Moose Deer Point First Nation
Phase I
Environmental Site Assessment

Prepared for:

Moose Deer Point First Nation

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1.0 Executive Summary

A Phase I Environmental Site Assessment (ESA) was completed for the Moose Deer Point First Nation. The objective of the Phase I ESA was to determine the environmental condition of the reserve lands prior to transferring the management of First Nation lands and resources from the Government of Canada to the First Nation.

The Phase I ESA included a review of available historical and current documentation in the form of reports and government inventories and files, and a site inspection that included interviews with various members of the First Nation.

The Phase I ESA has resulted in evidence of actual contamination on the subject property as outlined in the following table.

Evidence of Actual Contamination

Issue	Recommendation
Surface staining at existing and former above ground storage tank locations, Moose Deer Point Marina.	Perform Phase II ESA to confirm subsurface contamination and/or extent. Or Immediate removal of all contaminated soil.
Sanitary sewage leaking from failed septic beds.	Repair failed beds.

In addition, the Phase I ESA has revealed the following areas where evidence of potential contamination and issues of environmental concern exist on the subject property.

Evidence of Potential Contamination And Issues of Environmental Concern

Issue	Recommendation
Abandoned storage tanks.	Remove and properly dispose of all tanks.
Private septic systems – poor operating and structural conditions, and lack of suitable common design standards.	Establish and enforce a set of appropriate design standards and make required repairs to all septic systems.
Trailer Park sewage overflow to King Bay.	Establish and enforce minimum requirements for the use of sewage holding tanks.
Unused and abandoned wells.	Properly abandon wells to ensure protection of aquifer from surface contamination sources.
Large item garbage transfer area.	Use bins for the collection and segregation of all waste materials.
Marina Operations.	Complete Clean Marine Program Audit.

2.0 Site Description

2.1 Location and Legal Description

The Moose Deer Point (MDP) First Nation Reserve, #79, is located on the Moose Deer Point peninsula, which is along the eastern shoreline of Georgian Bay in the Province of Ontario. The reserve occupies the western portion of the peninsula along with the O'Donnel Point Provincial Nature Reserve Park. Located within the District Municipality of Muskoka and the Township of Georgian Bay, the MDP First Nation is approximately 30 km due south of Parry Sound and is accessible by Twelve Mile Bay Road from Highway 400 (formerly Highway 69), see Figure 1, Appendix A. The reserve consists of three separate parcels of land identified as Isaac Bay, King Bay, and Gordon Bay, having a combined land area of approximately 250 hectares. Two of the parcels, Isaac Bay (96 ha) and Gordon Bay (47.3 ha), are located on the southern shoreline of Twelve Mile Bay, and the third parcel, King Bay (107.3 ha) is on the north shoreline of King Bay, see SK1, SK2 and SK3, Appendix "A".

The three land parcels, which make up the MDP First Nation, are legally described as follows:

Isaac Bay -	Broken Lots, 56 & 57, Concession 9, and Part of Broken Lot 58, Concession 10, Freeman Township
Gordon Bay -	Part of Broken Lot 50, and Broken Lot 51, Concession 8, Freeman Township
King Bay -	Broken Lots 54 & 55, and Part of Lot 56, Concession 7, Freeman Township

2.2 Site History

The population of the MDP First Nation are descendants of Pottawatomi Native Americans originating from the area of what are now the states of Wisconsin and Illinois. The Pottawatomi moved to Ontario in the 1830's, eventually settling at Moose Deer Point where the MDP Reserve was first surveyed in 1917 and vested by an Order-in-Council the same year.

The MDP First Nation was physically isolated until 1958 when Highway 69 (now Highway 400) was completed. Twelve Mile Bay Road was completed in 1966 providing easy road access to the Reserve. There are no roads west of the MDP First Nation lands. The Moose Deer Point Marina on Gordon Bay opened in 1969 as the first First Nation owned and operated Marina.

2.3 Current Site and Area Characteristics

The MDP First Nation has an approximate population of 170 people residing in 62 residential units.

The land use on the reserve is a mix of residential, commercial and Community facilities. The Gordon Bay land parcel contains all of the Community run facilities, such as the administration building, Community Centre, fire station, church, rental cottages and Community operated marina. An industrial manufacturing plant, Niigon, is currently being constructed in the Gordon Bay parcel. The Isaac Bay and King Bay parcels are primarily residential with a privately operated marina and trailer parks at King Bay.

The natural setting of the MDP First Nation Reserve consists of an undulating topography with areas of exposed bedrock interspersed with wetland and forested glacial sediments.

Potable water supply is predominantly from surface water sources, and a small number of private and communal wells. Solid waste disposal is provided by the District Municipality of Muskoka. Sanitary sewage disposal is by individual septic tanks and conventional filter bed systems, and holding tanks.

The Moose Deer Point owned marina has a boat sewage pump-out holding tank. The commercial trailer parks have individual holding tanks for each trailer.

Sanitary sewage holding and septic tanks are periodically pumped out by a private contractor.

Electricity has been supplied to the reserve since 1956. The present hydro electric services are provided by Hydro One.

3.0 Records Review

3.1 Previous Reports

An extensive number of reports covering various subjects concerning the MDP First Nation were made available for this investigation. The reports included Environmental Issues Inventories, a Life Science Inventory, a Capital Planning Study, a Soil and Groundwater Evaluation, an Environmental Assessment Report, and others found in the References list.

The following information was obtained from a review of the background reports.

3.1.1 Geology

The regional topography is undulating with areas of exposed and shallow buried bedrock ridges interspersed with wetlands and forested glacial sediments. The bedrock is late to middle Precambrian and part of the formation known as the Central Greis Belt of the Grenville Province (Parkin Urban Design and LRG^2, 1999), which was formed through extensive faulting, folding, and intrusive activity during the Grenville cycle. The bedrock is veined, banded, and homogeneous pink and grey migmatic gneisses of the Moon River Subdomain of the Muskoka Domain (Parkin Urban Design and LRG^2, 1999).

The surficial geology is characterized by glaciolacustrine ice contact deposits (sand, silt, clay, and minor gravel), fill, and organic deposits, that are for the most part located between bedrock ridges. Overburden deposits typically consist of a thin layer of organic topsoil underlain by medium to coarse sand, with deeper sand deposits having alternating layer(s) of silt and clay. The deepest soil deposits are found in Isaac Bay where there is as much as 7.0 metres of sand with some clay found in the eastern portion of the bay. In Gordon and King Bays, overburden soil deposits have been found to range between 0.6 metre to 6.0 metres or more in depth.

3.1.2 Hydrology

Twelve Mile Bay, Moon River, and Miner's Creek are the main drainage channels for drainage west to Georgian Bay. Their orientation is influenced by the bedrock ridges of the Precambrian Laurentian Peneplain sloping towards Georgian Bay. Secondary lineaments trend northwest and allow for

drainage of smaller tributaries. Bedrock ridges and beaver dams result in the formation of numerous wetland areas (Parkin Urban Design and LRG[2], 1999).

3.1.3 Hydrogeology

Depth to groundwater within surficial soil deposits is typically less than 2.5 metres and the water table conforms to surface topography (Parkin Urban Design and LRG[2], 1999).

The local bedrock aquifer is found at depths ranging from 9 to 104 metres, in wells ranging in depth from 12 to 153 metres (R.J. Burnside Ltd., 1995). The bedrock aquifer yields water at rates ranging between 4 and 136 L/min., with an average yield of 40 L/min.

3.1.4 Potable Water Supply and Quality

The MDP First Nation obtains its water supply from both surface and groundwater sources. Surface water is the main source for domestic potable water supplied by individual or communal water intake systems. Only a handful of residents rely on groundwater wells as a potable water source. Wells supply potable water to Community buildings, the marina at Gordon Bay, and the new Niigon Plant.

Surface Water

King Bay residents obtain water for domestic use from King and Big David Bays. Isaac Bay residents obtain water from Isaac and Twelve Mile Bays.

There are two communal pumphouses that draw water from King and Isaac Bays for distribution, and several individual surface water pumping systems. Typical treatment consists of filters and ultraviolet disinfection (MMM, 2000).

Water samples collected in 2000 from the pump houses at Isaac Bay and King Bay satisfed the former Ontario Drinking Water Objectives (ODWO) (Aquatechnix, 2000).

Trihalomethane (THM) production potential resulting from disinfecting by chlorination was examined. A sample from King Bay produced THM levels lower than federal requirements (R.J. Burnside Ltd., 1997), while a sample from Twelve Mile Bay showed a THM potential greater than the Ontario Drinking Water Objectives (Aquatechnix, 2000).

Surface water was recommended (R.J. Burnside Ltd., 1997) as the most viable supply source of potable water for future development needs. An urban concept with separate water supplies, treatment facilities, and distribution systems, for both King and Isaac Bay Communities was recommended along with a central communal sanitary sewage treatment and collection system.

Groundwater

Groundwater has been used as a potable water supply source at one time or another for all land parcels of the MDP First Nation, and continues to be used by some Band Members.

There are a number of private and communal wells in King Bay and Isaac Bay that have been used for residential potable water supply in the past. There remain two communal wells operating in Isaac Bay.

In Gordon Bay, the MDP Marina is supplied by a dedicated well, the Community Centre well also supplies the Band Office, and two wells were recently built to supply the new Niigon Plant.

The 1997 R.J. Burnside Ltd. Study concluded that existing groundwater wells could not provide the necessary supply to support a communal water system. The wells tested during the Study were found to have poor water quality with respect to health, aesthetic and operational parameters when compared to ODWO, including bacteria levels.

It was previously recommended that Isaac Bay Well #3 be abandoned because of poor water quality (R.J. Burnside Ltd., 1995). However, it is reported that this well is still in use. A number of residents have switched to surface water supplies because of poor groundwater quality.

Hydraulic testing concluded that extended pumping of Niigon Plant wells could lower water levels in the two Gordon Bay wells. Possible solutions to this interference problem include; the construction of a third well for use by Niigon, or replacement of the Community Centre well with supply from the Niigon Wells (MMM, 2000).

3.1.5 Sewage Treatment

Sanitary sewage treatment at the MDP First Nation consists primarily of septic beds. The marina on Gordon Bay has a pump-out sewage storage tank that receives waste water from boats. Trailers at King Bay have individual holding tanks that are periodically pumped out by private contractors.

Several individual sanitary sewage systems are reported to have functional problems because of poor soil conditions. A previous development study concluded that only 35% of soils were suitable for in ground distribution trenches.

3.1.6 Natural Environment

The peninsula which the Moose Deer Point First Nation Reserve occupies is recognized as an ecologically significant area. The O'Donnell Point Provincial Nature Reserve Park extends from the western edge of the Gordon Bay parcel of the reserve to the shores of Georgian Bay.

The ecological significance stems from the peninsula's location at the edge of the Canadian Shield where both northern and southern species of plants and animals thrive. Significant flora and fauna include 13 species of orchids, and six species of reptiles and amphibians listed as either "threatened" or "vulnerable" (Parkin Urban Design & LRG[2], 1999).

The dominant tree species are Eastern Hemlock with Red Maple, Red Oak, Balsam, White Pine, and Large Tooth Aspen.

3.1.7 Niigon Manufacturing Plant

The construction of an advanced injection molding facility, referred to as Niigon Technologies Ltd. (Niigon), in the Gordon Bay parcel of MDP was preceded by an Environmental Assessment as required under the Canadian Environmental Assessment Act (CEAA) for federally funded projects. The Assessment examined the existing natural, social, and economic environments and any effects that could be expected from constructing and operating the Niigon plant. The Assessment reached the conclusion that the proposed Niigon plant would have no significant adverse effects on the natural, social, or economic environments, which would prevent the project from being approved.

The plant will have independent water supply and sanitary sewage treatment systems. A stormwater retention/treatment system is also proposed to control site surface runoff with no resulting adverse effects.

As noted, it was determined that the water demand of Niigon could adversely affect Community water supplies at the Community Centre and marina wells by lowering water table levels. Contingency measures have been proposed to restore water supply if this occurs.

Air emissions will be below Ontario Ministry of Environment guidelines. The plant will result in some increase in local traffic.

3.1.8 Environmental Issues Inventory System

The Environmental Issues Inventory System (EIIS) is a directive co-ordinated through Indian Affairs. The EIIS is meant to identify and document environmental problems and issues on inhabited reserves across Canada through a multi-phased environmental investigation process. A specific Environmental Issues Inventory (EIIS) for each reserve was to be completed consisting of the following phases:

Phase I — Environmental profile based on records review of activities on reserve lands.

Phase II — Physical investigation of reserves, both visual and initial soil and water sampling of suspicious sites.

Phase III — In-depth testing of sites discovered and confirmed to be contaminated during the Phase II portion of investigation.

Phase IV — Reporting of Phase III findings with recommendations for follow-up action.

A Phase II Report and a Phase III Report for MDP were made available and reviewed as part of this investigation. Those issues identified and relevant recommendations are summarized below.

3.1.8.1 Phase II

The Phase II of the EIIS was completed in 1994 by CH_2M Hill Engineering Ltd. The report identified three issues to be of medium significance including: an un-authorized landfill; above ground storage tanks at the First Nation operated Moose Deer Point Marina; and, above ground storage tanks at the Roads Department Yard.

Limited soil and groundwater sampling confirmed significant contamination in surface water near the unauthorized landfill, in soil from the Moose Deer Point Marina, and in soil and groundwater from the Roads Department yard (CH_2M).

The Phase II Report recommended further investigation of the above issues, as well as investigations to establish if any environmental concerns exist related

to underground storage tanks at the privately operated King Bay Marina, and at William's Wharf, which were not investigated due to accessibility and time constraints.

3.1.8.2 Phase III

The Phase III of the EIIS was completed in 1997 by Terraprobe Ltd. Based on the findings and recommendations of the Phase II Report, five specific sites were investigated including: storage tanks at three marinas, storage tanks at the Roads Department yard, and at the unauthorized landfill site.

The report concluded that there was some exceedence of Provincial and/or Federal guidelines with regard to soil and groundwater chemical concentrations, but that it was limited to localized areas.

