COASTAL GEOLOGY MAPS, NORTHWEST DEVON ISLAND AND NORTHEAST BATHURST ISLAND, N.W.T.

Prepared for

Geological Survey of Canada
Atlantic Geoscience Centre,
Dartmouth, Nova Scotia

By

S.B. McCann,
81 Little John Road,
Dundas, Ontario.

1981.

Edited by

R.B. Taylor,
Geological Survey of Canada,
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PREFACE

Oil and gas have been discovered in the Sverdrup Basin of the Canadian Arctic Islands and a marine transportation system is being considered to carry the oil and gas to southern markets. Coastal geology maps along potential transportation routes were requested and funded by Transport Canada, through their Transportation Research and Development Program. The information forms part of the baseline data required for asssessing the proposals of a partial or all-marine transportation system, e.g. for selection of potential terminal sites and assessment of coastal sensitivity to potential oil spills, to carry this frontier oil and gas to southern markets. Additional financial and logistics support was provided by the Geological Survey of Canada and the Polar Continental Shelf Project, Energy, Mines and Resources, Canada.

This report is the second in a series of three coastal geology mapping contracts for the central and northern Queen Elizabeth Islands. The mapping program was designed to utilize and expand upon the physical coastal information base begun during ground and low-altitude aerial field surveys in 1976 and 1978 (Beak Consultants Limited, 1977, Taylor, 1980). A detailed coding scheme for the coastal information was developed by Woodward-Clyde Consultants (1980) in the initial mapping project (Fig. 1, maps 1-4). It was designed from a mapping system previously used in southern Canada (Owens, 1980). The present mapping program was intended to expand the ground and aerial surveys to northwest Devon and northeast Bathurst Islands (Fig. 1,2) and to test the usefulness of the original mapping scheme in a slightly different physiographic and geologic setting. Editorial comments were added to the present text where problems were encountered with the original mapping scheme or where recommendations for changes in the mapping procedure were proposed. Constructive comments on the present report by D.L. Forbes and A. Hequette are gratefully acknowledged.

A third contract, through Barrie and Associates (1982), expanded the coastal mapping to northwest Bathurst and adjacent islands. These maps incorporated most of the changes to the original mapping scheme that were recommended in the present study by McCann.

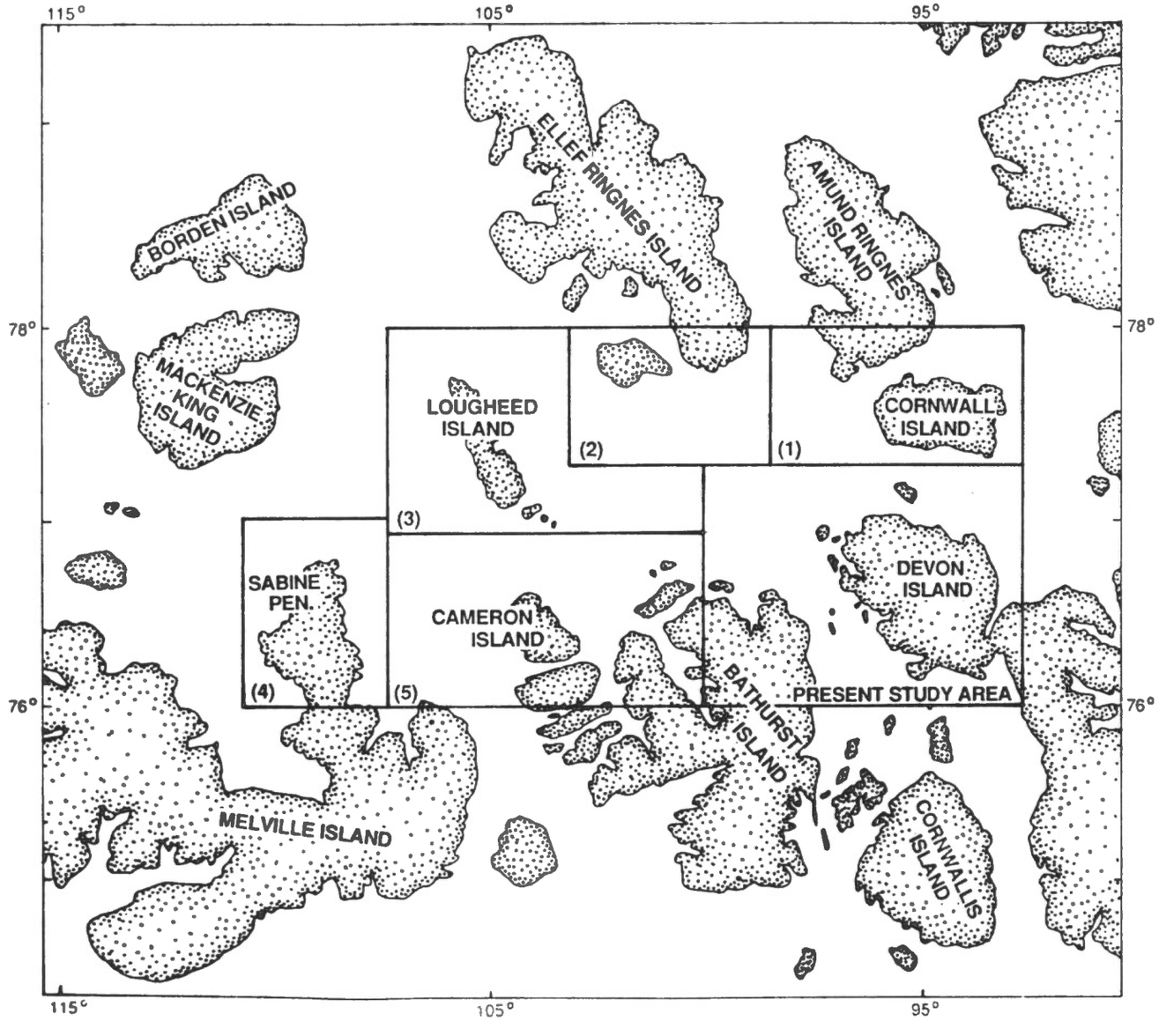


Figure 1. Location map of present study area and the coastal geology maps completed by Woodward-Clyde Consultants (1980, Maps 1-4) and Barrie and Associates (1982, Map 5).

The report consists of six parts: (1) a summary of the 1980 field surveys, (2) an evaluation of the original coastal mapping scheme, (3) a coding scheme and legend, (4) a set of coding sheets, (5) a set of coastal maps (1:125,000) and (6) two albums of oblique aerial and ground coastal photographs.

FIELD SURVEYS

Field observations collected from three sites on Northwest Devon Island are summarized along with the methodology used to collect the oblique aerial coastal photography.

EVALUATION OF COASTAL MAPPING AND CODING PROCEDURES

The original mapping system proposed by Woodward-Clyde Consultants (1980) is evaluated in terms of its applicability in the present study area. In addition,the instructions provided for the actual mapping are evaluated for their clarity.

CODING SCHEME AND LEGEND

The coding scheme is the key to the coding sheets, whereas the legend, which is provided on each map, explains the coastal unit descriptor, shore types and other map symbols.

CODING SHEETS

The coding sheets provide a detailed and systematic description of the physical characteristics of the coastal units. The coastal units are identified in columns 1 and 2 and their physical characteristics are listed in columns 6 to 32. The primary morphological and process elements of each coastal unit are summarized in columns 3 and 4 and marked on the maps. An index of reliability of the coastal data is provided by listing all sources and types of information used.

COASTAL MAPS

Coastal geology maps at a scale of 1:125,000 show the coastal units described in the coding sheets, a summary of the physical characteristics and the primary processes affecting each unit. The distribution of coastal classes are marked by distinctive patterns and the primary physical characteristics of each class are included in the map legend.

COASTAL PHOTOGRAPHS

A set of aerial oblique photos provide a nearly continuous view of the shores of northwest Devon and northeast Bathurst Island. Originally 35 mm slides were taken in the field, but for this report, colour prints were reproduced and mounted in two albums. The location of individual photographs are indexed on a series of air photo mosaics and topographic maps at the beginning of each album. A total of 724 photos were taken along Devon and adjacent Islands and 190 photos along Bathurst Island.

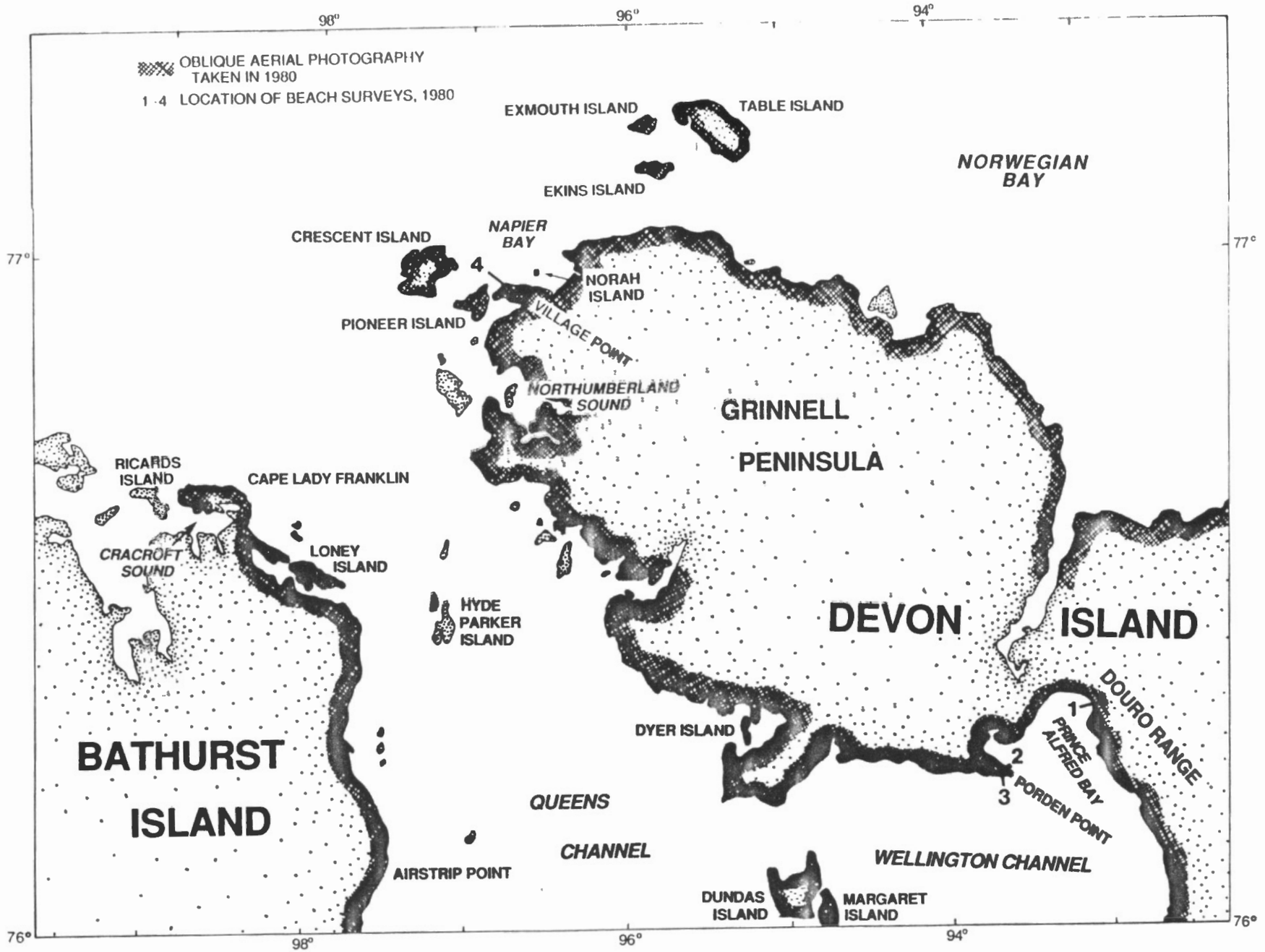


Figure 2. Extent of oblique aerial coastal photography and location of ground surveys completed within the present study area in 1980.

FIELD OBSERVATIONS

Between August 6 and 8, 1980, roughly 560 km of coastline along northwest Devon Island and northeast Bathurst Island (Fig. 2) was photographed from a fixed-wing, Twin Otter aircraft. The advantages of using this type of aircraft included: a long range flying capacity, a stable working platform and sufficient space for the three people involved. The major disadvantage was the presence of the aircraft propeller in the camera viewing area. The aircraft flew at roughly 115 knots at an altitude of 60-150 m and at an estimated 400 to 800 m from shore. Most of the photographs were taken on August 6. The task was completed using three persons, a photographer, a navigator who kept track of the flight path and the location of the photographs, and a third person who loaded the 35 mm cameras and labelled the exposed film. The ability to locate the coastal area covered by each transparency on the first viewing of the processsed films was attributed to the 'good eye' and concentration of the navigator.

The oblique aerial photographs of Devon and adjacent islands are mounted in one album. They are arranged from south to north, starting at 76° N latitude on the west coast of Devon Island and continuing in a clockwise direction around the coast of Grinnell Peninsula to roughly 92° W. longitude. The photos of Bathurst Island begin at the northeast corner of the Island in Cracroft Sound and continue south along the east coast to roughly 76° N (Fig. 2). The original 35 mm transparencies are stored with the coastal group, at the Atlantic Geoscience Centre, Dartmouth , Nova Scotia.

Beach observations were completed at three locations on northwest Devon Island: Prince Alfred Bay and Porden Point on August 8, 1980 and immediately east of Village Point on August 6, 1980. At each site a cross-sectional profile was completed using a stadia rod and level. Each line ran from just below sea level to a point above the maximum storm swash limit which varied from 1.2 m asl at Village point, 2.4 m at Prince Alfred Bay and 3.0 m asl at Porden Point. Sea level in each case has not been corrected for tides. Photographs (in photo albums) of surface beach sediment were collected at 3-4 positions across each survey line (Figure 3) to illustrate the clast lithology and the shore normal changes in clast size, sorting and shape.

SITE 1 PRINCE ALFRED BAY (76° 21'N 93° 05'W, air photo A16749-11)

Landing Place: The fixed-wing aircraft was landed along the most prominent north-south trending beach ridge, roughly 400 m landward from and c.10 m above the present shoreline. This well drained, level gravel surface would be suitable for landing aircraft at most times of the year. To the west of the landing site, a series of progressively lower gravel beach ridges extended to the present shore; to the east there was a shallow lake (photo album, photos 42,43).

Beach Profile: The profile is located midway along the southwest facing beach in the embayment north of a delta formed by a river that cuts through the Douro Range (photo album, photo mosaic p.v). The delta front appears to be rapidly prograding, therefore is a good source of sediment for nearby beach development. The beach profile is typical of much of the emerged gravel shores found along southern Grinnell Peninsula and west Devon Island. It is characterised by a series of raised beach ridges in the backshore and a well defined storm ridge at 1.3-1.4 m above the high tide level of August 8, 1980. At the time of the survey when the tide was below mid-level, the exposed foreshore slope extended 2.6 m in elevation and 17 m in width (Fig. 3). Small scale ice-push ridges and ice-melt features were commonly observed along the present storm ridge and most recent raised beach ridge (photo album, photos 42a-g). These ice-built features appear to have been formed by individual ice floes and there was no evidence of massive shore ice piling at this site. Nevertheless, there was extensive sea ice finger rafting and shore ice piling nearby along the south facing shore of Prince Alfred Bay (photo album, photos 47- 58).

Photographs of beach sediment were taken at 5 m intervals across the beach from 20 m landward to the present water level (photo album, photos 42h- 42 l). The clasts varied from an estimated 10-180 mm in diameter and were a modal size of 30-40 mm. The clasts were very angular and only the finer clasts ~10 mm had been sorted and reworked by waves into small ridges across the upper foreshore slope. Although this portion of Prince Alfred Bay was ice-free, there was no evidence of significant wave action or sea ice pressures onshore during 1980. A continuous ice cover still existed in the centre of the Bay and close pack ice covered parts of Wellington Channel.

PORDEN POINT (76° 15' N 93° 40' W, air photograph A16749-46)

Landing Place: The aircraft landed on an east-west trending raised beach ridge, an estimated 300 m from the south shore of the peninsula (photo album, photo mosaic p.v). The beach ridge separated a small lake basin from the south shore of Porden Point. It was a suitably dry, level strip for aircraft landings during much of the year, but its length may be too short for takeoffs by heavily laden aircraft.

Beach Profiles: Porden Point is the end of a low rocky promentory covered by a veneer of beach and marine sediment. Bedrock is exposed at the Point. Two beach profiles were surveyed on August 8, 1980. Site B (photo album, photos 92a-i) was an estimated 1 km north of Porden Point along the north facing side of the promentory, while Site A (photo album, photos 96a-f) was at roughly the same distance from the Point along the south shore. Both profiles were across gravel beaches where the elevation of the highest modern storm ridge was 1.5 m above the high tide limit of August 8 or 3.0 m above the recorded sea level. Site A represented a lower beach complex that had closed off a small lake basin, whereas Site B represented a less exposed, steeper portion of the promentory, where well defined ridges have been produced by waves refracting around Porden Point. Both sites exhibited a series of ice-built features across a 10-12 m wide zone landward of the maximum storm wave limit. The ice-built features were larger along the more exposed south coast. Ice-pushed features were not observed more than 30 m landward of the present HTL at either site.

Beach sediment consisted of angular, blocky clasts of locally derived limestone and shale. At the locations photographed, the pebble-cobble clasts varied from an estimated 8 - 200 mm (B-axis). At Site B the best sorted and finest clasts (20-30 mm) were recorded at the beach crest and the coarsest clasts (50-80 mm) were measured at sea level and on the raised beach (photo album, photos 92 i,f). At Site A the coarsest clasts were observed at the top of the beach which coincided with the zone of ice-push. The modal sediment size was estimated to be 40-100 mm and the maximum diameter measured was 200 mm. Across the upper foreshore (photo album, photos 96f) the pebbles were commonly 20-60 mm in diameter.

A well developed icefoot covered the lower foreshore slope at both Sites A and B (Fig. 3). It varied from 35 m wide and 1.5-2.0 m thick at Site A to 1.5 m thick and 10-12 m wide at Site B. At both sites the irregular ice surface was attributed to the incorporation of old icefloes and cakes during freeze-up the previous year. Sea ice ridging and rafting was observed both offshore and particularly to the west of Porden Point.

VILLAGE POINT (76° 58' N 94° 24' W, air photo A16202-14)

Landing Place: The aircraft landed along the height of land, c. 60 m asl, between Village and Napier Bays (photo album index, p.x). The strip was relatively dry on August 6, 1980 but could be very wet and boggy following spring melt or substantial precipitation, therefore unsuitable for aircraft.

Beach Profile: A shore-normal profile was surveyed at a site immediately to the east of Village Point. The profile was atypical of most of west and south Grinnell Peninsula because of the absence of well defined gravel storm ridges, and the presence of larger proportions of sand and fine colluvium. The

backshore was a partially vegetated convex slope crossed by solifluction and rills. The absence of raised beach ridges and the presence of snowfilled nivation features along most of the rest of the shore suggested that this site also was covered once by a semi-permanent snow patch (photo album, photos 429a-g). There were no well developed wave-built features across the foreshore slope. However, the presence of small discontinuous pebble ridges and partially reworked relict ice-built features at the top of the foreshore, and the presence of a sharp cut at the upper boundary of the modern beach, all indicated that moderate energy waves can rework this shore. The beach sediment consisted of coarse sand, some colluvium and pebbles of generally less than 30 mm diameter.

