

# SURFICIAL GEOLOGY OF THE PENNSYLVANIA PART OF THE NEW FREEDOM 7.5' QUADRANGLE, MD-PA

**THIS REPORT HAS NOT BEEN REVIEWED  
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**1996**

**Open-File Report 96-13**

NEW FREEDOM QUADRANGLE  
MARYLAND-PENNSYLVANIA  
7.5 MINUTE SERIES (TOPOGRAPHIC)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

UNITED STATES  
DEPARTMENT OF THE ARMY  
CORPS OF ENGINEERS

**EXPLANATION**

**AF = Artificial Fill**  
Compacted to semi-compacted material used for fill. Composed of locally derived bedrock or surficial material.

**A = Alluvium**  
Material underlies narrow to broad, flat-surfaced floodplains of perennial streams. Comprises stratified sand, silt, and clay in upper part; same plus gravel in lower part. Generally less than 10 feet thick.

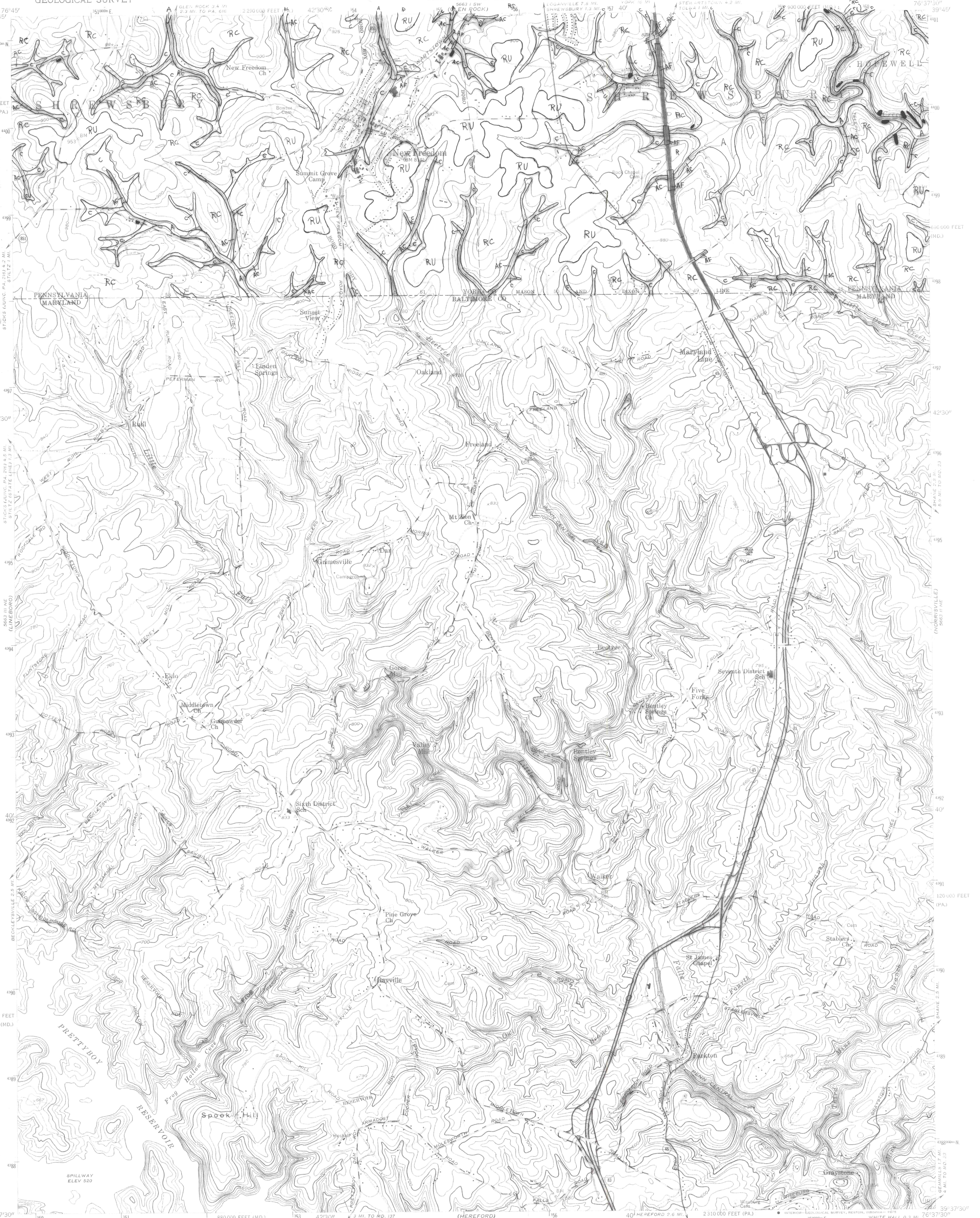
**C = Colluvium**  
Colluvium is unsorted and unstratified to crudely stratified debris derived from underlying bedrock. Comprises fragments set in finer-grained matrix. Platy fragments in schist bedrock areas (RC). Mapped where greater than 6 feet thick.

