

**15** The United Reform Chapel at the top of Hill Street was built of Bath Stone in 1858. It copes splendidly with the steep slope of Hill Street and neatly closes the east end of Victoria Place. The carvings of swags and symbols, and the barley-sugar-twists to the fronting columns, demonstrates the freestone quality of Bath Stone better than any other building in Newport.

*Return to Stow Hill, turn right and continue down the hill.*

**16** The tower, spire and the front façade of Bethel Community Church (built 1882-3) are of grey-green Pennant Sandstone with Bath Stone dressings.

**17** St Mary's Presbytery, alongside the church, is built of a very distinctive orange coloured limestone, full of shell debris. This is Ham Hill Stone, of Liassic age from the Yeovil area of Somerset. It is widely used in Somerset and the Bristol/Bath area as a dressing with other stones such as Pennant Sandstone. For Newport it is unique.

**18** St Mary's Roman Catholic Church (built 1839-40) has a tower capped with pinnacles, reputedly based upon St Mary's in Stamford. The church itself is of Bath Stone while the attached Infant's School next door is of South Wales Pennant Sandstone with Bath Stone dressings.



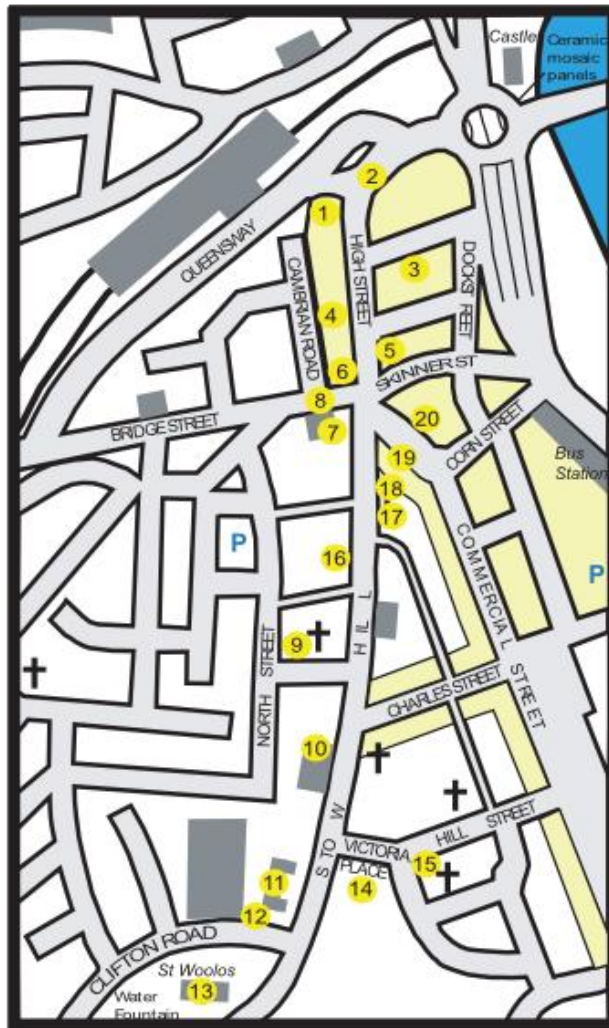
Ham Hill Stone (yellow) and Pennant Sandstone (grey). St Mary's Presbytery

**19** At the bottom of the hill the Westgate Hotel (now Baltica) built in 1886 has walls of small, tablet-shaped blocks of green Pennant Sandstone and window surrounds and pilasters of Beer Stone (hard Chalk) from the coast of southeast Devon. The door is flanked by columns of polished Shap Granite (note the large, pink feldspar crystals typical of this porphyry).



Beer Stone (white) and Pennant Sandstone (grey). Westgate Hotel

*This completes the walk. To return to the station walk back up High Street.*



Eric Robinson. Produced by the Geologists' Association South Wales Group July 2009. Registered Charity 1054303.

If you want to know more about rocks, fossils and the geology of south Wales, contact the Geologists' Association South Wales Group, Cymdeithas y Daearegwy'r Grwp De Cymru, Dept of Geology, National Museum of Wales, Cardiff CF10 3NP.

You can also find us at [www.swga.org.uk](http://www.swga.org.uk)

## Geological Walks in Wales 15



### Building stones of Newport High Street and Stow Hill



The streets of Newport are graced with some good Victorian and Edwardian buildings, which record the prosperity of the years when millions of tonnes of coal left the port each year.

Local stone from the Old Red Sandstone and Coal Measures are joined by stones brought by ship or railway so that it is possible to become familiar with British building stones in walks up Stow Hill and High Street.

St Woolo's Cathedral

**Take care: some of the walk involves walking along or crossing main roads. Cross at pedestrian crossings and beware of traffic.**

This walk is approximately 1.5 kms long and should take about 1.5 hours to complete. The ascent up Stow Hill is quite steep and participants should be careful of the traffic at all times.

*The walk begins at the north end of Cambrian Road, opposite the railway station.*

**1** Seven Bar is an Edwardian building with a curved face to the road. The main face and four upper floors are of yellow Bath Stone with a base of white-weathering Portland Stone, which contains oyster shells. Following the curve into High Street, the building extends into what were Princes Chambers built (1926) of Portland Stone.

