ARCHAEOLOGICAL IMPACT ASSESSMENT

CAM-F DEW LINE SITE REMEDIATION PROGRAM

PERMIT 05-028A

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Prepared For

Jacques Whitford Limited
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On the Request Of

Public Works and Government Services Canada, Western Region
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On Behalf Of

Indian and Northern Affairs Canada

Prepared By

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October 2005

October 18, 2005

Jacques Whitford Limited
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Attention: Mr. Jim Howell

Dear Mr. Howell:

I am pleased to submit to you this report entitled ***Archaeological Impact Assessment CAM-F, DEW Line Site Remediation Program***. Should you have any questions, please do not hesitate to contact me.

Sincerely yours,

RMA HERITAGE RESOURCES CONSULTANTS INC.

Gloria J. Fedirchuk, Ph.D.
/g

Executive Summary

An archaeological resources impact assessment was completed on DEW Line station CAM-F (Sarcpa Lake). A site file search of the corresponding 1:250,000 NTS map sheet was completed to determine the nature and location of previously recorded sites in the region. The field study focused on areas of existing and proposed disturbances in the vicinity of the station.

Occupation and use of the CAM-F station has resulted in extensive disturbance. Lake shore locations associated with borrow areas were disturbed by grading and other vehicular traffic as well as borrow activities. Existing borrow areas have been largely disturbed surficially by grading; areas of additional borrow activity will not impact previously undisturbed areas. The remaining areas surrounding the station, airstrip and roads are all associated with disturbances.

One tent ring was identified during the field study at CAM-F. It is located well away from any proposed remediation activities. No further study relative to the proposed remediation program is recommended.

Project Personnel

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INTRODUCTION

At the request of Jacques Whitford Limited and Public Works and Government Services Canada, Western Region on behalf of Indian and Northern Affairs Canada (INAC) an archaeological impact assessment (Nunavut Territory Archaeologist Permit 05-028A) was conducted of the proposed site remediation program at former CAM-F (Sarcpa Lake), Nunavut. CAM-F is located at Sarcpa Lake, southwest of Hall Beach, Melville Peninsula (Figure 1). Built in the mid-1950s, the location includes a main station module, warehouse and garages, pumphouses, communications tower, tanks, petroleum, oil and lubricants (POL) and drum storage areas, sewage outfalls, generator sites, assorted dumps, borrow areas, airstrip and access roads.

The proposed remediation program will entail a construction camp, upgrading of existing roads, excavation of contaminated soils, collection and sorting of dump remains, deposition of waste and contaminated soils in both on and off site facilities, demolition of site facilities, and excavation of borrow areas. Excavated areas will be backfilled with clean fill and graded and contoured consistent with local topography. Non-hazardous waste will be placed in an on site landfill and covered with local borrow materials. Excavated secure disposal facilities will require more extensive preparation both to subsurface and surface deposits and will be bermed with local borrow materials.

Figure 1 Location of CAM-F (Sarcpa Lake) on Melville Peninsula

OBJECTIVES

The objectives of the study were to document any previously recorded archaeological and historic sites relative to the program facilities, assess the potential for occurrence of additional currently unidentified heritage resource sites in the project areas, and to complete an impact assessment of any sites identified. Specifically, the field program was designed to provide information on both existing disturbed and intact sites, determine site types, site nature and association, site context, and potential site values. These data were used to evaluate the impact of the program on specific heritage resource sites identified and on the regional data base.

ENVIRONMENTAL SETTING

INTRODUCTION

Precontact economic strategies as well as many aspects of the material culture of the human inhabitants were intimately related to the opportunities and constraints provided by the regional environment which they occupied. In many respects, regional environment also strongly influenced where certain activities were conducted and consequently, where archaeological sites, testimony to precontact use and occupation, are located. The distribution of precontact sites in the barren grounds includes a wide variety of landforms but sites are most frequently associated with coastlines and lake shores, river banks, eskers and kames, and bedrock knolls. This distribution pattern partially reflects environmental opportunities presented to human populations as well as cultural preferences in site location. Terrain influenced many forms of human activity, directing travel, biasing routes of communication, enhancing or limiting resource procurement activities, and restricting human occupation areas to selected localities. As a result, human populations were not uniformly distributed across the landscape, but were non-randomly clustered within the most suitable habitats. Because of the close relationship which precontact occupants had with the environment, a brief description of the regional and local environments is provided.

REGIONAL ENVIRONMENT

The project is located in the Canadian Shield physiographic region as defined by Bostock (1970) and within the Foxe Plain (Figure 2). All of the area is characterized by Precambrian rock representing three periods of mountain-building over two billion years. Extensively eroded over time, glacial activity has had relatively little effect on this region as a whole.

Lying within the Churchill Province as defined by Stockwell (1970), the project is also associated with the Northern Arctic Ecozone supporting discontinuous low shrub tundra complex vegetation. Bedrock outcrops are common.

Terrain in the project areas reflects glacial activity which originated in the Hudson Bay area. Wasting of the ice sheets deposited till and outwash features are visible at Sarcpa Lake. Glaciofluvial deposits are present in the western portions of the study area. Of significance to the archaeological record of occupation are dates of deglaciation in the region. The eastern portion of Melville Peninsula was not free of ice until after 7000 years ago.

