

---- Possible buried terrane boundary

Triassic-Jurassic basins (patterned subsurface; rifting of Pangea)

Igneous Rocks	Terranes Accreted
190–170 Ma dikes, sills, & flows (Rifting of Pangaea)	During Taconian Events
325–285 Ma granitoid plutons (Modern age dates)	(Laurentian affinity, distal, deep-water deposits)
350–325 Ma granitoid plutons (Modern age dates)	Hamburg complex (Hc) Allochthons and olistostromes of deep-water, distal margin clastics and carbonates (Dauphin Formation) thrust into the
380–355 Ma granitoid plutons (Modern age dates)	foreland over the Myerstown euxinic platform limestone, and covered by the Martinsburg Formation. Includes greenschist facies equivalent clastic Cocalico Formation to the SE.
Likely Ordovician plutons (no age dates)	Mostminster torrens
Ordovician plutons (Modern age dates)	Westminster terrane Neoproterozoic/Cambrian–Middle Ordovician deposition & volcanism. Sedimentary component >>> volcanic.
Greenstone and amphibolite (Neoproterozoic to Ordovician) of arc, MORB, and continental affinities. Only Blue Ridge units shown; includes Catoctin Fm. (VA) & Hillabee Greenstone (AL-GA).	Terranes Accreted During Neoacadian to Alleghanian Events (distal, deep-water deposits
Ultramafic rocks (Neoproterozoic to Ordovician)	ànd arc–to–MORB volcanics)
~735 Ma rift-related alkalic plutons (Failed rifting of Rodinia)	Tugaloo (–Milton–Potomac–Philadelphia) terrane Distal Laurentian; Neoproterozoic/Cambrian–Middle Ordovician deposition & volcanism, minor 1.15 Ga basement;
Laurentian Platform	arc-to-MORB volcanics; mélanges. Abundant Ordovician plutons. Sedimentary component >> volcanic.
& Rifted Margin	Smith River allochthon Neoproterozoic metasedimentary and metavolcanic
Clastic Wedges	rocks; Ordovician plutons. May have Laurentian and Peri-Gondwanan provenance.
Alleghanian (Mississippian-Pe)	•
Acadian and Neoacadian (Late Devearly Mississippian)	Carolina superterrane (peri–Gondwanan) Carolina terrane Supracrustal (low grade) components
Taconian	Neoproterozoic deposition and arc volcanism to Ordovician (?) deposition.
Martinsburg-Tuscarora (Caradoc to Llandovery)	Charlotte terrane
Blountian–Sevier–Rockmart Mineral Bluff (Murphy syncline in Blue Ridge) (Llanvirn–Llandeilo)	Infracrustal (high grade) components Neoproterozoic deposition and arc volcanism.
Platform Rocks	Brunswick (Charleston) terrane
Cambrian-Ordovician clastic to carbonate	Rocks of largely unknown composition and provenance (likely peri-Gondwanan)
Rifted Margin Rocks	East Coast Magnetic Anomaly
Neoproterozoic–Early Cambrian clastic & volcanic rocks. Includes Baltimore terrane.	Alleghanian deformation obscured by failed rifting and deposition of Triassic–Jurassic sediments of the South Georgia basin. Continues south to join with Wiggins-Suwannee suture.
Thrust fault	from Reference 2.5.1-85

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Site Region Lithostratigraphic Map Explanation FIGURE 2.5.1-8b

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