

Local Development Plan – Preparatory Studies: Discussion Paper 9: Minerals	27th July 2016
Planning Committee	

Linkage to Council Strategy (2015-19)	
Strategic Theme	Outcome
Protect the environment in which we live	<ul style="list-style-type: none"> • All environments in the area will benefit from pro-active decision making which protects the natural features, characteristics and integrity of the Borough; • Our natural assets will be carefully managed to generate economic and social returns without compromising their sustainability for future generations.
Lead Officer	Sharon Mulhern
Cost:	N/A

1.0 Background

1.1 This is the ninth topic-related preparatory paper presented to Members, and relates to Minerals.

1.2 Key outputs of the paper are:

- a. to provide Members with the **legislative background** relating to minerals;
- b. to set out the **regional planning context** pertaining to minerals;
- c. to provide information on mineral activity in the Borough;
- d. to **outline the economic contribution** mineral activity makes locally;
- e. to provide information to assist Members to identify potential issues that may need to be given further consideration in the production of the **Local Development Plan (LDP)**.

1.3 This information will be kept under review and will be presented to Members, when necessary, throughout the LDP process.

2.0 Financial Implications

2.1 None.

3.0 Other Implications

3.1 None.

4.0 Recommendation

4.1 **IT IS RECOMMENDED** that Members endorse the use of the information contained within this paper in the preparation of the Local Development Plan.

Appendix 1

Discussion Paper 9: Minerals

LDP PREPARATORY STUDIES: DISCUSSION PAPER 9 -MINERALS

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1.0 Introduction

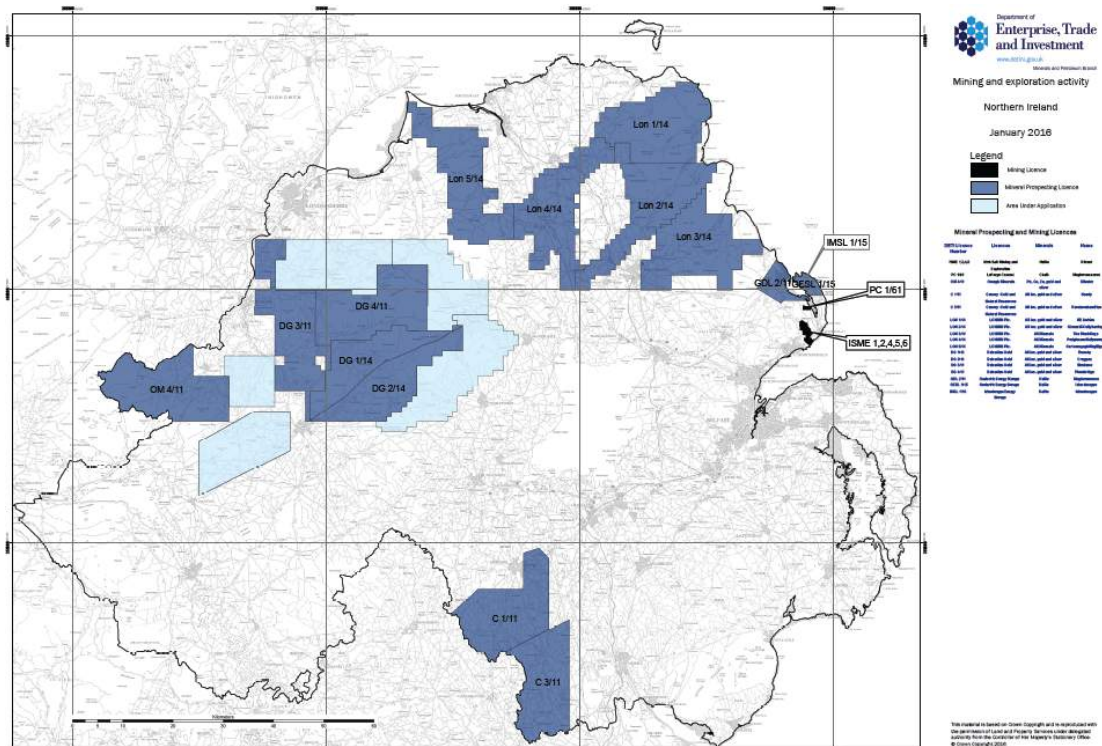
- 1.1 The purpose of this paper to provide Members with background information relating to the preparation of the Local Development Plan (LDP).
- 1.2 The paper relates to minerals and the implications for land use. It provides information on:
- The legislative background and regional planning context for minerals development;
 - The role of minerals in the economy of Northern Ireland and the Borough; and
 - An overview of known existing mineral activity within the Borough.
- 1.3 The minerals industry largely encompasses existing quarries, as well as a range of other products such as oil and gas, lignite, sand and gravel, salt, base metals, precious metals, road aggregate, and building stone.

2.0 Legislative Background

i. Mineral Licencing

- 2.1 The Department of the Economy (formerly the function of DETI) is responsible for mineral prospecting licences under the Mineral Development Act (NI) 1969 for the exploration of minerals. Licences apply to all minerals except:
- A few mineral deposits (mainly salt);
 - 'common' substances including crushed rock, sand, gravel and brick clay, and agricultural soil.
- 2.2 Licences are also required from the Crown Estates Commissioners as well as the Department where exploration for precious metals (gold, silver) is proposed. A separate licence is required to mine minerals.
- 2.3 At present, there are seventeen mineral prospecting and mineral licences in Northern Ireland, with fifteen being prospecting licences. Map 1 shows the distribution across Northern Ireland. Appendix 1 provides an enlargement of Map 1 with details relating to the Borough. There are six prospecting licences within the Borough, and a further two areas under application (June 2016). The prospecting licences are for either all minerals (precious metal and base metal – Lonmin), or all including gold and silver (precious metal – Dalradian Gold).

