But most architects will agree with Mr Jarvis when he suggests that the fundamental dilemma is a shortage of people trained to make valid criticism. Given highly trained, competent critics, controversy might appear less unwelcome to the profession.

Many architects will claim with Thomas Creighton, Editor of Progressive Architecture, that there are obvious reasons for the lack of knowledge about architecture, even among highly educated members of society. One reason undoubtedly is that the change from a traditional approach to architecture was so rapid earlier in this century as to confuse even the architects themselves, and obviously could not have been followed carefully by the general public. Another reason is that architecture for so long was, as an art, directed towards monumental buildings and the homes and institutions of the wealthy. A democratic architecture which should – and therefore could – be understood by all people is a recent concept which all people do not appreciate. A third possible reason is that architects themselves have not, until very recently, attempted to explain what they were doing, and why, to the public.

But finally, and probably most important of all, the reason people do not really critically see the architecture around them is that this is the most complicated of all the arts and the most difficult to evaluate.

IL Y A LIEU DE SIGNALER A L'ATTENTION de tous les architectes canadiens deux articles, parus dans un fort groupe de journaux du 4 février et du 4 mars, dans lesquels M. Alan Jarvis, ancien directeur de la Galerie nationale du Canada et directeur actuel de la Conférence canadienne des arts, déplore l'apathie et l'indifférence de la population en général à l'égard de l'architecture. M. Jarvis a sûrement rendu service à la profession en demandant que les architectes et l'architecture soient mieux connus et mieux considérés.

Dans son article de février, M. Jarvis se plaint de l'absence de débats publics au sujet de l'architecture et ajoute: "Comment pouvons-nous espérer intéresser plus de nos concitoyens à notre profession s'il n'en est jamais question en public?"

La déclaration suivante de M. Jarvis "la critique architecturale avisée et intelligente est presque inexistante au Canada et il existe un besoin urgent de critiques et d'historiens en architecture" a été la cause indirecte d'un grand débat sur la critique des oeuvres d'architecture, le 10 février, à l'assemblée de l'Association des architectes de l'Ontario où M. John Leaning d'Ottawa a formulé deux intéressants projets de résolution.

Les délégués ont voté en faveur d'une proposition demandant d'encourager les journaux, les revues et la télévision à faire connaître les critiques et les études intelligentes des oeuvres d'architecture au Canada.

Au sujet de cette décision de l'Association ontarienne, M. Jarvis a écrit dans son article de mars: "Il est facile de reprocher aux rédacteurs leur décision de ne pas stimuler davantage l'intérêt envers l'architecture quand la profession fait preuve d'une aussi grande indifférence à l'égard de l'intérêt public et d'une telle crainte de la controverse et de la critique. La situation changera peut-être si les architectes s'efforcent réellement de provoquer les discussions publiques."

Dire d'une profession ou d'une société, qui a pris la peine de charger un comité spécial de faire une étude de l'aménagement des milieux résidentiels dans tout le pays, qu'elle "fait preuve d'indifférence à l'égard de l'intérêt public" est sûrement exagéré mais la plupart des architectes admettront avec M. Jarvis que le grand mal est une insuffisance de personnes capables de faire une critique judicieuse. Si nous avions ces critiques compétents et éclairés, la profession craindrait peut-être moins la controverse.

Beaucoup d'architectes pensent avec M. Thomas Creighton, rédacteur de "Progressive Architecture", que plusieurs raisons expliquent ce manque de connaissances de l'architecture même dans les classes les plus instruites. Tout d'abord, au début du siècle le mouvement vers l'abandon des traditions classiques a été si rapide qu'il a créé de la confusion même chez les architectes et que, naturellement, le grand public n'a pu le suivre. De plus, pendant longtemps, l'architecture comme art a été orientée vers les grands bâtiments, les institutions ou les maisons des riches. L'architecture démocratique, à la portée de tout le monde, est une innovation récente que la population en général n'a pas encore tout à fait saisie. Troisièmement, jusqu'à ces derniers temps, les architectes n'avaient pas le souci d'expliquer leur travail et ses motifs.

Toutefois, la principale raison probablement de cette absence d'esprit critique c'est que l'architecture est de tous les arts le plus complexe et le plus difficile à apprécier.

# *Program of the RAIC Standing Committee on Building Research*

BY S. A. GITTERMAN, CHAIRMAN

The RAIC Standing Committee on Building Research with the co-operation of the NRC Division of Building Research, whose work is so closely related, has developed a suggested long-range program calculated to be of increasing benefit to the architectural profession in Canada. This program is directed towards discovering what research work has been and is being done, to encourage study in areas where difficulties are now encountered and facilitate the transmission of research and technical information to architects.

Before encouraging the initiation of any complicated projects, it was decided to send questionnaires to government agencies, universities, private companies and corporations, and others who may be involved in building research, to learn of past and present projects. The Division of Building Research performed such a survey many years ago and an attempt is being made to bring this data up to date.

### *Developing an Abstract Service*

With the vast amounts of published material being made available in recent years, it is impossible to keep abreast of technical and other information necessary to the practice of architecture. In other fields of scientific endeavour the "abstract" has become highly developed and provides a source of ready information. The same procedure can be used to serve architects. There are several abstract services now being provided and a great deal of work has been done to establish standardized international indexing techniques. The Division of Building Research has been in close touch with this activity and has recently started publishing a series of building research abstracts. Arrangements are being made for these and an index of others published throughout the world to be made available to the RAIC.

### *The Physical Performance of Buildings*

There appears to be very little organized information available concerning the physical performance of buildings. With the large volume of building construction in recent years a great deal is heard about leaky "curtain walls", leaky roofs, cracked plaster, unsatisfactory floor coverings, etc. Unfortunately, these complaints are not recorded and there seems to be no organized means of collecting data on such deficiencies in building construction and performance.

The Division of Building Research has learned, after writing to research stations in other countries, that little work seems to have been done on the performance of buildings. Therefore any activity started in Canada would be a pioneering effort. A tentative checklist or questionnaire is to be prepared by the Division and the Research Committee. This will be tested in one or two buildings by each of the architectural schools in Canada. From such tests it is hoped a reasonable procedure will be established for further study.

### *Data Available from Public Works*

For many years the Department of Public Works of the Federal Government has been designing, erecting and maintaining buildings. The Department has accumulated a large amount of data on maintenance and performance of various materials and components of construction. The Chief Architect of the Department has indicated that he will try to make available their experiences to the Research Committee. This should prove a very profitable source of performance and maintenance information.

### *Proposed Column on Technical Matters*

It is also hoped to start a monthly column in the RAIC Journal dealing with technical matters, including materials and projects. This column might become a forum where architects can exchange ideas. Often certain forms of construction, even if done in accordance with the best recommended practice, result in failures. Such failures are accepted because the practice is recommended by all experts. As a result such deficiencies are repeated again and again. Possibly this is done because of poor communications among architects.

In other areas of scientific endeavour failures are reported as well as successes. Possibly this should be done in architecture as well. In reporting a building, such troubles, as leaky windows, etc., if they do exist, should be described. There will be difficulties concerning trade names but these can be overcome. The practice of encouraging an exchange of data and experience should prove invaluable.

### *Cost Estimating*

Another area in which the architect finds himself in difficulty (as do others) is that of cost estimating. The committee is working on a standardization of procedures for the determination of cubes of buildings and square foot areas. These are used by various architects but there is very little published data on this subject. It is also hoped that when such standardization is completed a system of cost reports by architects from various regions of Canada can be inaugurated so that a valuable collection of cost data will be available. There is general agreement that this is necessary, since reasonably accurate cost estimating is a very important part of architectural service.

The Committee has kept in close touch with other activities, such as the Canadian Joint Committee on Construction Materials and the Committee on Modular Co-ordination. Correspondence has been exchanged with the American Institute of Architects and it is expected a close liaison will be maintained on all these subjects.

### *Committee will meet April 12*

There has also been some discussion on Architectural Research, as opposed to Building Research. It is difficult to define the former in specific terms. This is to be discussed further at the next meeting of the Research Committee to be held in Ottawa April 12 and 13.

The Committee has tried to develop a program that would be beneficial to architects generally: the subject is vast and complex. If any architects have comments on the program or would like to make any suggestions these would be most welcome. They should be sent to the Chairman, Standing Committee on Building Research, RAIC, 88 Metcalfe St, Ottawa 4, Ontario.

# CITY HALL

## Hamilton, Ontario

THE DESIGN AND BUILDING OF A NEW CITY HALL for any municipal centre is a momentous and monumental task. No other public government building develops as much public interest, press coverage or controversy. By its very nature as the nucleus of a community it represents its people and therefore must meet their approval. Hamilton's City Hall was mothered into existence by the fine examples set by the cities of Edmonton, Ottawa and Toronto.

Hamilton City was in dire need of a new building, not only because the civic departments were scattered throughout the city but also because it did not function as a Civic Core. Gore Park, a block away from the old City Hall performed this function, surrounded by heavy vehicular traffic, *"Keep of the Grass"* signs, and populated by the retired and jobless benchwarmers. Thus the selection of a generous City Hall site was more difficult than the design and erection of the building. In fact more time was devoted to the site selection than that which was required for the remainder of the project.

City Council approved the sale of the old City Hall to T. Eaton Company in June 1955 without an alternate site for their New City Hall. However Council immediately rose to the occasion and shortly approved an eight acre, four block square area, two blocks away from the recognized City Centre. Fortunately for the New City Hall all alternate sites were considerably smaller and more costly. With an approved site the architects were then able to proceed with the design of Hamilton's New Civic Square.

The Architect's first consideration was the importance of the Sociological aspects of the Civic Square. The Square must be the physical heart of the community, a nucleus surrounded by public buildings grouped in harmony of form and space, a meeting place of the people where pedestrians would be given preference over vehicular traffic. The new Core must unite the people, facilitate direct contacts and exchange of ideas, and result in urging the community to act as a whole by participation in the act of self-government. Thus an emphasis on the paved open areas, trees, plants, water, sun and shade, all the elements of nature which harmonize so well with buildings and its people.

The second consideration is of course the influence of the site. The four block square allocated for the new City Hall is known as the Main West site, located on the south side of a one-way street travelling east. As such it did not produce anything dramatic in the way of an approach by pedestrians or vehicular traffic. All traffic would of necessity pass by the building and a narrow street known as Park street could not function as a direct approach to the entrance of the building. This condition was the major influence in evolving the curved form to the front facade. The curved form also produced a feeling of protective enclosure to the public square. Thus the main

*Architect*
Stanley M. Roscoe
Hamilton

*Consulting Architects*
Fleury, Arthur & Barclay
Toronto

*CONSULTANTS*

*Air-conditioning*
Charles S. Leopold Inc
Philadelphia

*Structural*
C. C. Parker & Associates Ltd
Hamilton

*Electrical & Mechanical*
L. H. Schwindt & Co Ltd
Hamilton

*Landscaping*
Project Planning Associates Ltd
Toronto

*Art & Sculpture*
J. A. Hall
Toronto

*Acoustics*
V. L. Henderson
Toronto

*CONTRACTORS*

*General Contractor*
Pigott Construction Co Ltd
Hamilton

*Landscaping Contractor*
L. L. Solty & Sons Ltd
Toronto

ALL PHOTOS BY PANDA

entrance and the public square naturally located itself on the Main Street approach, parking to the rear away from pedestrians and at two levels. A garage and boiler room building resulted at the rear of the property due to existence of the Railroad tunnel thus providing a parking deck on the roof with a direct access off Hunter Street twenty-five feet above Main Street. This also produced the possible second level of entry to the City Hall. As such it presented an opportunity to locate all elected personnel at the second floor, easily accessible and permitting the first floor to attend to the needs of the taxpayer. The first floor is therefore allocated to departments such as the Treasury, Tax, Assessment, Personnel and Purchasing.

Orientation and future expansion was the third consideration. The property fortunately allowed for the length of the building to be located on an east and west axis, resulting in most offices facing south and north. This permitted for solar control and maximum views. The Hamilton Harbour can be seen to the north and the Mountain to the south. With the curve of the building all views would be available to the visitors in any part of the building. This of course would also be available to the staff which some people may be given to criticize. However the views are there and should serve as a welcome relief to the drudgery of every day work. Thus with the long axis of the building running east and west future expansion is available only with a connecting wing to the south over the ramp area and attached to the centrally located service tower.

Character and Massing then came in for a close scrutiny by the Architects involved. Three forms became apparent by close analysis of the City Hall Building function. The office section of workers who deal only occasionally with the public, the office section who serve a large number of taxpayers and the elected personnel. Since the most representative feature of the City Hall is the Council Chamber emphasis was placed on this portion of the building. The council chamber was therefore to form the character of the New City Hall to constantly remind the community that this is the symbol of our democratic way of life. Thus with the three masses established it was then only a matter of arranging them into a pleasing sculptural form. The usual studies of scale, proportion, rhythm and color then took place in drawing and model forms.

The selection of building materials became the subject of considerable controversy. A white building for extreme contrast, crispness of appearance and durability was desirable in the opinion of the architects. This of course met with opposition from the local stone suppliers. The Georgian Marble was fortunately approved to result in a most acceptable appearance.

Other building materials selected for the building were on the four foot module, to allow for maximum future flexibility. Floors, walls and ceiling lighting are integrated into this module producing a general order within and ease of partition changes.

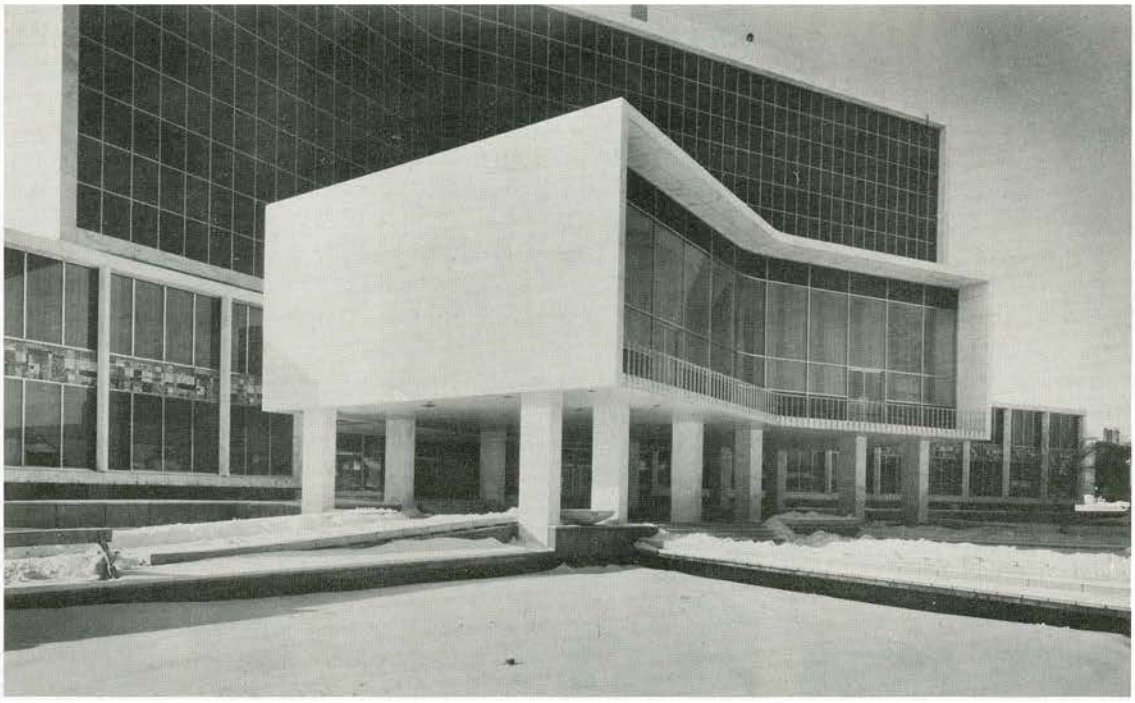
Night Architecture, considered as a necessary part of the City Hall was emphasized to dramatize the functioning of

*The approach from the east.*

City Council. Therefore the total ceiling is a luminous fixture with 1500 cycle transistor conversion of the standard 60 cycle power. The lighting level produced is approximately 100 foot-candles at top efficiency though design requirements were set at 75 foot-candles. The Hamilton City Hall is the first building on this continent to convert 60 cycles to 1500 by means of transistor units.

