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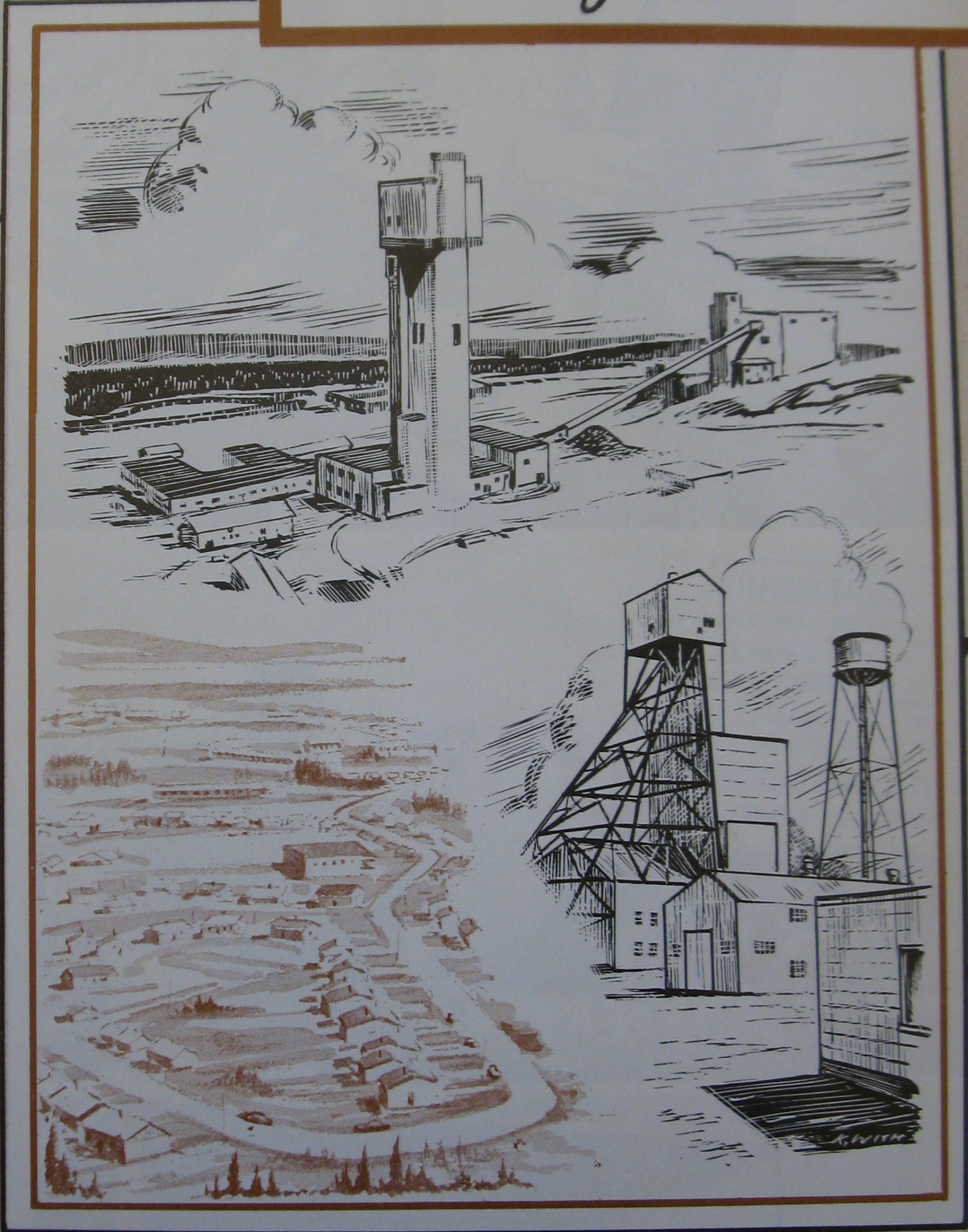
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MANITOUWADGE

*Cave of
the Great Spirit*





TOP: Hon. Philip T. Kelly (second from left), Ontario's Minister of Mines, pictured early in 1954 standing with the discoverers of Manitouwadge, Jack Forster, Bill Dawd and Roy Barker. Behind them is the helicopter in which they flew to the remote area.



MIDDLE: In 1962 the Hon. George C. Wardrop, who was then Minister of Mines, used a lumberman's broadaxe to cut the ribbon officially opening the road link from Manitouwadge north to Highway 11.

BOTTOM: Manitouwadge boasts modern and extremely well-equipped schools. Here a group of junior students is waiting for the bell to call them into class.





A picnic ground for children offers an overall view of Manitowadge, gained after a short but steep climb.



A forest ranger's camp on the shore of Manitowadge Lake during the summer of 1954.

Right: Manitou-midgets dressed warmly for outdoor play in May.

MANITOUWADGE

CAVE OF THE GREAT SPIRIT

by L. CARSON BROWN

IT WAS FORBIDDING land. From the beginning of time it had lain virtually unknown except to the nomadic Ojibway. Yet it was revered land, inspiring awe in the native tribesmen. It was Manitouwadge — “Cave of the Great Spirit”. Here a quiet lake nestled in the shadow of a rugged escarpment, surrounded by dense forest.

Thirty miles to the south transcontinental trains of the Canadian Pacific Railway left their plumes of smoke as they laboured around the north shore of Lake Superior. Twenty-five miles due north the steel road of the Canadian National

etched man's challenge to the unconquered wilderness. The miles between were unknown territory with a few timber companies just nibbling at the fringe of the vast covering forest.

Such was the situation in 1931 when James Edgar Thomson, a Canadian graduate student at the University of Wisconsin who was working during the summer with a field party of the Ontario Department of Mines, entered the area to make an assessment of its mineral possibilities.

Dr. Thomson, who was to become the director of the department's geo-

logical branch, had spent the preceding summer as the leader of a geological field party in the Heron Bay area. There, in conversation with the Indians — conducted largely in sign language interspersed with guttural grunts — he heard for the first time of the lake the Ojibway called Manitouwadge. His professional interest was aroused when the Indians, who were not ignorant of the story the rocks had to tell, described a greenstone belt with rusty gossans — an indication of promising country in the lexicon of prospectors in Ontario's Precambrian Shield.

Thomson learned what he could from the Indians, talked to prospective Indian guides and collected rough sketches of possible canoe routes into the Manitouwadge country. The day of aeroplane travel for geologists and prospectors had not dawned, nor were there such aids available as aerial photographs and maps.

Nevertheless, Thomson determined to probe the prospects of the unknown territory and, with the concurrence of Dr. A. G. Burrows, the provincial geologist, he began his quest the following year.

June 17, 1931, saw the start of the expedition as Thomson and his guide, Moses Fisher of the Pic River Reservation, paddled up the Pic River from the C.P.R. crossing just east of the Heron Bay settlement.