Map 1: Distribution of Mineral Licences and Prospecting Licences in NI at June 2016



Source: https://www.economy-ni.gov.uk/sites/default/files/publications/deti/1601-Minerals-License-Map_4.pdf

NB: further information on the licences in the Borough and the key at a legible size is contained in Appendix 1.

ii. Planning

- 2.4 The Planning Act (Northern Ireland) 2011 describes minerals as:
all minerals and substances in or under land of a kind ordinarily worked for removal by underground or surface working, except that it does not include turf cut for purposes other than sale.
- 2.5 Mineral Working Deposit is described as:
Any deposit of material remaining after minerals have been extracted from land or otherwise deriving from the carrying out of operations for the winning and working of minerals in, on or under land.
- 2.6 Mineral Operations are:
(a) *the winning and working of minerals in, on, or under land whether by surface or underground working; and*
(b) *the management of waste resulting from the winning, working, treatment and storage of minerals,*
and, for the purposes of paragraph (b), treatment does not include smelting, thermal manufacturing processes (other than the burning of limestone) and metallurgical processes. (Part 15, pages 160-161.)

iii. Permitted Development (PD) Rights for Minerals Exploration

- 2.7 Members will be aware of the recent DoE 'Call for Evidence' on PD Rights for Minerals Exploration following the Members Workshop held on 12th May 2016.
- 2.8 Article 3 of The Planning (General PD) Order (NI) 2015 (The GPDO) currently grants planning permission for a range of minerals development described in its Schedule (Parts 16 & 17) subject to provisions of this Order and Regulations 55 & 56 of the Conservation (Natural Habitats, etc) Regs (NI) 1995(a). This is currently under review.

iv. Review of Old Mineral Permissions (ROMPs)

- 2.9 European legislation, in the form of the Environmental Impact Assessment (EIA) Directive, implemented via the Planning (Assessment of Environmental Effects) Regulations (NI) in 1989 and the subsequent Planning (Environmental Impact Assessment) Regulations (NI) 1999 (re-enacted in 2015) introduced more stringent assessment criteria for the environmental impacts of mineral development than had occurred historically.
- 2.10 The 2011 Planning Act allows councils to review existing mineral permissions granted in Northern Ireland to ensure the activity meets modern standards, for example in terms of noise and amenity impacts and environmental matters. The review would bring Northern Ireland in line with the rest of the UK and the Republic of Ireland.
- 2.11 However, the Act requires further legislation, in the form of an Order, to implement ROMPs. As yet, this legislation has not been implemented.

Long Standing Quarries

- 2.12 Historically, quarries did not have planning permission and operated under the permitted development rights granted under the Planning (Interim General Development) Order (NI) 1944. Therefore, planning conditions normally found on more recent planning permissions, such as the restoration of land after mineral workings cease, could not be applied as no planning permission was required.
- 2.13 The Planning (General Development) Order (NI) of 1973 sought to rectify this situation by providing that permitted development rights for mining undertakers only applied for one year from 1st October 1973. In effect, this meant that existing quarries operating under permitted development rights had one year to apply for and obtain planning permission.
- 2.14 The DoE established a specialised minerals unit in Planning Service that dealt with all mineral planning matters across Northern Ireland (until the transfer of planning functions to councils in April 2015). The Department generally accepted that planning permissions for mineral developments granted since 1990 had appropriate and effective environmental conditions attached in line with the EIA regulations.
- 2.15 The review of old mineral permissions (ROMPs), allowed under the 2011 Act, would tend, therefore, to focus on planning permissions granted since 1973 following the introduction of the Order that required existing quarries to apply for permission within one year. The Department undertook a review in 2005 of existing permissions dating

from the 1970s and 1980s which highlighted some were deficient for a number of reasons, with fewer conditions and insufficient environmental protection in place, for example in relation to noise. The Department held files of 371 mineral permissions granted between the 1960s and the early 1990s. Of these, 46 related to the Borough. The table below sets out the location and type of the permissions relating to this Council area over this time period:

Table 1: Mineral Planning Permissions in CC&G Borough Council Area at 2005

Legacy Council Area	Total permissions	% of NI total	By Type of Permission						
			Hard Rock	Sand/Gravel	Peat	Clay	Salt	Gold	Un*
Limavady	20	5	4	16	0				
Coleraine	14	4	10	3	1				
Ballymoney	2	1	2	0	0				
Moyle	10	3	5	5	0				
Total	46	13	21	24	1	0	0	0	0

Source: <http://www.planningni.gov.uk/downloads/news-legislation-planreform-romp.pdf>

Un* - unknown

- 2.16 More recent information, prepared by the DoE at May 2014, indicates an increase in the ROMPs sites to 58 in the Council area, out of a total of 470 sites in NI overall (12%). The breakdown in the types of operations is as follows:

Table 2: Mineral Planning Permissions in CC&G Borough Council Area at 2014

CC&G	Total Permissions	% of NI Total	By Type of Permission			
			Hard Rock	Sand/Gravel	Peat	Other
	58	12	20	31	2	5

- 2.17 Map 2 in Appendix 2 shows the locations of the ROMPs produced by the DoE at May 2014 and their activities. This is combined with settlement development limits to show the location of sites in relation to settlements.

v. Waste From Extractive Industries

- 2.18 The Planning (Management of Waste from Extractive Industries) Regulations NI 2015 states that planning permission will not be granted unless a waste management plan (WMP) has been submitted to and approved by the Council.

3.0 Regional and Local Planning Context

3.1 The regional planning context is provided by the Regional Development Strategy (RDS) 2035, the Rural Strategy for Northern Ireland and planning policy statements (PPSs). The Adopted Northern Area Plan also contains mineral policy and designation.

a. Regional Development Strategy (RDS) 2035

3.2 The RDS does not contain any specific aims or policies relating to minerals. Rather, SFG 13 recognises the need to sustain rural communities living in smaller settlements and the open countryside. It also recognises that there are wide variations across Northern Ireland in terms of economic, social and environmental characteristics of rural areas, and there is a need for local development to reflect these regional differences. Approaches should be sensitive to local needs and environmental issues, including the ability of landscapes to absorb development (pages 76-77).

b. Strategic Planning Policy Statement (SPPS)

3.3 The SPPS recognises that minerals, including valuable minerals, are an important natural resource and their responsible exploitation is supported by Government. It also recognises that the minerals industry make an essential contribution to the economy and to our quality of life, providing primary minerals for construction, such as sand, gravel and crushed rock, and is a valued provider of jobs and employment, particularly in rural areas.

