

## GALWAY - COUNTY GEOLOGICAL SITE REPORT

<b>NAME OF SITE</b>	<b>Caherateemore M17 Road Cut</b>
Other names used for site	
<b>IGH THEME</b>	<b>IGH8 Lower Carboniferous</b>
<b>TOWNLAND(S)</b>	<b>Caherateemore North, Caherateemore South, Sheeaunpark</b>
<b>NEAREST TOWN/VILLAGE</b>	<b>Athenry</b>
<b>SIX INCH MAP NUMBER</b>	<b>71</b>
<b>ITM CO-ORDINATES</b>	<b>546675E 733395N (centre of section)</b>
<b>1:50,000 O.S. SHEET No. 46</b>	<b>GSI BEDROCK 1:100,000 SHEET NO. 14</b>

### **Outline Site Description**

This site comprises an 800 m long road cutting along the M17 motorway, with both high and low cliffs of rock overlain by a veneer of glacial till.

### **Geological System/Age and Primary Rock Type**

The rocks are limestones of Carboniferous age (approximately 330 million years). They are part of the Burren Formation.

### **Main Geological or Geomorphological Interest**

The rocks are limestones of Viséan age, from the Lower Carboniferous Period, part of the Burren Formation. The sections have been cut through a high hill, therefore forming some very high cliffs with spectacular bedrock exposure.

The limestone beds generally dip gently to the south, but the beds in much of the cutting are essentially flat lying.

There are also occasional, well-distributed blobs of the white mineral calcite throughout the cuttings. These may have been developed during the conversion of lime sediment into hard rock (a process called diagenesis). However, they may have replaced the mineral anhydrite which was formed earlier in the process.

There seem to be some small cavities in the bedrock outcrop associated with dissolution and karstification, particularly on the eastern side of the cutting.

The bedrock is overlain by a shallow covering of approximately 1 m - 2 m depth of till (glacial sediment), which was deposited by the last ice sheet to cover the area. The bedrock has been planed along a clear erosive boundary while this material was being deposited.

### **Site Importance – County Geological Site**

The site is of County Geological Site importance as a scientifically useful, well exposed representative section of Carboniferous limestone in central Galway, where it is otherwise poorly exposed. Further comparisons by experts in Carboniferous limestone geology may indicate the bedrock at the site is of national importance as representative of otherwise relatively poorly exposed Carboniferous stratigraphy in the area around central Galway.

### **Management/promotion issues**

This road cutting is completely unsuitable for any general public visits as it is on a motorway. GSI will liaise with TII, the County Council and appropriate authorities to discuss appropriate options for dissemination of information about the geological interest of the site.



View south along the Caherateemore road cut along the M17.



Almost flat beds of limestone, along the western section of the outcrop.



Cavity in karstified bedrock along the eastern side of the cutting.



Nodules and veins of calcite seen as white blobs in the western section.

