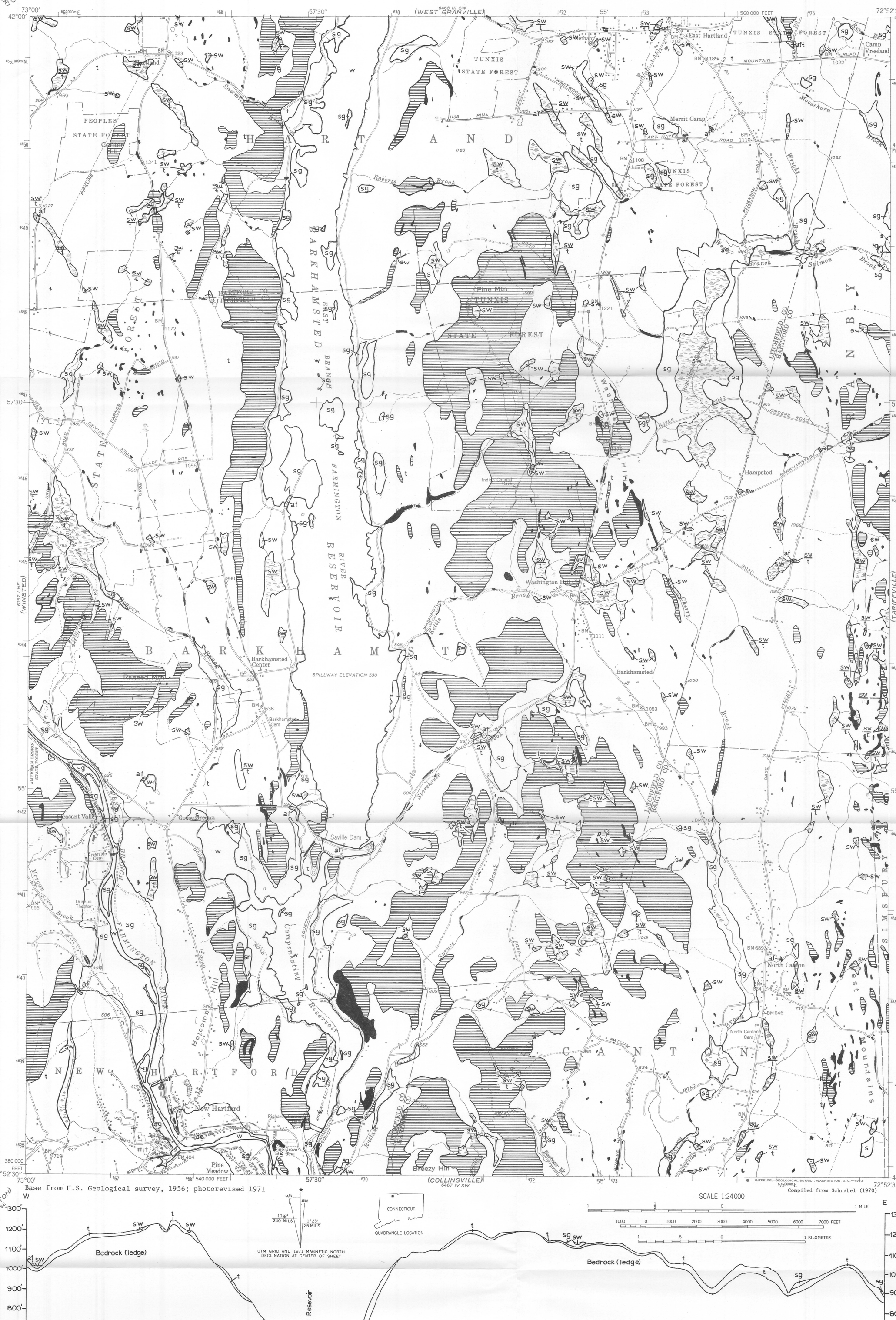
DEPARTMENT OF THE INTERIOR
UNITED STATES GEOLOGICAL SURVEY

MISCELLANEOUS FIELD STUDIES
MAP MF—542 A



Base from U.S. Geological survey, 1956; photorevised 1971

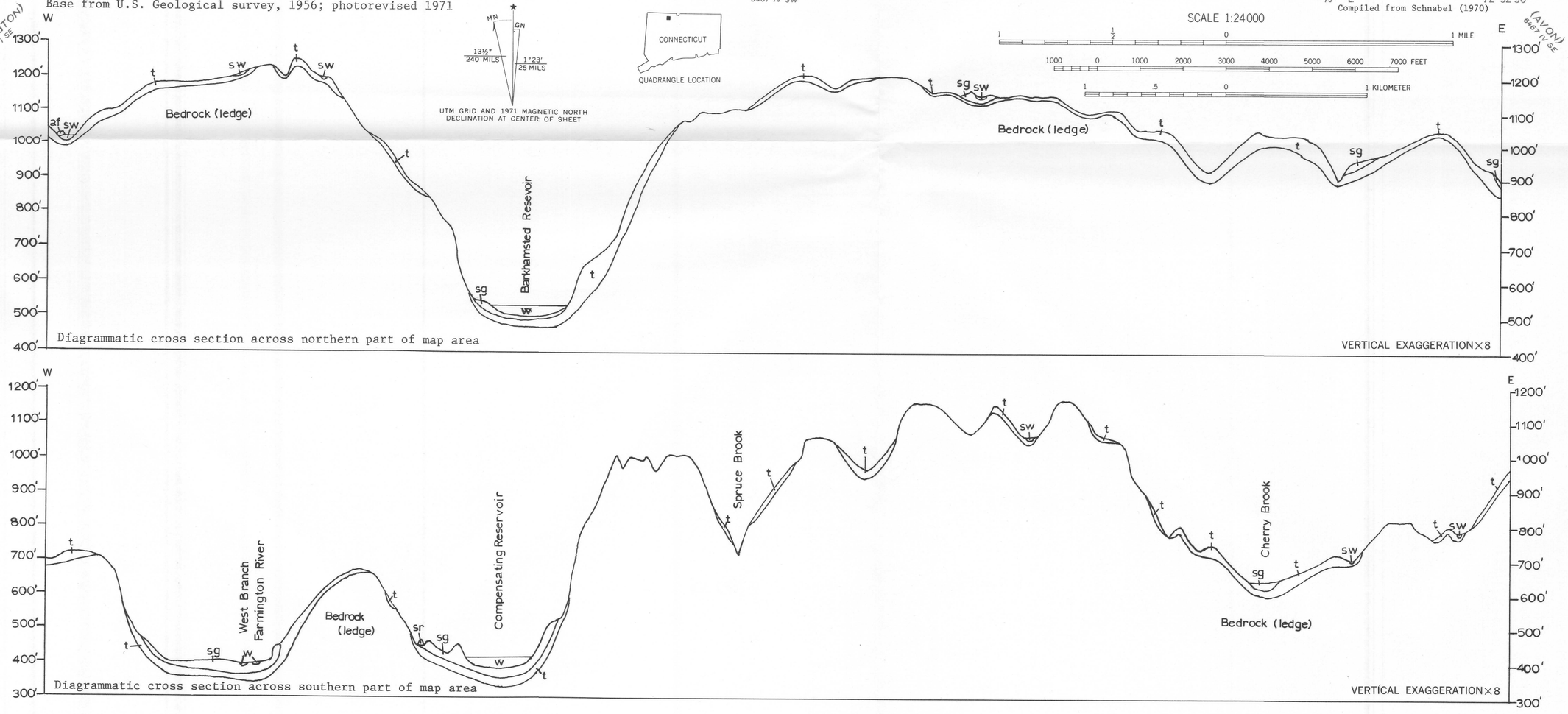
Compiled from Schnabel (1970)

SCALE 1:24000

1 MILE
7000 FEET
1 KILOMETER

UTM GRID AND 1971 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

CONNECTICUT
QUADRANGLE LOCATION



MAP SHOWING UNCONSOLIDATED MATERIALS, NEW HARTFORD QUADRANGLE, CONNECTICUT

By

Robert W. Schnabel

1973

EXPLANATION

This map is intended to serve as an aid in reconnaissance evaluation of unconsolidated materials and can be used to identify areas of potential interest.

The units on this map indicate the first material of substantial thickness (generally greater than 3 feet) encountered beneath the soil layer. The soil layer (commonly a foot or two thick) is not mapped. Other materials, different in composition, may underlie each map unit (see cross sections) or may occur as minor lenses within each map unit.

THIS MAP SHOULD NOT BE USED AS A SUBSTITUTE FOR ONSITE INVESTIGATION.

Most unconsolidated materials are mixtures of the three particle-size classes defined in the diagram below. This diagram also relates these three size classifications to the Wentworth classification (Wentworth, 1922) which can be compared with other classifications used in engineering and soil science.

PARTICLE-SIZE CLASSIFICATION
Classification used in this report
(Diameter, in inches)

0.08			0.005								
COARSE					MEDIUM			FINE			
Boulders	Cobbles	Pebbles	Granules	Sand					Silt		Clay
				vc	c	m	f	vf			
256	64		4	2			1/8		1/16		1/256

Wentworth classification
Diameter, in millimeters

Materials mapping involves a visual estimate of particle-size distribution in a deposit by the field geologist. Percentages of particle sizes therefore may vary somewhat from place to place beyond the limits defined in the map units below.

