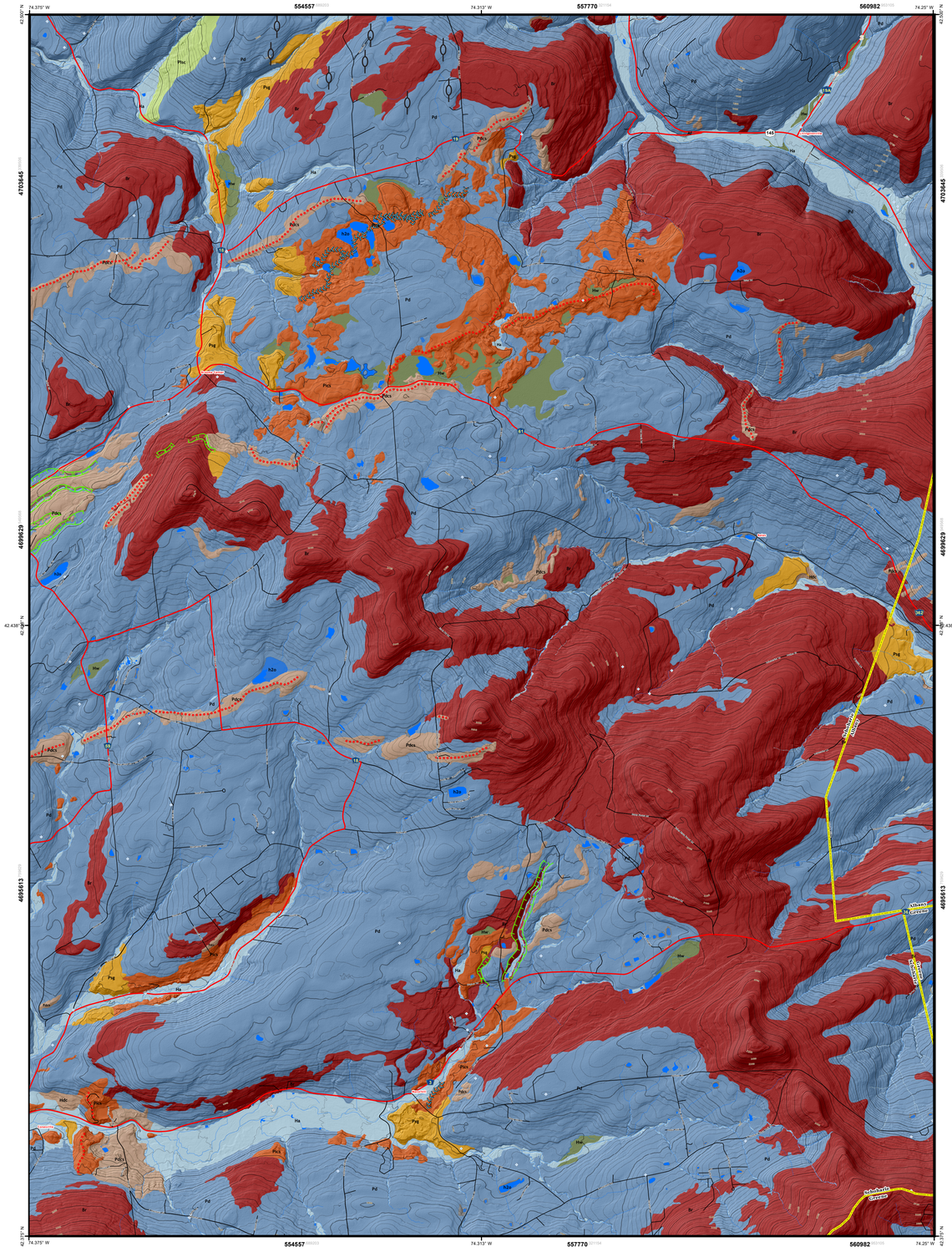
New York State Museum & Science Service

New York State Geological Survey
Dr. Andrew L. Kozlowski, Director



Universal Transverse Mercator, Zone 18 N
North American Datum of 1983

Hydrology, and planimetry layers from the New York State DOT raster quadrangle separates for Albany, Greene, and Schoharie Counties (https://gis.ny.gov/gisdata/inventories/member.cfm?Organization!D=108)

Geographic data layers from 2021 TIGER/Line shapes for transportation and hydrography: (https://www.census.gov/cgi-bin/geo/shapefiles/index.php)

Shaded relief from 2019 FEMA and 2014 Schoharie 1m lidar data sets: (http://gis.ny.gov/elevation/index.cfm)

Magnetic declination from the NOAA online Declination Calculator: (http://www.ngdc.noaa.gov/geomag-web/#declination)

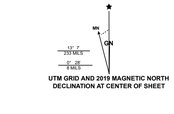
SCALE 1:24,000

1 0.5 0 KILOMETERS 1 2
1000 500 0 METERS 1000 2000
1 0.5 0 1
MILES
1000 500 0 1000 2000 3000 4000 5000 6000 7000 8000 9000 10000
FEET

CONTOUR INTERVAL: 10 FEET

Geologic mapping by K. Backhaus, S. Grasing, R. Frieman and A. Kozlowski, 2021-22