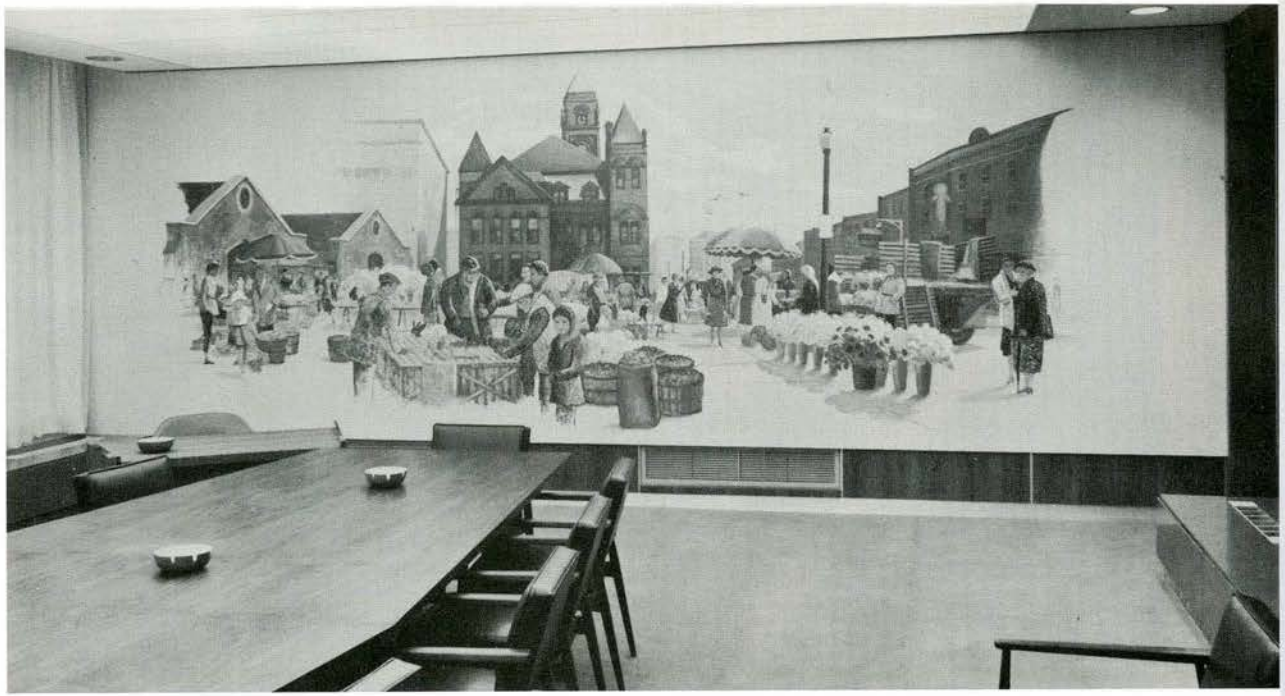
The total Civic Square, including land, demolition, expropriation, building, landscaping, furniture, parking, streets, sidewalks, garage, ramps, fees and construction evolved a cost of $9,300,000. The building alone less furniture and fees has been completed for the original contract price of $6,330,000. Approximately 130,000 square feet of office space has been provided for staff accommodation, 30,000 square feet was allocated to the boiler room and garage, 30,000 square feet of dead storage has been provided in the basement and the remaining 30,000 square feet of the total 220,000 is allocated to mechanical, restaurant and services.

Art and Sculpture was not ignored by the architects even though only three murals now exist in the building. Sculpture was considered in the form of a citizen group to be located at the main entrance, a free form was envisioned in the fountain group of the reflecting pools, playful forms in the sculpture court was budgeted for in the rear approach to the building, however to the disappointment of many, sculpture has been postponed by the City Council until some future period when the citizenry has totally accepted the New City Hall. Three very fine murals were completed however, each strategically located to complement the rooms and furniture. Mr Pannabaker's Market Square occupies one wall of a large committee room, Mr Lytle's mural of an abstract panoramic view of Hamilton City occupies one wall of the Mayor's Reception room and the Rix's lino mural depicts the history of Hamilton City. The remaining art work devised by Mr John Hall occupies a prominent position in the form of glass mosaics on the exterior and lobbies of the interior.



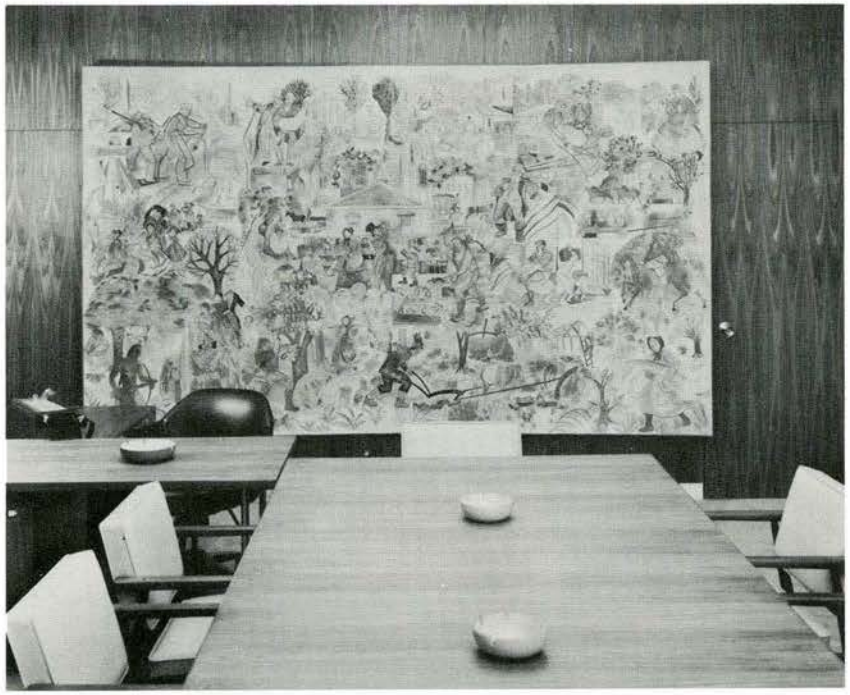
*Left: Council Chamber.*

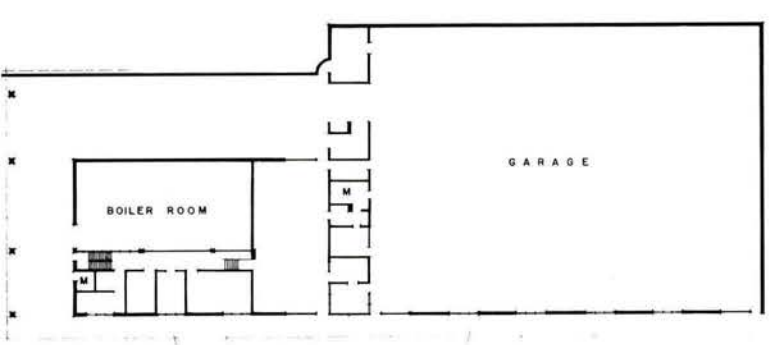
*Below: Front facade showing mosaic panels by John Hall.*

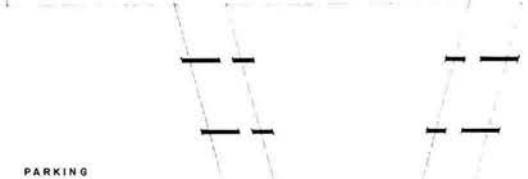


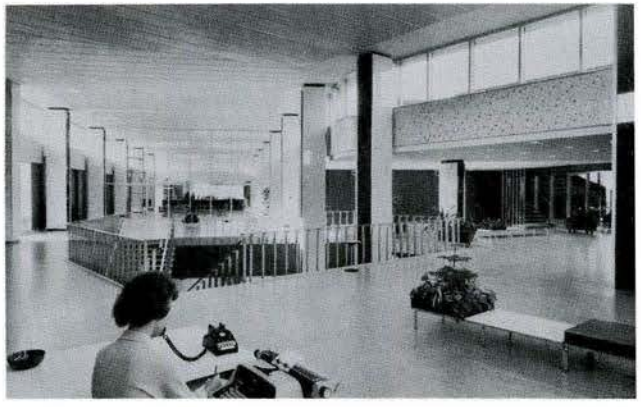
## THE THREE MURALS

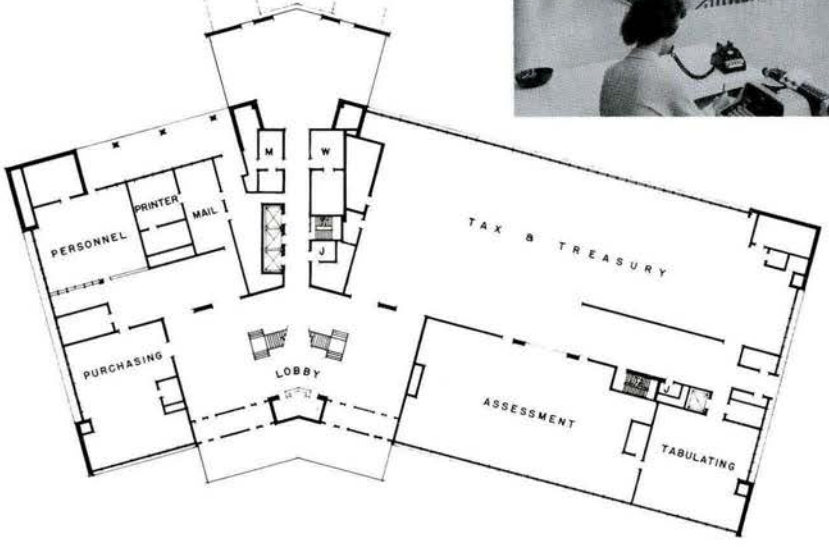
*On the left is "THE MARKET SQUARE", an oil on canvas mural by Frank Pannaker, in the large committee room on the second floor. The lino cut mural by Karl and Lauretta Rix (lower left) is in the Board of Control room and depicts the development of Hamilton through its history from pioneer days to present times. In the Mayor's reception room (below) "HAMILTON TODAY" by William Lytle is in oil on canvas.*



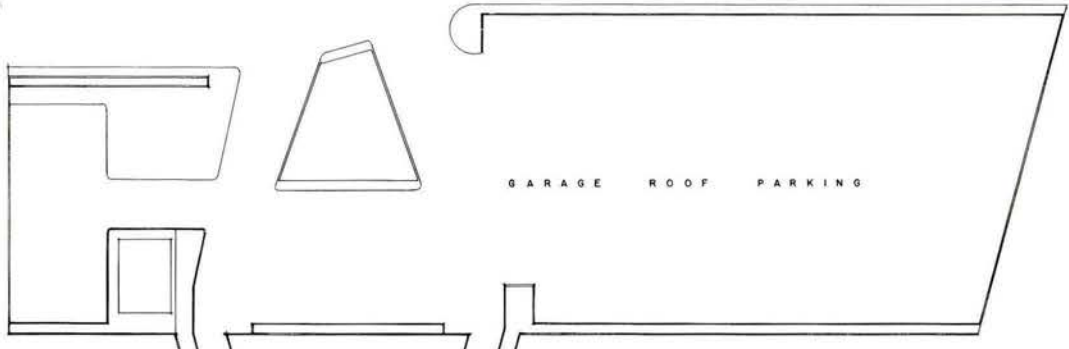


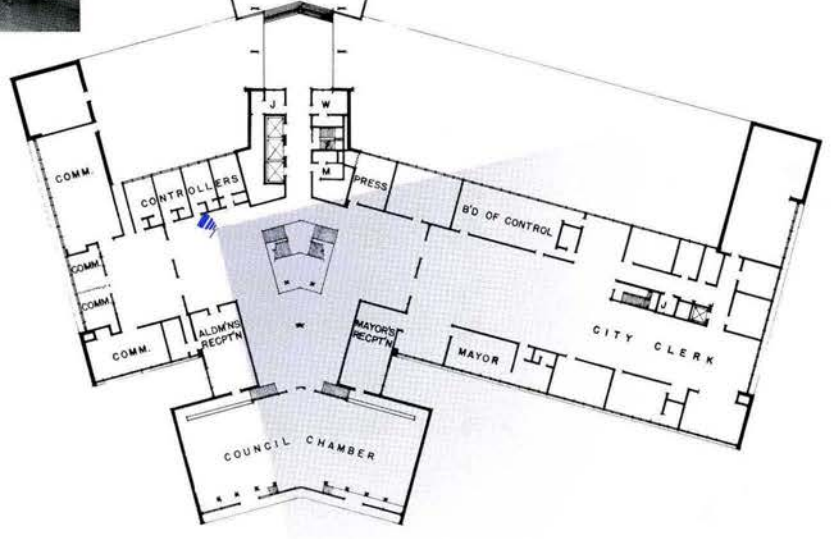



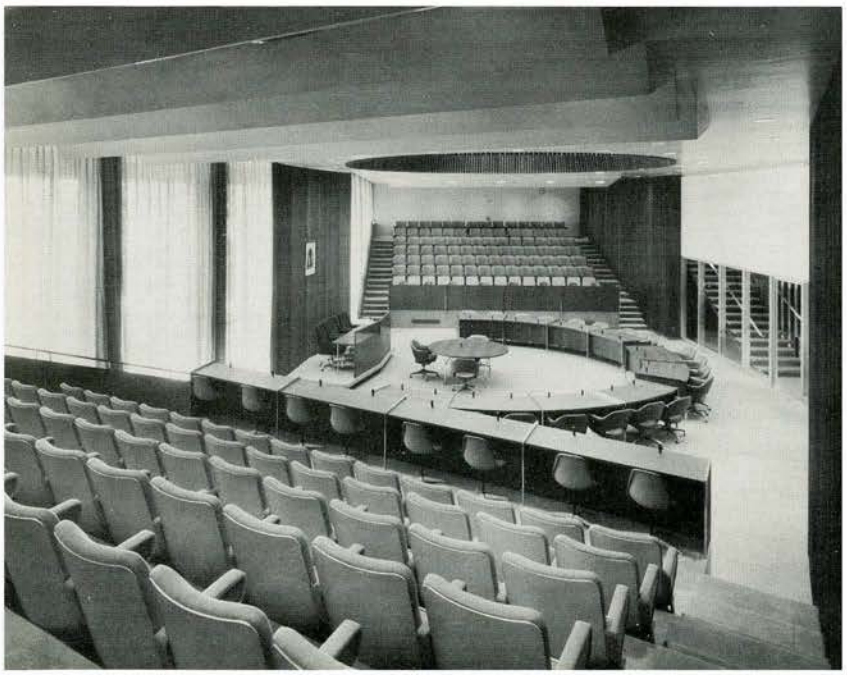



GROUND FLOOR PLAN




SECOND FLOOR PLAN

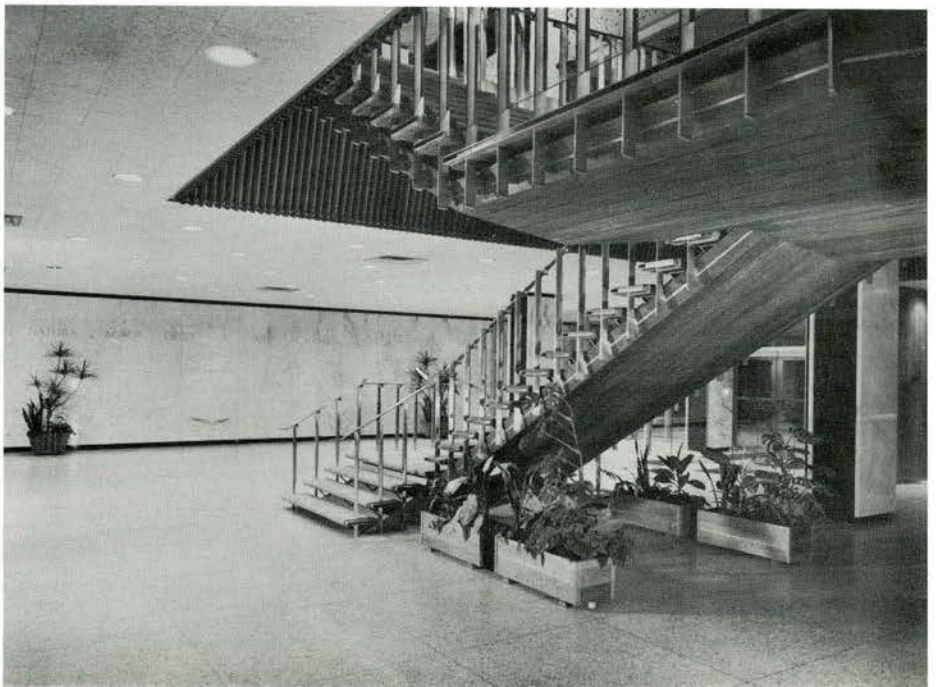


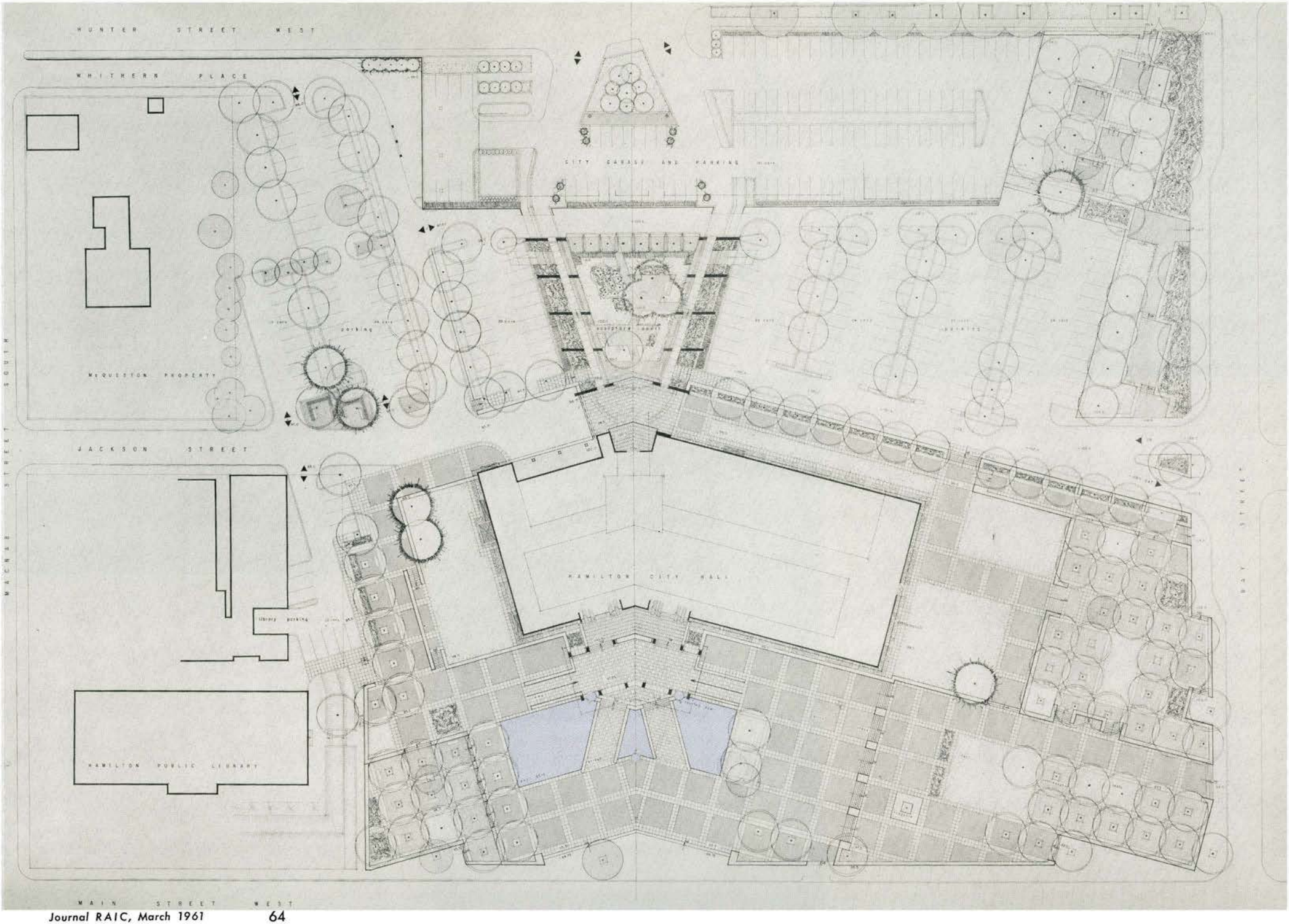
*Mayor's dais and council members' table in the Council Chamber. The spectator's gallery has a seating capacity for 200.*