They paddled upstream against



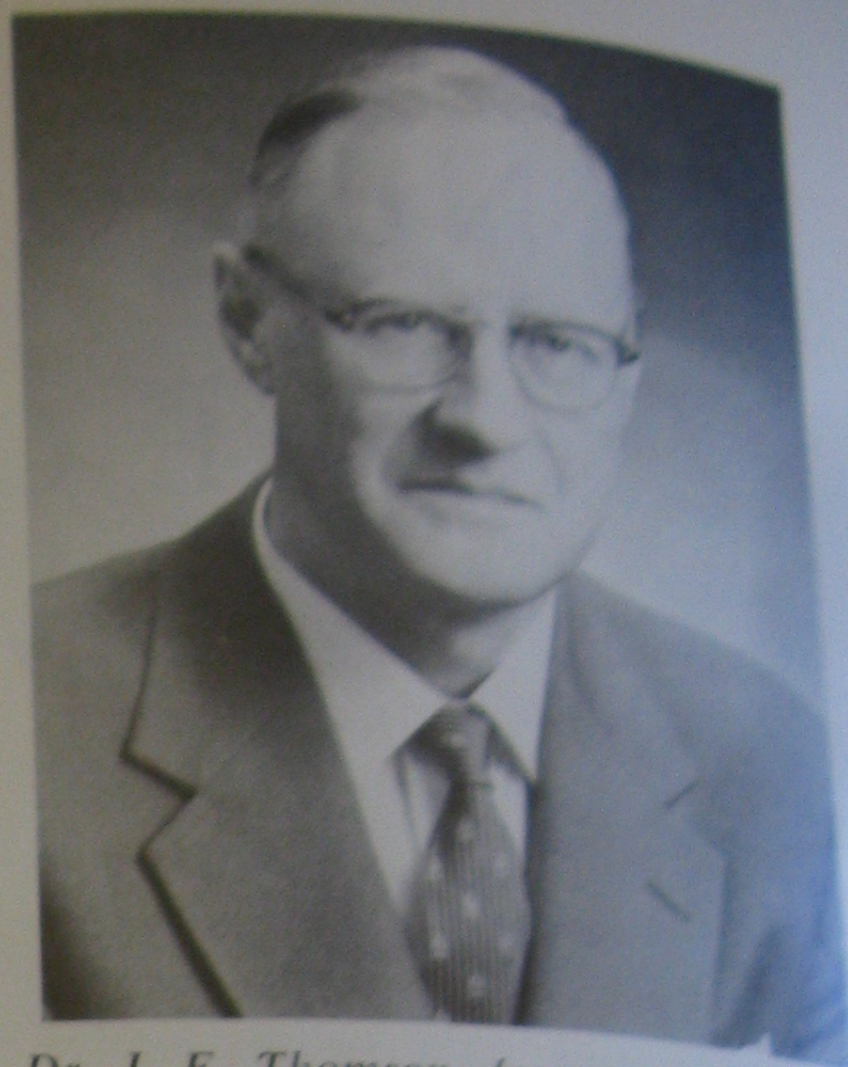
the current, and all that day they stopped paddling only to pull the canoe by hand through strong rapids. As the sun began to sink below the tree-tops they came upon the camp of a well-known prospector, "Little Jack" Miller and his partner who were at work on behalf of McIntyre Porcupine Mines. Miller was keenly interested in the Indian's story of Manitouwadge and arranged a meeting with the geologist on his return to the C.P.R.

Next morning they started out again and reached the mouth of Nama Creek. A short distance beyond they turned eastward toward the abode of the Great Spirit.

The going became rougher and it gradually became clear to Thomson that the canoe route into Mani-

touwadge was as new to his guide as it was to him — that on previous trips Fisher had always travelled cross-country in the winter.

However, on the fourth day of arduous canoeing and portaging through country that was alive with game, particularly moose, the geologist and his guide arrived at Manitouwadge Lake. Fisher was able to provide the Indian names for most of the lakes in the area but when they came to one east of Lake Manitouwadge which he could not name, Thomson forthwith immortalized the guide by christening it Moses Lake. When his map was subsequently examined by The Canadian Board on Geographic Names some changes were required



Dr. J. E. Thomson, former Director of the Ontario Department of Mines, geological branch, whose report was largely responsible for the discovery of Manitouwadge.

because of name duplication. So Moses Lake was officially shortened to Mose Lake and it still appears as such on maps.

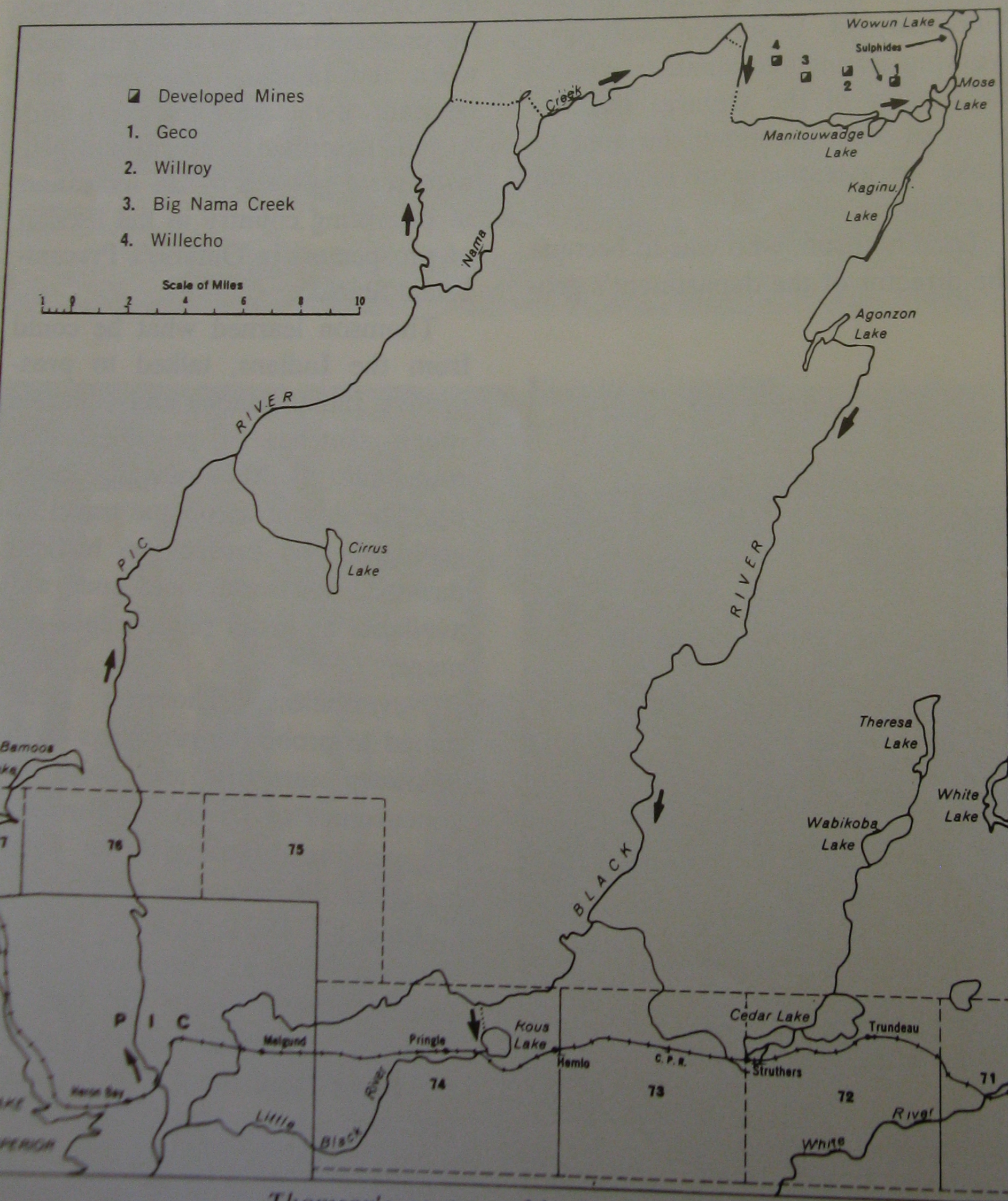
They spent only two days at Manitouwadge Lake, long enough for Thomson to make rough sketch maps of the topography and geology of the immediate area, and during those two days they had a tussle with a bear which the guide finally dispatched with his axe.

