

Sinead McEvoy

From: Chris Tinsley [REDACTED]
Sent: 18 May 2020 15:38
To: DevelopmentPlan@midulstercouncil.org
Subject: LDP Re-Consultation Correspondence
Attachments: QP Correspondence.pdf

Importance: High

Dear Sir/Madam

Further to the letters received from Mid Ulster District Council (MUDC) dated 12th March 2020 in relation to the Re-Consultation on Local Development Plan 2030- Draft Plan Strategy and accompanying Sustainability Appraisal incorporating Strategic Environmental Assessment Report, please find enclosed correspondence from Quarryplan confirming that our previous joint and individual representations may be considered as our Clients' representations to the DPS.

Please see attached for reference, with hard copy to follow in the post.

If you have any queries please don't hesitate to let me know,

Regards
Chris

Chris Tinsley MRTPI
Senior Town Planning Consultant
Quarryplan Limited
10 Saintfield Road
Crossgar
BT30 9HY





File ref: CST/MUDC/DraftPlanStrategy

Quarryplan Limited

10 Saintfield Road
Crossgar
Downpatrick
Co. Down
BT30 9HY

T: [REDACTED]
E: info@quarryplan.co.uk
W: www.quarryplan.com

Mid Ulster District Council
Planning Department
50 Ballyronan Road
Magherafelt
BT45 6EN



18th April 2019

Dear Sir/ Madam

Re: Joint representation to Mid Ulster Local Development Plan 2030- Draft Plan Strategy

Further to the above, Quarryplan Ltd has been instructed to submit a joint representation on behalf of the following clients:

- Acheson & Glover
- Breedon
- Campbell Contracts
- Core Aggregates
- Creagh Concrete Products Ltd
- FP McCann
- Hollow Park Sand Gravel Ltd
- LD Aggregates Ltd
- McGarrity Bros
- Norman Emerson Group
- Northstone (NI) Ltd
- Patrick Keenan
- Stanley Bell & Sons Ltd
- Tobermore Concrete Products Ltd
- Walls and Mulholland

Please find enclosed completed Representation Form and written representation.

I trust that the above is acceptable, however, if you wish to discuss any of the same please do not hesitate to contact me.

Yours sincerely,



Chris Tinsley MRTPI
Senior Town Planning Consultant
Enc

Submission of a Representation to Mid Ulster District Council Local Development Plan 2030 - Draft Plan Strategy



Comhairle Ceantair
Lár Uladh
Mid Ulster
District Council

Local Development Plan
Representation Form
Draft Plan Strategy

Ref:
Date Received:
(For official use only)

Name of the Development Plan Document (DPD) to which this representation relates

MID ULSTER DC DRAFT PLAN STRATEGY

Representations must be submitted by 4pm on 19th April 2019 to:

Mid Ulster District Council Planning Department
50 Ballyronan Road
Magherafelt
BT45 6EN

Or by email to developmentplan@midulstercouncil.org

Please complete separate form for each representation.

SECTION A

1. Personal Details

Title

First Name

Last Name

Job Title
(where relevant)

Organisation
(where relevant)

2. Agent Details (if applicable)

ACHESON AND GLOVER LTD; BREEDON; CAMPBELL CONTRACTS; CORE AGGREGATES;
CREAGH CONCRETE PRODUCTS LTD; FP McCANN; HOLLOW PARK SAND AND GRAVEL;
LD AGGREGATES; MCGARRITY BROS; NORMAN EMERSON GROUP; NORTHSTONE (NI)
LTD; PATRICK KEENAN; STANLEY BELL AND SONS; TOBERMORE CONCRETE; WALLS
AND MULHOLLAND

| | | |
|------------------|---|--|
| Address Line 1 | <input type="text" value="C/O AGENT"/> | <input type="text" value="QUARRYPLAN LTD 10 SAINTFIELD ROAD CROSSGAR CO. DOWN"/> |
| Line 2 | | |
| Line 3 | | |
| Line 4 | | |
| Post Code | <input type="text"/> | <input type="text" value="BT30 9HY"/> |
| Telephone Number | <input type="text"/> | <input type="text" value="██████████"/> |
| E-mail Address | <input type="text" value="████████████████████"/> | |

SECTION B

Your comments should be set out in full. This will help the independent examiner understand the issues you raise. You will only be able to submit further additional information to the Independent Examination if the Independent Examiner invites you to do so.

