

KILKENNY - COUNTY GEOLOGICAL SITE REPORT

NAME OF SITE	Hugginstown M9 Cutting
Other names used for site	
IGH THEME	IGH 10 Devonian
TOWNLAND(S)	Ballygeardra, Carrickshock Commons, Coolmore
NEAREST TOWN	Hugginstown, Ballyhale
SIX INCH MAP NUMBER	Kilkenny 31
NATIONAL GRID REFERENCE	251985 133545 to 251903 134504 (east side) 251835 135006 to 251919 134025 (west side, northern cut) 251948 133627 to 251959 133523 (west side, southern cut)
1:50,000 O.S. SHEET NUMBER	67 1/2 inch Sheet No. 19

Outline Site Description

Road cutting in the M9 motorway, approximately 2 km south of junction 10, comprised of several discrete sections over a total length of 1450 m, with relatively low cliffs of rock.

Geological System/Age and Primary Rock Type

The rocks are of Devonian age (approximately 370 million years). They are sandstones of the Kiltorcan Formation.

Main Geological or Geomorphological Interest

This series of broken cuttings displays good sections of the Kiltorcan Formation. This comprises red and purple and brown/grey sandstones of Devonian age. They were formed in river (fluvial) environments rather than in the sea. They show features such as cross bedding (internal laminations in the sandstone) which are suggestive of the river environment, as well as larger scale but poorly developed channel forms in the beds.

Of additional interest are glacial modifications to the rocks. Where hard sandstone beds occur, some show glacial striae and chattermarks. These are scratches and gouges on the surface of the rock, caused by the grinding action of rocks held within the base of an ice sheet as it moved over the locality. They are oriented 340° to 160°, showing the ice moved north-northwest to south-southeast direction. In addition, on the western side a section of rock pavement shows what are known as P-forms. These are sculpted surfaces on the rock formed by meltwater erosion under high porewater pressures at the base of the ice, due to its great thickness.

Site Importance – County Geological Site

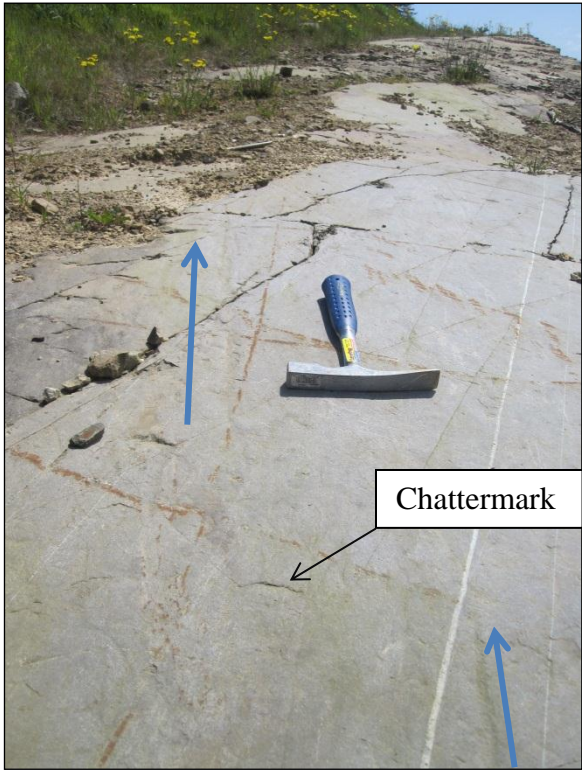
The site is of County Geological Site importance. It is scientifically useful as a representative section of the Kiltorcan Formation which is not well exposed across the southeast region. Only two other County Geological Sites in Kiltorcan Formation were previously identified, but primarily for their palaeontology.

Management/promotion issues

The site is on a motorway and therefore not accessible for visitors. Unfortunately the nature of the rock at this site means that these cuttings will generally weather, degrade and vegetate quicker than similar cuttings in Carboniferous limestone. However the more interesting sections with glacial erosion features are thicker sandstone units and will survive much longer. They could also be managed with very occasional cleaning of loose rock and removal of scrub.



This side excavation could be made accessible with some fencing to the right to isolate it.



Glacial striae, chattermarks and gouges (left) and P-forms (right)



View of cuttings from the over bridge.



Thicker rock sections on the west side.