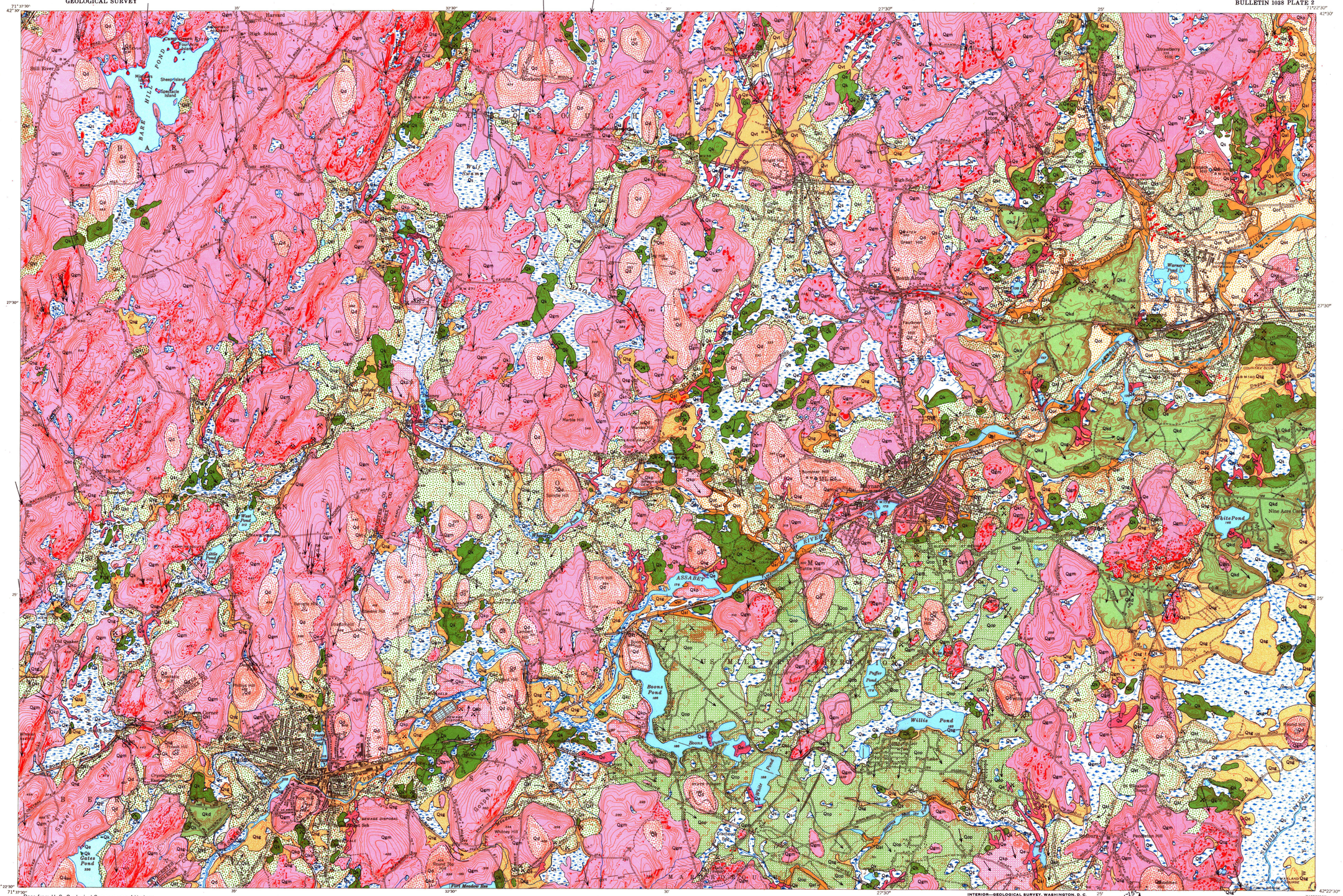

Base from U. S. Geological Survey maps of Hudson and Maynard quadrangles, Massachusetts

Geology by W. R. Hansen, 1948

INTERIOR—GEOLOGICAL SURVEY, WASHINGTON, D. C.
M-R-0332

MAP SHOWING SURFICIAL GEOLOGY OF THE HUDSON AND MAYNARD QUADRANGLES, MASSACHUSETTS

Scale 1:31,680

1 0 2 Miles

Contour interval 10 feet
Datum is mean sea level

TRUE NORTH
MAGNETIC NORTH
15°
APPROXIMATE MEAN DECLINATION 1950

EXPLANATION

Artificial fill
Chiefly along highways and railroad embankments

Qal

Alluvium
Sand, silt, and fine gravel. Includes flood plains of Assabet River, Fort Pond Brook, and Nashoba Brook in Maynard quadrangle, and locally, accumulations of colluvial wash. Unsurveyed in Hudson quadrangle

Qs

Swamps
Mostly sand and silt, some peat. Deposited probably in part by late glacial meltwaters

QUATERNARY

Recent

Stratified drift

Chiefly proglacial

Qsg

Sand and gravel
Chiefly deposits of fine gravel, sand, and silt without distinctive morphology. Designation includes thin late glacial deposits on ice-block areas and some low uncorrelated sand terraces above swamp levels. Lake-bottom deposits are included in the Lake Sudbury area

Qot

Outwash terraces
Terraces formed by stream entrenchment of valley trains

Qvt

Valley trains
Late glacial sands and fine gravels confined by valley walls

Pleistocene

Chiefly ice contact

Qkt

Kame terraces
Sands and gravels, commonly well stratified; deposited by melt water between stagnant ice masses and uplands or valley walls; characterized by valleyward ice-contact slopes

Qk

Kames and kame fields
Irregular mounds or hillocks of mixed sands and gravels, commonly poorly sorted, enclosed by ice-contact slopes. Commonly display collapse structures. Groups of several closely spaced or interjoining kames are called kame fields

Qkd

Kame deltas
Deposited in temporary ice impounded lakes or lakelets. Possess backward ice-contact slopes. Commonly contain well-defined gravelly top-set beds and sandy foreset beds. In Lake Sudbury area kame deltas were not all formed consecutively but, rather, progressively from south to north

Qoo

Outwash plains
Broad plains of well-stratified sand and gravel bounded on the north by ice-contact slopes. Characterized by many swamps, ponds, and other closed depressions

Qkp

Kame plains
Flat-topped deposits of well-stratified sands and gravels surrounded by ice-contact slopes

Qe

Ice-channel fillings
Include eskers and crevasse fillings. Elongated ridges, chiefly of mixed sand and gravel, deposited in subglacial tunnels or in open ice-walled channels. Characterized generally by rude stratification and extreme range of grain size. Commonly display collapse structures

Unsorted drift

Qgm

Ground moraine
Broad, relatively thin accumulations of till characterized mostly by gentle, undulatory relief that reflects in a broad measure the shape of the underlying bedrock surface. Locally is hummocky. Composed of unsorted rock fragments of all sizes from minute particles to large boulders. Fragments mostly angular. Stripping indicates thin veneer of sand or gravel

Qd

Drumlins
Oval or elongated rounded hills of till. Similar in composition to ground moraine

Bedrock outcrops

Geologic boundary
Dashed where gradational or approximately located

Boundary separating two deposits of stratified drift of similar genesis but of slightly different age
For example, a high-level kame terrace adjoining a lower level kame terrace

Bearing of glacial striae on bedrock outcrops
Point of arrow indicates place of observation

Generalized directions of glacial melt-water drainage

Gaps or cols to which melt-water streams were graded

Quarry

Sand or gravel pit