3. To which part of the DPD does your representation relate?

- (i) Paragraph
- (ii) Objective
- (iii) Growth Strategy/
Spatial Planning Framework
- (iv) Policy
- (v) Proposals Map
- (vi) Site Location

4(a). Do you consider the development plan document (DPD) is:

Sound Unsound

6. If you consider the DPD to be unsound, please provide details of what change(s) you consider necessary to make the DPD sound.

Please note your representation should be submitted in full and cover succinctly all the information, evidence, and any supporting information necessary to support/justify your submission. There will not be a subsequent opportunity to make a further submission based on your original representation. After this stage, further submissions will only be at the request of the independent examiner, based on the matters and issues he/she identifies at independent examination.

SEE ACCOMPANYING REPRESENTATION

(If not submitting online and additional space is required, please continue on a separate sheet)

7. If you are seeking a change to the DPD, please indicate if you would like your representation to be dealt with by:

Written Representation Oral Hearing

Please note that the Department will expect the independent examiner to give the same careful consideration to written representations as to those representations dealt with by oral hearing.

Signature: Date:

Mid Ulster District Council
Local Development Plan 2030
Draft Plan Strategy

Representation made on behalf of:

Acheson & Glover
Breedon
Campbell Contracts
Core Aggregates
Creagh Concrete Products Ltd
FP McCann
Hollow Park Sand Gravel Ltd
LD Aggregates Ltd
McGarrity Bros
Norman Emerson Group
Northstone (NI) Ltd
Patrick Keenan
Stanley Bell & Sons Ltd
Tobermore Concrete Products Ltd
Walls and Mulholland

APRIL 2019
by Quarryplan Ltd



CONTENTS

| Section | Page |
|---|-------------|
| 1.0 EXECUTIVE SUMMARY | 1 |
| 1.1.1 Representation and Soundness | 1 |
| 1.1.2 SA/SEA Inadequacies and Soundness | 1 |
| 1.1.3 Summary of Salient Points | 1 |
| 2.0 INTRODUCTION | 4 |
| 2.1 The POP Recap | 5 |
| 2.2 Cognisance of the Quarryplan Representation at POP | 8 |
| 2.3 Documentation Considered | 8 |
| 2.4 Methodology and Structure of the Representation | 9 |
| 3.0 DRAFT PLAN STRATEGY | 11 |
| 3.1 Mid Ulster Context and Key Issues | 11 |
| 3.2 Vision and Objectives | 13 |
| 3.2.1 Accommodating People and Creating Places | 13 |
| 3.2.2 Creating jobs and promoting prosperity | 15 |
| 3.2.3 Enhancing the environment and improving infrastructure | 17 |
| 3.3 Growth Strategy and Spatial Planning Framework | 19 |
| 4.0 EVIDENCE BASE | 20 |
| 4.1 Minerals Development Background Evidence Paper | 20 |
| 4.2 Preferred Options Paper- Public Consultation Report Update, January 2019 | 21 |
| 4.2.1 Areas Suitable for Mineral Development | 23 |
| 4.3 Suitable Mineral Development Areas: Substituting “May” for “Should” | 26 |
| 4.4 Mineral Reserve Policy Areas | 27 |
| 4.4.1 Objection to ACMD’s and Landscape Assessment | 30 |

| | | |
|--------------|--|-----------|
| 4.4.2 | Aggregate Assessment | 32 |
| 4.4.3 | Land won Sand and Gravel | 35 |
| 4.4.4 | Lough Neagh Sand and Gravel | 36 |
| 4.4.5 | Currently pending Planning Permissions | 39 |
| 4.4.6 | The position in relation to Lough Neagh | 40 |
| 4.4.7 | Other Issues | 42 |
| 4.5 | Landscape Character Assessment Review | 43 |
| 4.6 | Identification of ACMD's and Impact of Surface Development on Aggregate Resources in Mid Ulster Background Evidence Paper- January 2019 | 45 |
| 4.6.1 | Sperrins and Slieve Gallion | 47 |
| 4.6.2 | Clogher Valley and Ridges and Slieve Beagh | 48 |
| 4.6.3 | Shores of Lough Neagh and Lough Beg and Lower River Bann | 49 |
| 4.6.4 | Methodology | 51 |
| 4.6.5 | Outcomes | 53 |
| 5.0 | MID ULSTER MINERALS INDUSTRY | 58 |
| 6.0 | MINERALS | 60 |
| 6.1 | Overview | 60 |
| 6.2 | Policy MIN1- Mineral Reserve Policy Areas | 64 |
| 6.3 | Policy MIN 2- Extraction and processing of Hard Rock and Aggregates | 68 |
| 6.3.1 | Area of Constraint of Minerals Development | 70 |
| 6.3.2 | Extraction of Mineral outside ACMD's | 73 |
| 6.3.3 | Precautionary Approach | 74 |
| 6.3.4 | Assessment Criteria | 76 |
| 6.3.5 | Justification and Amplification | 82 |
| 6.3.6 | Summary/ Conclusions | 84 |

