TERRAIN CLASSIFICATION AND SENSITIVITY SERIES (PRELIMINARY)

1:250,000

GEOLOGICAL SURVEY OF CANADA
DEPARTMENT OF ENERGY, MINES AND RESOURCES

SHEET 95 G

LEGEND

I	ORGANIC TERRAIN (including muskeg)	Peat, fen; peat-fen complex; commonly occuring as a cover on Units II, IX and X; flat to moderately sloping.
II	SILT-CLAY PLAINS (marine and lake deposits)	Clay and silt, commonly surfaced by sand or silty sand, with discontinuous organic cover (see Unit I). Principally forming plains bordering rivers and coastal areas. Highly unstable in eroded slopes.
III	THERMOKARST LAKE BEDS	Clay, silt, peat, and local sand on low flat areas formerly occupied by tundra ponds. These materials generally less than ten feet thick over till or sand. Pingos generally confined to this unit.
IV	BEACHES (marine and lake)	Gravel and/or sand ridges or flat areas along present or former shorelines.
V	RIVER DEPOSITS-FINE	Silt and silty sand in river channels, floodplains, low terraces adjoining rivers, and alluvial fans; includes organic silt, peat and minor gravel.
VI	RIVER DEPOSITS-COARSE	Gravel and sand in river channels, floodplains, low terraces adjoining rivers and alluvial fans. Includes some silt, peat, and organic silt.
VII	GRAVEL-SAND HILLS, RIDGES AND TERRACES	Gravel, sand and some silt. Includes eskers, and other glaciofluvial deposits, river terraces, sand dunes, and moraines consisting of deformed gravelly-sandy strata.
VIII	SILT-CLAY HILLS AND RIDGES	Mainly silt and clay with minor sand and gravel in moraines, strata tilted and folded.
IX	TILL PLAIN	Till, occurring as ground moraine with low rolling relief or parallel drumlin ridges. Large areas are clayey to silty till as a thin veneer on shale; locally forms a thin veneer on other kinds of bedrock. Includes undifferentiated areas of Unit I.
X	HUMMOCKY TILL	Clayey to gravelly-sand till, local gravel, forming rolling to hilly moraine composed of individual and coalescent hummocks. Local contrasts in material and ground ice between well drained hills and poorly drained depressions. Includes small undifferentiated areas of Unit I.
XI	UPLAND AND PIEDMONT COMPLEXES	Areas of moderate to low slope, in part hilly, surfaced by till, disintegrated bedrock, and local clay, silt, sand, or gravel. Unconsolidated deposits generally form a thin veneer over rock but in places they are thick (>100 feet).
XII	MOUNTAINOUS AND ROCKY AREAS	Rock outcrop or rock thinly covered by rubble or drift. Moderate to steep slopes.
XIII	ERODED AND/OR ERODING RIVER BANKS, COASTAL CLIFFS, AND VALLEY WALLS (UNCONSOLIDATED MATERIAL)	Various unconsolidated materials on moderate to steep slopes, generally with surface veneer of slope debris; includes unstable areas.
XIIIR	ERODED AND/OR ERODING RIVER BANKS, COASTAL CLIFFS, AND VALLEY WALLS (BEDROCK)	Bedrock outcrops or bedrock partly covered by rock detritus or unconsolidated materials; slopes commonly steep; includes unstable areas.

Note: Detailed unit descriptions of terrain sensitivity, climatically significant zones, and the performance rating table are presented on a seperate sheet which accompanies this map.

SOURCES OF INFORMATION

Rutter, N.W., Boydell, A.N., Minning, G.V., Netterville, J.A., March 1973: Unpublished preliminary Surficial Geology Maps of NTS 95N (Dahadinni River), NTS 95O (Wrigley), NTS 95K (Root River), NTS 95J (Camsell Bend), NTS 95I (Bulmer Lake), NTS 95G (Sibbeston Lake), NTS 95H (Fort Simpson), NTS 95B (Fort Liard), NTS 95A (Trout Lake), NTS 85E (Mills Lake), and NTS 85D (Kakisa River).

Douglas, R.J.W., MacLean B. 1963: "Geology, Yukon Territory and Northwest Territories", Map 30-1963 Geological Survey of Canada.

Tarnocai, C., 1972: Soils of the Mackenzie River Area, Canada Soil Survey, Winnipeg Manitoba.