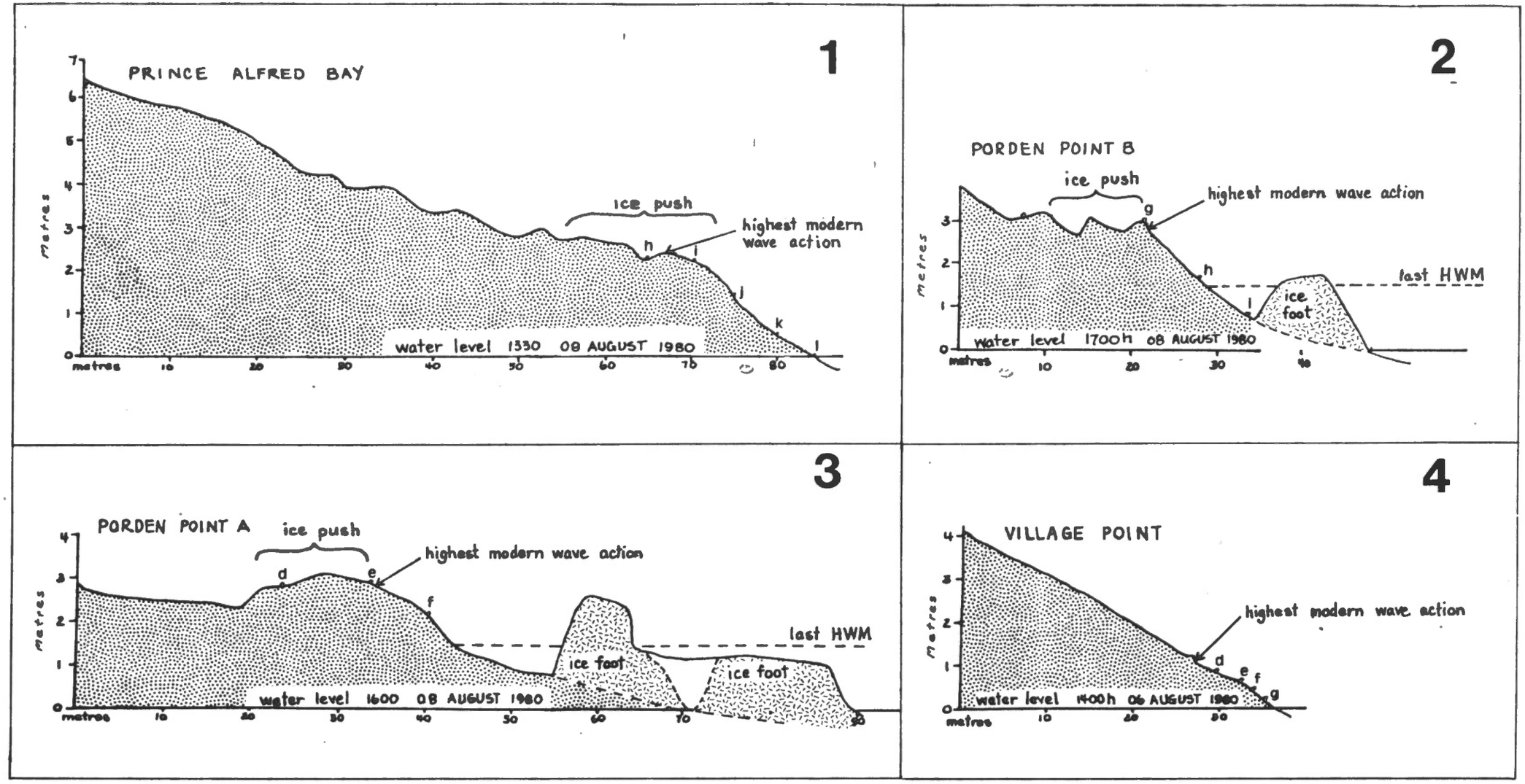


Figure 3 Cross-sectional beach profiles were surveyed in August 1980 at: (1) a site along southeast Prince Alfred Bay; (2, 3) sites A and B adjacent to Porden Point; and (4) a site just east of Village Point, Northwest Devon Island. The letters on each profile mark the location of sediment photographs displayed in a separate photo album, i.e. photos 42 h-l for site 1, 92 f-i and 96 d-f for sites 2, 3 and 429 d-g for site 4. Locations of profiles are shown in Figure 2.

(A) COASTAL GEOLOGY MAPPING FROM THE SVERDRUP LOWLAND, NWT: A MODEL FOR FUTURE MAPPING

Simply stated, the objective of the present project was to produce coastal maps and coding sheets for northwest Devon and northeast Bathurst Islands, following the procedures developed for mapping the shores of the Sverdrup Lowland, NWT (Woodward-Clyde Consultants, 1980). In effect the task was somewhat more complex than this. It was necessary at the outset, before considering the new areas to be mapped, to pose (and answer) a series of questions about the methods and products of the earlier mapping project.

1) Is the coastal classification scheme a logical one, based on sound geologic principles?

2) Is the list of items coded an appropriate one, and complete within the terms of reference and with the data available?

3) Are the maps well designed and readily understandable; i.e., is there sufficient information clearly displayed to allow a user, with no training in coastal geology, to obtain a quick appreciation of the character of the coastline?

4) Are the descriptions of the phenomena which are mapped and coded always clear and unambiguous?

In our view, the answer to the first three questions, which are the most critical, is affirmative. There are, however, some minor problems with the descriptions and definitions of some of the coastal classes, which became evident when the Sverdrup Lowland scheme was applied to the present study area. Some of the difficulties encountered arose from the fact that the former report, which described the coding scheme and legend, was intended as a guide for potential users rather than a set of instructions for future mappers. Other difficulties arose because of differences in the physical coastal characteristics of the Sverdrup Lowland and the present project area.

The following concerns about the original mapping system are discussed in the format that they occur on the coding sheets, starting first with the composition of the 'COASTAL UNIT'; second, the descriptions of selected 'COASTAL CLASSES'; third, the make up of the map 'DESCRIPTOR CODE' and lastly, the documentation of specific shore zone characteristics in the 'CODING SHEETS'

COASTAL UNIT COMPOSITION

Where composite shoreline units exist several secondary units and variants (indicated on maps by single slashes encompassing symbols S^{1-n} or V^{1-n}) may occur. It was not initially clear if each occurrence of a secondary unit or varient should be designated by a separate superscript, or if each type of secondary unit or varient should be so designated. The latter policy was followed in the present study.

EDITORIAL COMMENT: If the physical characteristics of each secondary unit or varient are similar, the subdivisions are designated by the same superscript, eg S^1 or V^1 ; if their physical character changes, the superscript also is changed, e.g. S^2 or V^2 (Owens et al., 1981).

COASTAL CLASSES

A larger problem arose from the definition of certain COASTAL CLASSES from the COMPOSITE UNITS. The best example of this problem is with the deltaic coast where the overall plan shape of the delta is the function of fluvial processes but most of the shoreline is more appropriately classed as beach. In other words, although a particular coastal segment may be in broad terms a delta, modern deltaic or fluvial processes are only operating along a restricted section of shoreline, thus the primary subdivision, i.e. greater than 50% of the Unit length, would not be class 7- Deltaic coast.

Clear examples of this problem arose in the present study when mapping the Bathurst coast, e.g. units B2, B4, B6 and B10 (see Map 2). Within units B2 and B4 rivers have built out well defined deltas which interrupt 15 km of continuous gravel beach. But the present courses of the braided rivers only occupy narrow zones, and more importantly the present river outlets only affect a small section of each shoreline. For instance, at B2 the outlet occupies 1.2 km of the 3.5 km length of deltaic coast and at B4 it occupies 0.5 km of 3.6 km of deltaic coast. In each case most of the shoreline consists of gravel berms and storm ridges which are continuous with the adjoining beaches to either side of the deltas. We resolved these two cases as follows:

i) the whole delta protrusion is defined as a composite unit by virtue of the distinctive backshore terrain;

ii) the primary subdivision is class 3 (gravel beach) by virture of the predominance of this foreshore component;

iii) the secondary subdivision is class 7 (deltaic) and confined to the river exit.

This information is shown on the map, with appropriate slashes and graphic shading, and expressed in the coastal unit descriptors. The primary descriptor for B2 was gWFIm-BRwT; the secondary descriptor was gFl-T. Judicious use of columns 16, 17 and 28 on the coding sheets (p. 71) allowed the overall deltaic character of the composite unit to be emphasized. The column items were the same for both primary and secondary subdivisions: 16=Y, 17=H, and 28=T.

With the examples of Unit B6 and B10 (p. 71, 73) the river outlets were very small and were therefore classed as varients rather than secondary subdivisions. The more pronounced delta character in unit B6 was signified through the use of columns 16-18 on the coding sheets and with the inclusion of the letter 'T' in the second part of the unit descriptor. To designate very small deltas, less than 0.5 km wide or a stream outlet where the shoreline was not designated Class 7 (Deltaic), the letter 't' was used (see coding scheme 4.4 coastal morphology).

Similar criteria were applied to all delta shores in the present study area but there still remained a problem of maintaining consistency because of changing local circumstances.

During the mapping exercise, it was also realized that the main coastal classes could not be identified from the map descriptor alone and that perhaps the coastal class number should be added at the beginning (separated by a hyphen) of the map descriptor. For example, the map descriptor, i.e. fIKm-SFRik, given in section 4.0 could be class 2 (banked coast), class 8 (ridged coast) or class 5 (fine textured coast).

Problems arose in differentiating some of the main coastal types because their diagnostic physical characteristics were not clearly defined in the earlier mapping program.

Cliffed Coast: It was not clear what constituted a cliff. How steep does the coastal slope have to be before it can be classed as a cliff? The problem was that many stretches of coastline along Devon and Bathurst Islands were high and steep but without a vertical face or precipitous scarp. The problem was overcome by redefining the cliffed coast (" must exhibit vertical or near vertical free faces or precipitous scarps over 3 m") and a new coastal class 'STEEP COAST' was introduced.

EDITIORIAL COMMENT: during the third phase of coastal mapping the slope of the cliffed coast was further defined as those >35° (Barrie and Associates, 1982).

Banked Coast: This coastal class was used to identify cliffs less than 3 m in height developed in either consolidated or unconsolidated material. In the Sverdrup Lowlands the banked coast was always cut in unconsolidated (often frozen) material.

Fine Textured Beaches and Ridged Coast: Although these coastal classes were not utilized in the present study, they were difficult to differentiate from some of the other coastal types. Neither their name nor their description conveyed a clear impression of the coastal characteristics that one easily obtained from the other seven classes.

EDITORIAL COMMENT: Recently these two coastal types have been redefined and described using new field observations collected along Lougheed Island in 1986 (Taylor and Forbes, 1987). Fine textured beaches are now called Mudflat coast and Ridged coast is now called Scarred coast. A detailed description of each is provided by Taylor and Forbes (1987).

COASTAL UNIT DESCRIPTOR CODES

Confusion in constructing and interpreting the coastal unit map descriptor developed because there was no explicit statement indicating where the hyphen should be placed, and because the same letters were used more than once, all be it in different parts of the code.

EDITORIAL COMMENT: Criticisms raised about the coding procedures are all well founded. The problem of using the same letter more than once originally was designed to be overcome by using alternate lower and upper case letters. This was one reason for placing the slope modifier at the end rather than at the first of the mapping code where similar lower case symbols for sediment texture were used. The greatest confusion appears to be over what part of the coast is described within each part of the code and what the hyphen should separate.

In the original mapping scheme used in southern Canada, the shore units were divided into three across shore zones (supratidal, intertidal, subtidal). They were further subdivided into components which define specific geomorphological features, e.g. storm ridge. However, the coastal information base in the Sverdrup Lowland was so limited that the coast was only divided into two across shore zones- the terrain zone and the shore zone. The terrain zone included the land adjoining the beach and extended to the 30 m contour, and the shore zone included the beach, and where information was available the nearshore. Originally, it was intended that the first part of the code describe the supratidal zone, the second part the intertidal, and the third part the subtidal. However in reality, in the case of the Sverdrup Lowland shores, the first part of the code described the sediment texture, the slope of the foreshore and the dominant processes affecting that shore unit. The second part described both the foreshore and backshore morphology. The terrain characteristics (physiography, geology, sensitivity) were not included in the map descriptor and were only listed in the coding sheets. The presence of beach descriptors in both parts of the mapping code caused further confusion. The strict division (by hypens) of information for each across shore zone would certainly eliminate some of the confusion.

In the case of a composite shore unit, the descriptor of the primary subdivision should be displayed above the descriptor of the secondary subdivision.

Some minor difficulties arose when documenting the terrain characteristics.

Slope Class: Only four rather than five slope classes were distinquished because of the difficulties of accurately measuring distances less than 170 m at the map scales involved, ie., 1:250,000, 1:125,000.

Drainage density: it would be useful to have some indication of the size of the channels that should be used when defining the drainage density.

CODING SHEETS - SHORE ZONE CHARACTERISTICS

Information about the shore zone processes were completed on the coding sheets except for columns 20 and 21 which pertained to extent of open water and wave generation. It was felt that there was insufficent information to accurately assess the potential for wave processes and the expenditure of wave energy in different coastal units. In addition, the other processes were mapped based on the presence of diagnostic physical features and to be in accord with this method, inferences about wave processes should be based on the presence or absence of wave formed features.

EDITORIAL COMMENT: Although information about most of the shore zone processes was included in the coding sheets, the information was not plotted on a separate coastal process map as was completed for the rest of the study area (Woodward-Clyde Consultants, 1980 and Barrie and Associates 1982).

Foreshore Slope: In the map descriptor there were four classes of foreshore slope provided but in column 25 of the coding sheet only three classes existed.

EDITORIAL COMMENT: This has been corrected by adding the fourth class.

Cliffs: The coding procedure for cliffs (column 26) was not well tested in the Sverdrup Lowland mapping exercise. Although the coding was not changed in the present study, it was expanded and revised, as illustrated for the mapping of northwest Bathurst Island (Barrie and Associates, 1982).

Barriers: There is no provision in the present coding scheme to denote barriers that develop above the intertidal zone.

EDITORIAL COMMENT: The addition of more codes is very easy to do with this mapping system and therefore can be accomplished when the need arises.

(B) THE VALUE OF LOW-ALTITUDE OBLIQUE COASTAL PHOTOS IN COASTAL MAPPING

The vertical aerial photography available for the study area was of good quality, with convenient flight lines, and sufficient overlap to permit stereoscopic vision of all parts of the coastline. However the scale of the photography (1:60000) limited the interpretation of many of the smaller scale features and beach sediment character. The whole mapping exercise would have been less than satisfactory without the additional information provided by the low-altitude oblique colour transparencies. The cost of obtaining this photography (including aircraft time, salaries and film) was about $6500.00. The

investment represents excellent value. Not only was it invaluable in the actual mapping of these shores but the photographs provide an up-to-date reference source for these shores, for a variety of users.

(C) COASTAL MAPPING PROCEDURE

Given both vertical and oblique aerial photography, the procedure used in mapping the shores of Devon and Bathurst Islands was as follows:

1. define and classify the main coastal units using single black and white vertical photographs;
2. review and modify these using the colour oblique photography, at the same time obtaining the information on foreshore conditions and sediment size;
3. obtain detailed information about backshore characteristics, e.g. drainage density, ground ice, trafficability using stereoscopic pairs of black and white vertical photographs;
4. complete the coding sheets using a combination of single black and white vertical photographs and colour transparencies, examined at the same time.

COASTAL UNIT IDENTIFICATION AND COMPOSITION

1.0 COASTAL UNIT IDENTIFICATION

Coastal units are identified by a one or two letter prefix, followed by a numerical code. The prefix letters identify various islands:

D = Devon Island (includes Dundas, Margaret, Crescent, Pioneer, Dyer, Table, Ekins, Exmouth Islands).

B = Bathurst Island (includes Ricards, Loney, and Allard Islands).

H = Berkeley Group of Islands (Helena, Hosken, Harwood, Seymour and Sherard Osborn).

2.0 COASTAL UNIT COMPOSITION

A UNIT is defined as a homogeneous association of across-shore zones that is contiguous alongshore. A unit is considered to extend across-shore from the seaward limit of nearshore marine processes and to encompass a narrow band of contiguous terrain. The alongshore boundaries of a unit (indicated on the maps by a double slash) are defined by a change in character of one or more zones. Thus, although the terrain character might remain constant along a section of coast, a change in the backshore, foreshore or intertidal characteristics may be used to delineate a unit boundary.

In many cases a section of the coast is characterized by a repetitive series of two or more homogeneous units: for example, a sequence of sand beaches and deltas. As mapping of each homogeneous unit would involve considerable repetition, it is more practical to use composite units.

A COMPOSITE UNIT is defined as a repetitive sequence of zonal associations. Within a composite unit the PRIMARY SUBDIVISION is the predominant repetitive association and usually accounts for greater than 50 percent of the unit length. A SECONDARY SUBDIVISION (indicated on the map by single slashes encompassing the symbol $s^{1...n}$) is the minor repetitive association and may account for up to 50 percent of the unit length. Two or more secondary subdivisions may be classified, in which case they are identified on the map by superscripts s^1, s^2, s^3, etc.

A unit or composite unit may be homogeneous, but the continuity may be interrupted by minor shore-zone features (such as a spit, small delta or small estuary). A VARIANT (indicated on the map by the symbol $v^{1...n}$) is used to delineate these minor features. Variants may in some cases be repetitive, but account for less than 10 percent of the unit length. Where more than one variant occurs, these are identified on the map by superscripts v^1, v^2, v^3, etc.

The relative percentage P of the total unit length occupied by primary or secondary subdivisions, or variants, is coded as follows:

1. $0 < P \leqq 20\%$
2. $20 < P \leqq 50\%$
3. $50 < P \leqq 80\%$
4. $80 < P \leqq 100\%$

Coastal features generally must be greater than 2 km in length before they are shown on the map as primary subdivisions. Features less than 2 km but more than 0.5 km in length are shown as secondary subdivisions or variants. A secondary subdivision may include sections of coast less than 0.5 km in length, but in this case, for clarity, the secondary subdivision is generally not plotted on the map. The presence of such small features can be inferred by comparing the plotted length of secondary features with the coded "percent linear extent P" and by reference to the coastal descriptor.

COASTAL UNIT SUMMARY

3.0 COASTAL CLASS

The following generalized coastal classes have been distinguished.

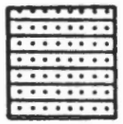
1 Cliffed Coast	6 Wide Intertidal Coast
2 Banked Coast	7 Deltaic Coast
3 Gravel Beaches	9 Steep Coast
4 Sand Beaches	10 Mixed Sand and Gravel Beaches

The characteristics which have been used to define these coastal classes and patterns used to identify these classes on the map are as follows:

1. Cliffed Coast

must exhibit vertical or near vertical free face over 3 m in height, is composed of consolidated or unconsolidated material, with or without talus
may be fronted by a beach
see also coastal class 9, "Steep Coast"

2. Banked Coast



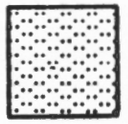
erosional coast characterized by scarps less than or equal to 3 m height
may be fronted by a beach
banks may be discontinuous

may be subject to severe ice action which, in some cases, may override the bank

3. Gravel Beaches

generally associated with well-preserved raised beaches having a distinguishable surface relief
characterized by a moderate or steep foreshore slope
usually topped by a gravel berm or storm beach ridge
may be subject to severe ice thrusting but the beach form remains the dominant morphology

4. Sand Beaches

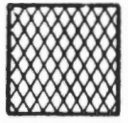


frequently associated with a visible pattern of raised beaches on air photographs; however, when examined on the ground, these features have little or no surface expression, as the pattern apparently reflects differences in drainage characteristics
characterized by a low to moderate foreshore slope; may include a low erosional bank in the backshore
backshore frequently exhibits a dense network of consequent rills or streams
may be subject to severe ice action; however, ice thrust ridges are generally poorly preserved
preferentially associated with sands and sandstones

6. Wide Intertidal Coast

shores with a wide shallow subtidal/intertidal area, often lined by a discontinuous ridge at low tide level
contiguous terrain is generally low-lying but may have local areas comprised of moderate angle slopes
commonly subject to severe ice action which results in numerous ice push features along the coast and in the nearshore region

7. Deltaic Coast



coasts dominated by active deltaic sedimentation
active deltas are invariably fan shaped with an arcuate front; channels are wide, shallow and braided; deltas may project as much as 2 km beyond the adjacent coastline
channels frequently incised in older deltaic sediments; coastal areas adjacent to the active channel mouth may have low banks cut into inactive delta surfaces; frequently associated with discontinuous barriers which commonly appear to have been initiated by ice thrusting, but may be reworked by waves and breached by river action

9. Steep Coast

steep (>20°) and high (>30 m) coastal slopes often consisting of angular rock debris at or near the angle of repose
absence of free rock faces and precipitous scarps distinguishes these slopes from cliffs

can be fronted by a beach, semi-permanent snow patch and associated icefoot
see also coastal class 1, "Cliffed Coast"

10. Mixed Sand and Gravel Beaches

generally associated with small active beach ridges and often discontinuous raised beaches composed of a bimodal distribution of sand and gravel
characterized by a low to moderate foreshore slope
may be subject to severe ice thrusting; however, ice thrust ridges are often poorly preserved
preferentially associated with Quaternary sand and gravel deposits and bedrock units Dmh and Dmg which are middle Devonian sandstone units.