PROJECT ENVIRONMENT

CAM-F (Figure 3) lies on the northwest side of Sarcpa Lake in the eastern interior of Melville Peninsula. The region is characterized by well drained rolling terrain. Numerous large lakes and rivers occur in the region. The station module is located on the highest point above the lake (Plate 1). An all weather airstrip lies to the southwest and two access roads leading to Sarcpa Lake terminate at borrow sources of outwash sands and gravels (Plates 2, 3). Terrain between the station module and the lake, in both directions, consists of several broad flats broken by occasional bedrock exposures (Plate 4). To the north and west lie rugged granite fell fields with large boulders and glacial erratics. An ice airstrip was seasonally built on Sarcpa Lake (Plate 5) during site operation and the beach and near-shore area contain remains of machinery and fuel drums.

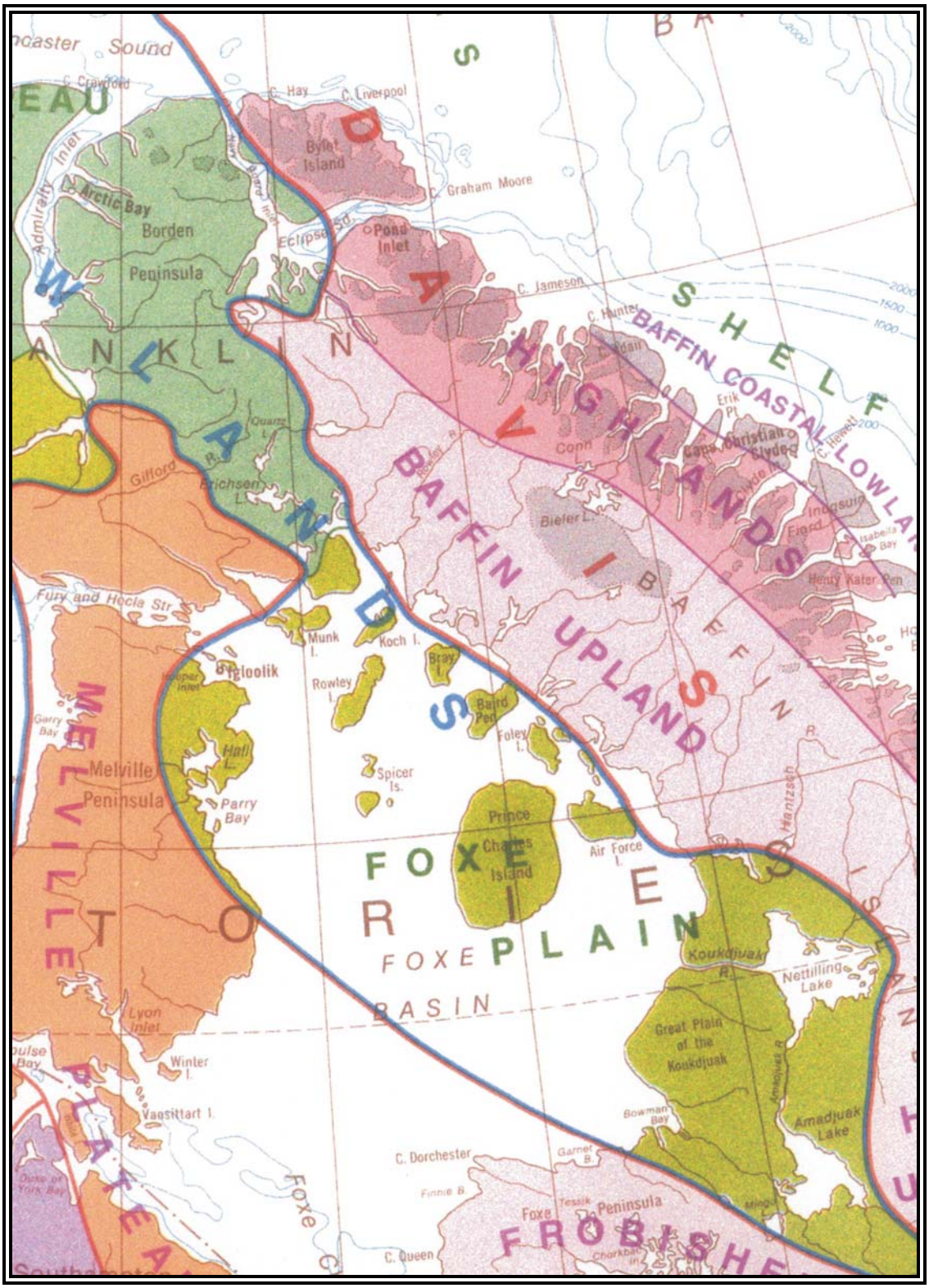

Figure 2 Project area relative to physiographic zones

Figure 3 Aerial view of CAM-F

Plate 1 General view north of operations station on high hill overlooking Sarcpa Lake, CAM-F.

Plate 2 Borrow source to east at edge of Sarcpa Lake where ice airstrip was constructed, CAM-F.

