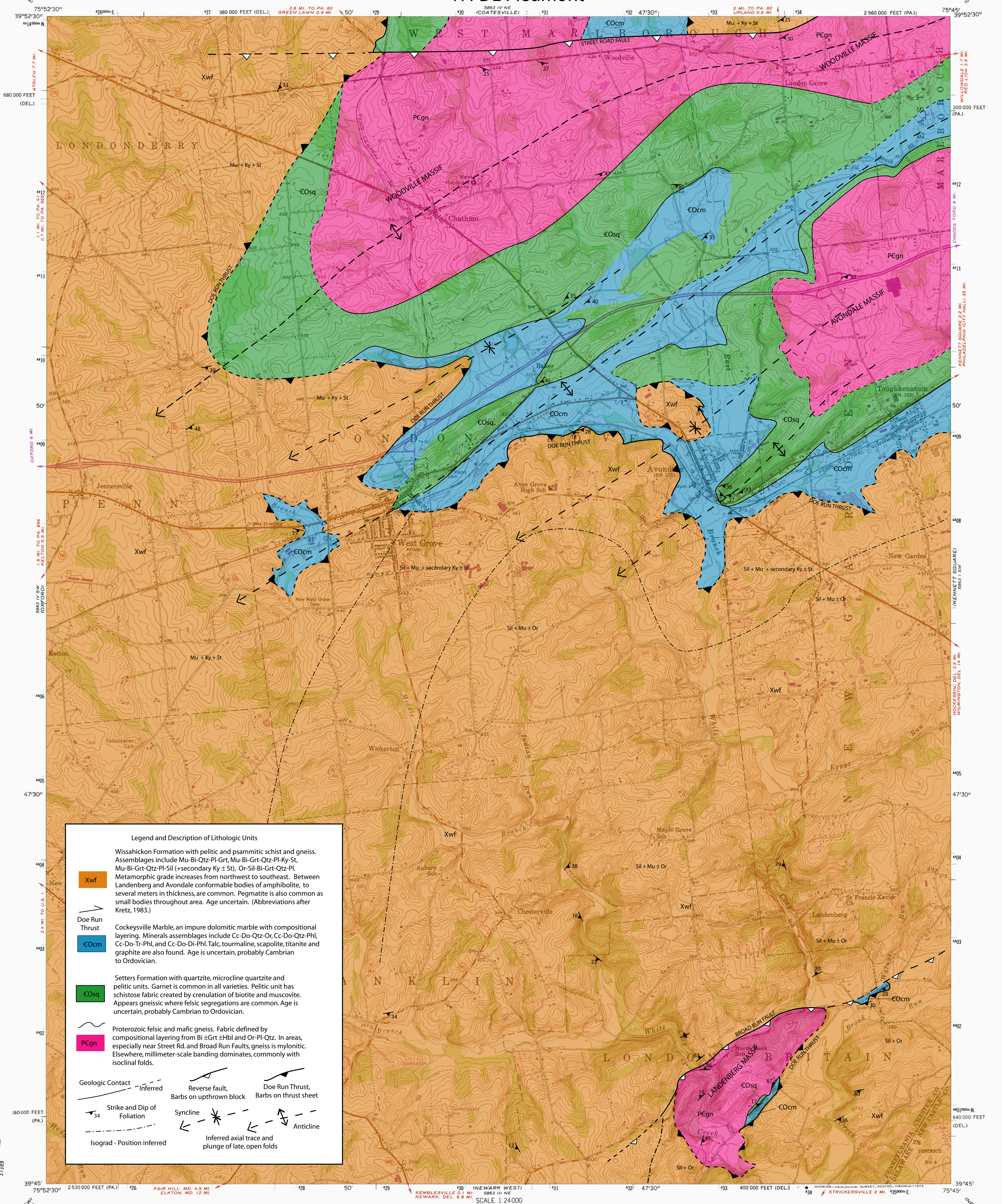


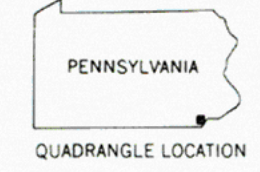
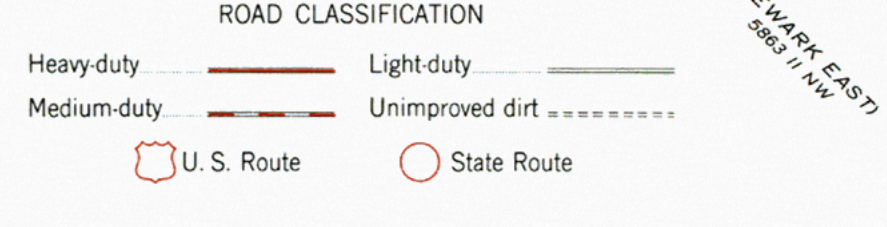
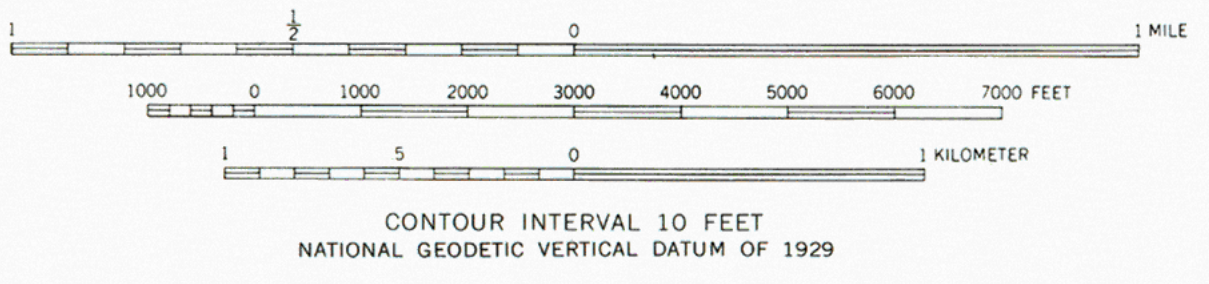
Bedrock Geology of the West Grove Quadrangle PA-DE Piedmont

WEST GROVE QUADRANGLE
PENNSYLVANIA—DELAWARE
7.5 MINUTE SERIES (TOPOGRAPHIC)



Legend and Description of Lithologic Units

- Xwf**
Wissahickon Formation with pelitic and psammitic schist and gneiss. Assemblages include Mu-Bi-Qtz-Pl-Grt, Mu-Bi-Grt-Qtz-Pl-Ky-St, Mu-Bi-Grt-Qtz-Pl-Sil (+secondary Ky ± St), Or-Sil-Bi-Grt-Qtz-Pl. Metamorphic grade increases from northwest to southeast. Between Landenberg and Avondale conformable bodies of amphibolite, to several meters in thickness, are common. Pegmatite is also common as small bodies throughout area. Age uncertain. (Abbreviations after Kretz, 1983.)
 - COcm**
Cockeysville Marble, an impure dolomitic marble with compositional layering. Minerals assemblages include Cc-Do-Qtz-Or, Cc-Do-Qtz-Pl, Cc-Do-Tr-Phl, and Cc-Do-Di-Phl. Talc, tourmaline, scapolite, titanite and graphite are also found. Age is uncertain, probably Cambrian to Ordovician.
 - COsq**