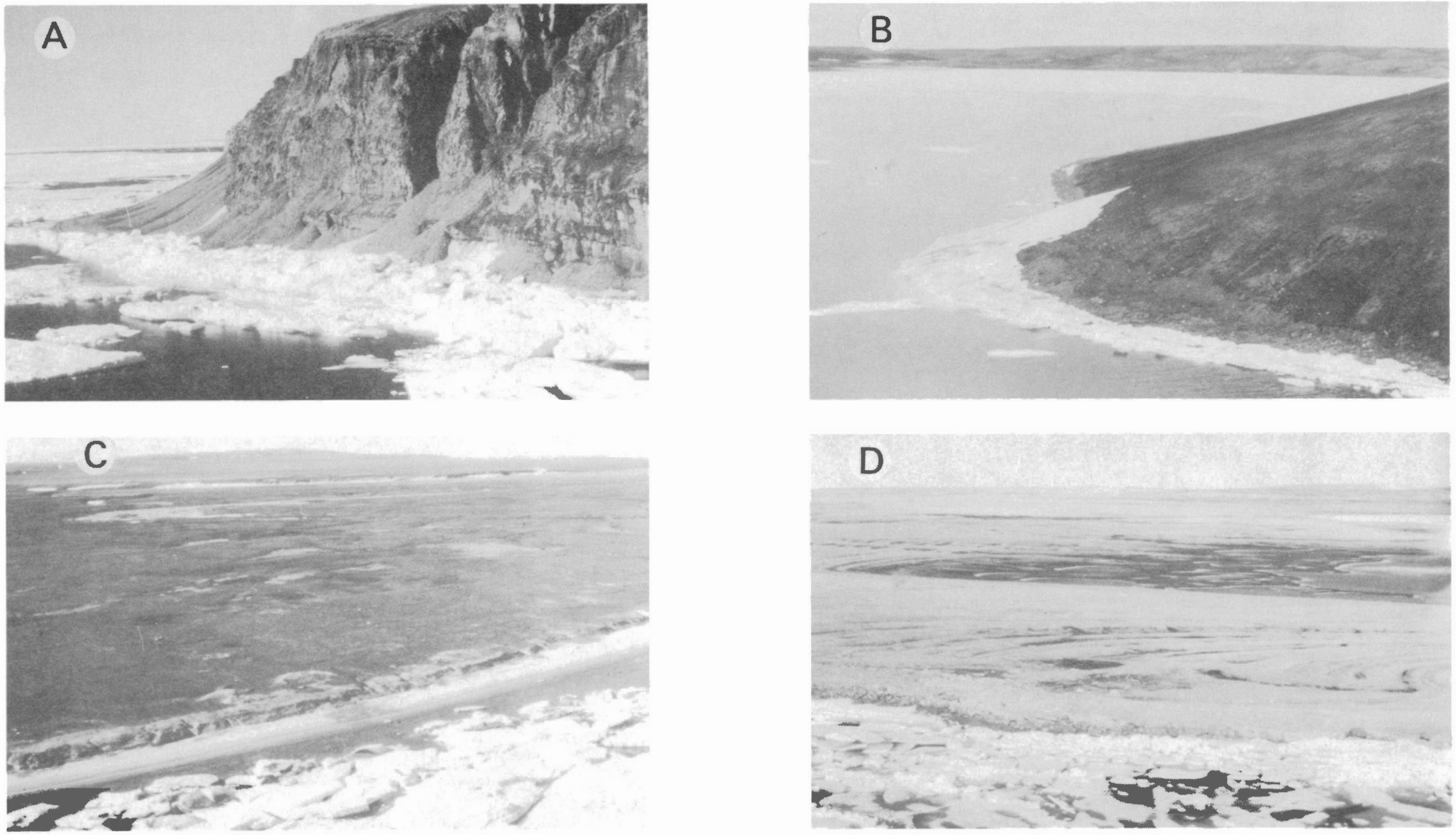


Figure 4 Type examples of the main coastal classes observed in the study area: (a) Talus banked, rock cliffed coast with sea ice thrusting onshore, (120-150 m high cliff, SE Margaret Island); (b) Steep Coasts commonly are fringed by a semi-permanent snow patch and icefoot. Periglacial slope processes dominate the backshore, (90-120 m high shore, Carey Harbour, NE Bathurst Island); (c, d) Banked coasts can be formed in unconsolidated deposits, (c - N. Grinnell Peninsula) or at the edge of a rock platform (d - Porden Point, Devon Island). The banked coast can be fringed by a narrow modern beach.

Figure 4 (con't) (e) Gravel shores can take the form of spits and barriers in areas with a shallow inshore platform (e - W. Devon Island) or on steeper shores, they may form a continuous sequence of modern and raised beach ridges (f - NW Devon Island); (f) Deltaic coasts are arcuate, fan-shaped deposits that protrude offshore, the river mouth can be closed off by beach ridges, and the flanks of the delta often exhibit erosional banks; (g) Sand shores exhibit poorly preserved raised beach ridges, a dense drainage pattern across the backshore and a nearshore bottom pitted by sea ice (Bere Bay, N. Devon Island); (h) Wide intertidal shores are very low sloping with poorly developed wave-formed beach features and a tidal flat fringed by a discontinuous ice-pushed, wave modified ridge at low tide limit (W. Table Island).

4.0 COASTAL UNIT DESCRIPTOR

For each coastal unit, a simple descriptive code provides a summary of the general character of that section of coast. The code is defined in terms of four parameters.

4.1	the texture of the shore zone;
4.2	the dominant process or processes operating on the shore zone;
4.3	the slope of the foreshore; and
4.4	the coastal zone morphology

The following information is coded:

4.1 Texture

Texture is defined in terms of the diameter D for unconsolidated material.

¢	Clay	($D \leqq$ 0.004 mm)
ş	Silt	(0.004 $<$ $D \leqq$ 0.063 mm)
ş-¢	Silt clay	($D \leqq$ 0.063 mm)
f-ş	Silt & fine sand	(0.004 $<$ $D \leqq$ 0.25 mm)
f	Fines	($D \leqq$ 0.25 mm)
s	Sand	(0.063 $<$ $D \leqq$ 2 mm)
g	Gravel	($D \geqq$ 2 mm)
b	Boulders	($D >$ 256 mm)
r	Rock fragments	($D >$ 2 mm)

4.2 Process

C	Colluvial
E	Eolian
F	Fluvial
I	Marine (ice)
K	Thermokarst
W	Marine (wave)

4.3 Slope of Foreshore

f	Flats (wide intertidal and/or shallow subtidal)
l	Low slope

m	Moderate slope
s	Steep slope (at angle of repose or steeper)

4.4 Coastal Zone Morphology

B	Beach and/or berm
G	Steep coast
C	Cliff, height >3 metres
F	Bank, height ≦ 3 metres
Ri	Ridged morphology due to sea ice thrusting
Rk	Ridged morphology due to thermokarst processes
Rw	Ridged morphology due to presence of raised beaches
S	Simple incline, featureless surface
T	Delta, braided channel, fan
t	Small delta, less than 0.5 km wide
( )	Discontinuous

One or more symbols may be used to describe the progression of morphologic features from the foreshore to the backshore/contiguous terrain interface. For example: sWm-SBF on the map indicates that this unit exhibits a moderately steep sandy shore zone dominated by marine processes. The foreshore is a simple incline, topped with a berm and the interface between the backshore and the adjoining terrain is a low bank less than 3 metres in height.

Up to three process elements can be used to describe coastal types which do not have a single dominant genetic cause. Similarly, more than one coastal unit descriptor can be used to indicate the presence of one or more secondary units. For example the symbols:

fIKm-SFRiRk
sF1-T

adjacent to a map unit indicate that the coast is primarily composed of a moderate slope, fine-textured shore zone, dominated by ice thrusting and thermokarst activity. The shore has a simple slope backed by a bank less than 3 metres high and by a series of ridges formed from a combination of ice thrusting and thermokarst activity. The secondary coastal type which occurs within this unit is a low angle sandy shore which primarily reflects the presence of fluvial processes and associated sediment deposition in a deltaic environment.

TERRAIN CHARACTERISTICS

5.0 PHYSIOGRAPHY (after Roots, 1963)

DEVON ISLAND	WCl	Wellington Channel lowlands
	Up	Uplands
	NBl	Norwegian Bay lowlands
BATHURST ISLAND	RU(E-NE)	Ridged upland with east northeast trend
	RU(N)	Ridged upland with north trend

6.0 GEOLOGICAL FORMATIONS (after Kerr, 1974)

Since there was no up-to-date geologic map for Grinnell Peninsula, Devon Island, only the bedrock underlying the terrain adjacent to each coastal unit of Bathurst Island has been included in the coding sheets. The following legend was used:

BATHURST ISLAND	Q	Quaternary sediment
	Dmg	Griper Bay Fm: quartz sandstone, siltstone and shale
	Dmh	Hecla Bay Fm: limestone, quartz sandstone, siltstone
	Dbi	Bird Fiord Fm: limestone, quartz sandstone, siltstone
	Dbl	Blue Fiord Fm: limestone
	De	Eids Fm: limestone, siltstone, shale
	Ddb	Disappointment Bay Fm: dolomite
	D	Bathurst Island and Stuart Bay Fms: siltstone, limestone, sandstone
	O-Dcp	Cape Phillips Fm: siltstone, shale, argillaceous limestone

7.0 SURFICIAL MATERIALS

This information was not available for Devon Island and the terrain mapping information for Bathurst Island (Barnett et al. 1977) was felt inappropriate for the present study.

8.0 SLOPE CLASS

Defined in terms of mean slope S, which is determined by the average distance D (in metres) from the shore to the 30 metre elevation contour marked on the 1:125,000 or 1:250,000 topographic maps.

1.	$S < 1°$	$(D > 1719\ m)$
2.	$1° \leqq S < 5°$	$(342 < D \leqq 1719\ m)$
3.	$5° \leqq S < 10°$	$(170 < D \leqq 342\ m)$
4.	$S \geqq 10°$	$(D \leqq 170\ m)$

9.0 SLOPE MODIFIERS

r	Raised beaches visible on air photos, but have little or no morphological expression on the ground
R	Prominent raised beach deposits
T	Terraces
Suffix i	Features primarily due to ice thrusting
?	A question mark indicates that the coded slope information is uncertain. When used in conjunction with other codes, implies that available evidence is inconclusive
-	No distinguishable raised beach deposits or terraces visible on the air photos
( )	Discontinuous

10.0 INDICATIONS OF POOR DRAINAGE

Y	Unit is poorly drained, as indicated by the presence of numerous small bodies of standing water
-	No indications of poor drainage, although ground may be wet with standing water during and immediately following snowmelt
NA	Non-applicable (used when describing a fluvial unit)

11.0 DRAINAGE DENSITY

Drainage density is defined in terms of the number of channels N per kilometre of coast.

L	Low	$N \leqq 1$
M	Moderate	$1 < N < 10$
H	High	$N \geqq 10$
NA	Non-applicable (used when describing a fluvial unit or a variant of small size)	
:	Ranging to (e.g. L:M is low ranging to moderate)	

12.0 GULLYING/NIVATION

Y	Yes
-	None

13.0 INSTABILITY FEATURES

Instability features within 3 kilometers of the coast are noted.

I	Gullying along ice wedges
K	Thermokarst depressions
P	Large polygonal pattern, probably indicating massive ice wedges
R	Retrogressive thaw flow slides
S	Skin flows
-	None
?	Information is unknown or when used in conjunction with other data, implies that available evidence is inconclusive; where within brackets ( ), applies only to the codes enclosed.

Polygonal ground and thermokarst depressions are coded only if they extend over a large area.

SHORE ZONE CHARACTERISTICS

14.0 TEXTURE OF BEACH MATERIAL

Texture is defined in terms of the diameter D for unconsolidated material.

ȼ	Clay	($D \leqq 0.004$ mm)
ȿ	Silt	($0.004 < D \leqq 0.063$ mm)
ȿ-ȼ	Silt clay	($D \leqq 0.063$ mm)
f-ȿ	Silt and fine sand	($0.004 < D \leqq 0.25$ mm)
f	Fines	($D \leqq 0.25$ mm)
s	Sand	($0.063 < D \leqq 2$ mm)
g	Gravel	($D \geqq 2$ mm)
b	Boulders	($D > 256$ mm)
r	Rock fragments	($D > 2$ mm)
:	Ranging to (e.g. s:g is sand ranging to gravel)	
?	Information is unknown or, when used in conjunction with other data, implies that available evidence is inconclusive; where within brackets ( ), applies only to the codes enclosed.	

Where two classes are shown on the coding sheets, the first named is the predominant class.

SHORE-ZONE PROCESSES

15.0 EOLIAN ACTIVITY

Y	Evidence of sediment reworking by wind: eolian depositional or erosional features (e.g. dunes, drifts or blowout hollows) visible on photos
-	Not evident
?	Possible; available evidence is inconclusive

16.0 PRESENCE OF FLUVIAL FEATURES

Y	Well-defined river or rill channels occur within the unit
-	No well-defined river channels occur within the unit

17.0 FLUVIAL SEDIMENT SUPPLY

L	No deltaic sediments present; few sediment storage features occur within the associated channels
M	Deltaic sediments present but not extensively prograded
H	Prograding deltas; active sediment storage features occur within the associated channels
-	Non-applicable

18.0 PRESENCE OF COLLUVIAL FEATURES

R	Rockfall/talus slopes
S	Solifluction lobes or terraces
-	Not evident
?	Information is unknown or when used in conjunction with other data, implies that available evidence is inconclusive; where within brackets ( ), applies only to the codes enclosed

Only observable features are coded; colluvial processes can be assumed to be occurring on most fine-textured slopes.

19.0 PRESENCE OF THERMOKARST FEATURES

Y	Yes, indicated by presence of retrogressive thaw flow slides or thermokarst depressions in the shore zone
-	Not evident
?	Information is unknown or when used in conjunction with other data, implies that available evidence is inconclusive; where within brackets ( ), applies only to the codes enclosed.

20.0 WAVES; 21.0 SHORE LEADS

Due to insufficient data, these items were not completed.

22.0 ICE THRUSTING

Determined from the presence of ice thrust features on the photography.

-	No thrusting or thrusting does not reach beach
1	Thrusting does not penetrate beyond beach
2	Thrusting penetrates less than 100 metres
3	Thrusting penetrates 100 metres or more
?	When used with other codes, implies available evidence is inconclusive

23.0 ICE PILING

Ramps or ridges of ice evident on photography. Ice piling is defined as "offshore" where it is judged to be grounded below low water level and as "onshore" where it seems to have penetrated to the intertidal zone or beyond.

Ps	Onshore
Po	Offshore
-	No piling evident

SHORE-ZONE FORM

24.0 NEARSHORE SLOPE

Due to insufficient data, this item was not completed.

25.0 FORESHORE SLOPE

F	Flats (wide intertidal and/or shallow subtidal)
L	Low-angle foreshore, generally composed of sand or finer material
M	Moderate-angle foreshore with a relatively steep beach, generally composed of gravel
S	Steep foreshore slope primarily controlled by non-beach materials

26.0 CLIFF

Rc	Cliff in lithified rock
Rb	Bank in lithified rock
Rs	Steep coastal slope in lithified rock
Uc	Cliff in unconsolidated material
Ub	Bank in unconsolidated material
Us	Steep coastal slope in unconsolidated material
t	Talus present
( )	Discontinuous
-	None
?	When used with other codes implies available evidence is inconclusive

27.0 BEACH

Bb	With berm
Bi	Without berm
( )	Discontinuous

28.0 DELTA AND/OR ESTUARY

E	Estuarine embayment occurs within unit, or unit is part of an estuary
ET	Significant deltaic deposition occurs within an estuarine embayment
T	Delta or deltas occur within unit, or unit is part of a delta deposit
t	Very small delta (less than 0.5 km in width) or the river exit(s) in a larger delta, the shoreline of which is not mapped or coded as "Deltaic Coast"
-	None
( )	Discontinuous

29.0 BARRIER / BARS

C	Near continuous ridge of sediment occurs in nearshore zone (feature may be due to marine sediment transport, ice push or both).
D	Discontinuous sediment ridges occur in the intertidal or nearshore zones (these are commonly found along delta-front shores in the study area)
o	Suffix indicating that a distinct body of water (e.g. a lagoon) separates the barrier from the adjacent shore
S	Bar form(s) present in the intertidal or nearshore zones

St	Transverse ridges or bars (above the intertidal zone, these ridges may be eolian depositional forms rather than wave built features)
-	None

30.0 SPITS

Y	Present
-	Not present
?	Possible; available evidence inconclusive

31.0 SHORELINE CHANGE

-	Eroding
0	Not obviously eroding or accreting
+	Accreting or prograding
?	Unknown or when used in conjunction with other data implies that available evidence is inconclusive

Note: Continuing isostatic uplift causes a component of shoreline advance which is not considered in the coding.

32.0 NET LONGSHORE SEDIMENT TRANSPORT

L	Left, facing seaward
R	Right, facing seaward
-	Little or no apparent net transport
?	Unknown or when used in conjunction with other data implies that available evidence is inconclusive
Y	Locally variable net transport within unit

LAND USE INTERPRETATIONS

33.0 ICE-RICH TERRAIN

Y	Yes, indicated by presence of retrogressive thaw flow slides, thermokarst depressions or lakes, or well-developed polygonal ice-wedge patterns (Note: sand wedges may occur in some areas)
-	No surface expression of high ice content material but ice-rich sediments may occur at depth
?	Used in uncertain situations where air photograph interpretation indicates that ice rich terrain may possibly be present

34.0 AGGREGATES

0	No significant amounts
1	Small amounts with little or no gravel from minor beach or fluvial deposits or from pre-Quaternary formations
2	Sand in significant quantities from beach ridge, glaciofluvial, or other deposits
3	Gravel in significant quantities from beach ridge, glaciofluvial, or other deposits
?	When used in conjunction with other codes implies that available evidence is inconclusive
-	Aggregate potential not evaluated due to the small size of the feature - generally a variant

35.0 FRESH-WATER SUPPLY

0	No significant lakes or streams
1	Streams may provide some freshwater (of variable quality) during limited period(s) of the year
2	Freshwater available from ponds or lakes (minimum width $\leqq 0.5$ km)
3	Freshwater available from large lakes (minimum width >0.5 km)
-	Water supply not evaluated due to the small size of the feature - generally a variant

Note: There may be no consistent relation between horizontal extent and depth of lakes, therefore, availability of water in winter is uncertain.

36.0 TERRAIN TRAFFICABILITY

The system developed by Hodgson (1978) and used by Woodward-Clyde Consultants (1980) for King Christian, Ellef Ringnes, Amund Ringnes and Cornwall Islands was adopted. The terrain was assessed in terms of performance of arctic tracked vehicles, without reference to size or type.

36.1 Roughness or Grade

A	Easily traversible in all directions
B	Traversible, but with difficulty locally or in some directions
C	Difficult or impossible

36.2 Traction

Includes ability of surface to bear vehicle. Value generally pertains to summer period. Traction is not normally a problem in winter.

1	Easily traversible
2	Traversible, but with slight or local difficulty
3	Difficult

37.0 TERRAIN SENSITIVITY

Terrain sensitivity is considered to be the susceptibility of an area to disturbance, where disturbance is a man-initiated change in surface characteristics. Disturbance may be caused by direct action of man or it may occur subsequent to such action as a result of a change in the equilibrium of natural processes. In the latter case, most physical changes of the surface take place during summer, even if the initiating activity occurred in winter. Original surface conditions may be restored naturally, but it is more likely that the changes will be permanent.

37.1 Magnitude

The probability of disturbance occuring and the degree to which it occurs.

L	Low; possibly high during snowmelt or prolonged rainfall; no disturbance or minor at other times
M	Medium; probably high during snowmelt or prolonged rainfall; disturbance of part or all for the area of activity, but processes not expected to expand disturbance beyond this area.
H	High; disturbance of all or substantial part of area of activity and processes likely to expand disturbance beyond this area; expected to hinder continued activities.

37.2 Form

The probable form of disturbance.

a	Disruption of surface drainage, especially by: (1) concentration, leading to erosion (e.g., due to culverting only a small percentage of rills which cross a road route); (2) ponding, leading to (a) overflow and erosion, and (b) thermal erosion under and adjacent to standing water.
b	Thermal erosion: initiation or acceleration of ground ice thaw, especially critical over ice wedges; caused by stripping vegetation, excavating and ponding water.
c	Slope failure: instability potential after excavating or loading; includes areas where mass movement processes are very active.

RELIABILITY

38.0 SCALE OF VERTICAL AIR PHOTOGRAPHS USED IN MAPPPING

1	1 : 15,840
6	1 : 60,000
10	1 : 100,000

39.0 AVAILABILITY OF OBLIQUE PHOTOGRAPHS

A	Continuous coverage, good quality oblique air photographs available
B	Continuous coverage, poor quality oblique air photographs available
C	Intermittent coverage, good quality oblique air photographs available
D	Intermittent coverage, poor quality oblique air photographs available
-	None available

40.0 GROUND PHOTOGRAPHS

A	Available, good quality
B	Available, poor quality
-	None available

41.0 BEDROCK GEOLOGY

A	Bedrock geology mapping available on the basis of detailed field studies (generally at a scale of 1:125,000 or larger)
B	Bedrock geology available only from older reports lacking detailed field studies (generally at a scale smaller than 1:125,000)
-	No bedrock geology mapping available except regional generalizations

42.0 SURFICIAL GEOLOGY

A	Mapping available
-	No mapping available

43.0 OTHER DATA

-	None
1	Data on beach texture and morphology available
2	Bathymetric data available
3	Both 1 and 2 available

44.0 AIR PHOTOGRAPH NUMBERS

Photographs used for interpretation. Where both 1:15,840 and 1:60,000 scale air photographs are available only the numbers for the 1:60,000 photographs are indicated.

NS	Stereo coverage not available at the time of interpretation

In 1987, tidal data had been published for four stations (Fig. 1) within the study area (Canadian Hydrographic Service 1987, Sandilands et al., 1985)

STATION NO.	GEOGRAPHIC POSITION	LOCALITY	RANGE (m)	
			MEAN	LARGE
6765	76° 05' N, 97° 44' W	Airstrip Point Bathurst Island	1.0	1.1
66770	76° 29' N, 97° 06' W	Hyde Parker Island	0.89	1.31
6910	76° 52' N, 96° 42' W	Northumberland Sound Grinnell Peninsula, Devon Island	0.50	0.80
66781	77° 01' N, 96° 37' W	Norah Island	0.51	0.75

CREDITS

Project Management and Report:	S.B. McCann, R.B. Taylor (editor)
Photo Interpretation:	S.B. McCann and L.A. Paul
Drafting and Data Compilation:	L.A. Paul
Oblique Aerial Photography and Ground Surveys:	S.B. McCann, M.K. Woo, and P. Steer.

LIMITATIONS

The coastal characteristics for Northwest Devon and Northeast Bathurst Islands were compiled using a combination of low-altitude oblique photos from 1980 and vertical air photos taken in 1959-1960. Ground survey information was only available from three sites on Grinnell Peninsula. The user should refer to the index of reliability provided in the coding sheets for the source information utilized to map each coastal segment.

Barnett, D.M., Dredge, L.A., and Edlund, S.A. 1977. Terrain characterisation: Bathurst and adjacent Islands, NWT; Geological Survey of Canada, Open File Report 479.

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Canadian Hydrographic Service, 1987. Canadian tide and current tables, Volume 4, Arctic and Hudson Bay; Fisheries and Oceans Canada, 51 p.