Plate 3 Borrow source at inlet of Kingora River into Sarcpa Lake, CAM-F. General view west.

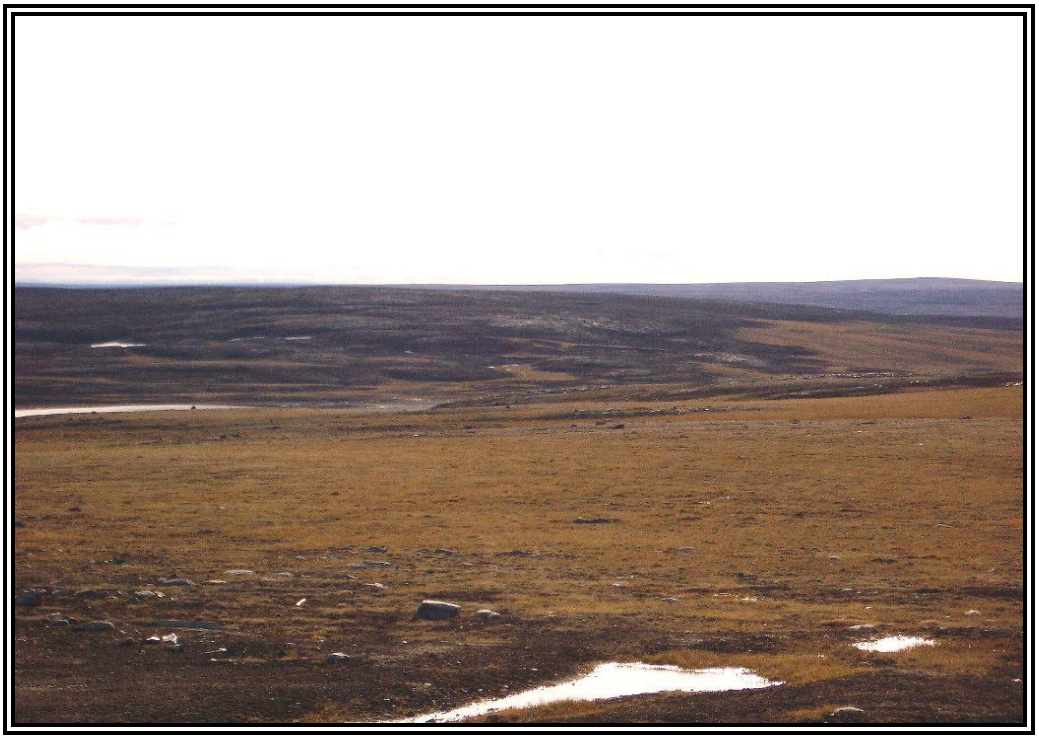

Plate 4 General topography to south of air strip, CAM-F. Sarcpa Lake in background.

Plate 5 Fuel drums and other debris at ice airstrip area on Sarcpa Lake, CAM-F. General view southeast.

HERITAGE RESOURCES

DEFINITION

Heritage resources are identified by the Nunavut Archaeological and Palaeontological Sites Regulations (2001) and consist of archaeological artifacts more than 50 years old and fossils including natural casts, preserved tracks, coprolites, and plant remains as well as shells, exoskeletons of invertebrates, and vertebrate remains. Precontact archaeological sites are comprised of artifacts, features, and residues of native origin. They predate the arrival of Europeans and are typically characterized by modified bone and stone, and stone structures. Historic sites are characterized by structures, features, and objects of European influence. These sites date back to contact with the Europeans but also include remains of more recent activity (i.e. more than 50 years). Historic sites less than 50 years old are generally associated with traditional land use and document continued use and occupation of an area to the present time. Cultural landscapes consisting of either natural or man-made features important to societies' sense of place are also important heritage resources. Although palaeontological sites contain fossils of plants or animals or fossilized evidence of their existence, also of geological interest are type sites for geological formations.

NATURE OF HERITAGE RESOURCES

Heritage resources are nonrenewable and are susceptible to alteration, damage, and destruction by construction and development activities. The value of heritage resources cannot be measured in terms of individual artifacts or biological specimens, rather the value of these resources lies in the integrated information which is derived from the relationship of the individual artifacts and fossil specimens, associated features, spatial relationships (distribution), and contextual situations. Interpretation of heritage resource materials, and the ability to interpret the significance of particular sites in a landscape, is based on an understanding of the nature of the relationship between individual archaeological and palaeontological materials as well as the sediments and strata within which they are contained. As such, removal or mixing of cultural or fossil bearing sediments results in the permanent loss of information basic to the understanding of these resources. As a result, heritage resources are increasingly susceptible to destruction and depletion through disturbance.

CULTURAL CONTEXT

PRECONTACT CHRONOLOGY

The cultural chronology of the eastern arctic reflects an increasing adaptation to arctic maritime environment. Present evidence indicates that Eskimoid peoples (archaeologically recognized as Arctic Small Tool Tradition), ultimately related to older populations of northeastern Asia, entered the western arctic and occupied the Alaska coast. Derivatives of this PaleoEskimo culture rapidly spread eastward and reached the eastern arctic, including Greenland, by 2500 B.C. (Maxwell 1984: 359). Locally identified by different archaeological names, it represents a homogeneous adaptation to the environment and a way of life (McGhee 1996).

