

Hay River Indian Reserve Number 1 Northwest Territories Planning Assessment

Environmental Services
Engineering and Architecture
Department of Indian and
Northern Affairs
Ottawa, Ontario

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1.0 Introduction

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This report results from a request from the Yellowknife Regional Office of the Indian and Eskimo Affairs Program to the Environmental Services Division of Engineering and Architecture Branch at Headquarters. The request initially came through correspondence and meetings between Messrs. G. Kelly and D. Lawson of the Regional Office and Messrs. P. Edridge and E. Rodger at Headquarters. These contacts took place in September, 1975.

It was agreed that the purpose of the study would be to provide the Regional Office with an assessment of physical conditions and a statement of physical planning requirements at Hay River Indian Reserve. General recommendations were to be made regarding the introduction of land use planning procedures and other measures which could assist in meeting the Department's program responsibilities for the Reserve.

This report is not intended to represent a comprehensive planning study nor is it intended to be the basis for a Reserve master plan. It is limited primarily to physical planning considerations and to a short to medium term planning span. Research, interviews, and plans associated with the conduct of this study have been undertaken almost solely within the limits of the above constraints.

Notwithstanding the above, certain non-physical requirements have been raised where considered necessary due to pressing issues or concerns which became apparent particularly during the various interviews. These requirements generally relate to problems of jurisdiction as discussed in Section 3 and also to certain economic matters such as the need for an economic development plan and social matters such as the impact of commercial fishing on the lifestyle of the Band. It is hoped that these references will not be considered digressive from the report or beyond the terms of reference of the study.

The structure of the report will include a summary and general recommendations in Sections 2 and 3 an outline of the study procedure in Section 4; a discussion of study observations in Sections 5 to 9; and a presentation of physical planning recommendations in Section 10. Section 11 outlines the services which Environmental Services Division could provide in the continuation of the study. Section 12 includes photographs illustrating certain issues. Section 13 concludes the report with a map presentation illustrative of a proposed conceptual development plan which has been envisaged during the course of the study and which is based on information available at the time of the study. It is this concept to which Environmental Services Division would address itself upon its further involvement in the planning of Hay River Indian Reserve.

2.0 Summary

Hay River Indian Reserve

Number 1

Northwest Territories

Planning Assessment

Errata:

Page 4 Federal Government

Item 6 should read:

Mr. Fontaine, Economic Development, Edmonton

Page 4 Others

Item 1 should read:

Mr. D. Makale, Makale Holloway & Assoc., Edmonton

The Hay River Indian Band may be characterized as concerned and cooperative, and as having a progressive and industrious Band Council. They have also cooperated greatly with the Department in the creation of the Reserve in 1974 as they saw that this was the way to retain their remaining land at the mouth of the Hay River. They furthermore want this cooperation to continue with all levels of government.

While they are an independent group, they require technical and financial assistance in improving the physical and other conditions on the Reserve. While they want to maintain their traditional skills and livelihoods based on hunting, trapping and fishing, they want to balance these with modern skills so that they will continue to be productive. They furthermore do not want to isolate their Reserve from the town of Hay River and are working towards accepting industrial tenants on land which is highly suited to the barging industry.

Both land use and master planning based on Band involvement and inter-governmental cooperation have much to offer the Band in terms of improving their living conditions; their employability and livelihoods; and their participation in health, educational, social, recreational and other programs. This planning should start immediately on the short/medium term goals and requirements particularly with regard to housing, servicing and road improvements and it should subsequently consider the long term objectives and requirements of the Band.

3.0 General Recommendations

3.1 Jurisdiction

It is recommended that jurisdiction and authority be discussed and defined among the following parties in such manner that all governmental responsibilities for Reserve development including planning, funding and implementation will be designated: the Department of Indian and Northern Affairs, the Government of the Northwest Territories, the Town of Hay River and the Band Council.

Recognition of responsibility is particularly required for the following:

- (a) land-use planning
- (b) the provision of subsidized and conventional housing
- (c) the provision of funds for housing maintenance
- (d) the reconstruction of the village road
- (e) road maintenance for the access and village roads
- (f) the provision of a Band hall

(g) the provision of recreational facilities

(h) economic planning and development

3.2

Liaison and Coordination

It is recommended that liaison and coordination among the authorities be undertaken during all phases of Reserve planning and development in order that the overall objective of an orderly, well-planned community may be established for the Band members and that provisions for realizing the industrial potential of the Reserve may be made.

It is recommended that a Band Manager be chosen with the approval of the Band and hired to assist the Band Council primarily with further planning and development of the Reserve and secondarily with the day-to-day administration of Band affairs.

With the anticipated increase in community development and possibly in industrial development on the Reserve, a full-time officer responsible to the Band would be of great benefit. His or her duties are envisaged to include: liaising with governmental and non-governmental groups; attending meetings on the Reserve, in Hay River, Yellowknife and possibly elsewhere; conducting surveys on the Reserve; preparing correspondence and other communications; and making representations on behalf of the Band.

3.3

Physical Planning

It is recommended that a Reserve land use plan focussing particularly on the Reserve communities be prepared which will control and order the physical development of the Reserve to meet the needs of Indian residents and to allow for economic development of the Reserve through non-Indian tenancy.

This plan should arrange, zone, and phase all foreseeable land uses on the Reserve and should direct the provision of housing, servicing and other physical requirements of the Reserve communities. It should be prepared in conjunction with the Band and should have the understanding and approval of the Band prior to implementation. Upon approval of the Band and the Department it should be considered the official plan of the Reserve and should govern all future physical developments accordingly unless amendments are made and approved. It should include provisions for non-Indian tenancy on the Reserve.

It is recommended that the land use plan be integrated into a more comprehensive Reserve master plan which will include the development of social, health, economic, vocational, recreational and other programs for the Band.

The Reserve master plan should represent the coordination of Federal and desirably other governmental and non-governmental activity on the Reserve as far as is foreseeable and as far as is possible. The land use plan should be complementary to the master plan in helping to achieve the broader goals of the master plan through physical development.

3.4

Economic Development

It is recommended that an economic development plan be prepared for the Reserve based on both Indian and non-Indian activities.

This plan should be based on an analysis of all economic activities on the Reserve and of the Band both existing and proposed. Of particular importance is an evaluation of those companies that may wish to lease land on the Reserve for industrial development. This evaluation should include economic, environmental and the cost/benefit relationships of the proposed uses. The plan should indicate which industries may be located on the Reserve; should designate land for their development; and should provide regulations and guidelines to govern their activities, including the provision of road and rail access, on the Reserve.

It is recommended that the further economic potential of the Reserve be investigated.

A number of industrial developments have been proposed for the Reserve mostly based on the barging industry. Other potential economic activities may exist for the Reserve and should be investigated. These might include: a handicraft industry with possibly an outlet on the Reserve; other commercial activity on the Reserve for Indian or non-Indian use and located either in the villages or along the highway.

3.5

Fishing on Buffalo Lake

It is recommended that the Band be given priority for fishing on the Buffalo River system and that commercial fishing at the lower mouth of the River be controlled or banned particularly in the spring.

This would involve coordination with the Federal Department of Fisheries which regulates commercial fishing on Great Slave Lake.

4.0

Procedure

Following the request of the Regional Office, the Physical Planning Section of Environmental Services Division undertook the following activities upon which this report is based.

4.1

Compilation of Information

Information concerning the Reserve itself, the Town of Hay River and the surrounding region was gathered primarily from Departmental sources and subsequently reviewed during the course of the study. Among the topics examined were:

- demography (Indian and non-Indian)*
- economy (Reserve and off-Reserve)*
- Reserve resources (surficial)
- Reserve resources (sub-surface)
- N.T.C.L. lease proposal*
- implications of Mackenzie Valley pipeline*
- meteorology
- soils and permafrost*
- geology
- vegetation
- wildlife
- access*
- history of the area

Some of this information will require supplementation should a complete physical planning study be undertaken. Of particular concern are those starred (*) above. Other information requirements such as a soil study and a housing survey will be discussed later in the report.