Digital data and cartography, R. Frieman and K. Backhaus, 2022



UTM GRID AND 2019 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

SURFICIAL GEOLOGY OF THE LIVINGSTONVILLE 7.5-MINUTE QUADRANGLE, ALBANY, GREENE AND SCHOHARIE COUNTIES, NEW YORK

Andrew L. Kozlowski, Karl J. Backhaus and Richard A. Frieman

2024

SURFICIAL GEOLOGY OF THE LIVINGSTONVILLE 7.5-MINUTE QUADRANGLE, ALBANY, GREENE AND SCHOHARIE COUNTIES, NEW YORK

prepared by
Richard A. Frieman and Karl J. Backhaus

Supported in part by the U.S Geological Survey's
National Cooperative Geologic Mapping Program Great Lakes Mapping Coalition Award Number G21AC10697

DESCRIPTION OF MAP UNITS

Holocene

Af — **Artifical Fill (Af)**
This unit is generally composed consists of coarse/-to-fine, materials such as large cement mounds and/or crushed rock , which have been transported anthropogenically transported and used for construction purposes.

Ha — **Stratified silt, sand and gravel (Ha)**
Sorted and stratified silt, sand, and gravel, deposited by rivers and streams. May include cobbles and boulders. Inferred as post-glacial alluvium and includes modern channel, over-bank and fan deposits

Hw — **Wetland Deposit (Hw)**
Peat, muck, marl, silt, clay or sand deposited in association with wetland environments. Various sediments can be present at transitional boundaries from one facies to another

Hdc — **Diamict Colluvium (Hdc)**
Unsorted and unstratified deposit of gravel, sand, silt, clay, with boulders/cobbles possible. Described as a mass-wasting deposit at the base of steep hillslopes and cliffs as part of a slump or hillslope failure.

Pleistocene

Plsc — **Silt and Clay (Psc)**
Stratified, fine-grained sediment consisting of fine sand, silt and clay size particles. Inferred to be deposited in mid shore to deepwater settings of glacial lakes. May include marl, rythmites, and varves.

Psg — **Stratified sand and gravel (Psg)**
Well-sorted and stratified sand and gravel. May include cobbles and boulders. Inferred to be delta, fan or lag deposits in glacial channels or near former ice margins.

Pics — **Cobbles to Sand (Pics)**
Stratified, ice contact deposits, variable coarse-grained sediment consisting of boulders to sand size particles. Inferred to be deposited along an ice margin. May include, interbedded coarse lenses of gravel and clast-supported diamicton (flow till).

Pd — **Diamicton (Pd)**
An admixture of unsorted sediment ranging from clay to boulders. Generally matrix-supported, massive and clast-rich.

Pdcs — **Diamicton (Pdcs)**
An admixture of unsorted sediment ranging from clay to boulders. Generally clast-supported, massive and clast-rich.

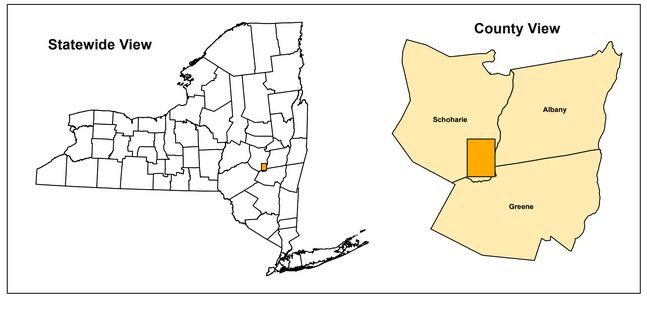
Pre-Pleistocene

Br — **Bedrock (Br)**
Non-glacially derived, hard rock, Paleozoic in age. May be covered up to a meter in diamicton, sand and gravel, or sand and clay in areas marked as Br.

SYMBOLS

- Street
- Highway
- County Line
- Water Body
- Stream
- Contour
- NYSGS Borehole Location
- NYSDOT Boring Location
- NYSDEC Water Well Location
- Drumlin
- Esker
- Meltwater Channel
- Moraine

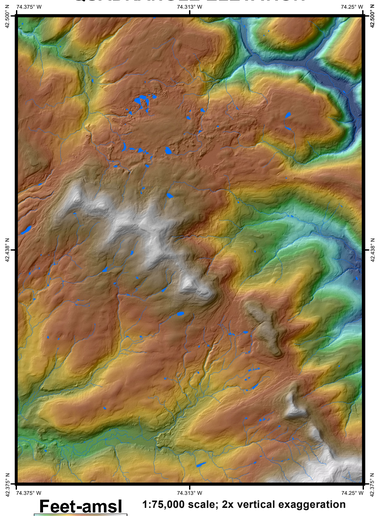
QUADRANGLE LOCATION



ADJOINING QUADRANGLES

Breakabeen	Middleburgh	Rensselaerville
Gilboa	Livingstonville	Durham
Prattsville	Ashland	Hensonville

QUADRANGLE ELEVATION



Feet-amsl
960 2990

1:75,000 scale; 2x vertical exaggeration

Shaded relief generated from the 2019 FEMA 1m and the 2014 Schoharie 1m lidar data sets

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