Compiled by R.L. Monroe 1973

Preliminary map prepared for open file, June 1973
Subject to revision and correction.

TERRAIN CLASSIFICATION AND SENSITIVITY SERIES

Produced for
Indian and Northern Affairs

by
Department of Energy, Mines and Resources
as part of
the Environmental-Social Program,
Task Force on Northern Oil Development

BEDROCK LEGEND

1 Resistant and competent rocks; potentially suitable for use as rip-rap. Comprised of Precambrian quartzite and argillite, Ordovician and Silurian limestone and dolomite; also included are Upper Devonian carbonate reefs and beds that border the Mackenzie River on the south side between Hay River and Fort Simpson (Escarpment, Twin Falls, and Kakisa Formations).

2 Coherent or moderately competent rocks; fairly resistant to erosion but not strongly cemented; probably would break down rapidly under heavy traffic (e.g., if crushed and used for road surfacing). Devonian, Carboniferous and Cambrian sandstones.

3 Moderately coherent rocks; more resistant than 4 and less easily eroded; capable of maintaining a steep cliff face 150 feet high. Not represented within this mapping area.

4 Incoherent rocks; soft, easily eroded, subject to slumping; mostly Devonian shale and siltstone (Tahlina, Hay River, Funeral, Fort Simpson, and Horn River Formations), but includes extensive areas of Cretaceous shale.

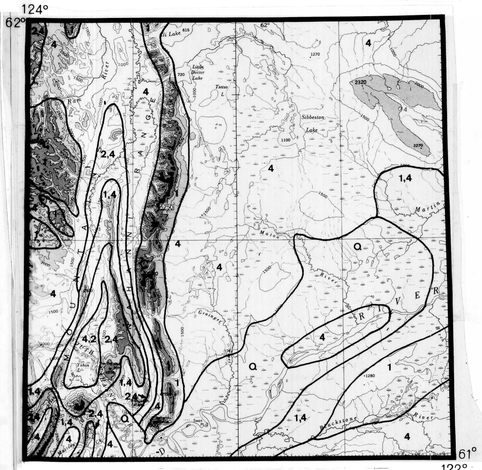
1,2 Undivided Precambrian argillite, quartzite, and dolomite.

1,4 Areas of mixed coherence; resistant competent, carbonate rocks consisting of Upper Devonian and Carboniferous (Mississippian) limestone and dolomite (rating 1); occurring with mainly incoherent and easily eroded shale and siltstone of the same ages (rating 4).

2,4 Undivided Devonian sandstone, siltstone, and shale (unnamed) Carboniferous and Permian (mainly Pennsylvanian) sandstone, shale, limestone, and Cambrian sandstone, shale and dolomite.

4,2 Undivided Upper and Lower Cretaceous shale, sandstone, and conglomerate (rated 4, 2, in Liard Plateau only).

Q Surficial deposits (where obscuring bedrock relationships).



OPEN FILE
131
June 1973
GEOLOGICAL SURVEY
OTTAWA

SIBBESTON LAKE

DISTRICT OF MACKENZIE

NORTHWEST TERRITORIES

Scale 1 : 250,000
1 Inch to 4 Miles approximately

Miles 5 0 5 10 15 20 Miles
Kilometres 5 0 5 10 15 20 25 30 Kilometres

Contour Interval 500 Feet
Elevations in Feet above Mean Sea Level
Transverse Mercator Projection
North American Datum 1927
Preliminary 1952

REFERENCE

Road, Hard Surface, All Weather — More than 2 Lanes Wide; 2 Lanes; Road No. (5); Less than 2
Loose Surface, All Weather — 2 Lanes Wide or More
Less than 2 Lanes — All Weather; Dry Weather
Cart Track, Trail — Cart Track; Trail
Railway, Multiple Track
Single Track
Boundary, International — Marker
Province or State
County or District
Reservations, Indian, Military, etc.

Church, School
Settlement, Town
Contours, Elevation
Depression
Approximate
Dry River Bed
Stream, Intermittent
Dam
Falls
Airfield, on Land
Power Transmission Line
Horizontal Control Point
Spot Elevation, in feet .124
Forest, well-treed
Swamp or Marsh
Ferry
W. L. 125
Lighthouse
Mud
Sand
Water
Landing Ground
Archaeology
Astronomical Monument