4.2

Interviews and Contacts

Liaison with Departmental and other governmental and non-governmental officials has been and should continue to be elementary to the planning of the Reserve. During the course of this study liaison has been maintained with Indian Affairs officials in Yellowknife, Edmonton and Ottawa.

For purposes of this study a number of interviews were arranged and attended with other federal officials, with the Territorial government, the Hay River Indian Band, and with the planning consultants serving the Town of Hay River. Interviews were not held with officials of the Town of Hay River nor with representatives of companies interested in leasing reserve land for industrial development. In every case, interviews were conducted solely for exploratory purposes and no program or other commitments were made.

More specifically, the following were interviewed.

Federal Government

Mr. G.F. Kelly, Regional Representative, Yellowknife

Mr. D. Lawson, Asst. Regional Representative, Yellowknife

Ms. N. Mitchell, Community Planner, Ottawa

Ms. P. Hébert, NHW Nurse-in-Charge, Hay River

Mr. J.R. Gunn, Economic Development, Edmonton

Mr. T. Fortaine, Economic Development, Edmonton

Territorial Government

Mr. A. Menard, Lands Division, Yellowknife

Mr. G. Talbot, HRIR Project Manager, Yellowknife

Mr. N. McLeod, Municipal Affairs, Yellowknife

Mr. R. Groves, Education, Hay River

Mr. G.A. Jones, Economic Development, Hay River

Mr. M. Trennert, Game Management, Hay River

Mr. R. Cook et al, Social Development, Hay River

Road Foreman, Hay River

Hay River Indian Band

Mr. D. Sonfrere, Chief

Mr. J. Lamollice, Councillor

Mr. P. Bughins, Councillor

Mr. T. Bughins, Councillor

Mr. R. Sonfrere

Other Band Members

Others

Mr. D. Makele, Makele Holloway & Assoc., Edmonton

4.3**Site Visits**

Departmental and Territorial officials were visited in Yellowknife on October 6, 1975 prior to arrival in Hay River. The Reserve and the Town of Hay River were then visited during the period of October 7-9, 1975. At this time three extensive visits were paid to the two Reserve communities in the company of the Chief and Band Councillors. One of these visits included a lengthy discussion with other Band members about the various issues which emerged. Additionally two trips were made along the south boundary of the Reserve (Pine Point Highway) in the company of Band members. Finally, the Town of Hay River and Vale Island were toured particularly with a view to their physical relationship with the Reserve communities.

5.0**Observations – Jurisdiction**

Before examining physical planning observations and requirements, the more basic matter of planning jurisdiction should be considered. During the course of the study, planning jurisdiction emerged as the central issue underlying problem identification and planning requirements. There became little doubt that the key to any further planning progress on the Reserve is the resolution of this problem.

Simply stated, there is a general uncertainty or at least a lack of definition of who holds what responsibilities for Reserve development. The problem seems to have arisen upon the creation of the Reserve, the first in the Territories, in 1974. Thus, while all authorities have an expressed concern for the Reserve, there is a common feeling that a higher level of servicing and development is being impaired by jurisdictional uncertainty. This was, in fact, singled out by Band officials as one of the main problems confronting Reserve development.

At the Federal and Territorial level, efforts are currently being made by the Department and the Territorial government to clarify their responsibilities. Items of particular relevance are: land use planning, construction and maintenance of roads, provision of housing, provision of services, and economic development. It is expected that a responsibility agreement between these two authorities is imminent. At the local level there is apparent uncertainty as well.

The Town of Hay River shares with the two Reserve communities the same municipality. It was noted that both the Town administration and the Band administration are uncertain about this relationship. Items of particular relevance here are: the provision of subsidized housing, road maintenance, land use planning and municipal expenditure.

Municipal expenditure is probably the key issue at the local level. The Territorial government provides the Town with funds to be allocated for municipal capital and operating purposes. It follows from jurisdictional uncertainty that the Town is not in a position to know for what purposes to allocate funds to the Reserve. To clarify the relationship would assist the town in budgeting, would remove apprehension by the Band that the Town might be diverting funds from Reserve development, and would nullify concern by the Town that the Band should be paying taxes.

The Town furthermore would have a legitimate concern with regard to how the Reserve will continue to relate to municipal development. Given the physical relationship of the Town and the Reserve, each will continue to affect the other. In its initial municipal plan in 1970 the Town did give consideration to the Reserve. Yet in the 1974 revision the Reserve was excluded. This is again attributed to jurisdictional uncertainty and it may, in this case, constitute a lost opportunity.

Ideally any two communities in such close proximity should be planned together so as to achieve orderly and compatible growth and development. At Hay River, there could be opportunities to be realized through joint economic development, through sharing of facilities, through cooperative programs, etc. One current illustration involves the increasing demand for barging and trans-shipping facilities at Hay River. To consider Reserve land as a part of an overall 'harbour' plan might have considerable economic benefit to both communities as well as to shipping companies and even indirectly to their customers. Such an approach might allieviate concern by the Town that a separate shipping installation on the Reserve would be detrimental to the Town's economy. It would also ensure the Band's legitimate participation in the economic development of the area. It is therefore worth exploring the possibility that certain benefits to both the non-Indian and Indian communities would be derived from the deliberate coordination of planning and development.

In summary, then, there are three levels of government which are involved with the Reserve and with which the Band must deal. The Band's own house seems to be in order with the Chief and Councillors established in office, prepared to carry out their functions, and having the general support of the Band. It may be concluded that a clarification of the responsibilities of the Federal, Territorial and local levels of government and a recognition of the relationships between each level will lead the way to more coordinated planning and the provision of improved services and facilities to the Reserve communities.

6.0 Observations — Physical Planning

This section on physical planning observations will attempt to provide an understanding of physical conditions of the Reserve communities as they exist and a statement of physical planning requirements as communicated by the Band, by concerned officials and as perceived by the author. Excluded from the analysis will be reference to how land claims settlements in the region may affect the Band; to jurisdictional responsibility with regard to funding and action; and to the matter of social integration with the Town of Hay River.

The Band, through its Council, has based its development requirements on two planning horizons: short/medium term and long term. For the short/medium term the Band has expressed the following objectives:

(a) improving physical conditions for the two Reserve communities;

(b) up-grading the level of social services for Band members; and

(c) controlled expansion and diversification of the Reserve's economy.

For the long term the Band has identified the following objectives:

(a) a reduction in off-Reserve Band population with a corresponding increase in on-Reserve population as physical conditions, particularly housing, on the Reserve improve;

(b) economic development of the Reserve along the Pine Point Highway based on service to road travellers;

(c) the provision of on-Reserve amenities for the attraction of non-Indians to the Reserve possibly based on the interpretation of traditional Indian activities or on a handicraft enterprise;

(d) certain off-Reserve development particularly in the area of Buffalo Lake for which an interest was expressed in developing an Indian owned and operated tourist or fishing camp; and

(e) the controlled conversion of the Band's traditional economy based on hunting, fishing and trapping to one of more contemporary pursuits. This is based on the Band's strong concern that wildlife resources are being depleted with the development of the area and that future Band generations will require alternate economic skills to ensure their livelihoods.

While long term objectives are important, the Band recognizes that the short/medium term objectives are more basic and more urgent. It is these latter objectives which will constitute the main focus of the planning analysis that follows.