*Above: Second floor lobby. Main stair to the elected personnel floor, looking towards the City Clerk's department.*

*Main stairwell from the ground floor lobby, looking towards the elevator core.*

*Below: Looking towards the main entrance. Gold leaf Greek motto on Georgia marble,* "GOD CREATED THE COUNTRY AND MAN BUILDS THE CITIES".




HUNTER STREET WEST
WHITHERN PLACE
CITY GARAGE AND PARKING
McQUESTON PROPERTY
parking
JACKSON STREET
HAMILTON CITY HALL
library parking
HAMILTON PUBLIC LIBRARY
MACNAB STREET SOUTH
BAY STREET
MAIN STREET WEST

by D. W. Pettit, PCSLA
DIRECTOR — LANDSCAPE ARCHITECTURE
PROJECT PLANNING ASSOC. LTD

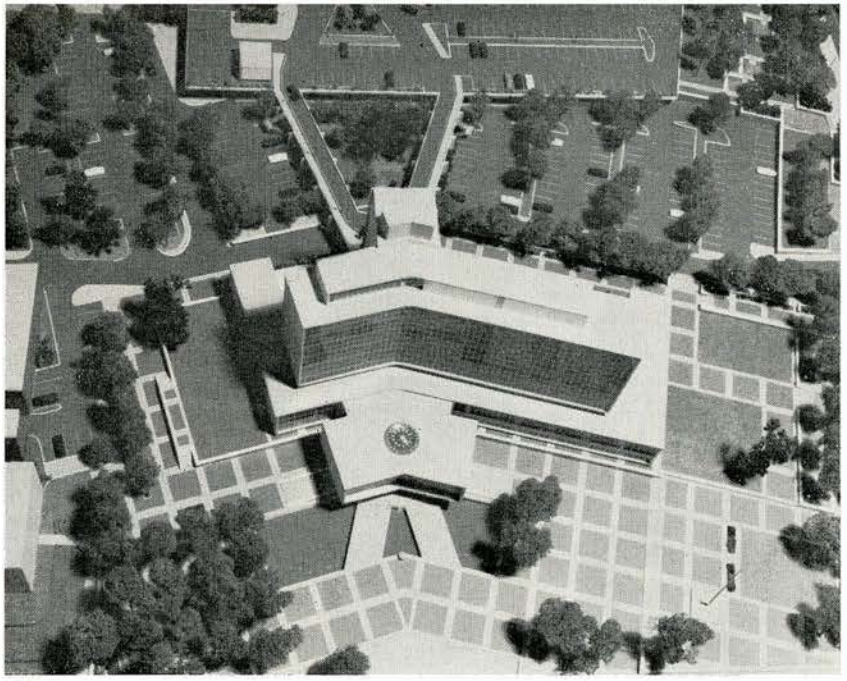
# *LANDSCAPE ARCHITECTURE*

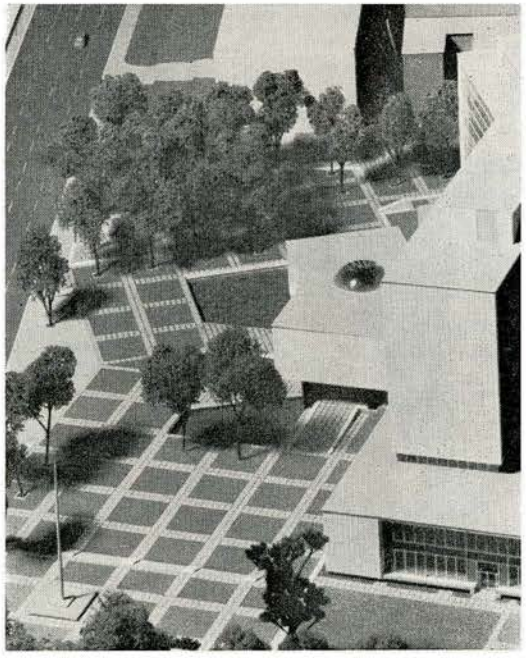
The landscape architect's design program encompassed the task of developing a total site environment which would compliment the precision of the building and provide the desirable aesthetic, social and physical functions in the surrounds of the City Hall.

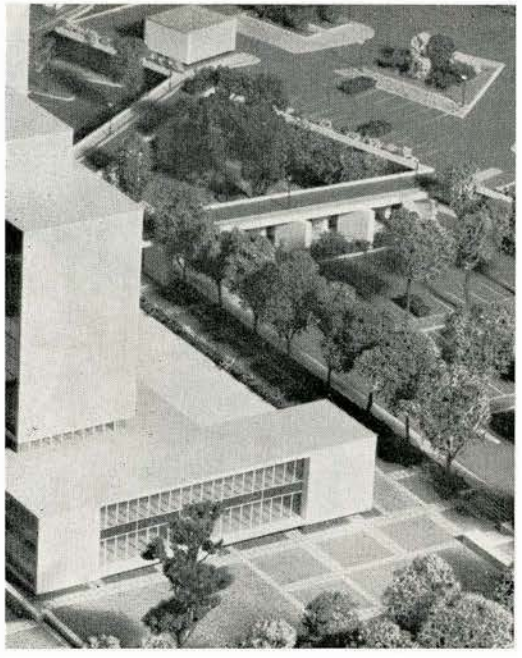
The design is bold in its concept to achieve a scale relationship with the total. The extensive pedestrian terraces, retaining walls, tree masses, turf panels and parking areas, together with the building were considered to be integral parts of the City's administrative heart. The design of the landscape elements centred about the provision of reflecting pools to set off and emphasize the main entrance to the building.

To accommodate a thirty-two foot diagonal cross fall on the site a series of broad terraces step down the slope from the parking at the rear, and embrace the building with pedestrian and garden spaces, to the piazza in front with its brick paving and pools.

Concrete, paving brick, asphalt with exposed marble chips, turf, large trees, and a selected range of deciduous, coniferous, and broad leaved evergreens constitute the basic landscape materials.



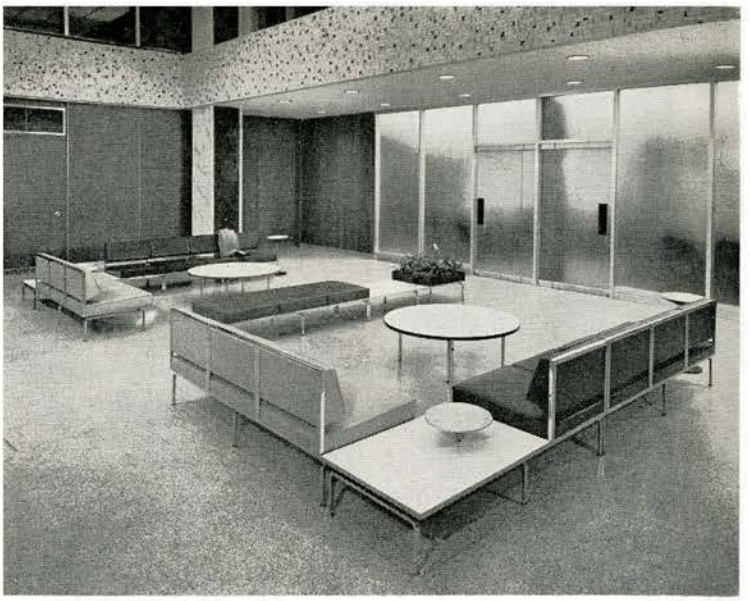




*Top right: Aerial view looking at the Main Street elevation, indicating the pools and fountains in front of the Council Chamber, and the parking levels at the rear.*

*Above: View from the west indicating the paved public square.*

*Right: View of the communicating bridge to the second floor level, indicating the treatment of the Hunter Street level in relation to Main Street and landscaping of the parking area.*



*Top left: View looking towards the City Clerk's department, second floor.*

*Top right: Public waiting room serving the committee rooms, second floor.*

*Left: Reception desk, Mayor's office, second floor.*

*Lower left: Typical office on the fifth floor.*

*Lower right: Staff cafeteria, penthouse level.*

## STRUCTURAL

by J. S. R. Beck, P.Eng.

### FOUNDATIONS

One of the first problems which had to be considered in the design of the City Hall was the soil conditions and possible foundation problems.

The basement of the building is about fifteen feet below the general site grade and this ensured that the foundations would be below any fill remaining from previous buildings and excavation on the site.

At the level of the footings the soil is generally a firm glacial till which has a safe bearing value of 4,000 psf. This till gradually becomes softer with depth and since bedrock is over 100 feet below the surface the logical solution was to use spread footings at as high an elevation as possible, just below basement floor level.

This allowable soil value also indicated that the dead weight of the structure must be kept to a reasonable minimum.

The loads on the columns in the centre tower ended up being of such a magnitude that adjoining footings frequently touched. This required the use of irregular shaped footings, both individual and combined. The heavy loads around the elevator pits and the resulting closely spaced footings made it impracticable to step the footings and as a result, the concrete elevator pit walls were formed with steel sheet piling so that adjoining footings could rest on undisturbed soil immediately below basement floor level.

### MAIN BUILDING

During early discussions with the architect we discussed various alternate methods of framing the building. The various alternatives were studied keeping in mind the following considerations:

*Minimum overall cost*
*Minimum depth of structure*
*Minimum size of columns, including the fireproofing*
*Speed of construction*
*Dead weight of the building*
*Use of the floor system for electrical distribution*
*Minimum confliction with ducts and piping*

Bearing these factors in mind, we made various preliminary designs of a typical bay in the tower using first poured-in-place concrete and alternately structural steel with either precast cellular concrete or steel deck. From these studies it was decided that the best solution was a structural steel frame with a cellular steel floor.

This choice of materials provided a floor system suitable for electrical services, with reasonable dead weight, and minimum size of members. This system provided a fast speed of erection and the total cost was in line with other construction materials.

The main tower of the building is only one bay wide and since no cross bracing could be permitted the steel frame was designed using welded, fully rigid connections. In the longitudinal direction of the tower there were sufficient columns so that the wind stresses could be handled by nominal flange connections. The wind shear, which was carried down the columns was taken out at the ground floor where a concrete slab extended to the foundation walls.

Since the cross beams had to be reasonably deep to resist wind moments we were able to provide duct openings through the beams. Thus the plaster ceiling which fireproofed the structure could run continuously immediately below the steel beams.

The liveloads which were used in the design of the main building were based on the requirements of the National Building Code and the Hamilton Building Code and were generally as follows:

*Office areas – 50 psf*
*Office with electronic equipment – 150 psf*
*Lobbys, main entrance corridors – 100 psf*
*Loading decks – 125 psf*
*Storage areas – 125 psf*
*Roof (where also promenade deck) – 75 psf*
*Roof (other) – 40 psf*

### GARAGE

The garage which is a separate building at the rear of the main building provides parking space on the roof and is connected to the rear entrance of the main building by two single lane bridges.

The bridge is of reinforced concrete consisting of a single slab spanning continuously over six spans between expansion joints at each building. The bridge is designed for H-15 truck loading. The bridges have stairways down to grade which are free standing between the ground and the bridge deck. These stairs are designed, not only for the usual vertical loads, but also to provide for possible differential deflection of the bridge deck with respect to the stair foundations.

The main roof of the garage is designed to support parked vehicles and a design live load of 75 psf was used throughout. The structure is framed using reinforced concrete slab, beam and girder construction. The total load on the structure is considerable as over the structural slab is laid 2" rigid insulation, a concrete protection surface (varying from 2½" to 6" in thickness for drainage) a waterproof membrane and finally 1¼" mastic wearing surface.

Since Hunter Street, which adjoins the rear of the garage is at the level of the roof of the garage, the rear wall of the garage is designed as a free standing retaining wall to resist the lateral earth pressure. Thus the excavation outside the foundation wall could be backfilled once the foundation walls were completed without waiting for the construction of the main deck.

## AIR CONDITIONING, VENTILATION & HEATING

by Francis H. Buzzard
(in association with L. H. Schwindt & Co Ltd, Engineers, Burlington, Ont)

The compressors and heating boilers are installed in a garage building approximately 180 ft from the Hamilton City Hall. Chilled water supply and return piping and steam and return piping are distributed in an underground tunnel between the two buildings.

### BOILER PLANT

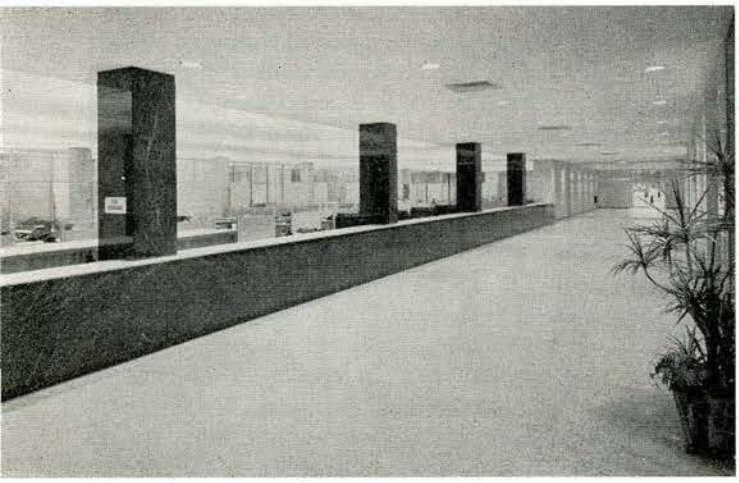
In the summer steam is produced by a small package type low pressure boiler rated at 125 BHP and in the winter by two cross-drum water tube boilers having a normal rating of 125 BHP but capable of being continuously operated at 150% of rating. All boilers operate at maximum of 15 PSIG and are equipped to burn #6 oil. Space has been provided and piping designed for a future boiler for possible expansion. Each boiler has a separate stack terminating 10 ft above boiler plant roof.

### REFRIGERATION

Two centrifugal hermetic refrigerating units, fully automatic, totalling 650 tons, supply the refrigeration effect. Condenser heat is rejected by a cooling tower constructed on the roof directly above the refrigeration machines.