| | | |
|--------------|--|------------|
| 6.4 | Policy MIN 3- Valuable Minerals and Hydrocarbons | 86 |
| 6.5 | Policy MIN 4- Peat Extraction | 87 |
| 6.6 | Secondary Aggregates | 87 |
| 6.7 | Policy MIN 5- Restoration of Mineral Sites | 88 |
| 6.7.1 | Justification and Amplification | 92 |
| 7.0 | ECONOMIC POLICIES | 93 |
| 7.1 | Policy ECON 2- Economic Development in the Countryside | 93 |
| 7.1.1 | Rural Industrial Policy Areas | 93 |
| 7.1.2 | Industry related to Quarrying | 96 |
| 7.1.3 | Justification and Amplification | 97 |
| 7.1.4 | Summary/ Conclusion | 97 |
| 8.0 | ENVIRONMENTAL POLICIES | 99 |
| 8.1 | Policy SCA 1- Special Countryside Areas | 99 |
| 8.1.1 | Lough Neagh/ Lough Beg SCA | 99 |
| 8.2 | Policy WM3- Waste Disposal | 101 |
| 8.3 | Policy RNW1- Renewable Energy | 102 |
| 9.0 | SUSTAINABILITY APPRAISAL INCOPORATING STRATEGIC ENVIRONMENTAL ASSESSMENT REPORT | 104 |
| 9.1 | Minerals- Strategic Approach | 106 |
| 9.2 | Areas of Constraint on Mineral Development | 108 |
| 9.3 | Mineral Reserve Policy Areas | 109 |
| 9.4 | Conclusions | 111 |
| 10.0 | JOINED UP APPROACH | 113 |
| 11.0 | SUMMARY AND CONCLUSIONS | 115 |
| 11.1 | Soundness | 117 |

APPENDICES

Appendix 1 Proposed Areas Most Suitable for Minerals Development Maps

Appendix 2 Mullin Design Associates Review of Landscape Matters

Appendix 3 Minerals Supply and Demand Checklist

Appendix 4 Oxford Economics Report- The Economic Contribution of Lough
Neagh Sand Traders

Appendix 5 DFE Annual Mineral Statements 2015 and 2016

Appendix 6 Client Evidence Forms

Appendix 7 DFE Mineral Returns Form

- The figure presented by the Council with respect to annual value of minerals (again focus on aggregates) is incorrect and significantly undervalues the minerals industry within the Council area;
- The baseline figures are incorrect; therefore, the baseline employed when conducting the Sustainability Appraisal incorporating the Strategic Environmental Assessment Interim Report² is inaccurate and invalid;
- The information presented by the Council within the POP has not been adequately researched as per Section 3 of the Planning Act (Northern Ireland) 2011 and Regulation 9 of the Planning (Local Development Plan) Regulations (Northern Ireland) 2015 for the following reasons:
 - Failure of the Council to consider the planning history of mineral development sites within the Local Development Plan (LDP) area;
 - Failure of the Council to identify and quantify the remaining 'permitted reserves' within the Plan Area to qualify reserves requirements for the Plan period;
 - Failure of the Council to proactively consult with the Mid Ulster Council Minerals Industry, including Quarry Operators and subsidiary business reliant upon the continued supply of raw material, aggregate, concrete and concrete products, asphalt and building materials – prior to the publication of the POP;
 - Failure of the Council to consult with subsidiary companies within the Mid Ulster Council area who rely on work from Quarry Operators such as plant manufactures, fabricators and equipment suppliers – prior to the publication of the POP;

- Failure of the Council to present areas seeking to safeguard minerals which truly contribute to the economy of the Plan area;
- Failure of the Council to consult with the Northern Ireland Environment Agency and a Landscape Architect in respect to its POP.
- Failure of the Council to consult with the Department for Economy and Geological Survey of Northern Ireland to ensure that its Local Development Plan process is based on sound evidence.
- Failure of the Council to base its Area of Constraint on Minerals Development on sound landscape, ecological, historical and economic assessment in accordance with good practice and previous advice from the Planning Appeals Commission.
- Failure of the Council to provide detailed Landscape Capacity and Sensitivity studies specific to mineral development (the Council has utilised archaic Landscape Character Assessments and guidance relevant to '*wind energy*').
- Failure of the Council to understand the mineral needs for the area and NI (lack of a joined-up approach), to adequately zone lands for mineral development prior to publication of the POP.
- Inadequately presented SA/SEA Interim Report³ and a Report which fails to meet the requirements of EAPP Regulations; specifically, Regulation 11 and the assessment of reasonable alternatives with respect to safeguarding proposed areas of mineral development.