The archaeological sequence in the eastern arctic begins with Arctic Small Tool tradition materials termed Independence I (2000 – 1600 B.C.) left by the earliest occupants of the High Arctic. With cultural origins to the west, this

tool kit is characterized by burin and microblade technology, side blade insets probably for harpoons, tools for working bone, antler, and ivory, and distinctive scraping and cutting tools. Although few organic items have been preserved, they undoubtedly occurred in the form of bone, antler and ivory fore shafts, arrow tips, and harpoon heads. Based on the results of excavations at Port Refuge (McGhee 1979) on northwestern Devon Island, these early occupants were primarily musk ox hunters. At Port Refuge, a linear arrangement of houses containing internal stone fire boxes associated with distinctive non-toggling harpoon heads serve to distinguish this occupation from later PreDorset remains containing clustered houses and toggling harpoon heads (Maxwell 1984).

The earliest PreDorset sites in the vicinity of the study areas are the Closure Site and the Mittimatalik Site on the south and northeast coasts of Baffin Island, respectively, and the Parry Hill Site near Igloolik. These sites all date from 2500 B.C. to 2000 B.C. PreDorset subsistence economy focused primarily on seal and walrus at seacoast locations with potentially some local use of beluga and narwhal. Remains of musk ox, caribou, and polar bear taken by bow and arrow and lances, as well as birds, also occur in site middens. The tool assemblage contains self bladed open socket bone and ivory harpoons with single or bilateral barbs, bows and composite arrows; microblades, burins, and burin spall awls of quartz crystal, chert drills, and ground slate knives. Chert end blades in the assemblages are thin, slender double tapered or triangular shaped, often exhibiting polished facets on both faces and finely serrated edges. Also present are numerous bone awls and ivory needles with round cross sections, small eyes and blunt butt ends. Small oval-to-round soapstone lamps occur sporadically. Art work is predominantly geometric and appears on needle cases and caribou scapula. Summer sites are characterized by small oval tent rings whereas winter ‘houses’ are oval with mid passages and stone slab fireboxes.

The transition to the succeeding Dorset culture (800 – 500 B.C.) is gradual with many traits from PreDorset components being retained and slowly replaced by new forms. In general, Dorset (500 B.C. to A.D. 1400) is characterized by the introduction and continuity of tools and equipment

specifically suited to winter hunting, particularly sea-ice hunting. For example, bone sled shoes, snow knives, and ice creepers appear. An emphasis on seal hunting is apparent. Fishing figured prominently in subsistence practices as sites associated with fish weirs are common. Shelters consisted of snow block winter houses or are evidenced by small circles outlined by large boulders, small rock ovals or large rectangular features with internal compartments. Summer habitations generally are associated with small circle tent rings. Burials with grave offerings occur occasionally. Art objects, either as three dimensional carvings or decoration of utilitarian items, are notable.

Beginning about A.D. 1000, Thule Culture (NeoEskimo) originating in coastal Alaska moved eastward to rapidly and effectively replace the Dorset people within 200 to 300 years (McGhee 1984). The cultural remains of these newcomers document an economy and technology uniquely adapted to sea mammal hunting, specifically whales. It is postulated that the primary route of these migrants passed eastward through Lancaster Sound to terminate in the Smith Sound area of Greenland. Small clusters of semi-subterranean stone and whale bone houses with stone floors and rear sleeping platforms are characteristic. Soapstone lamps appear to have been borrowed from their predecessors. Whale bone and ivory tools, implement components, and decorative items abound in Western Thule sites. Thule remains are by far the most prevalent archaeological materials reported by early investigators in the Arctic (Rasmussen 1929, 1931; Mathiassen 1927, 1928). A secondary route passed along the eastern side of Baffin Island and resulted in the population of the eastern arctic moving to the areas of Chesterfield Inlet and Ungava Peninsula on Hudson Bay and Baffin Island and Labrador to the east by A.D. 1200 to 1300 (McGhee 1984). Sites outside of the bowhead whale feeding range indicate subsistence based on caribou, fish, and ringed seal. Several important sites of Thule Culture occur on the southern and northern coasts of Devon Island and northern Baffin Island and on the shores of northwestern Greenland. As with PaleoEskimo materials, very few Thule sites have been investigated archaeologically. Many aspects of material and interpreted social culture as well as occupation and land use patterns of these ancestors of the Inuit have not been researched or documented in detail.

Sometime after approximately A.D. 1200, the islands north of Parry Channel were abandoned. Because gradual decline in climatic conditions and increased sea-ice accumulation retarded melting of summer ice pack, whale movement was inhibited which resulted in a concomitant decline in whaling activities as well as hunting of other sea mammals (McGhee 1984). The succeeding transition from Thule to historic Eskimo (Inuit) in the central arctic is characterized by a greater dependence on land animals and winter sealing activities except in the area of Boothia Peninsula where earlier whale hunting traditions had never been established. In the 1860s, northern Baffin Inuit attempted to reoccupy the northern edges of Lancaster Sound (McGhee 1996). For the three years they exploited the eastern portions of Devon and Ellsmere islands, eventually settling in northwestern Greenland.