6.1 Roads

The road system on the Reserve currently consists of a gravel-surfaced access road of an approximate length of 6.6 miles which extends north from Pine Point Highway to its juncture with the east-west road connecting the new and the old Reserve villages. The latter road is of an approximate length of 2.5 miles. For purposes of this report these roads will be referred to as the access road and the village road. The only other road on the Reserve is a 0.5 mile gravel road extending from Pine Point Highway north to an MOT non-directional beacon facility on leased Reserve land. This road is in private MOT use. Trails exist on the Reserve for pedestrian and winter tractor or snowmobile use. Most notable is the winter tractor trail bisecting the Reserve from north-west to south-east.

Concerning road maintenance, an informal agreement seems to exist such that the Territorial government will maintain the access road and the Town will maintain the village road. Road maintenance involves repairs as well as plowing. The Department of Indian and Northern Affairs additionally has allocated funds over the past two years for the purpose of road improvements.

Despite these efforts the conditions of the roads are not adequate; the access road being only in fair condition and the village road being in poor condition. The access road follows a more or less direct route along the river, has a good clearing with good visibility and a good base if low in some spots. Periodic gravelling has apparently been done in some locations. Nevertheless, during the site visit, the road was passable but, due to muddy shoulders, was limited to one car width. Nor was the road considered safe in its condition. Soft surface and shoulder conditions necessitated slow and highly attentive driving. In the event of an emergency, an emergency vehicle would be slowed down considerably. It is felt that this road should be examined by a local engineer for specific requirements. It is, however, recommended that it receive as soon as possible an entire new layer of gravel.

The village road, visited in wet weather, may only be considered impassable by all but the most adventurous drivers who maintain only a short term interest in their vehicles. It is perhaps best described as less of a road and more of a clearing through the trees. The road would require complete re-building with improved route clearing, grading, ditching, a new foundation and a new surface. As it exists it regularly hinders the provision of essential services of water distribution, garbage collection, police and fire protection, and social services to the old village.

In conclusion, the roads are in a fair to poor state of repair and as such cause unnecessary hardships to the Reserve communities through discouraging or preventing those who are responsible for providing on-Reserve services from doing their duties. To raise the roads to a good standard would permit immense improvements not only for basic travel but also for health, education, social and physical services for the Reserve population. It would ensure a dependable, safe and year-round connection between the two villages and the Town of Hay River. The Band considers road improvement to be the top development priority.

6.2 Housing

Housing on the Reserve is located in two areas: the old village to the north and the new village to the south. The old village comprises approximately twenty units of which approximately ten are occupied. These houses are generally old and in poor condition. They are randomly located on the basis of an old lot plan. Mostly of log or wood frame construction they are small and reportedly quite overcrowded. Heated by wood stoves, they are reportedly drafty and cold in the winter due to poor insulation and poor heat circulation.

The site of the old village suffers from a number of disadvantages. The area is highly prone to spring flooding and was seriously inundated in 1963. Also, the village is situated directly across the east channel from the main barging activity of the Town of Hay River. The area therefore suffers from mechanical noise and some people might say from visual pollution. Finally, should the area proposed for NTCL use on the Reserve be developed for industry, the old village would be substantially isolated from the new village. Despite the foregoing disadvantages a number of the residents are known to have a preference for remaining in the old village even with further development of the new village.

The new village includes twenty-five houses; four to the south of the new school and the remainder to the north. All are occupied with the exception of one which contains the communal freezer. The houses are located on a linear lot basis along the eastern edge of the village road. The four southern houses, built in 1974, are of a 16 feet by 24 feet layout and, while of a spartan design, appear to be in good condition. The remaining houses, built in 1963, are in fair condition. With people banking their houses with soil, heating and insulation again appeared to be a problem. The general location is good featuring high ground, good drainage, a good view, and access to the river.

A detailed housing survey was not undertaken and virtually none of the houses was examined in detail. Only the interior of the Chief's house was seen. A detailed survey is therefore considered a pre-requisite of further housing development in order that actual requirements can be clearly identified. Examples of such a survey are readily available. Reserve housing surveys are best conducted either by a trained Band member or by a planner in the company of a Band Councillor who would assist with occupant interviews as well as explain the purpose of the survey. Following completion of the survey a housing program could be undertaken. In the case of the Hay River Reserve the following items should be included:

- a) an analysis of requirements including the retention and renewal of existing units and the provision of new units;
- b) a maintenance program including a statement of agency and occupant responsibilities and funding requirements;
- c) a consideration of design aspects particularly overall size, number of bedrooms, improved heat circulation, better insulation and minimal maintenance; and
- d) a consideration of the role of the Territorial Housing Corporation in the program and the availability of municipally subsidized housing.

The Band has already evolved a number of definite views regarding the development of new housing. These were discussed with the Band and are presented below.

- a) the residents want to be able to own and maintain their own homes;
- b) they now need continual funds for home maintenance which are not available to them now;
- c) they want the occupants of a prospective house to be able to choose its location;
- d) they want larger houses than have been provided with more bedrooms to reduce over-crowding and alleviate the problems of 'doubling up';
- e) they prefer a bungalow style of dwelling with a conventional lay-out including living room, dining room, kitchen, bedrooms and basement;
- f) they prefer wood stoves for cooking, fuel furnaces for heating, refrigerators, toilets with pumpout tanks, bathtubs and water holding tanks of 250 gallon capacity for water supply;
- g) they want better insulation;
- h) they prefer the standard subdivision lot layout as opposed to more random siting;

i) they want large lots to allow space for dogs, storage of wood, etc.;

j) they prefer new housing to be located in the area to the south and east of the school rather than have further development along the village road; and

k) they require approximately 20 houses in the short term and approximately 10 houses in the medium term.

6.3

Band Hall

The Band currently has in the new village a building known as the Band Hall. This structure is quite small, in poor repair, with poor fenestration and is poorly founded on make-shift foundations. Not in use for office or meeting purposes, the building is used as storage for equipment. A smaller, unused Band office is located nearby. This also is in poor condition. The nearby school, a good quality and well-founded building, is used for Band meetings as was the case during the site visit. Due to its size, shortage of adult-sized furniture and due to possible disruptions in classes or student projects, the school is not suited for permanent substitution as a Band Hall.

The Band is therefore in need of a proper multi-purpose Band Hall at which the various official, social and indoor recreational activities of Band life could be held. The Band has already taken the initiative to apply to the Department of Indian and Northern Affairs for a capital grant and to the Department of Manpower for an L.I.P. grant to cover labour costs. Labour would presumably be provided by the Band. Approval is outstanding on both applications.

The design of the building should be worked out with the Band. It should however have two district areas: firstly, office space for Band administration, for the visiting health nurse and for any other office requirements and secondly, a large multi-purpose area for Council, Band or other meetings, for dances or other social events and for indoor recreation.

The Band has an expressed preference for locating a new Band Hall and any other community facility such as a garage or a storage yard in the new village.

6.4

School

The existing educational system provided for Band members is run by the Territorial Superintendent of Schools. A new ATCO-type one room school has been located in the new village and is staffed by an Indian teacher and an Indian assistant teacher. The building includes a large classroom, a "mudroom", a cloakroom and a furnace room. Pit privies have been provided nearby. While uniform educational statistics were difficult to obtain, approximately sixteen students are thought to use this school. One report stated that pre-school and kindergarten were taught there with the remaining grades taught in Hay River. Another report stated that the Reserve school taught grades 1 to 8 with the remaining grades being taught in Hay River.

For the students in the remaining grades, a daily school bus service is provided to transport the students to and from Hay River. Approximately twelve students use this service. The bus service was a source of great dissatisfaction to the Band. Apparently the only bus pick-up is at the new village, a fact which was attributed to the condition of the village road. Students from the old village were obligated to walk to the new village to get the bus. Additionally, there is some complaint about the operation of the bus, a situation which is being investigated by Territorial officials as a result of the site visit.

