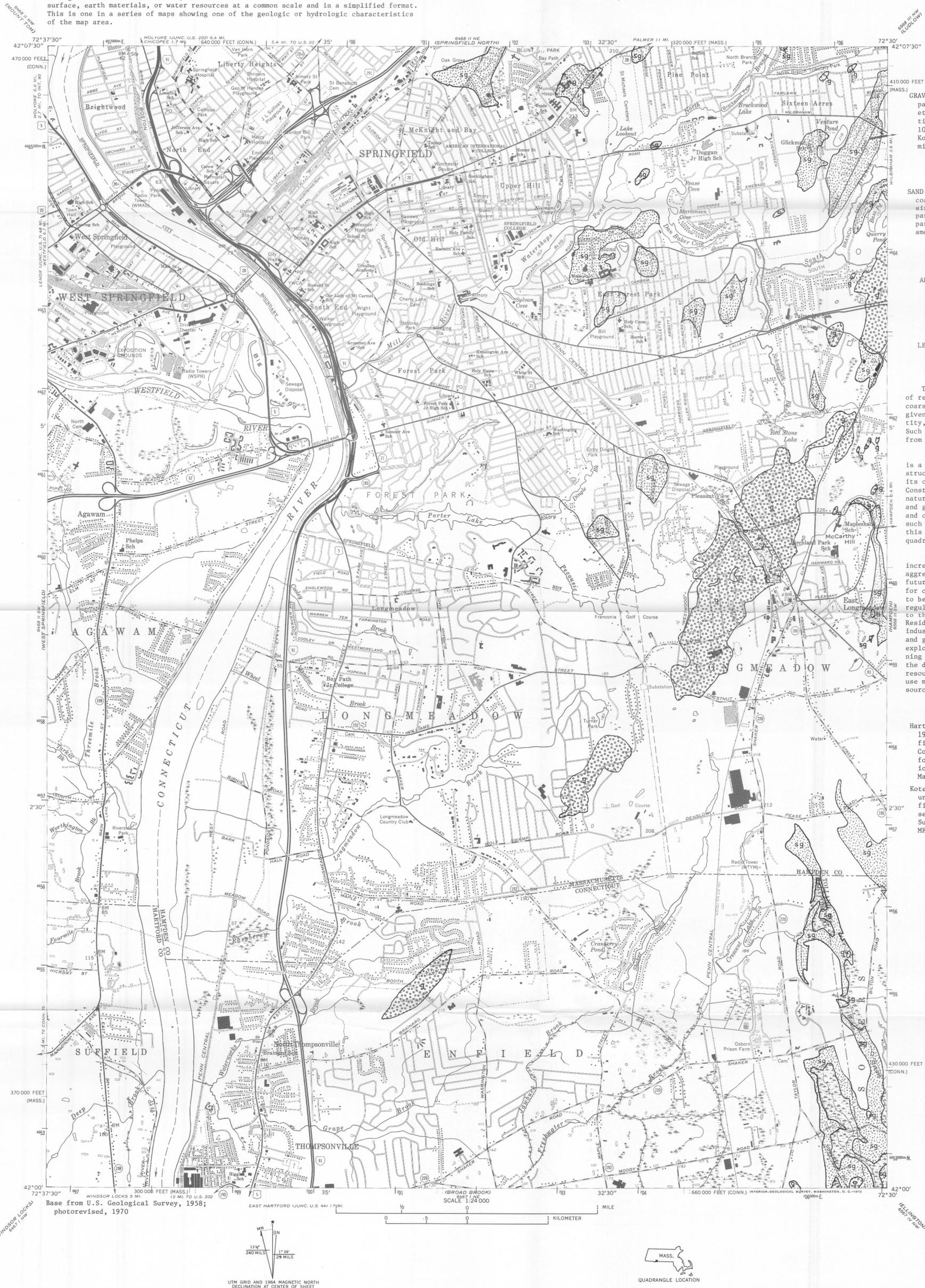


The Connecticut Valley Urban Area Project (CVUAP) covers about 5,000 square miles from New Haven and New London, Conn., on Long Island Sound north to Brattleboro, Vt., and Keene, N.H. Major cities within the project area include New Haven and Hartford, Conn., and Springfield, Mass. Commuter traffic to these urban centers reaches almost all parts of the project area. Interstate routes provide major north-south and east-west transportation corridors. Urbanization and industrial development are likely to continue within this central valley area of New England. In order that such anticipated growth be accomplished in an orderly manner and with a minimum of adverse environmental effects, information on the nature and distribution of natural resources will become increasingly important. The objective of CVUAP is to anticipate this need by providing geologic and hydrologic information to aid in planning and resource management. This information is in the form of maps, each presenting a single resource characteristic, or combination of related characteristics of the land surface, earth materials, or water resources at a common scale and in a simplified format. This is one in a series of maps showing one of the geologic or hydrologic characteristics of the map area.

Regional and local planners and other decision makers responsible for land use and resource management, including landowners, developers, and consultants should find these maps helpful in land-use analysis. Because statutory regulations, technological capabilities, available funding, and local land-use priorities vary from place to place, and can be expected to change with time, these maps are designed to provide a resource-data base with maximum flexibility for long-term usefulness. The maps can be used in various combinations, as in a series of overlays, according to the specific needs of a particular planning problem. As planning criteria change, the selection of pertinent resource-characteristic maps can be adjusted to meet the changing needs.

CVUAP maps, or maps derived from them, are not intended to replace onsite investigations. The maps can be used, however, to identify areas of potential interest for a particular land use. These areas can then be the subject of detailed site evaluation.