HISTORY

The earliest European explorers in the area were Martin Frobisher (1576) and John Davis (1585) followed by Henry Hudson (1610) and William Baffin and Robert Bylot (1616). Although portions of the shoreline of Baffin Island were mapped, no directed effort in exploring the region occurred until the mid 1800s. The search for the Northwest Passage, beginning in the first quarter of the 19th century, initiated additional exploration and produced the earliest descriptions of the aboriginal peoples (Mathiassen 1927, 1928, 1930; Boas 1888; Hall 1865). However, the area is perhaps best known historically for the ill-fated expedition of Sir John Franklin and the subsequent search efforts in the mid 1800s.

Northern Baffin Island and the Davis Strait area were probably initially visited by British whalers in the mid 1700s (Lubbock 1937). Exploitation of the bowhead whale continued until the latter half of the 19th century. It is suggested that whaling ship wrecks provided much useful materials for the local Inuit at that time (Ross 1979). By 1900, the fur trade became entrenched in the area and trading posts were established at such locations as Lake Harbour, Cape Dorset, Clyde River, Pond Inlet, Coral Harbour and Igloolik.

The earliest air defense radar stations were constructed along the eastern and western Canadian coasts in 1942 as a precaution against German and Japanese air attack. At the conclusion of these hostilities, the stations were dismantled. It was not until 1947 that technology became sufficiently sophisticated to warrant and permit construction of a long range radar facility system against a manned bomber attack. This system, the Pinetree Line stretching from Vancouver to Labrador, was completed in 1954 as a joint venture between the Canadian and American governments. It was followed in 1953 by the all-Canadian Mid-Canada Line. In November of 1954 plans were finalized for the construction of 22 Distant Early Warning (DEW) Line stations. These were completed in 1957. With the development of intercontinental and submarine launched missiles, the utility of all three systems diminished. As a result, the Mid-Canada Line was phased out in 1965. By 1983, 21 DEW Line stations and 24 Pinetree stations were still in operations.

Construction of the intermediate DEW Line facilities at Sarcpa Lake was completed in 1957. It was abandoned in 1963. The Sarcpa Lake facility was subsequently (1977) used as a research station by the Science Institute of the Northwest Territories and Indian and Northern Affairs but is now completely abandoned.

METHODOLOGY

INTRODUCTION

In order to meet the objectives of the heritage resources program, the following tasks were conducted: 1) site file search, 2) limited literature review, 3) completion of a field assessment at each location and 4) analysis of the acquired data.

RECORD REVIEW

Archaeological site records for the general project area (1:250,000 NTS map sheet) were searched through the Nunavut Department of Culture, Language, Elders & Youth. This data was reviewed to determine the presence, number and nature of previously recorded archaeological and historic sites in the region in which the proposed project is located.

LITERATURE REVIEW

A limited literature review was completed to provide the archaeological and historical context for currently unrecorded archaeological and historical remains and to determine whether significant and/or sensitive historical sites are present in the project area. Primarily NTS maps were examined to provide information regarding terrain features. The site file search, literature review, and the map data provided some information on archaeological and historic potential of the terrain features associated with the project area.

FIELD STUDIES

The general approach to the field program was to examine all areas of past disturbance and specifically the proposed new areas of disturbance. Specific attention was given to the following terrain features if they coincided with past or proposed DEW Line site activities: lakeshore situations, river/creek banks, glacial outwash and morainal features. Less intensive inspection was given to bedrock outcroppings and areas not identified for remediation activities.

The activity areas examined at CAM-F consisted of the operations station area and the associated dump locations, the two access roads (borrow source and gravel stock pile areas), and the proposed construction camp adjacent to the airstrip (Figure 4). In addition, a portion of the upland along the edge of Sarcpa Lake was examined to determine whether archaeological features were present and to confirm the results in the proposed activity areas. An existing borrow source which will potentially be reused during remediation is located across Sarcpa Lake (Plate 6). It was inaccessible by fixed wing aircraft and was not examined.

The specific field methodology consisted of foot traverse of each of the existing facilities and proposed activity areas. All exposures were intensively examined. When a cultural feature was identified, more intensive inspection was completed to determine the nature and extent of site content and to obtain an estimate of the potential age. Because exposures were abundant in all of the activity areas examined, shovel testing was not implemented.

SITE DESIGNATION

Identified archaeological sites are referred to by a Borden Number which consists of a four letter symbol accompanied by a number (i.e. LdNs 11). Within this system and north of latitude 62°, the upper case letters represent major blocks 2° by 4° in size (i.e. L = 64° to 66° latitude; N = 104° to 112° longitude) and the lower case letters denote 10' and 20' units within the major block (i.e. d = 30' to 40' latitude; s = 0' to 20' longitude). The numbers are assigned sequentially by the appropriate regulatory agency and refer to specific sites within each unit.

