

TIPPERARY - COUNTY GEOLOGICAL SITE REPORT

NAME OF SITE	Laffansbridge Quarry
Other names used for site	Gleesons Quarry (Laffansbridge)
IGH THEME	IGH8 Lower Carboniferous
TOWNLAND(S)	Manserghshill, Graystown
NEAREST TOWN/VILLAGE	Killenaule
SIX INCH MAP NUMBER	54
ITM CO-ORDINATES	618900E 646350N (centre of quarry)
1:50,000 O.S. SHEET NUMBER 66	GSI BEDROCK 1:100,000 SHEET NO. 18

Outline Site Description

An extensive quarry cut into a small, but prominent, steep-sided limestone hill.

Geological System/Age and Primary Rock Type

Bedrock comprises Lower Carboniferous (359-323 Ma) fossil-rich limestone of the Ballyadams Formation, deposited in open marine conditions.

Main Geological or Geomorphological Interest

The quarry at Laffansbridge produces stone for aggregates, chippings, railway ballast, lime dust, screenings, and drainage stone. Limestones of the Ballyadams limestone are worked for aggregate in several quarries in the region. The Ballyadams Formation limestone rocks are the typical 'Burren' type limestone, and are fossiliferous, clean and pale grey in colour. Some micritic beds are present near the base of the quarry; and are covered with thick, soft, brown clay wayboards. Fossils of coral colonies and bryozoa are found in places within the quarry rocks.

The beds in the quarry get much thicker with depth, and dip steeply towards the southeast. These have been studied in detail and are considered to be ramps and flat thrusts associated with the Variscan orogeny (320-280 Ma), and also have Variscan age north to north-northwest trending veins. These weaknesses are again offset by Palaeogene or Neogene -age (65-2 Ma) strike-slip faults. Joints in the rock are also present and visible closer to the surface. They were formed more recently than Neogene times.

The limestone in Laffansbridge Quarry has a well-developed layer of epikarst – enlarged fractures from dissolution of the limestone, in the upper few metres. Evidence of karstic cavities is also present at depth in the quarry.

Site Importance – County Geological Site

This County Geological Site is an important representative site exhibiting fresh and extensive exposures of limestone of the Ballyadams Formation. The southern portion of the quarry area has been designated a pNHA (sitecode 000965) owing to the presence of calcareous grassland there, but the quarry has removed much of this.

Management/promotion issues

As a working quarry, the listing as a County Geological Site has no implications for the normal operation of the quarry, subject to standard permissions and conditions under planning and environmental legislation. In the event of any future changes in quarrying operations, it would be desirable to consider retaining representative faces for geological purposes. As an operating quarry, the site is not suitable for any general promotion. Any correspondence can be made to the owner and operator Gleesons Quarries (Laffansbridge), Laffansbridge, Thurles, County Tipperary. (Phone 052 9156117)



Laffansbridge Quarry.



Steeply dipping beds in the southern face of Laffansbridge Quarry.



Epikarst in the uppermost portion of the exposed limestone.



Ramps and flat thrust faults in the lower beds of limestone.

