SURFICIAL GEOLOGY AND LANDFORMS

MALLOCH HILL

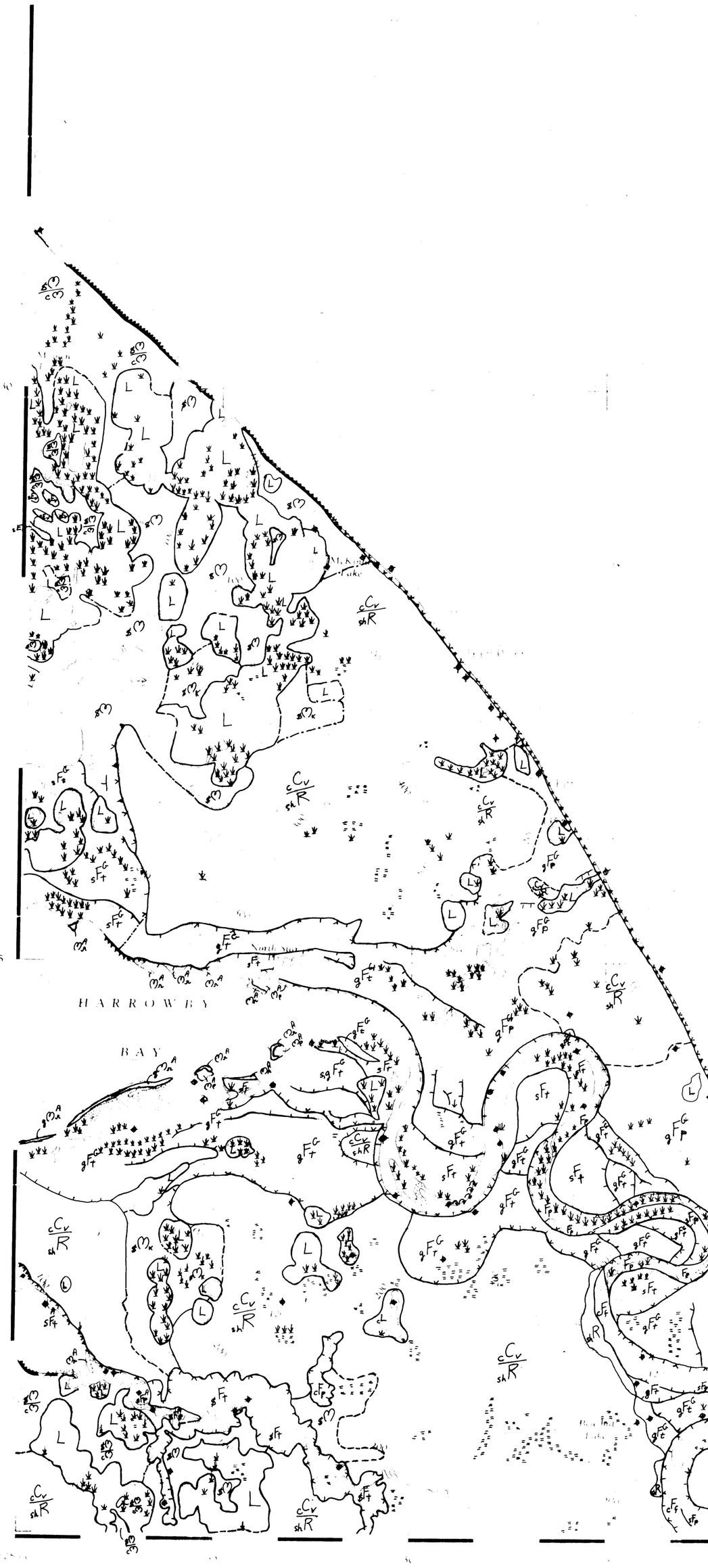
(97 F - W ½)

Geology by V. Rampton

SCALE 1 : 125,000

0 1 2

Miles



BASIC MAP LEGEND

Landform unit notation

Genetic category (ies) → $^{G}_{F}$ ← Genetic modifier

Textural modifier(s) → $^{s}_{pK}$ ← Morphologic modifier(s)

$\frac{M}{F}$ ← Stratigraphic relationship (M overlies F): use where upper unit is thin and irregular and underlying unit is known.

Genetic Categories

C - colluvial
E - eolian
F - fluvial
L - lacustrine
M - morainal
(M) - marine
O - organic (see symbol for organic)
R - bedrock
U - undifferentiated or unknown, commonly M or L

Genetic Modifiers[1]

G - glacial
A - responsible genetic process still actively affecting area

Textural Modifiers[2]

c - clay, clayey
ƒ - silt or interbedded clay, silt and fine sand
s - sand, sandy
g - gravel, gravelly
sh - shale

Morphologic Modifiers[3]

e - eroded, gullied
f - fan
h - hummocky
m - rolling
p - plain
r - ridged, beach
t - terrace
v - veneer[4]
G - glaciated[5]
K - thermokarst[5]

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1. Mainly used to separate glaciofluvial deposits (F^{G}) from nonglacial fluvial deposits (F); to separate late Pleistocene glaciolacustrine deposits (L^{G}) from lacustrine deposits of thermokarst origin (L); to indicate areas where the responsible genetic process is still active (A).

2. Where textures are not indicated, the following textural modifiers are assumed:

E - sand
F^{G} - sand or gravel
$(M)^{A}_{v}$ - silt or clay
$(M)^{A}_{p}$ - silt or sand
L - a function of materials of surrounding map-units
U - probably silt or clay, but maybe sand in some cases.
F - silt or fine sand
M - stony clay
$(M)^{A}_{v}$ - sand or gravel
L^{G} - clay or silt, in some cases dependent on materials adjacent to shoreline

3. Where morphology is not indicated, the following morphologic modifiers are assumed:

C - gentle or moderate slopes
L - flat or gently sloping; in places stepped
U - flat or gently rolling
E - flat or having small ridges
M - rolling

4. Veneer indicates known thickness of category is less than 15 feet, commonly only 3 feet or less. Surface is flat or gently rolling.

5. Glaciated indicates that map-unit has been topographically modified by glaciation even though till is not always easily identified on surface of map-unit. Thermokarst indicates that a hummocky topography has developed as a result of subsidence and erosion where frozen sediments or ground ice have melted.

Symbols

- beach ridge or spit (sand or gravel)
- former beach ridge or spit (sand or gravel; gravel)
- sea cliff or escarpment, ≥ 25 ft, constantly or periodically undercut (v indicates escarpment partly cut in bedrock)
- former sea cliff (partly cut in bedrock)
- abandoned glaciolacustrine shoreline, marked by cliffs, beaches, etc.
- stream-cut escarpment, constantly or periodically undercut (v indicates escarpment partly cut in bedrock)
- former stream-cut escarpment (v indicates escarpment partly cut in bedrock)
- standing water covering ≥ 30 percent of area
- organic deposit, 5-15 ft thick
- active or recently active blow-out
- ground observation
- aerial observation
- boundaries (defined, approximate, assumed)

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