In the daily log of his exploration trip, Thomson made two important notes. The first: "Sulphides north of Manitouwadge Lake. Fifty chains north of the north bay on the west side of the creek there is a gossan eight feet wide in gneiss and pegmatite. The strike is N 80° E., dip vertical. Ore consists of pyrite and pyrrhotite with a little chalcopyrite in quartz and chlorite schist. Sample taken for assay".

He had sampled what was to become one day the main orebody of the Geco Mine.

The other note read:

"At 130 chains north of the lake there is widespread development of gossan and considerable magnetic disturbance. A sample of the rusty



Thomson's route to Manitouwadge.

material has been taken for assay."

Near this spot the Willroy mine is now producing steadily.

After this short stay at Manitowadge Thomson and his guide returned to the C.P.R. right-of-way by way of the Black River.

This so far has been an account of an exploration trip, almost routine in the history of the development of Canada's broad expanses of unknown country.

The results have been far from routine.

Thomson's chief in the Department of Mines arranged for an immediate aerial survey of the Manitowadge area to be made by one of the forestry planes that was currently engaged in a survey near the north shore of Lake Superior to establish the route of what has since become the Lake Superior section of the Trans-Canada Highway. The aerial base map was

ready early in August. Thomson and a field party returned to Lake Manitowadge by way of the Black River, travelling slowly as they surveyed the meandering course of the stream.

Two parties of prospectors, one led by "Little Jack" Miller and the other by William DeVilliers, went on ahead to Manitowadge armed with sketch maps supplied by Thomson. In those depression years mining in Ontario was almost synonymous with gold mining. Nothing else could attract any real interest and, when the gossans around Manitowadge Lake failed to reveal any interesting gold colours, these two prospectors called off the search.

The Department of Mines published Thomson's report and the accompanying geological map in the following year, 1932. In both the report and map the author-

geologist described in somewhat greater detail the mineral occurrences which he had mentioned in his field notes.

Several prospectors visited the Manitowadge area in the years following publication of the report but, because no gold was found, none reported any success. One of these men was Moses Fisher, Thomson's Ojibway guide who returned in 1943 to stake the sulphide showing which a few years later was to become the Geco mine. He was unable to stir up any interest in this holding, however, and after one year he allowed the claim to lapse.

It was not until May 1953 that two residents of Geraldton, members of the fraternity of weekend prospectors, studied the 21-year-old Thomson report and decided to see for themselves the possibilities it described.

Shown in this aerial picture are the principal surface installations of Noranda's Geco Mine. The two headframes, both equipped with friction-drive hoists tower high over the other buildings and the surrounding bushland. George Hunter Photo.



Roy Barker was a carpenter employed by the MacLeod-Cockshutt gold mine in Geraldton and his friend Bill Dawd was a bush foreman working for a timber company. They solved the problem of transportation into the area by enlisting the services of another Geraldton man, Jack Forster, the operator of a car sales agency who owned a light plane which he used for recreational purposes. The three formed a partnership agreement which they have never had occasion to regret. On their first trip in, on a Sunday morning, they flew directly to the spot labelled "Sulphides" on Thomson's geological map. They examined the ground, took a number of samples and were back in Geraldton by mid-afternoon.

It was a strange quirk of fate that this ground, in which so little interest had been shown previously, should have attracted another team of prospectors during the brief absence of Dawd, Barker and Forster. Thus it was when the three returned to Lake Manitouwadge on June 22nd to stake their claims they were dismayed to find that the very ground they were interested in had been staked by F. Bergkvist and S. Pretulac on behalf of Lun-Echo Gold Mines. It was fortunate for the Geraldton trio that this company's interest was in nickel, and when samples taken from the showings failed to show any, the claims were not recorded.

Naturally the three men had kept their own counsel about the discovery, and now they were equally silent about the disappointment of finding that their rights to the ground had been pre-empted. Their patience was rewarded when a check made in the office of the Port Arthur mining recorder showed that the claims had not been recorded during the 30 days allowed by statute.

This time there was no hesitation. They returned to Manitouwadge,

staked their claims and recorded them immediately.

Now the prospecting team had rights to land which they believed contained valuable minerals — but no mineral is worth anything until it is brought to the surface and marketed. That calls for a full-scale mining operation which in turn calls for expenditure of great sums of money, possibly millions of dollars, before the first dollar is returned.

Under these circumstances it is not surprising that the three men experienced some difficulty in enlisting capital to develop their find. They tried to interest seven different mining companies. Only one showed any interest, eventually sending in an engineer to make an examination. There is no doubt that some of the other exploration and mining companies which were approached have since regretted their decision not to examine the ground.

However in July, only a few weeks after the finders had established their right to the property, an engineer, W. S. Hargraft, made an examination. Although the showing at the time was not very impressive, Mr. Hargraft decided it was sufficiently interesting to merit some diamond-drilling. Upon his recommendation it was taken up on a partnership basis by his principals, General Engineering Company Limited, H. C. McCloskey (who subsequently turned over his interest to Howey Consolidated Gold Mines Limited) and H. W. Knight and Associates. After a few holes had been put down the deposit began to assume importance.