The report recommended: that local areas of surficial soil contamination be excavated and removed; that secondary containment systems be installed below above ground storage tanks; that all storage tanks be brought into compliance with current guidelines such as the Gasoline Handling Code (GHC) for spill and overflow protection; that the underground storage tank at William's Wharf be removed; and, that the unauthorized landfill be cleaned up.

Specific site findings are noted below.

Moose Deer Point Marina

The MDP Marina had two above ground storage tanks (ASTs) and one underground storage tank (UST) which were investigated. Surficial soil staining was found at both ASTs, but there was no evidence of significant seepage into subsoils. The tanks were tested to be "tight" and the staining was assumed to be from spillage, or overfilling.

It was recommended that an estimated 30 to 40 m^3 of contaminated soil be removed, and upgrades to the tanks be made to bring them into compliance with the GHC.

King Bay Marina

The King Bay Marina had one UST which was investigated. It was found to be "tight" and vapour test results did not show presence of petroleum contamination.

It was recommended that the filling spouts be upgraded in accordance with GHC requirements.

William's Wharf Marina

The William's Wharf marina had one unused UST which was investigated. The tank was found to be dry, and vapour test results showed no petroleum contamination.

Recommendations were made that the tank be removed as per the GHC.

Roads Department Yard

The Roads Department Yard had two ASTs which were investigated. Surficial staining was observed at both tanks.

Water entering test pits showed an oily sheen and there was noticeable petroleum/diesel staining/odours present in the test pits.

The worst area was noted at the northwest corner of the existing steel shed (former Fire Hall). It was recommended that an estimated 50 to 100 m^3 of contaminated soil to be removed for full clean-up, alternatively, a partial clean-up would entail the removal of 25 m^3 of contaminated soil.

Unauthorized Landfill

An unauthorized Landfill was investigated. The dumping area contained various items including bed frames, carpets, stoves, shingles, oil containers, etc.

Previous surface water samples had low levels of napthalene, copper, lead, and zinc.

There was no evidence of petroleum staining in the area, and the most significant chemical analysis results were low pH levels for all soil samples.

It was recommended that all waste materials be removed from the area and delivered to a licensed landfill.

3.1.9 Light Ballast Inventory

An Inventory completed in 1998 by Champeda Inc. concluded that there were 19 PCB containing fluorescent light ballasts located in the front section of the first floor of the administration building. One of three ballasts inspected showed a small leak of what appeared to be tar.

3.2 Database Review

Records made available for review at the offices of DIAND, included the following:

- Capital Asset Management System (CAMS);
- Indian Lands Registry System;
- Environmental Issues Inventory System; and
- Various DIAND file folders pertaining to Moose Deer Point administration.

3.2.1 Capital Asset Management System

Within the Capital Asset Management System (CAMS) are the Capital Asset Inventory System (CAIS), and the Asset Condition Reporting System (ACRS). CAIS lists all funded and non-funded First Nation Assets. The ACRS rates the condition of each asset on a scale from 0 to 10 (10 being the best).

The CAMS was current for 1999/2000. The latest available ACRS reports were completed in 1997.

The ACRS reports on Community buildings made no mention of any environmental issues.

3.2.2 Indian Lands Registry System

The Indian Lands Registry System (ILRS) contains information about leases and permits executed for reserve land.

There were very few documents associated with the Moose Deer Point First Nation. Those documents found primarily involved easements for utility companies (ie. Ontario Hydro).

3.2.3 Environmental Issues Inventory System

The database for the EIIS contained the Phase II and Phase III reports already mentioned.

3.2.4 Moose Deer Point Administration Files

The files provided for review contained information on a variety of issues concerning the Moose Deer Point First Nation, such as economic development, Community services facilities, housing on the reserve, environmental protection, and an Environmental Assessment and Review Program pertaining to land use concerns such as the unauthorized landfill site, and possible gas station/corner store development.

Two environmental issues of note were found recorded within the files. The continuing problem with poor potable water quality on the reserve was expressed by letters dating from 1984, records of water quality test results, and a 1995 letter from Health Canada recommending a Boil Water Order be issued to residents that don't have full water treatment available.

An Environment Canada Incident Report reviewed the circumstances related to silting of Twelve Mile Bay as a result of dredging activities at the Marina on April 25, 2000.

Records from the Reserve General Register indicate the original date of purchase of the Reserve Lands from the Ontario Government occurred on December 29, 1917, and provide a listing of subsequent land arrangements up to 1984. A copy of the Register is found in Appendix "B".

3.3 Aerial Photography

Aerial photographs showing reserve lands and surrounding areas were reviewed for three distinct time periods. Photographs obtained from 1927 show King and Isaac Bays individually, while photographs from 1965 and 1993 show all three Bays (see Appendix C).

1927 King Bay

A trail is visible in the vicinity of King Bay along the current alignment of the Ogemawahj Road from Gordon Bay. No types of development are identifiable on reserve lands or adjacent properties.

Isaac Bay

No land access route is visible in the photograph. One isolated area of residential development that appears to consist of three or four structures is identifiable. There is no evidence of development on adjacent lands.

1965 The trail from Gordon Bay to King Bay is more defined now and an access route to Isaac Bay is now visible. The photograph scale does not allow for easy identification of any small development that may be present. Adjacent lands appear to remain undeveloped.

1993 The access roads appear to be fully developed and residential development at both King Bay and Isaac Bay is easily identifiable in the photograph. Gordon Bay Marina is visible, as well as docks at King Bay. Adjacent lands remain relatively undisturbed, with the exception of some residential development between Isaac and Gordon Bays along 12 Mile Bay.

3.4 Fire Insurance Records

The Insurers Advisory Organization was not contacted for a review of fire insurance records for this investigation. Site history was established through review of other available documentation, and the availability of records is generally limited to commercial and/or industrial facilities of more developed areas.

3.5 EcoLOG ERIS Reports

An EcoLOG ERIS Report was obtained for a three kilometre radius area containing all three parcels of the MDP Reserve and adjacent lands (see Appendix D).

Of the databases investigated, the following four contained information relating to the area of investigation: Environmental Issues Information System (EIIS, a federal database for environmental issues on inhabited First Nation Reserves); Occurrence Reporting Information System (ORIS, a provincial database for spills and occurrences within Ontario); Retail Fuel Storage Tanks (RFST, a private source database of retail fuel outlet locations with storage tanks on-site); Water Well Information System (WWIS, a provincial database of water wells found in Ontario).

The list of EIIS information concerns waste disposal and storage tank issues which were contained in reports previously reviewed as part of this investigation, see section 3.1.8.

The ORIS information lists two occurrences within the area of investigation. One occurrence involved the silting of 12 Mile Bay during dredging activities. This occurrence was previously examined in section 3.2.4 of this report. The

other occurrence, although located within the ERIS investigation area, was located on the other side of 12 Mile Bay. This is not considered to represent an adjacent property, and since the spill was relatively small, 18 litres of hydraulic oil, it is not considered possible to have had an impact on reserve lands.

The RFST information listed the locations of known fuel tanks that were already investigated in the EIIS reports review in section 3.1.8.

The WWIS information listed one water well that is located outside of MDP Reserve lands.

No other environmentally significant records were identified.

3.6 Government Contacts/Records

The list of agencies provided in the Terms of Reference was contacted by e-mail and regular mail to request a review of their records, see Appendix E for a copy of the list, the request letter and written responses received up to the date of the production of this report.

None of the responses included any information indicating any past or current activities or events that potentially may have adversely affected the environmental conditions of the MDP Reserve.

Executive summaries and conclusions for five of the seven reports identified by the Public Works contact were made available for our review. The 1992 property transfer assessment was not available and the Niigon Technologies report was previously examined as part of this investigation. None of the summaries/conclusions indicated any evidence of any significant environmental concerns that would impact the environmental conditions of the MDP Reserve.

Approximately half of those contacted responded within one month of the initial e-mail request, including: Public Works Canada, Fisheries and Oceans, Canadian Heritage, Canadian Transportation Agency, National Capital Commission, Health Canada, Transport Canada, National Energy Board, and the Canadian Nuclear Safety Commission.

Any pertinent responses received after the distribution of this report will be issued as an addendum at the time of their receipt.

4.0 Site Visit and Findings

On April 24 and May 9, 2001, the site was inspected by Trow staff accompanied by a representative of the MDP First Nation. On April 24, 2001, all of the residential sewage system leaching beds were inspected for general condition. On May 9, 2001, the Community and marina buildings at Gordon Bay, the former unauthorized landfill site in Gordon Bay, and the privately operated marina and trailer parks in King Bay, were inspected.

Interviews were for the most part limited to questions directed to residents regarding septic system performance at the time of inspection. The MDP First Nation representative, Ms. Sheryl Tolles, who accompanied Trow staff during the site inspections provided occasional additional information during the course of the inspection as requested. All information obtained through the above process has been incorporated into the proceeding sections.

4.1 Leaching Beds

A total of 55 individual residential and four Community building leaching beds were inspected for structural integrity, indications of performance problems, and signs of sewage seepage to ground surface. Three new and unoccupied dwellings did not have leaching beds installed, leaching bed locations at two existing occupied dwellings were not identifiable, and two locations were inaccessible due to the presence of unattended dogs. Table 1 provides a summary of the completed inventory. Septic bed locations are shown on SK-1, SK-2, and SK-3.

Due to bedrock outcrops and poor soil conditions, the majority of leaching beds are of a raised construction type without a soil mantle in the direction of sewage flow from the bed. The side slopes of raised beds tend to be steep. Several tile beds were built with stones or timber retaining walls supporting one or more sides. (See Photographs 1 and 2, Appendix "C".) There was a lack of vegetation growth (ie. grass cover) on the surface of several tile beds.

Structural integrity of the majority of septic leaching beds was satisfactory. There were some that showed some signs of perimeter slope erosion. One tile field had collapsed on one side and was supported by stone rip-rap, (see Photograph 3). One tile field was damaged at one end as evident by exposed broken leaching pipe, wetness, and a smell of sewage. One tile field had failed and sewage was seeping through the supporting timber wall. Three

beds are within a few metres of watercourses that flow directly to King Bay and therefore represent potential health and environmental concerns.

The performance of the majority of systems appeared to be adequate for their current use. There were many that showed signs of poor performance, and others that had problems reported by residents. One indication of poor performance included localized vegetation growth on the surface of the beds. In some cases the individual distribution pipe runs could be identified by heavier grass growth, while non-functioning lengths of pipe could be identified by a lack of grass growth (see Photograph 4).

Table 1
Summary of
Septic System Leaching Bed Inventory

System Identification	Occupant or House No.	Type of Bed	Mantle	Comments
01-1	Joan	Raised	No	No visual signs of malfunction. Resident reports problems but could not be specific.
01-2	Helen (King Bay)	Inground	No	No visual signs of malfunction. Resident reports of associated odours in past few months.
01-3	Shannon	Inground	No	No visual signs of malfunction.
01-4	Margo	Raised	No	No visual signs of malfunction.
01-5	Larry	Raised	No	Poorly vegetated top, mainly sand, edge of raised bed approximately 6 m from creek.
01-6	Cathy	Partly-raised	No	One side supported by stone landscaped slope.
01-7	Ed	Partly-raised	No	No visual signs of malfunction.
01-8	James	Raised	No	No vegetation only sand on top of long narrow, high bed.
01-9	Gwen	Partly-raised	No	No vegetation on top of bed, only sand.
01-10	1009	Partly-raised	No	Between rock outcrop and small wetland/creek area.
01-11	1015	Inground	No	Between two outcrops.
01-12	Ernie	Inground	No	Newly renovated, not vegetated yet.
01-13	Lena	Raised	No	No visual signs of malfunction.
01-14	Frank	Partly-raised	No	Grass growing over leaching pipes.
01-15	1010	Raised	No	Poorly vegetated, mainly sand top, bed is located near small wetland.
01-16	Ralph	Raised	No	No visual signs of malfunction.
01-17	Unoccupied	Partly-raised	No	Small trees growing up through bed. (Back of Ralph's Marina)
01-18	1447	Partly-raised	No	Poorly vegetated, half sand topped.
01-19	1458	Raised	No	Supported with wooden retaining wall.
01-20	Chris	Raised	No	Side of bed damaged by collapse, supported by crushed stone. Bed located up against rock outcrop, some sitting water between bed and rock.
01-21	Dorey	Raised	No	No vegetation, only sand on top.
01-22	Sheryl	Partly-raised	No	No visual signs of malfunction.
01-23	21	Partly-raised	No	No visual signs of malfunction, sparse vegetation cover.
01-24	1484	Inground	No	No visual signs of malfunction.
01-25	1487	Inground	No	New bed, no vegetation growth yet
01-26	Terry	Partly-raised	No	No visual signs of malfunction, sparse vegetation cover.
01-27	King	Partly-raised	No	No visual signs of malfunction.
01-28	Jason	Raised	No	One side supported with boulders.

