



An Bord Pleanála  
64 Marlborough Street  
Dublin 1  
County Dublin

Re: Proposed Application for Broadmeadow Way

Your Ref:  
Our Ref: 19/126



A chara,

With reference to the email received on 7 June 2019, concerning the proposed application for Broadmeadow Way, Geological Survey Ireland (a division of Department of Communications, Climate Action and Environment) would like to make the following comments.

Geological Survey Ireland provides information on all aspects of the geology of Ireland on our Map Viewer available on the GSI website [www.gsi.ie](http://www.gsi.ie). There are multiple layers of data available including Geology, Groundwater, Quaternary, Landslides, Physiographic Units and Geological Heritage. We would encourage the use of our [Map Viewer](#) when undergoing the planning process.

#### Geoheritage

Geological Survey Ireland (GSI) is in partnership with the National Parks and Wildlife Service (NPWS, Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs) to identify and select important geological and geomorphological sites throughout the country for designation as geological NHAs (Natural Heritage Areas). This is addressed by the Irish Geoheritage Programme (IGH) of GSI, under 16 different geological themes, in which the minimum number of scientifically significant sites that best represent the theme are rigorously selected by a panel of theme experts.

County Geological Sites (CGS), as adopted under the National Heritage Plan, include additional sites that may also be of national importance but which were not selected as the very best examples for NHA designation. All geological heritage sites identified by GSI are categorised as CGS pending any further NHA designation by NPWS. CGS are now routinely included in County Development Plans and in the GIS of planning departments, to ensure the recognition and appropriate protection of geological heritage within the planning system.

County Geological Sites in audited and unaudited counties can now be viewed online under the Geological Heritage tab on the Geological Survey Public Data Online Viewer at: [Geological Survey's Online Viewer](#) or via a direct link at: [Geoheritage Online Viewer](#). Audits carried out for Co. Fingal were completed in 2007.

Our records show that there is a CGS located in proximity to the proposed application:

**Malahide Point, Co. Fingal (GR 324000 246000) under IGH 13, Coastal Morphology.**

This large geomorphological feature composed of a broad dune system and a long beach to its east is formed by the transport of beach material (primarily in this case of sand and shingle) by a process called longshore drift. This occurs when waves approach a shore obliquely and push transported beach deposits along the coast in the direction of the waves. A spit will form when there is a change in the shape of the coastline, such as a bay or small inlet, as seen north of Malahide. This causes the transported material to stretch out across the mouth of the bay to form what is called a spit. The continued flow of the Broadmeadow River prevents the spit from closing off and forming a lagoon. (Site report from the Fingal Audit is attached).



Roinn Cumarsáide, Gníomhaithe  
ar son na hAeráide & Comhshaoil  
Department of Communications,  
Climate Action & Environment



**Geological Survey**  
Suirbhéireacht Gheolaíochta  
Ireland | Éireann

With the current plan, there is no envisaged impact on the integrity of CGSs by the proposed developments. However, if the proposed development plan is altered, please contact Siobhán Power at [Siobhan.Power@gsi.ie](mailto:Siobhan.Power@gsi.ie) for further information and possible mitigation measures if applicable.

Geological Survey Ireland would like to offer help with interpretative signs along Broadmeadow Way to explain the interesting geological features there, if appropriate. We were recently involved with the new signage along the Portmarnock coast.

### Recommendations

Should development go ahead, and all other factors considered, Geological Survey Ireland would much appreciate a copy of reports detailing any site investigations carried out. Should any significant bedrock cuttings be created, we would ask that they will be designed to remain visible as rock exposure rather than covered with soil and vegetated, in accordance with safety guidelines and engineering constraints. In areas where natural exposures are few, or deeply weathered, this measure would permit on-going improvement of geological knowledge of the subsurface and could be included as additional sites of the geoheritage dataset, if appropriate. Alternatively, we ask that a digital photographic record of significant new excavations could be provided. Potential visits from Geological Survey Ireland to personally document exposures could also be arranged.

The data would be added to GSI's national database of site investigation boreholes, implemented to provide a better service to the civil engineering sector. Data can be sent to Beatriz Mozo, Land Mapping Unit, at [Beatriz.Mozo@gsi.ie](mailto:Beatriz.Mozo@gsi.ie), T: 01 678 2795.

### Other Comments

Geological Survey Ireland is the national earth science agency and has datasets on Bedrock Geology, Quaternary Geology, Geological Heritage Sites, Mineral deposits, Groundwater Resources and the Irish Seabed. These comprise maps, reports and extensive databases that include mineral occurrences, bedrock/mineral exploration groundwater/site investigation boreholes, karst features, wells and springs. Please see our [website](#) for data availability.

I hope that these comments are of assistance, and if we can be of any further help, please do not hesitate to contact me, or my colleague Siobhán Power ([Siobhan.Power@gsi.ie](mailto:Siobhan.Power@gsi.ie)).

Le meas,



Amrine Dubois Gafar  
Graduate Geologist  
Geoheritage Programme  
Geological Survey Ireland



## FINGAL - COUNTY GEOLOGICAL SITE REPORT

NAME OF SITE	Malahide Point		
Other names used for site			
IGH THEME:	IGH 13 (Coastal Geomorphology)		
TOWNLAND(S)	Corballis		
NEAREST TOWN	Donabate		
SIX INCH MAP NUMBER	12		
NATIONAL GRID REFERENCE	324000 246000 = O 24 46		
1:50,000 O.S. SHEET NUMBER	43, 50	1/2 inch Sheet No.	13

### Outline Site Description

Dunes and a sand/shingle spit.

### Geological System/Age and Primary Rock Type

Recent geomorphological landforms.

### Main Geological or Geomorphological Interest

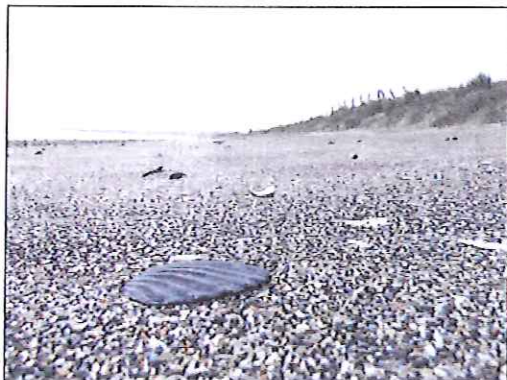
This large geomorphological feature composed of a broad dune system and a long beach to its east is formed by the transport of beach material (primarily in this case of sand and shingle) by a process called longshore drift. This occurs when waves approach a shore obliquely and push transported beach deposits along the coast in the direction of the waves. A spit will form when there is a change in the shape of the coastline, such as a bay or small inlet, as seen north of Malahide. This causes the transported material to stretch out across the mouth of the bay to form what is called a spit. The continued flow of the Broadmeadow River prevents the spit from closing off and forming a lagoon.

### Site Importance

This dune system is based on a shingle spit and is one of the best-developed and most natural in the country.

### Management/promotion issues

Malahide sand spit is surrounded and partly included in the existing Malahide Estuary pNHA and SAC (205). The beach and sand dunes are generally well maintained. Most of the small peninsula belongs to a local golf club, whereas the beach is public and can be accessed from the main road. Any change of land use of the spit from the existing golf links could be detrimental to the integrity of the spit.



Left: Sand and shingle deposits found along the east and southeast shores of Malahide Point.  
Right: An elevated view of Malahide Point from near the summit of the Ben of Howth.

# Malahide Point