Each of the three prospectors eventually received a considerable cash payment and a royalty on every ton of ore mined from the four discovery claims. Mr. Barker, who died early in 1970, left his mark as one of Canada's most successful prospectors.

A diamond-drilling program car-

ried out during the next two months of 1953 indicated that this was a copper-zinc-silver orebody of considerable size. Geco Mines Limited was incorporated to develop it.

Further drilling indicated a deposit of such importance that, when the results became known, one of the biggest staking rushes in the history of Canadian mining started and was continued for several months. While it lasted, more than 10,000 claims were staked in a solid band 80 miles long and from five to 20 miles in width.

It was fitting that the town of Geraldton, whose existence was based primarily upon its gold mines, should be the springboard for most of these expeditions to open up a completely new mining area. Certainly Geraldton — and most other exploration centres in Canada — had never seen anything like the feverish activity of those days. As a daily routine some 15 aircraft were busy from dawn to dusk running a shuttle service between Geraldton and Lake Manitouwadge, 65 miles southeast by direct airline.

Scores of other prospectors drove by truck from Stevens or Caramat 20 miles south into the camps of the Marathon Paper Company and hiked on from there to seek their fortunes.

Since most of this activity was confined to the winter months — a winter in which the temperature sometimes dropped to 47 degrees below zero — it involved considerable hardship. In most cases real prospecting (the visual examination of rock and the assessment of its values) was impossible and the activity consisted almost entirely of "tying on" to claims which had already been staked.

"The thing to do", one frost-bitten old prospector advised, "is to keep on hiking until you find a stretch of country with no snow-shoe prints. Then you know it hasn't been staked. So you turn south and



A broad swath through heavy timber was cut to make way for the Ontario Hydro line to the Geco mine.

keep going until you find somebody else's number one or number four post. Then you're set to begin staking."

Under these circumstances it is not surprising that in the spring, when the four-foot-thick overburden of snow evaporated, so, too, did the hopes of most of the men who had braved the elements in search of fortune.

However, there were several discoveries on ground adjacent to the Geco property. The most promising of these were on claims held by Willroy Mines Limited, a company named after the two original discoverers, William Dawd and Roy Barker. Here, diamond-drilling indicated three widely spaced orebodies. Underground development of one of these was started in October 1956, and a mill with a capacity to handle 1,000 tons daily began production July 25th, 1957, several weeks ahead of the Geco mill.

The Manitouwadge camp was now established as a producing mining area.

The rugged terrain offered a formidable challenge in the early stages of mine development. Since the area was completely isolated from the outside world, every nail, every foot of finished lumber had to be flown in at great cost or, in the dead of winter, hauled by tractor over the snow-covered hills.

The Department of Mines acted speedily to remedy this situation by driving an access road into Manitouwadge to connect with Highway 17 to the south. Traffic was pouring over this road before the end of 1954. Canada's two major railways, the Canadian National and the Canadian Pacific, also saw an opportunity for service and profit in the developing mining camp. Both constructed branch lines, the C.P.R. from the south and the C.N.R. from the north, so the silence of the bush was soon shattered by the whistle of laden ore trains.

While shafts were being sunk and surface buildings were rising on the mine sites, a whole new town

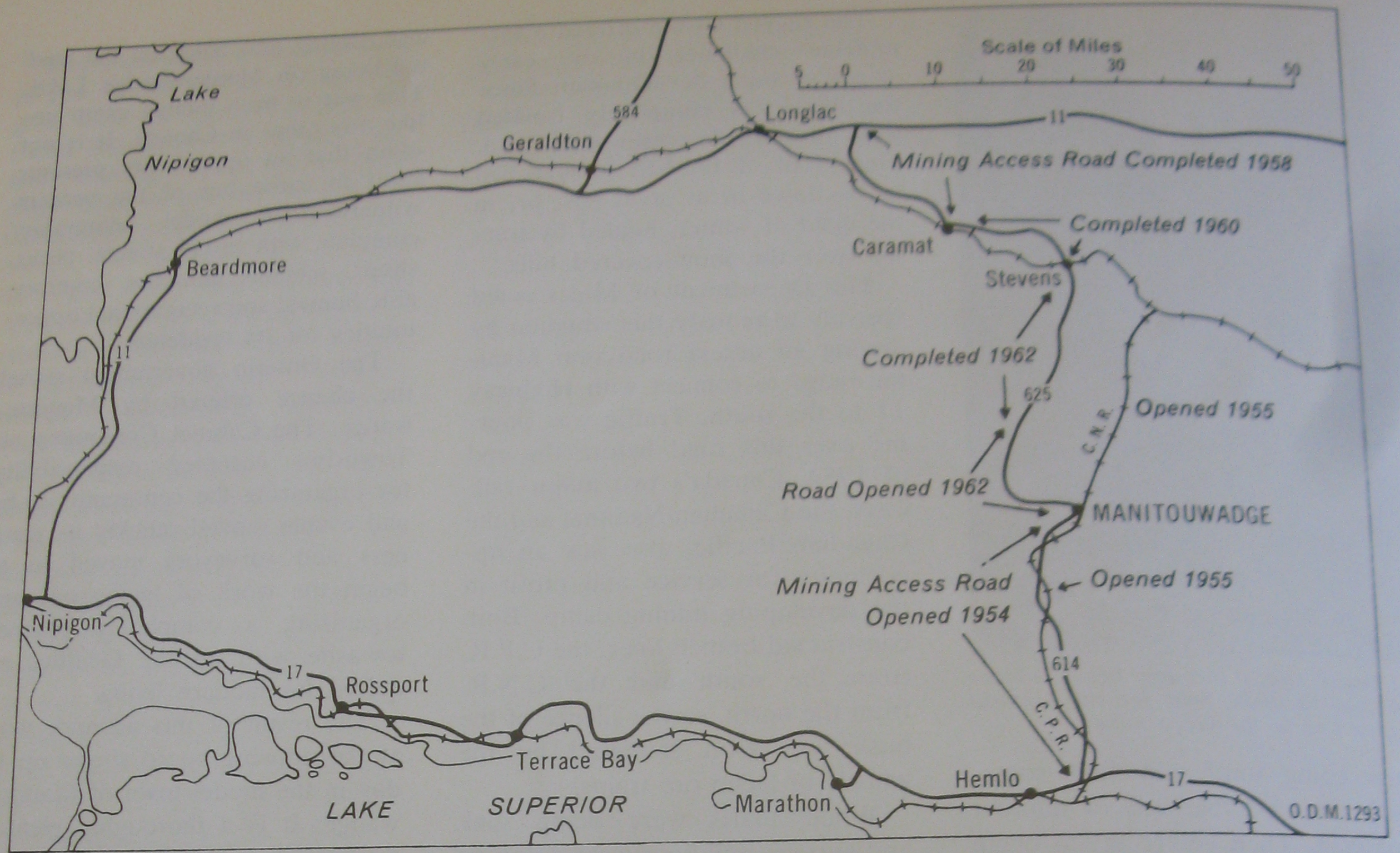
was coming into being on the land bordering on Manitouwadge Lake. This was to be a mining camp unlike any other in Canada. It is not often that an opportunity presents itself to carve out of the verdant wilderness a model community complete with broad streets, parks, shops, schools, churches, comfortable homes, and recreational opportunities for its residents.

