

TIPPERARY - COUNTY GEOLOGICAL SITE REPORT

NAME OF SITE	Horeabbey
Other names used for site	Knockananulla
IGH THEME	IGH8 Lower Carboniferous, IGH9 Upper Carboniferous
TOWNLAND(S)	Deerpark, Horeabbey, Farranamanagh
NEAREST TOWN/VILLAGE	Cashel
SIX INCH MAP NUMBER	60, 61
ITM CO-ORDINATES	606360E 640300N
1:50,000 O.S. SHEET NUMBER 66	GSI BEDROCK 1:100,000 SHEET NO. 18

Outline Site Description

A wide road section and exposed rock cutting, on the R932 road outside Cashel.

Geological System/Age and Primary Rock Type

Bedrock comprises Lower Carboniferous grey-coloured bedded limestone of the Hore Abbey Formation and silty mudstones of the Upper Carboniferous Killeshin Siltstone Formation. The contact is an unconformity.

Main Geological or Geomorphological Interest

The road section exposes a section of jointed and fractured beds of pale-grey limestone with chert. These exposures of the Horeabbey limestones represent the top part of the formation, where skeletal packstones pass up into cross-bedded grainstones, recording a regressive sequence. This location is one of two important exposure sites in the area that characterise the formation; the other site is at the Rock of Cashel further east, where the upper most part of the formation is also exposed. The Horeabbey Formation is named after exposures identified at Hore Abbey itself, 700 m northeast of the road section.

Namurian siltstones overlie the limestones and are exposed albeit limitedly, in upper part of the section. The limestone is in contact (unconformity) with younger Killeshin Formation bedrock. The Killeshin Formation is a major lithological unit on the Castlecomer Plateau, to the northeast of Cashel. The Killeshin Formation siltstones around Cashel form a small outlier, in unconformable contact with and surrounded by older Lower Carboniferous lithologies. Flattened mollusc shells in the muddy siltstones have enabled the unit to be attributed a Namurian date. The siltstones and sandstones (and some shale) reflect a southward-advancing delta system.

Site Importance – County Geological Site

This is an important County Geological Site because it hosts an accessible location where Lower Carboniferous and Upper Carboniferous rocks are in contact in County Tipperary.

Management/promotion issues

The bedrock exposures are partially vegetated with ivy, scrub and some small tree cover. Some management of the overgrowth would keep the exposures visible and accessible. The grass verge between the cutting and the road was landscaped with new grass and trees in summer 2019. The exposures are accessible along the wide grass verge.



Horeabbey road cutting, viewed looking east.



Horeabbey Limestone Formation exposures in road cutting.



Horeabbey Limestones comprise most of exposed rock cutting. Namurian Killeshin Formation siltstones exposed in the upper section of cutting.