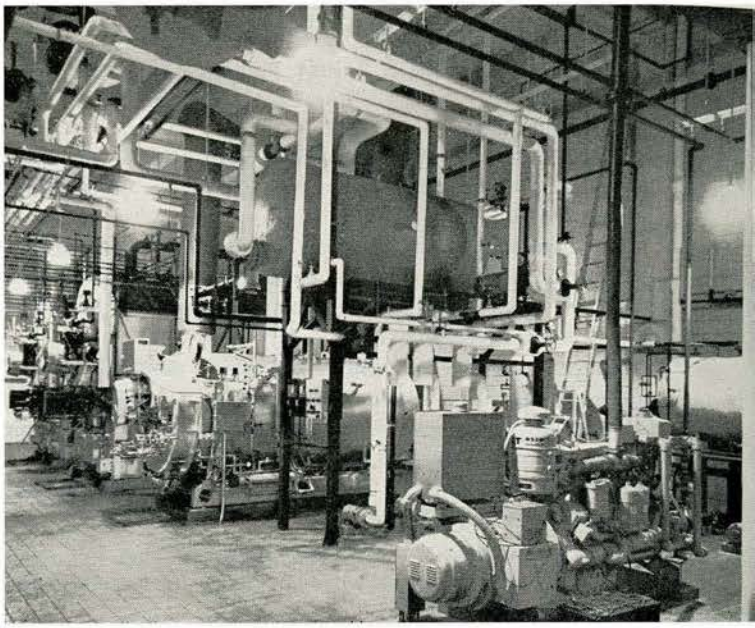
### AIR DISTRIBUTION SYSTEMS

Air handling equipment is installed in basement and penthouse apparatus rooms. Each system is of the built-up type. The outdoor and return air of each system passes through a curtain type filter, then through electrostatic filters, and then through a dehumidifier, in which are installed chilled water coils. Air is supplied to each floor by interior zone systems and by systems connecting to induction units. Air is supplied at high velocity through round ducts to the induction units. Since the fenestration is continuous with the columns being interior from the windows, it was not possible to install a conventional induction system with vertical risers.



*Tax and treasury offices on ground floor*

The round supply ducts to the induction units with the water piping are installed horizontally in the ceiling of the floor below the units. Branches from these mains supply a group of induction units, maximum of five, with the primary air passing from unit to unit, a maximum of three. Expansion in the horizontal ducts is provided by flexible connection



installed in the branch take-off and the secondary water piping expansion provided by loops at each take-off.

Cooling and heating are supplemented by a finned coil within each enclosure. All of the ventilation and humidity control, approximately 30% of the cooling, and at times a portion of the heating are affected by the air supply system; the balance of the cooling and heating is by circulation of secondary water through the finned coils.

Each induction unit has its own water control valve. A thermostat, located in the unit, controls the water valve of either a single unit or a group of units, depending on office layout. Pneumatic tubing is arranged so that partitions can be placed as required to provide private offices around the perimeter. As these office modifications are made, it will only require relocating a thermostat or installing additional thermostats.

Areas in excess of 12 ft from the windows are considered as interior spaces and they are supplied from systems independent of the induction units. Individual control is not needed or desirable as conditions in these areas should be maintained at an optimum for group occupancy.

A plenum barrier is installed from the suspended ceiling on the 12 ft line forming a barrier so that the interior zone air cannot pass into the space above the perimeter office ceilings.

Air is distributed to the interior zone spaces through either formal outlets exposed on the ceiling or through slots or other openings provided in the ceiling materials. Main supply ducts are installed in corridor with branches supplying air generally within each bay.

Air is returned from central grilles and branch run-outs to special rooms through main return air ducts to the return and relief fans in the equipment rooms.

The Council Chamber is a separate unit from the main building and there is a separate air handling system for the Council Chamber located in the main building basement.

Air is suplied to the Chamber through diffusers constructed as a continuous unit across the width of the Chamber. Air is returned through openings into a return air plenum space under the raised part of the Council Chamber. From these plenums main ducts return air to the systems in basement.

## VIEWPOINT

### "Is the device of zoning with a 'bonus system' for individual properties a desirable method, in a democratic community, of retaining detailed control of development in the hands of municipal authorities for planning purposes?"

THE POST WAR EXPERIENCE in the major cities of Canada and the United States indicates that the Zoning Bylaw is not a perfect tool to maintain a rational land use pattern and to discourage urban ugliness. Under the present system in Ontario, it is not an adequate instrument to completely control development.

In the rapidly growing municipalities, even the most outstanding Zoning Bylaws do become obsolete. In order to maintain a desirable land use pattern and enforceable regulations, periodical revisions and amendments are required.

The usual amendment is initiated by individual property owners, who would like to use their land contrary to the existing provisions of the Bylaw. In Ontario, such amendment often requires also the revision of the Official Plan. The two amendments necessitate a lengthy, involved process under the jurisdiction of four authorities. This usually results in an unsatisfactory solution to both the land owner and to the municipal administration.

Day after day, planning and zoning officials have expressed concern as to the adequacy of the existing Zoning Bylaws to cope with the growing number of privately owned projects and, in particular, those which they expected to be built, especially in urban renewal areas. Several cities are presently preparing new Zoning Bylaws which will include some form of planned development provision.

Law cannot of course enforce aesthetic regulations, but it should not on the other hand permit undesirable appearance or commonly considered ugliness. From this point of view, certain cities in the United States have adopted the "premium" or "bonus" approach with regard to floor area ratio. The question arising out of this approach is:

*If, under a given floor area ratio, ground floors and streets gain in light and air when a building is high and narrow rather than low and broad, can still greater gains be made by extending the process? That gains can be made is the theory behind the premiums offered under the Chicago and the proposed Philadelphia zoning ordinances.*

*If open area additional to that resulting from a basic floor area ratio is provided, height may be greater than that permitted under the basic ratio. In other words, increased open space at the ground level or on the lowest floors of a building compensates for and justifies an increase in total floor area.*

There is some evidence that the transfer of floor space from the lower to upper floors is profitable. Studies of office buildings in New York City show that square foot rental rates increase, on the average, about one per cent per storey, using the third, fourth, or fifth floor as base. The ground and second storeys are "taxpayers" and are reliable income floors.

The conclusion is . . . that it is practicable to make a considerable sacrifice in building bulk in the lower storeys, provided a sufficient proportion of it is added to the tower.

In redevelopment areas or in central areas for which planning precedes the construction, zoning can be integrated with planning, and many zoning objectives can be achieved without the rigid rules needed when individual lots are separately owned and under no general planning control.

Under both the Chicago ordinance and the Philadelphia proposal, premiums are given for arcades, setbacks, and plazas. Philadelphia also gives a premium for open-air interior courts; Chicago gives more weight than does Philadelphia to covered arcades.

In Philadelphia, these premiums are granted in several types of districts; in Chicago they apply only to the commercial zones of highest building density or bulk. However, Chicago grants another premium if the parcel adjoins or is across the street from a "public open space which is at least five acres in area and of a depth perpendicular to such front or side lot line of not less than 200 feet". This type of premium applies in all general residential districts, all business districts, all commercial districts, and all but the "heavy" manufacturing districts.

In older areas in which many buildings were constructed before the area was planned, zoning can only be the negative tool of a plan which has been conceived too late to dominate the development of the area. In this situation, zoning is used only as an expedient or as a corrective when damage has already occurred or may come about for lack of a plan. In redevelopment areas, or in other open areas for which the planning precedes the construction, zoning can arise from and be integrated with the planning and many zoning goals can be achieved without the rigid rules needed when individual lots are separately owned and under no general planning control.

In conclusion, zoning with a "bonus system" may be a desirable method of retaining control of development, where wise, experienced and creative planning officials are in charge of its administration. However, under our Canadian democratic system, planning preceding zoning could provide more desirable and lasting results.

*E. G. Faludi, P. Eng.*
*Toronto*

*Sources of Information:*
*"Urban Land – News and Trends": Urban Land Institute.*
*"Information Bulletin": American Society of Planning Officials.*

MUNICIPALITIES DO NOT NEED a "bonus system" in order to control development. The Planning Act provides councils with authority to pass restricted area (zoning) By-laws by which the use of land or the erection and use of buildings or structures may be prohibited or regulated. There are other means of control for planning purposes, of course, but our reply is limited to the question which is posed.

Zoning By-laws have many aliases derived largely from the purpose for which they are enacted. Some of

these pseudonyms are; existing land use, land use, temporary, holding, freezing or interim, plus a few which may not be in good taste. To this, we must add at least one other; viz, bonus. Unless the purpose of a zoning By-law is known, it is quite possible to misunderstand, for example, a By-law intended to give to council a measure of control for a temporary period pending the preparation or completion of a planning programme or any of its phases. We may look upon it as a comprehensive By-law implementing land use policies, for instance:

*What is the purpose of the "bonus system" and is it intended to reward developers who voluntarily exceed the requirements of zoning By-laws?*

The "system" is a departure from the form of the majority of zoning By-laws in force in Ontario in that it is, upon analysis, a zoning By-law which sets out alternative regulations applicable to each type of development. We are accustomed to By-laws which enumerate regulations without alternatives. Where the latter tends to stifle imaginative solutions to building programmes, the former will undoubtedly increase the scope for an architect in the resolution of a client's aesthetic, economic and physical requirements. It should encourage developers to do other than merely comply with one set of minimum requirements. This, of course, will be to the benefit of all communities: spatial relationships will eventually improve, available open space in the central business districts will increase as less land is covered in favour of a permitted increase in building height, redevelopment of existing arteries will permit more light and air to penetrate to the street level, despite a more intensive use of sites, because of the types of buildings which can result from intelligent combinations of alternative regulations.

Instead of a building without side yards, covering between one-half and three-fourths of the site and limited to a specified height for example, it is possible that an increase in the open space on a site may be encouraged by permitting a greater height of buildings. The same total floor space could result from either.

Features such as the "bonus system" require careful study prior to becoming part of a zoning By-law if they are to have positive effects in the interests of a community. It is limited to regulations which councils may enact in regard to the location of buildings and structures, the minimum area of land appurtenant to each, the maximum area of land which may be used for building purposes, the maximum height of buildings and others. It does not affect the use of land, buildings or structures in terms of these being residential, commercial or industrial.

Properiy applied, a zoning By-law which provides for combinations of alternative regulations will overcome some of the deficiencies apparent in By-laws presently in force. *Graham Adams, Willowdale, Ontario.*

## BOOK REVIEWS

"AN ANTHOLOGY OF CANADIAN ART", edited by Dr Robert H. Hubbard. Published by Oxford University Press. Price $5.50.

Published in November and its first printing sold out before Christmas, "An anthology of Canadian Art", clearly fills a great need.

Those concerned with Canada's artistic heritage have wished for some time that such an anthology existed. Dr Hubbard is the first to satisfy this wish and as Curator of Canadian Art at the National Gallery, he is most advantageously placed to display the panorama of Canadian Art.

The author leads us at a brisk pace through a pleasantly written introduction crammed with factual information. Dr Hubbard set out to write a brief scholarly history and it is possible that in his attempt to achieve conciseness he has assumed that the average reader would have a general knowledge of art. It might turn out that this book will find its way into the hands of many for whom it will be the first art book they read. The similarity between Thomas Davies' patterned treatment of foliage and the style of Le Douanier Rousseau is aptly noted. It could have been said that this manner is common to many if not most primitives and Le Douanier might have been introduced with place and dates.

Should one use the term "accidental Chinoiserie" when Chinoiserie as a style can only be the result of a definite wish to produce Chinoiserie? Does not the word "Chinoiserie" imply an atmosphere of frivolous decoration quite opposite from the purity of line characteristic of early Quebec Architecture?

An anthology inevitably has its limitations; among the plates some undoubtedly will miss old friends, others will discover new ones. The pictorial selection covers architecture, painting, sculpture, graphic work, and handicrafts, and embraces a period from the last quarter of the 17th century till today, including only one example each of eskimo and west coast indian art. To create a balance in this wide range of varied items must have cost the author many a sleepless night, and he is probably still haunted by the images of those that he left out. But how could Osgoode Hall not be there, and the Sharon Temple? Surely from the present generation Anne Kahane and Graham Coughtry should not be omitted. And where is our Scottie Wilson?

I think it can be fairly said that even for an Anthology the selection is too limited. If the choice were determined by historical considerations it should have been more complete; a more exciting selection certainly could have been made if aesthetic considerations had been dominant. As represented here, may be the most obvious general characteristic of Canadian Art is a certain dullness.

To those that wish to see or read more about Canadian Art the bibliographical note in this book is of great value.

A helpful companion to Dr Hubbard's book is the catalogue of painting and sculpture of the Canadian school from the National Gallery of Canada.

"An Anthology of Canadian Art" Dr Hubbard notes, took about fifteen years of preparation. The result is an enlightening book handsomely designed and produced. It has an agreeable landscape format and a convenient size, and contains 123 monochrome and fourteen colour plates. It is a volume no Canadian bookshelf should be without. I hope that a more extensive and complete work is already in preparation. *Leo Rampen*

# LEGAL NOTES

EDITED BY D. C. HALDENBY

## *The Mechanics' Lien Act: Registration Period*

BY JACK BATTEN

THE FIRST REQUIREMENT that a claimant under The Mechanics' Lien Act of any Province must satisfy is proper and timely registration of his lien. He must file the lien, in the Registry or Land Titles Office, within the statutory period permitted from the date that he last worked on the job or last supplied material to it. This period varies from province to province – 37 days in Ontario, 60 in New Brunswick–but the principle remains the same in every province and it seems, at least on the surface, to be fairly straight forward and inflexible.

A number of recent decisions have, however, begun to suggest that there is still some room, and necessity, for careful judicial interpretation of even this deceptively plain requirement. In New Brunswick, in 1960, for instance, the Supreme Court was asked to define the real meaning of *"substantial performance"* of a contract, especially in its application to the registration period under the province's Lien Act, and at the same time, the Supreme Court of Canada was expressing its opinion on the meaning of *"completion"* and *"performance"* of work, for registration purposes, under the Ontario Mechanics' Lien Act. And earlier in 1959, the Alberta Supreme Court considered the effect of a guarantee clause on the registration period under its Mechanics' Lien legislation.

In the New Brunswick case, Wagg and Wagg v. Boudreau Sheet Metal Works (1960) 21 D.L.R. 80, a heating contractor, who had registered his lien more than the statutory 60 days after installing a furnace in a customer's home, tried to use a familiar and, still, ingenious argument to protect his lien rights. He maintained that, while the heating unit was admittedly functioning and supplying heat after the initial installation, it was still necessary for him to return later to put it in proper and complete order. *"It was like running a car without a muffler,"* he testified, *"it would still go, but it was not finished"*. He listed the various adjustments and additions that he made – balance system to provide uniform heat, install return air grill, add ten damper arms, etc. – and argued that the registration period should be calculated from the date of these adjustments, a date that was, naturally, less than 60 days before he registered his lien.

Unfortunately for the contractor, the New Brunswick Act clearly worked against him. It required registration *"– before the expiration of 60 days from completion of the contract"* and further defined *"completion"* as *"substantial performance, not necessarily total performance."* The heating contractor's argument was, at bottom, that entire performance, not substantial performance, of his contract was a condition precedent to his right to enforce any kind of payment. However, as Mr Justice Ritchie pointed out in his judgment, *"– the doctrine of substantial performance of entire contracts relaxes the requirement of exact and precise performance"*, and, *"in the case of building contracts, where there has been substantial performance by the builder, the owner cannot refuse payment under the contract because the completed work does not conform to its exact and literal terms. He, however, is entitled to credits or deductions for omissions and defects – The test is whether the work is 'finished' or 'done' in the ordinary sense even though part of it is defective."*

His Lordship had no difficulty in finding that the heating contract was in fact substantially completed when the furnace had been first installed. The minor nature of the later adjustments, he said, was clearly demonstrated by the home owner's failure to make an immediate complaint about lack of heat, and his Lordship also thought that the heating contractor's own use, in cross-examination, of a word like *"knick knacks"* to describe the later work was almost completely damning to his case. *"Substantial performance"* at the early date meant, therefore, that the lien was registered far outside the proper time.

Another unique, and unsuccessful, argument for extending the registration period was used in the Alberta case, J. R. Stephenson v Shoppers' Park-Westmount (1959) 18 D.L.R. 212. A subcontractor had installed an incinerator in a small department store, and, when he failed to file his lien within the statutory time limit, argued that his rights were kept alive by a one-year guarantee clause, against defective installation, in his contract. The Alberta Act provides that, *"a lien . . . may be registered before or during the performance of the contract or within 35 days . . . after completion . . . "*, and, so the subcontractor in the Stephenson case maintained, his contract was not fully *"performed"* within the meaning of the Act until the guarantee period had expired. Thus, he could validly register his lien at any time during the one year period, or, even, 35 days after it ended.

Mr Justice Riley of the Alberta Supreme Court showed very litle patience with this argument, clever as it seems, and a clear note of disdain runs through his judgment: *"To allow the plaintiff's claim would render nugatory, inoperative and ridiculous the hold-back provisions of the Mechanics' Lien Act because it would mean that the hold-back would have to continue not for 35 days as set out in the Act, but for 1 year and 35 days after the completion of the work."* His Lordship found, altogether, four reasons, of varying force, for refusing the subcontractor's contention, and, perhaps most important, he expressed a real doubt that a guarantee clause could ever constitute a *"continuing"* contract within the Mechanics' Lien Act in the absence of some definite implementation of the guarantee – work done or materials furnished – during the stated period: *"The normal continuing contract . . . arises when materials are supplied from time to time for a period of months and then if the account is not paid and a mechanics' lien is filed within 35 days from the last day on which materials were supplied the lien would cover all of the materials supplied over the period of months. This, of course, would also apply in the case of work done. In this case, the necessary ingredient of some work having been done during the period of the one-year guarantee and within 35 days of the filing of the lien is missing."*

The Ontario case, County of Lambton v Canadian Comstock Co. Ltd. (1960) 21 D.L.R. 689, again dealt with claimants who had apparently filed their liens long after they had substantially completed their contracts. But this case was complicated by an additional fact: each

claimant had also furnished the architect with a written acknowledgment that all its work was indeed finished. This step was taken, it appears, to accommodate the architect who wished to certify completion, and, as it turned out, there still remained a good deal of work to be done after the acknowledgments were delivered. None of the later work could be described as really substantial – some of it was in fact trivial – but in every case it was done, openly and to the architect's knowledge, to complete a contract or to remedy a defect.