Hodgson, D.A. 1978. Surficial materials, southern Ellef Ringnes and King Christian Islands, Northwest Territories; Geological Survey of Canada, Open File Report 538.

Kerr, J.W., 1974. Geology of the Bathurst Island Group and Byam Martin Island, Arctic Canada; Geological Survey of Canada, Memoir 378, 152 p.

Owens, E.H., 1980. Physical shore-zone analysis, Saltspring Island, B.C.; unpublished report to Lands Directorate, Pacific and Yukon Region, Environment Canada, Vancouver, 155 p.

Owens, E.H., Taylor, R.B., Miles, M., and Forbes, D.L., 1981. Coastal geology mapping: an example from the Sverdrup lowland, District of Franklin; in Current Research, Part B, Geological Survey of Canada, Paper 81-1B, p. 39-48.

Roots, E.F. 1963. Physiography of Devon and Bathurst Islands, NWT. In Geology of the north-central part of the Arctic Archipelago Northwest Territories (Operation Franklin) by Fortier Y.O., Blackadar R.G., Glenister B.F., Greiner H.R., McLaren D.J., McMillan N.J., Norris A.W., Souther J.G., Thorsteinsson R., and Tozer E.T.; Geological Survey of Canada, Memoir 320, p. 164-174 and 580-585.

Taylor, R.B., 1980. Coastal reconnaissance for marine terminal planning in the Sverdrup Basin, Northwest Territories; Geological Survey of Canada, Open File Report 693, 150p.

Taylor R.B. and Forbes D.L. 1987. Ice-dominated shores of Lougheed Island: type examples for the northwest Queen Elizabeth Islands, Arctic Canada; in Proceedings Canadian Coastal Conference, (ACROSES), National Research Council Canada, p 33-48.

Sandilands R.G., Solvason R.R., and St. Jacques D.A. 1985. 1979 Arctic tidal survey data report, Canadian Hydrographic Service Technical Report, Bayfield Laboratory for Marine Sciences and Surveys, Burlington Ontario, 4p. and Appendices.

Woodward-Clyde Consultants, 1980. Coastal geology maps, central Sverdrup Basin, Northwest Territories; Geological Survey of Canada, Open File 549.

LOCATIONS Devon Island D

MAP SHEET 59B & Part of C

CODING SHEET 1 of 11

UNIT					SUMMARY		TERRAIN CHARACTERISTICS									
	COMPOSITION															
IDENTIFICATION	HOMOGENEOUS	PRIMARY	SECONDARY	VARIANT	COASTAL CLASS	COASTAL UNIT DESCRIPTOR	PHYSIOGRAPHY	GEOLOGICAL FORMATION	SURFICIAL MATERIALS	SLOPE CLASS	SLOPE MODIFIERS	POOR DRAINAGE	DRAINAGE DENSITY	GULLYING / NIVATION	INSTABILITY FEATURES
1	2				3	4	5	6	7	8	9	10	11	12	13	
D1		3			3	gWFℓ-BRw	WCl			1/2	R	Y	M	-	P	
			2		7	gFℓ-T	WCl			1/2	-	NA	NA	-	-	
D2		4			3	gWm-BRw	WCl			2	R	Y	M	-	P	
			1		7	gFℓ-T	WCl			2	R	NA	NA	-	-	
D3	4				7	gFℓ-T	WCl			1	R	Y	NA	-	-	
D4	4				3	gWm-BSRw	WCl			2/3	R	Y	NA	-	-	
				V'			WCl			2/3	R	NA	NA	-	P	
D5	4				6	gWIf-BRw	WCl			2	R	Y	L	-	-	
D6		3			3	gWIℓ-B	WCl			1	-	Y	NA	-	-	
			2		6	gWIf-B	WCl			1	-	Y	NA	-	-	
D7	4				7	gFℓ-T	WCl			1	-	NA	NA	-	-	
D8	4				3	gWℓ-BRw	WCl			2	R	Y	L	-	-	
D9		3			3	gWm-BSRw	WCl			2	R	-	L	Y	P	

LOCATIONS Devon Island D

MAP SHEET 59B & Part of C

CODING SHEET 1 of 11

	SHORE ZONE CHARACTERISTICS																	LAND USE INTERPRETATIONS					RELIABILITY						
	PROCESSES									FORM																			
TEXTURE	AEOLIAN	FLUV. PRESENCE	FLUV. SEDIMENT SUPPLY	COLLUVIAL	THERMOKARST	WAVES MAX. OBS. FETCH	WAVES LEAD WIDTH	ICE THRUSTING	ICE PILING	NEAR SHORE SLOPE	FORESHORE SLOPE	CLIFF	BEACH	DELTA	BARRIER	SPITS	SHORE LINE CHANGE	NET. SED. TRANSPORT	ICE RICH	AGGREGATES	WATER SUPPLY	TRAFFICABILITY	TERRAIN SENSITIVITY	A/P SCALE	OBLIQUE A/P	GROUND PHOTOS	BEDROCK GEOLOGY	SURFICIAL GEOLOGY	OTHER DATA	AIR PHOTOGRAPH NUMBERS
14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44
9	-	Y	M	-	-			1	PsPo		L	-	Bb	-	Do	Y	+	Y	-	3	2	B2	Ma	6	A	-			-	A 16747 (167-169)
9	-	Y	M	-	-			-	-		L	-	Bb	T	D	Y	+	Y	-	3	1	B2	Ma	6	A	-			-	same
9	-	Y	M	-	-			1	-		M	-	Bb	-	-	-	+	Y	-	3	1	A1	L	6	A	-			-	A 16747 (167-165)
9	-	Y	M	-	-			1	-		L	-	Bb	t	-	-	+	Y	-	3	1	A1	L	6	A	-			-	same
9	-	Y	H	-	-			-	-		L	-	Bb	T	Do	-	+	Y	-	3	1	B3	L	6	A	-			-	A 16747 (164-165)
9	-	Y	L	S	-			2	-		M	-	Bb	(t)	-	-	+	Y	-	3	1	A1	L	6	A	-			-	16749 (13-14)
9	-	Y	L	S	-			-	-		M	-	Bb	(t)	-	-	+	Y	-	3	1	A1		6	A	-			-	same
9	-	-	-	-	-			1	PsPo		L	-	Bb	-	Do	Y	+	R	-	3	O	A2	L	6	A	-			-	A16749 (12-13)
9	-	-	-	-	-			1-2	-		L	-	Bb	-	Do	Y	+	Y	-	1	1	C	L	6	A	-			-	A16749 (11-13)
9	-	-	-	-	-			-	-		L	-	Bb	-	Do	Y	+	Y	-	1	1	C	L	6	A	-			-	same
9	-	Y	H	-	-			-	-		L	-	Bi	T	-	-	+	Y	-	1	1	C	L	6	A	-			-	A16749 (11-12)
9	-	-	-	S	-			-	-		L	-	Bb	-	-	-	+	Y	-	3	O	A1	Ma	6	A	-			-	same
9	-	Y	L	S	-			2	Ps		M	-	Bb	t	-	-	O	Y	-	3	1	A1	L	6	A	-			-	A16749 (10-11, 16-17)

LOCATIONS Devon Island D

MAP SHEET 59B & part of C

CODING SHEET 3 of 11

UNIT					SUMMARY		TERRAIN CHARACTERISTICS									
	COMPOSITION															
IDENTIFICATION	HOMOGENEOUS	PRIMARY	SECONDARY	VARIANT	COASTAL CLASS	COASTAL UNIT DESCRIPTOR	PHYSIOGRAPHY	GEOLOGICAL FORMATION	SURFICIAL MATERIALS	SLOPE CLASS	SLOPE MODIFIERS	POOR DRAINAGE	DRAINAGE DENSITY	GULLYING / NIVATION	INSTABILITY FEATURES
1	2				3	4	5	6	7	8	9	10	11	12	13	
			2		3	gWℓ-B	Up			2	R	Y	L	-	-	
				V'			Up			2	R	NA	NA	-	-	
D19	4				6	gIWℓ-BRi	Up			2	R	Y	L	-	-	
D20	4				7	gFWIf-BT	Up			1	R	-	NA	-	-	
D21	4				3	gWs-BS	Up			1	R	-	L	-	-	
D22	4				1	gCWs-BC	Up			4	-	-	L	-	-	
D23		4			3	gWs-B	Up			2	r	-	M	-	-	
			1		7	gFWm-T	Up			2	r	NA	NA	-	-	
D24		3			3	gWIm-BRW	Up			2	R	-	L	-	-	
			2		1	gCWs-C	Up			4	-	-	L	-	-	
D25		3			1	rCWs-C	Up			4	-	-	L	-	-	
			2		3	gWIm-BRW	Up			3	R	-	L	-	-	
			1		3	gWIm-BRW	Up			3	R	-	L	-	-	

LOCATIONS Devon Island D

MAP SHEET 59B & Part of C

CODING SHEET 3 of 11

	SHORE ZONE CHARACTERISTICS																		LAND USE INTERPRETATIONS					RELIABILITY						
	PROCESSES									FORM																				
		FLUV.				WAVES		ICE																						
TEXTURE	AEOLIAN	PRESENCE	SEDIMENT SUPPLY	COLLUVIAL	THERMOKARST	MAX. OBS. FETCH	LEAD WIDTH	THRUSTING	PILING	NEAR SHORE SLOPE	FORESHORE SLOPE	CLIFF	BEACH	DELTA	BARRIER	SPITS	SHORE LINE CHANGE	NET. SED. TRANSPORT	ICE RICH	AGGREGATES	WATER SUPPLY	TRAFFICABILITY	TERRAIN SENSITIVITY	A/P SCALE	OBLIQUE A/P	GROUND PHOTOS	BEDROCK GEOLOGY	SURFICIAL GEOLOGY	OTHER DATA	AIR PHOTOGRAPH NUMBERS
14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44
g	-	-	-	-	-			2	Ps,Po		L	-	Bb	-	Co	-	+	-	-	3	0	B2	L	6	A	-			-	same
g	-	Y	M	-	-			2	Ps,Po		M	-	-	t	-	-	+	-	-	1	1	A1		6	A	-			-	same
g	-	-	-	-	-			2	Ps		L	-	Bb	-	Co	-	+	-	-	3	0	B2	L	6	A	-			-	same
g	-	Y	H	-	-			1	Ps		L	-	Bb	T	-	-	+	-	-	3	1	B2	L	6	A	-			-	A16761 (46-47)
g	-	-	-	-	-			1	Ps		S	-	Bb	-	-	-	O	-	-	3	0	A1	L	6	A	-			-	same
g	-	-	-	R	-			2	Ps		S	Rt	Bb	-	-	-	O	-	-	0	0	C	L	6	A	-			-	same
g	-	Y	M	-	-			2	Ps,Po		S	-	Bb	-	-	-	O	-	-	2	1	B2	L	6	A	+			-	same
g	-	Y	H	-	-			1	-		M	-		T	-	-	+	-	-	1	1	B2	L	6	A	-			-	same
g	-	Y	L	S	-			2	Ps		M	-	Bb	-	-	-	O	-	-	3	0	A1	L	6	A	-			-	A16175 (103) A16761 (12)
g	-	-	-	R	-			2	-		S	Rt	-	-	-	-	O	-	-	0	0	C	L	6	A	+			-	same
r	-	-	-	R	-			1	Ps		S	Rt		-	-	-	-	-	-	0	0	C	L	6	A	-			-	A16749 104
g	-	-	-	S	-			1	-		M	-	Bb	-	-	-	O	-	-	3	0	A1	L	6	A	-			-	same
g	-	-	-	S	-			2	Ps		M	-	Bb	-	-	Y	+	L	-	3	0	A1	L	6	A	-			-	same

LOCATIONS Devon Island D

MAP SHEET 59B & Part of C

CODING SHEET 4 of 11

UNIT					SUMMARY		TERRAIN CHARACTERISTICS										
IDENTIFICATION	COMPOSITION				COASTAL CLASS	COASTAL UNIT DESCRIPTOR	PHYSIOGRAPHY	GEOLOGICAL FORMATION	SURFICIAL MATERIALS	SLOPE CLASS	SLOPE MODIFIERS	POOR DRAINAGE	DRAINAGE DENSITY	GULLYING / NIVATION	INSTABILITY FEATURES
	HOMOGENEOUS	PRIMARY	SECONDARY	VARIANT											
1	2				3	4	5	6	7	8	9	10	11	12	13
				V'			Up			3	R	NA	NA	-	-
D26		3			1	rCWIs-C	Up			4	-	-	L	-	-
			2		3	gWIm-BRw	Up			3	R	-	L	-	-
			1		3	gWIm-BRw	Up			3	R	-	L	-	-
D27	4				3	gWIm-BRw	Up			3	r	-	L	-	-
D28	4				3	gWm	Up			2	-	-	L	-	-
D29	4				7	gFl-T	Up			1	-	NA	NA	-	-
D30		4			3	gWIm-BRwRi	Up			4	r	-	L	Y	P
			1		3	gWm-B	Up			1	-	NA	-	-	-
				V'			Up			4	-	-	-	Y	-
D31	4				1	rCWIs-C	Up			4	-	-	L	Y	-
D32		4			3	gWIm-BRw	Up			4	R	-	L	-	P
			1		7	gFl-T	Up			1	-	NA	NA	-	-

LOCATIONS Devon Island D

MAP SHEET 59B & Part of C

CODING SHEET 4 of 11

SHORE ZONE CHARACTERISTICS																		LAND USE INTERPRETATIONS					RELIABILITY						
	PROCESSES									FORM																			
		FLUV.				WAVES		ICE																					
TEXTURE	AEOLIAN	PRESENCE	SEDIMENT SUPPLY	COLLUVIAL	THERMOKARST	MAX. OBS. FETCH	LEAD WIDTH	THRUSTING	PILING	NEAR SHORE SLOPE	FORESHORE SLOPE	CLIFF	BEACH	DELTA	BARRIER	SPITS	SHORE LINE CHANGE	NET. SED. TRANSPORT	ICE RICH	AGGREGATES	WATER SUPPLY	TRAFFICABILITY	TERRAIN SENSITIVITY	A/P SCALE	OBLIQUE A/P	GROUND PHOTOS	BEDROCK GEOLOGY	SURFICIAL GEOLOGY	OTHER DATA	AIR PHOTOGRAPH NUMBERS
14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44
g	-	Y	M	-	-			1	-		M	-		t	-	-	+	-	-	1	1	B1		6	A	-			-	same
r	-	-	-	R	-			1	Ps		S	Rt		-	-	-	-	-	-	0	0	C	L	6	A	-			-	A16175 (105-106)
g	-	Y	L	S	-			2	Ps		M	-	Bb	-	-	-	O	-	-	3	0	A1	L	6	A	-			-	same
g	-	Y	L	S	-			1	Ps		M	-	Bb	-	-	Y	O	L	-	3	0	A1	L	6	A	-			-	same
g	-	Y	L	S	-			1	-		M	-	Bb	-	-	-	O	-	-	1	1	A1	L	6	A	-			-	A16749 (102,103)
g	-	Y	L	-	-			-	-		M	-	Bi	-	-	-	O	-	-	1	3	A2	L	6	A	-			-	A16761 (12,13)
g	-	Y	H	-	-			1?			L	-		T	-	-	+	-	-	3	1	B3	L	6	-	-			-	A16749 (101-102)
g	-	-	-	S	-			1	Ps		M	-	Bb	-	-	-	O	Y	-	1	0	B2	L	6	A	-			-	A16753 (79-81)
g	-	-	-	-	-			-	-		M	-	Bb	E	-	-	O	-	-	3	0	C	L	6	A	-			-	same
r	-	-	-	R	-			-	-		S	Rt		-	-	-	O	Y	-	-	0	C		6	A	-			-	same
r	-	-	-	R	-			-	-		S	Rt		-	-	-	-	Y	-	-	-	C	L	6	A	-			-	same
g	-	Y	L	S	-			1	-		M	-	Bb	-	-	-	O	Y	-	3	1	A1	L	6	A	-			-	A16749 (148-149) A16753 (79-80)
g	-	Y	H	-	-			1	Ps		L	-	(Bb)	T	-	-	+	Y	-	3	1	B	L	6	A	-			-	same

LOCATIONS Devon Island D

MAP SHEET 59B & Part of C

CODING SHEET 5 of 11

UNIT					SUMMARY		TERRAIN CHARACTERISTICS									
	COMPOSITION															
IDENTIFICATION	HOMOGENEOUS	PRIMARY	SECONDARY	VARIANT	COASTAL CLASS	COASTAL UNIT DESCRIPTOR	PHYSIOGRAPHY	GEOLOGICAL FORMATION	SURFICIAL MATERIALS	SLOPE CLASS	SLOPE MODIFIERS	POOR DRAINAGE	DRAINAGE DENSITY	GULLYING / NIVATION	INSTABILITY FEATURES
1	2				3	4	5	6	7	8	9	10	11	12	13	
				V'			Up			1	-	NA	NA	-	-	
				V2			Up			1	-	NA	NA	-	-	
				V3			Up			1	R	NA	NA	-	-	
D33						see Map 69A										
D34						see Map 69A										
D35	4				3	gWCm-B	Up			2	r	-	-	Y	P	
				V'			Up			1	-	NA	NA	-	-	
D36	to	D	60			see Map 69A										
D60	4				3	gIWm-BRwRi	Up			3	R	-	L	Y	-	
D61		3			9	gWICs-BG	NBI			1	-	NA	L	Y	-	
			2		3	gIs-Ri	NBI			2	T	-	L	-	-	
				V'			NBI			2-3	T	NA	NA	-	-	
D62		3			7	gFIl-T(B)	NBI			1-2	T	-	NA	-	-	

LOCATIONS Devon Island D

MAP SHEET 59B & Part of C

CODING SHEET 5 of 11

SHORE ZONE CHARACTERISTICS																														
	PROCESSES									FORM									LAND USE INTERPRETATIONS					RELIABILITY						
		FLUV.				WAVES		ICE																						
TEXTURE	AEOLIAN	PRESENCE	SEDIMENT SUPPLY	COLLUVIAL	THERMOKARST	MAX. OBS. FETCH	LEAD WIDTH	THRUSTING	PILING	NEAR SHORE SLOPE	FORESHORE SLOPE	CLIFF	BEACH	DELTA	BARRIER	SPITS	SHORE LINE CHANGE	NET. SED. TRANSPORT	ICE RICH	AGGREGATES	WATER SUPPLY	TRAFFICABILITY	TERRAIN SENSITIVITY	A/P SCALE	OBLIQUE A/P	GROUND PHOTOS	BEDROCK GEOLOGY	SURFICIAL GEOLOGY	OTHER DATA	AIR PHOTOGRAPH NUMBERS
14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44
g	-	Y	H	-	-			1	Ps		L	-	(Bb)	t	-	-	+	Y	-	3	1	B		6	A	-			-	same
g	-	Y	M	-	-			-	-		L	-	Bb	t	-	Y	+	R	-	3	1	B2		6	A	-			-	same
g	-	-	-	-	-			1	-		L/M	Ub	Bb	-	-	-	-	Y	-	3	1	B2		6	A	-			-	same
g	-	Y	M	S	-			-	-		M	-	Bb	t	-	-	O	Y	-	1	1	B	L	6	C	-			-	A16753(76-77) A16749(147-148)
g	-	Y	M	-	-			-	-		L	-	Bb	T	-	-	O	-	-	1	1	B2		6	C	-			-	same
g	-	Y	M	S	-						M	-	Bb	t	-	-	O	Y	-	3	1	A1	L	6	A	-			-	A16753 (66,67)
g	-	Y	M	R,S	-			2	-		S	-	Bb	T	-	-	O	Y	-	1	1	C	L	6	A	-			-	A16749 (87-88)
g	-	Y	H	-	-			2	-		S	-		-	-	-	+	Y	-	3	1	B2		6	A	-			-	same
g	-	Y	H	-	-			2	-		M	-		-	-	-	+	Y	-	3	1	B3		6	A	-			-	same
g	-	Y	H	-	-			1	-		L	-	(Bb)	T	-	-	-	+	-	3	1	B2	L	6	A	-			-	same

LOCATIONS Devon Island D

MAP SHEET 59B & Part of C

CODING SHEET 7 of 11

UNIT					SUMMARY		TERRAIN CHARACTERISTICS									
	COMPOSITION															
IDENTIFICATION	HOMOGENEOUS	PRIMARY	SECONDARY	VARIANT	COASTAL CLASS	COASTAL UNIT DESCRIPTOR	PHYSIOGRAPHY	GEOLOGICAL FORMATION	SURFICIAL MATERIALS	SLOPE CLASS	SLOPE MODIFIERS	POOR DRAINAGE	DRAINAGE DENSITY	GULLYING / NIVATION	INSTABILITY FEATURES
1	2				3	4	5	6	7	8	9	10	11	12	13	
				V'			NBI			2/3	r	-	NA	-	-	
D73		4			4	sgWIFℓ-(B)TRW	NBI			2	r	-	L	Y	S	
			1		2	sgIWℓ-F	NBI			3/2	-	-	L	Y	S	
			1		3	gWIm-BRWRi	NBI			2	r	-	L	-	-	
D74		4			4	sWf-BRW	NBI			1	r	-	L	-	-	
			1		2	sWf-F	NBI			1	-	-	L	Y	-	
				V'			NBI			1	r	-	L	-	-	
D75	4				3	gWIm-BRWRi	NBI			2	-	Y	M	Y	S	
				V'			NBI			2	T	NA	NA	-	-	
D76	4				4	sWℓ-SRW	NBI			1/2	r	-	H	Y	S	
D77		3			7	sFℓ-T	NBI			1	-	-	NA	-	-	
			2		4	sWℓ-S	NBI			1	-	-	L	-	-	
D78		3			3	gWℓ-BRW	NBI			3	r	-	L	-	S	