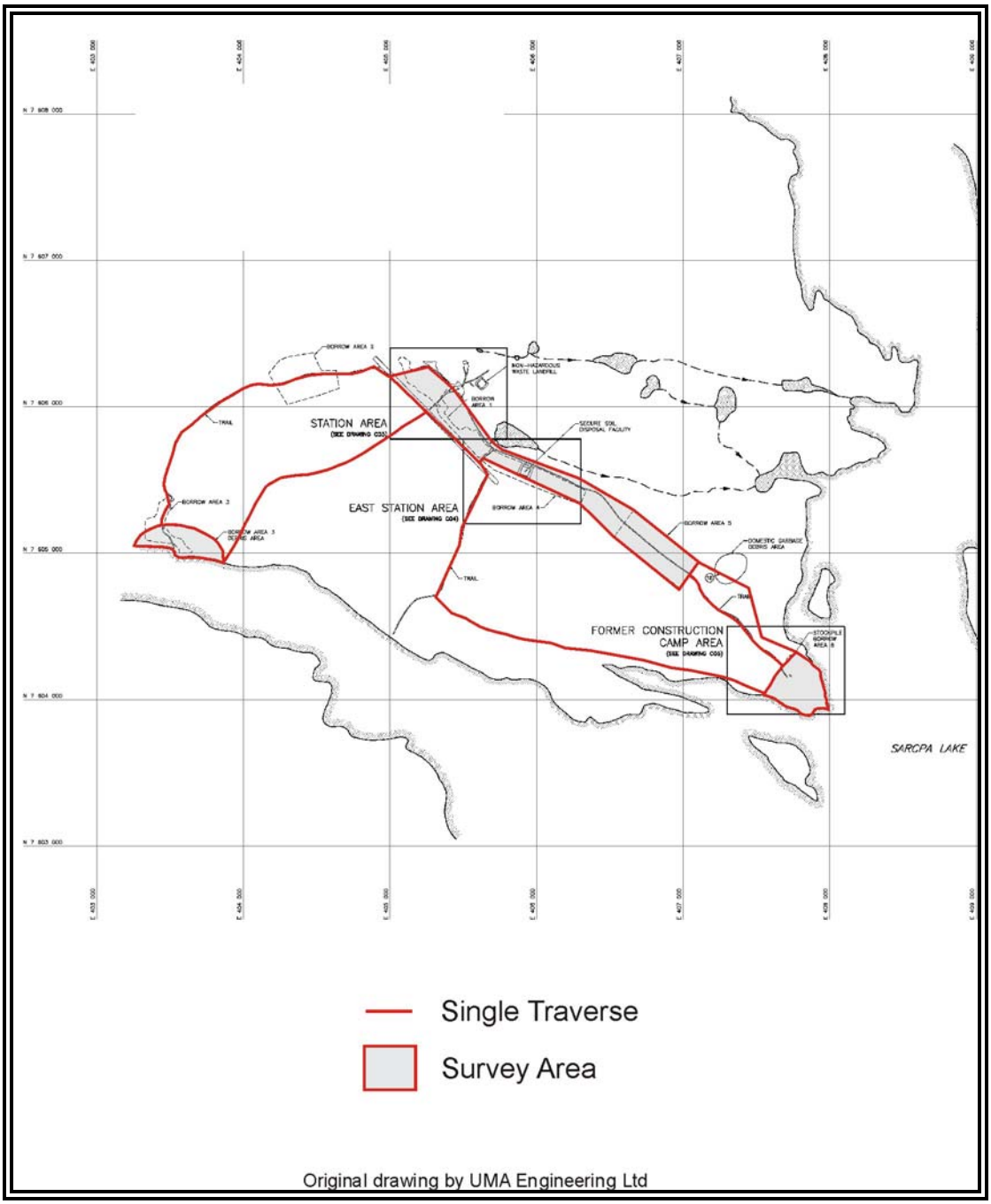

Figure 4 Field reconnaissance – CAM-F

Plate 6 Existing borrow area across Sarcpa Lake, CAM-F, that will be used during remediation but was not examined in the field.

SITE DOCUMENTATION

The location of any sites encountered are recorded using Global Positioning System (GPS) (NAD 27) coordinates and the relationship of each site to local physical features is documented. The site locations are plotted on the relevant 1:50,000 National Topographic Map Series map sheet and the relationship of each site to the proposed development zones are denoted. Site characteristics are also documented and include estimated dimensions, content, setting, and complexity. An Archaeological Survey of Canada Site Entry Form is completed for each heritage resource site identified.

SITE CLASSIFICATION

Each precontact sites identified is classified on the basis of its primary physical attributes and/or predicted primary function.

SITE EVALUATION

IN-FIELD ASSESSMENT

The nature of site assessment completed at each site identified is largely contingent on the nature of the site and its physical relationship to both previous and proposed disturbance activities. If an identified site does not coincide with either previous disturbance or proposed remediation activities, detailed site assessment is not undertaken.

CONTEXT FOR RECOMMENDATIONS

In general, site-specific mitigative measures recommended reflect the nature and content of each site and the heritage resource values ascribed to each site. As such, the site-specific scope of studies recommended at each site represents a professional judgment as to an appropriate balance in compensation for scientific and public information lost through site destruction.

The site-specific recommendation made for identified sites is based primarily on its location relative to proposed disturbance activities. However, should remediation plans change and disturbance to identified sites be anticipated, further assessment and/or mitigation recommendations may be required.

