

## GALWAY - COUNTY GEOLOGICAL SITE REPORT

<b>NAME OF SITE</b>	<b>Two Mile Ditch Quarry</b>
Other names used for site	Roadstone Galway
<b>IGH THEME</b>	<b>IGH8 Lower Carboniferous</b>
<b>TOWNLAND(S)</b>	<b>Pollkeen, Ballygarraun</b>
<b>NEAREST TOWN/VILLAGE</b>	<b>Galway</b>
<b>SIX INCH MAP NUMBER</b>	<b>82</b>
<b>ITM CO-ORDINATES</b>	<b>532845E 729070N (centre of quarry)</b>
<b>1:50,000 O.S. SHEET No. 46</b>	<b>GSI BEDROCK 1:100,000 SHEET NO. 14</b>

### **Outline Site Description**

A very large working quarry.

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

The quarry extracts Carboniferous Limestone of Lower Carboniferous or Viséan age, which has not been differentiated into different formations in published Geological Survey Ireland maps, but new mapping will be published imminently (late 2019).

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

The quarry is extensive and demonstrates just how uniform and continuous is the Carboniferous Limestone in this part of County Galway. The beds are variable in individual thickness but they are virtually horizontal and laterally very continuous. They indicate that, aside from a relative change in sea level to raise them up as land, they have remained virtually unchanged for 340 million years.

The hydrogeology of the Carboniferous Limestone is also demonstrated partly by the seepage of groundwater at certain horizons where impermeable layers drive water sideways, and the quarry faces allow it to flow over them and precipitate any minerals that are dissolved within it. In this quarry, extensive orange staining at specific lower levels would suggest a high iron content in the groundwater.

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

The large quarry is a good representative site for the Carboniferous Limestone geology of East Galway and warrants recognition as a County Geological Site, even though it would not be accessible to the public.

### **Management/promotion issues**

The quarry produces a wide variety of products (aggregates, readymix and blocks) and is a vital element of Galway's infrastructural network. A retail section demonstrating products derived from Earth resources (but many from other quarries or sites) offers opportunities for geo-education of the general public in the need for quarries such as this to sustain societal needs. However, the working quarry is unsuitable for public access and there is none without express permission of the operators.



Panoramic view of Two Mile Ditch Quarry, looking west at working face.



View of Two Mile Ditch Quarry face, showing uniformity of the near horizontal bedding. The mineral staining (probably iron oxides) is caused by water seepages on specific beds.