**AC = Alluvium and colluvium undivided**  
Alluvium and colluvium are mapped together where the valley in which they occur is too narrow to map the units separately at 1:24,000 scale.

**RC = Schist bedrock and colluvium undivided**  
Surfaces with low to steep slopes underlain by unweathered or weathered schist bedrock and thin (<6 feet), discontinuous deposits of colluvium.

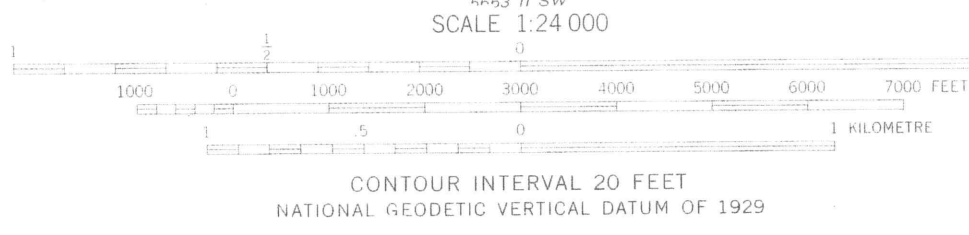
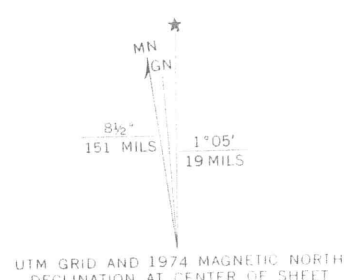
**RU = Rock upland**  
Nearly flat upland surface underlain usually by weathered schist bedrock, sometimes by unweathered schist bedrock. Little or no colluvium is present.

**● = Outcrop**  
Areas with continuous or discontinuous bedrock outcrop.

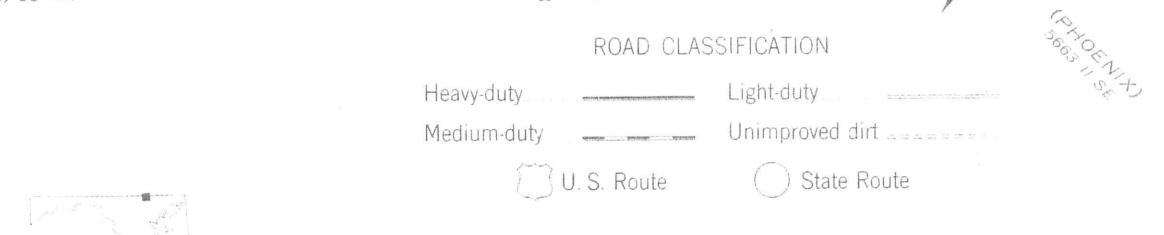


Mapped by the Army Map Service  
Edited and published by the Geological Survey  
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U. S. Soil Conservation Service

Topography from aerial photographs by photogrammetric  
methods. Aerial photographs taken 1943  
Culture revised by the Geological Survey 1958  
Polyconic projection. 1927 North American datum  
10,000-foot grids based on Maryland coordinate system,  
and Pennsylvania coordinate system, south zone  
1000-metre Universal Transverse Mercator grid ticks,  
zone 18, shown in blue  
Unchecked elevations are shown in brown



THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS  
FOR SALE BY U. S. GEOLOGICAL SURVEY, RESTON, VIRGINIA 22092  
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST



Revisions shown in purple compiled by the Geological  
Survey from aerial photographs taken 1974. This  
information not field checked.

NEW FREEDOM, MD.-PA.

N 3937.5-W 7637.5/7.5  
1958  
PHOTOREVISED 1974  
AMS 5663 II NW-SERIES V633

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