3.4 The SPPS acknowledges that there are a number of challenges arising from minerals development that fall to be addressed through the planning system. There can be significant adverse impacts on the environment and on the amenity and well-being of people living in proximity to operational mineral sites. The restoration of sites upon completion of work associated with the extraction and processing of materials is another challenge.

Regional Strategic Objectives

3.5 The SPPS's objectives for mineral development (page 76) are to:

- Facilitate sustainable minerals development through balancing the need for specific mineral development proposals against the need to safeguard the environment;
- Minimise the impacts of mineral development on local communities, landscape quality, built and natural heritage, and the water environment; and
- Secure the sustainable and safe restoration, including the appropriate re-use of mineral sites, at the earliest opportunity.

Regional Strategic Policy

3.6 The policy approach for minerals development, including peat extraction from bog lands, must be to balance the need for mineral resources against the need to protect and conserve the environment.

3.7 The SPPS states that, in preparing LDPs, councils should bring forward appropriate policies and proposals that must reflect the policy approach of the SPPS, tailored to the specific circumstances of the plan area. In particular, LDPs should:

- Ensure that sufficient local supplies of construction aggregates can be made available for use within the local, and where appropriate, the regional market area and beyond, to meet likely future needs over the plan period;
- Safeguard mineral resources which are of economic or conservation value, and seek to ensure that workable mineral resources are not sterilized by other surface development which would prejudice future exploitation;
- Identify areas (normally referred to as Areas of Constraint on Minerals Development) which should be protected from minerals development because of their intrinsic landscape, amenity, scientific or heritage value (including natural, built and archaeological heritage). There should be a general presumption against minerals development in such areas. However, where a designated area such as an AONB covers expansive tracts of land, the LDP should carefully consider the scope for some mineral development that avoids key sites and that would not unduly compromise the integrity of the area as a whole or threaten to undermine the rationale for the designation (paragraph 6.155, page 77).

3.8 Councils should also identify areas most suitable for minerals developments in their LDPs. These areas will normally include areas of mineral reserves where exploitation is likely to have the least environmental and amenity impacts, as well as offering good accessibility to the strategic transport network. The SPPS refers to the fact that minerals which are particularly valuable to the economy may be discovered from time to time, and states there will not be a presumption against their exploitation in any area, however, in considering a proposal where the site is in a stationary policy area, due weight will be given to the reason for the statutory zoning. In relation to unconventional hydrocarbon extraction, (hydrocarbon is a substance, such as coal, crude oil or natural gas that contains only carbon and hydrogen) (unconventional hydrocarbon extraction relates to oil and gas which comes from sources such as shale or coal seams which act as the reservoirs) (conventional hydrocarbons are oil and gas where the reservoir is sandstone or limestone), there should be a presumption against their exploitation until there is sufficient and robust evidence on all environmental impacts.

3.9 Given the importance of peatland in nature conservation as well as minerals, the SPPS's position in relation to peat and natural heritage, is also relevant. Active peatland is recognised as being of particular importance to NI for its biodiversity, water and carbon storage qualities. Paragraph 6.192 (page 84) of the SPPS states that planning permission should only be granted for a development proposal which is not likely to result in the unacceptable adverse impact on, or damage to, known active peatland (amongst others).

Areas of Constraint on Minerals Development

3.10 As mentioned above, these are areas that should be protected from minerals development due to their intrinsic landscape, amenity, scientific or heritage value. Based on these criteria, the following areas may be considered as suitable for consideration as Areas of Constraint on Mineral Development (ACMD):

Table 3: Areas Potentially Suitable for Identification as Areas of Constraint on Mineral Development

Value of Area	
Landscape	Areas of Outstanding Natural Beauty (AONBs); Local Landscape Policy Areas (LLPAs)
Amenity	Public safety and residential amenity particularly for those living in proximity to workings
Scientific	RAMSARs, Special Areas of Conservation (SACs), Special Protection Areas (SPAs), Areas of Special Scientific Interest (ASSIs), Areas of Scientific Interest (ASIs), Sites of Community Importance (SCIs), World Heritage Site (WHS)
Heritage	Ancient Monuments; Archaeological Sites; Listed Buildings

- 3.11 There is to be a general presumption against mineral development in such areas, but the SPPS acknowledges that where designations, such as AONBs, cover expansive areas, the LPD should carefully consider the scope for some mineral development that avoids key sites, would not unduly compromise the integrity of an area as a whole, or threaten to undermine the rationale for the designation.
- 3.12 Map 3 in Appendix 3 shows the types and extent of the environmental designations and the location of existing mineral workings to highlight where such activity is currently taking place in, or in proximity to, designed areas.
- 3.13 Caution should be taken in the application of a wholesale exclusion of mineral development in the areas of environmental designation. This approach was advocated in relation to the Magherafelt Area Plan, and the PAC report was critical of this, as it did not seek to balance the needs of the environment with the local economy.

Areas Where Mineral Development Would be Suitable

- 3.14 The converse of the ACMD approach is that the SPPS states that LDPs may also specify areas where mineral development would be suitable, for example where there will be less impact on amenity, or on environmentally sensitive areas, and with good accessibility to strategic transport networks. However, it should be borne in mind that minerals may only be worked where they are found.

c. Planning Strategy for Rural Northern Ireland (PSRNI)

- 3.15 This document recognises the importance of minerals as a natural resource and their essential contribution to prosperity and the quality of life, and the industry's role in providing employment in rural areas. The PSRNI acknowledges that minerals can only be extracted where they are found, although with common minerals, there may be a choice of site. It recognises that, in terms of minerals, the principle of sustainable development can pose particular difficulties as mineral workings can never be entirely reversed. However, to accord with the principles of sustainable development, the rate of consumption of finite minerals should be reduced by encouraging the use of renewable and recycled alternatives whenever this is practical and economically viable. The mineral industry should aim for the best use of the total aggregates resources by minimising wastage and avoiding the use of higher quality materials where lower quality materials would suffice.