LOCATIONS Devon Island D

MAP SHEET 59B & Part of C

CODING SHEET 7 of 11

	SHORE ZONE CHARACTERISTICS																		LAND USE INTERPRETATIONS					RELIABILITY						
	PROCESSES									FORM																				
		FLUV.				WAVES		ICE																						
TEXTURE	AEOLIAN	PRESENCE	SEDIMENT SUPPLY	COLLUVIAL	THERMOKARST	MAX. OBS. FETCH	LEAD WIDTH	THRUSTING	PILING	NEAR SHORE SLOPE	FORESHORE SLOPE	CLIFF	BEACH	DELTA	BARRIER	SPITS	SHORE LINE CHANGE	NET. SED. TRANSPORT	ICE RICH	AGGREGATES	WATER SUPPLY	TRAFFICABILITY	TERRAIN SENSITIVITY	A/P SCALE	OBLIQUE A/P	GROUND PHOTOS	BEDROCK GEOLOGY	SURFICIAL GEOLOGY	OTHER DATA	AIR PHOTOGRAPH NUMBERS
14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44
S,g	-	Y	M	-	-			2	-		L	-		t	-	-	+	-	-	1	1	A3/2		6	A	-			-	same
S,g	-	Y	L	S	-			1	-		L	-	(Bb)	-	-	-	O	-	-	1	1	A3/2	Mabc	6	-	-			-	A16749 (85-86)
S,g	-	-	-	S	-			1	-		L	-		-	-	-	O	-	-	O	O	C	Mabc	6	-	-			-	same
g	-	-	-	-	-			1	-		M	-	Bb	-	-	-	O	-	-	O	O	C	Mabc	6	-	-			-	same
S	-	-	L	S	-						L	-	Bb	-	-	-	O	-	-	O	O	C	Mabc	6	-	-			-	A16749 (84-85)
S	-	-	L	-	-						-	-		-	-	-	O	-	-	O	O	C	Mabc	6	-	-			-	same
S	-	-	L	S	-						L	-	Bb	-	-	Y	+	R	-	O	O	C		6	-	-			-	same
g	-	Y	M	S	-			2	-		M	-	Bb	t	-	-	+	-	-	3	1	A1	L	6	A	-			-	A16749 (130-131)
g	-	Y	M	-	-			2	-		L	-	-	t	-	-	+	-	-	3	1	A2		6	A	-			-	same
S	-	Y	L	S	-			2	-		L	-	Bi	-	-	-	O	-	-	2	1	A2	Ma	6	A	-			-	same
S	-	Y	H	-	-			1	-		L	-		T	-	-	+	-	-	2	1	B3	L	6	A	-			-	same
S	-	-	M	-	-			1	-		L	-	Bi	T	-	-	+	-	-	2	O	A2	Ma	6	A	-			-	same
g	-	Y	L	S	-			1	-		L	-	Bb	-	-	-	O	-	-	3	1	A1	L	6	A	-			-	A16761 (28-29)

LOCATIONS Devon Island

MAP SHEET 59B & Part of C

CODING SHEET 8 of 11

UNIT					SUMMARY		TERRAIN CHARACTERISTICS									
	COMPOSITION															
IDENTIFICATION	HOMOGENEOUS	PRIMARY	SECONDARY	VARIANT	COASTAL CLASS	COASTAL UNIT DESCRIPTOR	PHYSIOGRAPHY	GEOLOGICAL FORMATION	SURFICIAL MATERIALS	SLOPE CLASS	SLOPE MODIFIERS	POOR DRAINAGE	DRAINAGE DENSITY	GULLYING / NIVATION	INSTABILITY FEATURES
1	2				3	4	5	6	7	8	9	10	11	12	13
			2		3	gWIs-B	NBI			1	r	-	L	-	-
D79		4			3	gWIℓ-BRwRi	NBI			2	R	-	L	Y	S
			1		7	gFℓ-T	NBI			2	T	-	NA	-	-
			1		4	sWIf-(B)	NBI			1	r	-	L	-	-
				V^1			NBI				r	-	L	-	-
				V^2			NBI				r	-	NA	-	-
D80		4			4	sgWIℓ/f-Rw	NBI			1	r	-	M	Y	S
			1		7	sFIf-T	NBI			1	-	-	NA	-	-
			1		9	sgCWIm-BG	NBI			3	-	-	L	Y	S
				V^1			NBI			2	-	-	NA	-	-
D81	4				3	gsWIℓ/f-B(Ri)	NBI			1	-	-	L	-	-
D82		3			4	sWIℓ/f-(B)	NBI			1	-	-	L	-	S
			2		7	sFIf-T	NBI			1	-	-	NA	-	-

LOCATIONS Devon Island D

MAP SHEET 59 B & Part of C

CODING SHEET 8 of 11

	SHORE ZONE CHARACTERISTICS																		LAND USE INTERPRETATIONS					RELIABILITY						
	PROCESSES									FORM																				
		FLUV.				WAVES		ICE																						
TEXTURE	AEOLIAN	PRESENCE	SEDIMENT SUPPLY	COLLUVIAL	THERMOKARST	MAX. OBS. FETCH	LEAD WIDTH	THRUSTING	PILING	NEAR SHORE SLOPE	FORESHORE SLOPE	CLIFF	BEACH	DELTA	BARRIER	SPITS	SHORE LINE CHANGE	NET. SED. TRANSPORT	ICE RICH	AGGREGATES	WATER SUPPLY	TRAFFICABILITY	TERRAIN SENSITIVITY	A/P SCALE	OBLIQUE A/P	GROUND PHOTOS	BEDROCK GEOLOGY	SURFICIAL GEOLOGY	OTHER DATA	AIR PHOTOGRAPH NUMBERS
14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44
g	-	Y	M	-	-			1	-		S	-	Bb	T	-	-	O	-	-	3	1	A2	L	6	A	-			-	same
g	-	Y	M	S	-			1	-		L	-	Bb	t	-	Y	O	-	-	3	1	A1	L	6	A	-			-	A16761 (30-31)
g	-	Y	H	-	-			2	-		L	-		T	-	-	+	-	-	O	1	B2	L	6	A	-			-	same
S	-	-	-	-	-			1	-		L	-	(Bb)	-	-	-	O	-	-	O	O	A2	L	6	A	-			-	same
g	-	-	-	-	-			1	-		M	-	Bb	-	-	Y	+	R	-	3	O	A2		6	A	-			-	same
g	-	Y	M	-	-			1	-		L	-		t	-	-	+	-	-	1	1	A3/2		6	A	-			-	same
s,g	-	Y	L	S	-			1?	-		L	-	Bi	-	-	-	O	-	-	O	1	A3/2	Ma	6	A	-			-	A16749 (121-122)
S	-	Y	M	-	-			1	-		L	-		T	-	-	+	-	-	O	1	C	L	6	A	-			-	same
s,g	-	-	-	S	-			1	-		S	-	Bi	-	-	-	O	-	-	O	O	B3	L	6	A	-			-	same
S	-	Y	M	-	-			1	-		L	-		t	-	-	O	-	-	O	1	C		6	A	-			-	same
g,s	-	-	?	-	-			1	-		L	-	Bb	T	-	-	O	-	-	3	O	A1	L	6	A	-			-	same
S	-	Y	M	S	-			1	-		L	-	(Bb)	T	-	-	+	-	-	O	1	B3/2	Ma	6	A	-			-	A16749 (32-33)
S	-	Y	H	-	-			1	-		L	-		T	-	-	+	-	-	O	1	C	L	6	A	-			-	same

LOCATIONS Devon Island D

MAP SHEET 59B & Part of C

CODING SHEET 9 of 11

UNIT					SUMMARY		TERRAIN CHARACTERISTICS									
	COMPOSITION															
IDENTIFICATION	HOMOGENEOUS	PRIMARY	SECONDARY	VARIANT	COASTAL CLASS	COASTAL UNIT DESCRIPTOR	PHYSIOGRAPHY	GEOLOGICAL FORMATION	SURFICIAL MATERIALS	SLOPE CLASS	SLOPE MODIFIERS	POOR DRAINAGE	DRAINAGE DENSITY	GULLYING / NIVATION	INSTABILITY FEATURES
1	2				3	4	5	6	7	8	9	10	11	12	13
D83	4				4	sWℓ-(B)(Rw)	NBI			1	r	-	M	-	-
D84		3			4	sWIℓ/f-(B)	NBI			1	-	-	L	-	-
			2		7	sFℓ/f-T	NBI			1	-	-	NA	-	-
			2		6	sWIf	NBI			1	-	-	L	-	-
				V'			NBI			1	-	NA	NA	-	-
D85	4				4	sgWIFf/ℓ-Rw(T)	NBI			2	r	-	H	Y	-
				V'			NBI			2	r	-	NA	-	-
D86		3			4	sWIFℓ	NBI			½	-	-	L	-	S
			1		7	sFf-T	NBI			½	-	-	NA	-	-
			1		2	sWCℓ-F	NBI			½	-	-	L	Y	-
			1		6	sWℓ/f	NBI			½	-	-	L	-	-
				V'			NBI			1/2	-	-	L	-	-
D87	4				4	sWIℓ	NBI			1	-	-	L	-	-

LOCATIONS Devon Island D

MAP SHEET 59B & Part of C

CODING SHEET 9 of 11

	SHORE ZONE CHARACTERISTICS																		LAND USE INTERPRETATIONS					RELIABILITY						
	PROCESSES									FORM																				
		FLUV.				WAVES		ICE																						
TEXTURE	AEOLIAN	PRESENCE	SEDIMENT SUPPLY	COLLUVIAL	THERMOKARST	MAX. OBS. FETCH	LEAD WIDTH	THRUSTING	PILING	NEAR SHORE SLOPE	FORESHORE SLOPE	CLIFF	BEACH	DELTA	BARRIER	SPITS	SHORE LINE CHANGE	NET. SED. TRANSPORT	ICE RICH	AGGREGATES	WATER SUPPLY	TRAFFICABILITY	TERRAIN SENSITIVITY	A/P SCALE	OBLIQUE A/P	GROUND PHOTOS	BEDROCK GEOLOGY	SURFICIAL GEOLOGY	OTHER DATA	AIR PHOTOGRAPH NUMBERS
14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44
S	?	Y	L	-	-			-	-		L	-	(Bb)	-	-	-	O	-	-	O	O	A2	Ma	6	A	-			-	same
S	Y	Y	M	-	-			1	-		L	-	(Bb)	t	-	-	O	-	-	2	2	A3/3	Mab	6	A	-			-	A16749 (28-30)
S	-	Y	M	-	-			1	-		L	-		T	-	-	+	-	-	-	1	A3/3	L	6	A	-			-	same
S	Y	-	-	-	-			1	-		L	-		-	D,S	-	O	-	-	2	O	A3/3	Ma	6	A	-			-	same
S	-	Y	M	-	-						L	-		t	D	-	+	-	-	O	1	A3/3		6	A	-			-	same
S,g	-	Y	H	S	-			1	-		L	-	(Bi)	(t)	-	-	+	-	-	O	1	A3/3	Ma	6	A	-			-	A16749 (27-28)
S,g	-	Y	M	-	-			1	-		L	-		t	-	-	+	-	-	O	1	A3/3		6	A	-			-	same
S	-	Y	L	S	-			1	-		L	-	Bi	t	-	-	+	-	-	O	O	A3/3	Ma	6	A	-			-	A16749 (1-3)
S	-	Y	M	-	-			1	-		L	-		t	-	-	+	-	-	O	1	A3/3	L	6	A	-			-	same
S	-	-	-	-	-			2	-		L	-	Bi	-	-	-	O	-	-	O	O	C	Mac	6	A	-			-	same
S	-	-	-	-	-			1	-		L	-	Bi	-	D,S	-	O	-	-	O	O	A3/3	Ma	6	A	-			-	same
S	-	-	-	-	-			1	-		L	-	Bi	-	D,S	-	O	-	-	O	O	A3/3		6	A	-			-	same
S	-	-	-	-	-			2	-		L	-		T	-	-	O	-	-	O	O	A1	Ma	6	A	-			-	A16749 (3-4)

LOCATIONS Devon Island D

MAP SHEET 59B & Part of C

CODING SHEET 10 of 11

UNIT					SUMMARY		TERRAIN CHARACTERISTICS									
	COMPOSITION															
IDENTIFICATION	HOMOGENEOUS	PRIMARY	SECONDARY	VARIANT	COASTAL CLASS	COASTAL UNIT DESCRIPTOR	PHYSIOGRAPHY	GEOLOGICAL FORMATION	SURFICIAL MATERIALS	SLOPE CLASS	SLOPE MODIFIERS	POOR DRAINAGE	DRAINAGE DENSITY	GULLYING / NIVATION	INSTABILITY FEATURES
1	2				3	4	5	6	7	8	9	10	11	12	13	
				V'			NBI			1	-	-	L	-	-	
D88	4				7	sFWf-T	NBI			1	-	-	NA	-	-	
D89	4				3	gsWIℓ-Rw	NBI			½	r	-	L	-	-	
D90	4				2	gcWIs-F(Ri)	Up			¾	-	-	L	Y	R,S	
				V1			Up			¾	-	-	NA	-	-	
D91	4				2	gbCWIs-F(Ri)	Up			4	-	-	L	Y	R,S	
D92	4				7	gFIm-(B)(T)	Up			⅔	T	-	NA	-	-	
D93		4			3	gWIs-(B)	Up			⅔	-	-	L	Y	-	
			1		7	gFm-T	Up			2	T	-	NA	-	-	
				V'			Up			2	T	-	NA	-	-	
D94					3	gWIs-BRwRi	Up			2	R	-	L	Y	S	
				V'			Up			2	R	-	L	-	-	
D95	4				3	gbWIm/ℓ-BRwRi	Up			2	R	-	L	Y	-	

LOCATIONS Devon Island D

MAP SHEET 59B & Part of C

CODING SHEET 10 of 11

	SHORE ZONE CHARACTERISTICS																		LAND USE INTERPRETATIONS					RELIABILITY						
	PROCESSES									FORM																			
		FLUV.				WAVES		ICE																					
TEXTURE	AEOLIAN	PRESENCE	SEDIMENT SUPPLY	COLLUVIAL	THERMOKARST	MAX. OBS. FETCH	LEAD WIDTH	THRUSTING	PILING	NEAR SHORE SLOPE	FORESHORE SLOPE	CLIFF	BEACH	DELTA	BARRIER	SPITS	SHORE LINE CHANGE	NET. SED. TRANSPORT	ICE RICH	AGGREGATES	WATER SUPPLY	TRAFFICABILITY	TERRAIN SENSITIVITY	A/P SCALE	OBLIQUE A/P	GROUND PHOTOS	BEDROCK GEOLOGY	SURFICIAL GEOLOGY	OTHER DATA	AIR PHOTOGRAPH NUMBERS
14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44
S	-	-	-	-	-						L	-		T	-	Y	+	L	-	O	O	A1		6	A	-			-	same
S	-	Y	H	-	-			2	-		L	-		T	-	-	+	-	-	O	1	A 3/3	L	6	A	-			-	same
g,s	-	-	-	S	-			2	-		L	-	Bi	T	-	-	+	-	-	O	1	A2	L	6	A	-			-	A16749 (3-4)
g	-	Y	L	S	Y			1	-		S	Ub		-	-	-	O	-	Y	O	O	C	Mabc	6	A	-			-	A16749 (4-5)
g	-	Y	L	-	-						M	-		t	-	-	O	-	-	O	1	C		6	A	-			-	same
g,b	-	Y	L	S	Y			1	-		S	Ub		-	-	-	O	-	Y	O	O	C	Mabc	6	A	-			-	A16749 (5-6)
g	-	Y	M	-	-			2	-		M	-	(Bb)	T	-	-	+	-	-	3	1	B 3/3	L	6	A	-			-	same
g	-	Y	L	S	-			1	-		S	-	(Bb)	t	-	-	O	-	-	O	1	B2	L	6	-	-			-	A16749 (6-9) A16749 (19-20)
g	-	Y	H	-	-			1	-		M	-		T	-	-	+	-	-	3	1	B2	L	6	-	-			-	same
g	-	Y	H	-	-			1	-		M	-		t	-	-	+	-	-	3	1	B2		6	-	-			-	same
g	-	Y	L	S	-			2	-		S	-	Bb	t	-	Y	O	-	-	3	1	A1	L	6	A	-			-	A16749 (5-6) A16747 (155-156)
g	-	Y	L	-	-			2	-		S	-	Bb	-	-	Y	+	R	-	3	1	A1		6	A	-			-	same
g,b	-	Y	L	S	-			2	-		M/L	-	Bb	t	-	Y	O	-	-	3	1	A1	L	6	A	-			-	A16747 (156-157)

LOCATIONS Devon Island D

MAP SHEET 59B & Part of C

CODING SHEET 11 of 11

UNIT					SUMMARY		TERRAIN CHARACTERISTICS									
IDENTIFICATION	COMPOSITION				COASTAL CLASS	COASTAL UNIT DESCRIPTOR	PHYSIOGRAPHY	GEOLOGICAL FORMATION	SURFICIAL MATERIALS	SLOPE CLASS	SLOPE MODIFIERS	POOR DRAINAGE	DRAINAGE DENSITY	GULLYING / NIVATION	INSTABILITY FEATURES
	HOMOGENEOUS	PRIMARY	SECONDARY	VARIANT											
1	2				3	4	5	6	7	8	9	10	11	12	13
				V1			Up			2	-	-	NA	-	-
				V2			Up			2	R	-	NA	-	-
D96		4			3	gbWIm/l-BRwRi	NBl			½	R	-	L	Y	S
			1		3	gbWICm-BRw	NBl			3	-	-	L	Y	R,S
			1		7	s Ff-T	NBl			1	r	-	NA	-	-
				V1			NBl			½	R	-	NA	-	-
				V2			NBl			½	R	-	NA	-	-

LOCATIONS Devon Island D

MAP SHEET 59B & Part of C

CODING SHEET 11 of 11

SHORE ZONE CHARACTERISTICS																			LAND USE INTERPRETATIONS					RELIABILITY						
	PROCESSES									FORM																				
		FLUV.				WAVES		ICE																						
TEXTURE	AEOLIAN	PRESENCE	SEDIMENT SUPPLY	COLLUVIAL	THERMOKARST	MAX. OBS. FETCH	LEAD WIDTH	THRUSTING	PILING	NEAR SHORE SLOPE	FORESHORE SLOPE	CLIFF	BEACH	DELTA	BARRIER	SPITS	SHORE LINE CHANGE	NET. SED. TRANSPORT	ICE RICH	AGGREGATES	WATER SUPPLY	TRAFFICABILITY	TERRAIN SENSITIVITY	A/P SCALE	OBLIQUE A/P	GROUND PHOTOS	BEDROCK GEOLOGY	SURFICIAL GEOLOGY	OTHER DATA	AIR PHOTOGRAPH NUMBERS
14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44
g,b	-	-	-	-	-			2	-		M	-	Bb	-	-	Y	+	R	-	3	0	A1		6	A	-			-	same
g	-	Y	L	-	-			2	-		M	-		t	-	-	+	-	-	3	1	A2		6	A	-			-	same
g,b	-	Y	L	S	-			2	Ps		M/L	-	Bb	t	-	Y	O	-	-	3	3	A1	L	6	A	-			-	A16749 (58,60, 152-153)
g,b	-	Y	L	S	-			2	-		M	-	Bb	-	-	-	O	-	-	O	O	B3	L	6	A	-			-	same
S	-	Y	M	-	-			2	-		L	-		T	-	-	+	-	-	O	1	A3/2	L	6	A	-			-	same
g	-	-	-	-	-			2	-		M	-	Bb	-	-	Y	+	R	-	3	O	B2		6	A	-			-	same
g	-	Y	M	-	-			2	-		M	-		t	-	-	+	-	-	3	1	A3/2		6	A	-			-	same

LOCATIONS Devon Island D

MAP SHEET 69A & Part of D

CODING SHEET 1 of 5

SHORE ZONE CHARACTERISTICS																			LAND USE INTERPRETATIONS					RELIABILITY						
	PROCESSES									FORM																				
		FLUV.				WAVES		ICE																						
TEXTURE	AEOLIAN	PRESENCE	SEDIMENT SUPPLY	COLLUVIAL	THERMOKARST	MAX. OBS. FETCH	LEAD WIDTH	THRUSTING	PILING	NEAR SHORE SLOPE	FORESHORE SLOPE	CLIFF	BEACH	DELTA	BARRIER	SPITS	SHORE LINE CHANGE	NET. SED. TRANSPORT	ICE RICH	AGGREGATES	WATER SUPPLY	TRAFFICABILITY	TERRAIN SENSITIVITY	A/P SCALE	OBLIQUE A/P	GROUND PHOTOS	BEDROCK GEOLOGY	SURFICIAL GEOLOGY	OTHER DATA	AIR PHOTOGRAPH NUMBERS
14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44
g	-	Y	L	S	-			1	-		M	-	Bb	-	-	-	O	Y	-	3	1	A1	L	6	A	-			-	A16749 (148-149)
r	-	-	-	R	-			1	-		S	Rt	Bb	-	-	-	-	Y	-	O	O	C	L	6	A	-			-	A16749 (147-148)
g	-	-	-	S	-			1	-		S	-	Bb	-	-	-	O	Y	-	3	O	B2	L	6	A	-			-	same
r	-	-	-	R	-			1	-		S	Rt	(Bb)	-	-	-	-	Y	-	O	O	C	L	6	A	-			-	A16749 (146-147)
g	-	Y	L	S	-			1	-		M	-	Bb	-	-	-	O	Y	-	O	O	B2	L	6	A	-			-	same
g	-	Y	M	-	-			-	-		L	-		T	-	-	+	Y	-	3	1	B2	L	6	A	-			-	same
g	-	-	-	-	-			1	-		L	-	Bb	-	Co	-	+	Y	-	3	1	B3	L	6	A	-			-	same
g	-	-	-	S	-			1	-		M	-	Bb	-	-	-	?	Y	-	3	1	B2	L	6	A	-			-	A16202 (81-82) A16749 (145-146)
g	-	Y	M	-	-			-	-		M	-		t	-	-	+	Y	-	3	1	B2		6	A	-			-	same
g	-	Y	H	-	-			1	-		L	-		T	-	-	+	Y	-	3	1	B2	Ma	6	A	-			-	A16749 (145-146)
g	-	Y	-	-	-			1	-		M	-	Bb	T	-	-	O	-	-	3	1	A	Ma	6	A	-			-	same
r	-	-	-	R	-			1	-		S	Rt		-	-	-	-	-	-	O	O	C	L	6	A	-			-	A16202 (79-80)

