Northwest Territories Kitikmeot Region

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1661 NUNAVUT DIST WB (land use plan map)

December 14, 1995

DIAND
P.O. Box 1500
Yellowknife, NT
X1A 2R3

Attention: Brian Collins

Re: Taloyoak Water and Sanitation Systems Layout Plans/Drawings.

I refer to your phone request of this morning and enclose here with a Land Use Plan of Taloyoak. It shows the location of the water and sanitation facilities. The Land Use Plan plus the Water and Sanitation section of the attached community profile sholud answer any questions a set of engineering drawings would - if we could find the drawings.

Please call me at 403-983-7269, if you have any questions.

Sincerely,

K.O.(Kojo) Kumi, P.Eng.
Municipal Engineer

Sanikiluaq, N.W.T.. January, 1991.

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Vista Engineering. Environmental Costs and Liabilities of Municipal Facilities in the NWT. March, 1995.

COMMUNITY PROFILE
TALO YOAIC

TALOYOAK

A General

A.1 Location

Taloyoak, formerly known as Spence Bay, is located on the west coast of Boothia Peninsula, 460 air km east of Cambridge Bay and 1,224 air km northeast of Yellowknife. The settlement is situated in a narrow inlet projecting northeastward from the head of Spence Bay. The western side of the inlet has cliffs rising to 23 m, with a point of land projecting halfway across the inlet to form an inner and outer harbour. The eastern side is rocky with cliffs rising to 14 m. The Community is located at 69°32' N latitude and 93°32' W longitude.

A.2 Geology and Terrain

The relief and topography of the area are quite varied. The eastern side of the Inlet is typified by rugged bedrock terrain, while the western side tends be more subdued, hummocky relief. Irregular, weathered bedrock hills, outcrops and boulder fields are common. Boulder fields within the townsite are a major obstacle to orderly development. The small valleys between outcrops contain glacial drift and rock flour deposits thinly overlain by tundra vegetation. Small, shallow lakes are also common. The boulder glacial till, on which the community is situated, is underlain by Precambrian granite and gneiss with Palaeozoic limestone. The beach material in the area has a very course composition and is generally not suitable for construction purposes.

Taloyoak is within the zone of continuous permafrost. Perennially frozen ground occurs throughout the area, usually at a shallow depth. Depth to permafrost varies between 46 cm to 94 cm. Active layer depths are expected to vary from about 0.5 m, in poorly drained areas, to about 1 m, in well-drained gravelly areas. Greater depths of thaw may occur beneath the deeper lakes and larger streams.

A.3 Vegetation

Only lichens, mosses and willows are hardy enough to grow in this harsh environment. Some grasses grow in the more poorly drained depressions.

A.4 Climate

Taloyoak receives an average of 6.5 cm of rainfall and 103 cm of snowfall per year. The total precipitation is about 18.1 cm annually. The July mean high and low temperatures are 11.5° C and 3.2° C, respectively. The January mean high and low temperatures are -29.7° C and -39.3° C, respectively. The winds are from the east and southeast.

As of 1994, the Housing Corporation owned 115 housing units. The Housing Assistance Program, the Alternative Housing Program and Government Lease-to-Own units accounted for 15 homes in the community.

A.8 Commercial Accommodation

The Paleajook Hotel accommodates twelve guests and the Boothia Inn accommodates ten.

B General Municipal Facilities and Services

B.1 Recreation and Culture

Taloyoak's gymnasium was built in 1974 as part of the school. The community uses the gym during the evenings and weekends. The E. Lyall Recreation Complex, which includes an arena and community hall, was completed in January of 1992. The Moses Teelktaq Memorial Pool, completed July, 1995, is a wooden structure with a seasonal above-ground pool. There are three playgrounds in the community: one school playground and two tot-lots (one completed in 1993 and one in 1995). The slow-pitch diamond includes a backstop and a level playing surface. There is also a developed trail system. Taloyoak has a youth centre, community library, Easter Games and an active recreation committee.

B.2 Education

The Netsilik School teaches grades K-10. Eight teachers and three language specialists are employed. There is one resident adult educator for vocational and continuing education.

B.3 Health

The current Taloyoak Health Centre was built in 1987. The facility is 882 m^2 in area and contains four medical beds, two bassinets and two cribs. Two nurses, one dental technician and one community health worker are employed.

B.4 Fire Protection

Fire protection in Taloyoak consists of a volunteer fire brigade. Equipment includes a 1984 IHC model 1824 L triple combination pumper and a telephone alarm system. The community one-bay firehall is attached to the hamlet complex.

B.5 Other Municipal Services and Buildings

A three-person RCMP detachment serves the Hamlet. There is a two-person community social services office, as well as a Drug and Alcohol Education Committee, Alcohol Drop-in Centre and Youth Justice Committee.