While not of direct relevance to physical planning, the Band expressed much concern that their traditional way of life based on fishing, hunting, trapping was becoming less and less viable as urbanization and industrialization of Hay River increased and as fish and game supplies decreased. Their concern was that their children would have the opportunity to acquire alternate skills which would permit them to remain economically independent. They felt that education was the means to do this although they want the school curriculum to offer some reference to traditional skills and culture. It is understood that the Superintendent of Schools is attempting to establish a Band educational committee to increase Band participation in determining educational programs.

No need for new or improved educational facilities was mentioned with the exception of the busing problem.

6.5 Churches

There was no discernable concern about religious facilities on the Reserve although this topic was discussed with Band members. The clergy of the Anglican and Roman Catholic churches, however, were not interviewed. Both churches are located in the old village and both are in use; the Roman Catholic church regularly and the Anglican church occasionally. The cemetery is located just south of the Anglican church. There is no Bahai practiced on the Reserve.

In focussing further community development on the new village, consideration would have to be given to religious facilities. It may become desirable to incorporate new religious facilities as part of a central area of the new village or perhaps alternate facilities such as the Band Hall could be found. This will have to be explored further with the Band as well as with religious officials.

6.6 Water Supply

The Reserve is currently being supplied with water by means of door to door truck delivery once a week. The water comes from the Town's supply which originates from Great Slave Lake, is chlorinated and fluoridated, and subsequently delivered by pipe to Hay River New Town and by truck to the Old Town, West Channel and the Indian villages. Water is stored at each house in 45 gallon drums. It is not known if the stored water is further treated.

The Band seems quite satisfied with this method of water distribution, except for the fact that when the road is bad, as the village road frequently is, the water truck cannot pass. The resultant shortages require the residents to obtain untreated water from Hay River, water which is no doubt polluted and requires considerable effort to obtain in quantity. The Band would prefer water delivery twice a week and would like a firm contract to be arranged for water delivery. It is apparent that the Band would be prepared to assume delivery of their own water.

With further development, alternative means of providing water should be examined including: individual wells, a common well with piped distribution, and larger sealed water containers to store truck-delivered water. The development of individual or common well systems will depend strongly on the availability of potable underground water, the subsoil conditions where water mains would be required, and the economics involved.

6.7 Sewage Disposal

Sewage disposal on the Reserve is by pit privy with outhouses located in individual backyards. Additionally, there are two public privies located just to the west of the school for students. This system contrasts with Hay River New Town which has a piped collection system with treatment by two anaerobic detention ponds. Hay River Old Town and West Channel have pit privies.

Alternatives to the pit privy system, depending on economic, frost and soil conditions, could include: pump-out tanks with 'honey-wagon' pick-up; septic systems; or piped collection and lagoon disposal. The Band has stated a preference for pump-out tanks in any new housing yet this system would not be practical for a small number of houses. Septic systems should be considered and would require soil tests to determine the feasibility and size of disposal fields. Septic systems are often used where large lots are provided. Piped collection and lagoon disposal might also be considered but this system is generally economical only for compact, small lot subdivisions (lots at 10,000 sq. ft. or less).

6.8 Garbage Disposal

Disposal of garbage is currently being provided on a contract basis with truck collection and disposal at the town dump. While the method of disposal is appropriate, the existing system is not considered satisfactory by the Band. An unwritten contract has been attributed as the cause of irregular and sub-standard service. The condition of the road no doubt contributes to this as well.

A written contract outlining the regularity of collection as well as road improvements would no doubt improve the standard of service. The Band itself has expressed an interest in providing garbage collection service but lacks a truck.

A local dump exists on the Reserve approximately half way between the two villages. This should be discontinued or its use at least controlled so as to develop it more along the lines of a sanitary landfill.

6.9

Police Protection

The R.C.M.P. provides police protection for both the Town of Hay River and the Reserve from a local detachment in the new town. The Town additionally uses a municipal police force to deal with municipal laws. The Band Council additionally assumes police duties on the Reserve periodically on an emergency basis.

The service which the R.C.M.P. provides to the Reserve is hampered greatly by the travel distance from the Town to the Reserve and by the condition of the roads particularly in adverse weather. This is of concern to the Band particularly in emergency situations and it is for this reason that they must assume police duties themselves on occasion.

The Band requested that a special constable be established through the hiring of a Reserve Indian to work under the supervision of the R.C.M.P. This proposal would no doubt provide a more immediate service to the Band.

6.10

Fire Protection

Fire protection, a municipal responsibility, is provided by a volunteer fire department. While this service is available to the Reserve, it is virtually useless due to the length of travel time required to reach the Reserve communities. The service could be of greater potential benefit with improvements to the roads. The wooden structure of the houses along with the use of wood stoves year round and constantly in the winter makes the threat of fire very serious. Additionally, the close spacing of many of the houses could readily bring about a multiple dwelling fire. The lack of alternate housing on the Reserve would cause burnt-out families great hardship in getting re-established particularly during the winter.

Fire protection on the Reserve should be re-examined with a view to providing better on-Reserve facilities to improve the time element involved. Existing equipment includes two portable communal fire extinguishers in the new village. A Reserve resident should be appointed to ensure that these are kept filled and serviceable. A number of private water-filled extinguishers were observed at some houses. Until better communal facilities are available, it would be worthwhile to see that each house has a serviceable fire extinguisher.

6.11

Recreation

While recreation was not mentioned as a high priority of the Band, formal facilities and programs are lacking on the Reserve and new facilities are desired. Currently some of the residents go to Hay River for entertainment and recreation. This is inadequate especially for the younger people. Formal sports at the Reserve school are not extensive. It is not known how much participation exists for those students attending the Hay River school.

The existence of the school provides a good Reserve focal point for the provision of more formal recreational facilities. Facilities such as a hockey rink, play field and baseball diamond could readily be constructed and, with the Band members establishing teams and events and providing supervision, a number of year-round opportunities could be generated. Additionally, other activities could be developed by the Band based on more traditional pursuits should the members so desire.

While a recreational proposal has previously been prepared for the new village, this was considered tentative due to the lack of an overall community plan. Recreational facilities and programs should be treated as a part of a Reserve plan and based on further discussions with the Band regarding what opportunities to provide.

6.12

Telephones

There was some concern by the Band that the telephone system which was to replace the single radio-phone had not been provided as promised. The explanation for the delay was that CN Telecommunications had lost the feeder cable. Telephone service is desired by the Band members and, more importantly, is necessary for summoning emergency police, fire or medical help. The situation of the missing cable should be rectified and the final installation made promptly.

6.13

Gardens

With an average killing frost-free period of 126 days and a mean July temperature of 57.9°F, the growing of some crops, primarily vegetables, for personal or for a local market is possible. A number of personal gardens and a larger communal garden exist on the Reserve. Cabbages were the only produce in evidence, but other crops may be grown as well particularly with the use of greenhouses. 'Paradise Gardens', just south of the Town and on a large meander of the Hay River, produces most types of vegetables and even fruits such as strawberries.

It was reported that a number of individuals are interested in continuing to have gardens. In further land use planning the provision of gardens should be considered in lotting and, as suitable soil is limited on the Reserve, a communal area should be designated for gardening purposes. Furthermore, the construction of a greenhouse can be simple and inexpensive using any softwood lumber and polyethylene plastic film. One could readily be constructed on the Reserve as an illustration.

6.14**Freezer**

A community freezer is located in a shed in the new village for Band use but is not electrically connected. Band members expressed a preference for drying fish and game for household use and did not consider the connecting of the freezer a high priority item.

6.15**Firewood**

Firewood was singled out by the Band as an item of continuing concern. Reserve houses are equipped with woodstoves for cooking and for heating. A year round supply of firewood is therefore required, most especially during the winter season. The poor insulation and heat circulation of the houses aggravates the need for firewood in the winter.