Clearly these circumstances raise the issue of substantial completion in much the same way as it occurred in the Wagg case, and it seems that, in New Brunswick, with its definition of *"completion"* as *"substantial performance"*, the lien claimants would be out of court. But the Ontario Act takes a different approach, and contains no similar definition of *"completion."* Thus, Mr Justice Judson, who delivered the judgment of the court, was able to hold that time did not begin to run against the claimants when they had substantially finished their work or even when they admitted that they had substantially completed it: *"The fact that a contractor, who has substantially completed his work, may sue for the contract price, subject to deductions for minor defects or omissions, if there are any, does not and cannot determine when time begins to run against him under the Mechanics' Lien Act. Completion means what it says. I do not think that time begins to run under s. 21(1) until it can be said that the contractor or sub-contractor has done all that he promised to do and is entitled to maintain his action for the full amount."*

As for the acknowledgments, the lower courts and Mr Justice Judson agreed that these did not work against the lien claimants because all parties, including the architect, were aware that they were not entirely accurate. *"I can readily find that by the giving of these acknowledgments, these sub-contractors hoped to get their money faster and that they knew that they would be used by the county for the purpose of computing the time when it would be safe to pay out the holdback. But the Act provides (s. 5(1) that 'Unless he signs an express agreement to the contrary' a person who does certain things shall have a lien. The acknowledgments given in this case do not, in my opinion, amount to an 'express agreement to the contrary' as required by the Act."*

*Mr Batten is a member of the Toronto legal firm of McLaughlin, Macaulay, May and Soward.*

## LETTERS TO THE EDITOR

Editor, RAIC *Journal:*

The Architectural Undergraduate Society of McGill University, being sincerely concerned about the future development of the McGill campus, prepared a submission to the Board of Governors of the University, and on February 20th, supported by a considerable number of students of other faculties, paraded through the campus (see photograph) and formally presented the submission to the Board of Governors.

Our submission to the Board of Governors of McGill was in the form of a series of questions, and read as follows:

"This body, the Architectural Undergraduate Society of McGill University, is deeply concerned by the danger of haphazard development, and having McGill's interests at heart, respectfully requests that the Administration give information on the following points:

"1. Does the University have a comprehensive development plan? If such a master plan exists, or if it does not, how are the following questions resolved?

(a) Is there a plan to determine land uses and departmental precincts?
(b) Is there a plan to indicate projected land uses and land acquisition necessary for expansion?
(c) Can the existing facilities of departments be extended without occupying distant sites?
(d) Does a plan exist which establishes priorities of land uses in terms of the academic central core of the University and proximity of other departments?
(e) Have serious studies been made to decide upon the best location of future buildings according to their relationship to other buildings?
(f) Is there a plan which limits building masses and heights, and respects historically and architecturally important buildings?
(g) Have pedestrian, vehicular, and service access routes been clarified?
(h) What considerations have been given to the landscaping of the grounds?

2. Has the University a permanent body of highly qualified persons to deal with all aspects of physical planning?

3. Does McGill have a definite educational and enrollment policy to guide the policies of a planning committee?

We hope that our questions will be considered and that a statement will be made."

Respectfully submitted,

(signed) *Rudy V. Javosky, President,*
*Architectural Undergraduate Society,*
*McGill University.*

CANADIAN
BUILDING DIGEST

DIVISION OF BUILDING RESEARCH • NATIONAL RESEARCH COUNCIL CANADA

# CONCRETE

by N. B. Hutcheon

UDC 691.32

The extensive use made of concrete is proof of its outstanding characteristics as a construction material. It is such a familiar material that we take for granted the quite remarkable process by which cement and water mixed with a wide range of aggregate materials into a plastic mass are converted into a strong, durable material, in almost any desired shape on the job. The development of modern portland cements having a property of setting up quickly, even under water, began a little over a hundred years ago when the necessary basic raw materials for their manufacture, together with the required burning process, began to be recognized. Today many hundreds of highly qualified scientists and engineers throughout the world are continuously engaged in studies of these materials in attempts to understand them better and to improve them still further.

Many of the chemical and physical reactions which take place during the setting of concrete and subsequently are so complicated that they are still not fully understood. This is due in part to the wide range of chemical substances that can exist partly by design and partly by chance in any given concrete mix. Additional variations may be introduced in the methods of manufacturing, handling, and curing on the site. All of the changes that take place relatively rapidly in new concrete do not cease at the end of the formal curing period. Some may continue slowly over a long time and others may be initiated by elements in the environment to which the concrete is subsequently exposed. Despite all these complications, concrete of predictable properties and performance is regularly produced and used. This does not occur by chance.

Fortunately it is not necessary for the designer, specification writer, job engineer and materials supplier to keep in touch with the whole field of concrete technology. There are various guides to practice by way of manuals, codes, standards and specifications from such sources as the American Society for Testing Materials, the American Concrete Institute, and in Canada the Canadian Standards Association and the National Building Code. But it is highly desirable if not essential to have some idea of the general nature of the material and its more important properties. This Digest attempts to provide such a picture.

*The Concrete Mix*

Concrete results from the combination of cement paste formed from cement and mixing water, with aggregate. Since cement is up to 10 times more costly than the aggregate it is desirable to use the minimum amount of cement for this reason alone. In standard, dense concrete it is necessary to have enough cement paste to fill the voids in the aggregate. Economy in use of cement is thus to be achieved by arranging the grading of the aggregate to produce a practical minimum of voids. But there is usually another reason for avoiding too much cement. All cement products undergo small changes in volume with changes in moisture content. Though small, these changes are very important since they may be considerably greater than the strains produced by normal loading. The dimensional changes in cement paste, however, may be as

much as ten times those occurring in normal good concrete or in the aggregate itself. In a concrete made from a "rich mix" containing more cement paste than is necessary to fill the voids in the aggregate, the concrete takes on more of the shrinkage characteristics of the cement paste. Excessive cracking due to shrinkage often occurs in concrete floor toppings because excess cement has been added in a misguided effort to make them better.

The volume of voids in a sample of any aggregate of fairly uniform size is likely to be roughly ⅓ of the gross volume. The percentage of voids is roughly the same regardless of size. A commonly used proportion of cementing material to sand used in making mortars is 1 to 3. That is, one volume of cementing material is required to fill the voids in 3 volumes of sand. The same ratio would hold, roughly, for a coarse aggregate. If, however, the voids in a coarse aggregate are first filled with a fine aggregate the remaining voids in the combination will be reduced to 1/3 of 1/3, or 1/9 and the resulting mix will be 1:3:9 by volume. This is an oversimplification of the basis for proportioning concrete mixes but it serves to illustrate the importance of grading of aggregate in the making of good concrete. Aggregate shape, gradation in aggregate size, total surface area of aggregate and considerations such as workability of the fresh concrete may call for adjustments in the amount of cement paste required and thus lead to necessary deviations from the rough 1 to 3 proportion indicated above for a two-component mix.

The proportion of water to cement, these two ingredients together constituting the cement paste, is of prime importance. The amount of water required in a normal mix is always much in excess of that required for the "hydration" of the cement in the attainment of its final form in the concrete. Much of the extra water which is necessary in practical mixes to make them workable will be lost as the concrete attains its final form. But the volume that the hydrating cement must eventually try to fill is predetermined by the volume of the paste. Thus it may be concluded that the final density of the hardened cement paste, and therefore several other important properties such as strength and porosity, will be determined by the ratio of water to cement used in the original mix. This has been found to be substantially the case and has led in turn to the use of *water-cement ratio* as an index of strength in the design of concrete mixes. The lower the water-cement ratio the higher will be the strength of the hardened paste and thus of the concrete. This explains the engineer's dislike of excess water in the making of good structural concrete and justifies his contention that good concrete is placed, and never poured; if it can be poured it will not be good concrete.

*Setting and Hardening of Cement Paste*

Portland cement is prepared from raw materials consisting in large part of calcium carbonate frequently in the form of limestone, and of aluminium silicates often suitably obtained in the form of clay. Marls containing both of these substances may often be used. An intimate mixture of the raw materials is burned at a clinkering temperature. The resulting clinker is then ground to a fine powder. The major constituents are lime, alumina and silica.

Distinct differences in properties of portland cement may be produced by suitable adjustments in chemical composition. There are available many types of portland cement having specified properties. These may be designated by descriptive names such as Ordinary, Rapid Hardening, Quick Setting, White, Low Heat and Sulphate Resisting or, as in the United States, by special designations such as the Types I to V used by A.S.T.M.

All the compounds present in portland cement are attacked or decomposed when brought into contact with water. A variety of products is formed, some of them only temporarily, to be converted later to others in the process of hydration. These products form first at the boundaries of the grains of cement and as their development continues, the cement paste "sets" and later "hardens". Heat is released during this hydration process.

The setting of cement may begin in as little as 30 minutes and continue for several hours until a stage known as final set is reached. Special quick setting cements may achieve final set in as little as 30 minutes. The compressive strength of concrete made from ordinary cement takes longer to develop. It increases rapidly over a period of several days then more slowly over several weeks and may continue to increase slowly for many months. No simple guide to the rate of attainment of

strength can be given since this can be varied over a very wide range by varying the water-cement ratio, and is influenced as well by cement type, and by curing conditions. It is a necessary part of the design of a concrete mix to arrange that the strength attained at various times will be appropriate to the requirements of the particular application. The stripping of forms and the application of load as construction proceeds must obviously be related to the attainment of sufficient strength by the time these various events occur.

Since the progress of hydration leading first to setting and later to hardening is dependent upon the presence of water it is necessary to keep concrete from drying out during the curing period. Suitable curing conditions may be ensured by keeping concrete damp by flooding, by spraying or by the application of wetted coverings for periods up to 7 days or in special cases to 14 days or more. Alternatively in some cases where it is suitable a curing compound may be applied to the surface. It forms an impermeable film which prevents drying out.

The process of hydration is very considerably retarded at low temperatures. In winter construction, special precautions by way of heating of materials before mixing, or the use of insulation or enclosures may be necessary to ensure the development of sufficient hardening by maintaining an adequate temperature for some time before exposure to freezing conditions. Advantage may be taken of the heat generated during the hydration process in the case of mass concrete which will keep the interior of a large mass warm for many days.

In summer, the heat of hydration may cause difficulties through the development of excessively high temperatures in mass concrete. Low heat cements may have to be used. In more extreme cases with massive structures such as dams, artificial cooling through pipes embedded in the concrete may have to be employed.

*Properties of Cured Concrete*

Fully hardened standard or dense concrete becomes stonelike in nature. In common with most stonelike materials its strength in compression greatly exceeds its strength in tension, these often being in the ratio of 10 to 1. It is not therefore an efficient material by itself in resisting bending and tensile stresses, but can for such applications be combined with steel reinforcement. The reinforcement carries the tensile stresses while the concrete carries compression and serves to bind the whole assembly together. Fortuitously, the thermal expansions of ordinary concrete and steel are approximately the same and both of them exhibit approximately the same strains when loaded to their normal working stresses, so that they work well together. Special problems may arise in a few applications when these conditions are not obtained.

Concrete has a tendency to shrink as it attains strength. These shrinkage strains are not insignificant and must often be reckoned with in design. There is a further tendency to shrinkage as concrete dries out. Cracks from this cause may develop months or even years after manufacture in the case of heavy sections which lose their excess water very slowly. This dimensional change due to drying can be reversed when the water content is restored. A further kind of shrinkage due to chemical reaction between carbon dioxide in the air and the cement, leading to carbonation adjacent to exposed surfaces, takes place still more slowly, requiring many years to penetrate as much as one inch into normal concrete. Under certain special conditions, this effect can aggravate shrinkage and cracking problems.

There is a variety of other circumstances involving unusual aggregate properties and sometimes involving unusual chemical reactions between the cement and the aggregate which can lead to abnormal dimensional changes. Many of these potential difficulties can be avoided by the application of various special tests which have been devised. New difficulties not previously identified can arise, but this occurs infrequently.

Excessive shrinkage of concrete masonry units can occur if they are used before the major portion of the curing and drying shrinkage has taken place. Many of these products are now autoclaved or steam cured at the plant to accelerate the curing and shrinkage. Some masonry units are now being exposed to flue gases in a chamber at the plant in an attempt to reduce still further the amount of shrinkage that can occur on the job. The tendency to some degree of dimensional change is an inherent property of concrete, as well as of many other materials. Difficulties

from this, however, can be avoided by realistic designs taking into account the nature of the materials, by care in the selection of adequately cured units and by attention to the moisture content at the time of laying. Units that are laid up wet will inevitably shrink when they dry to a more normal average moisture content characteristic of the exposure. By the same reasoning units delivered very dry could expand upon regain of moisture to a more normal working level but this is seldom a problem.

*Lightweight Concretes*

Standard or dense concrete is made from aggregates obtained from natural deposits of sand and gravel or from the crushing of stone materials, but a wide range of aggregates may be used in the manufacture of other types of concretes. The object in the use of these other aggregate materials is in most cases to produce concretes which are lighter in weight but still of sufficient strength for the intended purpose. Cinders, slag, foamed slag, expanded clays or shales, perlite, vermiculite, and even sawdust and other forms of wood waste, are being used. The extreme in light weight is represented by the foamed concretes in which bubbles of gas take the place of the aggregate. Strength and certain other properties may vary substantially from those of standard dense concrete, depending on the properties of the aggregate.

*Durability of Concrete*

It is the quality of the hardened cement rather than the aggregate which will in the first instance determine the durability of concrete under severe or aggressive environmental conditions. If the paste is dense and occupies all possible voids around the aggregate, water will be able to enter only very slowly, if at all. This is a big step in achieving durability since both cement and aggregate will thus be protected from contact with chemical agents in the environment.

The more common of the chemical agents which give rise to degradation of concrete in Canada are the sulphates. These may be present in some open waters in concentrations likely to be significant, but are more often to be found in serious proportions in the soil or in the soil water. Good, sound, dense concrete is usually able to provide good service under moderate sulphate conditions, and the time for a given degree of degradation may be greatly extended in the case of more severe conditions by the use of sulphate-resistant cements.

Durability under freezing and thawing conditions is not guaranteed by density and impermeability in the concrete. These properties are desirable since they are usually accompanied by superior strength, and they serve to limit the entry of the water which is a necessary companion to freezing in the case of freeze-thaw breakdown. It has been found that dense paste can be vulnerable to repeated freezing when wet, but that its resistance can be increased many times when air is introduced or entrained during mixing to create a pattern of tiny, closely spaced bubbles throughout the mix. Air-entraining agents can be added in small quantities at the time of mixing or can be incorporated in the cement during manufacture. It is the close spacing of these air bubbles rather than their size which determines the degree of protection, so that the percentage of air in the mix is not alone a good index of the suitability. The air content required for good protection has relatively little effect on other desirable properties and since the tiny air bubbles are totally enclosed in the cement paste they do not add to the permeability in any significant way, and are not in conflict with practices designed to produce impermeable concrete. The presence of the proper amount of entrained air, properly distributed in the paste, will do more to improve the durability of a concrete of normal quality under freeze-thaw conditions than will moderate changes in any of the other pertinent factors that determine its general suitability.

Some of the characteristics of concrete which have been discussed can create problems. The same can be said for all other materials. Many problems can be avoided, usually without much difficulty, at the design stage provided that the designer knows his material. The same may be said for the manufacturing and construction stages. There is an extensive literature on almost every aspect of concrete through which the story which has been given can be expanded and extended.

*This is one of a series of publications being produced by the Division of Building Research of the National Research Council as a contribution toward better building in Canada. The Division has issued many publications describing the work carried out in the several fields of research for which it is responsible. A list of these publications and additional copies of this Building Digest can be obtained by writing to the Publications Section, Division of Building Research, National Research Council, Ottawa, Canada.*

Editor, RAIC *Journal:*

Your coverage of the three most recent air terminals in Canada was excellent. However, we feel that credit should have been given to the designers of the interiors and of the interior furnishings. In seven of the interior photographs, furniture designed by Robin Bush Associates for Canadian Office and School Furniture was prominently displayed. In others, there was furniture by Knoll International Canada Ltd, and by Chris Sorenson for Jacques Guillon Associates, Montreal. Jacques Guillon Associates should also have been credited as interior design consultants for Dorval. *Norman M. Hay, Toronto.*

## INSTITUTE NEWS

### *1961 Massey Medals Competition*

At the beginning of March an announcement in both French and English languages was forwarded by the Institute to every architect in Canada outlining the regulations governing the 1961 Massey Medals for Architecture competition. Following two meetings at Winnipeg and Ottawa in 1960, the Massey Medals Committee, with the concurrence of the Massey Foundation, and the approval of the Executive Committee of the RAIC, have made several changes in the regulations governing the 1961 Competition, as follows:

1. The Massey Foundation has granted an increase in the number of silver medals to be awarded from 15 to 19.
2. Two judgments are now instituted, the first to select for inclusion in the Massey Medals exhibition, 100 outstanding buildings built since 1951, with the final judgment to award a maximum of 19 silver medals and the 1961 gold medal.
3. Buildings which may be located anywhere in the world, and designed by architects registered and resident in Canada, are eligible for submission. The former category restrictions applying to the final judging have been removed.
4. No limit is to be placed on the number of entries an architect may submit.
5. A registration fee of $5.00 is to be paid for each building entered. This will cover the cost of the special binders containing transparent mica-film window sleeves which will be supplied for each building.
6. Only those buildings chosen in the preliminary judgment will be presented on exhibition panels for the final judgment; by following this procedure no excessive expense will be involved for those buildings not selected for fina! judgment.