The Ontario government seized the chance offered by Manitouwadge. The Cabinet Committee on Townsites accepted responsibility for organizing the community-to-be and events moved quickly as planners and surveyors moved in to begin the work of laying out and organizing a completely planned townsite with all the facilities required for modern living.

The result of this advance work at the drawing board shows up today in the model town of Manitouwadge. It is a thoroughly pleasant town built to the most up-to-date standards. In the planning, provi-



The access road into Manitouwadge from the south was bulldozed through the bush in quick time after the decision was taken to establish mining operations.



Manitowadge is now served by road and rail.

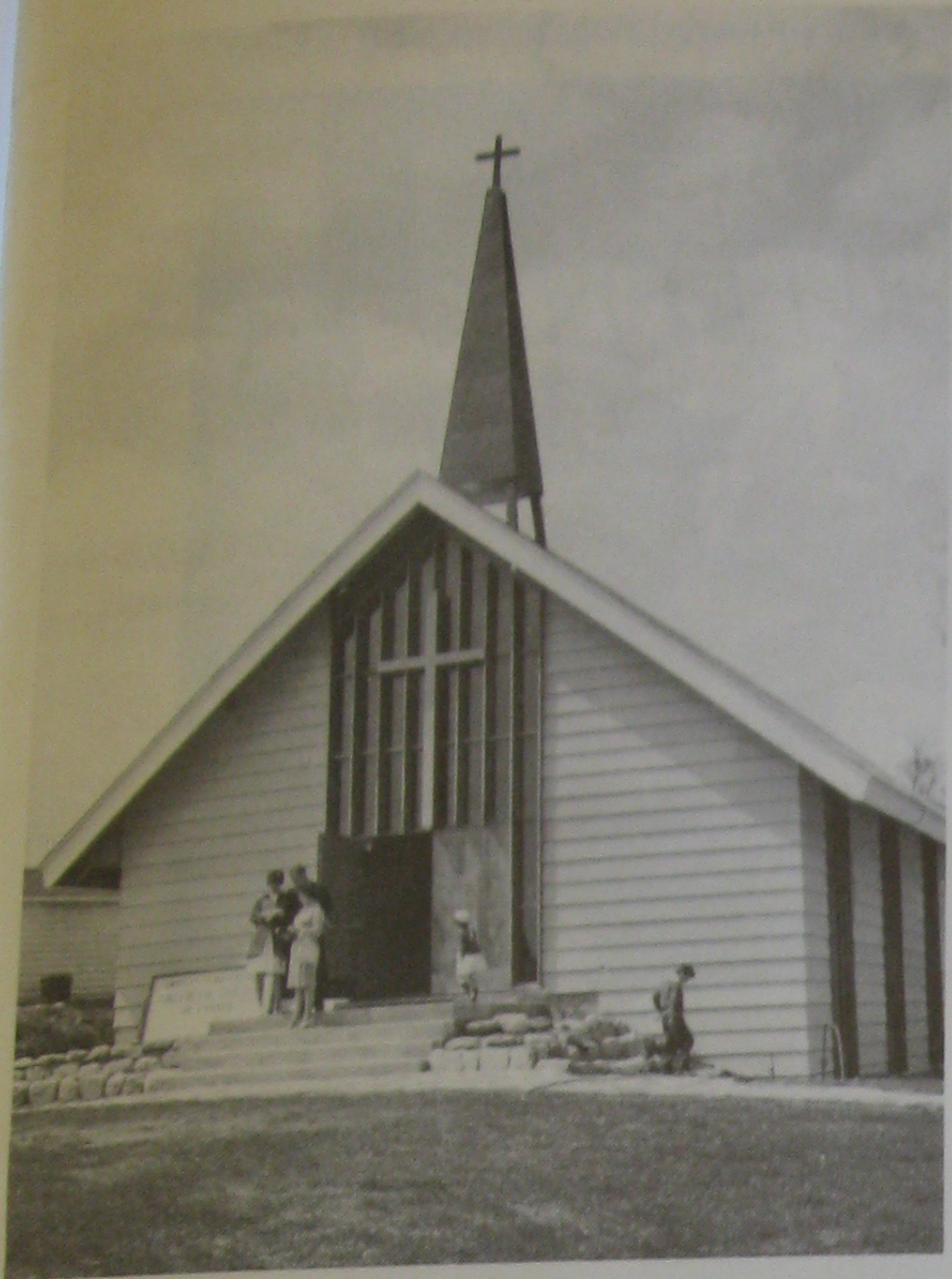


In 1955 this group of parliamentarians rode into Manitowadge on the first train to run over the newly constructed C.P.R. line. Left to right: W. M. Nickle, then Ontario Minister of Planning and Development; The Rev. Dan McIvor, who was M.P. for Fort William; P. T. Kelly, then Ontario Minister of Mines; George C. Wardrope, a later incumbent of the Mines portfolio.

sion was made for separate residential areas, a commercial area in which are located the retail business establishments, and an industrial area to house service buildings of all kinds. This section of the community is entirely separate from the other areas.

The first of the residential areas was quickly filled, and by the summer of 1963 more than one-third of the second had been built up and plans were on the drawing boards for the development of the rest of this area. This area is now completely occupied and land is available for still another entire residential neighbourhood when it is required. Growth has been fairly constant as witnessed by the construction in 1971 of another 16 family residences.

The mining companies are the principal owners of residential property, and between them they own



The Church of the Holy Spirit, the Anglican Church of Manitouwadge.

Right: The United Church of Canada, Manitouwadge.

about 75 per cent of the dwellings. The comfortable, well-constructed homes are rented to mine employees. There are, however, large blocks in the residential areas that are owned by other local business interests and by individuals, and of course, the commercial and industrial properties are owned by other than the mining enterprises.

In addition to its family residences, Noranda Mines Limited, which in 1964 took over the Geco property, as a matter of policy prefers to have its employees living off the mine property. It therefore maintains a number of dormitories for single men and a dining hall in the central part of the town.

Visitors to Manitouwadge find accommodation in a comfortable motor hotel. The 32-bed cottage-type general hospital is considered a model institution of its kind in Northern Ontario. The community's four churches (Roman Catholic,

Anglican, United and Lutheran) are built at a principal intersection. A 1963 addition to the town's public buildings is the large Ontario Provincial Police headquarters in which is incorporated the magistrate's courtroom.