Setters Formation with quartzite, microcline quartzite and pelitic units. Garnet is common in all varieties. Pelitic unit has schistose fabric created by crenulation of biotite and muscovite. Appears gneissic where felsic segregations are common. Age is uncertain, probably Cambrian to Ordovician.
 - PCgn**
Proterozoic felsic and mafic gneiss. Fabric defined by compositional layering from Bi ± Grt ± Hbl and Or-Pl-Qtz. In areas, especially near Street Rd. and Broad Run Faults, gneiss is mylonitic. Elsewhere, millimeter-scale banding dominates, commonly with isoclinal folds.
- Geologic Contact**
 - Inferred: Dashed line with triangles
 - Reverse fault: Solid line with triangles on upthrown block
 - Doe Run Thrust: Solid line with triangles on thrust sheet
 - Strike and Dip of Foliation: Arrow with number
 - Syncline: Dashed line with inward-pointing arrows
 - Anticline: Dashed line with outward-pointing arrows
 - Isograd - Position inferred: Dashed line with triangles
 - Inferred axial trace and plunge of late, open folds: Dashed line with asterisk



WEST GROVE, PA.—DEL.
N 39°45'—W 75°45'/7.5
1953
PHOTOREVISED 1968 AND 1973
AMS 5863 IV SE—SERIES V831