The Massey Medals Committee believe that the new scheme will, in the first instance, establish distinction for those buildings chosen for inclusion in the coast to coast exhibition of 100 outstanding buildings by Canadian architects. In addition, up to 20 buildings in this group may be further honoured by being awarded Massey Medals.

The preliminary entries are due June 1st and will be judged at Ottawa on June 19-20. The final judgment for the awarding of the medals takes place October 2 and 3. On November 2 it is expected that His Excellency Major-General Georges P. Vanier, DSO, Governor General of Canada, will formally open the Massey Medals Exhibition 1961 in the National Gallery of Canada, and will present the medals to the architects of the winning buildings.

Jury of Selection will consist of Pietro Belluschi, FAIA, Dean of the School of Architecture, Massachusetts Institute of Technology, Boston; John Bland, FRAIC, Director, School of Architecture, McGill University, Montreal; and Peter Thornton, FRAIC, of the firm of Gardiner, Thornton, Gathe and Associates, Vancouver.

### *63% Response to Date on Income Survey*

Preliminary returns made available by the Economics and Research Branch of the Department of Labor indicate that a large majority of architects have completed and returned to the Labor Department in Ottawa the first full-scale survey by questionnaire of annual income and earnings in Canadian architecture. The project is a first step toward acquiring relevant salary and income data concerning the profession. The survey was initiated in mid-January, and is co-sponsored by the RAIC and the Department of Labor.

At the end of the first week of March, a 63% response from architects had been recorded. This represents 1,291 questionnaires returned from a total of 2,060 forms distributed in January. Because the Institute believes that the profession has been handicapped in the past by lack of valid statistical data, architects who have not yet returned the questionnaire are urged to do so witout delay.

### *RAIC Presents Brief to Tariff Board*

The Duty on Plans Committee of the RAIC, under the Chairmanship of Leonard Shore (F), Toronto, submitted a formal brief to the Tariff Board at Ottawa hearings held last February 13-15. Representing the Royal Institute were Mr Shore, D'Arcy Helmer, Ottawa, Robbins Elliott, Executive Director, RAIC; and Duncan K. MacTavish, QC, Special Ottawa Counsel.

The Tariff Board hearing dealt with Tariff Board Reference No 128, Engineers' and Architects' Plans, Drawings and Blueprints, and followed a directive from the Minister of Finance in 1960 to make a study and report under Section IV (2) of the Tariff Board Act of Tariff Items 180(e) and 180(f) and the method of determining the value for duty purposes of the goods specified in these items. The wording of these items had not been made subject to public scrutiny since 1951, when the Board last convened to hear briefs concerning duty on plans.

The RAIC submission supported the proposal of the Canadian Council of Professional Engineers that items not relating specifically to construction, such as machines, engines and apparatus, be dutiable under Tariff Item 180(e) with the following wording of that item: "Designs, plans, drawings, or any reproduction therefor, of machines, engines, apparatus, test sets and plant equipment, and complete parts thereof, and of general arrangement, foundation bolt plans, process layouts and flow sheets, and tooling, required for the manufacture, assembly, erection, installation, operation or maintenance of such machines, engines, apparatus, test sets, plant equipment."

The Institute, following consultation with the Canadian Council of Professional Engineers, introduced a rewording of Tariff Item 180(f) from "Blueprints, Building Plans, Maps and Charts, n.o.p." to read "Designs, plans, drawings and models for all items of construction or works or planning or additions or alterations thereto; and maps, charts, reports and specifications pertaining to the foregoing; or any reproductions of the above."

The objective of the RAIC, in making this proposal, is to ensure that all entries relating in any way to construction are introduced under Tariff Item 180(f). No judgment has been rendered to date.

### *Conference of National Organizations On Environment Report in Toronto May 2*

To maintain the program of implementation of the Report of the RAIC Committee of Inquiry into the Design of the Residential Environment and to enlist the continuing support of organizations whose activities bear on the subject, a conference of national organizations will be held at the Ontario Association of Architects' building in Toronto on Tuesday, May 2. The Chairman will be James A. Murray, Chairman of the RAIC-CMHC Joint Committee, and the RAIC representative will be Peter Dobush of Montreal, Chairman of the RAIC Committee which produced the Report. Among the organizations which will be represented at the meeting are the Canadian Federation of Mayors and Municipalities, the Canadian Association of Real Estate Boards, the Town Planning Institute of Canada, the Canadian Council of Professional Engineers, the Canadian Construction Association, the National Housebuilders Association and the Urban Development Institute.

### *Mumford Awarded RIBA Royal Gold Medal*

The RIBA Royal Gold Medal for Architecture for 1961 has been awarded to Prof Lewis Mumford, the noted American architectural critic, author and city planner. Prof Mumford was born in Long Island in 1895 and educated at the College of the City of New York, Columbia University, and the New School for Social Research. He was Professor of Humanities at Stanford University from 1942-44, Visiting Professor of city and regional planning at the University of Pennsylvania 1951-56 and 1959-61, and Visiting Bemis Professor at MIT 1957-60. A disciple of Sir Patrick Geddes, Prof Mumford has taken a keen interest in post-war town planning in both Britain and the United States. He became an Honorary Associate of the RIBA in 1942 and in 1957 was awarded the Gold Medal of the Town Planning Institute.

### *RAIC Journal Back Issues*

Limited quantities of back issues of the RAIC *Journal* are available at 50¢ per copy, on application to the *Journal* office. These copies date from recent issues back to 1938 and for this period applications for most issues can be met. However, copies of editions prior to this date are in very short supply.

Applications should be addressed to the RAIC *Journal*, Circulation Department, 600 Eglinton Avenue East, Toronto 12, Ontario.

### *Canada Council Architectural Scholarships*

The Canada Council has announced five scholarships for study leading to a master's degree in architecture. The awards are of an average value of $1,500 and the recipients are:

Julius Roy Izen, Winnipeg – to study architecture one of five American universities

Melvin Frank Malkin, Saskatoon – to study architecture at the University of Pennsylvania

Jon Victor Oliver, Prince Albert, Sask. – to study architecture at the University of Liverpool

Ove Christian Simonsen, Winnipeg – to study architecture at the University of Copenhagen

Fraser H. Watts, Toronto – to study landscape architecture at Harvard University.

### *Positions Wanted*

Architectural draughtsman, matriculation with science and drawing, Punjab University, promotion examination of the MES; 8 years experience; age 25, single. M. A. Karim, 'ALADIL' A/360-B, Mohanpura, Rawalpindi, West Pakistan.

## OBITUARY

WILLIAM SANGSTER, MRAIC of Toronto, Ontario, died in August, 1960 after a brief illness. Mr Sangster was born in Edinburgh, Scotland on September 21st, 1884 and received his architectural training in that city.

He came to Canada in 1910 and entered the office of Sproat & Rolph, Architects where he became a senior draftsman and had the experience of working on many very fine buildings including Hart House.

After the Second World War he joined the staff of Marani & Morris where his many years of experience were greatly appreciated. Due to ill health he retired in July, 1959. *J. A. Robertson*

EDWARD WILLIAM WARD WRIGHT, MRAIC of Stouffville, Ontario, died in Scarborough General Hospital on Monday, February 13th after a brief illness. Mr Wright was born in Southend-on-Sea, England, December 21st, 1890, the son of an English Architect who moved with his family to Canada prior to World War I and started practice in London, Ontario. Mr Wright worked in his father's office for some time and then on construction work until he joined the Army after war broke out. Following demobilization he worked for several years with the office of Bernard H. Prack in Toronto before joining F. H. Marani in 1920. Following World War II he was made an Associate partner in the firm of Marani & Morris. After the death of his wife Ada Mary (nee Andrews) in 1956, he suffered from ill health for a number of months, but was still a partner in the firm at the time of his death. *F. H. Marani*

# PROVINCIAL NEWS

## *The Roving Reporter At The OAA Convention*

Those of us who had anything to do with the education of veterans following the late war, must often have thought of their influence on the profession within a decade or so. Such thoughts came naturally to mind in those days because the veteran students were not the callow youth (even if bearded) that we see in the first and second years of the schools in 1960. They were mature men in many ways, and their leaders rose rapidly to the top in school societies and the executive student committees of the university. We, on the staff, were constantly on tenterhooks that a deputation might arrive at any moment with carefully worked out briefs involving the curriculum that required immediate attention. In Toronto, we labored under the burden of a first year class of something under 150 students living in huts in a Dachau like encampment called Ajax some 15 miles away. In their later years in the course, they returned to the University of Toronto and we got to know and, at times, even like such *provocateurs* as Ian Maclennan, Hart Massey and James Strutt.

It was with such memories that I looked at the crowd assembled in the lobby at the Royal York waiting for the Annual Assembly of the OAA, and, for the first time that I remember, was prepared to guess the average age at around forty and it augured well for the meeting. Not all those present – far from it, were graduates of the Toronto University School. Many were new Canadians from Europe still hesitant with English speech, and quite a few English obviously not yet wholly familiar with the Canadian idiom. All, however, seemed young.

The business meeting of the OAA, where it deals with reports, is dull and, too often, the statements of Committee Chairmen are perfunctory, redundant (since the printed report is before the meeting) or tedious. The meeting came to life only when resolutions appeared, but prior to that there were comments on fees for housing that left this reporter rather disturbed. Someone, perhaps Mr Leman, suggested that the "Fees" committee members were too representative of the larger office, and could have no personal contact with housing, and, perhaps, little understanding or sympathy. In saying so, it was made clear that, under Mr Parkin's chairmanship, the fees committee was a most active one and was completely impartial in its investigations. Mr Strutt promised a review of the constitution of the committee with the likelihood of additional members from the small interested offices.

What disturbed this reporter was the apparent apathy of the meeting toward a realistic fee basis in the housing field. With the ink on the report of the "Committee of Inquiry" hardly dry, and demands for funds for its implementation, we seem to have a fee schedule that is quite unrealistic, and a barrier to architectural participation in the housing field. Of the few who spoke for an immediate study of the fee for housing, no one impressed this writer or the meeting so much as did Mr Henry Fliess. His experience in the field and his reputation for excellent work and unimpeachable ethics are second to none in Canada, and he spoke unreservedly for revision. He removed, for me, any suggestion that the architects doing housing for merchant builders were to be associated with those rogue elephants who have left the herd to browse in the jungle of apartment houses or office buildings. We would add "at 2%" if it weren't that the metaphor was getting out of hand. The main point seems to be that there is more than an element of hypocrisy in our attitude to "Housing for Canadians" so long as the established fee is higher than the traffic will bear, and higher than the experts on our side think is necessary. On this topic, the older architects were mute.

The Assembly really came out of hibernation when resolutions were before it. There were two – that the OAA encourage criticism of buildings in the press, television and all other forms of communication; and the other, that architects be encouraged to put plaques on their buildings giving name and date. Both resolutions were read by Mr Leaning of Ottawa. On criticism, he clearly had comparative youth on his side against a rear guard action valiantly led by Mr R. S. Morris and Mr Peter Dobush. That the latter were not alone in their objection to the motion was to be seen in the vote, but 78 to 64 was a not insignificant victory. The interesting thing is where do we go from here?

All were agreed that "malicious" criticism was to be avoided, but, as the "architect" critic is always open to the charge that he was prejudiced against a building because he was not given the commission himself or, alternatively, that he could have done it better had he been asked, when is he malicious and when not? For instance, we know an office building in X that has two unrelated facades facing East and North, held together, rather desperately by sculpture on the corner. Is that wholly malicious and damaging to the architect's reputation, or does the elimination of the words "unrelated" and "desperately" make the sentence respectable? It would then read – "We know an office building in X that has two facades facing East and North held together with sculpture on the corner". I rather think that that was not what Mr Leaning had in mind. When we get into full stride, Mr Morden, our solicitor, is going to have a merry time, and public relations, even more than now, will wonder sometimes whether they are going or coming.

With plaques as with "criticism" the younger architects carried the motion. The name of the architect applied in some form to a building, is not new or, I think, a particularly good suggestion. If the plaque is 6′ x 4′, it could be incorporated somehow in the design, but there is something messy in finding a place on a prominent facade for something 10″ x 6″. At times in the debate, it looked as though the plaque were actually running into dimensions in feet. There was a proposal to include the contractor and sub-trades and, from another quarter, the job captains in the architect's office. Dr Howarth rose as an architectural historian, in support of the simpler style with the addition of the date. The plaque is, of course, old stuff at any rate in these parts. Lennox, the architect of the Toronto City Hall, worked his name into a frieze of foliage so carefully that this historian has been unable to find it. Paisley put his name in bronze on a corset building on Bloor Street, and in Hamilton, there is a sinkage in the stone work of the Federal Building

that tells the sad story of a plaque that was torn from its moorings by an irate government authority. The plaque was extremely modest in size, and its absence, for those who know its story, gives it a simple dignity perhaps more significant than the original plaque. But then, there are very few of us, and the victory for enlightened private enterprise is, in truth, a hollow one.

It seemed to this reporter that quite the most useful motion of the business session was that of Mr Smale from Simcoe, who recommended the setting up of a committee to study the program for next year – not in terms of distinguished speakers or anything of that sort, but rather to weed out those rather dreary periods which custom and tradition have led us to believe were unavoidable. He felt that much could be learned from the annual meetings of the Royal College of Physicians and Surgeons which members attended with more of a feeling of participation, and left with more of a feeling of usefulness to society. His proposal received unanimous approval.

Mr David Molesworth is writing at this time on the excellent seminars, the quite extraordinarily moving address for those who like their withers unwrung at lunch by the parson from Montreal, and the building exhibits which seemed livelier than ever before.

This writer was in a privileged situation at the dinner as the one appointed to introduce the guest speaker, Dr Claude Bissell, the President of the University of Toronto, and Chairman of the Canada Council. From that experience, I learned with what military precision every step in the arrangements had been studied, and how vast an amount of work goes into the planning of an annual Convention. The Convention Committee did a superb job, and I am sure they would be the last to minimize the contribution of the indispensable John Miller and the Park Road staff. As I hope that Dr Bissell's address may be published in full in the *Journal,* I shall mention only that he took the opportunity of saying publicly (for the first time since his appointment as Chairman) what he saw as the future of the work of the Canada Council. It was a brilliant address which will be read with interest from coast to coast and has already been heard in part on television. In an admirable and brief speech, Mr Carter of Windsor thanked the speaker. One would be remiss, in conclusion, if one did not mention the always impressive line of young architects who receive their scrolls at the hands of Mr Eric Haldenby, the Chairman of the Registration Board. For them it is a great moment and a moving one, not only for wives and friends, but for all the architects present. I am sure that the group of 30 coming as they did from schools in Canada, Great Britain and Europe, felt from the applause that their colleagues wished them well.

*The 1961 Council of the Ontario Association of Architects: left to right, around the table: Prof James A. Murray, Toronto; Frank H. Burcher, Hamilton; William J. Carter, Windsor, Treasurer; Douglas E. Catto, Toronto, new President; James W. Strutt, Ottawa, Past President; Earle C. Morgan, Toronto, Vice-President; Lloyd D. Kyles, Hamilton; D'Arcy Helmer, Ottawa, and Lynden Y. McIntosh, Fort William. Council member Peter F. Tillman of London, Ont., was absent.*

PHOTO BY TRUSSLER

A great deal of credit is due the OAA Convention Committee members who surpass themselves year by year on our behalf in presenting an excellent, smoothly flowing series of events for our enjoyment and enlightenment at the Royal York Hotel.

This year's Convention was of a very high calibre indeed. I hope that the brief resumé that follows will give an indication of the evident enjoyment and satisfaction that the attending members evinced throughout the ambitious program.

We moved from a pleasant entrance lounge displaying sculpture by the artists Ursula Hanes, E. B. Cox, Leonard Oesterle, Augustin Filipovic and A. H. Wolfenden, into a bright pavilion of varied and attractive displays ranging from prestressed slabs to gold-plated and decorated-china hardware, once old-fashioned, now new again.

I feel sure that we were all very impressed by the range of new products shown by the Exhibitors this year and feel that they deserve our appreciation for their co-operation in producing a controlled yet variegated exhibition and for their graceful submission to the iron hand of the Exhibitions Committee.

We were then the guests of the Exhibitors for two lively hours of refreshments and chat followed by the OAA dinner, which I believe everyone found delicious this year.

The Annual General Meeting on the second day, although distractingly punctuated by the not-too-musical quality of the automatic doors, was most capably and efficiently handled by Mr Strutt, with some legal assistance from Mr Morden on some very confusing points of order, and is discussed elsewhere in this issue by the Roving Reporter.