*Turn left past the Newport Cross and walk along High Street to the first building on the left.*

**2** Exchange House, the site of the Edwardian general Post Office (built 1907), now a multi-storey car park, has a façade of Portland Stone. Fossils stand out from the weathered surface, while the freestone quality is demonstrated in the carved coat of arms above the entrances.

*Turn back towards Princes Chambers and continue down High Street. Turn left into Market Street.*

**3** On the right the old covered market (built 1887) under an iron-frame and glass roof has walls of bolster-dressed grey-green Coal Measures sandstone (with occasional ironstone nodules) passing up into similarly dressed Old Red Sandstones pitted with cavities. The cornices and window surrounds are of Bath Stone.

*Return to High Street and turn left*



Coat of arms above the door on the old post office in Portland Stone

4 On the opposite side of High Street, a massive building tunnelled through by the Newport Arcade (built 1893) is of yellow Bath Stone.

5 At the bottom of the street, on the left, the Principality Building Society (built 1891) offers materials which were much favoured by late Victorian and Edwardian architects. These are deep red brick (possibly from Ruabon or Malpas) and decorative details moulded in high temperature-fired red terracotta that occur above the ground floor.

6 Opposite, on the junction with Bridge Street, the National Westminster Bank (built 1892) has a base course of silver-grey Cornish Granite, passing up into massive walls of Bath Stone. The contrast in the colour and in the etching of the cross-bedding and the fossil shells which run through the stone faces of the columns, which flank the entrance, reflect the work of the prevailing westerly winds. The vertical fissures in the Bath Stone, now filled with white calcite, are typical of this rock and are known as 'snail-creep'.



HSBC Building, Bridge Street

7 The HSBC building opposite also has a base of Cornish Granite but its higher walls are of yellow sandstone, probably Millstone Grit from Yorkshire or Derbyshire. Look for the later repairs in the granite bases. One is of a very different granite texture and another, a metamorphic gneiss.

Turn right into Bridge Street

8 The statue to Harry William in the middle of Bridge Street has a plinth of grey Aberdeen Granite that contains black patches of the rock into which it was intruded. It sits on a base of local Pennant Sandstone. The street in this area is paved with Huddersfield Green York Stone.

Continue along Bridge Street. At the fork bear left and then turn left into North Street. Walk up the hill, past the car park, until its junction with Havelock Street.

9 The Presbyterian Church of Wales in Havelock Street (built 1864) contains a wide variety of different rock types, colours and textures, to produce a striking façade. There is white limestone with corals and crinoids from Plymouth (Middle Devonian), grey Carboniferous Limestone and some darker Liassic limestones. The igneous rocks include gabbros and granites of different colours. It is possible that some of the stones are ballast bought from the coal exporting shipping lines from distant lands. Bath Stone forms the decorative stone work to the doors and windows.



The Presbyterian Church of Wales, Havelock Street.

Continue along Havelock Street and then turn right into Stow Hill and continue up the right-hand side of the hill.

10 St Woolos' Primary School, Stow Hill (built 1904) is a typical County Board school of the period, grim but solid. This example is of deep red brick with white stone dressings of Portland Stone that contains fossils.

11 Further up the hill, at 100 Stow Hill, the Queen Victoria Memorial Almshouses (built 1901) are neat red brick apartments, related to St Woolos' Cathedral, set about a neat central lawn space.

Turn right into Clifton Road

12 The retaining wall to Clifton Road is made of slabs of Pennant Sandstone set at different angles. Too much cement has been used in the pointing so that the lime is leaching and spreading as a white flowstone dribble over the stones.



Devonian limestone (white), Old Red Sandstone (red) and a piece of granite

13 Dominating the top of the hill is St Woolos' Cathedral. The three storeyed, C15th west tower is built largely of purple-red Old Red Sandstone, probably of the local St Maughn's Group. Intermixed are some conglomerates and sandstones, probably from the Coal Measures. The pale yellow quoins are of local Triassic Sudbrook Sandstone while the later buttresses include Bath Stone and a rather obvious fiery-red render of artificial stone!

The Norman core to the cathedral has external walls of the local St Maughn's Group sandstones. Note that some of these contain neatly drilled holes. These were made by a bivalve, the common piddock *Pholas*, which lives in the brackish waters of the estuary, showing that these stones came from a quarry alongside the estuary. The stone occurs in uneven beds which make it difficult to dress and square. Consequently, they are set in a generous amount of sand-lime mortar.



Piddock boring in Old Red Sandstone, St Woolos' Cathedral

The walls are of brown Coal Measures sandstones in random coursing giving an overall mottled brown effect which is more regular than the mixed lithologies immediately east of the porch. The interior of the cathedral deserves much closer attention but this may be a subject for a future study.

From the cathedral walk back down the east side of Stow Hill to Victoria Place

14 Victoria Place is a sudden surprise as a short but complete early Victorian (1884) stucco-fronted pair of terraces, which might have been lifted from Cheltenham or Gloucester. They stand with their original pavings of sandstone plates, their edge-set sandstone kerbs, and their gutters of squared sandstone plates.

Walk to the End of Victoria Place



United Reformed Chapel, Hill Street (Bath Stone)