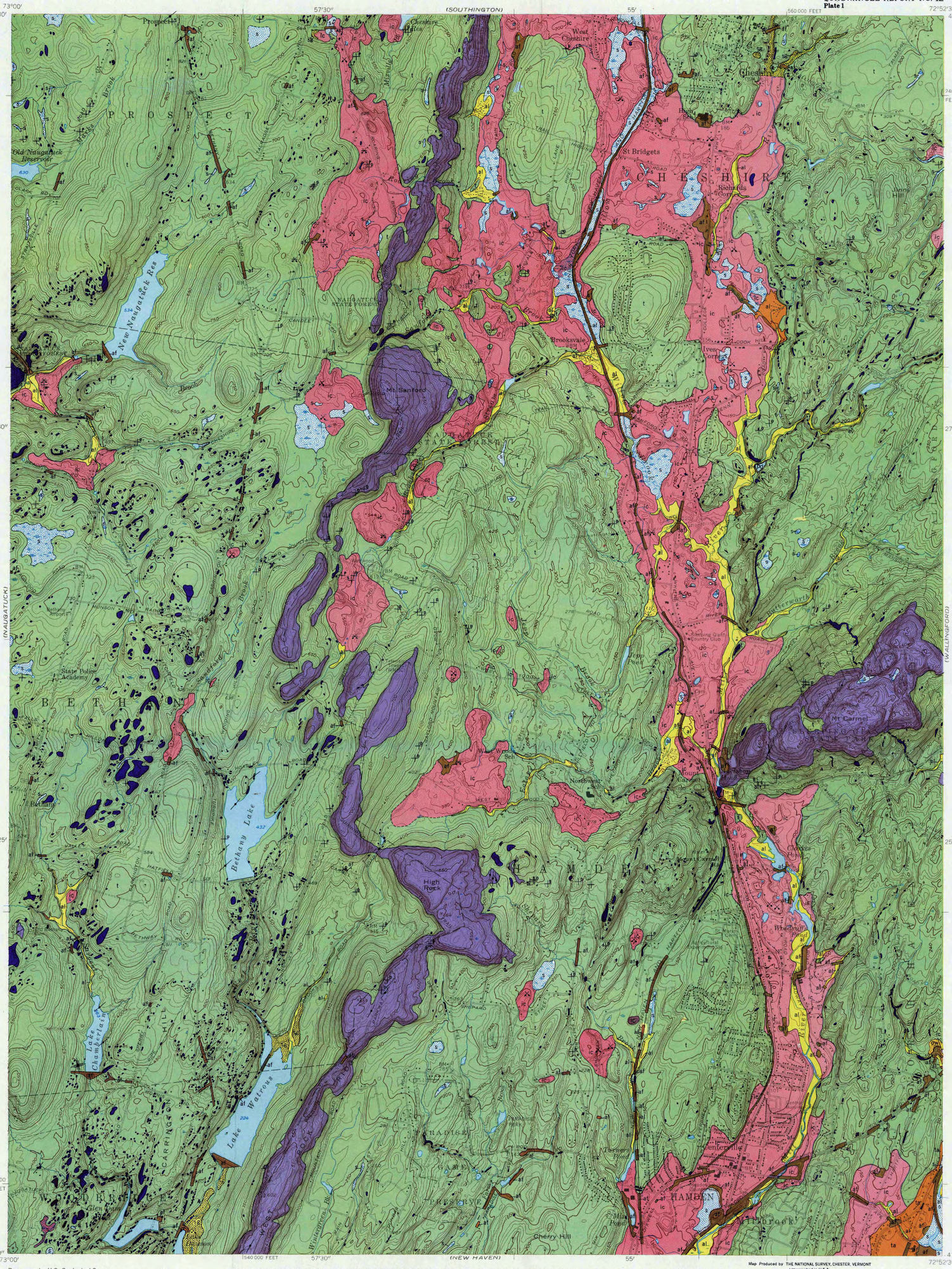
Open Report

STATE OF CONNECTICUT
GEOLOGICAL AND NATURAL HISTORY SURVEY
JOE WEBB PEOPLES, DIRECTOR

QUADRANGLE REPORT NO. 12
Plate 1

GEOLOGIC MAP OF THE MOUNT CARMEL QUADRANGLE, CONNECTICUT

Surficial Geology by Richard Foster Flint in 1958, 1959 and 1960.



EXPLANATION

Postglacial

af — Artificial fill

s — Swamp deposits
Silt, sand, and clay, mixed with organic matter in poorly drained areas.

al — Alluvium
Sand, silt, and gravel occurring as thin covers on valley floors, and on low stream terraces in Mill River Valley. Locally includes colluvium and bodies of clay.

ta — Terrace alluvium
Thin covers of sand and gravel capping stream terraces in Quinnipiac Valley.

Glacial

sg — Sand and gravel, undifferentiated
Local sediment, probably alluvial, of uncertain age.

ow — Outwash sediments
Yellowish sand, silt, and pebbles derived mainly from crystalline rocks in the Western Highland.

ic — Ice-contact stratified drift
Sand, gravel, silt, and clay, in many places poorly sorted, and with abrupt changes in grain size. Deposited in streams and locally in ephemeral lakes, in close relation to melting glacier ice.

t — Till
Compact, nonsorted sediment deposited by glacier ice. Includes small bodies of stratified sediment.

Bedrock
Individual exposures or groups of small exposures in dark color; light color denotes areas with complex patterns of bare rock and rock thinly covered with residuum, small patches of till, scattered slide rock, and taluses.

Geologic contact
Dashed where located approximately

Alluvial fan

Scarp, mainly stream cut, separating two adjacent surfaces of ice-contact stratified drift. Ticks are on downslope side.

Erratic boulder
Ten feet or more in greatest diameter.
Letter denotes lithology:
D—diabase and basalt; H—Hartland Formation; P—Prospect Gneiss; Q—quartz; S—sandstone and conglomerate; W—Waterbury Gneiss; no letter—unidentified

Till-fabric measurement
Dot at center of symbol indicates locality of occurrence

Glacial striations and (or) grooves
Dot at center of symbol indicates locality of occurrence

Sand-and-gravel pit (Operating)

Sand-and-gravel pit (Abandoned)

Artificial pond not shown on topographic base map.

NOTE: Surface of Lake Chamberlain, which now stands at 398 ft., is shown as it was in 1959, so as not to obscure geologic data exposed at that time.

Base map by U.S. Geological Survey
Control by USGS, USC&GS, and Connecticut Geodetic Survey
Topography from aerial photographs by multiplex methods
Aerial photographs taken 1949–1950. Field check 1954
Polyconic projection. 1927 North American datum
10,000-foot grid based on Connecticut coordinate system

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State of Connecticut

Map Produced by THE NATIONAL SURVEY, CHESTER, VERMONT
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ROAD CLASSIFICATION
Heavy-duty — Light-duty
Medium-duty — Unimproved dirt

MAGNETIC NORTH — TRUE NORTH
APPROXIMATE MEAN DECLINATION, 1954

SCALE 1:24 000
1 MILE
1000 0 1000 2000 3000 4000 5000 6000 7000 FEET
1 KILOMETER

CONTOUR INTERVAL 10 FEET
DATUM IS MEAN SEA LEVEL

CONNECTICUT
QUADRANGLE LOCATION

MOUNT CARMEL, CONN.
N4122.5—W7252.5/7.5