

MANN AVENUE

Ottawa, Ontario.

number

4

in a series of bulletins on Canada's Housing Projects...

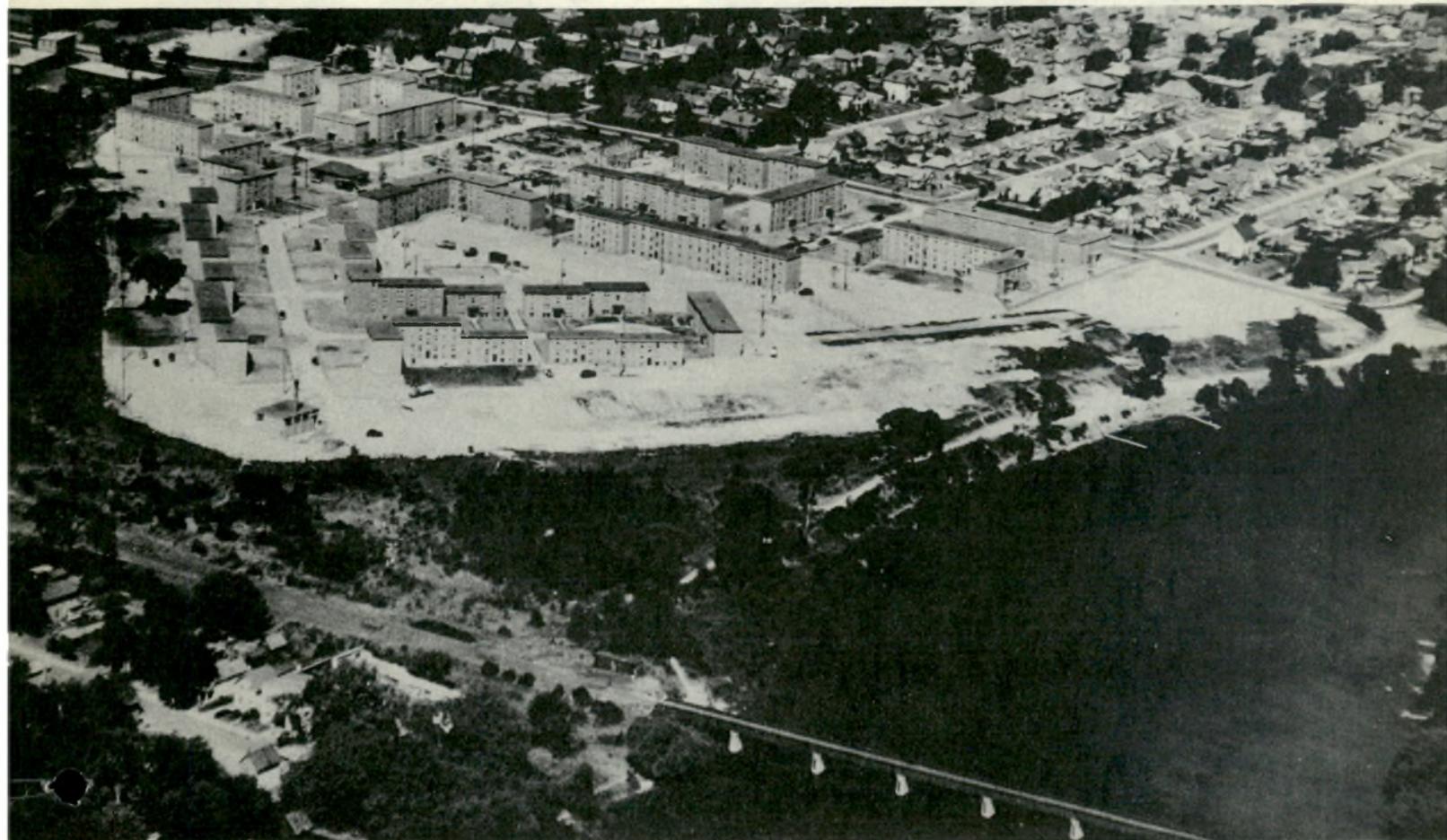
...their development from master plan to completion.

The Mann Avenue project in Ottawa, known locally as "Ottawa's New Town", is one of the largest and most ambitious apartment house developments ever attempted by Canadian builders and planners under the National Housing Act. The \$3,000,000 project provides comfortable living accommodation for more than 500 veterans and their families.