**EXPLANATION**

- GRAVEL**--Ranges from 50 percent coarse particles (larger than 2 mm in diameter) and 50 percent sand-sized particles (1/8 to 2 mm in diameter) to 100 percent coarse particles (see Koteff, 1973). Locally contains minor amounts of silt and clay.
- SAND AND GRAVEL**--Ranges from 25 percent coarse particles and 75 percent sand-sized particles to 50 percent coarse particles and 50 percent sand-sized particles. Locally contains minor amounts of silt and clay.
- AREA IN WHICH COARSE AGGREGATE IS NOT KNOWN TO BE PRESENT AT OR NEAR THE LAND SURFACE**
- LEDGE (BEDROCK EXPOSED AT THE LAND SURFACE IN AREAS OF GRAVEL AND SAND AND GRAVEL)**

This map shows the distribution of resources of unconsolidated coarse aggregate. No information is given about the value, quality, quantity, or accessibility of the resource. Such information should be obtained from onsite investigations.

Availability of coarse aggregate is a critical cost factor in many construction projects. Location of deposits close to market areas is important. Construction aggregate is obtained from naturally occurring sources such as sand and gravel deposits and from quarrying and crushing certain kinds of bedrock such as traprock (basalt). Bedrock of this type does not occur in this quadrangle.

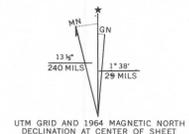
As urban and suburban development increases, the need for construction aggregate also increases. However, the future use of sand and gravel deposits for construction aggregate is likely to be increasingly restricted by zoning regulations and regulations pertaining to the operations of processing plants. Residential housing and commercial and industrial developments built on sand and gravel deposits further restrict exploitation of this resource. Planning decisions based on knowledge of the distribution of this important resource and on concepts of multiple use may permit extraction of this resource prior to other types of land use.

**SOURCES OF DATA**

Hartshorn, J. H., and Koteff, Carl, 1967, Geologic map of the Springfield South quadrangle, Hampden County, Massachusetts, and Hartford and Tolland Counties, Connecticut: U.S. Geol. Survey Geol. Quad. Map GQ-678.

Koteff, Carl, 1973, Map showing unconsolidated materials, Springfield South quadrangle, Massachusetts-Connecticut: U.S. Geol. Survey Misc. Field Studies Map MF-509 A.

Base from U.S. Geological Survey, 1958; photorevised, 1970



MAP SHOWING RESOURCES OF COARSE AGGREGATE, SPRINGFIELD SOUTH QUADRANGLE, MASSACHUSETTS-CONNECTICUT

By  
Carl Koteff  
1973