3.16 The PSRNI contains eight policies to guide the development of mineral workings. The areas covered relate to Environmental Protection, Visual Implications, Areas of Constraint, Valuable Minerals, Mineral Reserves, Safety and Amenity, Traffic, and Restoration. These have been largely carried over into the SPPS generally within the sections: Regional Strategic Policy and Implementation (pages 77-79).

d. Northern Area Plan 2016

3.17 The Adopted Plan refers to the contribution that mineral extraction makes to the economy, but acknowledges there can be adverse environmental effects if not properly regulated. It notes that the mineral resources in the area comprise sand and gravel, hardrock, lignite and peat. The Plan also refers to the extraction of sand deposits from a number of the Borough's beaches and the range of direct and indirect impacts this can create. The Plan contains one minerals policy and one designation. Policy MIN 1: Natural Mineral Reserves – Hydrocarbon Exploration, relates to exploration of commercially viable resources of natural oil and gas. Designation COU 5: Lignite Resource Area identifies the extent of the lignite deposit in the Borough, which is recognised as an important and valuable mineral resource, part of which has been proven to be of internationally recognised standards. The purpose of the designation is to safeguard the resource, to ensure the reserves remain exploitable if and when the need arises. The extent of the Lignite Resource Area is reproduced in Map 4 in Appendix 4.

4.0 Other Sources of Information on Mineral Resources and Activity

i. Minerals Resource Maps

4.1 The DoE, in association with the British Geological Survey, Minerals UK and the Centre for Sustainable Mineral Development published the Mineral Resources Map of Northern Ireland in 2012. Six maps, one for each county, were produced and may be viewed at: <http://www.bgs.ac.uk/mineralsuk/planning/resource.html#NI>. The maps show the broad distribution of mineral resources and the boundaries are, therefore, approximate. The purpose of the maps is to assist strategic decision making in respect of mineral extraction and to protect important mineral resources against sterilization. They show the following:

- The geological distribution of all onshore (above low water mark) mineral resources;
- The extent of mineral planning permission and their current planning status (extant or expired);
- The recorded occurrences of metallic minerals;
- The recorded location of building stone quarries; and
- The extent of selected landscape and nature conservation designations (SACs, SPAs, RAMSAR sites, AONBs, ASSIs, NNR and scheduled monuments).

ii. Geological Survey of Northern Ireland (GSNI)

4.2 The Geological Survey of Northern Ireland (GSNI) – the national source of information on natural resources and hazards within the Department for the Economy – has advised that, at June 2016, there are twelve operating quarries in the Council area. The commodities mined are basalt, and sand and gravel. Map 5 below shows a simplified Geology of Northern Ireland and its Quarry Locations.

Map 5: NI Geology Map and Quarry Locations

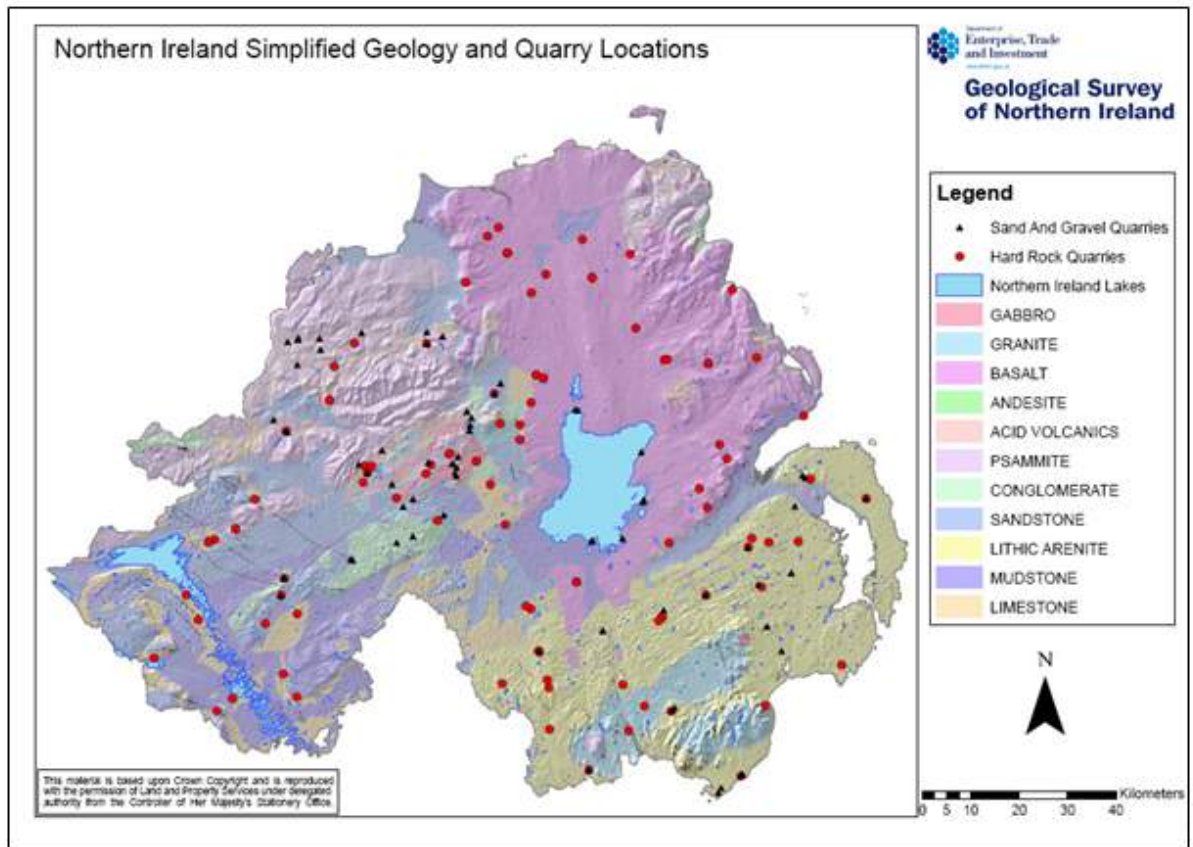


Figure 2: Northern Ireland Geology Map and Quarry Locations

Source: QPANI – Aggregate Production in Northern Ireland Summaries

- 4.3 Another source of information on quarry activity is the Quarry Products Association (NI) Ltd (QPANI). Map 3, Appendix 3 shows the location of existing quarries represented by the Quarry Products Association (NI) Ltd (QPANI), which represents 95% of the industry, in the Council area. Other quarries in the Borough are not represented by this body, as an example, it is understood that Keady Quarry is not a member.

iii. Adits, Collapses, Shafts and Working Mines

- 4.4 Map 6, Appendix 5, shows the location of known occurrences of adits (an entrance to an underground mine), collapses, shafts and working mines in the Borough, which are concentrated along the north coast and in the eastern part of the Borough. These may have a bearing on the location of future development, particularly where these are located in proximity to settlements, for example in terms of land stability in relation to the depth and length of the former mine.