EXISTING DATA BASE

SITE FILE SEARCH

A file search for previously recorded sites occurring on 1:250,000 NTS map sheet 47A (Hall Lake) was completed. No sites were previously recorded on the Hall Lake map sheet.

PREVIOUS STUDIES

Archaeological studies specific to the Sarcpa Lake locality have not been conducted to date.

IDENTIFIED ABORIGINAL LAND USE PATTERNS

Melville Peninsula comprised part of the territorial home of the Iglulik people who are believed to be the descendants of the bearers of the Thule culture into the region (Mary-Rousseliere 1984: 431). This territory extended from Lancaster Sound and Baffin Bay on the north and east into the Foxe Basin on the south west to Committee Bay. Some of the earliest work documenting the local populations and their use of the land was by the Fifth Thule Expedition, notably Mathiassen (*cf.* 1927, 1928, 1930). The following land use patterns represent early historic activities and provide insight into archaeological and historical potential of various terrain features and localities. The following land use pattern is based on the seasonal round described by ethnographers and explorers and summarized by Mary-Rousseliere (1984).

In early spring, surface ice sealing formed the focus of economic activities. At this time, the large winter villages were abandoned and small groups dispersed across the landscape. Some families remained along the ice edges hunting seal, and later narwhal and Greenland whale from kayak in the open water; others crossed to Devon Island to hunt muskox and polar bear. Still others retired to fishing camps in the interior. Dwellings often consisted of modified snow houses in which snow blocks formed the basis of the structure and skins formed the roofing.

The summer season was associated with two age-related patterns. Young hunters and their families moved inland to focus on caribou hunting while older men and their families hunted marine animals on the coast. Caribou were hunted by bow and arrow from blinds and speared from kayaks as they forded the local rivers. Some interior groups supplemented caribou with muskox and arctic char. Seal skin, less commonly caribou or walrus skin, tents were used for shelter. In the late fall, members of these two distinctive patterns met at 'sewing villages'. By midwinter, all of the residents moved to sealing villages at the sea ice where both ice hole seal hunting and walrus hunting could be efficiently practiced. Winter villages were large, containing several snow houses, sometimes linked into dwelling complexes. This was the period of intensive social interaction, ceremonies, gatherings and festivities.

FIELD RESULTS

DEW LINE LOCATION

In the general DEW Line site area, extensive disturbance had occurred as a result of past activities such as road and airstrip construction and maintenance (Plate 7), habitation and use of structures (Plate 8), use and maintenance of fuel and domestic dumps (Plates 9,10), and access to and use of borrow areas (Plate 11). Of particular note is this pattern in the areas of the proposed remediation facilities. Very few to none of the new facilities coincide with previously undisturbed areas.

IDENTIFIED SITES

One archaeological site was identified during the field component of the study completed at CAM-F (Figure 5). It is a stone feature site that is associated with the protohistoric/early historic period.

STONE FEATURE SITES

Stone feature sites are stone alignments or configurations resulting from past human activity. If they contain obvious tent weights and hearths attributable to campsite activities, these sites are identified as campsites. All other configurations are classified as stone feature sites. Depending on the configuration of these features, function may be ascribed to these sites, for

Plate 7 Disturbance associated with road construction to borrow area.

Plate 8 Disturbance associated with station module area, CAM-F, in area of non-hazardous waste disposal.

Plate 9 Disturbance associated with station refuse area, CAM-F, Dump 'B' area.

Plate 10 Disturbance associated with airstrip and abandoned machinery, CAM-F.

Plate 11 Disturbance observed at borrow location on Sarcpa Lake, CAM-F.

