UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

MISCELLANEOUS FIELD STUDIES
MAP MF-572 A

Base from U.S. Geological Survey, 1961
10,000-foot grids based on Massachusetts mainland zone, and Vermont coordinate systems
1000 meter Universal Transverse Mercator grid ticks zone 18, shown in black

MN GN
14°
249 MILS
1°34'
28 MILS

UTM GRID AND 1961 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

SCALE 1:24 000

1 ½ 0 1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 .5 0 1 KILOMETER

CONTOUR INTERVAL 10 FEET
DATUM IS MEAN SEA LEVEL

Compiled in part from data gathered in cooperation with the Massachusetts Water Resources Commission, Division of Water Resources

MASS.
QUADRANGLE LOCATION

MAP SHOWING DEPTH TO BEDROCK, COLRAIN QUADRANGLE, MASSACHUSETTS–VERMONT

By

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1974

EXPLANATION

Map units indicate ranges in depth to bedrock (ledge) below land surface. The locations of bedrock outcrops were obtained directly from the surficial geology map (Segerstrom, 1955), which shows only those outcrops that occur in or immediately adjacent to valley areas. The areal distribution of the map units 0-10 and 10-50 feet to bedrock is based on interpretation of the surficial geology map supplemented by data from logs of wells and test holes (Hansen and others, 1973) and geophysical studies (Weston Geophysical Engineers, 1967). The areal distribution of additional depths to bedrock is based almost entirely on subsurface data.

Depths shown are a generalization of localized highly variable conditions, they do not include any weathered (decomposed) bedrock, and are based on interpretations of the surficial geology map that have not been field checked. Therefore, this map should be used only to determine the general conditions that can be expected over an area, not as a substitute for detailed site evaluation.

Depth to Bedrock, In Feet

0
Bedrock outcrop
(Ledge exposed at land surface)

Shown primarily in or immediately adjacent to valley areas.

0-10

Includes outcrops on hillsides and hilltops and may include small areas in excess of 10 feet. Corresponds with "Thin ground moraine" mapped by Segerstrom, 1955

10-50

Corresponds in most areas with "Thick ground moraine" and "Drumlin" mapped by Segerstrom, 1955.

50-100

100-150

150-200

200-250

REFERENCES

Hansen, B.P., 1972, Bedrock topography of the Connecticut River Valley near Greenfield, Massachusetts: U.S. Geol. Survey open-file report.

Hansen, B.P., Gay, F.B., and Tolar, L.G., 1973; Massachusetts hydrologic-data report number 13, hydrologic data of the Deerfield River basin, Massachusetts: U.S. Geol. Survey open-file report, 59 p.

Segerstrom, Kenneth, 1955, Surficial geology of the Colrain quadrangle, Massachusetts-Vermont: U.S. Geol. Survey Geol. Quad. Map GQ-82.

Weston Geophysical Engineers, 1967, Compilation of geophysical studies conducted by Weston Geophysical Engineers, Inc. throughout Massachusetts for Massachusetts Water Resources Commission: Weston, Mass., Weston Geophys. Eng. Inc., 2 parts including maps and graphs.