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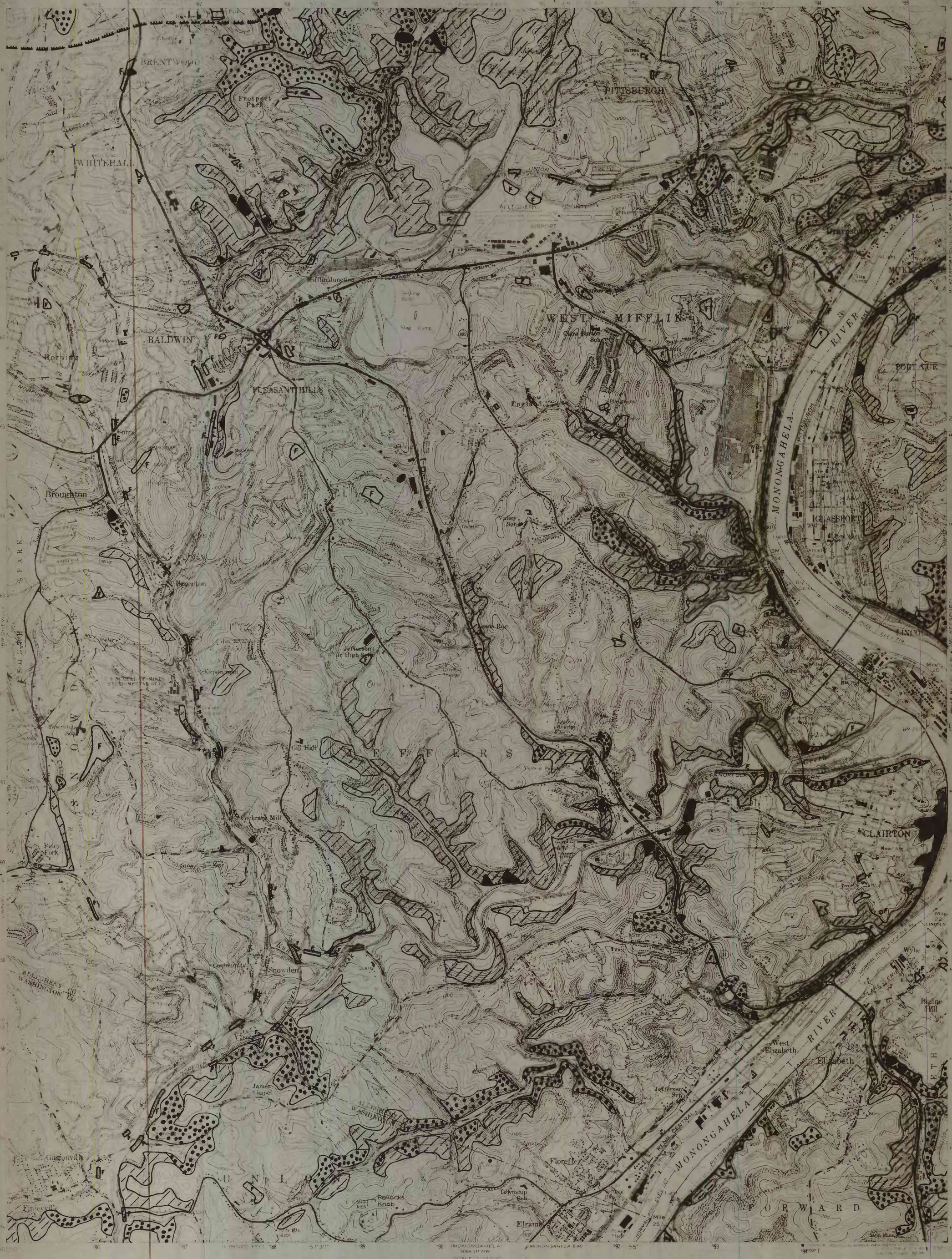
UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Prepared in cooperation with the
APPALACHIAN REGIONAL COMMISSION

CLASSPORT QUADRANGLE
PENNSYLVANIA
7.5 MINUTE SERIES (TOPOGRAPHIC)

74-279



EXPLANATION

Additional information is contained in a leaflet accompanying this map.

RECENT LANDSLIDES
Dominantly earth slumps and earth flows; historically recorded or characterized by fresh scars. Small landslides enclosed by triangles.

DEBRIS SLIDES
Slides in steep narrow valleys; primarily rock, soil and vegetation debris.

PREHISTORIC LANDSLIDES
Dominantly earth slumps and earth flows characterized by hummocky topography and slump benches; relatively stable in natural state but can be reactivated by excavation, loading and changes in ground and surface water conditions. Includes some probable recent landslides not covered by records examined.

SLOPES WITH CONSPICUOUS SOIL CREEP
Clayey soils, generally less than 5 ft. thick, commonly underlain by weathered shale; characterized by shallow, slow but distinct, downslope movement that can be greatly accelerated by overloading from fills or structures.

OUTCROP AREA OF THICK "RED BEDS" AND ASSOCIATED ROCKS
Rock weathers rapidly on exposure; weathered rock and related soil commonly result in soil creep and landslides; cuts and fills in "red beds" generally not stable.

RELATIVELY STABLE GROUND
Most slopes have little susceptibility to landsliding unless extensively modified by man; slight soil creep common on undisturbed slope.

XXXX STEEP SLOPES SUSCEPTIBLE TO ROCKFALL
Dominantly thick-bedded sandstone and limestone, 1 to over 10 ft thick; subordinate flaggy sandy shale and interbedded shale; highly fractured and locally undercut by weathering of shale; in steep natural and cut slopes and cliffs, 15 to over 150 ft high.

MAN-MADE FILL
Heterogeneous soil and rock material; variable susceptibility to slope failure depending on nature of materials, foundation conditions, design and construction. Fills in older urbanized areas mapped only where associated with recent landslides. Fills too small to be shown by pattern identified by letter "F".

GROUND WITH HIGHLY VARIABLE SLOPE CONDITIONS
On the ticked side of the dashed line, ground has been widely disturbed by past and present cut-and-fill operations related to residential and commercial development and (or) surface mining of coal. Thin complex zones of soil and weathered rock mantle the area. These conditions combine to make uncertain the classification of slopes on the basis of conspicuous or relatively minor soil creep.

NOTE
Variations in slope sensitivity may occur at any specific point within a unit. Boundaries largely are inferred and information given is intended as a general guide and should not be construed as applicable to all localities within the area shown. This map cannot be used as a substitute for detailed engineering investigations of specific sites.

HIGHLY SENSITIVE TO DISTURBANCE BY MAN

Base by U.S. Geological Survey, 1969. Research sponsored by the Appalachian Regional Commission under contract no. 74-31.

Map based on 1973 aerial photographs, field reconnaissance, 1973-74; soil surveys by U.S. Dept. Agriculture Soil Conservation Service, and existing geologic data. This map has not been edited or reviewed for conformity with Geological Survey standards and nomenclature.

PENNSYLVANIA
QUADRANGLE LOCATION

LANDSLIDE SUSCEPTIBILITY MAP OF THE GLASSPORT 7 1/2' QUADRANGLE, ALLEGHENY COUNTY AND VICINITY, PENNSYLVANIA

by

William E. Davies

U.S. Geological Survey
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