² Mid Ulster Council SA (Incorporating SEA) Interim Report, Nov 2016

³ MUDC, SA (Incorporating SEA) Interim Report, Nov 2016 at pages 34 – 36.

2.2 Cognisance of the Quarryplan Representation at POP

It is encouraging that since the publication of the POP and the subsequent public consultation and consideration of the responses, the Council has endeavoured to apprise its evidence base and the published Draft Plan Strategy (DPS) appears to have taken cognisance of several of the comments provided within the Quarryplan POP 2017 representation.

Notwithstanding the above, there are several significant concerns with regards to the content of the DPS, particularly in relation to the collation of evidence; interpretation and the formulation of policy based upon the same; all of which, it is considered fall short of meeting the tests of soundness.

2.3 Documentation Considered

The representation hereby submitted considers the content of the DPS. Several other documents have also been considered within this representation, namely:

- Sustainability Appraisal Incorporating Strategic Environmental Assessment Report (Environmental Report) of Local Development Plan 2030 – Draft Plan Strategy, MUDC, Feb 2019;
- Local Development Plan Minerals Development Background Paper, MUDC, February 2018;
- Local Development Plan Lough Neagh / Lough Beg Special Countryside Area (SCA) Background Paper, MUDC (no date of publication provided);
- Local Development Plan High Sperrins and Slieve Beagh Special Countryside Area (SCA) Background Paper, MUDC, (no date of publication provided);

- Local Development Plan Minerals Development- Identification of Areas of Constraint on Mineral Development & Impact of Surface Development on Aggregate Resources in Mid Ulster Background Paper, MUDC, January 2019;
- Local Development Plan Landscape Character Assessment Review, MUDC (no date of publication provided); and
- Review and Audit of Mid Ulster District Council Landscape Character Assessment Review for Local Development Plan Preparation, GM Design Associates, October 2018.

2.4 Methodology and Structure of the Representation

This submission is structured to firstly consider the background sections of the DPS, considering the context of the Mid Ulster district in the region and the key issues facing the district. The representation also comments upon the visions and objectives as set out within the DPS.

The representation then considers the evidence base presented by the Council, outlining shortcomings and providing information collated from our Clients.

The mineral policies of the plan are then considered in the light of the tests of soundness identified in Development Plan Practice Note 6- Soundness, published by Department for Infrastructure (DFI) in May 2017.

The concluding element of this submission sets out concerns relating to the compliance of the DPS with respect to legislative requirements and outlines areas where our clients believe further information is required to be

considered and where efforts are required in order for the plan to meet the required tests of soundness.

3.0 DRAFT PLAN STRATEGY

3.1 Mid Ulster Context and Key Issues

Section 2 of the DPS outlines the context of the Mid Ulster Region and highlights key issues faced within the district and how they may be addressed within the DPS.

Paragraphs 2.2 to 2.4 of the DPS detail the demographics of the district, describing how 72% of the population within the district live in a rural area with 40% of all households are located within the countryside. As a result, the potential for conflicting land uses within the countryside between mineral operations and residential uses is higher than what it may be in other districts in Northern Ireland. This position is also at odds with the “theory” expounded by the Council when removing single dwellings in the countryside as a constraint on mineral development.⁴

Indeed, the development pattern inherent within the MUDC area is an obvious constraint to mineral development within the district. It is known, through planning history searches that proposals to develop lands close to existing quarry/mineral development sites have not had policies pertaining to matters of residential amenity adopted, conversely, in most cases, where a proposed sensitive receptor has applied to be developed in close proximity to existing mineral development sites, the Council or its predecessor have opted to inform the occupant of the proximity of the mineral operation; rather than refuse or have the applicant mitigate (i.e. appropriate glazing, siting of the dwelling etc) the existing operational influences. Therefore, Operators within the district have an increased likelihood of having to address complaints regarding residential amenity due to proximity to newly approved residential

⁴ Para 5.2 Identification of ACMD & Impact on Surface Development on Agg. Resources in Mid Ulster – January 2019

properties, despite the longevity of existence and/or importance of the mineral source and the paucity in aptitude of policy regarding amenity.