Continued, next page

Table 1 continued

System Identification	Occupant or House No.	Type of Bed	Mantle	Comments
01-29	Wendy	Raised	No	New bed, no vegetative growth yet.
01-30	Dave	Raised	No	Supported with wooden retaining wall on three sides. Seepage occurring on one side.
01-31	Pauline	Partly-raised	No	No visual signs of malfunction.
01-32	Robert	Partly-raised	No	Between two outcrops, no vegetative cover.
01-33	Gail	Partly-raised	No	No visual signs of malfunction.
01-34	Betty	Partly-raised	No	Resident reports only half of leaching pipe functioning. Between outcrop, house and retaining wall.
01-35	Midge	Raised	No	No visual signs of malfunction.
01-36	Marie	Raised	No	New bed, no vegetative growth yet.
01-37	Ben	Raised	No	No visual signs of malfunction.
01-38	Richard	Raised	No	No visual signs of malfunction. Some small tree growth.
01-39	David	Raised	No	No visual signs of malfunction, sparse vegetation cover.
01-40	Mary	Raised	No	No visual signs of malfunction, end supported with stone landscaping. Reports of tank overflow occurring.
01-41	George	Partly-raised	No	No visual signs of malfunction.
01-42	Leah	Partly-raised	No	No visual signs of malfunction.
01-43	Jamie	Inground	No	No visual signs of malfunction.
01-44	Helen (Isaac Bay)	Inground	No	No visual signs of malfunction.
01-45	Ryder Jr.	Raised	No	Reports of occasional odours in basement.
01-46	Clarence	Raised	No	Only half working as evidenced by vegetation growth, no seepage.
01-47	Cindy	Inground	No	No visual signs of malfunction, spare vegetative cover.
01-48	Henry	Partly-raised	No	No visual signs of malfunction.
01-49	Jeremy	Raised	No	No visual signs of malfunction, long, narrow, high bed.
01-50	Laval	Partly-raised	No	No visual signs of malfunction.
01-51	Marshal	Partly-raised	No	No visual signs of malfunction, no vegetative growth, only sand.
01-52	Michael	Partly-raised	No	No vegetation growth, only sand, boulder landscaped sides. Report of tank overflow.
01-53	Mike	Inground	No	End is damaged, exposing leaching pipe and seepage soft areas evident at end.
01-54	4565	Raised	No	No visual signs of malfunction.
01-55	Milly	Raised	No	Supported on two sides by partial stone and wood landscaping.

Continued, next page

Table 1 continued

System Identification	Occupant or House No.	Type of Bed	Mantle	Comments
01-56	Community Centre	Partly-raised	No	No visual signs of malfunction.
01-57	Band Office	Inground	No	No visual signs of malfunction.
01-58	MDP Marina	Partly-raised	No	Some minor erosion and tree growth at bed.
01-59	Rental Cabins	Raised	No	New bed, no vegetative growth yet.
01-60	PJ	N/A	N/A	Not constructed yet.
01-61	Shelly	N/A	N/A	Not constructed yet.
01-62	Leona	N/A	N/A	Inaccessible, not located.
01-63	Higgs	N/A	N/A	Not located.
01-64	Wally	N/A	N/A	Not located.
01-65	Tom	N/A	N/A	Not constructed yet.
01-66	Ryder	N/A	N/A	Inaccessible, not located.

4.2 Community Buildings

The Community buildings in Gordon Bay were reviewed for evidence of items that could pose an environmental concern. The buildings reviewed included the Band Office and garage, Community Centre, Fire Hall, and Roads Department shed/yard.

Band Office

Relatively recent renovations to the Band Office included the removal of hazardous building materials, including all PCB light ballasts. The building is in satisfactory condition and there were no issues of environmental concerns identified.

The garage building is used to store a van and various sports activity equipment. No environmental concerns were identified.

Community Centre

The Community Centre was extensively renovated in 1996/97. The storage of hazardous materials was limited to small amounts of cleaning supplies and partially used paint cans.

A sewage leaching bed is located to the south of the building which appears to be in satisfactory condition.

Fire Hall

The Fire Hall was built in 1996. It is currently used to park a van and fire truck. Various fire-fighting equipment is stored in the building, including breathing apparatus with oxygen tanks. The building is well maintained and does not present any environmental concerns.

One car battery was left abandoned sitting along the outside wall of the firehouse.

East of the current Fire Hall there are two abandoned storage tanks left in the open (see Photograph 5). The tanks were previously identified by CH_2M and were located inside what is now the Roads Department steel shed. The tanks were noted in the Phase II investigation and associated soil staining was investigated in the Phase III investigation. They are currently supported on wood frames and do not appear to be in use. One tank was approximately one third full of liquid and a petroleum odour was evident. No obvious signs of soil staining or contamination were observed at this location.

Roads Department

In the Phase II and Phase III investigations, this location was noted due to the presence of two above ground storage tanks (ASTs) and associated staining of the ground beneath them. Investigations showed the presence of contaminated soil outside of the building which was attributed to the ASTs and the observed surface staining. The tanks have since been removed from the buildings as noted above, and it was reported that the recommended soil removal was performed. No obvious signs of soil staining remained at the former tank locations.

There is currently one AST located outside the rear of the Roads Department steel shed. The tank is protected by a small wood and sheet metal lean-to structure. There is no secondary spill containment structure below the tank (see Photograph 6). There are no obvious signs of spillage or staining of soil near the tank, although, there was a strong petroleum smell.

The area behind the works shed is used as a large item garbage transfer station. The majority of material present at the time of this site consisted of construction waste and wood.

4.3 Moose Deer Point Marina

The Phase II and Phase III Environmental Issue Inventories of the Band owned and operated marina on Gordon Bay focused on two above ground storage tanks (ASTs), one underground storage tank (UST), and associated observed and potential soil contamination. Recommendations were made for upgrading operational procedures involving the tanks and limited clean-up consisting of soil excavation and removal. At the time of the site visit, it was reported that some soil removal had been completed.

Currently, there remain two ASTs and one UST at the marina. The UST and one of the ASTs are in the locations as indicated in previous reports, the other formerly noted AST has been removed, and a new AST located beside the boat repair shop is being used for waste oil.

Soil surface staining is evident at both existing AST locations, neither of which have secondary containment structures. There is also minor soil staining evident at the location of the removed AST.

There are at least seven abandoned storage tanks in the vicinity of the marina. They range in size from a typical residential heating oil type, to what is presumably the former gasoline storage tank for the marina gas pumps that was reportedly removed from service at least twelve years ago. Most of the tanks appear to be empty, or almost empty, as indicated by hollow sounds when struck. One tank exhibited a solid sound when struck, its contents could not be confirmed.

Approximately twenty used, and most likely empty, 20 pound size propane tanks were observed casually discarded beside a fenced bulk propane storage area behind the boat repair shop. A dozen engine batteries were found sitting beside one of the boat storage sheds, along with other pieces of garbage.

The marina provides both boat sewage pump-out services and laundry/shower facilities for boaters. The sewage pump-out is stored in an underground tank that is periodically emptied by a licensed contractor. The laundry/shower facilities have a septic leaching bed located behind the building. The tile bed is partially raised, and there was minor erosion of the bed and small trees had begun to grow on top of the bed.

4.4 Unauthorized Landfill

The unauthorized landfill has been cleaned up, and there is no garbage left in the area.

4.5 King Bay Marina and Trailer Parks

The privately run King Bay Marina has one UST which was investigated during the previous Phase III investigation. Marina operations associated with the UST appear to be unchanged.

There is a seasonal trailer park at King Bay Marina. Approximately a dozen trailers were present at the time of the site visit. Each trailer has an individual sewage holding tank which is reportedly periodically pumped out. No record is kept as to what frequency this occurs. It was reported that in Spring 2001, high water levels in the vicinity of the trailer park caused sanitary sewage from the park to drain directly into King Bay.

There is a second trailer park located along the shore of King Bay to the east of the marina. This operation is privately run. Sewage from the trailer park is stored in individual holding tanks that are supposed to be pumped out periodically.

4.6 Other Items

The operating procedures of the King Bay and MDP Marinas were to be reviewed through a voluntary First Nation initiated Clean Marine Program audit process. This audit had not been completed at the time of the site investigation.

There is a privately run fiberglass boat repair shop operated in King Bay. Paints, solvents and other chemicals associated with this type of repair work are stored in the repair building, but no large bulk chemical containers are used. The interior of the shop is in a general state of disarray with numerous containers stacked on the floor and counters, with a coating of dust on everything. No large stains or spills were noted on the floor of the shop. The main hazard associated with this operation is the storage of flammable substances.

There are two ASTs on King Bay and three on Isaac Bay that are used for private fuel supplies. All are in good condition, although, none had secondary containment structures.

A metal storage tank was found abandoned along the south shore of Isaac Bay. Its former and remaining contents (if any) are unknown.

There are a number of used and unused wells throughout the Community. All observed and reported locations of active and dormant wells are identified on land parcel sketches found in Appendix "A". Not all wells identified were found. Conflicting information between the CAMS database and information provided by First Nation members during and after site visits have made identification of each well and their status difficult. Table 2 provides a summary of all reported wells and their status as known to date.

Documentation and reports of poor water quality from wells go back many years. Unused wells were taken out of service primarily because of poor water quality.

Table 2
Summary of
Groundwater Wells

Location Identification	Occupant/House and/or Well No.	In Use (Supplying)	Recommendation
King Bay			
01-1	Joan - Well #2	No	Abandon
01-2	Helen	No	Abandon
01-4	Margo	No	Abandon
01-25	Beatrice - 1487	No	Abandon
Isaac Bay			
01-41	George - Well #3	Yes (01-41, 01-65, 01-40)	Test
01-38	Richard	Yes (01-38, 01-37)	Test
01-36	Marie	No	Abandon
01-34	Betty	No	Abandon
01-33	Gail	No	Abandon
Gordon Bay			
01-56	Well #1 (Community Centre)	Yes (01-56, 01-57)	Test
01-58	Well #9 (MDP Marina)	Yes (01-58)	Test

4.7 Adjacent Properties

Surrounding property uses consist of the Provincial Nature Reserve Park, cottages and private residences. The cottages and residences are located predominantly along Twelve Mile Bay. The impact of private sewage systems on the water of Twelve Mile Bay is the main environmental concern associated with these land uses.

There is some logging activity to the east of the reserve along Twelve Mile Bay Road.

5.0 Conclusions and Recommendations

The following are the Conclusions and Recommendations of this Phase 1 Environmental Site Assessment.

5.1 Evidence of Contamination

The Phase I ESA has resulted in evidence of actual contamination on the subject property associated with the following:

5.1.1 Moose Deer Point Marina Above Ground Storage Tanks.

At Moose Deer Point Marina, Ground surface staining was observed at the two existing Above Ground Storage Tanks (ASTs) and at the former waste oil AST location. The degree and extent of staining suggest that repeated minor spilling and/or overflowing has occurred.

It is recommended that the contaminated soil be excavated and removed, and that as a minimum, suitable spill containment structures be constructed below the existing tanks.

5.1.2 Failed Sanitary Sewage Systems

Two individual dwelling septic tile fields have failed and sewage was observed seeping from them. It is recommended that the failed tile beds be repaired immediately.

5.2 Evidence of Potential Contamination

The Phase I ESA has revealed the following areas where evidence of potential contamination and issues of environmental concern exist:

5.2.1 Abandoned storage tanks, batteries and propane cylinders.

Storage tanks have been casually abandoned at various locations on the reserve. The tanks range in size and type from that of the former fuel tank at Moose Deer Point Marina to residential heating oil tanks, to waste oil tanks removed from the Roads Department maintenance building. One tank abandoned outside the Fire Hall was confirmed to contain some petroleum product, which if spilled would constitute a significant spill. It could not be established if the other tanks were completely empty or still contained liquids.

There were no obvious signs of soil staining on the ground at the abandoned tanks. The presence of abandoned tanks still containing, or possibly containing, unknown liquids presents a potential for contamination.

It is recommended that all abandoned tanks be emptied of any remaining contents and removed from the site for disposal by a qualified waste contractor, including the UST at William's Wharf. If there is any evidence of contamination around the tanks, the contaminated soil should also be removed from the site. All discarded batteries and propane cylinders should be safely stored before reuse or proper offsite disposal.

5.2.2 Individual Septic Systems.

The condition of residential septic system leaching beds on the reserve is quite varied. They range from well constructed, operational, revised and in-ground leaching beds, to small poorly functioning beds. As noted, two systems have failed.

The degenerating structural quality, poor performance, and general design of a majority of the existing systems on the reserve represents a potential for a number of systems to fail. Failure of sanitary sewage systems threatens the safety of drinking water supplies and promotes the spread of disease.

It is recommended that those systems that are not fully operational be repaired in the near future.

Current design and construction practices should be upgraded to ensure a suitable degree of reliability in performance and structural integrity is achieved for future years. A formal set of guidelines should be adopted and enforced to ensure a minimum degree of quality.

5.2.3 Sewage Systems at King Bay Trailer Park.

An incident of a sanitary sewage spill into King Bay was reported in the spring of 2001. The contamination was reported to have occurred as a result of high water levels flooding through the marina trailer park.

The construction and operation of trailer holding tanks should be reviewed in more detail to determine the cause of the alleged spill and appropriate remedial action taken.

5.2.4 Poor Groundwater

Two communal wells in Isaac Bay, and the two Community building wells in Gordon Bay, are still used as potable water supplies. One Isaac Bay communal well has a history of water quality problems that render it unpotable. In general, groundwater supplies have historically been of poor quality.

It is recommended that testing of water quality from active groundwater supply wells be performed on a regular basis. If the quality is consistently found to be unsatisfactory, appropriate treatment should be provided or the wells should be taken out of service and properly closed.

5.2.5 Unused Groundwater Wells

There are a number of unused groundwater wells that remain throughout the Community. Unused wells represent a potential avenue of groundwater contamination, and remain an environmental concern because they have not been properly abandoned, or closed.

5.2.6 Marina Operations.

The Clean Marine Program audit of marina operating procedures should be completed to allow assessment of these compared to current regulations.

5.2.7 Large Garbage Item Transfer Area.

It is recommended that all waste materials in the transfer area be segregated into large garbage bins for easy removal from the site.

Based on the results of the Phase I ESA, it is recommended that a Phase II ESA be performed. The investigation to focus on the surface staining and possible extent of subsurface contamination at the ASTs at Gordon Bay, noting that one of the tanks did not have a previous investigation performed because it is relatively new. Alternately, this item of concern could be dealt with immediately by removing all contaminated soil from current and former AST locations.

The items of potential concern should be dealt with as recommended above.

Further, based on the results of the Phase 1 ESA, the following are recommended:

- That failed septic beds be repaired immediately;
- As a minimum, that all potable water supply systems be fitted with filtration and ultraviolet disinfection and that a program be put in place to ensure that filters and bulbs are replaced annually; and,
- That minimum requirements be established for the design and use of sanitary sewage holding tanks, and that a program be implemented to pump all holding tanks and septic tanks on a regular basis.

Respectfully submitted,

Oliver, Mangione, McCalla & Associates
a division of Trow Consulting Engineers Ltd.