Further extension of facilities in 1970 included the transfer of the Woodlands division office of the Ontario Paper Company to Manitouwadge from Heron Bay. In addition to the office building itself this establishment called for the

construction of 14 new homes. Noranda began building another 20 houses for its employees. In the public sector, the federal government constructed a public dock and the Ontario Department of Transport, as part of its "Highways in the Sky" program, assisted in the construction of a 3,700-foot air-strip, which the municipality planned to take over in 1972. A new Post Office building was opened in 1972.

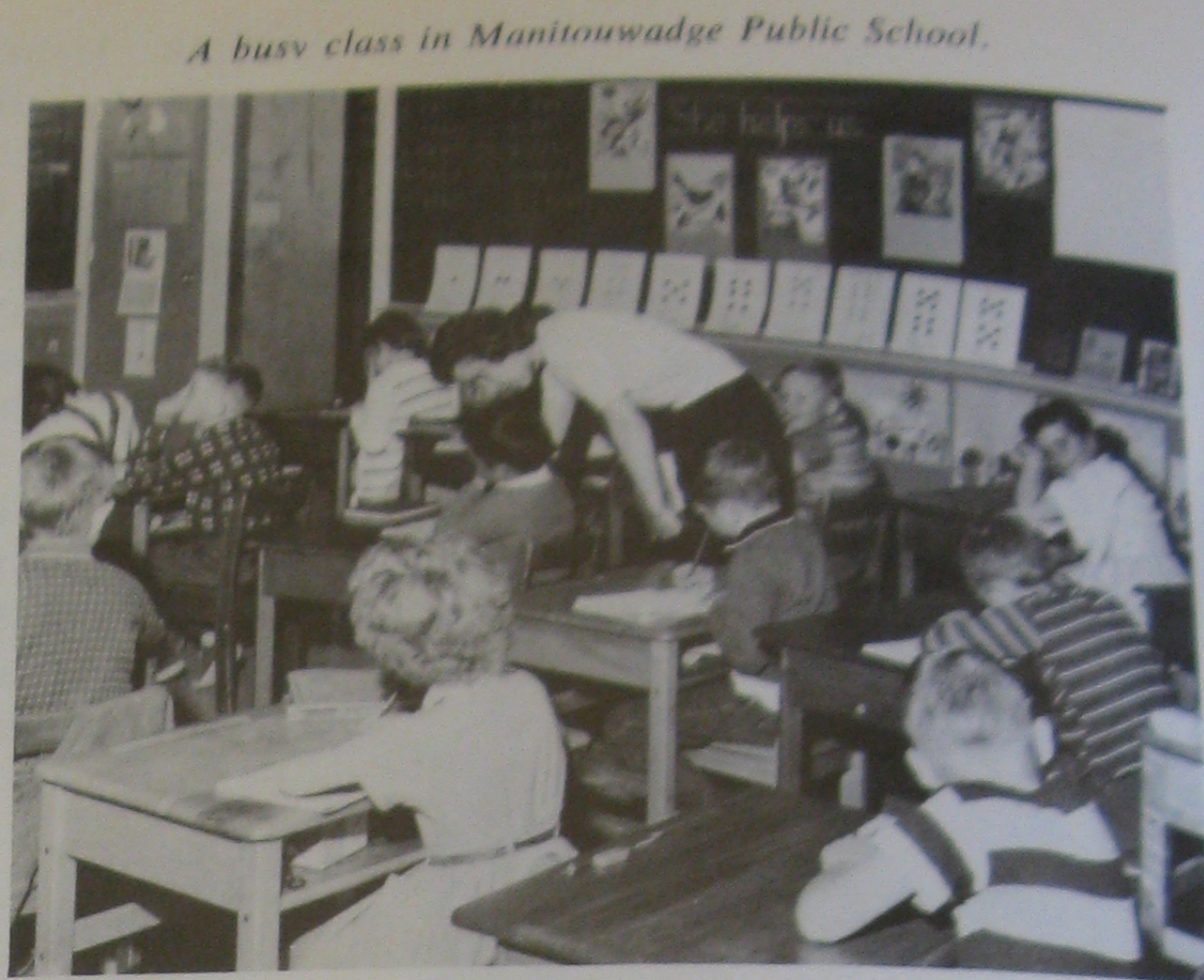
Recreational facilities continued to expand and in 1973 a fine new



Teacher leads the play break in the spacious yard of the Manitouwadge Public School.



The interior of the Public Library.



A busy class in Manitouwadge Public School.

The hospital stands on the edge of the lake.



outdoor swimming pool was opened to the public and work was started on a nine-hole municipal golf course. A gift of \$130,000 by Noranda Mines Limited plus an allocation of \$65,000 by the municipality and a further \$20,000 raised by public subscription made the two projects possible. Paved tennis courts have been added at the community centre.

The rapid expansion of the school population (up by 500 per cent since 1957) has posed special problems for the municipality. Townspeople are justifiably proud of the fully modern public, separate and high schools. But by 1963 it had become evident that a major addition to the high school was urgently needed. Geco Mines stepped into the breach with a contribution of \$300,000, sufficient to ensure that taxpayers would not have to meet any special levy for the expenditure, nor even the interest charges that would have resulted from debenturing the project in the normal way. The remaining \$137,000 required for the school addition was to be received from the Ontario Department of Education as a capital grant.

The same company made another

magnificent contribution to the community in the form of a million-dollar-plus recreation centre that went into operation in 1965. The centre contains a four-sheet curling rink, an arena for year-round use that will seat 400 people, an auditorium, a library, club rooms, meeting rooms and other amenities. The annual operating costs are defrayed through a membership plan in which local employers and employees pay equal shares.

The year 1962 was one of wholesale civic improvement in Manitouwadge and, as a result, every street

in the town is now paved and the street lighting system is complete. Incidentally, all wires are strung in lanes behind buildings so the streets are free of unsightly festoons of wires. The Bell Telephone exchange is entirely automatic. Thanks to the initiative of a group of townspeople, residents are able to enjoy regular television with better reception than would otherwise be possible in an area so distant from the points of transmission. Programs from the Lakehead and Marquette, Michigan, are "piped in" at a nominal cost. A C.B.C. "booster"

tower now makes all network programs available to townspeople.

The fire department, whose chief is the only full-time paid member, is the pride of Manitowadge residents. The department has been awarded top honours both for Ontario and all Canada as the most efficient fire-fighting organization in municipalities in the same population range. It has ranked eighth in Canada in competition with all municipal fire departments.

In its early days Manitowadge

found garbage disposal to be a real problem because of hazard to the forest presented by burning rubbish, combined with the nuisance — and possible danger — of bears which, attracted by the prospect of a free meal, swarmed to the dump every evening. The solution to both problems lay in the construction of a highly efficient incinerator.

