CORK - COUNTY GEOLOGICAL SITE REPORT

NAME OF SITE Other names used for site IGH THEME TOWNLAND(S) NEAREST TOWN/VILLAGE SIX INCH MAP NUMBER ITM CO-ORDINATES 1:50,000 O.S. SHEET NUMBER GIS CODE Baltimore Beacon Beacon Point IGH10 Devonian, IGH13 Coastal Geomorphology Baltimore Baltimore 149, 150 503600E 525480N (beacon) 88 GSI BEDROCK 1:100,000 SHEET NO. 24 CK017

Outline Site Description

The site includes cliff-top outcrops, sea-cliff exposures, and a series of deep geos in the bedrock on either side of the Beacon headland southwest of Baltimore.

Geological System/Age and Primary Rock Type

Bedrock is sandstone and mudstone of the Sherkin Formation, which is of Upper Devonian age (c. 382-359 million years old). The deep sea inlets (geos) have been formed in the Holocene (post-glacial) period, since the last glaciation, though they potentially may have been partially formed much earlier in either the Neogene or Quaternary periods.

Main Geological or Geomorphological Interest

The town of Baltimore stands on the northern side of a peninsula formed of Old Red Sandstone of the Sherkin Formation, which comprises green and grey, medium-to-fine-grained sandstone, alternating with subordinate grey-green and purple mudstone. Smooth bedding planes in the sandstone and mudstone are prominent where the cliffs follow the geological strike, and alongside gorges excavated along the strike, as seen beneath the 15 m high Beacon on Beacon Point. The sandstone displays large-scale trough and planar cross stratification, with individual sets up to 1.5 m thick.

The type section for the Sherkin Formation is on Sherkin Island, which lies approximately 400 m west of the site.

The southern coastal slopes and cliffs of the peninsula are incised by narrow valleys at Broad Cove and Eastern Hole, which run ESE-WNW, and are therefore transverse to the ENE-WSW strike of the bedrock.

Site Importance – County Geological Site

This is an excellent site for viewing the rocks of the Sherkin Formation both at your feet, as well as in the surrounding cliffs. The spectacular nature of the deep incisions made by the sea into the coastal bedrock can be easily appreciated when viewed from this elevated site.

Management/promotion issues

The site is accessible via a long, *cul-de-sac* laneway, which ends at the entrance to the Beacon walkway. High, sheer cliffs bound each side of the beacon site, and care should be taken when walking on these clifftops; ideally in calm weather conditions. An information signboard illustrating the coastal geomorphological features and the bedrock geology of the site would be a valuable addition to this popular visitor locality.



Sandstone and mudstone of the Sherkin Formation cropping out around the Beacon.



Bedrock of the Sherkin Formation exposed on Sherkin Island, as seen from the Beacon.



The deeply incised Sherkin Formation rocks at Broad Cove, beneath the Beacon.



The steeply-dipping nature of the Sherkin Formation sandstone and mudstone rocks can be seen clearly in the exposed cliffs at Eastern Hole.