LOCATIONS Devon Island D

MAP SHEET 69A & Part of D

CODING SHEET 1 of 5

UNIT					SUMMARY		TERRAIN CHARACTERISTICS									
	COMPOSITION															
IDENTIFICATION	HOMOGENEOUS	PRIMARY	SECONDARY	VARIANT	COASTAL CLASS	COASTAL UNIT DESCRIPTOR	PHYSIOGRAPHY	GEOLOGICAL FORMATION	SURFICIAL MATERIALS	SLOPE CLASS	SLOPE MODIFIERS	POOR DRAINAGE	DRAINAGE DENSITY	GULLYING / NIVATION	INSTABILITY FEATURES
1	2				3	4	5	6	7	8	9	10	11	12	13
D32		4			3	gWIm-BRw	Up			4	R	-	L	-	P
D33	4				1	rCWIs-C(B)	Up			4	-	-	L	Y	-
D34	4				3	gWICs-BRwRi	Up			4	r	-	L	Y	-
D35						see Map 59B									
D36					1	rCWIs-CB	Up			4	-	-	L	Y	-
D37		3			3	gWIFm-B	Up			4	r	-	L	-	-
			2		7	gFl-T	Up			1	-	NA	NA	-	-
D38	4				3	gWIl-BRw	Up			2	R	Y	L	-	-
D39	4				3	gWIm/s-BRw	Up			3	R	-	L	Y	P
				V'			Up			2	R	NA	NA	-	-
D40		3			7	gFf-T	Up			1	-	NA	NA	-	-
			2		3	gWFm-BT	Up			1	-	NA	NA	-	-
D41		3			1	rCWIs-C	Up			4	-	-	L	Y	-

LOCATIONS Devon Island D

MAP SHEET 69A & Part of D

CODING SHEET 2 of 5

UNIT					SUMMARY		TERRAIN CHARACTERISTICS									
	COMPOSITION															
IDENTIFICATION	HOMOGENEOUS	PRIMARY	SECONDARY	VARIANT	COASTAL CLASS	COASTAL UNIT DESCRIPTOR	PHYSIOGRAPHY	GEOLOGICAL FORMATION	SURFICIAL MATERIALS	SLOPE CLASS	SLOPE MODIFIERS	POOR DRAINAGE	DRAINAGE DENSITY	GULLYING / NIVATION	INSTABILITY FEATURES
1	2				3	4	5	6	7	8	9	10	11	12	13	
			2		3	gWIs-BRw	Up			1	r	-	L	-	-	
D42	4				3	gWIl-BRw	Up			1	r	Y	L	Y	-	
D43		3			3	gWIs-BRw	Up			3	r	-	L	-	-	
			2		1	grCWIs-(B)C	Up			4	-	-	L	Y	-	
D44		4			3	gWIm-BRw	Up			2	r	-	L	-	-	
			1		1	rCWs-C	Up			4	-	-	L	Y	-	
				V'			Up			3	-	NA	NA	-	-	
D45		3			3	gWIm-BRwT	Up			2	r	NA	NA	-	-	
			2		7	gFf-T	Up			2	-	NA	NA	-	-	
D46		4			9	gWIs-BG	Up			4	-	-	L	Y	-	
			1		1	gWICs-BC	Up			4	-	-	L	Y	-	
D47	4				3	gWIm-B	Up			3/3	-	-	L	-	-	
				V'			Up			2	-	NA	NA	-	-	

LOCATIONS Devon Island D

MAP SHEET 69A & Part of D

CODING SHEET 2 of 5

	SHORE ZONE CHARACTERISTICS																		LAND USE INTERPRETATIONS					RELIABILITY						
	PROCESSES									FORM																				
TEXTURE	AEOLIAN	FLUV. PRESENCE	FLUV. SEDIMENT SUPPLY	COLLUVIAL	THERMOKARST	WAVES MAX. OBS. FETCH	WAVES LEAD WIDTH	ICE THRUSTING	ICE PILING	NEAR SHORE SLOPE	FORESHORE SLOPE	CLIFF	BEACH	DELTA	BARRIER	SPITS	SHORE LINE CHANGE	NET. SED. TRANSPORT	ICE RICH	AGGREGATES	WATER SUPPLY	TRAFFICABILITY	TERRAIN SENSITIVITY	A/P SCALE	OBLIQUE A/P	GROUND PHOTOS	BEDROCK GEOLOGY	SURFICIAL GEOLOGY	OTHER DATA	AIR PHOTOGRAPH NUMBERS
14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44
g	-	-	-	S	-			1	-		S	-	Bb	-	-	-	O	-	-	3	2	A2	Mac	6	A	-			-	A16202 (79-86)
g	-	-	-	-	-			1	-		L	-	Bb	-	Co	-	+	Y	-	3	2	B2	Ma	6	B	-			-	Same
g	-	-	-	-	-						S	-	Bb	-	-	-	O	-	-	3	O	B1	L	6	-	-			-	A16202 (77-79, 89-90)
g,r	-	-	-	R	-						S	Rt	(Bb)	-	-	-	O	-	-	O	O	C	L	6	-	-			-	same
g	-	-	-	-	-						M	-	Bb	-	-	-	O	-	-	2	O	A1	L	6	D	-			-	A16202(76-78) A16749 (141-143)
r	-	-	-	R	-						S	Rt		-	-	-	O	-	-	O	O	C	L	6	-	-			-	A16749 (142-143)
g	-	Y	M	-	-						L	-		t	-	-	+	-	-	2	1	B1		6	-	-			-	same
g	-	Y	-	-	-						M	-	Bb	T	-	-	+	-	-	3	1	A1	L	6	-	-			-	A16202 (76-77)
g	-	Y	H	-	-						M	-		T	-	-	+	-	-	2	1	B2	L	6	-	-			-	same
g	-	-	-	S	-						S	-	Bb	-	-	-	O	-	-	O	O	C	L	6	-	-			-	A16202 (75-76)
g	-	-	-	R	-						S	Rt	Bb	-	-	-	O	-	-	O	O	C	L	6	-	-			-	same
g	-	-	-	-	-			1?	-		M	-	Bb	-	-	-	O	-	-	3	O	A1	L	6	D	-			-	same
g	-	Y	M	-	-			1?	-		L	-		t	-	-	+	-	-	2	1	B2		6	-	-			-	same

LOCATIONS Devon Island D

MAP SHEET 69A & Part of D

CODING SHEET 3 of 5

UNIT					SUMMARY		TERRAIN CHARACTERISTICS									
	COMPOSITION															
IDENTIFICATION	HOMOGENEOUS	PRIMARY	SECONDARY	VARIANT	COASTAL CLASS	COASTAL UNIT DESCRIPTOR	PHYSIOGRAPHY	GEOLOGICAL FORMATION	SURFICIAL MATERIALS	SLOPE CLASS	SLOPE MODIFIERS	POOR DRAINAGE	DRAINAGE DENSITY	GULLYING / NIVATION	INSTABILITY FEATURES
1	2				3	4	5	6	7	8	9	10	11	12	13	
D48		3			9	gWIs-BG	Up			4	-	-	L	Y	-	
			2		1	grCWs-C	Up			4	-	-	L	Y	-	
			1		7	gFf-T	Up			1	T	NA	NA	-	-	
D49		3			3	gsWm-BRw	Up			3	r	Y	M	-	-	
			2		3	gsWf-BRw	Up			3	r	Y	M	-	-	
D50	4				1	rCWs-C	Up			4	-	-	L	Y	-	
D51	4				3	grWICs-B	Up			3	-	-	L	-	-	
D52	4				3	gFWIm-(B)Rw	Up			3	r	-	H	-	-	
D53	4				3	gWIm-BRiRw	Up			2	r	-	L	Y	-	
D54		3			3	gsWIm-(B)RiRw	Up			2	r	-	L	-	-	
			2		1	gs CWs-C	Up			4	-	-	L	Y	-	
D55		2			3	gsWIm-B	Up			2	r	-	L	Y	-	
			2		3	gsWIl-B	Up			2	r	-	L	Y	-	

LOCATIONS Devon Island D

MAP SHEET 69 A & Part of D

CODING SHEET 3 of 5

	SHORE ZONE CHARACTERISTICS																	LAND USE INTERPRETATIONS					RELIABILITY						
	PROCESSES									FORM																			
		FLUV.				WAVES		ICE																					
TEXTURE	AEOLIAN	PRESENCE	SEDIMENT SUPPLY	COLLUVIAL	THERMOKARST	MAX. OBS. FETCH	LEAD WIDTH	THRUSTING	PILING	NEAR SHORE SLOPE	FORESHORE SLOPE	CLIFF	BEACH	DELTA	BARRIER	SPITS	SHORE LINE CHANGE	NET. SED. TRANSPORT	ICE RICH	AGGREGATES	WATER SUPPLY	TRAFFICABILITY	TERRAIN SENSITIVITY	A/P SCALE	OBLIQUE A/P	GROUND PHOTOS	BEDROCK GEOLOGY	SURFICIAL GEOLOGY	OTHER DATA	AIR PHOTOGRAPH NUMBERS
14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44
g	-	-	-	S	-			1	-		S	-	Bb	-	-	-	O	-	-	1	O	B2	L	6	C	-			-	A16202 (73-75)
g,r	-	-	-	R	-			1	-		S	Rt		-	-	-	O	-	-	O	O	C	L	6	-	-			-	same
g	-	Y	M	-	-			1	-		L	-		T	-	-	+	-	-	3	1	A1	L	6	A	-			-	same
g,s	-	Y	L	S	-			1	-		M	-	Bb	-	-	-	O	-	-	1	O	B	Mac	6	A	-			-	A16202 (73-74)
g,s	-	Y	L	S	-			1	-		L	-	Bb	-	-	-	O	-	-	1	O	B	Mac	6	A	-			-	same
r	-	-	-	R	-			1	-		S	Rt		-	-	-	O	-	-	O	O	C	L	6	A	-			-	same
g,r	-	-	-	S	-			1	-		S	-	Bb	-	-	-	O	-	-	3	O	A1	L	6	C	-			-	same
g	-	Y	L	S	-			2	-		M	-	(Bb)	-	-	-	O	-	-	O	1	A3	L	6	A	-			-	A16202 (92-94)
g	-	-	-	S	-			2	P_o, P_s		M	-	Bb	-	-	-	O	-	-	3	2	A1	L	6	A	-			-	same
g	-	-	-	-	-			2	P_s, P_b		M	-	(Bb)	-	-	-	O	-	-	3	O	A1	L	6	C	-			-	same
g,s	-	-	-	R,S	-			2	-		S	Rt		-	-	-	O	-	-	O	O	C	L	6	C	-			-	same
g,s	-	-	-	S	-			2	-		M	-	Bb	-	-	-	O	-	-	1½2	O	B3/B2	Mac	6	A	A			-	A16202 (72-73)
g,s	-	-	-	S	-			2	-		L	-	Bb	-	-	-	O	-	-	1½2	O	B3/B2	Mac	6	A	-			-	same

LOCATIONS Devon Island D

MAP SHEET 69A & Part of D.

CODING SHEET 4 of 5

UNIT					SUMMARY		TERRAIN CHARACTERISTICS									
	COMPOSITION															
IDENTIFICATION	HOMOGENEOUS	PRIMARY	SECONDARY	VARIANT	COASTAL CLASS	COASTAL UNIT DESCRIPTOR	PHYSIOGRAPHY	GEOLOGICAL FORMATION	SURFICIAL MATERIALS	SLOPE CLASS	SLOPE MODIFIERS	POOR DRAINAGE	DRAINAGE DENSITY	GULLYING / NIVATION	INSTABILITY FEATURES
1	2				3	4	5	6	7	8	9	10	11	12	13
			2		9	gCWm-G	Up			4	-	-	L	Y	-
D56		4			3	gIWCm-BRiRw	Up			3	r	-	L	Y	-
			1		3	gWCm-BRw	Up			2	r	-	L	-	-
				V'			Up			2	r	NA	NA	-	-
				V2			Up			2	r	-	L	-	-
D57	4				3	gWIl-BRw	Up			2	r	-	L	-	-
				V'			Up			2	r	-	L	-	-
				V2			Up			2	r	-	L	-	-
D58		3			3	gWm-BRw	Up			2	r	-	L	-	-
			2		9	gWCs-BRwG	Up			4	r	-	L	-	-
				V'			Up			2	-	NA	NA	-	-
				V2			Up			2	r	-	L	-	-
D59	4				3	gIWm-BRwRi	Up			2	R	-	L	-	-

LOCATIONS Devon Island D

MAP SHEET 69A & Part of D

CODING SHEET 4 of 5

SHORE ZONE CHARACTERISTICS																			LAND USE INTERPRETATIONS					RELIABILITY						
	PROCESSES									FORM																				
TEXTURE	AEOLIAN	FLUV. PRESENCE	FLUV. SEDIMENT SUPPLY	COLLUVIAL	THERMOKARST	WAVES MAX. OBS. FETCH	WAVES LEAD WIDTH	ICE THRUSTING	ICE PILING	NEAR SHORE SLOPE	FORESHORE SLOPE	CLIFF	BEACH	DELTA	BARRIER	SPITS	SHORE LINE CHANGE	NET. SED. TRANSPORT	ICE RICH	AGGREGATES	WATER SUPPLY	TRAFFICABILITY	TERRAIN SENSITIVITY	A/P SCALE	OBLIQUE A/P	GROUND PHOTOS	BEDROCK GEOLOGY	SURFICIAL GEOLOGY	OTHER DATA	AIR PHOTOGRAPH NUMBERS
14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44
g	-	-	-	S	-			-	-		M	-		-	-	-	O	-	-	O	O	C	Mc	b	A	-			-	A16202 (72-73)
g	-	-	-	S	-			1	-		M	-	Bb	t	-	-	O	-	-	3	O	A1	L	b	A	-			-	A16749 138-139
g	-	Y	L	-	-			1	-		M	-	Bb	-	-	-	O	-	-	1	1	A2	L	b	-	-			-	same
g	-	Y	M	-	-			1	-		L	-	Bb	t	-	-	+	-	-	1	1	A2		b	A	-			-	same
g	-	-	-	-	-			1	-		M	-	Bb	-	-	Y	+	L	-	3	O	A1		b	A	-			-	same
g	-	-	-	-	-			1	-		L	-	Bb	-	-	-	O	Y	-	3	O	A1	L	b	A	-			-	same
g	-	-	-	-	-			1	-		L	-	Bb	-	-	Y	O	?	-	3	O	A1		6	A	-			-	A16749 138-139
g	-	-	-	-	-			1	-		L	-	Bb	-	Do	-	O	Y	-	3	O	B2		b	A	-			-	same
g	-	-	-	-	-			1	-		M	-	Bb	t	-	-	O	Y	-	3	O	A1	L	6	A	-			-	A16749 (137-139)
g	-	-	-	S	-			1	-		S	-	Bb	-	-	-	6	Y	-	O	O	C	Mc	6	A	-			-	same
g	-	Y	M	-	-			1	-		L	-		t	-	-	+	Y	-	3	1	B2		6	A	-			-	same
g	-	-	-	-	-			1	-		L	-	Bb	-	D	-	O	Y	-	3	O	B2		6	A	-			-	same
a	-	-	-	-	-			2	P_0P_3		M	-	Bb	-	-	-	O	Y	-	3	O	A1	L	6	A				-	A16749 (137-139)

LOCATIONS Devon Island D

MAP SHEET 69A & Part of D

CODING SHEET 5 of 5

UNIT					SUMMARY		TERRAIN CHARACTERISTICS									
	COMPOSITION															
IDENTIFICATION	HOMOGENEOUS	PRIMARY	SECONDARY	VARIANT	COASTAL CLASS	COASTAL UNIT DESCRIPTOR	PHYSIOGRAPHY	GEOLOGICAL FORMATION	SURFICIAL MATERIALS	SLOPE CLASS	SLOPE MODIFIERS	POOR DRAINAGE	DRAINAGE DENSITY	GULLYING / NIVATION	INSTABILITY FEATURES
1	2				3	4	5	6	7	8	9	10	11	12	13
D60	4				3	gIWm-BRwRi	Up			3	R	-	L	Y	-
				V'			Up			3	R	NA	NA	-	-

LOCATIONS Devon Island D

MAP SHEET 69A & Part of D

CODING SHEET 5 of 5

SHORE ZONE CHARACTERISTICS																		LAND USE INTERPRETATIONS					RELIABILITY						
	PROCESSES									FORM																			
		FLUV.				WAVES		ICE																					
TEXTURE	AEOLIAN	PRESENCE	SEDIMENT SUPPLY	COLLUVIAL	THERMOKARST	MAX. OBS. FETCH	LEAD WIDTH	THRUSTING	PILING	NEAR SHORE SLOPE	FORESHORE SLOPE	CLIFF	BEACH	DELTA	BARRIER	SPITS	SHORE LINE CHANGE	NET. SED. TRANSPORT	ICE RICH	AGGREGATES	WATER SUPPLY	TRAFFICABILITY	TERRAIN SENSITIVITY	A/P SCALE	OBLIQUE A/P	GROUND PHOTOS	BEDROCK GEOLOGY	SURFICIAL GEOLOGY	OTHER DATA	AIR PHOTOGRAPH NUMBERS
14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44
9	-	Y	M	S	-			2	-		M	-	Bb	t	-	-	O	Y	-	3	1	A1	L	6	A	-	B	-	-	A16753 (66-67)
9	-	Y	M	-	-			2	-		m	-		t	-	-	+	Y	-	1	1	B1		6	A	-	B	-	-	same

LOCATIONS Bathurst Island B

MAP SHEET 69A

CODING SHEET 1 of 8

UNIT					SUMMARY		TERRAIN CHARACTERISTICS									
	COMPOSITION															
IDENTIFICATION	HOMOGENEOUS	PRIMARY	SECONDARY	VARIANT	COASTAL CLASS	COASTAL UNIT DESCRIPTOR	PHYSIOGRAPHY	GEOLOGICAL FORMATION	SURFICIAL MATERIALS	SLOPE CLASS	SLOPE MODIFIERS	POOR DRAINAGE	DRAINAGE DENSITY	GULLYING / NIVATION	INSTABILITY FEATURES
1	2				3	4	5	6	7	8	9	10	11	12	13
B1	4				3	gWIm-BRw	Ru(N)	Dmh		2	R	-	L	-	-
B2		3			3	gWFIm-BRwT	"	Q		1	R,T	-	L	-	-
			2		7	gFℓ-T	"	Q		1	T	-	NA	-	-
B3		4			3	gbWCIm-BRw		Db;		2/3	R	-	M	Y	S
			1		3	gbWIF-BRw	"	Db;		2	R	Y	L	Y	S
B4		4			3	gWFIℓ/m-BRwT	"	Q		2	R,T	-	L	-	-
			1		7	gFℓ-T	"	Q		2	T	NA	NA	-	-
B5	4				9	gCWIm-(B)G	Ru(N)	Dbl		4	-	-	L	-	-
				V'			"	Dbl		4	-	NA	NA	-	-
B6	4				3	gWFℓ/m-BRwT	"	Dmg		2	R,T	-	L	-	-
				V'			"	Dmg		2	R,T	NA	NA	-	-
B7		4			9	gCIWm-(B)G	"	Dmg		3/4	-	-	H	Y	S
			1		3	gWFm-BRw	"	Dmg		2	R	-	L	-	-

