



Development Plan Submissions
Strategic and Economic Development
Cork City Council
City Hall
Anglesea Street
Cork, T12 T997

30 September 2021

Re: Draft Plan Consultation Phase of the Cork City Development Plan 2002-2028

Your Ref: n/a

Our Ref: 21/272 [c.f. 20/137, 20/266]

Dear Sir/Madam,

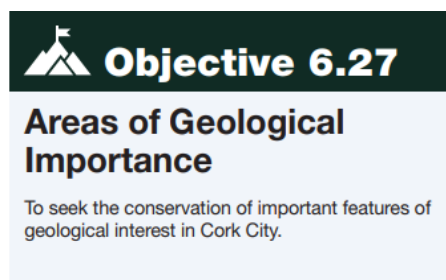
Geological Survey Ireland is the national earth science agency and is a division of the Department of the Environment, Climate and Communications. We provide independent geological information and advice and gather various data for that purpose. Please see our [website](#) for data availability. We recommend using these various data sets, when conducting the EIAR, SEA, planning and scoping processes. Use of our data or maps should be attributed correctly to 'Geological Survey Ireland'.

With reference to your letter dated 26 July 2021, concerning the Draft Plan Consultation Phase of the Cork City Development Plan 2002-2028, Geological Survey Ireland would encourage use of and reference to our datasets. Please find attached a list of our publicly available datasets that may be useful to the environmental assessment and planning process. We recommend that you review this list and refer to any datasets you consider relevant to your assessment. The remainder of this letter and following sections provide more detail on some of these datasets.

Geoheritage

We welcome the inclusion of the of the two unaudited County Geological Sites (CGSs) in Section 4.8.1 'Geological Sites', and delineated in map form in Figure 4.7 'Sites of Geological Interest' in the draft SEA report.

in Chapter 6, Section 6.72 'Geology' in the draft plan, we are pleased to see the inclusion of Objective 6.27:



The Geological Heritage Programme views the Local Authorities as critical partners in protecting, through the planning system, those CGS which fall within their county limits. In many cases these are often sites of high amenity or educational value, already zoned or listed in the plan. Listing in the CDP provides protection of the sites against potentially damaging developments that normally require planning permission, such as building, quarrying, landfilling or forestry. It is also important that the democratic process of public consultation and approval by councillors of the CDP means that stakeholders in the sites and all the local community can buy into the process.

CGSs have been adopted in the National Heritage Plan, and will form a major strand of geological nature conservation to complement the various ecological and cultural conservation measures.



It is important to note however, that management issues for the majority of geological heritage sites may differ from ecological sites, and in some cases development may facilitate enhanced geological understanding of a site by exposing more rock sections - for example, in a quarry extension. Consultation at the earliest stages can identify any issues relevant to an individual site or proposed development.

County Geological Sites are the optimal way of addressing the responsibility of each authority under the Planning and Development Act 2000 and its amendments, to protect sites of geological interest. It would also be necessary to include a policy objective to protect geological NHAs as they become designated and notified to the Local Authority, during the lifetime of the Plan.

We would like to draw your attention to one of the recipients of Geological Survey Ireland funding under the Geoheritage Grant Scheme 2020/21 [We offer a number of small grants each year to support the sustainable development, promotion and recognition of Ireland's geoheritage. These grants are aimed at local community-driven outreach and development initiatives with a geoheritage theme. The grants are made through an open competitive application process].

Hardcore Cork (Geology in the City)

The goal of this project is to link the archaeological and historical built heritage of Cork City to its geology of Devonian sandstones, Carboniferous limestones and Quaternary sands and gravels. In doing so, it can make Cork's geoheritage accessible and engaging to local people. The project will use online innovations, a geology trail, exhibition and schools outreach to link Cork City's historical heritage to its geology.

This project has the potential to align with the landscape and natural heritage themes in Chapter 6 'Green and Blue Infrastructure, Open Space and Biodiversity', the educational aims in Chapter 3 'Delivering Homes and Communities' and tourism in Chapter 7 'Economy and Employment'. For further information please see their website www.hardcorecork.ie.

As always we are available if you require any further information, please feel free to contact Clare Glanville (Clare.Glanville@gsi.ie).

Groundwater

In the SEA environmental report, we welcome the inclusion of our Groundwater data sets in 4.9.5 'Ground Water' and 4.9.6 'Aquifer Vulnerability and Productivity' and as maps in Figure 4.12 'Groundwater Vulnerability' and Figure 4.13 'Groundwater Productivity'. We are pleased to see mention of our Groundwater maps within Section 9.9 'Water Quality' of the draft plan. Please ensure that use of our data or maps is attributed correctly to 'Geological Survey Ireland'.

