

## August 2017 Field Trip - A Geological Town Walk around Conwy





The early buildings of Conwy clearly demonstrate the underlying geology of the area whilst the later buildings underline the way in which improved transport links allowed the introduction of more "exotic" stone.

The solid geology of Conwy essentially consists of Silurian muds laid down of the southern flanks of the subsiding basin of the lapetus Ocean. A significant interruption to these argillaceous sediments was created by the introduction of the sandstones/grits of the Conwy Castle Sandstone which is considered to be a gravity flow or turbidite. The Sulurian is then faulted against the Ordovician Rhyolites that form the rocky outcrops around Bodlondeb.

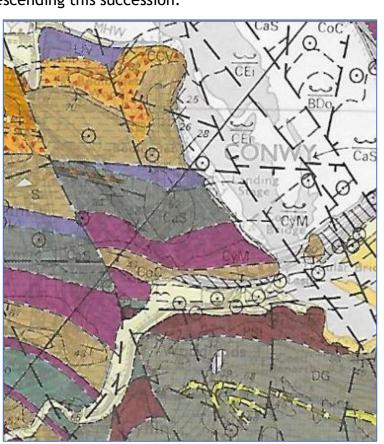
When we walk around the town we shall gradually be descending this succession.

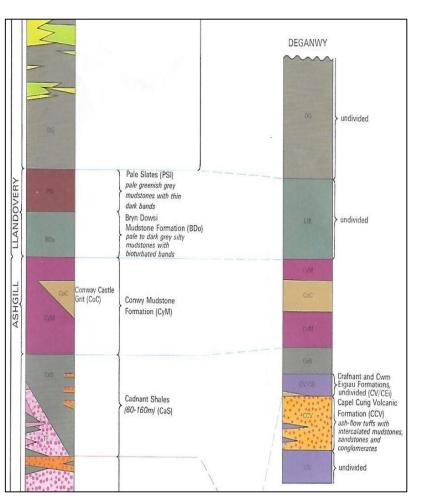
The BGS succession for the area is :

CONWY MUDSTONE ( CONWY CASTLE GRIT WITHIN ) CADNANT SHALE

+++FAULT+++ Cutting out the TAL y FAN and the LOWER CRAFNANT VOLCANICS

CWM EIGIAU RHYOLITES





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## **Building Stones on view:**

Cambrian slate-Ordovician Rhyolite-Silurian Conwy Castle Grit-Permo-Carboniferous GloddaethSandstone-Carboniferous Limestone-Carboniferous SandstoneTriassic Sandstone-Penmaenmawr Granodiorite-Ruabon and Llandudno Junction Bricks

The early buildings of Conwy, the Castle, Town Walls and Aberconwy House are built from the Conwy Castle Sandstone with increasing amounts of rhyolite as one approaches Bodlondeb

With the opening of the railway and improving transport systems then a more diverse range of, and better, building stones became available such as the Carboniferous limestones and sandstones.

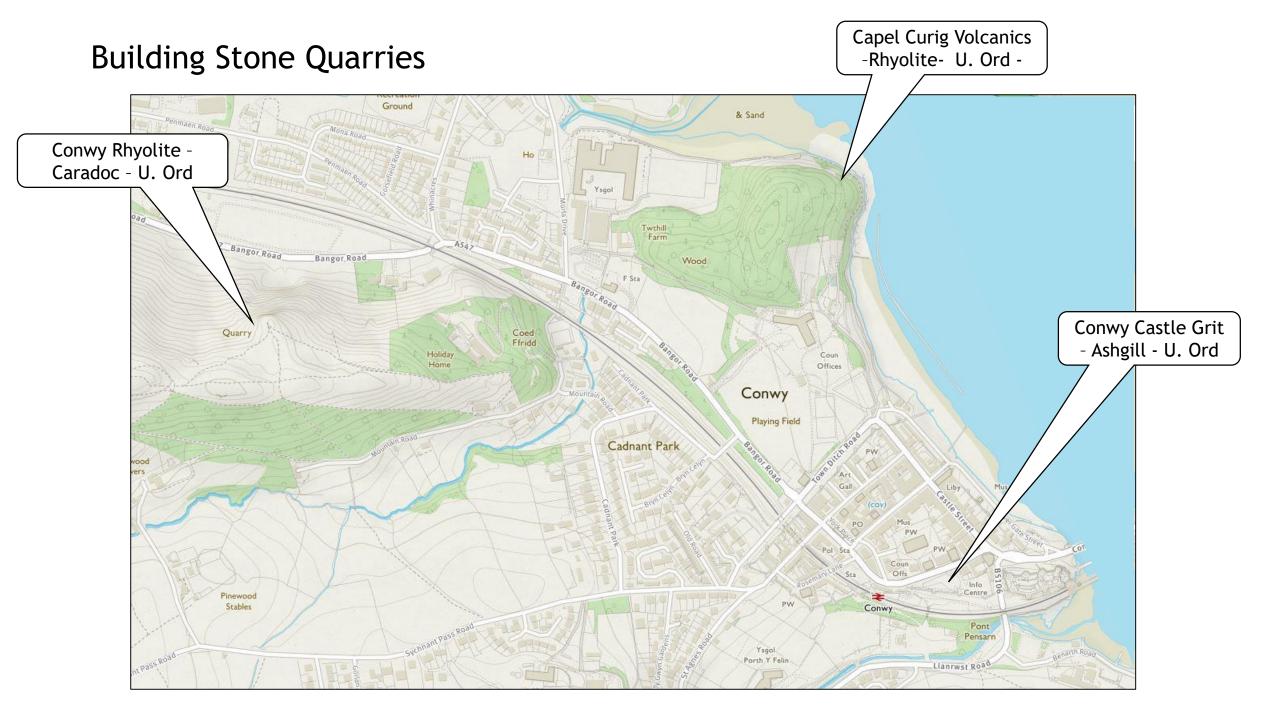
## Locations:

- 1. Conwy Castle -Conwy Castle Grit. Built around 1282-1287 by Edward 1 and his master builder James of St George. Gradually declined in importance and condition and was captured for 3 months by Owain Glyndwr in 1390s. Was held by the Royalists in the Civil War. Sold to Baron Conwy for £100 in 1627
- 2. British Legion Wall Penmaenmawr Granodiorite.
- 3. 3 St Marys Church Conwy Castle Grit, Carboniferous Sandstone and Limestone and Permo-Triassic Sandstone. Built on the site of a Cistercian Monastery c 1192 which was removed to Maenan by Edward. Subsequently rebuilt and altered over the centuries.
- 4. Spar shop front, below windows dark Scandinavian (Bergen, Norway) Larvikite with large iridescent potassium feldspars.
- 5. Palace Cinema Permo-Triassic Sandstone. Built 1936 on site of the Metropolitan Bank
- 6. Castle Hotel Permo-Triassic Sandstone, Penmaenmawr Granodiorite and Ruabon Bricks. Medieval or older origins but new façade dates from 1880's
- 7. Aberconwy House Conwy Castle Sandstone and Rhyolite. C 1417 20
- 8. Town Wall Conwy Castle Sandstone and Rhyolite. Notice that the rhyolite is more evident as a result of being closer to the source.
- 9. Corner of Bodlondeb Park Cadnant Shales.

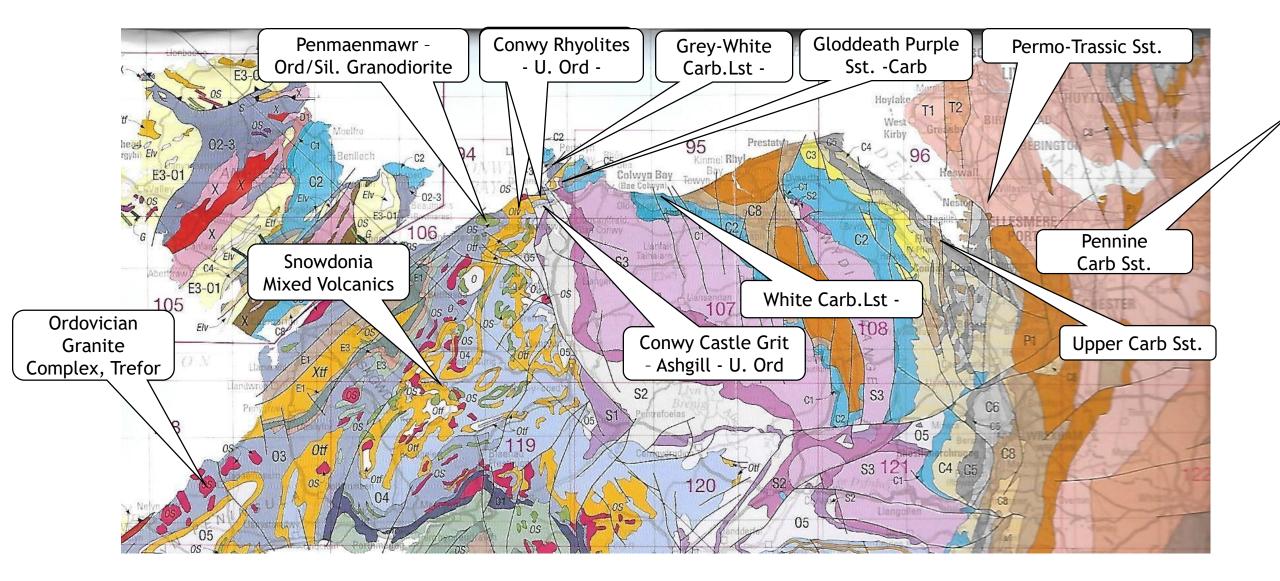
10. Police Station - White Carboniferous Limestone and Penmaenmawr Granodiorite pebble dashing.

11. Railway Station - Entrance pillars of Carboniferous Limestone packed with corals (Lithostrotion sp and ? Dibunophyllum.

12. The Albion



## Quarries supplying Conwy buildings



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