5.0 Mineral Activity, the Northern Ireland and Local Economies

- 5.1 As mentioned earlier, the minerals industry is recognised as making an essential contribution to the NI economy and to our quality of life. The NI Census 2011 provides the following information on those directly involved in the mining and quarrying.

Table 4: Local Employment in Mining and Quarrying from 2011 Census

	All Usual Residents in Employment 16-74 years	All Residents Employed in Mining and Quarrying 16-74 years	Percentage of Total
NI	795,263	1,972	0.25%
CC&G	58,936	171	0.29%

Source: *Industry of Employment Table KS605NI (administrative geographies)*
<http://www.ninis2.nisra.gov.uk/public/PivotGrid.aspx?ds=7494&lh=73&yn=2011&sk=136&sn=Census%202011&yearfilter=2011>

- 5.2 The above table relates only to those employed at mines and quarries, it does not take into account employment in related activities, such as concrete products. QPANI has published information, set out in Table 5 below, that indicates the quarrying industry employs around 300 people in the Borough, and extracts over £6m of raw aggregates every year which, after processing into concrete and asphalt products, is worth nearly £40m to the area's economy.

Table 5: Information on Employment in Quarries and Associated Industries

	Quarry Value	Employee Numbers	Value of Manufactured Concrete & Asphalt Products
NI	£83m (100%)	4276 (100%)	£548m (100%)
CC&G	£6m (7.2%)	300 (7%)	£37m (6.8%)

Source: *QPANI spreadsheet: Quarry Data Based on 10 Year Average, Sept 2015*

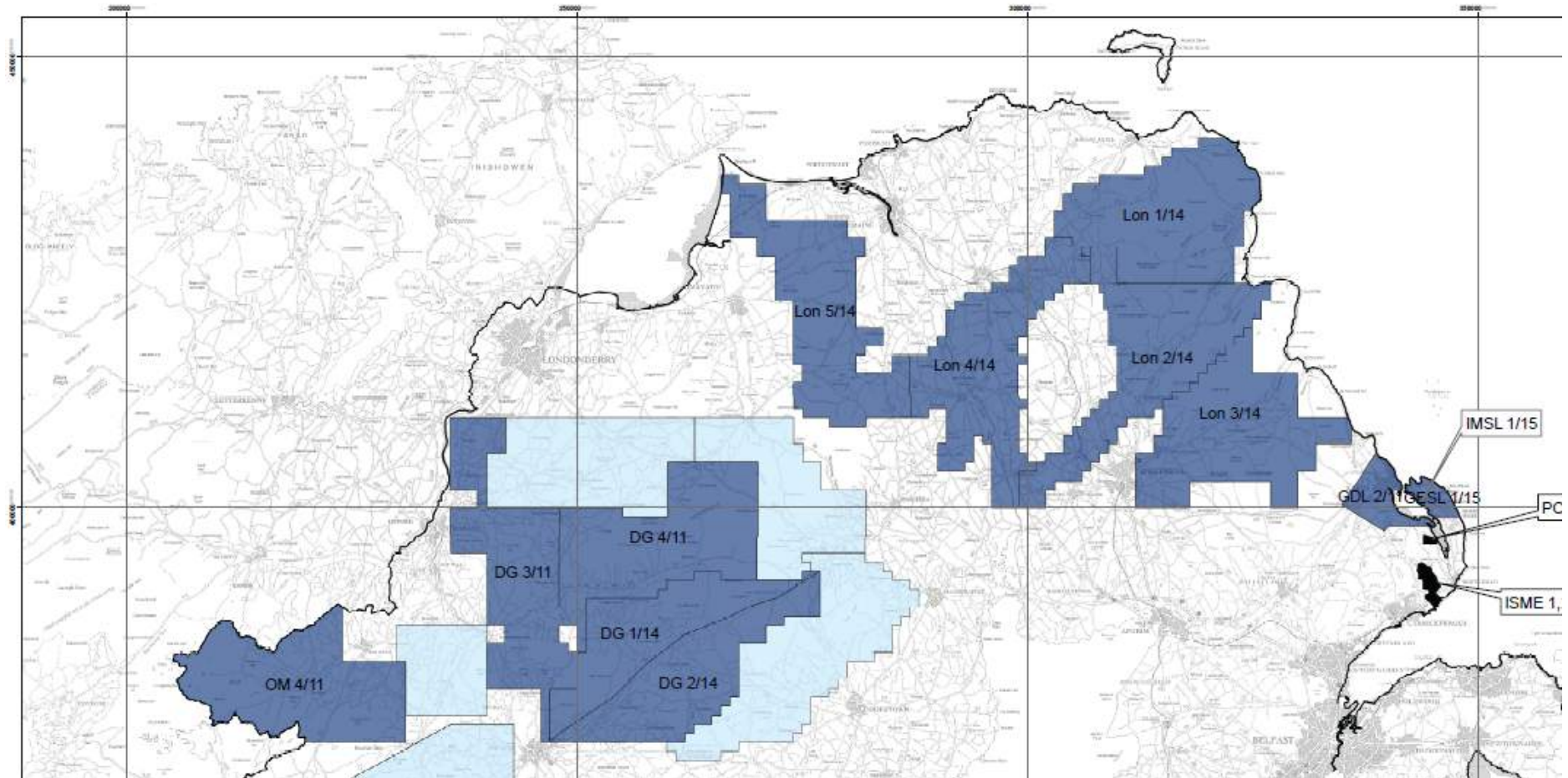
- 5.3 As Members will appreciate, the distribution of minerals is not consistent across Northern Ireland, and minerals may only be mined where they are found. As an example, there are no operations within the administrative boundary of Belfast City Council.