One of the afternoon seminars saw a large group of members intrigued by Professor Sibyl Moholy-Nagy's approach to the education of the up-coming generations of architects. Her controversial thoughts on apprenticeship, architectural part-time work for students and student-practitioner relationships (not enough of any of these to-day, she felt) were challenged by those of other opinion, particularly University faculty members. Professor Moholy-Nagy's approach to teaching potential architects, is to imbue them with the desire to use architecture not as a purely individual statement without social

commitment, but with responsibility, discrimination and evaluation of all the elements involved, in a broader "civic sense". She stressed the need for the architect of to-day to have "an environmental awareness".

Professor B. Paul Wisnicki, of Vancouver, who conducted one of the seminars, read a paper on "Architects and the Structure" wherein he advised the architects tactfully to use characteristic structural forms with honesty. He suggested that the folded plate roof, for example, should not be used for its form alone with inappropriate materials, forgetting entirely its intrinsic value as an evolved expression of a structural system.

Both luncheons were followed by provocative talks, one by Mr Ian MacLennan, well known as Chief Architect and Planner for Central Mortgage and Housing Corporation; the other by Rev Norman Rawson of St James United Church in Montreal, who has a great reputation, well founded indeed, as an after dinner speaker. Mr MacLennan and Mr Rawson took us to task; the former for our not taking enough of a part in the shaping of the Canadian physical environment and for our blaming others for the resulting mess; the latter for the likelihood that our professional ambitions might lead us away from our families and friends and that we should consider the path ahead before it is too late.

Each gentleman tempered his censure with sparkling wit and constructive suggestions for our immediate consideration. I am sure that we all felt that their talks were far too brief.

The Friday evening social gathering was a great success, bright with attractive ladies, gay entertainment and good dance music. The Roving Reporter will tell you of the success of the Annual Dinner.

As befitted such a successful production, the 1961 Annual Convention of the Ontario Association of Architects closed with applause. *D.H.G.M.*

## *Report of the President, Mr James Strutt, to the Annual General Meeting of the OAA*

After his introductory remarks, Mr. Strutt said:

"During this past year under the masterful direction of John Miller and his staff we have dealt with an ever-increasing number of matters. A great many of these items have become by now routine but the balance necessitated at times lengthy deliberations by Council. A number of informal discussions were held the night before regular Council Meetings. I hope that Council Members found it as useful as I did in facilitating the business of the following day.

"I am not going to weary you with an elaboration of activities already discussed in the Committee Reports — however, as you can see from the Annual Report, a number of new committees were formed to deal with new matters: (1) Legislative Committee; (2) Committee on the Incorporation of Companies; and (3) Committee on Fees for Engineering Services for Architects and Conditions of Engagement.

"Two of these Committees, the Legislative, and Fees for Engineering Services Committees, were formed so that we might be better able to deal with the problems that arise out of our relations with the engineering profession. These do not replace but supplement the Joint Committee of the OAA and APEO.

"A further group of committees have been formed recently, too late to have reports included in the Annual Report:

(1) *The Architectural Competitions Committee*

Council instigated a general revision of RAIC Document No 4, "Code for the Conduct of Architectural Competitions", by the RAIC. This you will recall was reported on in the RAIC Journal. This Committee, made up of Members of Council and the Registration Board, is to review the revised draft of this Code before the ratification of it by Council. It is also empowered to review the conditions for all competitions for projects in the Province of Ontario and, on behalf of the Association, has the authority to approve, amend, or reject, any program for a proposed competition.

(2) *Architectural Control Committee*

The subject of architectural control by municipalities has come before Council from a number of sources; from recommendations made in the RAIC Inquiry Report into the Residential Environment; from private bills before the Ontario Legislature; from municipalities, and concern shown by Members of the OAA. This Committee is requested to examine all aspects of architectural control and make recommendations to Council on the attitude the profession should adopt.

(3) *Architectural Education Committee*

This committee has been set up within the terms of a trust agreement which was drawn up in 1953. The terms of reference and other aspects of this Committee will be announced at a later date.

"Committees are the backbone of our Association. So many items on the agendas of Council meetings are referred to standing committees, that special mention has to be made in commendation of the men who devote so much of their time, ability, and efforts to the progress and operation of the profession.

"Traditionally, Council holds one meeting away from our Headquarters each year. This year we enjoyed a most pleasant meeting with the members of the Hamilton Chapter. Another out-of-town meeting was held by Council on the occasion of the inauguration of a new Chapter of the OAA. A warm welcome is extended to the members of the North Bay Chapter in attendance.

"At its January 1961 meeting Council approved a motion that the North Bay and Sudbury areas of the Province would be given representation on Council. Steps will be taken by your incoming Council to adjust the electoral districts of the Lakehead, Sudbury and North Bay Chapters.

"There are at least two collective endeavours that have been carried out by the members of the OAA this year in which we can be reasonably proud. The first, which encompassed the whole membership, is the support given the RAIC in its efforts to implement its Report of Inquiry into the Residential Environment. Individual and firm contributions to the RAIC Fund in this regard provided the greatest percentage of monies received across the country and an additional sum was contributed through your Council to enable the RAIC to obtain the necessary professional assistance to proceed with this, the most constructive collective endeavour every attempted by the profession. However, excellent though this response was we cannot stand on our laurels. As was indicated recently in a letter from RAIC President Harland Steele

to all architectural firms, the full amount necessary to pay for this public-spirited endeavour has not been achieved, and there are still quite a number of us who have not as yet contributed. It is a little surprising to think that some of us are quite happy to ride along on the efforts of a few when all we are asked to give at this time is money.

"The other project was carried out by the Ottawa Chapter. Much publicity was given to the City of Ottawa's Shopping Mall. Council received the report on the Mall and will be passing copies on to all Chapters. This highly competent report indicates that the Mall was an unqualified success, due in no small measure to those Members of the Chapter who designed and supervised its construction as a service to the Community.

"Over the last five years our presidents invariably have made reference to the state of our profession with regard to our ethic and our professional attitude. I am bringing it up again, not because it is a pleasant subject, but, on the contrary, because it is the one very unpleasant one which still plagues us in the pursuit of a livelihood through the practice of architecture.

"Council has become very aware of certain conditions through the reports of the Professional Guidance Committee. We have asked for and received information from our members regarding among other things, variations on the theme of "Fees for Services Rendered"; variations which are contrary to the intent of our regulations and which lead to the quotation of fees on a competitive basis, a direct contravention of these regulations.

"The Committee on Fees in their deliberation on the first and foremost aspect of their task "Conditions of Engagement" run into similar problems, including, as well as fee cutting, partial services and our association with package dealers.

"The foregoing are a few of the most prominent problems facing the profession which will have to be resolved in the next few years if we are not to have a lowering of the standards of our service and of the general standing of the profession.

"As I see it, we are faced with three alternative solutions to deal with the problems:

(1) Restrictive legislation and rigid control;
(2) Unrestricted competition and no fee structure; and
(3) A thorough breakdown of our fee structure in terms of specific services rendered.

"The work of these two Committees, and particularly the long discourses of the Fees Committee on the "Conditions of Engagement", will result in recommendations which will have a profound effect on the future of the profession. Conceivably, their recommendations will be placed before our next Assembly, and one of the reasons I am presenting the situation to you now is that I hope interested members will assist them in their task by presenting briefs on the subject for their consideration.

"We are practising at a time when our patrons cover a wider strata of society than ever before. The increased consciousness of design on the part of the public which this implies is something which I would like to think we have cultivated and wish to continue. But the question then arises as to how we can best co-operate with this greater demand for our services while still maintaining and exhibiting in all phases of our practice the highest possible professional conduct. We are thus inexorably led to the point of considering our conduct as a profession not only in terms of legitimate professional competition, but in terms of the actual needs of the society we serve as they are apparent today. The end to be served is MAN – not OURSELVES – in his struggle to renew his environment, and we must be at the forefront of this struggle.

"I wish to express my sincere appreciation and gratitude to the Members of Council, the Registration Board, the Committees, and all those who have given of their time and thought to the operation and development of the profession, and may I say that without John Miller and Stan Cosby and the staff of the OAA this Association would be very much less effectual.

"It has been an inspiring experience to have served as your President during 1960."

## REGISTRATIONS

### *Ontario Association of Architects*

*January 25, 1961*

Glazier, Franklyn, B.Arch (Tor); *2175 Avenue Road, Apt. 314, Toronto, Ont.* (Mendelow & Keywan)

Himel, Bernard Paul, B.Arch (Tor); *70 Garthdale Court, Apt. 3, Downsview, Ont.* (Venchiarutti & Venchiarutti)

Kent, Oliver, ARIBA; *491 Brittany Drive, Ottawa 2, Ont.* (Balharrie, Helmer & Morin)

Lehnert, Kurt Walter (Tech. University, Darmstadt & Polytechnic Institute, Giessen); *214 Silver Heights Shopping Centre, Winnipeg, Man.* (K. W. Lehnert)

Menkès, René, B.Arch (McGill University); *9-B Dorval Avenue, Dorval, Quebec.* (Peter Dickinson Associates)

Peck, George Wallingford, B.Sc. in Arch (Man); C.D.; *544 Fraser Avenue, Ottawa, Ont.* (Asst. Architect – Hospital Design Division, Dept. of National Health & Welfare)

### *Du Secrétariat de l'AAPQ*

En juin 1957, M. Lucien Mainguy demandait une entrevue au Conseil pour lui exposer ses vues en matière de concours d'architecture. A la suite de l'entrevue, un Comité spécial a été créé sous la présidence de M. Guy St-Aubin Mongenais; MM. Paul Lambert et Edouard W. Tremblay en faisaient également partie. On leur a confié le soin d'étudier les remarques et suggestions de Monsieur Mainguy et de reviser d'une façon générale le Code de règlementation des concours d'architecture. A sa réunion de juin 1960, le Conseil approuvait en principe la nouvelle version du Code telle que recommandée par le Comité Mongenais. Toutefois le texte n'a pas été alors publié parce que le Conseil voulait auparavant consulter l'OAA sur la question. Vers la fin de 1960 un Comité de l'IRAC composé de deux représentants de l'Ontario, de MM. E. W. Tremblay et F. J. Nobbs de l'AAPQ et du Directeur administratif de l'Institut, a examiné le document soumis par notre Association.

A la suite de toutes ses délibérations, les modifications suivantes apportées au Code méritent d'être signalées. Un quatrième type de concours existe maintenant: le concours pour fins de recherches, dont le but est d'étudier l'utilisation et l'intégration de matériaux spécifiques et la recherche de nouvelles formules d'expression architecturale.

Avant d'établir le programme, dans tous les types de

concours, l'architecte-conseil doit obtenir de son Association l'autorisation d'organiser le concours, et par la suite l'approbation des conditions qu'il aura arrêtées.

Plus de (non pas au moins) la moitié des membres du jury doivent être des architectes de compétence reconnue. L'architecte-conseil n'agit pas d'office comme président du jury; tout autre membre peut être élu président.

Le concurrent qui se classe premier a droit, dès la publication du jugement, à 20% du total des honoraires prévus au Tarif.

Dans les concours à deux étapes, chaque concurrent perçoit une indemnité fixe de pas moins de 20% de l'estimé des honoraires complets. Dans les concours sur invitations particulières l'indemnité de chaque concurrent ne sera pas inférieure à 10% du total des honoraires estimatifs. (Ces taux de 20% et de 10% pourraient, de l'avis de certains, être prohibitifs, surtout s'il s'agit de bâtisses dans le million de dollars ou plus.)

Pour ses déboursés et honoraires, l'architecte-conseil reçoit une somme équivalent à 0.25% du coût des travaux projetés, cette somme n'étant pas inférieure à $100 par jour. Pour leur part les membres du jury ont droit à une rémunération minimum de $100 par jour et au remboursement de leurs dépenses. Les frais d'administration sont à la charge des promoteurs.

Les responsables de la dernière version du Code des concours ont jugé qu'il n'était pas inutile d'y inclure l'article 5 du Code d'éthique qu'ils ont reproduit comme suit: Nul architecte ne peut prendre part à un concours comme concurrent ou comme membre du jury, si tel concours ne se conforme pas aux règlementations du présent Code. A titre de membre du jury, l'architecte doit, dans l'exercice de ses fonctions, observer les règles de ce Code. Toute infraction aux dispositions de ce Code constitue une infraction au Code d'éthique.

Voila en résumé les modifications majeures apportées au texte précédent. Les autres changements ne concernent que le phraséologie. Avant que les Conseils de l'OAA et de l'AAPQ ne donnent leur sanction au Code amendé, des membres de l'Association aimeraient peut-être y ajouter leur grain de sel? D'autre part, il ne faudrait pas s'imaginer qu'une fois adoptée la dernière version ne sera plus sujette à transformation. Le cas du Tableau des honoraires ne doit pas faire loi. On a beau être fier de ses textes de base (Loi, Règlements, Tarif, Codes de toutes sortes), il faut tout de même se rendre à l'évidence et les adapter aux circonstances actuelles. Quand on songe qu'en 1961, on se sert d'un Tableau d'honoraires approuvé en 1912 . . . .

Dans le même ordre d'idées, il est bon que les membres de l'AAPQ soient informés du travail présentement en cours. Le conseiller juridique de l'AAPQ, Me Bernard M. Deschênes, a reçu mandat du Conseil de reviser et de coordonner les Règlements de l'Association. Son travail consiste à y introduire un ordre logique, à supprimer des articles là où il y a répétition, à préciser le texte en d'autres endroits et à compléter certains Règlements qui ont été une source d'ennuis ces dernières années.

Encore ici tous les membres de l'Association sont invités à communiquer au Secrétariat leurs points de vue sur les règlements qu'ils considèrent désuets ou inadéquats. On acquitte sa cotisation: on a voix au chapitre.

*Jacques Tisseur*

## NEW BRUNSWICK

### *Neil M. Stewart Heads NB Assn*

The annual meeting of the New Brunswick Association of Architects was held Friday and Saturday, January 27-28, at Saint John. Neil M. Stewart (F) of Fredericton was named President, succeeding W. W. Alward (F), and other officers elected were D. W. Jonsson, Fredericton, Vice President; J. R. Myles, Saint John, Secretary-Treasurer, and H. Claire Mott (F), Saint John, Registrar. Councillors elected were Yvon LeBlanc, Gerald J. Gaudet and Jacques Roy, Moncton; and Richard West, Saint John.

Friday morning was devoted to committee meetings and the annual meeting began in the afternoon. Members and their staffs held a dinner in the evening, following which an illustrated address on early buildings in the Saint John area was given by Dr George B. MacBeath, Curator of the New Brunswick Museum.

On Saturday a luncheon address on paints and protective coatings was given by H. E. Ashton of the National Research Council, Ottawa.

Municipal officers and representatives of other professional organizations were guests of the Association at the annual dinner Saturday evening.

*Officers of the NBA: seated, left to right, Neil M. Stewart(F), President; Jacques Roy, Richard West, W. W. Alward (F); standing, J. R. Myles, Gerald J. Gaudet, and D. W. Jonsson. (Photo by Michaud).*

## ALBERTA

The 50th Annual General Meeting of The Alberta Association of Architects was held on Friday and Saturday, Jan 27th and 28th at the MacDonald Hotel, Edmonton with 70 members attending.

The newly elected Council consists of President, T. A. Groves, Edmonton; 1st Vice-President, J. A. Cawston, Calgary; 2nd Vice-President, D. L. Sinclair, Edmonton; Honorary Secretary, D. G. Forbes, Edmonton; Honorary Treasurer, R. F. Bouey, Edmonton, and Councillors: B. Wood, Edmonton, H. Seton, Edmonton, J. C. Clayton, Calgary, D. K. Bissell, Red Deer, and G. B. McAdam, Calgary.

The theme of the 50th Annual Meeting was "Planning and Zoning" with emphasis on the architect's responsibilities in these fields.

As a centre piece for the meeting a Civic Centre study for Edmonton was built by a group of Edmonton architects. The model remained on public display in the lobby of the MacDonald Hotel after the Annual Meeting.

The two days proceedings began with a luncheon meeting at which the guest speaker was Mr G. Hamilton, a member of the Edmonton Planning Advisory Commission and Chairman of the "Downtown Design Committee" of this Commission. The topic of Mr Hamilton's address was "Central Area Planning", filled with dire warnings of the problems that could result if we let our young western cities drift into chaotic unplanned conditions of the older cities of north America.

The Friday afternoon session began with a lively panel discussion on "Design Control", with the following participants: Mrs Freda O'Connor, Architect; Noel Dant, Planner; George Campbell, Real Estate; J. R. Klinck, Lender. The panel was moderated by Mr Pierre Berton.

The afternoon session closed with the film "Suburban Living", which many members had previously seen on TV but stayed to see and enjoy again.

Friday evening, members and their wives enjoyed a country sleigh ride followed by a midnight supper.

The Saturday morning business session was concerned mainly with the routine affairs of the Association. Following the general theme of the Convention there were further discussions about "Design Control" related to the advisability of our association continuing to officially endorse the architectural panel of the City of Edmonton. This discussion was topical for all members because Calgary and possibly other municipalities in Alberta are contemplating similar controls of architectural design.

Another interesting discussion was on the subject of Public Relations. All such discussions seem to end in a dead-lock between those that think that good public relations is a matter for each individual architect and those who feel that it is a commodity to be purchased by the Association on behalf of its members. The Public Relations Officer suggested that the Association give full co-operation and a portion of its annual public relations budget to the RAIC Central Committee on Public Relations.