With a view to recreation, entertainment, and self-improvement the people of Manitowadge have gone to remarkable lengths in establishing such organizations as ski, curling and swimming clubs, a drama group and bridge clubs. All these activities, supplementing the work of such standard organizations as the Canadian Legion and the service clubs make for a busy and happily self-contained community which is made up largely of comparatively young people. Altogether, 48 separate "activity groups" are operating in the town.

The life of Manitowadge is, of course, based on one industry — mining. Undoubtedly this will be the case for some years to come, but a broadening of the municipality's economic base is seen as the ultimate aim.

The present population is about 3,500 but, if the concept of the

community as a resource centre and an urban municipality to serve people living over a broad area is realized, it could and probably will grow very considerably in the coming years.

A major step in that direction was taken with the opening in 1962 of the last short road link that was required to give access from Manitowadge to Highway 11 to the north and, even more important, a direct route through Manitowadge connecting this highway with the Trans-Canada route, Highway 17, to the south.

The incorporation of Manitowadge as the first Government-planned municipality in Ontario stemmed from the decision of the provincial government that no more so-called "company towns" should be set up in organized territories. This decision was completely in line with the wishes and policies of the mining companies concerned.

The Improvement District system gives the municipality complete control of fringe area development over an area of 144 square miles. Manitowadge is presently governed by three-man board of trustees appointed by the provincial government. The arrangement entails financial problems peculiar to



Sunday Mass is over at the Roman Catholic Church, and the congregation heads for home and lunch.

The new separate school in Manitowadge.



Miner operating drill underground in Willroy Mines.



Underground shift going on duty in Willroy Mines.

Filter operation at the Geco Mill.



Improvement District — problems which probably would not arise in a normal municipality in which growth could be gradual and to a greater extent self-sustaining. In the first eight years of its corporate existence Manitowadge incurred capital expenditures totalling about \$3,000,000. Most of this money was raised through the sale of debentures to the government of Ontario.

The whole concept of Manitowadge as a pre-planned and pre-engineered community developed under government supervision was a complete departure from the norm. It was an experiment on the grand scale — an experiment that, only a few years after it began, paid extra dividends in the development of the Improvement District of Elliot Lake. The lessons learned at Manitowadge stood the planners in good stead when a fully planned and equipped town was needed in a hurry to house the miners who flocked to that area in the uranium boom of the mid-fifties. There is no doubt that still other communities

will come into being in Northern Ontario, and when they do it is altogether likely that they, too, will bear the stamp of the Manitowadge experiment.

Although a broadening of the base of Manitowadge's economy is a development to be hoped for, the town's real reason for existence lies in the mines which together employ close to 1,000 people.

Geco, the largest operation, has

about 650 employees. The ore reserves so far outlined total 29,400,000 tons after mining about 21,000,000 tons since the beginning of operations. The mill has been expanded to an operating capacity of 5,000 tons per day for an annual milling total of 1,825,000 tons. Geco's milling operations began in September 1957.

While the mine is primarily a copper, zinc and silver producer, it

also yields considerable values in lead with some gold. Copper, zinc and lead are concentrated at the mine. Gold and silver are returned in the copper concentrates. The copper is sent to the Noranda smelter for refining. The zinc concentrate is refined by Canadian Electrolytic Zinc Limited at Valleyfield, Quebec, and the lead goes to Trail, B.C.

A major extension program, which started in 1963, included the construction of the new No. 4 shaft to a depth of 4,000 feet, a headframe and friction-type hoists, and underground development. The No. 4 shaft, which is circular and concrete-lined, 21½ feet in diameter, is 4,000 feet east of the Number 1 shaft. The shafts are connected at four levels. In 1970 more than half the mine's total production was hoisted through the No. 4 shaft.

The Willroy mine which is established on six copper-lead-zinc orebodies has produced more than 100 million dollars in new wealth since production started in July of 1957. Practically all of this money has

been injected into the economy of Canada in the form of wages, supplies and taxes. Willroy was acquired in 1970 by the Little Long Lac Gold Mines Limited through Lake Shore Mines Limited.

The neighbouring Willecho mine from which production was started in 1965 has been merged with Willroy. It is established on three orebodies on the old Lun-Echo property. Mining operations are being conducted down to the 1,800-foot level. The copper, lead and zinc concentrates that are produced from both properties are shipped to Noranda, the United States and Europe for smelting.

Willroy has a lease on still another property. The Big Nama Creek orebody is just about one mile from the Willroy mill. The first ore shipments were in 1969 and continued for two years before operations were suspended. The output of this mine also was handled in the Willroy mill.

Several other companies hold property in the Manitouwadge area. Varying amounts of work have been

Watertower and headframe form geometric patterns at Willroy Mines.