6.0 Conclusion

- 6.1 The extraction of minerals is essential to maintain the ability of the Northern Ireland economy to sustain and grow and to maintain the quality of life of its residents. Minerals may only be worked where they are found, and the Council's economy benefits from the existence of quarries within its area, which provide a resource to the Borough and beyond. The lignite deposit in the Borough is of international quality and is, therefore, a regional significant resource and has been protected as such. The mineral prospecting licences presently issued within the Borough indicate there is a potentially expanding range of operations in the Council area.

6.2 However, there is also a potential environmental cost to mineral workings that can affect the amenity of the immediate area and, also, the wider contribution that the landscape and its biodiversity make to the Borough's economic base. The regional planning framework contained in the SPPS acknowledges there is a need to balance mineral development needs with the protection of the environment. The identification of Areas of Constraint on Mineral Development, together with the possibility of adopting a proactive approach in other suitable areas based on future needs of the minerals industry and on the mineral resources found in the Borough is one way of addressing this. Further information on the quality of mineral deposits in the Borough, rates of consumption and alternative potential sources in and outside of the Borough, and the proposed approach of neighbouring authorities where reserves cross administrative boundaries, would assist in determining the best approach for the LDP to adopt in relation to minerals in the Borough.

Appendix 1: Enlargement of Map 1 Showing Licences in the Borough With Accompanying Key



https://www.economy-ni.gov.uk/sites/default/files/publications/deti/1601-Minerals-License-Map_4.pdf

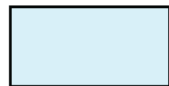
Legend



Mining Licence



Mineral Prospecting Licence





Area Under Application

Mineral Prospecting and Mining Licences

DETI Licence Number	Licencee	Minerals	Name
ISME 1,2,4,5	Irish Salt Mining and Exploration	Halite	Kilroot
PC 1/61	LaFarge Cement	Chalk	Magheramourne
OM 4/11	Omagh Minerals	Pb, Cu, Zn, gold and silver	Kileeter
C 1/11	Conroy Gold and Natural Resources	All inc. gold and silver	Keady
C 3/11	Conroy Gold and Natural Resources	All inc. gold and silver	Newtownhamilton
LON 1/14	LONMIN Plc.	All inc. gold and silver	NE Antrim
LON 2/14	LONMIN Plc.	All inc. gold and silver	Glenariff/Cullybackey
LON 3/14	LONMIN Plc.	All Minerals	The Sheddings
LON 4/14	LONMIN Plc.	All Minerals	Portglenone/Ballymoney
LON 5/14	LONMIN Plc.	All Minerals	Gortnamoyagh/Magilligan

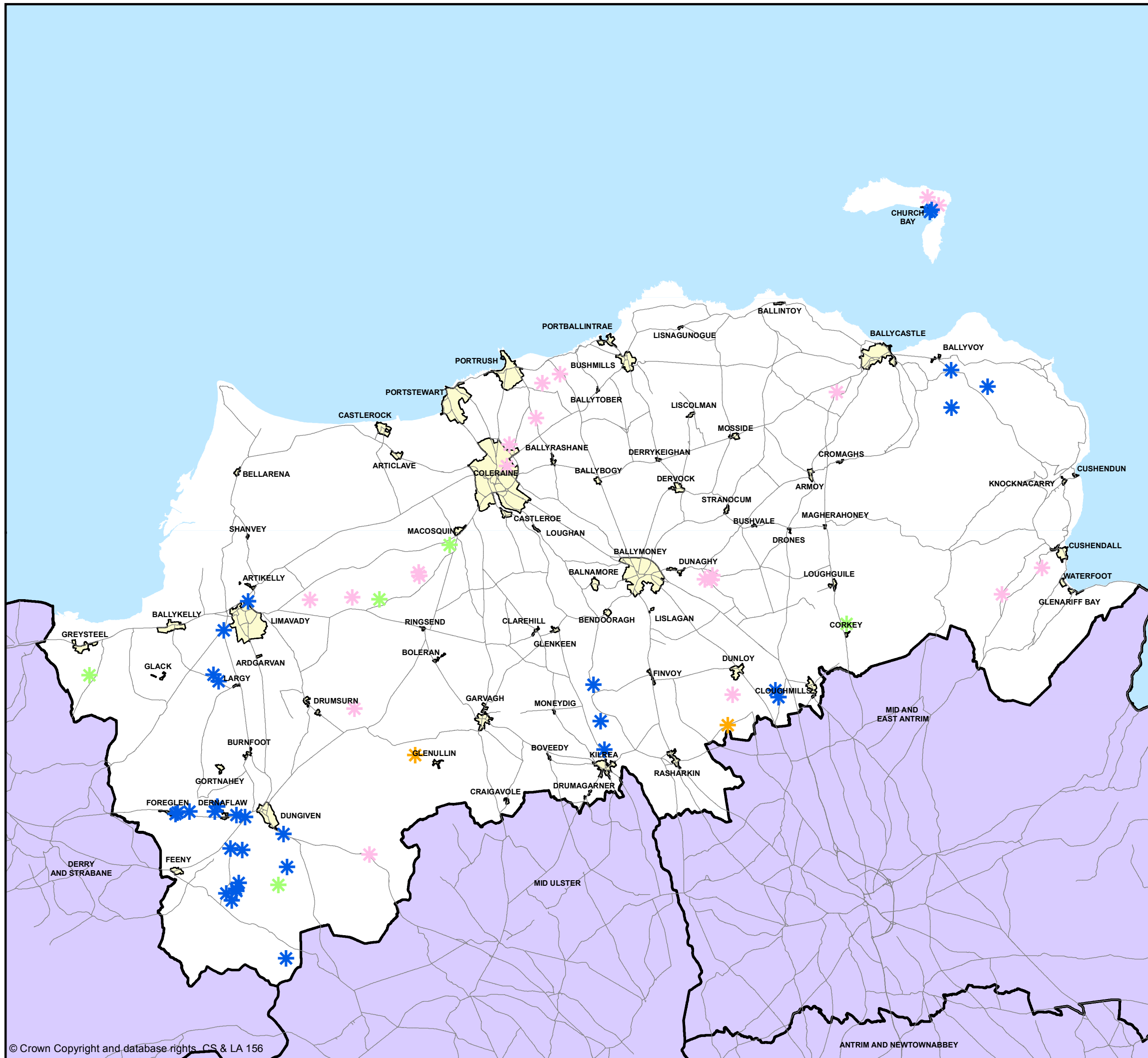
Causeway Coast and Glens
Borough Council