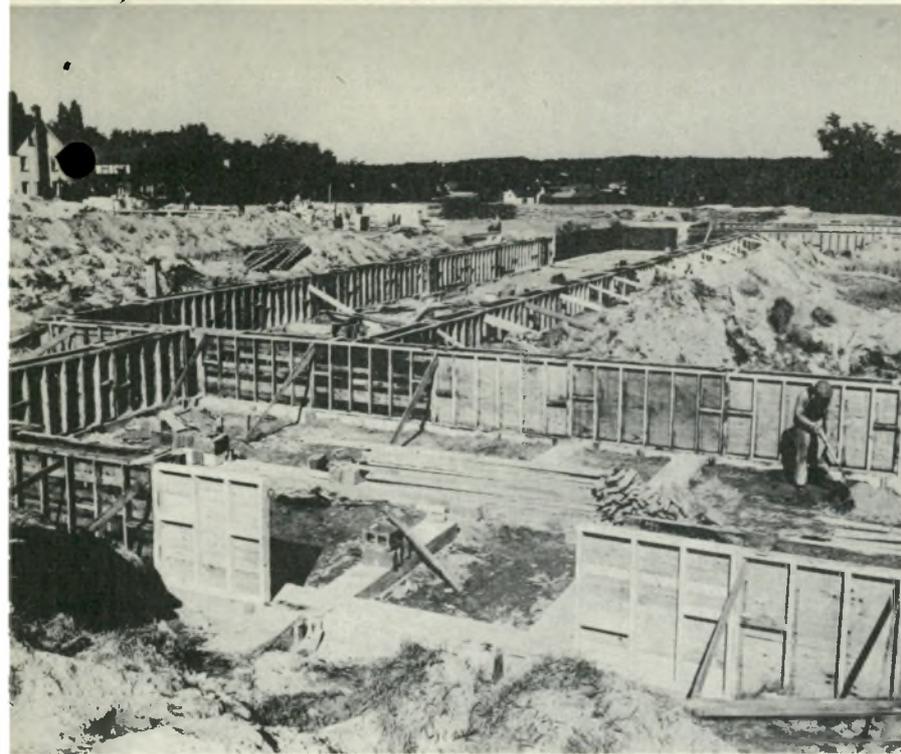
Mann Avenue occupies a 27-acre tract of land in the Sandy Hill district, once occupied by Dominion Government wireless installations, and commands a wide

view of the Rideau River. The City of Ottawa thoroughfare, Mann Avenue, which forms the northern boundary of the project, was named after General Gother Mann, a British Army officer who lived in the Ottawa area in the early days of the 19th century. The new housing development is only a mile-and-a-half from mid-town Ottawa.

On August 19, 1947, less than two weeks after an agreement between Ottawa City Council and Central Mortgage and Housing Corporation was reached, con-



MANN AVENUE FROM THE AIR...Ottawa's 'new town' covers 27 acres and is ideally situated on high ground overlooking the beautiful Rideau River.



PRE-FAB FORMWORK FOR FOUNDATIONS...The beginnings of a modern U-shaped apartment. Heavy oil was painted on formwork to allow easy stripping from concrete. Cement footings in foreground are to support concrete block stair-wall.

struction was commenced on the project by the Ottawa contracting firm of James More and Sons, Limited. First footings for the 24 blocks of 64 buildings, which were to comprise 150 three-bedroom apartments and 268 two-bedroom apartments, were poured by the end of the same month.

Before final authority to begin construction was granted, however, considerable time was spent with plans and negotiations. The first steps toward development of the property were taken in 1946 by Housing Enterprises of Canada Ltd., a limited-dividend company formed by the life insurance companies of Canada under the low-rental provisions of the National Housing Act of 1944. Housing Enterprises abandoned the proposal in July, 1947, when bids for contracts placed the cost of development at a figure which prohibited economic rentals. When these negotiations failed, an agreement was reached between CMHC and the City of Ottawa and construction was begun.

An indication of the mammoth size of the undertaking may be found in a few of the construction figures. In all, 12 trade contractors and 465 men worked on the job when building was at its peak. Modern power shovels were employed to excavate 675,000 cubic feet of earth. Into the buildings, comprising 418 apartment units, went 2,753,000 board feet of lumber, 1,800,000 bricks, 1,500,000 square

feet of plaster, 26 miles of pipe, 19 miles of wire, 77 tons of nails, 40,000 bags of cement, 68,500 square feet of glass, 5,387 gallons of paint and 8,288 tons of crushed stone. In addition, countless pounds, square feet and cubic yards of other assorted materials were used in the huge task. By May, 1949, 21 months after initial construction was started, the last of more than 2,000 residents had moved into their completely finished living quarters.