Mail is delivered three times per week. NorthwesTel (local and

long distance), CBC Radio and CBC Television are provided via the Anik Satellite. There is also a community radio station. NWTPC, with the area office at Cambridge Bay, provides power with a 1,610 kW diesel generator.

Other MACA-provided buildings include, staff housing, a Hamlet office, a three-bay maintenance garage (renovated in 1994) and two three-bay parking garages.

C Water and Sanitation

C.1 Water Supply and Treatment

Construction of the existing water supply scheme was completed in November, 1973. Situated immediately northeast of the community, Water Supply Lake is the source of potable water for the community. The water-supply system is a heated, two-pipe (dual system), continuous circulating, self-draining system. Heat traces have been provided to prevent freezing under emergency conditions and to preheat the pipes before start-up during winter operation.

The intake system extends out into Water Supply Lake. A wetwell is located in approximately 2.5 m of water. The pumphouse is a 64 m^2 building, situated on a small concrete causeway extending into the lake. The pumps are electric and submersible. An intake screen of galvanized steel metal mesh prevents objects from entering the pumps.

A utilidor extends from the intake well to the truckfill/storage building. The Health Centre is serviced directly off this utilidor. Heat exchangers located in the water storage building provide heat to the water returning to the intake pumphouse. Distribution pumps are used to transfer water from the main storage tank to the water trucks.

Chlorination is the only treatment the raw water receives. Facilities to treat and store the water are housed in the truck distribution building. A hypochlorinator and mixing tank are used for chlorination by injection.

Taloyoak's supply water is of good chemical quality for domestic use. Based on chemical analysis, the water is clear, moderately hard, slightly alkaline, well-buffered, and has a moderate amount of dissolved solids. Comparison of the chemical analysis for the raw and treated water samples to the GCDWQ showed those parameters tested as below the recommended maximum limits.

C.2 Water Storage and Distribution

The lake is 13.7 m deep, with a useful storage capacity beneath the ice of about 340 million L. The truckfill/ water storage building has a water storage capacity of 11,365 L. The community water storage tank is 45,000 L and takes 12-15 hours to fill.

As indicated earlier, water is supplied to the Health Centre directly from the supply water line since it is situated beside the utilidor. A trucked-water distribution system serves the rest of the community. The Hamlet has two 4,500 L tank trucks for distribution with water being delivered to residences every other day. The average size of a residential tank is 1,100 L.

C.3 Sewage Collection and Disposal

At present, most dwellings are equipped with pressure plumbing systems and sewage holding tanks. Pumpout sewage is collected by three 4,500 L vacuum sewage tank trucks (1985, 1989 and 1992) twice a week. Honey bags are collected daily with a stake truck.

At present, sewage is discharged into a single-cell sewage lagoon, 37,500 m² in area, 2.5 km northwest of the community. Bagged sewage is placed in a cell adjacent to the sewage lagoon. A new project includes the development of a large tundra pond located 3 km west of the community and 500 m west of the airport as a primary settling pond. A 2.8 km access road will be built to accommodate access to the site.

C.4 Solid Waste Collection and Disposal

Domestic solid waste is collected twice per week from 205 L oil drums in front of individual homes. A two-person crew collects the waste using a Ford model F-350 Haul-All (a new truck is planned for 1995). According to by-laws, the burning of wastes in barrels at the home is not permitted.

The most recent disposal site, 2.2 km northwest of the community, was completed in 1989. The landfill occupies an area 45,000 m² and was designed to service the community for twenty years. The disposal site is fenced but access to the area is not controlled.

Wastes are burned at the disposal site once a week and the adjacent hillside provides a granular source for cover material.

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Municipal and Community Affairs, Government of the Northwest Territories "Community Works Programs and Sport and Rec Programs."

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WHALE COVE

A General

A.1 Location

Whale Cove is located on the point of a peninsula on the west coast of Hudson Bay at 62°10' N, 92°36' W. It is 80 air km south of Rankin Inlet and 1,139 km east of Yellowknife.

A.2 Geology and Terrain

Whale Cove lies in a south facing sheltered cove, set on a grassy boulder-studded area which gently rises inland. It is surrounded by a ridge of Precambrian rock, rising to an elevation of 15-20 m. Rocky outcrops are common in the community.

The grassy area on which the community is located has a boulder strewn overburden of course gravel and sand up to 1 m deep. It is overlain by a thin layer of organic soil. The maximum annual thaw layer is not very thick; the active layer of permafrost extends to about 1 m.

A.3 Vegetation

Tundra vegetation such as mosses and lichens are common among the low hills and on the rocky coast of Whale Cove.