Map No. 2 - Review of Old
Mineral Permissions

-  Settlement Development Limit
-  Road Network

Rock Type

-  Basalt
-  Sand/Gravel
-  Peat
-  Other



0 5 10 Kilometres



Causeway Coast and Glens
Borough Council

**Map No. 3 - Environmental Designations
and the location of Existing Mineral
Workings / Quarries**

- Settlement Development Limit
- Road Network
- Quarry

International Importance

- Ramsar Site
- Special Protection Area
- proposed Special Protection Area
- Special Area of Conservation
- candidate Special Area of Conservation
- Site of Community Importance

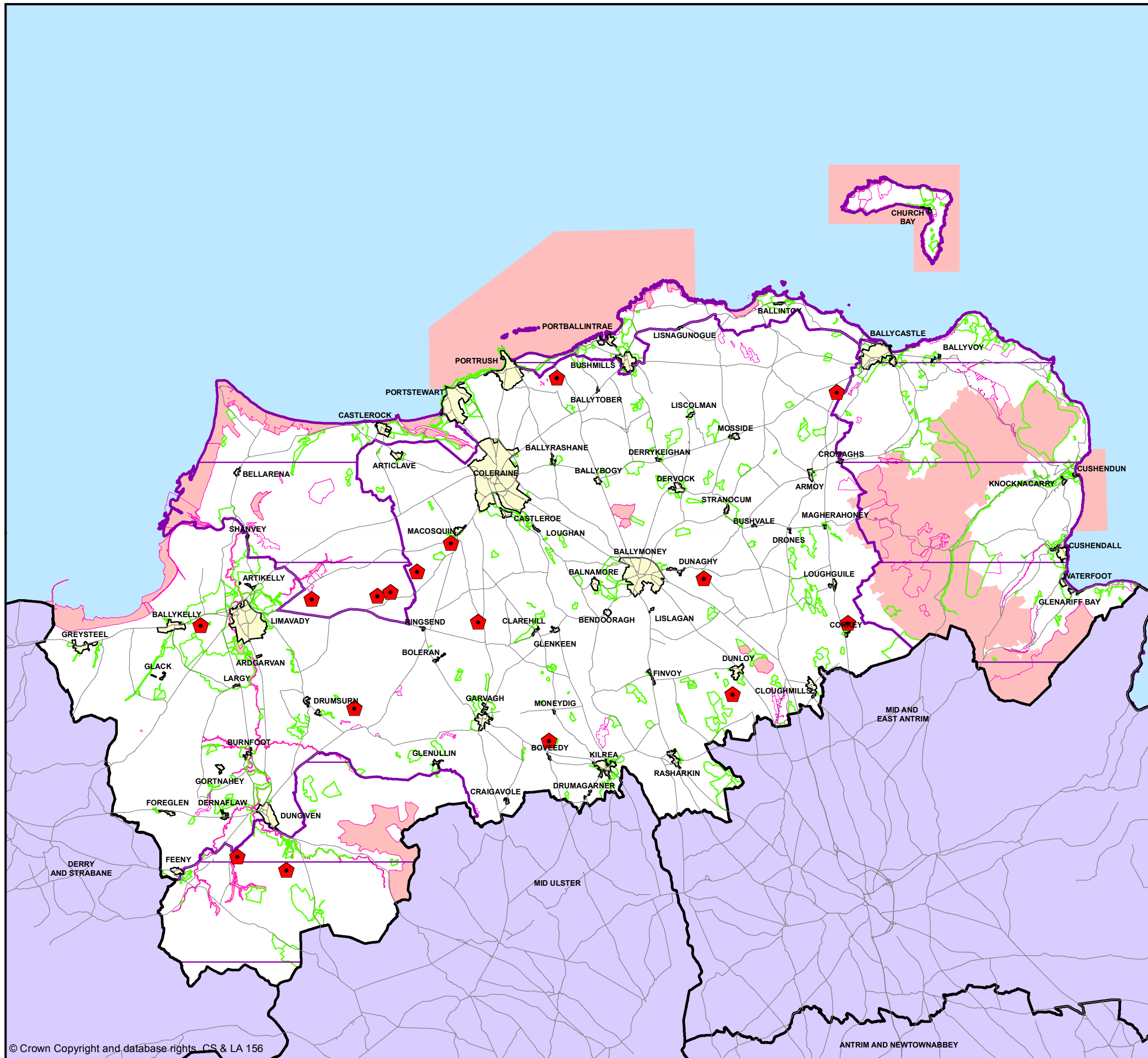
National Importance

- Area of Special Scientific Interest
- Nature Reserve
- National Nature Reserve
- Marine Nature Reserve.