As there is a Reserve-wide demand for wood and as there are a number of old or incapacitated residents who cannot get their own wood, the Band proposes to obtain wood on a communal basis. To do this it would supply the labour, but would require or truck on a rental basis as well as money for gas and oil to transport the wood from the cutting area to the houses. This scheme has been proposed for the fall of 1975 and presumably could occur each fall to provide the winter wood supply for the Band (200 cords).

Future Reserve planning will have to recognize this need perhaps through providing for a controlled cutting program, through designating cutting areas, through locating community woodpiles, and through house-to-house wood delivery.

7.0**Observations — Economic Development**

The economic structure of the Town of Hay River is quite diversified and particularly during the spring to fall period has a large employment base. In contrast, the Reserve economy is quite limited with most employment oriented toward the traditional pursuits of fishing, hunting and trapping. Labouring, both permanent and casual, is probably the next largest occupational group. A few Band members are employed in administration particularly with the Territorial government. Two others are teachers. While N.T.C.L. and a number of other companies have indicated that a variety of positions, particularly in the spring to fall period, are open to Indians, the Reserve residents find it difficult to live on one side of the river and work on the other.

Further economic development for the Band probably could best be realized through providing more on-Reserve work opportunities. The Band has recognized this and has been considering the leasing of Reserve land particularly in the north-west corner for industrial development. Negotiations have been underway with Northern Transportation Company for some time regarding the development of a 350 acre parcel just south of the old village. A number of other leasing interests exist as well, mostly associated with the barging industry.

The north-west corner of the Reserve in particular is of prime use for industrial activities associated with cargo shipping. While alternate locations for such industrial expansion are available, e.g. West Channel, the Reserve bank of the east channel is considered to be the best remaining area. If the Mackenzie Valley pipeline is built the pressures on Hay River for shipping support will increase greatly. The Band should therefore be in a position to participate in this expansion. It is therefore desirable to develop a coordinated economic development plan for the Reserve based on what uses would be most suited to the Reserve and utilizing land designated and zoned for industrial purposes.

In addition to having a number of positive and negative implications for the Town of Hay River, industrial development on the Reserve would have a number of positive and negative impacts for the Band. Among the positive impacts are: increased on-Reserve employment opportunities, lease revenues, improved road access to the Town of Hay River possibly by means of a bridge, and improved police and fire protection and possibly other services. Among the negative impacts are: a barrier effect between the old and new villages, noise and land damage from the heavy equipment, and abandoned facilities such as a railway spur following expiration of the lease. Abandoned facilities, however, could be re-used to advantage at the end of a lease.

A land use plan should identify land which would be suitable to both the Band and the potential lessee and include appropriate provisions in light of industrial potential. Such provisions should include: designated development areas, building standards and regulations, noise and pollution control by-laws, servicing arrangements, and regulations regarding the abandonment of facilities.

The economic potential of the Reserve might also be realized in other ways. Residential development, for example, was proposed in the Hay River town plan of 1970. While land for residential expansion is sufficient for at least the next ten years, it is possible that expansion onto the Reserve might become feasible in subsequent years. Gravel extraction has been suggested as another potential source of revenue. It is believed, however, that commercially exploitable quantities of gravel have not yet been found on the Reserve.

8.0

Observations – Social Development

While social development was not considered extensively during the course of the study, a number of situations were observed and are discussed below.

8.1

There was an expressed concern by all parties contacted that the standard of living on the Reserve be raised through cooperation and coordination particularly in the governmental sector. The Band Council in turn was concerned with the development of a relationship of mutual trust and goodwill among those involved with Reserve development. They see this as a means to meeting the short and long term requirements of the Band. The Band Council is well-established as the Band's governing authority and is prepared to conduct its duties accordingly.

8.2

While the Reserve Communities are only a river width from the Hay River towns, the river acts as a major social barrier particularly during the spring and fall when the only connection is the fourteen mile road. A bridge connecting perhaps the new town with the east bank would no doubt affect the socialization of the two. At the present time, the relationship between the Indians and non-Indians is reported to be one of tolerance or mutually acceptable segregation. Apparently there is little formal effort to structure involvement between the groups and there is little informal initiative on the part of the residents themselves.

8.3

The Band depends quite heavily on services provided by educational, health and social welfare agencies. Education they view as the means by which their children and subsequent generations can continue to maintain livelihoods as their dependance on hunting, trapping and fishing diminishes. Social welfare they view as supplementary to their hunting, trapping and fishing pursuits. For many of the members, welfare is necessary particularly in the fall to get the children established in school particularly if the men are off fishing or hunting. For the old and disabled, welfare is a necessity as the Band is unable to provide for these people from its own resources.

8.4

If further development on the Reserve were concentrated in the new village, it is likely that some of the residents in the old village would prefer to remain where they are. This would necessitate continuation of service to the old village and a two-pronged planning approach by which the old village would be upgraded along with the development of the new village.

8.5

A number of Band members have moved off the Reserve for housing, employment or other reasons. It was the opinion of the Chief that many of these people might move back if conditions were to improve and especially with the provision of new housing. Currently it is very difficult to obtain an accurate estimate of total Band population as well as to understand how migration is affecting the size of the Reserve population. Such information has implications for the provision of housing, servicing, etc.

9.0

Observations – Other Issues

9.1

Fishing on Buffalo Lake

The Band depends heavily, and particularly in the fall and winter, on fish and game stock in Wood Buffalo National Park. The Band is ensured unlimited hunting and trapping in the Park with the exception of the ban on the killing of buffalo. Additionally the Band has unlimited fishing rights on Buffalo Lake. The Band has an encampment at the upper mouth of Buffalo River which is used as a fishing camp in the Fall. It is during this time that the Band obtains much of the inconnu which will provide food for Band members and their sled dogs during the winter.

The pattern of the inconnu is such that they winter in Great Slave Lake, swim up to Buffalo Lake in the spring, and back down to Great Slave in the fall. The water around the lower mouth of Buffalo River always breaks up earlier than the rest of Great Slave Lake in the spring. This water becomes a productive and popular spot for commercial fishermen at that time of year. Consequently the fish stock reaching Buffalo Lake is greatly depleted. In recent years the Band has noticed a markable drop in their fall catches on Buffalo Lake. Ten years ago the Lake could provide two hundred sticks (four fish per stick) for each family. In more recent years the Band has been catching forty sticks for each family using the same techniques.

This case illustrates the Band's concern that their game stocks are diminishing and as that happens they will become more dependant on welfare until alternative livelihoods are found. The Band has requested that they be given priority over the commercial fishermen and that commercial fishing be regulated or banned at the lower mouth of Buffalo River particularly in the spring.

10.

Physical Planning Recommendations

Based on the foregoing analysis and general recommendations, the following more specific recommendations are made with regard to physical planning. These recommendations are to be considered intermediary rather than final in that they are intended to direct further action toward a physical plan rather than to be such a plan. They may be modified as more information on the land, the plans of other levels of government, and the concerns of the Band becomes available. With the exception of the first item, they are not prioritized as they are each considered integral to the overall plan which is envisaged.

10.1 Roads

As discussed, access and village road improvements will provide immediate and tangible results toward alleviating the most urgent problems confronting the Reserve communities. While a road engineer should be consulted with regard to specific requirements, it is felt that widening and re-surfacing of the access road and the complete rebuilding of the village road are required. The two roads should be brought up to and maintained at a safe, durable and all-weather standard in order that essential community services may be ensured at a minimal level at least. Other roads and railines will have to be considered when the requirements of industrial tenants become known.

10.2 Development Priorities

The Reserve should be divided and zoned into areas of high, medium and low development priority based on land use capability, Band concerns, etc. These zones should be sufficient to direct development by area and by sector (residential, industrial, wood cutting, trapping, etc.) so as to control overall land use and to be able to allocate development resources to maximum advantage. Of particular concern from the point of view of this study are: the designation of the new village and its surrounding area as a high priority community development area which would include most new Reserve housing and community facilities; the designation of Island A and the mainland to the east for industrial development; and the designation of areas which should be retained for hunting, fishing and trapping.