Gary Matthie, P.Eng.
Project Engineer

Jamieson S. Gourley, P.Eng.
Senior Project Engineer
Manager Orillia & Barrie Offices

References

AquaTechnix, 2000, "Review of Water Pumphouses"

Asset Condition Reporting System 1997

Capital Asset Management System 2000

Ch2M Hill Eng. Ltd., 1994, "Environmental Issues Inventory, Phase 2"

Champeda Inc., 1998, "Inventory of Light Ballasts Containing PCBs"

ECO LOG ERIS., 2002, "Project # 20020418011"

Environmental Services, Government Services Canada, 1993, "Property Transfer Assessment – Proposed Addition of Twelve Mile Bay Island 401.5 to Moose Deer Point I.R. 79, Section 5.0 – Summary of Environmental Findings"

Marshall, Macklin, Monoghan, 2000, "Niigon Technologies Ltd., Environmental Assessment Report".

Ontario Base Mapping

Parkin Urban Design and LRG's, 1999, "Life Science Inventory"

Parkin Urban Design and LRG's 1999, "Sustainable Community Plan – Phase 1"

R.J. Burnside & Associates Ltd., 1998, "MDP Assimilative Capacity Study"

R.J. Burnside & Associates Ltd., 1997, "Moose Deer Point Capital Planning Study"

R.J. Burnside & Associates Ltd., 1995, "Phase II Soil and Groundwater Evaluation"

Terraprobe, 1996, "Environmental Issues Inventory & Detailed Site Assessment"

Terraprobe, 1997, "Environmental Issues Inventory, Phase 3"

XCG Consultants Ltd., 1999, "Final Report for Phase 1 Environmental Site Assessment Lots 50, 51, 52 and 53, Concession 7, Township of Georgian Bay, Ontario – Executive Summary"

XCG Consultants Ltd., 2002, "Phase 1 Property Transfer Assessment Moose Deer Point First Nation Park, Crown, and Protected Lands, Township of Georgian Bay, District of Muskoka, Ontario – Executive Summary"

XCG Consultants Ltd., 2002, "Updated Phase 1 Property Transfer Assessment Moose Deer Point First Nation Lots 50, 51, 52, and 53, Concession 7, Township of Georgian Bay, Ontario – Executive Summary"

XCG Consultants Ltd., 2002, "Updated Phase 1 Property Transfer Assessment Moose Deer Point First Nation Twelve Mile Bay Island 401.5 - Executive Summary"

Appendix A: Figures

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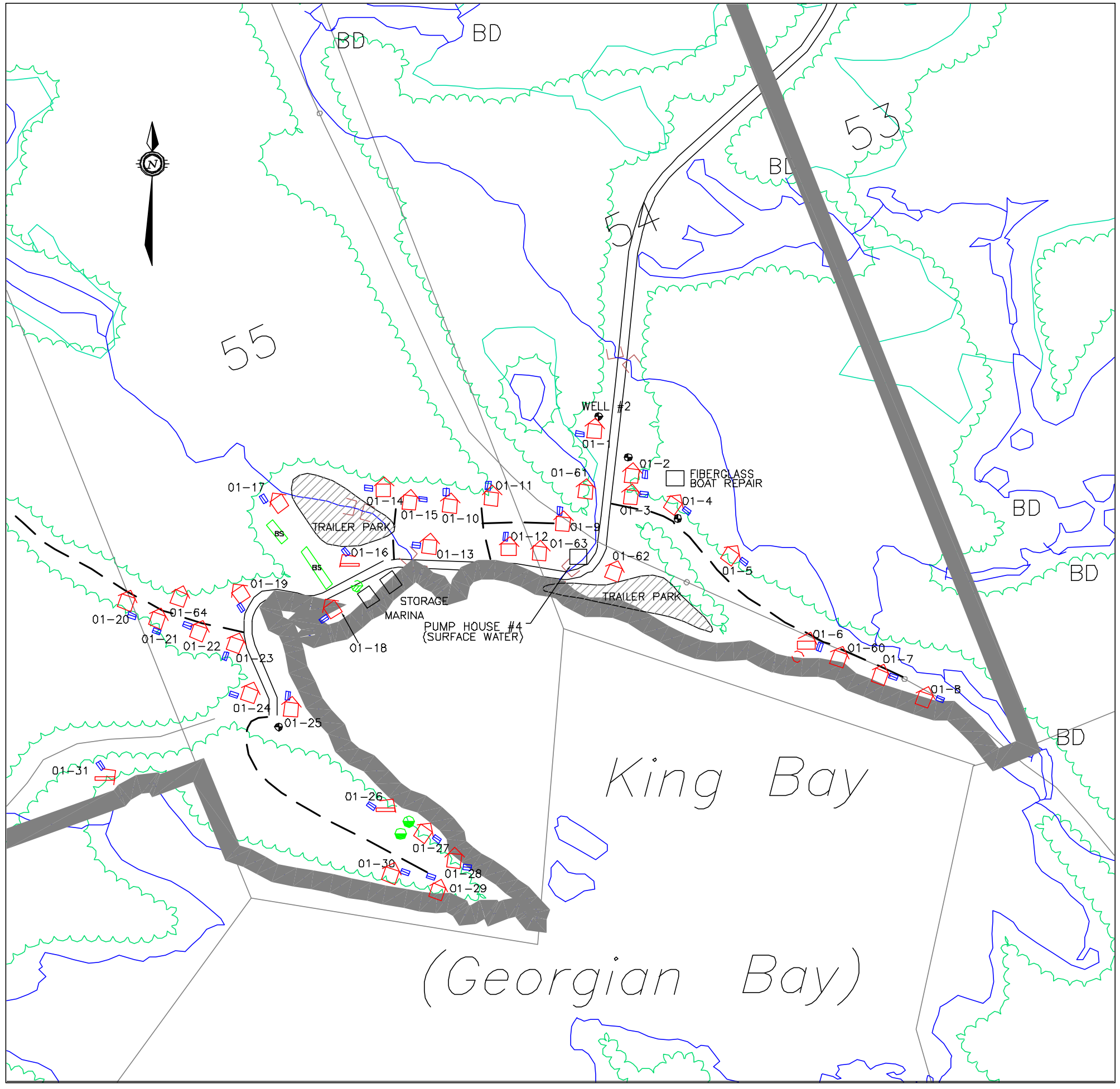
SCALE N.T.S.	CLIENT: MOOSE DEER POINT FIRST NATION	JOB NO. MZ14540
DATE: MAY 2001		
DRAWN: LLC	TITLE: SITE LOCATION	FIGURE 1



LEGEND

- APPROXIMATE DWELLING LOCATION
- APPROXIMATE STRUCTURE LOCATION
- APPROXIMATE SEPTIC BED LOCATION
- WELL
- BS — BOAT STORAGE
- ABOVE GROUND STORAGE TANK - IN USE
- UNDERGROUND STORAGE TANK - IN USE
- TANK ABANDONED ON SURFACE
- UNDERGROUND STORAGE TANK - ABANDONED IN PLACE
- RESERVE BOUNDARY

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Trow

CLIENT: MOOSE DEER POINT FIRST NATION

TITLE: KING BAY

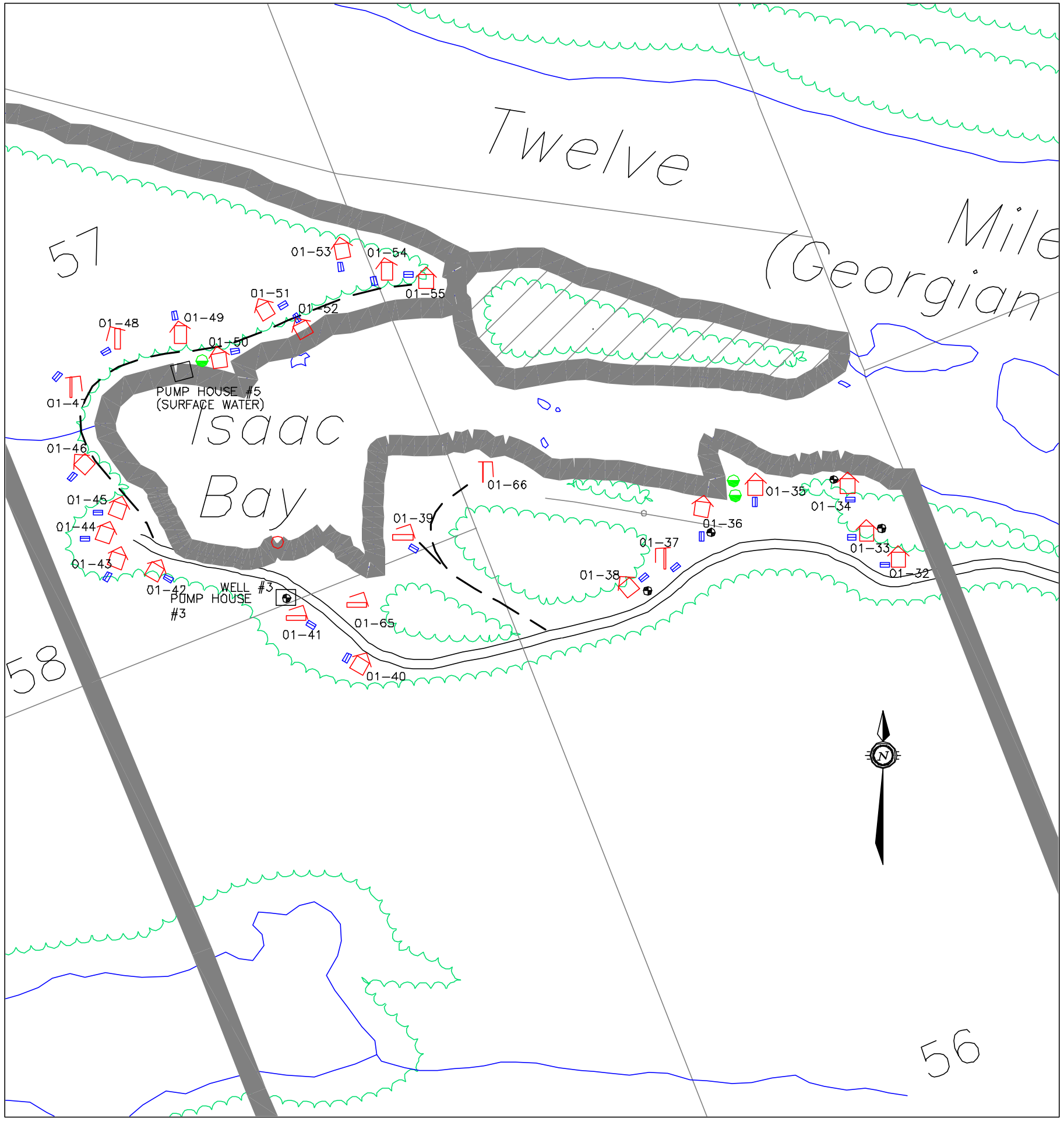
SCALE: 1:5000

DATE: MAY 2001

DRAWN: LLC

JOB: MZ14540

SK-1



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- APPROXIMATE STRUCTURE LOCATION
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CLIENT: MOOSE DEER POINT FIRST NATION

TITLE: ISAAC BAY

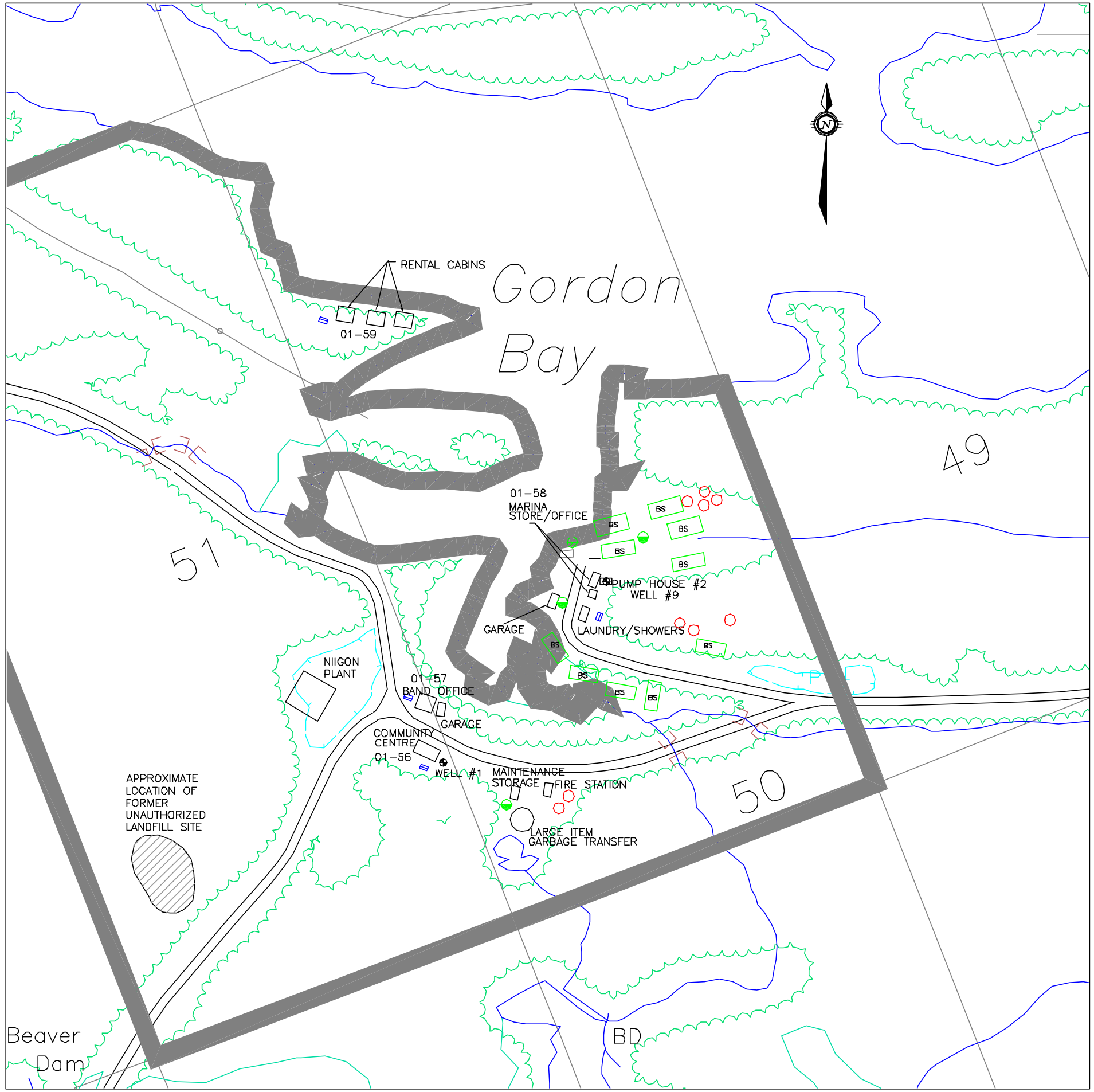
SCALE: 1:5000

DATE: MAY 2001

DRAWN: LLC

JOB: MZ14540

SK-2



LEGEND

- APPROXIMATE DWELLING LOCATION
- APPROXIMATE STRUCTURE LOCATION
- APPROXIMATE SEPTIC BED LOCATION
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CLIENT: MOOSE DEER POINT FIRST NATION