A.4 Climate

Whale Cove receives an average of 16.0 cm of rainfall and 118.1 cm of snowfall per year. The total precipitation is 27.8 cm. The July mean high and low temperatures are 12.5° C and 4.2° C, respectively. The January mean high and low temperatures are -28.0° C and -34.7° C, respectively. Winds are northwest at 24 km/h.

A.5 Community History and Economy

The first Europeans to explore the Whale Cove area were Captain Thomas Button in 1613, and Captain Luke Foxe in 1631. The Hudson Bay Company began trading with people indigenous to the area during the 18th century. At the same time, mineral exploration was the focus of many journeys to the area.

Whale Cove was officially established in 1959 by the Department of Northern Affairs as a way of absorbing the survivors of inland hunting camps where people had starved in significant numbers during 1957 and 1958. It was thought that the Inuit could adapt their technologies to the use of coastal resources.

The Whale Cove area is abundant in game resources; hunting, fishing and trapping constitute the major economic activities of

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Various, sources from earlier research: J. Burr, L. McMahon.

Vista Engineering. Environmental Costs and Liabilities of Municipal Facilities in the NWT. March, 1995.

Taloyoak
LAND USE PLAN

1.0 INTRODUCTION

GOALS OF THE PLAN

3.0 RESIDENTIAL

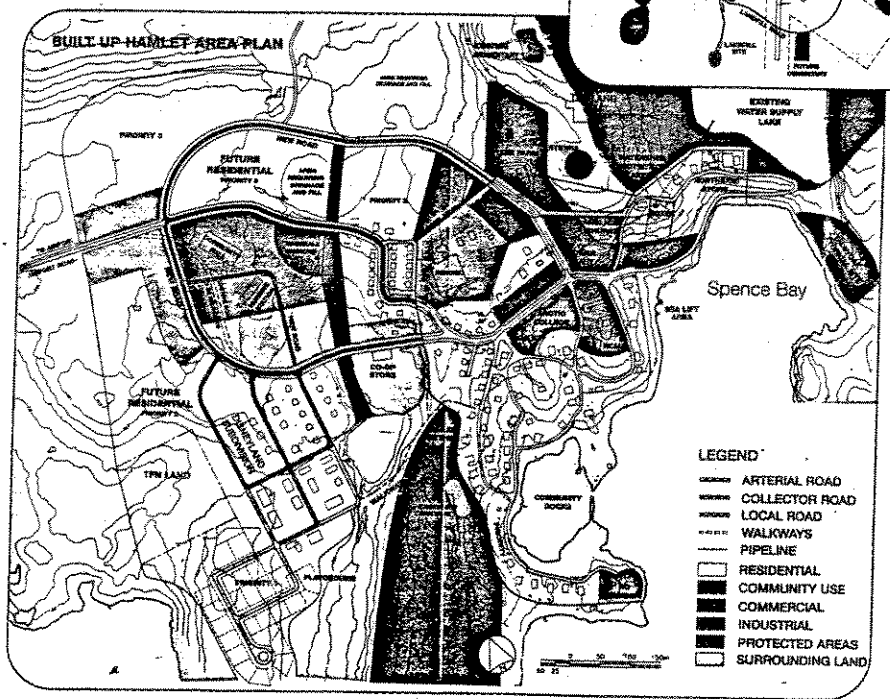
4.0 COMMUNITY USE AREAS

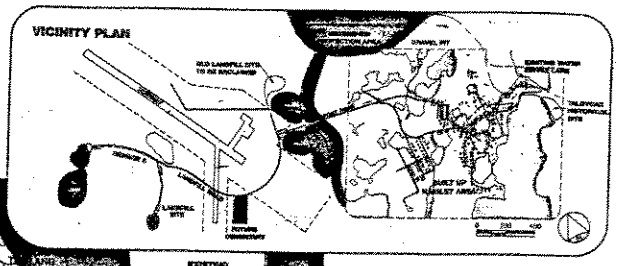
5.0 COMMERCIAL

6.0 INDUSTRIAL

7.0 PROTECTED AREAS

8.0 SURROUNDING LAND





9.0 TRANSPORTATION

10.0 DRAINAGE

11.0 GENERAL

SPENCE BAY - N7L5-0775 - IN CR

Sewage Disposal System Spence Bay, N.W.T.	Jun 1979	Vol. 1
Pre-Design Report Sewage Disposal System Spence Bay, N.W.T.	Jan. 1979	Vol. 1
Spence Bay - Aerial Photos Aug. 1972 - July 1977	July 1977	Vol. 1
Sewage Disposal Site Spence Bay, N.W.T.	March 1974	Vol. 1
Report Re: Sewage Disposal Spence Bay, N.W.T.	Feb. 1970	Vol. 1

Cross Reference file N7L4-0775
Hamlet of Spence Bay