10.3 New Village Development

The new village should receive priority for new Indian community development. It would include: most new Indian housing, the new Band Hall, most recreational facilities, a Reserve store, and emphasis on servicing improvements. The area surrounding the existing new village is considered to be most suitable for further community expansion. It has the major advantages of high ground, good soil conditions, good access, good view and isolation from the proposed industrial area to the north-east.

10.4 Old Village Development

This community will likely continue despite the proposed focus of further development in the new village. Development for the old village should feature the upgrading and maintenance of existing facilities for those residents who choose to remain. The cemetery should be designated for preservation. The area has basic disadvantages of susceptibility to flooding, poor access, industrial noise, and potential separation from the rest of the Reserve through industrial development.

10.5 Industrial Development

An area or areas should be designated and set aside for potential industrial development for non-Indian use. One 350 area parcel has, in effect, been set aside for development by N.T.C.L. should such arrangements be concluded. Consideration should be given to the accommodation of other tenants in that area or other areas as well.

10.6 Other Areas

The remainder of the Reserve is in limited use at this time mostly by Indians for hunting, trapping, and wood-cutting. While the Band has its own system for designating hunting and trapping areas, these should be confirmed by official designation. Wood-cutting areas should also be designated.

10.7 New Housing

New housing should be the main thrust of further community development on the Reserve. This housing should be located in the vicinity of the new village and should be based on a complete survey of existing stock and projected requirements. The Band has a stated preference for a standard sub-division layout with large lots. Size of lots and soil conditions in future residential areas will dictate servicing possibilities. Zoning should ensure that residential areas will be free of non-compatible uses such as a garbage dump or certain industries. Development areas should be phased so as to order and accommodate both existing and emergent housing needs.

The design of new Band housing requires reconsideration of past housing styles. New design alternatives should feature a larger net floor area, more bedrooms, improved heat circulation, improved heat retention, more storage space, and greater fire resistance. These and other design criteria should be discussed with the Band.

10.8 Community Facilities

The development of new community facilities should be concentrated in the new village and preferably in a core area which would maximize accessibility to new and existing housing. Supplementary facilities could be provided in the old village as necessary. The core areas should be planned to accommodate a new Band Hall, a Reserve store, recreational facilities, the communal freezer and any other community facilities which may be developed.

Concerning the Band Hall, the Band's applications for capital and labour funds should be responded to so that this requirement may be met one way or another. Upon completion of a new hall the old building should be relocated for storage use. The design of the Band Hall should be discussed with the Band Council.

10.9 Churches

In view of the proposed development priority for the new village, the continued use of the churches in the old villages should be discussed with religious authorities. The planning of religious facilities in the new village should be considered particularly with regard to design, location and funding implications.

10.10 Recreation

Facilities as well as programs, instruction and supervision should be developed in both communities. These should provide opportunities for children and adults on a year-round basis. While facilities should be discussed further with the Band, the following should be considered: a hockey rink, a toboggan slide, a baseball diamond and a general play field. Many of such facilities would ideally be located near the school.

10.11 Water Supply

The existing water supply arrangement should be re-established on a written contract basis so that, once road improvements are made, weekly or twice weekly delivery will be guaranteed. Alternative means of water supply should be investigated particularly for new residential development. Such means should be evaluated upon criteria of: cost, quality of water provided, assurance of availability, susceptibility to freezing, etc. At least the following should be considered:

- (a) individual wells based on large lots
- (b) a common well with piped distribution
- (c) truck delivery to larger, sealed holding tanks
- (d) piped across the River from the new town

10.12 Sewerage

Alternative means of sewage disposal should be considered particularly in view of new housing development and particularly where alternate means of water supply may be introduced. The following alternative methods might prove feasible depending on lot size, soil conditions and frost:

- (a) pump-out tanks with truck collection

- (b) septic tank with leach pit

- (c) septic tank with septic field

- (d) piped collection and lagoon treatment

10.13 Garbage

The continuation of the existing truck collection arrangement should be re-established on the basis of a written contract which will ensure regularity of delivery especially following road repairs. Alternatively the Band could attempt to establish an improved standard of service through tendering for a new contractor. The use of the municipal dump should be continued while the use of the local dump on the Reserve should be discontinued.

10.14 Police Protection

The appointment of a resident Band member as a Special Constable would provide the Band with a more immediate means by which to ensure police protection. Support would be required of the Hay River R.C.M.P. detachment. This proposal should be discussed with the R.C.M.P. and an answer to the Band's request for such a service provided.

10.15 Fire Protection

A suitable fire extinguisher should be provided to each household with clear operating instructions. Band members should be organized to assist each other with available equipment in the event of a house fire. More permanent communal arrangements are required at least to retard any fires until municipal equipment will arrive.

11. Role of Environmental Services Division

Upon its further involvement in the planning of the Reserve, Environmental Services Division would continue this base study into a more detailed consideration of site and community conditions and design solutions. Services which could be provided in combination toward this effort or in part as supportive to planning action by other authorities would include:

11.1 Terrain Assessment

The assessment is an examination through aerial photographic interpretation, soil and drainage maps and soil testing of site conditions on the Reserve particularly with a view to locating new housing and other buildings, to constructing underground services, and to routing of new roads and a rail spur. This assessment would include the production of necessary maps and other materials showing ranked areas of development capability, hazard areas, areas requiring environmental protection, etc. Additionally terrain standards for further development on the Reserve could be prepared.

11.2

Site Planning

The planning of individual components of the Reserve development plan includes a housing sub-division with lots, roads and services; site plans for other facilities such as the Band Hall and the recreational area; and the selection and designation of phased future development areas which will provide for expansion in the various land uses. Landscaping and site improvement measures would be provided.

11.3

Servicing Plan

Based on terrain assessment and the planning of individual components, a servicing plan for both Reserve communities could be prepared. This would discuss, evaluate and recommend various alternatives for water supply, sewage disposal and other services which could be provided individually or collectively and with or without the sharing of facilities with the Town of Hay River. The servicing plan would include a cost analysis of alternatives and also a recommended standard for the operation and maintenance of the facilities.

11.4

By-Laws

Based on the physical development plan, assistance could be provided with regard to the preparation of by-laws which would regulate and control activities associated with or generated by the new facilities. Such by-laws which have been provided on other Reserves and which could be provided on the Hay River Reserve could relate to amongst others:

- burning grass, weeds and rubbish
- construction and repair of buildings

- fencing
- fire protection
- garbage and waste
- recreation program
- sanitation and health
- use of community hall
- water supply and sewage
- zoning

11.5

Building Design

Architectural services could be provided with regard to preparing designs for new housing, a new Band Hall, a commercial building, greenhouses or any other facility proposed for the Reserve communities. Additionally building regulations and design standards could be developed to guide the design and construction of other buildings, such as those associated with industrial tenants, on the Reserve. These architectural services would be provided in collaboration with the Band and other Branch personnel.