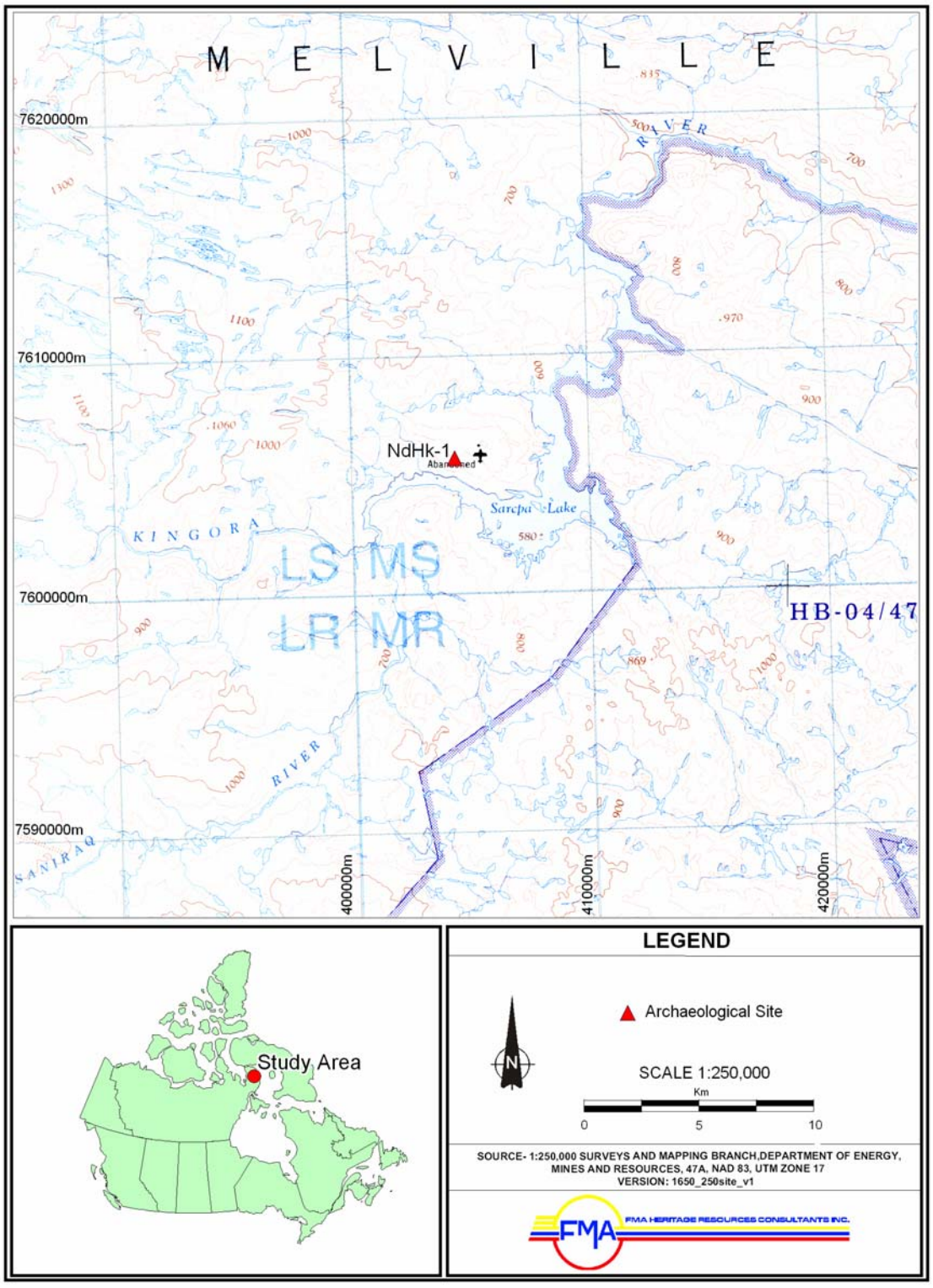

Figure 5 Location of archaeological site relative to CAM-F station

example drive lanes, or caches. In other situations there may be insufficient information to interpret function of the structures and they are identified simply as stone feature sites. The scientific potential of stone feature sites generally reflects the identifiable associated activity.

Site NdHk 1 (Figure 5; Plates 12, 13)

An isolated tent ring was observed on a high terrace overlooking the inlet of the Kingora River into Sarcpa Lake. The site area is relatively flat. An extensive area of bedrock outcrop lies below and to the south of the site whereas a level plain occurs to the west. To the northeast is a small pond which drains through an incised channel into Sarcpa Lake.

Evaluation. The tent ring consists of two components, a larger ring comprised of 40 rocks, some deeply buried, and a circular alcove attachment on the southern edge consisting of 8 rocks. Within the larger ring a platform of 5 flat limestone rocks and an additional 8 smaller nodules occurs adjacent to the western edge of the ring. Two additional flat rocks occur on the eastern side of the ring, adjacent to the alcove attachment. The larger ring is 2.5 to 3 metres in diameter (north-south) whereas the alcove is 1 to 1.5 metres in diameter (north-south). The more deeply buried rocks are granitic in origin. A bifacially reduced quartz core was observed and collected 1.5 metres to the southwest of the tent ring. Intensive examination of the area of the feature did not result in the identification of any additional cultural material. Based on the lack of any materials of historic age, the feature is considered to date to the protohistoric/early historic period. The interpretive capacity of this site is good. The site lies well away from any proposed activity areas associated with the remediation program at CAM-F. Providing that no change in the proposed facility locations is made, the site will not be impacted. No disturbance to this site is anticipated.

Recommendations. No further study of this site relative to the proposed remediation program is recommended.

Plate 12 View west of stone feature NdHk 1 in foreground. Note alcove at foreground left and rock platform upper left.

Plate 13 View northeast of site NdHk 1 overlooking Kingora River inlet into Sarcpa Lake.

SUMMARY AND RECOMMENDATIONS

An archaeological resources impact assessment was completed on DEW Line station CAM-F (Sarcpa Lake). A site file search of the corresponding 1:250,000 NTS map sheet was completed to determine the nature and location of previously recorded sites in the region. The field study focused on areas of existing and proposed disturbances in area of the station.

Occupation and use of the station has resulted in extensive disturbance at this location. Lake shore locations associated with borrow areas were disturbed by grading and other vehicular traffic as well as borrow activities. Existing borrow areas have been largely disturbed surficially by grading; areas of additional borrow activity will not impact previously undisturbed areas. The remaining areas surrounding the station, airstrip and roads are all associated with disturbances.

One tent ring was identified during the field study at CAM-F. It is located well away from any proposed remediation activities. No further study relative to the proposed remediation program is recommended.

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