TITLE: GORDON BAY

SCALE: 1:5000

DATE: MAY 2001

DRAWN: LLC

JOB: MZ14540

SK–3

Appendix B:
Reserve General Register

RESERVE GENERAL REGISTER – REGISTRE GÉNÉRAL -A RÉSERVE Moose Point #79 INT

Item No. / Article no	Instrument / Acte	Number / No	Date	Grantor / Grantee / Cessionnaire	Land – Remarks	Area / Superficie	Parcel Register Abstract / Extrait de l'index des immeubles	Title No. / No du dossier	REMARKS – REMARQUES
4	Order in Council PC2122	R7062	Nov 19 1968		See attached schedule(in twp of Freeman)			474/31-10-79	Grants authority for the conveyance of said lands to corporation of the township Freeman for road purposes
5	Addendum	1778-30	Mar 5 1970	Canada to the Bell Telephone Co. of Canada	The whole of lot 50-1 according to plan 55666 CLSR	0.52		474/31-6-10-79	Telephone right of way change in collateral re: permit under L3324
7	Compensation Agreement DF 46701		4 Mar	Ontario Hydro to Bell Telephone Co. of Canada	Pole				Recorded: 21 Jul 1983
7	Compensation Agreement		7 Dec 1983	Ontario Hydro to Bell Telephone Co. of Canada	Pole & Guy on road allowance as shown attached				Revised: 18 May 1984 - Confirmation for damages

Province
Ontario

Indian and Northern Affairs Affaires indiennes et du Nord

RESERVE GENERAL REGISTER – REGISTRE GÉNÉRAL DE LA RÉSERVE

Agency - Agence
Georgian Bay

Reserve - Réserve
Moose Point # 79

Band - Bande
Moose Deer Point

Date Established - Date de création

Authority - Autorisation

Title Deed - Titre de propriété

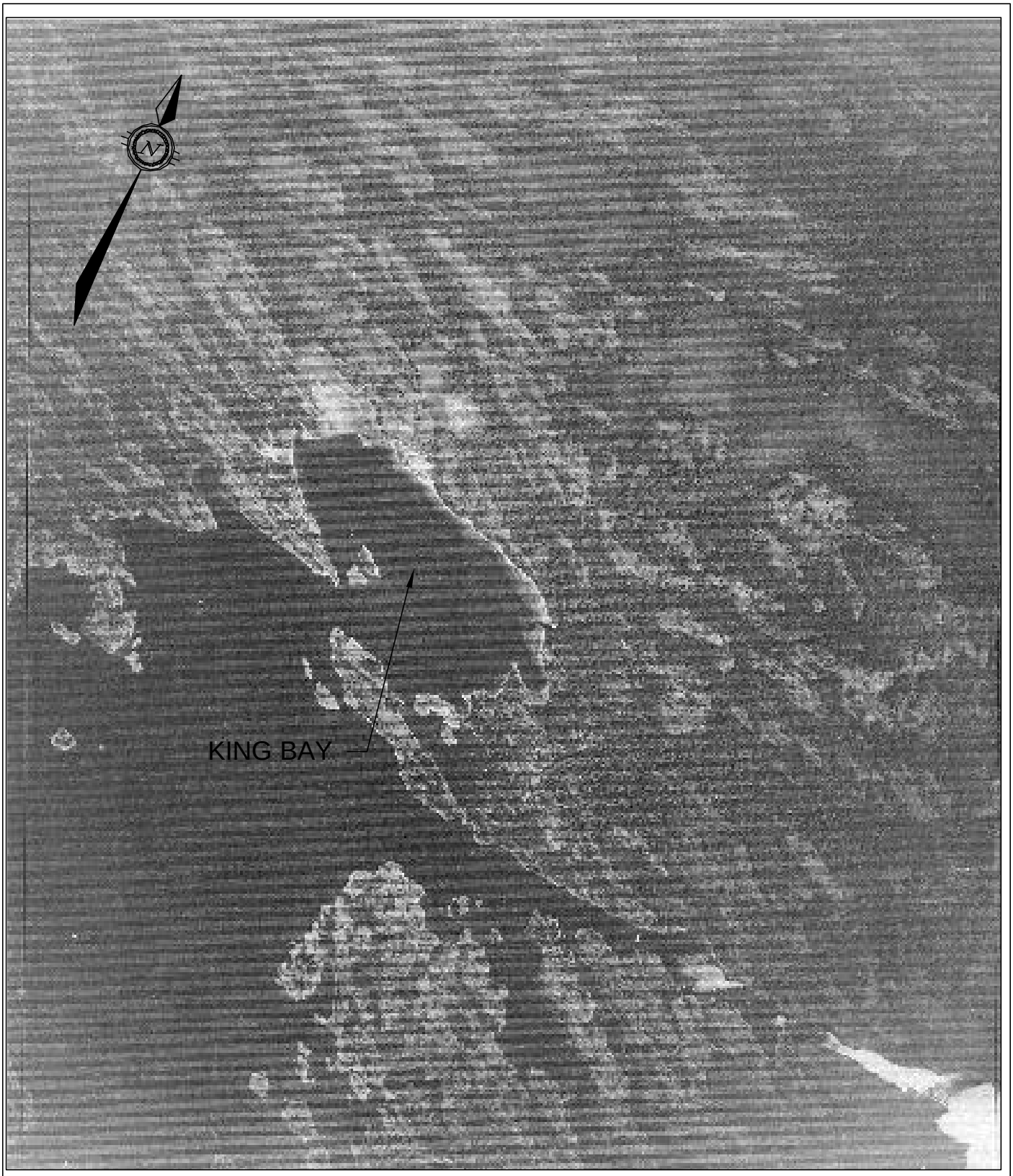
Original Survey - Premier Arpentage

Original Area - Superficie originale

General Remarks - Remarques générales
Reversionary Interest. See Provincial O.C. dated December 28, 1917

Item No. / No de mention	Instrument Acte	Number / Numéro	Date	Grantor/Grantee / Donateur/Donataire	Land - Riveraines	Acreage / Superficie	Present Reserve Area / Superficie actuelle de la réserve	File No. / No de dossier	Remarks - Remarques
	79 Moose Point		Lots 54, 55, 56, Concession VII 50 and 51, Concession VIII 56, 57, Concession IX Freeman Township	Kings Band	619			Purchased from Ontario Government 1917 O.C. December 28, 1917.
1	Provincial Order In Council	H46215	Dec.28 1917	Province of Ontario to Canada	Broken Lot 54, Concession 7 Broken Lot 55, Concession 7 Part of Lot 56, Concession 7 described by metes and bounds. Part of Broken Lot 50, Concession 8. South and West of 12 mile or Moose Bay. Broken Lot 51, Concession 8, Broken Lot 56, Concession 9 Part of Broken Lot 58, Concession 10.	619			Recommends that lands be vested in Canada for use of Indians, to revert back to Province if no longer required for Indian purposes. See Letters Patent dated Mar. 1 1969. Reg. No. RR704. See Land Grant Reg. No. X124538 Reserving mines and mineral and pine trees.
2	BCR	X12030	Mar. 28 1967		Lots 50 & 51, Concession 8			474/32-1	Approved BCR agrees to set aside land for the construction and development of a Commercial Marina Enterprise
3	Permit	L3324	June 7 1968	Canada to the Bell Telephone Co. of Canada	see abtached sketch			474/31-6-10-79	Telephone Right of Way. BCR dated Apr. 24, 1968. Reg. No. 586216

Appendix C: Photographs



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SCALE 1:13,000	CLIENT: **MOOSE DEER POINT FIRST NATION**	JOB NO. BRBA0014540A
DATE: JUNE 2002		
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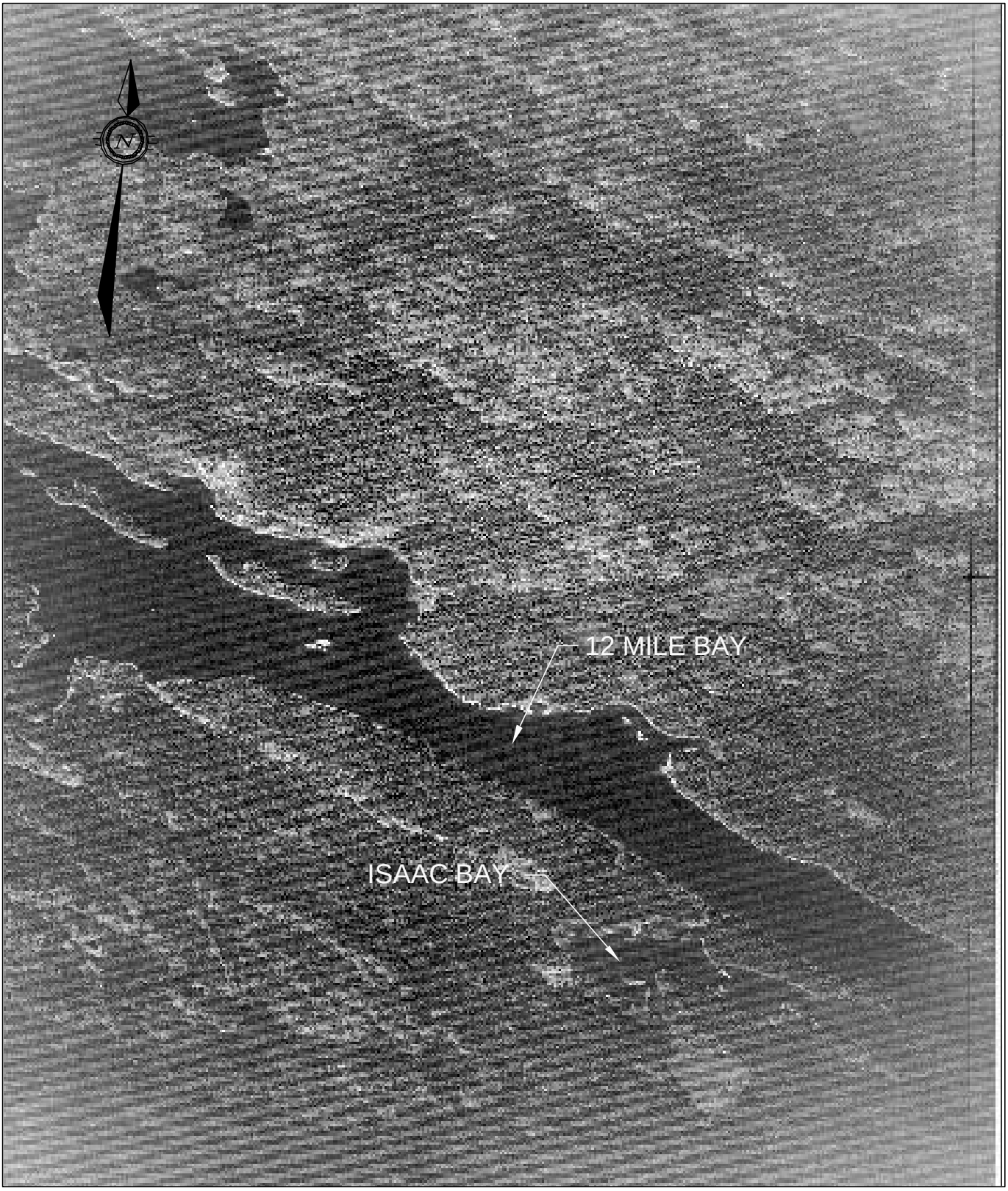

