

SURFICIAL GEOLOGY

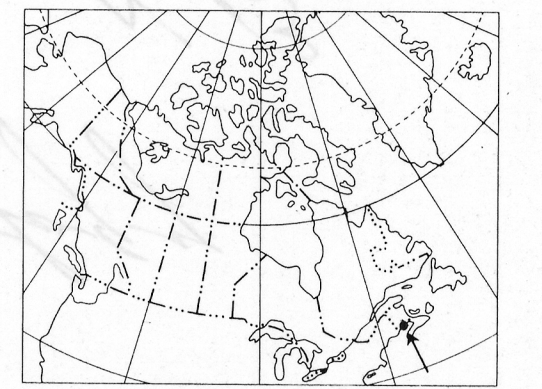
LEGEND

MAP UNIT	UNIT NAME	DESCRIPTION	MATERIAL	LAND POTENTIAL
7	ORGANIC Organic	Poorly drained to undrained areas. Mostly bedrock depressions filled in by lacustrine sediments overlain by organic material. Formation of peat bogs when closed in depression. Thickness: to 15 metres.	Organic material underlain by marine silt & clay deposits.	Susceptibility to seasonal or annual flooding. Drainage problems caused by proximity of bedrock. Organic material has to be removed before filling or undertaking any kind of construction. Very soft material at bottom of deposit. Good for fauna and flora conservation, peat exploitation.
7/1	Organic/Bedrock	Large areas of poorly drained terrain, covered by thin or small marsh deposits over bedrock. Topography controlled by bedrock, generally flat or gently sloping, many outcrops (small elongated knobs). Thickness: to 2 metres.	Thin organic material underlain by silt and clay. Many bedrock outcrops.	Drainage problems; high water-table. Numerous shallow depressions in bedrock depressions are present throughout this unit causing construction problems. Engineering problems related to proximity of bedrock. Most drainage problems can be overcome by filling after removing organic deposits.
6	MARINE Tidal	Flat to gentle undulating tidal flats; active zone; reworked deposits. Covered by sea at high or seasonal tides. Thickness: to 50 metres.	Clay, silt and sand, some organic matter. May contain ice rafted boulders.	Very soft material. Subject to periodic flooding. Unsuitable as construction material. Major site investigations are required before construction of any type is undertaken to avoid foundation and flooding problems.
5	Offshore	Deep water marine deposits. May include some glaciolacustrine deposits. Usually fossiliferous. Imprecise contact with moraine material due to slumping and reworking by wave action during marine episode. Thickness: to 70 metres.	Clay, silt and some fine sand.	Soft to hard material varying with water content. Drainage problems on flat topography. Slope stability problems. Water-table should not be raised to avoid slope failure. Susceptibility to erosion if earth work is undertaken. Foundation problems.
4	GLACIAL Fluvioglacial	Outwash and outwash delta deposits. Includes ice contact stratified drift. Deposits reworked by wave action when lying below marine limit (approx. 70 metres). Thickness: 3 to 70 metres.	Gravel, sand, some silt. Moderate to well sorted.	Good drainage. Excellent source of sorted granular aggregate for construction. Proper planning and managing of the areas mapped under this unit is essential to avoid misuse or spoiling of this material.
3	Ice Contact	Moraine ridges and other ice contact deposits, smooth topped ridges to gently sloping fans. Bedrock outcrops present even in major end moraines. Intensively modified by wave action. Deposits often occur on side of major hills. Thickness: 3 to 50 metres.	Gravel, sand, silt and boulders. Clay may be present at bottom of deposit.	Good drainage. Good source of fill material. Problems in estimating quantity of granular material available caused by rugged bedrock topography (presence of sporadic bedrock knobs). Petrographic analysis of granular material is essential before using as construction material due to local variation in lithology.
2	Morainal	Till deposits including hummocky terrain and minor to major ridges. Continuous deposits with few or no bedrock outcrops. Surface often reworked by glacial melt-water. Thickness: 3 to 50 metres.	Till consisting of gravel, sand, some silt and boulders, little or no clay. Composition varies with bedrock lithology. Generally loose; unsorted.	Good drainage. Good source of fill material. Generally no construction problems.
2/1	Morainal veneer	Thin or discontinuous deposit of till over bedrock. Hummocky terrain with minor ridges. Reflects bedrock topography. Numerous minor bedrock outcrops. Thickness: less than 3 metres.	Same as unit 2.	Drainage problems in flat areas or depressions due to proximity of bedrock. Marginal source of granular material. Moderate to good land potential for urban development.
1	BEDROCK	Large bedrock outcrops. May be veneered by pockets of thin till. Rugged topography mainly steep sided hills or washed out knobs.		

