

CORK CITY - COUNTY GEOLOGICAL SITE REPORT

NAME OF SITE	Saint Fin Barre's Cathedral
Other names used for site	
IGH THEME	IGH 15 Economic Geology, IGH 3 Carboniferous-Pliocene Palaeontology
TOWNLAND(S)	
NEAREST TOWN/VILLAGE	In Cork City
SIX INCH MAP NUMBER	74-3
ITM CO-ORDINATES	566927E 571462N
1:50,000 O.S. SHEET NUMBER	87 GSI BEDROCK 1:100,000 SHEET NO: 25

Outline Site Description

St Fin Barre's Cathedral, an Anglican church in the Gothic Revival style, was built between 1865 and 1879. Several lithologies local to Cork were used, as well as some from further afield.

Geological System/Age and Primary Rock Type

The rocks used in the construction of St Fin Barre's Cathedral, between 1865 and 1879, are of several different types, provenances and ages.

Main Geological or Geomorphological Interest

Many lithologies are in use in St Fin Barre's Cathedral. Upper Devonian Red Sandstone from Brickfield Quarry was used to build 'invisible walls' for the church building. Lower Carboniferous crinoidal 'Beaumont Dove' limestone from the Beamish estate, likely either Beaumont Quarry or Blackrock Diamond Quarry, was used for the external façade and gargoyles, which were carved in place. The figures seen on the front wall are carved from Ballinasloe limestone, and the quality of the masonry and treatment of the rock types evidence outstanding craftsmanship. Small stalactites and stalagmites have formed on the outside of the building following dissolution and reprecipitation of the limestone building material, representing artificial speleothem features. The internal dressings and great pillars were built using a cream sandstone from Storeton Quarry, Lancashire, and Bath stone, an oolitic limestone from the Jurassic of Bath. The internal walls are lined with stone from each of the Irish provinces: green Connemara marble, from Connacht; black Kilkenny marble from Leinster; blue Armagh marble and white Tyrone marble from Ulster; and Cork Red Marble, from Munster. The Cork Red Marble, which is technically a limestone, has well-defined crinoid stems visible; examples in the north aisle were quarried at Little Island, and in the south aisle were sourced from Fermoy. A dark purple mudstone from the Ballytrasna formation in Fermoy is also seen in the interior of the church, and marble segments, either from Italy or the Pyrenees, were used to form the mosaic in the apse. Dundry Stone from Bristol was used to build the 'Chapel House' doorway. Several other lithologies of unknown provenance are found in the cathedral and in the preserved features from earlier churches on the site. This site is a visually stunning historical resource showing the role of quarried rock in the global economy.

Site Importance - County Geological Site

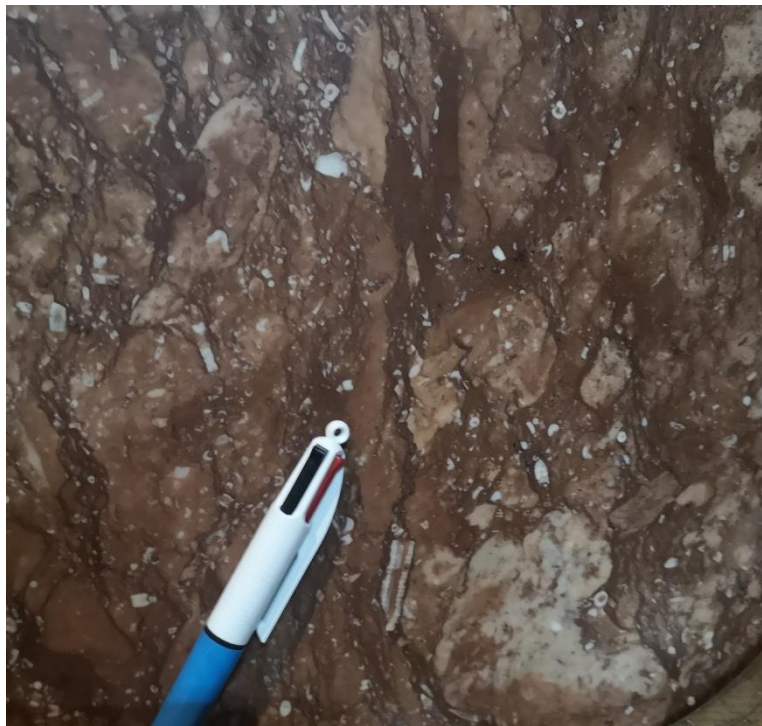
Several different worked rock types are visible in the Cathedral, with outstanding examples from several local quarries, and are easily accessible. This building showcases the importance of economic geology of the region and beyond excellently.

Management/promotion issues

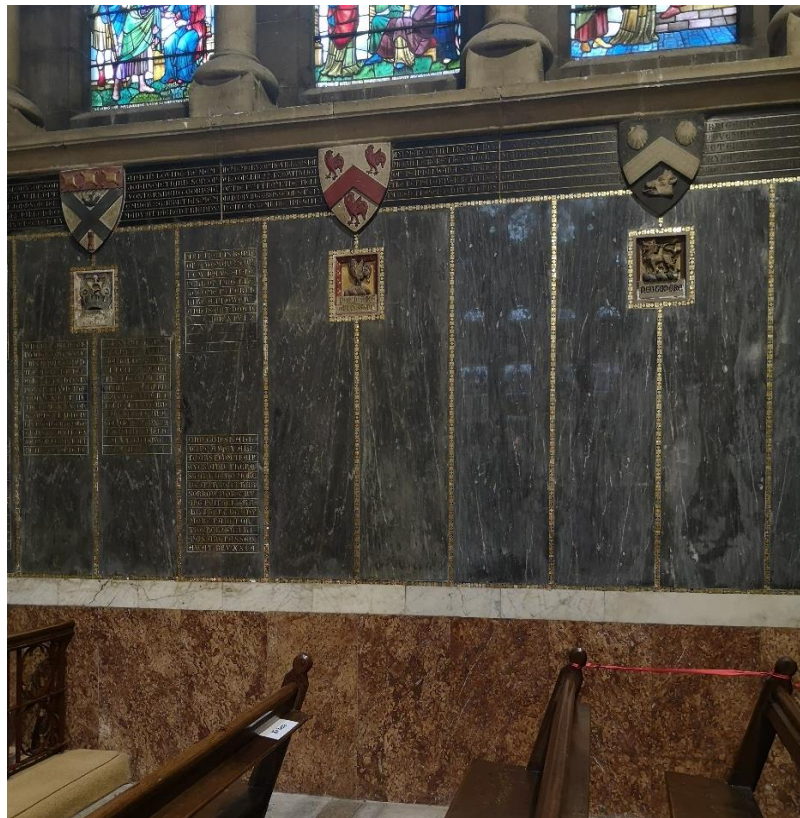
The Cathedral is easily visited, and has well-advertised opening hours. There are not currently any reading materials on the geology of the church for visitors, but the guides and cathedral workers are well versed on the lithologies used in the building.



Left: external façade of St Fin Barre's Cathedral, primarily of Beaumont Dove Limestone – the statues around the doors are from Ballinasloe Limestone. Right: internal dressings, with marble of unknown provenance in the apse, and Bath Stone pillars.



Crinoidal Cork Red Marble is found throughout the cathedral interior, and represents an important natural resource from the region. The fossils are well preserved, and easily visible to the general public.



Internal dressings on the walls include: black Kilkenny Marble; blue Armagh marble; white Tyrone marble; and Cork Red Marble. Connemara marble is found elsewhere in the cathedral, as well as several other lithologies.