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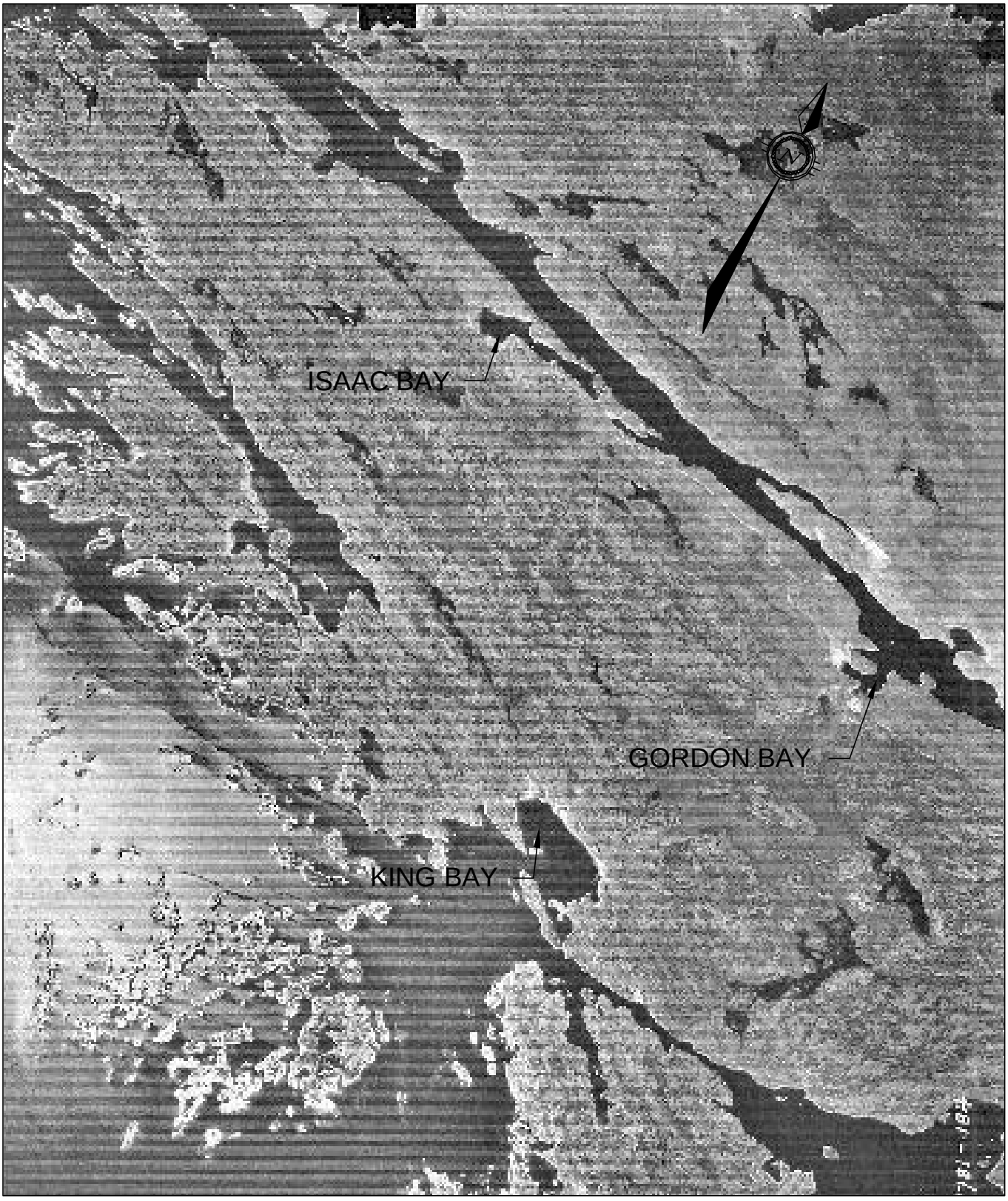
SCALE 1:13,000	CLIENT: **MOOSE DEER POINT FIRST NATION**	JOB NO. BRBA0014540A
DATE: JUNE 2002	TITLE: **ISAAC BAY 1927**	AP-2
DRAWN: LLC		



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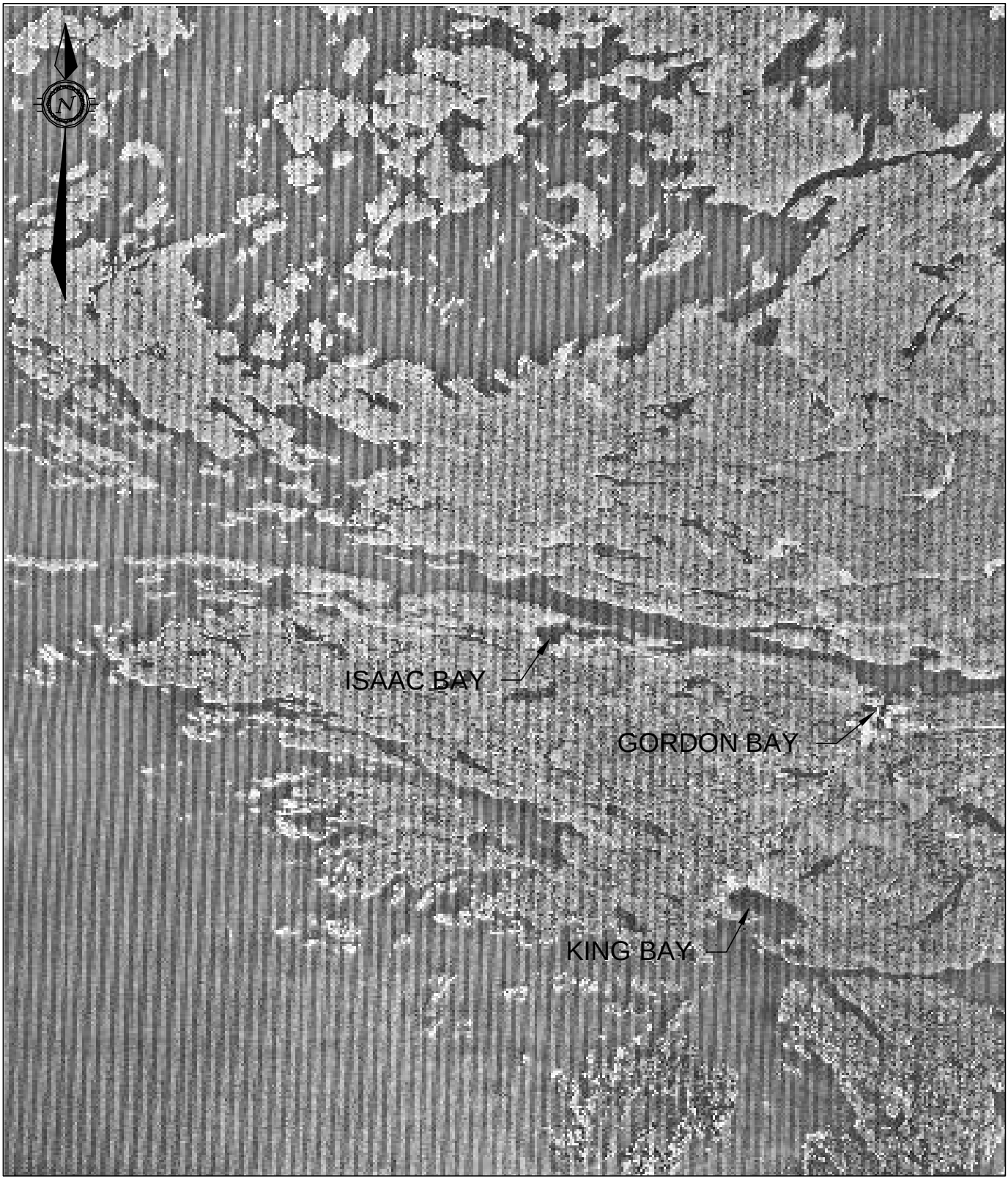
SCALE 1:37,000	CLIENT: **MOOSE DEER POINT FIRST NATION**	JOB NO. BRBA0014540A
DATE: JUNE 2002	TITLE: **GORDON BAY, ISAAC BAY, KING BAY 1965**	AP-3
DRAWN: LLC		



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SCALE 1:50,000	CLIENT: **MOOSE DEER POINT FIRST NATION**	JOB NO. BRBA0014540A
DATE: JUNE 2002	TITLE: **GORDON BAY, ISAAC BAY, KING BAY 1993**	AP–4
DRAWN: LLC		

Photograph 1 – Retaining wall supported septic bed.

Photograph 2 – Retaining wall supported septic bed, sewage seepage behind propane tank.

Photograph 3 –Septic bed erosion damage repair.

Photograph 4 – Partially functioning septic bed.

Photograph 5 – Abandoned tanks East of Fire Hall.

Photograph 6 – AST at Roads Department shed.

Appendix D:
EcoLOG ERIS Report

ECO LOG ERIS
Environmental Risk Information Services Ltd.

1450 Don Mills Road
Don Mills, Ontario, M3B 2X7
Phone: (416) 442-2105
Fax: (416) 442-2917
www.ecologeris.com

Gary Matthie
Trow Consulting Engineers Ltd.
561 Byne Drive, Unit D
Barrie, ON
L4N 9Y3

May 17, 2002

Dear Gary Matthie:

Enclosed is your EcoLog ERIS Report for the site "Moose Deer Point First Nation Reserve", located at Isaac Bay, Gordon Bay, King Bay , in Moose Point 79, ON. The site location was placed according to the information provided by the order form and site inquiries of the surrounding area.

Locations on the Site Diagram can be matched to specific records in the Detail Report via the Map Keys (i.e., GEN-1). Within the Detail Report, you will notice that many of the Map Keys are identified as "n/a". These records have incomplete addresses and therefore cannot be located on the map; however, they are located within Moose Point 79 and may be relevant to your site or the surrounding area.

If you have any questions regarding the enclosed report, please do not hesitate to contact me at the phone number below. Thank you for your interest in EcoLog ERIS.

Sincerely,

Mark Mattei
(416) 442-2913

ECO LOG ERIS
Environmental Risk Information Services Ltd.

1450 Don Mills Road
Don Mills, Ontario, M3B 2X7
Phone: (416) 442-2105
Fax: (416) 442-2917
www.ecologeris.com

Site: **Moose Deer Point First Nation Reserve**
Isaac Bay, Gordon Bay, King Bay
Moose Point 79 ON

Client: **Gary Matthie**
Trow Consulting Engineers Ltd.
561 Byne Drive, Unit D
Barrie ON L4N 9Y3

ERIS Project #: **20020418011**

Date: **May 17, 2002**

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Site Address: Isaac Bay, Gordon Bay, King Bay Moose Point 79, ON

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EcoLog Environmental Risk Information Services Ltd

EcoLog Environmental Risk Information Services Ltd (EcoLog ERIS) is an environmental database and information service company. Our clients include consulting and engineering firms, banks, law firms, real estate firms and other organizations concerned with environmental information concerning property and due diligence investigations.

EcoLog ERIS specializes in providing environmental and historical information compiled from government and private source records. To assist in meeting the Canadian Standards Association (CSA) Standard Z768-94 Phase 1 Environmental Site Assessment, EcoLog ERIS will provide you with the government and/or private records available on our system that pertain to your project property and neighbouring properties. However, reports other than the "Complete Report" may not satisfy the CSA Standard Z768-94 given that the information pertains to only a portion of the subject area (i.e. site only) or is generated from only a portion of the entire set of records (i.e. selecting 10 databases). Descriptions and features of the report include:

1. Databases Information

The first section briefly describes the databases searched for your report. It provides details about the sources of the information and the years included for each database.

2. Site Diagram

The records that were found within a specified distance from the project property (the primary search radius) have been plotted on a diagram to provide you with a visual representation of the information available. Unless otherwise stated the primary search radius will be a 1/4 kilometer around the project property and is referred to as the buffer zone. Sites will be plotted on the diagram if there is sufficient information from the database source to determine accurate geographic coordinates. Each plotted site is marked with an acronym identifying the database in which the record was found (i.e., WDS for Waste Disposal Sites). These are referred to as "Map Keys". A variety of problems are inherent when attempting to associate various government or private source records with locations. **EcoLog ERIS has attempted to make the best fit possible between the available data and their positions on the site diagram.**

3. Tabular Report

The first table is a **Statistical Profile**, which outlines the number of records from each database that fall within various distances from your site. The second table describes the records that relate directly to the property that is being researched and is called the **Site Profile**. The rest of the report, the **Detail Report**, presents information, by database, for the records found within the buffer zone. Listed at the end of each database are the sites that could not be plotted on the locator diagram because of insufficient address information. These records will not have map keys. They have been included because they may be found to be relevant during a more detailed investigation.

Ontario Database Information

EcoLog Environmental Risk Information Services Ltd can search the following databases. The information within the EcoLog ERIS system dates back to the mid 1980's and is current as far as what is publicly available.

Federal Government Source Databases: Diagram Identifier:

National PCB Inventory 1988-1998 **NPCB**

Environment Canada's National PCB inventory includes information on in-use PCB containing equipment in Canada including federal, provincial and private facilities. All federal out-of-service PCB containing equipment and all PCB waste owned by the federal government or by federally regulated industries such as airlines, railway companies, broadcasting companies, telephone and telecommunications companies, pipeline companies, etc. are also listed. Although it is not Environment Canada's mandate to collect data on non-federal PCB waste, the National PCB inventory includes some information on provincial and private PCB waste and storage sites.

National Pollutant Release Inventory 1994-2000 **NPRI**

Environment Canada has defined the National Pollutant Release Inventory ("NPRI") as a federal government initiative designed to collect comprehensive national data regarding releases to air, water, or land, and waste transfers of 178 specified substances.

National Contamination Sites Remediation Program 1989-1995 **NCS**
(the "Orphan/Abandoned" Sites Program or NCSRP)

NCSRP was established in October 1989, by the Canadian Council of Ministers of the Environment (CCME). This program was terminated in March 1995. The National Site Classification System was developed to designate contaminated sites into 3 categories according to their level of risk. The program was directed toward the identification and remediation of "abandoned/orphan", high risk sites.

Environmental Issues Inventory System 1992-2001 **EIIS**

The Environmental Issues Inventory System was developed through the implementation of the Environmental Issues and Remediation Plan. This plan was established to determine the location and severity of contaminated sites on inhabited First Nation reserves, and where necessary, to remediate those that posed a risk to health and safety; and to prevent future environmental problems. The EIIS provides information on the reserve under investigation, inventory number, name of site, environmental issue, site action (Remediation, Site Assessment), and date investigation completed.

Federal Convictions 1988-Nov 1996 **FCON**

Environment Canada maintains a database referred to as the "Environmental Registry" that details prosecutions under the Canadian Environmental Protection Act (CEPA) and the Fisheries Act (FA). Information is provided on the company name, location, charge date, offence and penalty.

Provincial Government Source Databases:

Certificates of Approval 1985-1999 **CA**

This database contains the following types of approvals: Certificates of Approval (Air) issued under Section 9 of the Ontario EPA; Certificates of Approval (Industrial Wastewater) issued under Section 53 of the Ontario Water Resources Act ("OWRA"); and Certificates of Approval (Municipal/Provincial Sewage and Waterworks) issued under Sections 52 and 53 of the OWRA.