Geothermal Energy

We note reference to geothermal energy in Objective 9.14 of the draft plan:

Objective 9.14
Renewable Energy
To promote the increased use of renewable energy resources in Cork City such as solar, wind, geothermal, heat pumps and district heating.

Geothermal energy harnesses the heat beneath the surface of the Earth for heating applications and electricity generation, and has proven to be secure, environmentally sustainable and cost effective over long time periods. Geothermal applications can range in depth from a few metres below the surface to several kilometres.



Ireland has widespread shallow geothermal resources for small and medium-scale heating applications, which can be explored online through Geological Survey Ireland's Geothermal Suitability maps for both domestic and commercial use. We recommend use of our [Geothermal Suitability maps](#) to determine the most suitable type of ground source heat collector for use with heat pump technologies. Ireland also has recognised potential for deep geothermal resources.

The Roadmap for a Policy and Regulatory Framework for Geothermal Energy was launched at the Geoscience 2020 Conference in November 2020. The [Assessment of Geothermal Resources for District heating in Ireland](#) and the [Roadmap for a Policy and Regulatory framework for Geothermal Energy in Ireland](#) documents have been developed to support the Government's commitments under the Climate Action Plan 2019 and the Programme for Government.

For further information please see our [Geoenergy pages](#) on our website or contact the [Groundwater and Geothermal Unit](#) of the Geological Survey Ireland directly.

Geohazards

We welcome the inclusion of our Landslide Events and Landslide Susceptibility database to highlight areas of risk in Cork City in Section 4.8.3 'Landslides' and as a map in Figure 4.8 'Landslide Susceptibility and Previous Landslide Events' of the draft SEA report.

Natural Resources (Minerals/Aggregates)

In the SEA environmental report, Section 4.11.8 'Minerals and Aggregates', we are pleased to see mention of our Aggregate Potential Mapping dataset and our Mineral map in Figure 4.17 'Minerals Localities'.

Geotechnical Database Resources and Bedrock Geology and 3D Quaternary Models

Geological Survey Ireland continues to populate and develop our national geotechnical database and viewer with site investigation data submitted voluntarily by industry. The current database holding is over 7500 reports with 134,000 boreholes; 31,000 of which are digitised which can be accessed through downloads from our [Geotechnical Map Viewer](#). We would encourage the use of this database as part of any baseline geological assessment of the proposed development as it can provide invaluable baseline data for the region or vicinity of proposed development areas. This information may be beneficial and cost saving for any site-specific investigations that may be designed as part of the project. Our 3D models can help stakeholders visualize, understand and characterise geology, offering a key element of geotechnical risk management by identifying areas requiring further site investigation. Further information on the GeoUrban Bedrock and Quaternary 3D models of Cork are available [here](#) and [here](#).

Geophysical data

Geological Survey Ireland produces high-resolution geophysical data (Magnetic field, electrical conductivity, natural gamma-ray radiation) of soils & rocks as part of the [Tellus programme](#). These data currently cover approximately 75% of the country and provide supporting geological information on a regional scale useful for assessing environmental impact and risk.

The [Tellus programme](#) provides expertise to the Environmental Protection Agency (EPA) for the determination of radon risk. The data is used in mineral exploration or is useful in aiding site investigation works for large scale projects.

The GeoUrban Bedrock Geology and 3D Quaternary Models, Geochemistry and Geophysical would be useful additions to the list of Geological Survey Ireland datasets that would be useful in "planning and assessing individual projects with regard to the environmental topic(s) of soil and/or material assets", in Sections 4.8 'Soil' and 4.11.8 'Minerals and Aggregates' within the draft SEA report.



An Roinn Comhshaoil,
Aeráide agus Cumarsáide
Department of the Environment,
Climate and Communications



Geological Survey
Suirbhéireacht Gheolaíochta
Ireland | Éireann

I hope that these comments are of assistance, and if we can be of any further help, please do not hesitate to contact me Clare Glanville, or my colleague Trish Smullen at GSIPanning@gsi.ie.

Yours sincerely,

Clare Glanville
Senior Geologist
Geological Survey Ireland

Enc: Table - Geological Survey Ireland's Publicly Available Datasets Relevant to Planning, EIA and SEA processes.