Geological boundary, (definite, approximate) - - - - -
 Glacial striae - - - - -
 Fossil locality and radiocarbon age determination (lab. number & age) - - - - -

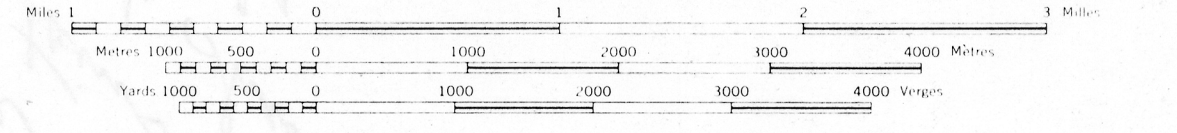
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Geology by J.R. Bélanger
 Project 760002



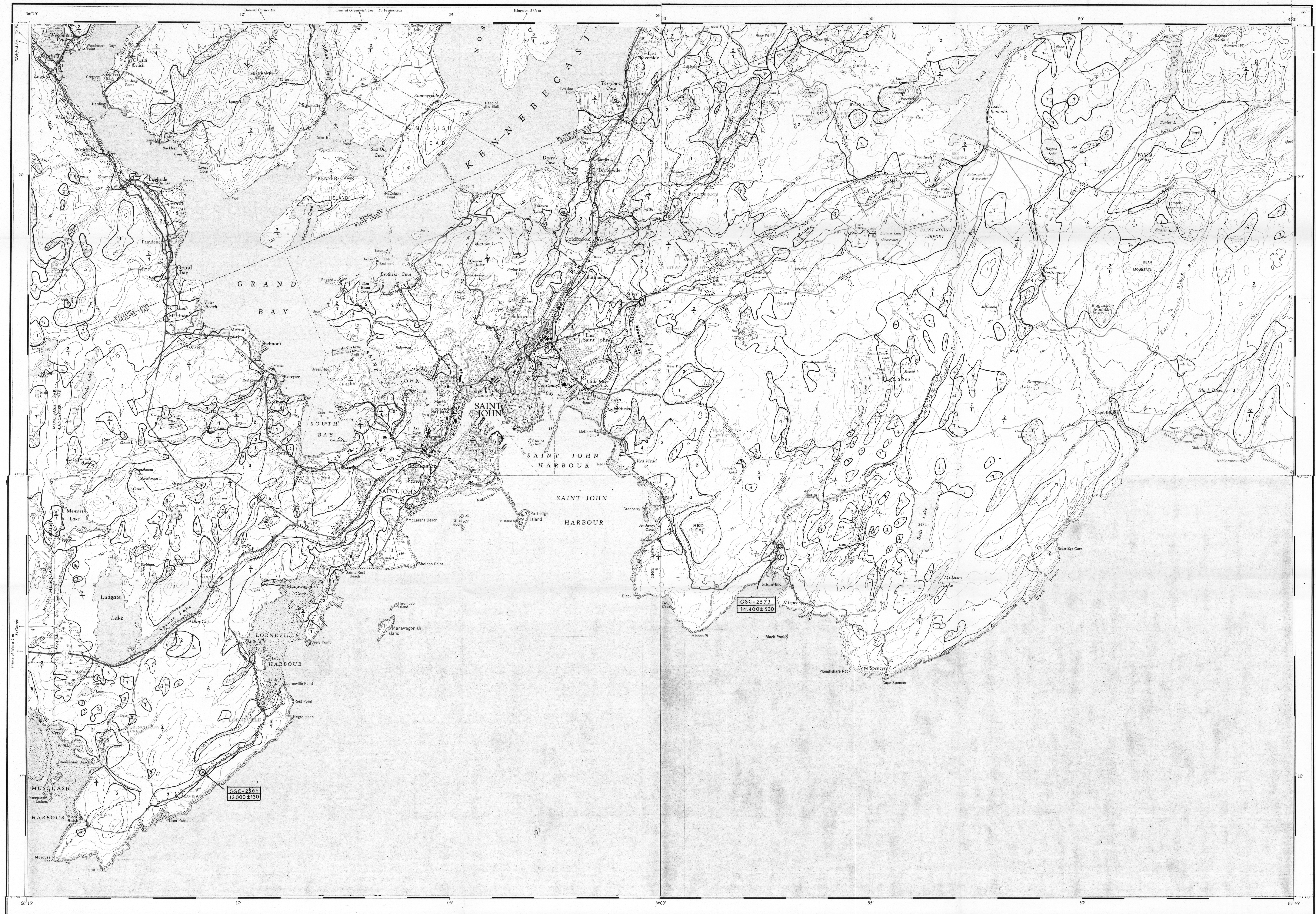
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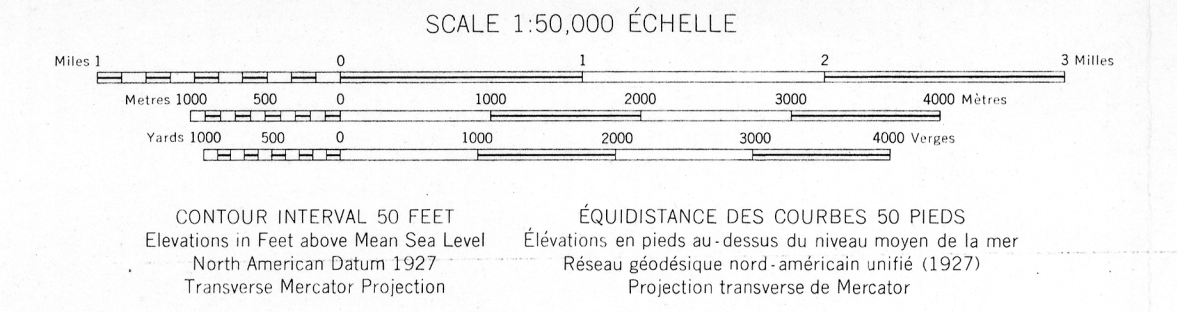


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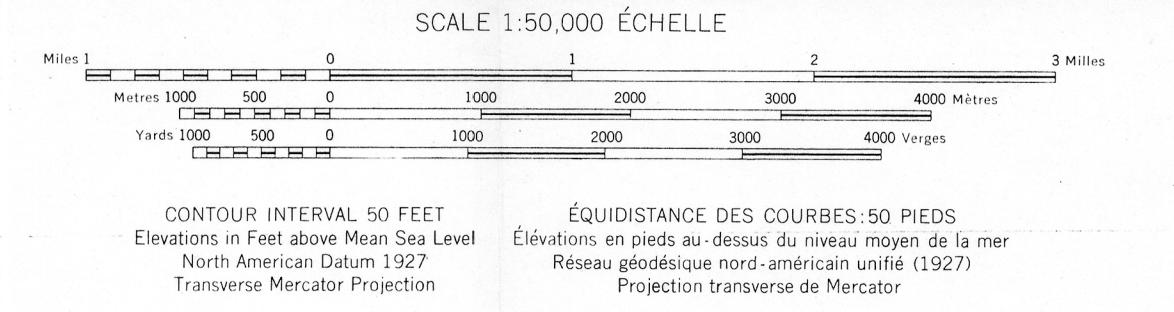
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