Ontario Regulation 347 Waste Generators Summary 1986-2000 GEN

Regulation 347 of the Ontario EPA defines a waste generation site as any site, equipment and/or operation involved in the production, collection, handling and/or storage of regulated wastes. A generator of regulated waste is required to register the waste generation site and each waste produced, collected, handled, or stored at the site. This database contains the registration number, company name and address of registered generators including the types of hazardous wastes generated. This information is a summary of all years from 1986 including the most currently available data. Some records may contain, within the company name, the phrase "See & Use…" followed by a series of letters and numbers. This occurs when one company is amalgamated with or taken over by another registered company. The number listed as "See & Use", refers to the new ownership and the other identification number refers to the original ownership. This phrase serves as a link between the 2 companies until operations have been fully transferred.

Ontario Regulation 347 Waste Receivers Summary 1986-2000 REC

Part V of the Ontario Environmental Protection Act ("EPA") regulates the disposal of regulated waste through an operating waste management system or a waste disposal site operated or used pursuant to the terms and conditions of a Certificate of Approval or a Provisional Certificate of Approval. Regulation 347 of the Ontario EPA defines a waste receiving site as any site or facility to which waste is transferred by a waste carrier. A receiver of regulated waste is required to register the waste receiving facility. This database represents registered receivers of regulated
wastes, identified by registration number, company name and address. This information is a summary of all years from 1986 including the most currently available data.

Private Fuel Storage Tanks 1989-1996 PST

The Fuels Safety Branch of the Ontario Ministry of Consumer and Commercial Relations maintained a database of all registered private fuel storage tanks. Public records of private fuel storage tanks are only available since the registration became effective in September 1989. This information is now collected by the Technical Standards and Safety Authority.

Ontario Inventory of PCB Storage Sites 1987-July 2000 OPCB

The Ontario Ministry of Environment, Waste Management Branch, maintains an inventory of PCB storage sites within the province. Ontario Regulation 11/82 (Waste Management - PCB) and Regulation 347 (Generator Waste Management) under the Ontario EPA requires the registration of inactive PCB storage equipment and/or disposal sites of PCB waste with the Ontario Ministry of Environment. This database contains information on: 1) waste quantities; 2) major and minor sites storing liquid or solid waste; and 3) a waste storage inventory.

Compliance and Convictions 1989-1996 CONV

This database summarizes the fines and convictions handed down by the Ontario courts beginning in 1989. Companies and individuals named here have been found guilty of environmental offenses in Ontario courts of law.

Waste Disposal Site Inventory 1970-1998 WDS

The Ontario Ministry of Environment, Waste Management Branch, maintains an inventory of known active, inactive and closed disposal sites in the Province of Ontario. Active sites maintain a Certificate of Approval, are approved to receive and are receiving waste. Inactive sites maintain Certificate(s) of Approval but are not receiving waste. Closed sites have no Certificate of Approval and are not receiving waste. Locations of these sites may be cross-referenced with the Anderson database described under ERIS's Private Source Database section.

Occurrence Reporting Information System 1988-2001 ORIS

This database identifies sources, effects/actions and approximate locations of spills and occurrences within Ontario. The locations identified on the locator diagram refer to the facility responsible for the spill. The actual location of the spill can be derived from the descriptions provided in the detailed report.

Drinking Water Information Management System – Water Treatment Plants 1998 WTP

This database provides comprehensive information regarding design specifications and performance for municipal works water treatment plants.

Sample Result Data Store – Sewage Treatment Plants **1998** **STP**
This database provides comprehensive information regarding design specifications and performance for municipal works sewage treatment plants.

Water Well Information System **1955-2000** **WWIS**

This database describes locations and characteristics of water wells found within Ontario in accordance with Regulation 903. Geographic coordinates are reliable according to the given percentage. Wells that are identified with lot and concession only are available upon request and would be provided as a separate report.

Pesticide Register **1988-1998** **PES**

The Ontario Ministry of Environment maintains a database of all manufacturers and vendors of registered pesticides.

Wastewater Discharger Registration Database **1990-1998** **SRDS**

Information under this heading is combination of the following 2 programs. The Municipal/Industrial Strategy for Abatement (MISA) division of the Ontario Ministry of Environment maintained a database of all direct dischargers of toxic pollutants within nine sectors including: Electric Power Generation; Mining; Petroleum Refining; Organic Chemicals; Inorganic Chemicals; Pulp & Paper; Metal Casting; Iron & Steel; and Quarries. All sampling information is now collected and stored within the Sample Result Data Store (SRDS).

Coal Gasification Plants **1988** **COAL**

This inventory of all known and historical coal gasification plants was collected by the Ministry of Environment. It identifies sites that produced and continue to produce or use coal tar and other related tars. This information is effective to 1988, but the program has since been discontinued.

Non-Compliance Reports **1994-1998** **NCPL**

The Ministry of the Environment provides information about non-compliant discharges of contaminants to air and water that exceed legal allowable limits, from regulated industrial and municipal facilities. A reported non-compliance failure may be in regard to a Control Order, Certificate of Approval, Sectoral Regulation or specific regulation/act.

Orders **1995-1996** **ORD**

Control Orders/Documents are enforcement actions issued by the Ministry of the Environment to deal with environmental violations. They clarify and allocate individual/joint liability when issuing clean-up orders for contaminated sites.

Record of Site Condition **1997-Sept 2001** **RSC**

The Record of Site Condition (RSC) provides a summary of the final environmental condition of a site, once an environmental site assessment and/or restoration approach has been undertaken. The database provides information on the site restoration approach used (Background, Generic, Site Specific Risk Assessment), location of contaminated site, whether contamination extends past 1.5m from the surface thereby requiring "stratified restoration", soil type, and the date when RSC was submitted/acknowledged/ responded to by the Ministry of the Environment. A site restoration approach involves the use of soil and groundwater quality criteria, which have been developed to provide protection against adverse effects to human/ecological health and the natural environment. These criteria may be applied to agricultural, residential/parkland, industrial/commercial land uses; as well as potable (source of drinking water) and nonpotable groundwater use.

Private Source Databases:

Retail Fuel Storage Tanks **1989-July 2001** **RST**

The Fuels Safety Branch of the Ontario Ministry of Consumer and Commercial Relations maintained a database of licensed retail fuel outlets. The MCCR no longer collects this information. Current information is now collected from private sources. This database includes an inventory of retail fuel outlet locations that have on their property gasoline, oil, waste oil, natural gas and / or propane storage tanks.

Canadian Pulp and Paper **1999** **PAP**

This information is part of Southam's Pulp and Paper Canada Directory. The Directory provides a comprehensive listing of the locations of pulp and paper mills and the products that they produce.

Anderson's Waste Disposal Sites **1930-2000** **ANDR**

The Anderson database uses historical documentation to locate and characterize the likely positions of former waste disposal sites in Ontario. It aims to identify those sites that are missing from the Ontario Ministry of Environment's *Waste Disposal Site Inventory* (also included in EcoLog ERIS). The Anderson database provides revisions and corrections to the positions and descriptions for sites listed in the MOE database. For most sites, more comprehensive information is available, to which EcoLog ERIS can arrange rapid access at an additional cost. In addition to historic waste disposal facilities, the database also identifies certain auto wreckers and scrap yards that have been extrapolated from documentary sources.

Scott's Manufacturing Directory **1992-2000** **SCT**

Scott's Directories is a data bank containing information on over 20,000 manufacturers in Ontario. Even though Scott's listings are voluntary, it is the most comprehensive database of Ontario manufacturers available. Information concerning a company's address, plant size, and main products are included in this database. This database begins with 1992 information and is updated annually.

Chemical Register **1992, 1999-July 2001** **CHEM**

This database includes information from both a one time study conducted in 1992 and private source and is a listing of facilities that manufacture or distribute chemicals. The production of these chemical substances may involve one or more chemical reactions and/or chemical separation processes (i.e. fractionation, solvent extraction, crystallization, etc.).

Canadian Mine Locations **1998-2001** **MINE**

This information is collected from Southam's Canadian Mines Handbook. The Mines database is a national database that provides over 290 listings of public mines dealing primarily with precious metals and hard rocks. Listed are mines that are currently in operation, closed, suspended or are still being developed (advanced projects). Their locations are provided as geographic coordinates (x, y and/or longitude, latitude).

ECO LOG ERIS

Environmental Risk Information Services Ltd.

1450 Don Mills Rd. Toronto, ON M3B 2X7
416-442-2105

Project Property: Moose Deer Point
First Nation Reserve
Isaac Bay, Gordon Bay, King Bay
Moose Point 79, ON

ERIS Project #: 20020418011

Date: MAY-17-2002

SITE LEGEND

- Database locations & project property
- Points of interest (chimney, silo)
- Pipe & transmission line features (pipeline, transmission tower, transmission line, transformer station)
- Railway (operational, operational sidetrack, abandoned, gates)
- Other transportation features (embankment, tank, conveyor moveable crane, trail, stationary crane)

TOPOGRAPHIC LEGEND

- Hydrographic features (permanent & intermittent waterways)
- (dyke/levee, wetland, dam)
- Land use (residential, industrial, commercial, waterbody, gov & institutional, special use, parks & recreation, open area)
- Vegetation (vineyard, orchard, wooded area)
- Recreation uses (race track, golf course)
- Miscellaneous uses (cemetary, open reservoir)
- Industrial and resources (rock cut, auto wrecker, lumber yard pit, sewage disposal pond)

This diagram is to be used solely for relative street location purposes. It may not accurately portray street or site positions.

SITE DIAGRAM

Note: Search radius at 3 km. No topographic information availabel for this area.

Statistical Profile

Order Number: 20020418011
Site Name: Moose Deer Point First Nation Reserve
Site Address: Isaac Bay, Gordon Bay, King Bay Moose Point 79, ON

Number of Mappable Records Surrounding the Site

Database		Within 3.00km Buffer	3.00km to 5.00km	Total
ANDR	*	0	0	0
CA	*	0	0	0
CHEM	*	0	0	0
COAL	*	0	0	0
CONV	*	0	0	0
EIIS	*	0	0	0
FCON	*	0	0	0
GEN	*	0	0	0
MINE	*	0	0	0
NCPL	*	0	0	0
NCS	*	0	0	0
NPCB	*	0	0	0
NPRI	*	0	0	0
OPCB	*	0	0	0
ORD	*	0	0	0
ORIS	*	0	0	0
PAP	*	0	0	0
PES	*	0	0	0
PST	*	0	0	0
REC	*	0	0	0
RSC	*	0	0	0
RST	*	0	0	0
SCT	*	0	0	0
SRDS	*	0	0	0
STP	*	0	0	0
WDS	*	0	0	0
WTP	*	0	0	0
WWIS	*	1	3	4
		1	3	4

The databases chosen by the client as per the submitted order form are denoted by an '*' in the above table. Counts have been provided for the remaining databases for cursory examination only. These records have not been examined or verified, therefore, they are subject to change.

Site Report

Order Number: 20020418011
Site Name: Moose Deer Point First Nation Reserve
Site Address: Isaac Bay, Gordon Bay, King Bay Moose Point 79, ON

FOR COMPLETE INFORMATION, REFER TO DETAIL REPORT

A search has been conducted for this site (address) and company name. No records were found, within the database(s) selected, that meet either of these criteria.

Detail Report

Order Number: 20020418011
Site Name: Moose Deer Point First Nation Reserve
Site Address: Isaac Bay, Gordon Bay, King Bay Moose Point 79 ON

If information is required for sites located beyond the selected buffer area, please contact your ERIS representative.

Environmental Issues Information System

Occurence Reporting Information System

Retail Fuel Storage Tanks

Water Well Information System

Environmental Issues Information System

Map Key	Company	Address	Inventory Number	Environmental Issue	Fiscal Year	Funding Site Action
n/a	REFUSE SITE FOR LARGE OBJECTS MOOSE DEER POINT FIRST NATION	MOOSE POINT NO. 79	3000023495	WASTE DISPOSAL SITES (ACTIVE)	1996/1997	PHASE III
			Band: MOOSE DEER POINT **Reserve:** MOOSE POINT NO. 79 **File Closed:** 24/02/00			
n/a	MOOSE DEER POINT MARINA MOOSE DEER POINT FIRST NATION	MOOSE POINT NO. 79	3000023595	UNDER OR ABOVE GROUND STORAGE TANKS	1995/1996	PHASE III
			Band: MOOSE DEER POINT **Reserve:** MOOSE POINT NO. 79 **File Closed:**			
n/a	AST AT THE ROADS DEPARTMENT MOOSE DEER POINT FIRST NATION	MOOSE POINT NO. 79	3000023695	UNDER OR ABOVE GROUND STORAGE TANKS	1995/1996	PHASE III
			Band: MOOSE DEER POINT **Reserve:** MOOSE POINT NO. 79 **File Closed:**			

Occurence Reporting Information System

Map Key	Company	Address	Spill ID	Medium	Environmental Impact	Date of Occurrence	Nature of Impact
n/a	ONTARIO HYDRO	HARRISON TRAIL, 12 MILE BAY GEORGIAN BAY TWP.	113959	LAND	POSSIBLE	6/2/1995	Soil contamination
			Synopsis:	ONTARIO HYDRO: 18 L HYDRAULIC OIL TO GROUND			
			Cause:	PIPE/HOSE LEAK OVERSTRESS/OVERPRESSURE			
n/a	MARINA	12 MILE BAY MARINA IN GORDON'S BAY, OFF 12 MILE BAY-MOOSE DEER FIRST NATIONS (N.O.S.) GEORGIAN BAY TWP.	179617	WATER	POSSIBLE	4/17/2000	Water course or lake
			Synopsis:	12 MILE BAY MARINA- DREDGING: REPORT FROM RESIDENTS OF SILT PLUME IN WATER.			
			Cause:	WASTEWATER DISCHARGE TO WATERCOURSE DAMAGE BY MOVING EQUIPMENT			

Retail Fuel Storage Tanks

Map Key	Company	Address	Location ID	Expiry Date	Capacity (L)	Licence #	Facility Description
n/a	MOOSE DEER POINT MARINA	LOT 50 CON 7 IR 79 GEORGIAN BAY TWP	18015	1993-11-30	0	0000019203	MARINA
n/a	WILLIAMS WHARF MOOSE DEER POINT	LOT 54 CON 7 GEORGIAN BAY TWP	5175	1994-10-31	4546	0051339001	MARINA
n/a	KING BAY MARINA	LOT 55 CON 7 MOOSE DEER PT RES GEORGIAN BAY TWP	5183	1995-10-31	13600	0055504001	MARINA

Water Well Information System

Map Key	Company	Address	Easting	Northing	Zone	Well ID	Well Depth (ft)	Primary Water Use	Secondary Use
WWIS-1		GEORGIAN BAY TOWNSHIP (FREEMAN)	576550	4992750	17	4201048	89.00	DOMESTIC	

County: MUSKOKA
Lot: 054
Concession: 09
Location Reliability: margin of error : 30 m - 100 m
Date Drilled: 7/21/1971

Appendix E:
Government Contacts

Distribution List

CANADIAN ENVIRONMENTAL ASSESSMENT AGENCY

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Trow Consulting Engineers Ltd
Parent Company of Oliver, Mangione, McCalla & Associates

561 Bryne Drive, Unit D
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Facsimile: (705) 734-6224
E-mail: barrie@trow.com
Web Site: www.trow.com

Reference: BRBA14540A

April 18, 2002

Via Regular Mail

Name
Company
Address
Address

Re: File Search and General Environmental Issues Inquiries

Dear Name:

We are performing a Phase 1 Environmental Site Assessment of the Moose Deer Point First Nation Reserve, #79, located on Moose Deer Point Peninsula on Georgian Bay, within the Township of Georgian Bay, District Municipality of Muskoka, Ontario.