sg

SAND AND GRAVEL

Particle sizes range from 100 percent coarse to 25 percent coarse and 75 percent medium

s

SAND

Particle sizes range from 25 percent coarse and 75 percent medium through 100 percent medium to 50 percent medium and 50 percent fine

t

TILL (HARDPAN)

Particle sizes range from coarse to fine in varying proportions. Some till, averaging less than 10 feet thick, is sandy, loose, and very stony; other till, commonly more than 10 feet thick, is less sandy, very compact, and less stony. Where these tills occur together, the sandy, loose till is always on top

sw

SWAMP DEPOSITS

Undecomposed to partly decomposed organic matter, generally mixed or interbedded with varying amounts of fine, medium, and coarse particles. Extent and thickness of most swamp deposits is poorly known. $\frac{sw}{t}$ indicates areas where till underlies swamp deposits

sr

SLIDE ROCK (TALUS)

Large angular rock fragments at the base of cliffs; locally contains organic matter and silt

af / aft

ARTIFICIAL FILL

Fill for highways, solid-waste disposal, and other major construction
af, predominantly earth fill
aft, predominantly trash fill

BEDROCK (LEDGE) OUTCROP

Bedrock exposed at ground surface; may be partly covered by thin soil. Ruled pattern shows areas of small, closely-spaced outcrops

w

WATER BODIES

In general, lakes and ponds greater than 5 acres, or streams wider than 200 feet

REFERENCES CITED

Schnabel, R. W., 1970, Preliminary surficial map of the New Hartford quadrangle, Litchfield and Hartford Counties, Connecticut: U.S. Geol. Survey open-file rept. (scale 1:24,000).

Wentworth, C. K., 1922, A scale of grade and class terms for clastic sediments: Jour. Geology, v. 30, p. 377-392.

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