LOCATIONS Bathurst Island B

MAP SHEET 69A

CODING SHEET 1 of 8

SHORE ZONE CHARACTERISTICS																		LAND USE INTERPRETATIONS					RELIABILITY						
	PROCESSES									FORM																			
		FLUV.				WAVES		ICE																					
TEXTURE	AEOLIAN	PRESENCE	SEDIMENT SUPPLY	COLLUVIAL	THERMOKARST	MAX. OBS. FETCH	LEAD WIDTH	THRUSTING	PILING	NEAR SHORE SLOPE	FORESHORE SLOPE	CLIFF	BEACH	DELTA	BARRIER	SPITS	SHORE LINE CHANGE	NET. SED. TRANSPORT	ICE RICH	AGGREGATES	WATER SUPPLY	TRAFFICABILITY	TERRAIN SENSITIVITY	A/P SCALE	OBLIQUE A/P	GROUND PHOTOS	BEDROCK GEOLOGY	SURFICIAL GEOLOGY	OTHER DATA	AIR PHOTOGRAPH NUMBERS
14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44
9	-	-	-	-	-			1	-		M	-	Bb	-	-	-	O	Y	-	3	O	A1	Ma	6	A	-	B	-	-	A16202 (53-54)
9	-	Y	H	-	-			1	-		m	-	Bb	T	-	-	+	Y	-	3	O	A2	Mac	6	A	-	B	-	-	A16202 (51-54)
9	-	Y	H	-	-			2	-		L	-		T	-	-	+	Y	-	1	1	B3	L	6	A	-	B	-	-	same
9.b	-	Y	L	S	-			1	-		M	-	Bb	-	-	-	O	Y	-	3	1	A2	Mac	6	A	-	B	-	-	A16202 (51-52)
9.b	-	-	L	S	-			1	-		L	-	Bb	-	-	-	O	Y	-	3	O	A1	Mac	6	A	-	B	-	-	same
9	-	Y	H	-	-			2	-		L,M	-	Bb	T	-	-	+	Y	-	3	1	A1	L	6	A	-	B	-	-	A16202
9	-	Y	H	-	-			2	-		L	-	-	T	-	-	+	Y	-	1	1	B1	L	6	A	-	B	-	-	(49-51)
9	-	-	-	S,R	-			1	-		m	-	(Bb)	-	-	-	O	Y	-	O	O	C	L	6	A	-	B	-	-	same
9	-	Y	m	-	-			1	-		M	-		t	-	-	+	Y	-	1	1	B1		6	A	-	B	-	-	same
9	-	Y	H	-	-			1	-		m	-	Bb	T	-	-	+	Y	-	3	1	B2	L	6	A	-	B	-	-	A16202 (49,50)
9	-	Y	H	-	-			1	-		L	-		t	-	-	+	Y	-	3	1	B3		6	A	-	B	-	-	same
9	-	Y	L	9	-			1	-		m	-	Bb	-	-	-	O	Y	-	O	O	C	L	6	A	-	B	-	-	A16202 (47-49)
9	-	Y	m	-	-			1	-		m	-	Bb	T	-	-	O	Y	-	3	1	A1	L	6	A	-	B	-	-	same

LOCATIONS Bathurst Island B

MAP SHEET 69A

CODING SHEET 2 of 8

UNIT					SUMMARY		TERRAIN CHARACTERISTICS									
	COMPOSITION															
IDENTIFICATION	HOMOGENEOUS	PRIMARY	SECONDARY	VARIANT	COASTAL CLASS	COASTAL UNIT DESCRIPTOR	PHYSIOGRAPHY	GEOLOGICAL FORMATION	SURFICIAL MATERIALS	SLOPE CLASS	SLOPE MODIFIERS	POOR DRAINAGE	DRAINAGE DENSITY	GULLYING / NIVATION	INSTABILITY FEATURES
1	2				3	4	5	6	7	8	9	10	11	12	13	
B7				V^1			Ru(N)	Dmg		3	-	NA	NA	-	-	
				V^2			"	Dmg		4	-		L	-	S	
B8		3			3	gWIm - BRw	"	Q		2	R	Y	M	-	-	
			2		7	gFl - T	"	Q		1	R	NA	NA	-	-	
			1		3	gWF - (B)	"	Q		2	R	Y	M	-	-	
B9	4				9	grCIm - G	Ru(N)	Dmg		4	-	-	M	-	S	
B10	4				3	gWl - BRw	"	Dmg Qdd		1	R	-	L	-	-	
				V^1			"	Dmg		1	R	NA	NA	-	-	
B11		4			3	gWIm - B	Ru(E-ME)	Q O-Dcp		3	-	-	M	Y	-	
			1		9	gWICs - BG	"	D		4	-	-	L	-	S	
				V^1			"	O - Dcp		2	-	NA	NA	-	-	
B12	4				3	gWl - S	"	Dmh		2/3	-	-	L	-	-	
B13	4				3	gWm - BRw	"	Dbi		2/3	R	-	L	-	-	

LOCATIONS Bathurst Island B

MAP SHEET 69A

CODING SHEET 2 of 8

SHORE ZONE CHARACTERISTICS																			LAND USE INTERPRETATIONS					RELIABILITY						
	PROCESSES									FORM																				
TEXTURE	AEOLIAN	FLUV. PRESENCE	FLUV. SEDIMENT SUPPLY	COLLUVIAL	THERMOKARST	WAVES MAX. OBS. FETCH	WAVES LEAD WIDTH	ICE THRUSTING	ICE PILING	NEAR SHORE SLOPE	FORESHORE SLOPE	CLIFF	BEACH	DELTA	BARRIER	SPITS	SHORE LINE CHANGE	NET. SED. TRANSPORT	ICE RICH	AGGREGATES	WATER SUPPLY	TRAFFICABILITY	TERRAIN SENSITIVITY	A/P SCALE	OBLIQUE A/P	GROUND PHOTOS	BEDROCK GEOLOGY	SURFICIAL GEOLOGY	OTHER DATA	AIR PHOTOGRAPH NUMBERS
14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44
g	-	Y	M	-	-			1	-		L	-		t	-	-	+	Y	-	1	1	C		6	A	-	B	-	-	A1C202 (47-49)
g,r	-	-	L	-	-			1	-		S	-		-	-	-	-	Y	-	0	0	B3		6	A	-	B	-	-	same
g	-	Y	M	S	-			1	-		M	-	Bb	T	-	-	+	Y	-	3	1	B2	Ma	6	A	-	B	-	-	A1C202
g	-	Y	H	-	-			1	-		L	-	-	T	-	-	+	Y	-	3	1	B2	L	6	A	-	B	-	-	(46,47)
g	-	-	-	-	-			1	-		L	-	(Bb)	-	D	-	+	Y	-	3	1	B2	Ma	6	A	-	B	-	-	same
g,r	-	Y	L	S	-			1	-		M	-		-	-	-	0	Y	-	0	0	C	L	6	A	-	B	-	-	A1C202 (124,125)
g	-	Y	L	-	-			1	-		L	-	Bb	t	-	-	0	Y	-	3	1	A2	L	6	A	-	B	-	-	A1C202 (125,126)
g	-	Y	L	-	-			1	-		L	-		t	-	-	0	Y	-	3	1	B2		6	A	-	B	-	-	same
g	-	Y	L	S	-			2	P_s		M	-	Bb	t	-	-	0	Y	-	1	0	B2	L	6	A	-	B	-	-	A1C202 (125-128)
g	-	-	-	S	-			2	-		S	-	Bb	-	-	-	0	Y	-	0	0	B3	L	6	A	-	B	-	-	same
g	-	Y	L	-	-			2	-		L	-	-	-	-	-	0	Y	-	1	1	B2		6	A	-	B	-	-	same
g	-	-	L		-	-		-	-		L	-	B;	-	-	-	0	Y	-	1	0	B1	L	6	-	-	B	-	-	A1C202 (40-41)
g	-	-	L	S	-						M	-	Bb	t	-	-	0	Y	-	3	0	A2	L	6	-	-	B	-	-	same

LOCATIONS Bathurst Island B

MAP SHEET 69A

CODING SHEET 3 of 8

UNIT					SUMMARY		TERRAIN CHARACTERISTICS									
	COMPOSITION															
IDENTIFICATION	HOMOGENEOUS	PRIMARY	SECONDARY	VARIANT	COASTAL CLASS	COASTAL UNIT DESCRIPTOR	PHYSIOGRAPHY	GEOLOGICAL FORMATION	SURFICIAL MATERIALS	SLOPE CLASS	SLOPE MODIFIERS	POOR DRAINAGE	DRAINAGE DENSITY	GULLYING / NIVATION	INSTABILITY FEATURES
1	2				3	4	5	6	7	8	9	10	11	12	13	
B13				V'			Ru(E-NE)	–		2	-	NA	NA	–	–	
B14	4				3	gWIm-BRw	"	–		2	r	–	L	–	–	
				V'			"	–		2	r	–	L	–	–	
B15	4				1	grCIWs-C	"	–		4	–	–	L	Y	–	
B16		4			1	grCIWs-C	"	D		4	–	–	M	Y	S	
			1		3	gWFm-Rw	"	D		2	r	–	L	–	–	
B17	4				3	gWIm-BRw	"	–		2	r	–	L	–	–	
B18		3			9	gIWs-Ri G	"	Db;		3	–	–	M	Y	S	
			2		3	gIWm-BR;Rw	"	Db;		2	–	–	M	Y	S	
B19	4				3	gWIm-BRwRi	"	D, Db;		3/3	r	–	M	Y	S	
				V'			"	De, Db;		3	-	NA	NA	Y	S	
B19A		3			9	rgWCs-BG	"	De, Db;		3	(r)	–	M	Y	S	
			2		9	gWCs-BG	"	D		3/4	–	–	L	Y	S	

LOCATIONS Bathurst Island B

MAP SHEET 69A

CODING SHEET 3 of 8

SHORE ZONE CHARACTERISTICS																			LAND USE INTERPRETATIONS					RELIABILITY						
	PROCESSES									FORM																				
		FLUV.				WAVES		ICE																						
TEXTURE	AEOLIAN	PRESENCE	SEDIMENT SUPPLY	COLLUVIAL	THERMOKARST	MAX. OBS. FETCH	LEAD WIDTH	THRUSTING	PILING	NEAR SHORE SLOPE	FORESHORE SLOPE	CLIFF	BEACH	DELTA	BARRIER	SPITS	SHORE LINE CHANGE	NET. SED. TRANSPORT	ICE RICH	AGGREGATES	WATER SUPPLY	TRAFFICABILITY	TERRAIN SENSITIVITY	A/P SCALE	OBLIQUE A/P	GROUND PHOTOS	BEDROCK GEOLOGY	SURFICIAL GEOLOGY	OTHER DATA	AIR PHOTOGRAPH NUMBERS
14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44
g	-	Y	m	-	-						L	-		t	-	-	+	Y	-	1	1	B2		6	-	-	-	-	-	A16202 (40-41)
g	-	-	-	S	-			2	P_s		M	-	Bb	-	-	-	0	Y	-	1	0	A2	L	6	A	-	-	-	-	A16202 (128,129)
g	-	-	-	-	-			2	P_s		L	-	Bb	-	D	-	0	Y	-	1	0	B2		6	A	-	-	-	-	same
g,r	-	-	-	R,S	-			2	-		S	Rt		-	-	-	0	Y	-	0	0	C	L	6	A	-	-	-	-	A16202 (40,41)
g,r	-	Y	L	S,R	-			2	-		S	Rt		-	-	-	0	Y	-	0	0	C	L	6	A	-	B	-	-	A16202 (39,40)
g	-	Y	L	-	-			2	-		M	-		-	-	-	0	Y	-	1	0	A_2	L	6	A	-	B	-	-	same
g	-	-	L	S	-			2	-		M	-	Bb	-	-	-	0	Y	-	3	0	A2	L	6	C	-	-	-	-	A16202 (38,39)
g	-	Y	L	S	-			2	$P_s P_o$		S	-		-	-	-	0	?	-	0	0	C	L	6	A	-			-	A16202 (134,135)
g	-	Y	L	S	-			2	$P_s P_o$		M	-	Bb	-	-	-	0	Y	-	1	0	B2	L	6	A	-			-	(30,32)
g	-	Y	L	S	-			1	-		M	-	Bb	t	-	-	0	Y	-	1	2	B2	Mac	6	A	-	B	-	-	A16202 (134,135)
g	-	Y	M	S	-			1	-		M	-		t	-	-	0	Y	-	1	1	B2		6	A	-	B	-	-	(30-32) same
g:r	-	Y	L	R,S	-			-	-		M/S	R_s	(B:)	t	-	-	?	-	-	0	1			6	-	-	B	-	-	A16202 (29,30)
g	-	Y	-	R,S	-			1	-		M	R_s,t	(B:)	-	-	-	?	?	-	0	0			6	-	-	B	-	-	same

LOCATIONS Bathurst Island B

MAP SHEET 69A

CODING SHEET 4 of 8

UNIT					SUMMARY		TERRAIN CHARACTERISTICS									
	COMPOSITION															
IDENTIFICATION	HOMOGENEOUS	PRIMARY	SECONDARY	VARIANT	COASTAL CLASS	COASTAL UNIT DESCRIPTOR	PHYSIOGRAPHY	GEOLOGICAL FORMATION	SURFICIAL MATERIALS	SLOPE CLASS	SLOPE MODIFIERS	POOR DRAINAGE	DRAINAGE DENSITY	GULLYING / NIVATION	INSTABILITY FEATURES
1	2				3	4	5	6	7	8	9	10	11	12	13	
				V^1		r,g WI_m - BR;	R_u(E-NE)	D		3	r,T	-	L	-	-	
B19B		4			3	s,g WCl - BF	"	Dmh		3	-	-	L:M	Y	S	
			1		7	g Fl - T	"	Dmh		2	T	NA	NA	-	?	
B19C		3			9	g WC_m - BG	"	D, De		3	r	-	L	Y	S	
			1		3	g W_m - BR_w	"	Db1, Db;		2	R	-	L	-	S	
			1		9	g WC_s - (B)R;	"	Db; Dmh		3	(R)	-	L	Y	S	
				V^1		g F_m - t	"	Db;		2	-	NA	NA	Y	-	
B19D	4				9	g WC_m - BFG	"	Dmh Db;		3	r	-	H	Y	S	
				V^1		g WI_m - BR_w	"	Db1		3	R,T	-	L	-	-	
				V^2		g Fl - T	"	De		1	-	NA	NA	-	-	
B19E		3		9		g WI_m - B(R_w)	"	D		4	(R)	-	M	-	S	
			2	9		gr W_s - BG	"	De Db1		4	-	-	L:M	Y	-	
			1	7		g FWl - T	"	D		1	R,T	NA	NA	-	-	

LOCATIONS Bathurst Island B

MAP SHEET 69A

CODING SHEET 4 of 8

SHORE ZONE CHARACTERISTICS																			LAND USE INTERPRETATIONS					RELIABILITY						
	PROCESSES									FORM																				
		FLUV.				WAVES		ICE																						
TEXTURE	AEOLIAN	PRESENCE	SEDIMENT SUPPLY	COLLUVIAL	THERMOKARST	MAX. OBS. FETCH	LEAD WIDTH	THRUSTING	PILING	NEAR SHORE SLOPE	FORESHORE SLOPE	CLIFF	BEACH	DELTA	BARRIER	SPITS	SHORE LINE CHANGE	NET. SED. TRANSPORT	ICE RICH	AGGREGATES	WATER SUPPLY	TRAFFICABILITY	TERRAIN SENSITIVITY	A/P SCALE	OBLIQUE A/P	GROUND PHOTOS	BEDROCK GEOLOGY	SURFICIAL GEOLOGY	OTHER DATA	AIR PHOTOGRAPH NUMBERS
14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44
g:r	-	-	-	-	-			2	P_o		M	Rb?	B:	-	-	-	?	?	-	0	0			6	-	-	B	-	-	A1C202 (29,30)
s:g	-	Y	L	S	-			-	-		M	Ub	Bb	t	-	-	-	Y	-	1	1			6	-	-	B	-	-	Same
s:g	-	Y	H	-	-			-	-		g/M	Ub	(Bb)	T	D	-	+	Y	-	3	2			6	-	-	B	-	-	Same
g:r	-	-	-	S				1	P_o		M	-	Bb	-	-	-	0	Y	-	0	0			6	-	-	B			A1C202 (135, 136)
g	-	-	-	S				1	-		M	-	Bb	-	-	-	0	Y	-	1	0			6	-	-	B			Same
g:r	-	-	-	S				2	P_o		M	-	(Bb)	-	-	-	0	Y	-	0	0			6	-	-	B			A1C202 (136, 137)
g	-	Y	L	-				-	-		M	-	Bb	t	-	-	0	Y	-	1	1			6	-	-	B			Same
s,g	-	Y	L	S	-			1	-		M	Us	Bb	`	-	-	0	Y	-	1	0			6	-	-	B	-	-	A1C202 (136, 137)
g:r	-	-	-	-	-			2	P_s		M	-	Bb	-	-	-	0	Y	-	1	0			6	-	-	B	-	-	Same
s:g	-	Y	H	-	-			-	-		M	-	B:	T	-	-	+	Y	-	1	1			6	-	-	B	-	-	Same
g	-	-	L	S	-			2	-		M		Bb	-	-	-	0	?	-	1	1	B1	L	6	-	-	B	-	-	A1C202 (137-139)
g:r	-	-	L	R,S	-			1	-		S	R_s	-	-	-	-	0	?	-	0	0	C2	L	6	-	-	B	-	-	Same
g	-	Y	H	-	-			2	-		M		Bb	T	-	-	+	Y	-	3	1	B2	L	6	-	-	B	-	-	Same

LOCATIONS Bathurst Island B

MAP SHEET 69A

CODING SHEET 5 of 8

UNIT					SUMMARY		TERRAIN CHARACTERISTICS									
	COMPOSITION															
IDENTIFICATION	HOMOGENEOUS	PRIMARY	SECONDARY	VARIANT	COASTAL CLASS	COASTAL UNIT DESCRIPTOR	PHYSIOGRAPHY	GEOLOGICAL FORMATION	SURFICIAL MATERIALS	SLOPE CLASS	SLOPE MODIFIERS	POOR DRAINAGE	DRAINAGE DENSITY	GULLYING / NIVATION	INSTABILITY FEATURES
1	2				3	4	5	6	7	8	9	10	11	12	13	
				V'		gFWm - t	Ru(E-NE)	D		3	T	NA	NA	-	-	
B19F		3			3	gWCm - BF	"	De_{Dbi}		2/3	-	Y	M	Y	-	
			2		7	s,gFWℓm - T	"	De_{Dbi}		1/3	T	NA	NA	-	S	
			1		9	g:rWms - BG	"	Dbl		3/4	-	-	M	Y	-	
B19G		3			9	grWCs - BG	"	Dst De,Dbl		4	-	-	L	Y	S	
			1		3	gWIs - BRw	"	Q		3	R	-	L	-	-	
			1		3	gWm - BRw	"	Db;		2	R	-	M	-	-	
B19H		3			9	gWCm - BG	"	Db;		3/4	(R)	-	H	Y	S	
			2		3	gWm - SBRw	"	Db;		2	r	-	M	-	-	
			1		7	gFℓ - (B) T	"	Db;		1	-	NA	NA	-	-	
B19I		3			3	f:gWCm-(B,F,Rw)	"	De		2/3	(R)	-	H	Y	S,I,R?	
			2		7	sgWFℓ - T	"	Q,De		1/2	T	NA	NA	-	-	
B19J		2			3	gWm - B(F)Rw	"	D		3	R	-	L	Y	S	

LOCATIONS Bathurst Island B

MAP SHEET 69A

CODING SHEET 5 of 8

SHORE ZONE CHARACTERISTICS																				LAND USE INTERPRETATIONS					RELIABILITY						
	PROCESSES									FORM																					
TEXTURE	AEOLIAN	FLUV. PRESENCE	FLUV. SEDIMENT SUPPLY	COLLUVIAL	THERMOKARST	WAVES MAX. OBS. FETCH	WAVES LEAD WIDTH	ICE THRUSTING	ICE PILING	NEAR SHORE SLOPE	FORESHORE SLOPE	CLIFF	BEACH	DELTA	BARRIER	SPITS	SHORE LINE CHANGE	NET. SED. TRANSPORT	ICE RICH	AGGREGATES	WATER SUPPLY	TRAFFICABILITY	TERRAIN SENSITIVITY	A/P SCALE	OBLIQUE A/P	GROUND PHOTOS	BEDROCK GEOLOGY	SURFICIAL GEOLOGY	OTHER DATA	AIR PHOTOGRAPH NUMBERS
14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44
g	-	Y	M	-	-			-	-		M	-	Bb	t	-	-	+	?	-	1	2	B2	L	6	-	-	B	-	-	A16202 (137-139)
g	-	-	L	S	-			1			M	-	Bb	-	-	-	o	Y	-	o	o	B2	Ma	6	-	-	B	-	-	A16202 (138,139)
S:g	-	Y	H	-	-			1	Po		R,M	-	Bb	T	C	-	+	R	-	3	1	B2	L	6	-	-	B	-	-	Same
g:r	-	Y	L	R	-			1			M,S	-	(Bb)	-	-	-	o	-	-	o	o	C3	L	6	-	-	B	-	-	Same
g:r	-	-	-	SR	-			1	-		M	Rs Us	Bb	-	-	-	o	Y	-	o	o	C3	Mac	6	-	-	B	-	-	A16202 (138,139)
g	-	-	-	-	-			1	-		M	-	Bb	-	-	-	o	Y	-	3	o	B2	L	6	-	-	B	-	-	Same
g	-	-	-	-	-			-	-		M	-	Bb	-	-	-	o	Y	-	1	2	A1	Mab	6	-	-	B	-	-	Same
g	-	Y	M	S	-			1	-		M	-	Bb	t	-	-	o	Y	-	o	3	B2	Mac	6	-	-	B	-	-	A16203 (51,52)
g	-	Y	M	-	-			-	-		M	-	Bb	t	-	-	o	Y	-	o	1	A1	Mb	6	-	-	B	-	-	A16761 (165-167)
g	-	Y	H	-	-			-	-		M	-	(Bb)	T	-	-	+	Y	-	3	2	B2	L	6	-	-	B	-	-	Same
F:g	-	Y	M	S	?			-	-		M	Ub?	Bb	t	-	-	?	Y	Y?	2,3	1	C3	Hab	6	-	-	B	-	-	A16203 (51,52)
S:g	-	Y	H	-	-			1	-		M	-	(Bb)	T	-	-	+	Y	-	2,3	1	B2	Mb	6	-	-	B	-	-	Same
g	-	-	L	-	-			1	-		M	(Ub)	Bb	-	-	-	o	Y	-	o	o	B2	L	6	-	-	B	-	-	A16203 (49,50)