11.6

Audio-visual Presentations

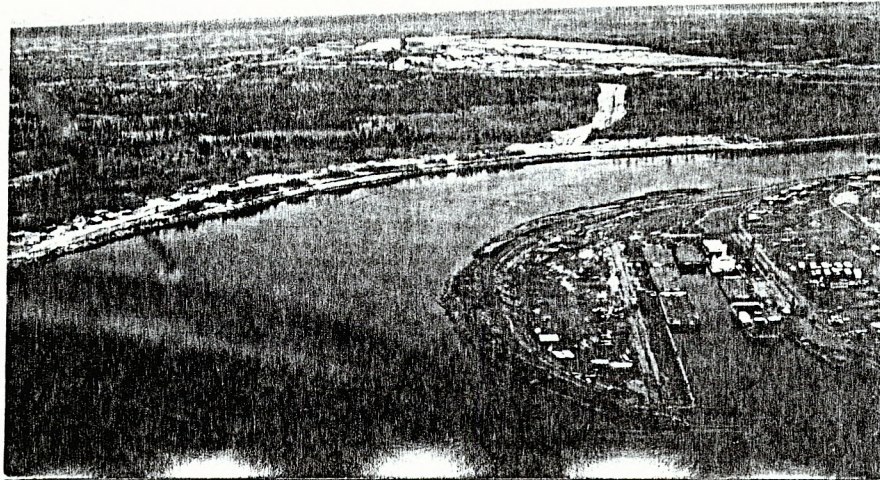
Associated with the preparation and approvals process leading to an official plan, is the need for presentations to the various levels of authority concerned, to Reserve residents and to potential Reserve tenants. Audio-visual materials which illustrate and support the elements of the plan require detailed consideration if they are to have maximum effect. Such materials should be included as a part of the on-going planning process.

11.7

Plan Co-ordination

On-going coordination of firstly, the above and other elements which comprise a physical plan and, secondly, the participants or authorities involved in the preparation of the plan is the key to an effective plan supported by the Band and others concerned. Coordination must continue through all phases of the process including: research and data collection, analysis of alternative development schemes, recommendations, approvals and implementations.

12. Photographs



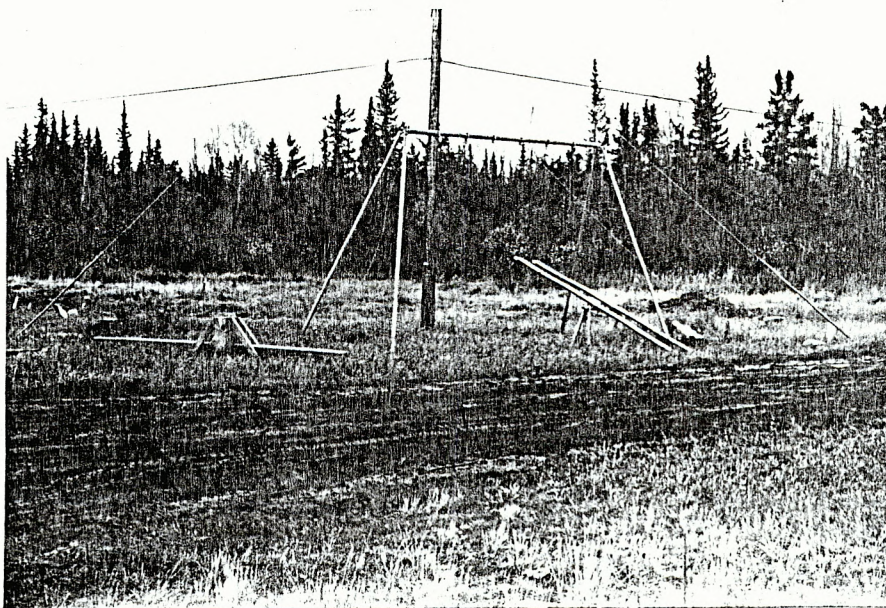
New Village (left) - Vale Island (right)



