CORK CITY - COUNTY GEOLOGICAL SITE REPORT

NAME OF SITE Ballinlough Fields

Other names used for site Ballinlough Quarry, Japanese Gardens

IGH THEME IGH 7 Quaternary, IGH 1 Karst, IGH 15 Economic Geology

TOWNLAND(S)

NEAREST TOWN/VILLAGE In Cork City

SIX INCH MAP NUMBER 74-4

ITM CO-ORDINATES 569041E 570663N

1:50,000 O.S. SHEET NUMBER 87 GSI BEDROCK 1:100,000 SHEET NO: 25

Outline Site Description

In the northwest corner of the park, a ~100m long limestone outcrop, formerly a quarry face, exhibits a karst system partially infilled by glacial deposits.

Geological System/Age and Primary Rock Type

This outcrop is of a crinoidal limestone from the Little Island Formation, from the Dinantian of the Carboniferous, with diamict infilling of a minor karstic system.

Main Geological or Geomorphological Interest

Karst features are visible at this site, including a vertical shaft ~1 m in diameter and with ~3m of height exposed at the eastern end of the outcrop. A few metres to the west, another shaft and a small cave are completely infilled with a diamict. The deposits are supported by subangular, pebble-sized clasts, primarily of red sandstone. Partial collapse of karst features in one place has resulted in several angular limestone blocks set within the diamict. The sub vertical bedding planes highlight weathered out crinoid fossils, and exhibit crystals of pale pink vein quartz up to 1 cm in diameter. While little is known of the precise use for the limestone quarried here, gouge marks approximately 50 cm by 3 cm are visible along the rock face, in one place retaining a now-rusted spike, and acting as a visual reminder of the historic quarrying activity at this locality.

Site Importance - County Geological Site

This outcrop retains much of its original quarry character, but arguably more importantly, the relationship between the limestone's karst features and subsequent partial infilling with glacial deposits is particularly striking.

Management/promotion issues

The outcrop, which is easy to access in a public park, has areas with extensive vandalism, and there is a lot of litter near the rock face. This site would benefit from promotion and maintenance as well as raising awareness.



Full extent of outcrop in the park – looking N.



Left: Infilled karst chimney and second infilled cavity. Right: Poorly sorted glacial till found within the karst system.