Areas of Outstanding Natural Beauty




Local Importance

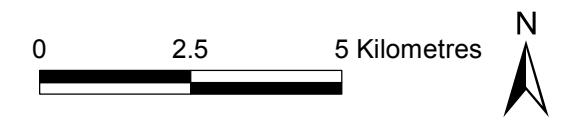
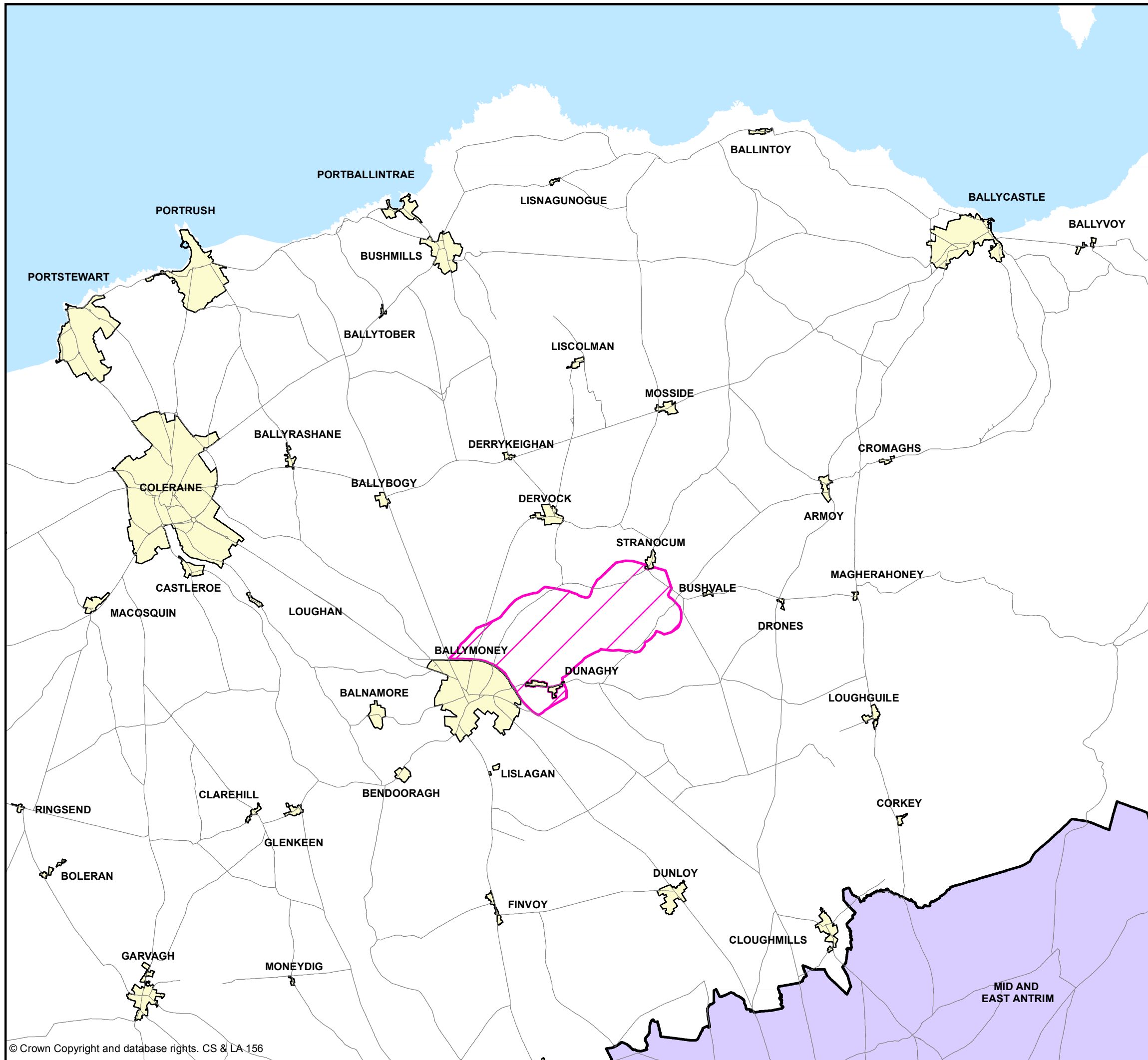
- Site of Local Nature Conservation Importance
- Local Landscape Policy Area
- Area of Significant Archaeological Importance



Causeway Coast and Glens
Borough Council

Map No. 4 - Lignite Resource Area

-  Lignite Resource Area
-  Settlement Development Limit
-  Road Network



Geological Survey of Northern Ireland

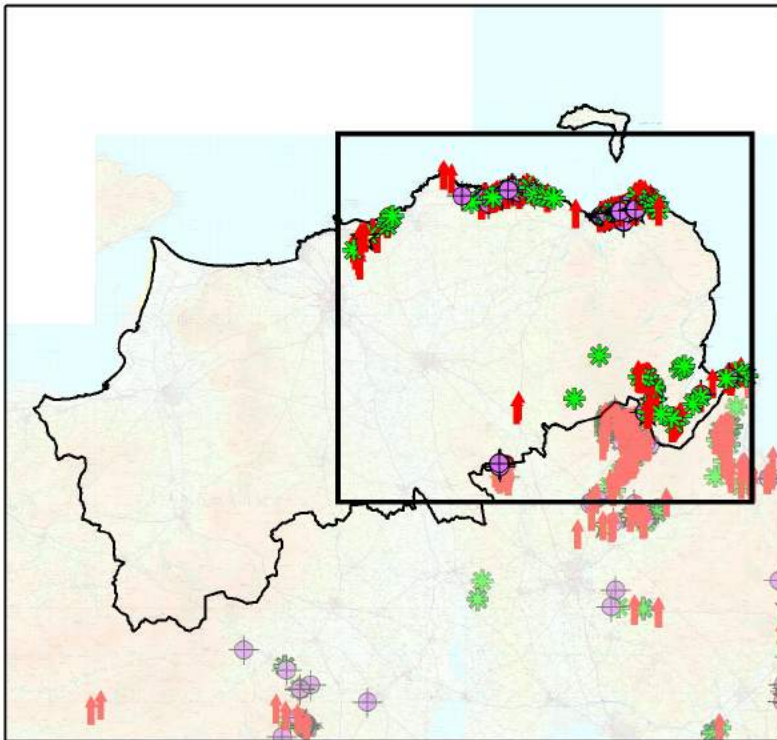
Legend

Shafts and Adits

Record Type

-  Adit
-  Collapse
-  Shaft
-  Working

Location of mine workings held in GSNI archives.
 Note: Locations are displayed as point data and do not take into account extent of workings.



Map 5. Location of Adits, Collapses, Shafts and Working Mines