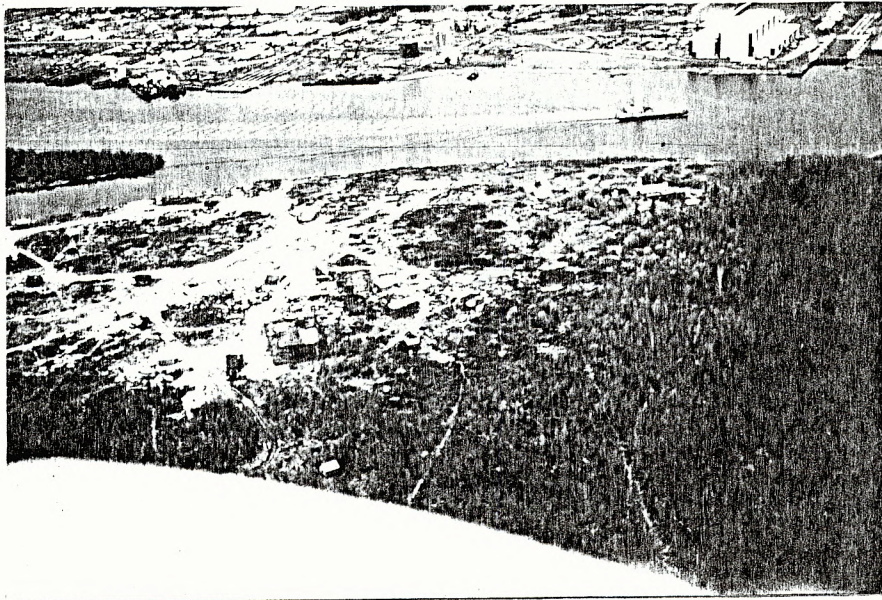
New Village - Water Delivery



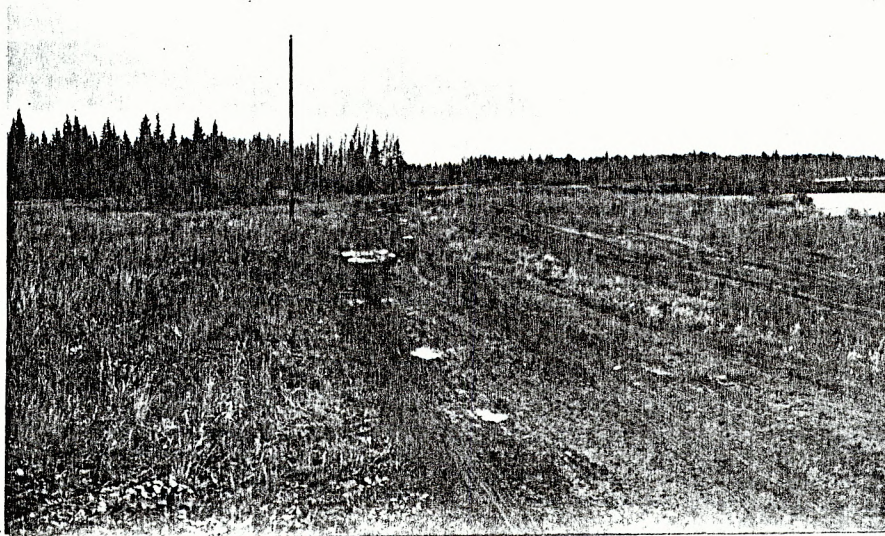
New Village - School and Band Hall



New Village - Playground



Old Village



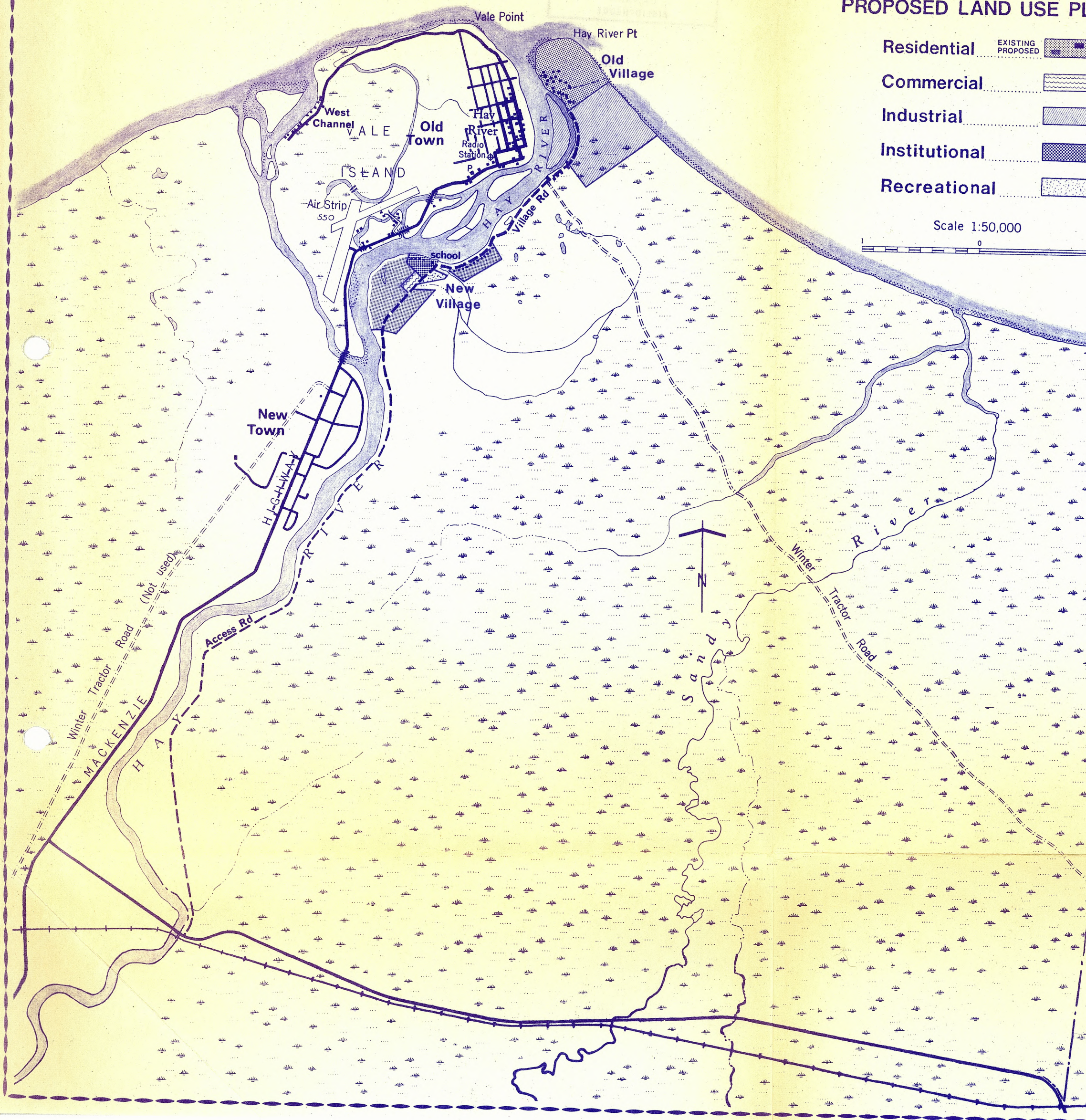
Village Road

HAY RIVER

PROPOSED LAND USE PLAN

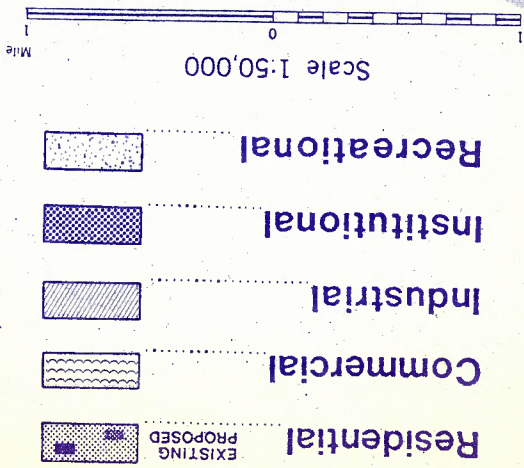
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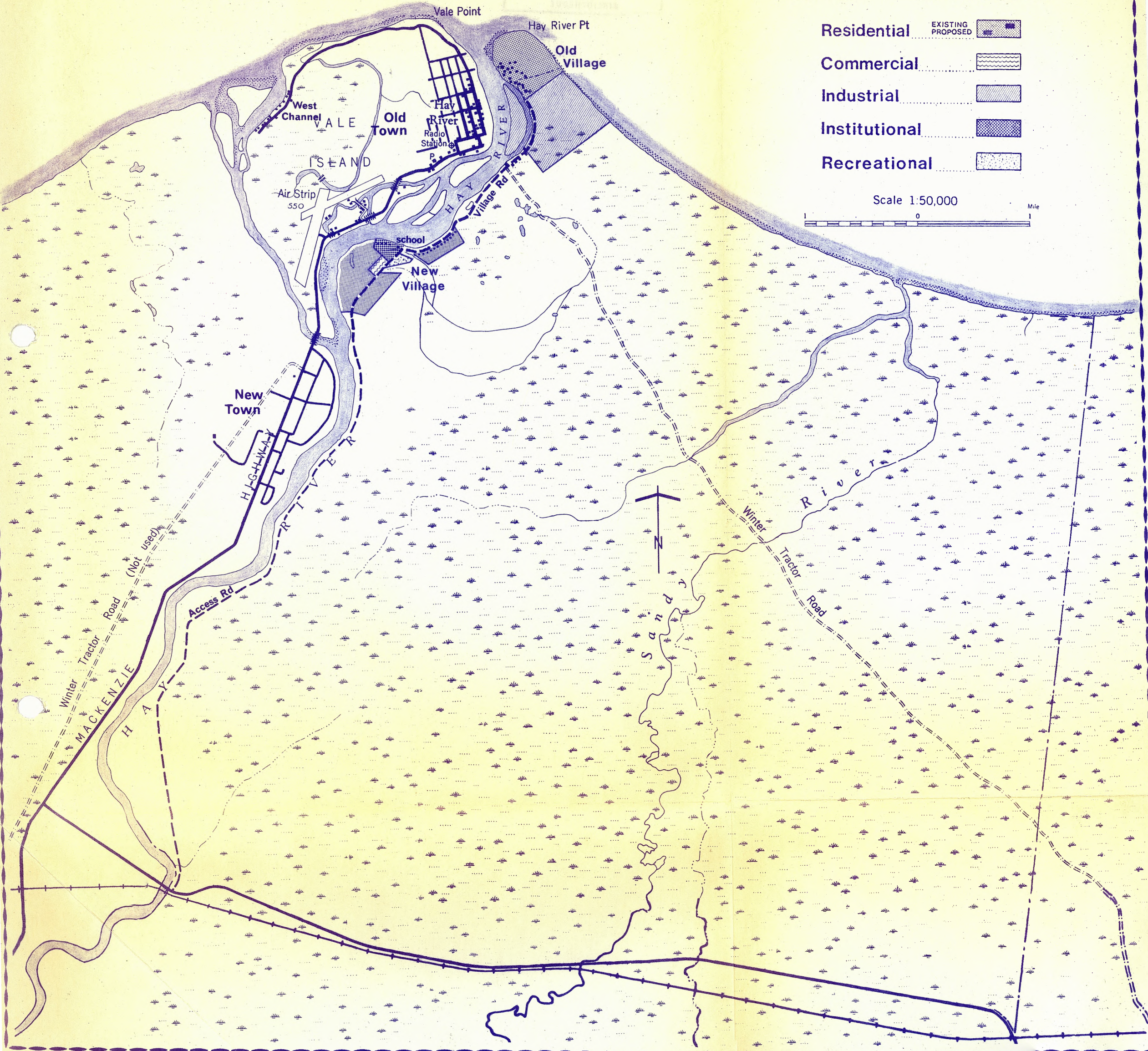
HAY RIVER i.r.

PROPOSED LAND USE PLAN



HAY RIVER i.r.

PROPOSED LAND USE PLAN



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- Commercial
- Industrial
- Institutional
- Recreational

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