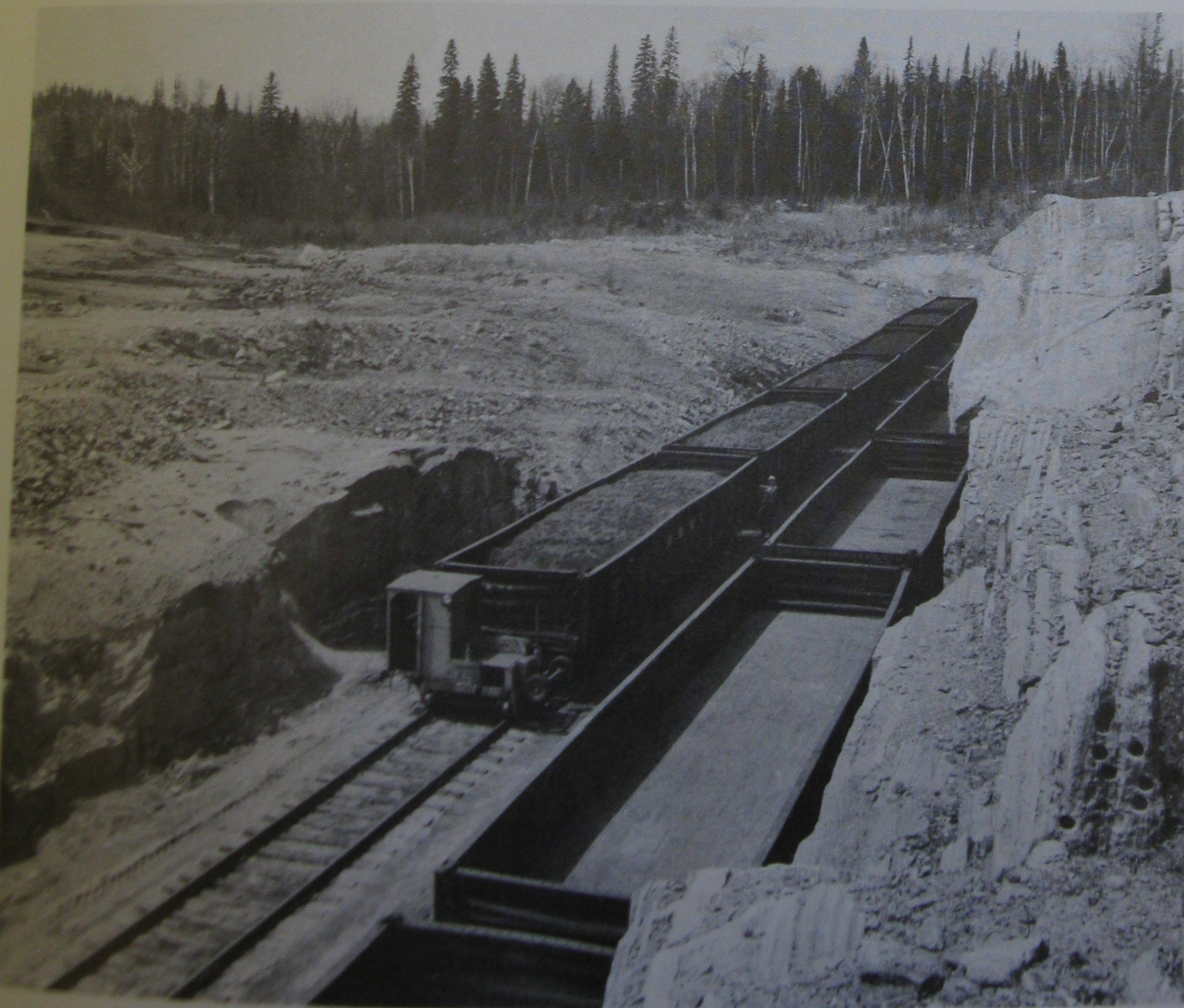


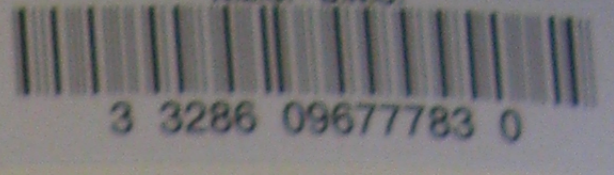
done on them, but there is no indication that any of these companies has immediate plans to proceed with active mining operations. There is no prediction as to what the future may bring.

Already in a few short years, the wilderness area of the Cave of the Great Spirit has given birth to four mines producing copper, zinc, gold, silver, lead and cadmium, adding in no small degree to the mineral wealth of Canada. In addition, a community with its modern homes, schools, churches, hospital and recreation centre has been provided.

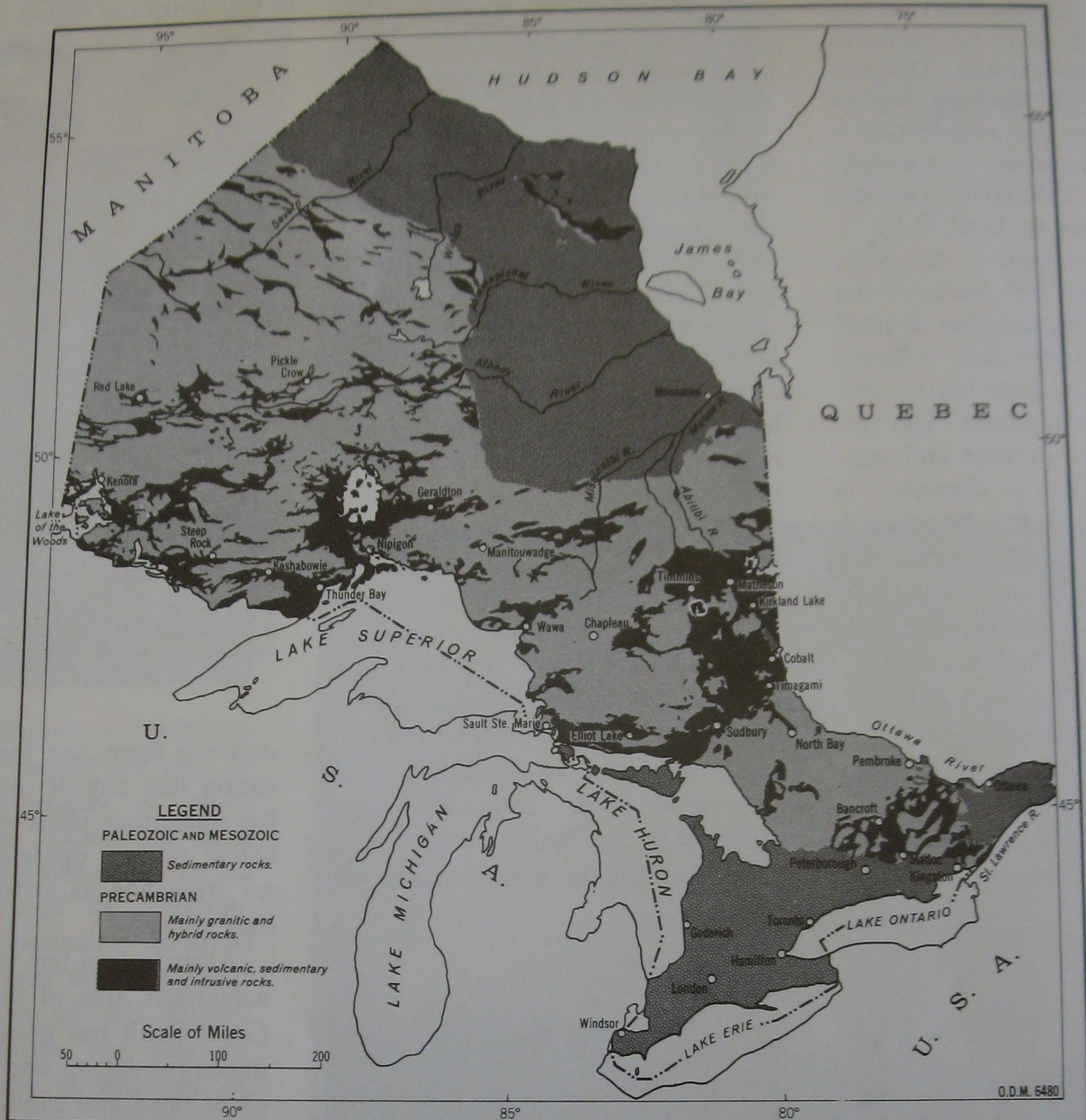
Truly, this has been a monumental achievement which only a few years ago could not have been considered practical or feasible for any new community growing in so remote an area. The development of such a project called for a tremendous amount of planning and plain hard work. Certainly, it did not just happen.

Ore cars loaded with concentrate from the Willroy mill, wait in a rock-cut siding on mine property.





Geological Map of Ontario



Ministry of
Natural
Resources

Ontario

Hon. Leo Bernier
Minister

W. Q. Macnee
Deputy Minister

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