Using construction techniques perfected on previous single-unit housing schemes, James More and Sons established a mill on the site where considerable pre-fabrication was accomplished. Precision built plywood forms were specially designed and constructed by the contractor for the pouring of concrete foundation walls. Built in sections, the forms were easy to assemble for use, then dismantle and reassemble on another site. On-site prefabrication, making use of pre-cut lumber and jig assembly devised by the contractor, was used for panel construction of the frame work of the exterior walls and interior partitions. By using panels in this fashion, outdoor work was greatly reduced and resulted in better working conditions for the carpenters. Much of



IN THE EARLY STAGES...diagonal sheathing allows for greater rigidity in wall structure. Horizontal boards cover fireproof concrete stair-wall. At right is storage pile for lumber under tarps.



the construction was carried out in very cold winter weather.

The use of prefabricated bathroom units was an interesting feature of the contractor's building technique. The bathroom units, complete in every detail, were prefabricated at a factory in St. Catharines, Ontario. Built on a steel floor and framework, they contain a recessed bathtub, a toilet and wash basin and such fixtures as a medicine cabinet, towel racks, an electric light and a door - all in place and ready for use. The walls of these novel bathrooms are of plywood, which is waxed and tinted green. A heavy crane was used to lift the units into position while workmen stood by to connect the plumbing.

All the apartments at Mann Avenue are two or three-bedroom units with living-room, kitchen-dinette and bathroom. Hall space within the apartments has been kept at a minimum. Kitchens in all apartments are large and well planned for efficiency and include a four-burner electric stove, refrigerator, built-in sink, broom closet and ample cupboard space. Large windows in living rooms and kitchens provide plenty of natural light and fresh air.

In each apartment building, basement space has been utilized to the fullest extent. Individual locker space is provided for each family, while laundry

facilities include laundry tubs and drying space for clothes. The provision of washing machines on a rental basis is being considered.

Construction of stairways is an important feature of the building design. All staircases are made of steel and are enclosed by fireproof walls of concrete block which also act as a firewall between apartments. Every apartment unit is served by two or three fireproof exits, a front entrance and a rear service stair. Extensive use of fire-resistant paint has been made and automatic fire-alarm systems are to be installed in all apartment blocks.

Heat for all buildings of the Mann Avenue Project is piped from a heating plant located at the south-east corner of the project area. The heating plant, a one-storey building, which uses almost 380 tons of coal per month during the winter, is equipped with four 150 H.P. boilers, automatic stokers and a hoist system which facilitates the removal of ashes. The services of an engineer and four shift workers are required to attend to the heating system. Approximately 1,400 feet of insulated, all-welded eight-inch pipes carry steam through a network



REAR VIEW...In this block the windows have been set. Door frames and windows were ready made in the 'mill' on the site. Tractor and trailer were used to transport lumber from mill.



BATHROOM-PRE-FAB STYLE...Hoist truck delivering pre-fab bathroom unit to site. Special crane was used to install unit before roof was put on building.

of concrete underground tunnels to nine heating equipment rooms located in apartment basements. In the heating rooms the steam is converted into hot water for heating and domestic purposes. All water piping is of "steamline" copper.

The site layout of Mann Avenue is a striking example of modern community planning within a metropolitan area. All the apartment blocks overlook wide, spacious lawns. Every effort has been made to eliminate through-traffic and there is only one intersection. The project's three streets - Chapel Crescent, Goulbourn Crescent and Philip Court - are of asphalt and form nearly a mile of winding roadway. A net-work of asphalt foot paths, over two

miles in length, connects the apartments. Provision has been made for the development of a central shopping centre, administration building, and several off-street parking group garages - in the near future. A new school is being erected near the project.

In the spring of 1949 extensive landscape operations were begun. Under the supervision of professional landscape architects, approximately $12\frac{1}{2}$ acres were beautified. Hundreds of 20- to 25- foot





PHILIP COURT-MANN AVENUE...There are two and three-floor apartments in the project. Apartment blocks overlook spacious playgrounds where children may play in safety.

elms and maples were planted along with many flowering shrubs, including lilacs and honey-suckle. Over 150 nursery trees were also planted and much grass seed was sown and sod put down.

For the children, now numbering almost 1200, two wading pools and eight large playgrounds have been established. There are swings, sea-saws, sand boxes and other equipment for the amusement of the project's younger inhabitants. In the winter there is a large skating rink on

the project maintained by the Playgrounds Department of the City of Ottawa.

Ottawa's "new town", Mann Avenue, is already a full-fledged residential community within the limits of the Canadian Capital. Its 2,000 residents live within another young and vital housing development which has already taken its place in Canadian life.