As part of the investigation, contact with various government agencies was recommended to augment information obtained through records review and site visits. We would like to request a search of your records for any information pertaining to any past or current activities or events which potentially may have adversely affected the environmental conditions of the Reserve. If you, or other members of your department have knowledge of any other issues of potential concern which may not be contained in your files, we would appreciate receiving this information as well.

Please call the undersigned if you have any questions or require additional information.

Yours truly,

Trow Consulting Engineers Ltd.

Gary N. Matthie, P.Eng.
Project Engineer

cc: Keith Maracle, M.Eng., P.Eng. – Ogemawahj Tribal Council Engineer
Chief Ed Williams
Urmass Madisso

GNM:kg

Saved: 14540\File Search Letter.doc

OMM/TROW Public works

From: "Brett Maracle" <Brett.Maracle@pwgsc.gc.ca>
To: <barrie@trow.com>
Sent: April 23, 2002 3:31 PM
Attach: Re FW Records Search - Moose Deer Point First Nation Reserve.rtf; File Search Letter Mr Khan Apr 22-02.doc
Subject: FW: Records Search - Moose Deer Point First Nation Reserve

Good afternoon! I just received this request this afternoon and took a qick look to dig up some information on our records. Here is a list of the reports available on the above site:

- Moose Deer Point - Niigon Technologies, Ontario - Environmental Assessment of Tech/Husky Injection Moulding Plant

- Property Transfer Assessment (1992) - Twelve Mile Bay Island Exchange involving Georgian Bay Islands 399, 352, and 352A.

- Property Transfer Assessment (1993) - Twelve Mile Bay Island 401 1/2 to Moose Deer Point Indian Reserve 79.

- Phase I Environmental Site Assessment (1999) - Lots 50-53, Concession 7, Township of Georgian Bay, Ontario.

- Phase I Property Transfer Assessment (2002) - Moose Deer Point Park and Crown Land.

- Updated Phase I Property Transfer Assessment (2002) - Moose Deer Point Island 401 1/2

- Updated Phase I Property Transfer Assessment (2002) - Moose Deer Point Lots 50-53, Concession 7

I would like to point out that all of these projects were carried out on behalf on Indian and Northern Affairs Canada. Therefore, ALL of these reports should be available through INAC as well. And in fact, the First Nation should also have been provided copies of these (with the exception of the final three reports mentioned above since they were just provided to INAC in the last couple of weeks).

Brett Maracle
Environmental Officer
PWGSC - Environmental Services
Ph: 416-512-5219
Fax: 416-590-8284

> -----Original Message-----
> From: Stephan Moushian
> Sent: Tuesday, April 23, 2002 1:46 PM
> To: Brett Maracle
> Cc: Erin Hartman
> Subject: FW: Records Search - Moose Deer Point First Nation Reserve
>
> Brett,

> Trow Consulting is working with the Moose Deer Point FN on an environmental study in relation to the UAC Agreement. They have written to us and are asking to review our files pertaining to this FN and their lands. We may have undertaken EII and other Phase II/III work in the 90s for INAC.
> Can you find out if from Records Office if we have any files for them to come and review here and then write to them, and advise accordingly.
> Apparently they have INAC's authorization.> > <<Re FW Records Search - Moose Deer Point First Nation Reserve.rtf>>
> Thanks,
>
> Stephan Moushian, M. Eng.
> Head, Assessments, Evaluations and Environmental Initiatives
> PWGSC - RPS - Environmental Services - Ontario Region
> Phone: 416-512-5718 Fax: 416-590-8284
> E-mail: stephan.moushian@pwgsc.gc.ca
>
> -----Original Message-----
> From: Ansar Khan
> Sent: Monday, April 22, 2002 3:46 PM
> To: Paul Mountjoy
> Cc: Erin Hartman; Stephan Moushian
> Subject: FW: Records Search - Moose Deer Point First Nation Reserve
>
> Paul,
> Such requests would normally be routed to us via our client, INAC. I assume you will seek their authorization before Erin and Stephan can proceed and respond.
> Please advise.
> Thanks.
>
> Ansar Khan
> Regional Manager, Environmental Services
> PWGSC, Ontario Region
> Phone: 416 512 5507; Fax: 416 590 8284
> e-mail: Ansar.Khan@pwgsc.gc.ca
>
> -----Original Message-----
> From: OMM/TROW [SMTP:trow@bconnex.net]
> Sent: Monday, April 22, 2002 3:20 PM
> To: Ansar Khan
> Subject: Records Search - Moose Deer Point First Nation Reserve
>
>
> Please find attached a letter regarding the above.
>
> Yours truly,
>
> Karen Gibbon
> Admin. Assistant (Barrie)> > <<File Search Letter Mr Khan Apr 22-02.doc>>

OMM/TROW Environment Canada

From: <Sandro.Leonardelli@ec.gc.ca>
To: <trow@bconnex.net>
Cc: <Rob.Dobos@ec.gc.ca>
Sent: June 5, 2002 2:34 PM
Attach: File Search Letter Mr Dobos Apr 22-02.doc
Subject: FW: Records Search - Moose Deer Point First Nation

Your request for information (attached below) regarding the Moose Deer Point First Nation Reserve was forwarded to me by Dobos. Our Federal Programs Division does not have any information pertaining to this Reserve. Our Environmental Emer staff have no records of any spills occurring at this Reserve. Indian & Northern Affairs Canada might be your best source fo information you seek.

I hope this helps. Sincere apologies for the delay in replying.

-----Original Message-----
From: OMM/TROW [mailto:trow@bconnex.net]
Sent: Monday, April 22, 2002 1:42 PM
To: Rob.Dobos@ec.gc.ca
Subject: Records Search - Moose Deer Point First Nation Reserve

Please find attached a letter regarding the above

Yours truly,

ant (Barrie)

OMM/TROW Fisheries & Oceans

From: <DeBruynE@DFO-MPO.GC.CA>
To: <trow@bconnex.net>
Sent: April 22, 2002 6:17 PM
Subject: RE: Records Search - Moose Deer Point First Nation Reserve

Thanks for the letter .I will pass to our referrals coordinator to assign your request to a staff officer to investigate the request

Edwin R. DeBruyn
Habitat Chief
DFO Ontario Area

-----Original Message-----
From: OMM/TROW [mailto:trow@bconnex.net]
Sent: Monday, April 22, 2002 1:43 PM
To: debruyne@dfo-mpo.gc.ca
Subject: Records Search - Moose Deer Point First Nation Reserve

Please find attached a letter regarding the above.

Yours truly,

Karen Gibbon
Admin. Assistant (Barrie)

OMM/TROW Fisheries to Oceans

From: <ThompsonDL@DFO-MPO.GC.CA>
To: <gary.matthie@trow.com>
Cc: <DeBruynE@DFO-MPO.GC.CA>; <RichardsB@DFO-
Sent: April 24, 2002 11:40 AM
Subject: Moose Deer Point Phase 1 Environmental Site Assessment

HI Gary,

Further to our telephone conversation, Fisheries and Oceans Canada, Ontario-Great Lakes Area administers the habitat protection provisions of the Fisheries Act. With consideration to our administrative responsibility and having reviewed our files, I am not aware of any "current activities or events that have adversely affected the environmental conditions of the Moose Deer Point First Nation". I hope this is of assistance in your Environmental Issues Inquiry.

Regards,

Dan Thompson

Habitat Impact Assessment Biologist

Parry Sound District
Ontario Great Lakes Area
Fisheries and Oceans Canada
28 Waubeek Street
Parry Sound, ON P2A 1B9
* (705) 746-2196 fax: (705) 746-4820
email: thompsondl@dfo-mpo.gc.ca <mailto:thompsondl@dfo-mpo.gc.ca>

(Canadian Heritage)

Parks Canada / Parcs Canada

111 Water Street East
Cornwall, Ontario
K6H 6S3

RECEIVED

13 May 2002

5585-2

Gary Matthie
Trow Consulting Engineers Ltd
561 Bryne Drive, Unit D
Barrie, Ontario
L4N 9Y3

Dear Mr. Matthie:

RE: FILE SEARCH AND GENERAL ENVIRONMENTAL ISSUES INQUIRIES

Thank you for your letter dated April 18, 2002, regarding the above mentioned inquiry. We have reviewed our records and have no knowledge of any past or current activities on the Moose Deer Point Peninsula which may have potentially affected the environmental conditions of the Reserve.

Please do not hesitate to contact me at (613) 938-5937 should you have any questions.

Yours sincerely,

Mark Yeates

cc. R. Prosper - Supt. GBI NP

Canada

OMM/TROW Can. tran.

From: "Bill Aird" <Bill.Aird@cta-otc.x400.gc.ca>
To: <trow@bconnex.net>
Sent: May 15, 2002 1:36 PM
Subject: Re: Records Search - Moose Deer Point First Nation Reserve

Gary Matthie

I am responding to your letter of April 18, 2002

The Canadian Transportation Agency does not maintain records of environmental conditions on railway lines.

I would suggest that you contact the railways which cross the Moose Deer Point First Nation Reserve in order to obtain such information.

Bill Aird, Senior Environmental Officer
Rail Infrastructure Directorate
Canadian Transportation Agency
15 Eddy Street
Hull QU K1A 0N9
(819) 953-9924

>>> OMM/TROW 04/22/02 03:05pm >>>

OMM/TROW NCC

From: <DMugeman@ncc-ccn.ca>
To: <trow@bconnex.net>
Sent: April 23, 2002 11:14 AM
Subject: Subject: Records Search -Moose Deer Point First Nation Reserve.

Dear Gary N. Matthie,

Thank you for your letter on the above subject.

We want to let you know that the area of activities of the National Capital Commission is restricted to the National Capital Region.
We don't have any information on the Moose Deer Point Peninsula.

Good luck in your investigation.

Domitien Mugemana
Agent principal/senior officer Environnement
Commission de la capitale nationale
Section des Services environnementaux
202-40 rue Elgin
Ottawa (Ontario), K1P 1C7
Tél: (613) 239-5037 Fax: (613) 239-5393
Courriel: dmugeman@ncc-ccn.ca

CLCA

Barrie - Karen Gibbon

Transport Canada

From: Risen, Marty [RisenM@tc.gc.ca]
Sent: Friday, May 10, 2002 3:49 PM
To: Barrie Office
Subject: Phase 1 ESA of Moose Deer Point First Nation Reserve #79

To: Gary N. Matthie

I received your letter requesting a search of our records for relevant information.
Could you please forward a rough drawing showing the location of the reserve lands, so that we may determine if we have investigated neighbouring/abutting lands.

Thank you.

Marty Risen
Senior Environmental Engineer
Phone: 416-952-0501
Fax: 416-952-0514

Transport Canada

Barrie - Karen Gibbon

From: Risen, Marty [RisenM@tc.gc.ca]
Sent: Tuesday, June 04, 2002 4:18 PM
To: Barrie Office
Subject: Moose Deer Point First Nation Reserve #79

To Gary Matthie

Gary,
Thank you for the map showing the location of the Reserve.

To the best of my knowledge we have not had any involvement with the Reserve Lands which might pertain to your assessment. The closest property where we have been involved is Boyds Bay, which is located northeast of Midland.

Marty Risen
Senior Environmental Engineer
Phone: 416-952-0501
Fax: 416-952-0514

Canadian Nuclear Safety Commission
Commission canadienne de sûreté nucléaire

P.O. Box 1046, Station B
Ottawa, Ontario
K1P 5S9

C.P. 1046, Succursale B
Ottawa (Ontario)
K1P 5S9

Fax: (613) 995-5086
Télécopieur : (613) 995-5086

RECEIVED
BK15A001454DA

Your file Votre référence

Our file Notre référence

Directorate of Nuclear Cycle and Facilities Regulation

26-7-1-25-0

May 29, 2002

Mr. Gary Matthie
Project Engineer
Trow Consulting Engineers Ltd
Unit D
561 Bryne Drive
Barrie, Ontario
L4N 9Y3

Subject: **Information on records pertaining to the Moose Deer Point First Nation Reserve, #79**

Dear Mr. Matthie:

This will confirm receipt of you letter dated April 18, 2002 requesting information on records pertaining to the Moose Deer Point First Nation Reserve, #79, located on Moose Deer Point Peninsula on Georgian Bay, Ontario.

A search of our records has determined that the Canadian Nuclear Safety Commission has no information pertaining to the Reserve Lands of the Moose Deer Point First Nation.

Sincerely,

Bernard Richard

Bernard Richard
Project Officer
Processing Facilities and Technical Support Division

Canada