LOCATIONS Bathurst Island B

MAP SHEET 69A

CODING SHEET 6 of 8

UNIT					SUMMARY		TERRAIN CHARACTERISTICS									
	COMPOSITION															
IDENTIFICATION	HOMOGENEOUS	PRIMARY	SECONDARY	VARIANT	COASTAL CLASS	COASTAL UNIT DESCRIPTOR	PHYSIOGRAPHY	GEOLOGICAL FORMATION	SURFICIAL MATERIALS	SLOPE CLASS	SLOPE MODIFIERS	POOR DRAINAGE	DRAINAGE DENSITY	GULLYING / NIVATION	INSTABILITY FEATURES
1	2				3	4	5	6	7	8	9	10	11	12	13
			2		3	gWC_m - B(F)	Ru(N-NE)	$^{Dbl}_{De}$		3	-	-	H	Y	I, S
B19K	4				3	gWI_m - BSRw	"	Dmh		2	R, T	-	M	-	S
				V'		gWF$_m$ - Ft	"	Dmh		2	R, T	NA	NA	Y	S
B19L		4			9	f:gWIC$_m$ - BFG	"			4	(R)	-	H	Y	I, S
			1		3	gWI_m - BRw	"	De, D		2	R	-	L	(Y)	-
				V'		r:gWI$_s$ - BG	"	D		4	-	-	L	-	-
B19M		4			3	s:gWI$_{2m}$ - B(F)Rw		$^{De, D}_{Dbi}$		1/2	R	Y	M	-	-
			1		3	f:gWC$_m$ - BF(Rw)		$^{De}_{Dbi}$		2		-	M	Y	S
				V'	9	f:gWC$_s$ - BG		De		4		-	H	Y	S
				V^2		s,gFW$_2$ - (B)T				2	-	NA	NA	-	-
B19N	4				9	g:rWI$_s$ - BG(Rw)	"	Dmh		3	(R)	-	M	Y	I, S
B19O	4				10	s,gWIC$_m$ - B(Rw)	"	Dmh		2	$^{(R)}_{(T)}$	Y	H	Y	I, S
				V'		sgWF$_2$ - (B)t	"	Dmh		1/2	T	NA	NA	-	I, S

LOCATIONS Bathurst Island B

MAP SHEET 69A

CODING SHEET 6 of 8

	SHORE ZONE CHARACTERISTICS																		LAND USE INTERPRETATIONS					RELIABILITY						
	PROCESSES									FORM																				
		FLUV.				WAVES		ICE																						
TEXTURE	AEOLIAN	PRESENCE	SEDIMENT SUPPLY	COLLUVIAL	THERMOKARST	MAX. OBS. FETCH	LEAD WIDTH	THRUSTING	PILING	NEAR SHORE SLOPE	FORESHORE SLOPE	CLIFF	BEACH	DELTA	BARRIER	SPITS	SHORE LINE CHANGE	NET. SED. TRANSPORT	ICE RICH	AGGREGATES	WATER SUPPLY	TRAFFICABILITY	TERRAIN SENSITIVITY	A/P SCALE	OBLIQUE A/P	GROUND PHOTOS	BEDROCK GEOLOGY	SURFICIAL GEOLOGY	OTHER DATA	AIR PHOTOGRAPH NUMBERS
14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44
g	-	Y	M	S	-			-	-		M	(ub)	Bb	t	-	-	0	-	-	0	1	C2	Mac	6	-	-	B	-	-	A16203 (49,50)
g	-	Y	L	S	-			1	-		M	-	Bb	-	-	-	0	Y	-	1	2	A1	L	6	-	-	B	-	-	A16203 (48,49)
g	-	Y	M	-	-			1	-		M	(ub)	(Bb)	t	-	-	0	Y	-	1	1	B2	L	6	-	-	B	-	-	Same
F:g	-	-	L	S	-			1?	-		M	Us	Bb	-	-	-	0	Y	-	0	0	B3	Hac	6	-	-	B	-	-	A16203 (47,48)
g	-	-	L	(S)	-			2?	-		M	-	Bb	-	-	Y?	0	Y	-	1	0	B2	L	6	-	-	B	-	-	Same
r:g	-	-	L	-	-			1?	-		S	Rs	-	-	-	-	0	?	-	0	0	C3	-	6	-	-	B	-	-	Same
S,g	-	-	L	-	?			1	-		M	-	Bb	-	S?	-	0	-	-	1	3	A1	L	6	-	-	B	-	-	A16203 (37,38
F:g	-	Y	L	S	-			1	-		M	Ub	Bb	-	-	-	0	-	-	1	0	B2	Mac	6	-	-	B	-	-	47,48)
F:g	-	Y	L	S	-			2	-		M	Rs	Bb	-	-	-	0	-	-	1	0	C3	Hac	6	-	-	B	-	-	Same
S,g	-?	Y	H	-	-			-	P_s		M,l	-	(Bb)	T	-	-	+	R	-	3	3	B2	L	6	-	-	B	-	-	Same
r:g	-	-	L	S	-			2	-		M	(ub)	Bb	-	-	-	-	Y	-	0	0	C3	Ma	6	-	-	B	-	-	A16203 (37,38)
s:g	-	Y	M	S	-			-	-		l,M	(ub)	Bb	-	S	-	0	Y	-	1	3	B2	Ma-c	6	-	-	B	-	-	A16203 (120,121)
s:g	-	Y	M	-	-			-	-		l,M	(ub)	(Bb)	t	-?	-	+	Y	-	1	3	B2	L	6	-	-	B	-	-	Same

LOCATIONS Bathurst Island B

MAP SHEET 69A

CODING SHEET 7 of 8

UNIT					SUMMARY		TERRAIN CHARACTERISTICS									
	COMPOSITION															
IDENTIFICATION	HOMOGENEOUS	PRIMARY	SECONDARY	VARIANT	COASTAL CLASS	COASTAL UNIT DESCRIPTOR	PHYSIOGRAPHY	GEOLOGICAL FORMATION	SURFICIAL MATERIALS	SLOPE CLASS	SLOPE MODIFIERS	POOR DRAINAGE	DRAINAGE DENSITY	GULLYING / NIVATION	INSTABILITY FEATURES
1	2				3	4	5	6	7	8	9	10	11	12	13
B37A		3			9	gWC m-(B,F)G	Ru(E-NE)	Dba Q		4	-	-	M	Y	S
			1		7	sg WF ℓ-(B)T	"	Q		1	-	NA	NA	-	-
			1		1	r,g cW s - C	"	octi		4	-	-	L	-	-
				V'		g F W m-(B,F)t	"	Q		3	T	NA	NA	-	S
B38A		3			9	rg WC m-(B,F)G	"	Dba, Dmg Dbi		4	-	-	M	Y	S
			1		10	sg WF m-B(F)t	"	De		1	(R)	-	M	Y	S
			1		7	sg WF ℓ-(B,F)T	"	Dmh		1	T	-	NA	-	I
B38B		2			9	g WC s-(B,F)G	"	Db;		3	(R)	-	M	Y	S
			2		1	r,g WC s-(B,F)C	"	Db; Dmh		4	-	-	L	Y	-
				V'		g WF m-(B,F)t	"	Db;		3/3	T	-	NA	NA	-
B48A	4				10	sg WFC m-B(F)t	"	De		3	-	-	H	Y	I,S
B48B	4				1	r WC s-C(B)	"	Db;		4	-	-	L	Y	I
				V'		g FW m-BFT	"	Db;		3	T	NA	NA	-	-

LOCATIONS Bathurst Island B

MAP SHEET 69A

CODING SHEET 7 of 8

SHORE ZONE CHARACTERISTICS																			LAND USE INTERPRETATIONS					RELIABILITY						
	PROCESSES									FORM																				
TEXTURE	AEOLIAN	FLUV. PRESENCE	FLUV. SEDIMENT SUPPLY	COLLUVIAL	THERMOKARST	WAVES MAX. OBS. FETCH	WAVES LEAD WIDTH	ICE THRUSTING	ICE PILING	NEAR SHORE SLOPE	FORESHORE SLOPE	CLIFF	BEACH	DELTA	BARRIER	SPITS	SHORE LINE CHANGE	NET. SED. TRANSPORT	ICE RICH	AGGREGATES	WATER SUPPLY	TRAFFICABILITY	TERRAIN SENSITIVITY	A/P SCALE	OBLIQUE A/P	GROUND PHOTOS	BEDROCK GEOLOGY	SURFICIAL GEOLOGY	OTHER DATA	AIR PHOTOGRAPH NUMBERS
14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44
g	-	Y	L	S,R	-			-	-		M	Rs Us	(Bb)	-	-	-	o	Y	-	1	0	C3	Mac	6	-	-	B	-	-	A16203 (114,115)
S,g	-	Y	H	-	-			1	-		R	-	(Bb)	T	-	-	+	Y	-	2,3	1	B2	L	6	-	-	B	-	-	Same
r:g	-	-	L	R	-			-	-		S	Re	-	-	-	-	-	Y	-	0	0	C3	L	6	-	-	B	-	-	Same
g	-	Y	M	-	-			1	-		M	(ub)	(Bb)	t	-	-	o	Y	-	3	1	B2	L	6	-	-	B	-	-	Same
r:g	-	Y	M	S	-			1	-		M	Rs	(Bb)	t	-	-	o	Y	-	1	0	C3	L	6	-	-	B	-	-	A16203 (113,114)
S,g	-	Y	H	S	-			-	-		M,R	-	Bb	T	D	Y	o	Y	-	2,3	1	A2	Mab	6	-	-	B	-	-	Same
S,g	-	Y	H	-	-			1	-		R	-	(Bb)	T	D	-	+	Y	-	2,3	1	B2	L	6	-	-	B	-	-	Same
r:g	-	Y	L	S	-			1	-		M	Us	Bb	-	-	-	o	Y	-	1	0	B2	Mac	6	-	-	B	-	-	A16203 (113,114)
r:g	-	-	-	R	-			-	-		S	Rs	(Bb)	-	-	-	o	Y	-	0	0	C3	L	6	-	-	B	-	-	Same
g	-	Y	M	-	-			1	-		M	(ub)	(Bb)	t	-		o	Y	-	1	1	B2	L	6	-	-	B	-	-	Same
S,g	-	Y	M	S	-			-	-		M	(ub)	Bb	t	-	-	o	Y	-	1	2	C3	Mac	6	-	-	B	-	-	A16203 (142,143)
r:g	-	-	L	R	-			1	-		M,S	Rct	(Bb)	-	-	-	o	Y	-	1	0	C3	L	6	-	-	B	-	-	A16203 (142,143)
g	-	Y	H	-	-			1	-		M	(ub)	(Bb)	T	-	-	+	Y	-	3	1	B2	L	6	-	-	B	-	-	Same

LOCATIONS Bathurst Island B

MAP SHEET 69A

CODING SHEET 8 of 8

UNIT					SUMMARY		TERRAIN CHARACTERISTICS									
	COMPOSITION															
IDENTIFICATION	HOMOGENEOUS	PRIMARY	SECONDARY	VARIANT	COASTAL CLASS	COASTAL UNIT DESCRIPTOR	PHYSIOGRAPHY	GEOLOGICAL FORMATION	SURFICIAL MATERIALS	SLOPE CLASS	SLOPE MODIFIERS	POOR DRAINAGE	DRAINAGE DENSITY	GULLYING / NIVATION	INSTABILITY FEATURES
1	2				3	4	5	6	7	8	9	10	11	12	13
B48c	4				9	gWC_m-(B,F)G	Ru (E-NE)	De Dbl		4	T	-	H	Y	I, S
				V^1		$sgWF_l$-T	"	De		1	-	NA	NA	-	-
B48D	4				1	$rgWC_s$-C(B)	"	Dba		4	-	-	L	-	-
B48E		4			9	F:gWC_s-BG(Ru)	"	O-Dcp		3/4	-	-	M	Y	S
				V^1		$sgWF_m$-T(F)	"	O-Dcp		3	-	NA	NA	-	-
B48F		3			1	rgW_s-C(F,B)	"	Dba O-Dcp		4	-	-	H	Y	-
			2		7	$sgWF_{l\bar{m}}$T	"	Q		1/3	T	NA	NA	-	-
			1		9	$sgWC_m$-BFG	"	Dba		1	T	Y	M	Y	S
B48G	4				1	r:$gWIC_s$-C(B)	"	D Q-Dcp		4	-	-	L	Y	S, I
B48H		4			9	r:$gWIC_s$-G(B)	"	D		3/4	-	-	H	Y	I, S
				V^1		gWI_m-BF(Ru)	"	D		3	R	-	L	-	S
				V^2		gWF_m-(B,F)C	"	D		3	T	NA	NA	Y	-

LOCATIONS Bathurst Island B

MAP SHEET 69A

CODING SHEET 8 of 8

	SHORE ZONE CHARACTERISTICS																			LAND USE INTERPRETATIONS					RELIABILITY						
	PROCESSES									FORM																					
		FLUV.				WAVES		ICE																							
TEXTURE	AEOLIAN	PRESENCE	SEDIMENT SUPPLY	COLLUVIAL	THERMOKARST	MAX. OBS. FETCH	LEAD WIDTH	THRUSTING	PILING	NEAR SHORE SLOPE	FORESHORE SLOPE	CLIFF	BEACH	DELTA	BARRIER	SPITS	SHORE LINE CHANGE	NET. SED. TRANSPORT	ICE RICH	AGGREGATES	WATER SUPPLY	TRAFFICABILITY	TERRAIN SENSITIVITY	A/P SCALE	OBLIQUE A/P	GROUND PHOTOS	BEDROCK GEOLOGY	SURFICIAL GEOLOGY	OTHER DATA	AIR PHOTOGRAPH NUMBERS
14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44
S, g	-	Y	L	R,S	-			-	-		M,S	Rc (Ub)	(Bb)	t	-	-	0	Y	-	2,3	1	C2	Mac	6	-	-	B	-	-	A16203 (111, 112)
S,g	-	Y	H	-	-			-	-		g,M	-	-	T	-	-	+	Y	-	2,3	1	B2	L	6	-	-	B	-	-	Same
g:r	-	-	L	R	-			-	-		S	Rct	(Bb)	-	-	-	-	Y	-	1	0	C3	L	6	-	-	B	-	-	Same
r:g	-	Y	M	S	-			-	-		M,S	(Ub)	Bb	t	-	-	0	y	-	2,3	0	B2	Mac	6	-	-	B	-	-	A16203 (110, 111)
S,g	-	Y	M	-	-			-	-		M	(Ub)	-	t	-	-	+	Y	-	3	1	B2	L	6	-	-	B	-	-	Same
r:g	-	Y	L	R	-						M,S	Rct	-	-	-	-	-	Y	-	0	0	C3	L	6	-	-	B	-	-	A16203 (110, 111)
S:g	-	Y	H	-	-			-	-		g,M	Ub	(Bb)	T	-	-	+	Y	-	2,3	1	B2	L	6	-	-	B	-	-	Same
F:g	-	Y	M	S	-			-	-		M	(Us)	Bb	t	-	-	0	Y	-	2,3	1	B2	Mac	6	-	-	B	-	-	Same
r:g	-	Y	L	R(S)	-			-	-		S	Rct	(Bb)	-	-	-	-	Y	-	0	1	C3	L	6	-	-	B	-	-	Same
r:g	-	Y	L	R	-			-	-		S	Rst	(Bb)	-	-	-	-	Y	-	0	0	C3	L	6	-	-	B	-	-	A16203 142, 143
g	-	-	L	S	-			2	Ps		M	Rb	Bb	-	-	-	0	Y	-	0	0	B3	L	6	-	-	B	-	-	Same
g	-	Y	M	-	-			2	Ps		M	Ub	(Bb)	t	-	-	0	Y	-	0	1	B2	L	6	-	-	B	-	-	Same

LOCATIONS Berkeley Islands H

MAP SHEET 69A

CODING SHEET 1 of 1

UNIT					SUMMARY		TERRAIN CHARACTERISTICS									
	COMPOSITION															
IDENTIFICATION	HOMOGENEOUS	PRIMARY	SECONDARY	VARIANT	COASTAL CLASS	COASTAL UNIT DESCRIPTOR	PHYSIOGRAPHY	GEOLOGICAL FORMATION	SURFICIAL MATERIALS	SLOPE CLASS	SLOPE MODIFIERS	POOR DRAINAGE	DRAINAGE DENSITY	GULLYING / NIVATION	INSTABILITY FEATURES
1	2				3	4	5	6	7	8	9	10	11	12	13
H24		3			9	gWCm - BG	Ru(N-NE)	De Dbi		3/4	-	-	H	Y	I,S
			2		3	gWIm - B(Rw)	"	Dbi		2	(R)	-	L	Y	S
				V'		gWFm - Bt	"	Dbi		1/2	-	-	NA	-	-
H25	4				3	gWIm - B(Rw)	"	Dmh?		2/3	R	-	L	Y	S
H26		3			3	grWCm - B(Rw)	"	De, Dbi, Dmh		3/4	(T)	-	M	Y	I,S
			1		3	gWm - BRw	"	De, Dbi		2	R	-	L	-	S
			1		3	sgWCm - BF(Rw)	"	De Dbi		2	T	-	M	Y	I,S
H27		3			10	sgWIm - BFRw	"	Dmh Dmg		2	R	-	M	Y	S
			2		9	gWCm - BG	"	Dmh		3/4	-	-	L	Y	I
H28	4				3	s,gWIm - BRiw	"	Dbi, De Dmh		3	Ri	-	L	Y	S
H29	4				10	s,gWCx - BF	"	Dmh Dmg		3	-	-	H	Y	I,S
H30		3			10	s,gWIm - BRiw	"	Dmg		2	R	-	L	-	S
			2		10	s(g)WIm - BRw	"	Dmh		3	(R)	-	L	-	S

LOCATIONS Berkeley Islands H

MAP SHEET 69A

CODING SHEET 1 of 1

SHORE ZONE CHARACTERISTICS																			LAND USE INTERPRETATIONS					RELIABILITY						
	PROCESSES									FORM																				
		FLUV.				WAVES		ICE																						
TEXTURE	AEOLIAN	PRESENCE	SEDIMENT SUPPLY	COLLUVIAL	THERMOKARST	MAX. OBS. FETCH	LEAD WIDTH	THRUSTING	PILING	NEAR SHORE SLOPE	FORESHORE SLOPE	CLIFF	BEACH	DELTA	BARRIER	SPITS	SHORE LINE CHANGE	NET. SED. TRANSPORT	ICE RICH	AGGREGATES	WATER SUPPLY	TRAFFICABILITY	TERRAIN SENSITIVITY	A/P SCALE	OBLIQUE A/P	GROUND PHOTOS	BEDROCK GEOLOGY	SURFICIAL GEOLOGY	OTHER DATA	AIR PHOTOGRAPH NUMBERS
14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44
f:g	-	Y	L	S	-			1	P_o		M	(ub)	Bb	-	-	-	o	Y	-	1	o	B2	Mac	6	-	-	B	-	-	A16203 (39,40)
g	-	-	M	S	-			-	-		M	-	Bb	t	-	-	o	Y	-	1	o	A2	L	6	-	-	B	-	-	Same
g	-	Y	H	-	-			-	-		M	-	Bb	T	-	-	+	Y	-	1	1	B2	L	6	-	-	B	-	-	Same
g	-	-	L	S	-			2	P_o		m	-	Bb	-	-	Y	o	Y	-	o	o	A2	Mab	6	-	-	B	-	-	A16203 (38,39)
g,r	-	Y	M	S	-			-	-		M	(ub)	(Bb)	-	-	-	o	Y	-	1	1	B2	Mac	6	-	-	B	-	-	A16203 (45,46)
g	-	-	L	S	-			-	-		M	-	Bb	-	-	-	o	Y	-	1	o	A1	L	6	-	-	B	-	-	Same
s,g	-	Y	M	S	-			-	-		e,m	(ub)	(Bb)	t	-	-	o	Y	-	1	1	B2	Mac	6	-	-	B	-	-	Same
s,g	-	Y	m	S	-			1?	P_s		e,M	(ub)	Bb	-	-	-	o	Y	-	1	1	A2	Mab	6	-	-	B	-	-	A16203 (45,46)
s:r	-	Y	L	S	-			1?	-		M	Rs	Bb	-	-	-	o	Y	-	1	o	C3	Mac	6	-	-	B	-	-	Same
g	-	Y	L	S	-			2	P_i P_o		m	(ub)	Bb	-	-	-	o	Y	-	o	o	B2	Mab	6	-	-	B	-	-	A16203 (45,46)
s,g	-	Y	M	S	-			-	-		e	(ub)	Bb	t	-	-	o	Y	-	1	1	B2	Mac	6	-	-	B	-	-	A16203 (39,40)
g:s	-	-	L	S	-			2	P_i P_o		M	-	Bb	t	-	-	o	Y	-	1	o	A1	L	6	-	-	B	-	-	Same
s(g)	-	-	L	S	-			1	P_i		e	(ub)	Bi	-	-	-	o	Y	-	1	o	A2	L	6	-	-	B	-	-	Same