The Annual Meeting closed with the President's Reception and Annual Dinner on Saturday evening. Guest speaker was Mr Pierre Berton, journalist, author and TV panelist. Mr Berton gave a forceful and thought provoking talk on planning and zoning with particular emphasis on the need for a greater measure of responsibility and leadership by architects in these fields.

*D. L. Sinclair*

### *A Civic Centre study for Edmonton*

A Civic Center study for Edmonton in model form was designed and built by a group of architects, an engineer, and a planner as a "think piece" for the 50th Annual Meeting of the Alberta Association of Architects.

## NOVA SCOTIA

The Nova Scotia Association of Architects will appoint a standing committee to undertake the work of implementing the RAIC's Report on Residential Environment. The three-man committee, to be set up by the association council when it meets March 6, will spearhead the effort to win the support of government, professional and other interested organizations and enlist their active participation. (The *Journal* subsequently has been informed that the following have been appointed to the committee: A. F. Duffus, chairman, M. H. F. Harrington and J. P. Dumaresq.)

The proposals dealing with the Residential Environment Report came at the two-day annual meeting of the NSAA held in Halifax February 16-17, and immediately following a one-day discussion meeting held jointly by the NSAA and the New Brunswick Association on the report itself. Edmond Fox, who was appointed by the RAIC to implement the report across Canada, was in Halifax to conduct the one-day joint meeting, and was a special guest of the association at its meeting.

Another highlight of the annual meeting was the Stainless Steel Design Awards exhibition, sponsored jointly by the NSAA and the Nova Scotia College of Art, officially opened February 16, by Dr H. P. Moffat, Provincial Deputy Minister of Education. A series of films on the use of stainless steel was shown by a representative of Atlas Steel Corporation.

Dealing with association business, members decided:

(1) To vote against any form of reciprocal agreement with the Province of Quebec Architects' Association; instead, favoring the present arrangement which requires a temporary license and association with a registered member carried out on a job per year basis.

(2) To recommend that temporary fees be charged to architects registered

Architects: Earl C. Morgan and Page & Steele, Cons. Mech. Engineer: G. Granek & Associates



*The new executive of the Nova Scotia Association of Architects and visitors: left to right, Charles A. E. Fowler (F); Lester J. Page, honorary secretary; John L. Darby, president; Robbins L. Elliott, Executive Director, RAIC; T. W. Bauld, honorary treasurer; Walter B. Bowker, the Journal's managing editor; M. H. Frank Harrington. Not shown, C. D. Davison, vice president, and F. Carl Ford.*

Reading from left to right: D. Bittorf, J. Donahue, G. Fleet, R. Gordon, G. Graham, M. Holland, R. Maltby, D. Dibernardo (model-maker), M. Morin, J. Naito, G. Nykanen, S. Schmidt, W. Spotowski. Not present when the picture was taken, S. Hodgson, B. Pratt.

The model went on public display after the Annual Meeting. It will serve as a center piece at the Annual Meeting of the Edmonton Branch of the Community Planning Advisory Commission of the City of Edmonton as a goodwill gesture.

*AAA Newly Elected Executive*

*Seated from left to right: T. A. Groves, President; J. A. Cawston, 1st Vice-President; Standing from left to right: B. Wood, Edmonton, G. B. McAdam, Calgary; D. K. Bissell, Red Deer; D. G. Forbes, Honorary Secretary, Edmonton; D. L. Sinclair, 2nd Vice-President, Edmonton; R. F. Bouey, Honorary Treasurer, Edmonton; H. Seton, Edmonton. Mr J. C. Clayton, Calgary was not present at the time this photograph was taken.*

outside the Province of Nova Scotia according to the value of the commission. Members felt that a firm doing a quarter of a million dollar job should not have to pay the same fee as one doing a two million dollar job.

(3) To advocate a new form of advertising. Architects now advertising in the local newspaper were asked to consider placing a block ad in the paper representing the association, with the participating architectural firms' names placed under one main heading. This would eliminate the individual block units now used and give more weight to the association with the public.

(4) To propose that a committee be formed to help establish an advisory committee to the City of Halifax planning board to advise and recommend in architectural and city planning.

(5) On final adoption of the Professional Code of Conduct and the minimum schedule of fees and conditions of engagement previously passed at the last annual meeting. The code and schedule had been on a one-year trial basis.

(6) To give serious consideration to the present financial status of the NSAA and to means of increasing the revenue without radically increasing the annual dues.

(7) To set up immediately committees to deal with the Residential Environment Report, revision of the Act and Regulations, and the Architects' and Engineers joint relations.

John L. Darby, president, C. D. Davison, vice-president, and Lester J. Page, secretary, were returned to their respective offices for a third consecutive term. T. W. Bauld was elected treasurer, succeeding Henry Romans. Councillors elected were C. A. E. Fowler, F. Carl Ford, M. H. F. Harrington, and members of the RAIC Council, John L. Darby, Lester J. Page, and C. A. E. Fowler.

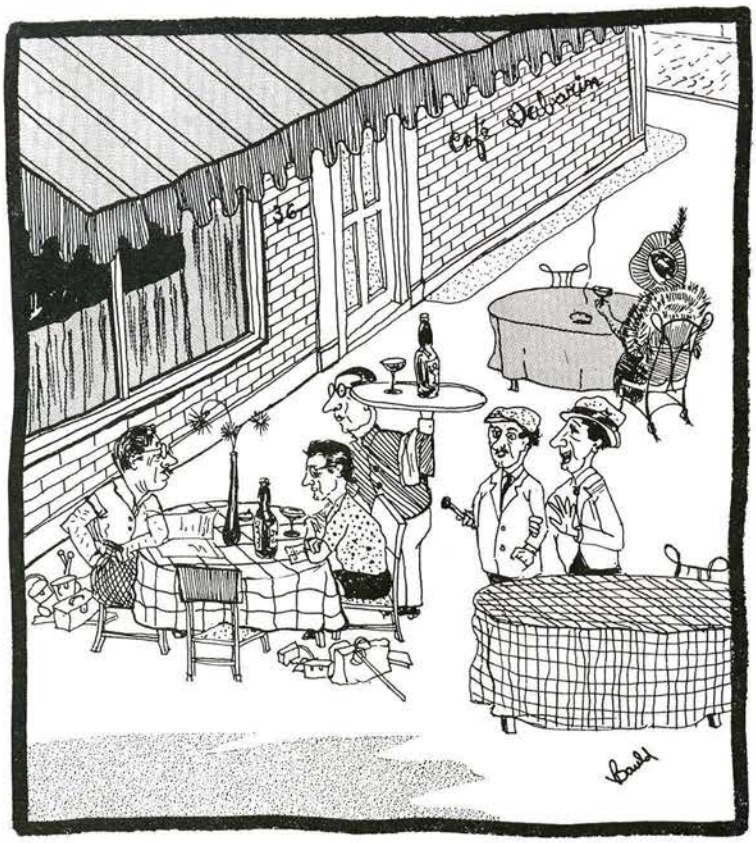
The NSAA was asked and agreed to give its support to the formation of a wives' association.

New members receiving their certificates were Charles D. Hay, Leslie Morley, and Walter P. Desilua.

## *Halifax Regional Conference*

The second of a series of regional conferences to discuss ways and means of implementing recommendations of the Residential Environment Report referred to Provincial Associations, was

FACETED MO-SAI PANELS FOR MORGAN'S STORE,
CLOVERDALE SHOPPING CENTRE, TORONTO, BY TORONTO CAST STONE
ARCHITECTS: BREGMAN AND HAMANN




Nova Scotia Association member Tom Bauld has captured the atmosphere of the opening (and probably only) night of "Springtime in Paris", the dramatic skit in one act (with pauses) presented at the annual dinner of the NSAA following the annual meeting. Playwrite was G. J. Marshall (Et Al) and the players, so far as they could be identified, were Lester Page, Aza Avramovitch, Lucien Ledaire, Sandy MacDonald, John Darby, Geoffrey Marshall, Frank Harrington and Charles Fowler.

held in Halifax on Wednesday, February 15. This conference was attended by representatives of the Nova Scotia and New Brunswick Associations of Architects. Representatives from other organizations in the building industry were also invited to participate. The first such conference took place in Winnipeg on January 13 and was attended by representatives from the Manitoba, Saskatchewan and Alberta Architectural Associations.

On the morning of February 15 a brief meeting was held with planning officials from the City and County of Halifax and from the Province of Nova Scotia. Discussions at this meeting involved primarily those aspects of the Residential Environment Report pertaining to local and regional planning. On Wednesday afternoon a general meeting took place at the Lord Nelson Hotel to discuss the steps which had been taken by the RAIC and Provincial Architectural Associations, and to consider what measures might be adopted by the NSAA and AANB to act on certain recommendations. Also attending this meeting were persons from the building industry, from the local board of trade, from lending institutions and other bodies whose activities influence residential design. It was seen from this meeting that the Report and its recommendations were of real interest to all those attending, and it was evident that the Nova Scotia Association could count on a full measure of support in development of an implementation program from the organizations represented.

On Thursday, February 16, the annual meeting of the Nova Scotia Association of Architects considered in some detail what action it could take to implement the Report. A full discussion was held on those recommendations referred to the Association, and on the following day it was moved that the new Council appoint a committee of three to prepare a basic implementation program for the Association. Subsequently, an implementation committee was appointed including A. F. Duffus as Chairman, M. H. F. Harrington and J. P. Dumaresq as members.

## COMING EVENTS

**March 31-April 8, 1961**
**National Home Show**
**Exhibition Grounds, Toronto**

**Spring of 1961**
**Celebration in Honor of Founders of Modern Architecture, Gropius, Le Corbusier, van der Rohe, Wright**
**Columbia School of Architecture**
**New York**

**April 5-6-7, 1961**
**1961 Building Officials' Conference**
**Building Research Centre**
**NRC, Ottawa**

**April 9-14, 1961**
**23rd Annual Convention**
**National Association of Architectural Metal Manufacturers,**
**Plaza Hotel, New York**

**April 18-19, 1961**
**Conference on Muskeg in Relation to Northern Development**
**McMaster University, Hamilton.**
**Interested persons are invited to attend. Address enquiries to**
**I. C. MacFarlane, DBR, NRC, Ottawa**

**May 3-7, 1961**
**Canadian Conference of the Arts**
**O'Keefe Centre, Toronto**

**May 14-16, 1961**
**17th Canadian Regional Conference**
**Illuminating Engineering Society**
**Queen Elizabeth Hotel, Montreal**

**May 17-20, 1961**
**RAIC 54th Annual Assembly**
**Chateau Frontenac, Quebec**

**July 3-7, 1961**
**VIth Congress**
**International Union of Architects**
**London, Eng. (Registrations, RIBA)**

**August 30-September 2, 1961**
**Conference on Shell Structures**
**Civil Engineering Dept,**
**Technical University,**
**Delft, Netherlands**

**September 25-28, 1961**
**1961 Industrial Building Exposition**
**New York Coliseum, New York**

## INDUSTRY

### "Sealtight" Products

A new catalogue prepared by W. R. Meadows of Canada Ltd to give concise, factual information on the wide range of "Sealtight" Products designed specifically for concrete construction. Copies of the catalogue are obtainable from W. R. Meadows of Canada Ltd, 96 Vine Avenue, Toronto 9, Ont.

◇

### Sonoco Products of Canada

A technical paper entitled "Design and Construction of Voided Heavy Duty Reinforced Concrete Floors and the use of Sonovoid Fibre Tubes" has been published by Sonoco Products Company and is available on request from the sales office of the Canadian Company in Brantford, Ontario, or from the regional Sonoco Sonovoid distributors.

This supplements the two earlier papers also authored by Humberto J. Benet, M.S., C.E., and Fausto Bojorquez, M.E., of Mexico, D.F.

◇

### Sargent Door Closer Line

Lift Lock Hardware Industries Limited, Peterborough, Ontario, has announced that it will now make and sell both the Sargent Powerglide line of rectangular-type door closers and the Sargent standard line of door closers.

Lift Lock, under license from Sargent & Company in New Haven, Conn., currently manufactures and distributes all Sargent lock lines, exit devices and miscellaneous hardware in the Dominion. The addition of the door closer line makes the full range of "newest fashion" Sargent hardware available from a Canadian Company.

Lift Lock has also announced a change in its name to Sargent Hardware of Canada, Limited.

◇

### Garland Wins NIDC Award

Winners in the international competition for articles made of stainless steel, conducted under the auspices of Canada's National Industrial Design Council, were announced recently.

Selected on the basis of excellence in design and excellence in manufacture, the new GARLAND electric line of commercial cooking equipment was named a winner.

Photographs of all the winners are being shown in a special exhibition arranged by the Stainless Steel Design Award Committee. In February, it will be shown in Halifax, at the Nova Scotia College of Art, in March at the British Columbia Industrial Design Committee Headquarters in Vancouver, in April at the Calgary Allied Arts Centre and in September at the University of Manitoba, Winnipeg.

◇

### Pennsalt Chemicals

Two new products for industrial floor surfacing, Penntrowel Latex and Color Penntrowel, are introduced by the Corrosion Engineering Products Department of Pennsalt Chemicals Corporation.

Penntrowel Latex is a wear-resistant, cement-latex surfacing designed for industrial use. Economical and hard-wearing, it offers a durable coating for all surfaces in non-corrosive areas.

Color Penntrowel introduces a striking, decorative effect for the wear- and chemical-resistant surfacings. The color pigment is in the resin itself, insuring high stability and color fidelity. Color Penntrowel resists strong acids, alkalis, and solvents and withstands temperatures to 230°F.

◇

### Expanded Metal Partitions

Cresswell Pomeroy Limited, Granby, Quebec, has issued new literature on their expanded metal partitioning.

Stress is laid on the strength, stability and good appearance of expanded metal for partitioning. The folder is illustrated and includes sketches of construction details.

### Precast Cellular Concrete and Precast Concrete Slabs

A four-page folder on "SIPOREX" precast cellular concrete roof and floor slabs and standard size (9" x 18" or 18" x 18" face) masonry blocks has been issued by Siporex Limited.

Besides a short, general description of the manufacture and uses of this precast concrete product, its outstanding features of light-weight, high insulation, fire resistance and workability are discussed. Charts giving thicknesses, weights, U-values and loads per sq ft for various spans are also included.

Information and technical data, including working load charts, on precast "HAYDITE" and natural concrete products are contained in a two-page leaflet.

Products discussed include "HoLo-Kor" floor and roof slabs, "Zone Floor" slabs and channel slabs. Special shapes available in either natural or "HAYDITE" concrete are beams, columns, sewage and filtration troughs, cable trenches and parking curbs.

Copies are available on request from Siporex Limited, 5165 Sherbrooke St. West, Montreal, Que.

### Canadian Standards Association

The Canadian Standards Association announced a new structural steel specification G40.8, – entitled "Structural Steels with Improved Resistance to Brittle Fracture". This new CSA specification meets the demands of Canadian structural engineers by providing a steel with greater security and higher strength and was developed by a co-operative effort of the basic steel industry, the major steel fabricators and allied groups of Canada.

It makes available to designers and fabricators of steel structures three new standard grades of steel, with the added benefits of increased strength, good weldability, better toughness at low temperatures and more economical use for some structures. G40.8 incorporates higher yield strengths for all three grades of steel so that structural designers can now decrease the weight of steel sections by as much as twelve per cent in certain applications.

### Incandescent Lighting Units

A new line of rugged, rustproof, incandescent lighting units for indoor and outdoor use has been introduced by J. A. Wilson Lighting & Display Limited for use in institutional, commercial and residential buildings.

Designed for a 100 watt lamp, each unit utilizes an aluminium die cast bracket with a satin chrome finish available for ceiling or wall mounting. The wall units also have available the added feature of a convenience plug outlet suitable for washrooms and corridors. Cast aluminium guards are available with a hinging arrangement that makes it unnecessary to remove the guard during relamping.

◇

### Expandite (Canada) Ltd.

Expandite Limited, the British firm which has specialized in the development of joint fillers, has established a Canadian company at 96 Vine Avenue, Toronto. The Canadian subsidiary will be known as Expandite (Canada) Limited.

In initial stages, the company will concentrate on four of the major products, – Philplug Cold Caulking Compound, Screwfix, Secomastic, and Galvafroid.

During its 25 years history, Expandite Limited has been prominent in the development of sealants, waterproofings, anti-corrosives, and equipment for the application of such products. The Expandite group of Companies is world wide in scope with its head office in London, subsidiary companies operate in Ireland, South Africa, Australia, New Zealand and Rhodesia in addition to Canada.

◇

### Concrete Additive

A supplementary use for Anti-Hydro of ensuring cement hydration at temperatures down to 15°F., is discussed in the latest bulletin issued by Anti-Hydro of Canada Sales Ltd.

Main advantage claimed by the company is the low cost. By simply adding a predetermined quantity of Anti-Hydro to cement during mixing, construction can be carried out at temperatures below freezing. In addition, waterproofing of the concrete is guaranteed against leaks for five years.

Copies, in English or French, and additional information is available from Anti-Hydro of Canada Sales Ltd, 2070 Favard St, Montreal 22, Quebec.