A thin layer of windblown sand and silt covers most of the surficial

deposits, especially in the eastern half of the quadrangle

Alluvial-lacustrine deposits

Laminated silt and sand, deposited in glacial lake in the Connecticut val-ley, overlain by 5-10 feet of younger

Delta deposits

Cobble gravel and sand, with topset and foreset bedding, in a large delta merging with stream terrace Qst₄

Stream terrace deposits, undifferentiated

Sand, gravel, and boulders, in narrow to broad discontinuous terraces, in the upper gorge of the Westfield River, and on the Manhan River. Unmatched along the Westfield River. Heights above

Swamp deposits

alluvial silt and sand

present stream range from 30 to 200 feet

***59**

Stream terrace deposits

Alluvium

Qst₅

those on alluvium

Stream terrace deposits

Stream terrace deposits

Stream terrace deposits

Stream terrace deposits

Sand, pebble sand, and gravel, in

broad, pitted terraces, typically 120 feet above the modern streams

Sand and gravel, in minor terrace de-

posit, 90 feet above present stream

Sand and pebble gravel, in terrace

deposits, 70 feet above present streams

Silt and silty sand in low terraces,

typically 35 feet above modern streams. Surface retains some

ridges and channels similar to

Recent

Silt, sand, gravel, and boulders

in modern flood plains and in swales. Occurs as low terraces, typically 10-20 feet above stream

level, and subject to floods.

Marked by ridges and meander scars

Gravel in high terraces, typically 150 feet above modern stream

Ice-contact stratified drift

Sand and gravel, in poorly formed kames and kame terraces, with pitted surfaces and collapse structures

Till

Boulders, gravel, sand, silt, and clay, nonsorted to poorly sorted, deposited directly by glacial ice. Includes some bodies of stratified sand and gravel

Artificial fill: dams, embankments and dikes

XX

3 g

Construction materials pit. Crossbar indicates inactive pit Number refers to data sheets. Letter symbol: g, gravel of mixed sizes; cg, cobble gravel; s, sand; ps, pebble sand. Minor pits not numbered

Summit of drumlinoid hill, composed at least in part of till, and smoothed and sculptured by glacial motion. Line indicates direction of flow, which was apparently from the north-northwest in the northwestern two-thirds of the quadrangle, and from the north-northeast in the southeastern one-third of the quadrangle

br

Large exposures of bedrock uncovered

gorge of the Westfield River

during trenching of terraces in the

Location of glacial spillway. Arrow indicates direction of flow

Contact, dashed where inferred

Geology mapped by G. William Holmes, 1966 Assisted by George C. Kelley, 1967

G. William Holmes SUALE' 1.24000

Qal

Qst2

WQst4

Qal

Russell Mth

ANTENTO THE INTENT

Russell Pond

South Dairter

Base map by the U.S. Geological Servey, 1951

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Geology sapped in 1966 by G. William Hele

erficial Goology of the Moronoco Quadras

approximate shore

when lake is full