This representation will draw attention to several constraints which mineral operators are faced with when identifying areas where minerals resources could be worked in a sustainable manner. The dispersed pattern of development within the district makes identifying such sites more difficult, with the proximity to residential development being one of the key factors when assessing a site's suitability for future development.

Paragraphs 2.5 and 2.6 of the DPS outline the economic trends within the district, describing how the district is significantly more dependent on the construction and manufacturing sectors than the rest of Northern Ireland. For instance, 27.5% of all jobs in Mid Ulster are in manufacturing and 8% are in construction, compared to regional figures of 11% and 4.2% respectively (Census for Employment, NISRA, July 2014).

This demonstrates the importance that the minerals industry has upon the local economy with employment in the district dependent upon minerals won and worked to produce the aggregates which in turn, facilitate manufacturing and construction. The statistic also demonstrates the importance of mineral to the value-added manufacturing process such as pre-cast concrete products manufacturing or road surfacing. This is a key employer within the district with its continued success explicitly linked to the supply of mineral from within the Mid Ulster Resource.

In terms of infrastructure, Paragraph 2.8 of the DPS states that travel times from some parts of Mid Ulster to an A&E hospital is over 50 minutes, making the need for improved roads and infrastructure a significant priority. In order to achieve this priority, aggregates will be required in order to deliver the physical infrastructure to provide improvements to the highway network, allowing this travel time to be reduced.

3.2 Vision and Objectives

Our Clients would support the vision outlined at Paragraphs 3.1 to 3.14 of the DPS. It is considered that the District is a region of opportunity and that opportunities presented within the DPS need to be realised during the plan period.

Paragraph 3.3 of the DPS is particularly welcomed, which states that:

“We also recognise the role of mineral assets and are eager that they are not just extracted from but also processed in Mid Ulster with our aggregates exported to other areas”.

As outlined later in this representation, our clients would encourage the Council to actively safeguard existing extraction, processing and manufacturing facilities and explicitly encourage the growth of new extraction areas and facilities within the plan.

Paragraphs 3.5 to 3.7 of the DPS detail how the Council seeks to provide attractive and welcoming towns; see better connections through appropriate infrastructure and promote and encourage the creation of key road transport links. Achieving all of these will be dependent upon securing a supply of mineral in order to allow the physical infrastructure to be constructed. It is considered that the most feasible and sustainable way in which this can be delivered is via continued mineral extraction, locally produced aggregates and local manufacturing of materials such as concrete products and asphalt.

3.2.1 Accommodating People and Creating Places

Our Clients support the ‘Accommodating People and Creating Places’ objectives stated within the DPS.

Our Clients would advocate improving economic prosperity within the District through education and employment opportunities. Mineral projects including extraction, processing and manufacturing offer long term, stable full-time employment prospects at a local level. The minerals industry offers opportunities for promotion and advancement through training and experience and the industry is regarded as an important rural employer.

The Clients listed in Section 2, have invested in local communities within Mid Ulster, in terms of training, education, employment contributions, economic advancement, sponsorship and charitable support.

It is noted that the Council aims to provide for 11,000 new homes by 2030. The British Geological Survey⁵ calculates each new house built in England requires 60 tonnes of aggregates. If all roads and utilities associated with housebuilding are included, the requirement can increase to as much as 400 tonnes of Aggregates.

In order to achieve the desired rate of housebuilding envisaged within the plan an adequate and steady supply of aggregate will be required. It is considered beneficial in sustainability terms if these aggregates can be sourced locally rather than transported over longer distances, resulting in increased congestion, fuel consumption and pollution.

⁵ The need for indigenous aggregates Production in England, Open Report OR/08/026, British Geological Survey, 2008

3.2.2 Creating jobs and promoting prosperity

Our Clients support the ‘Creating jobs and promoting prosperity’ objectives outlined stated within the DPS.

The DPS states that it is the Council’s vision to facilitate the creation of at least 8500 new jobs by 2030 at a variety of locations.

The DPS advises that the minerals industry in the District employs 1250 people. As will be discussed in this document, it is our view that this figure is inaccurate and that employment within the industry is higher, with our clients alone providing employment for over 1600 people. The DPS also states that manufacturing accounted for 27.5% of the employment in Mid Ulster; some 16.6% above the Northern Ireland average. A significant number of manufacturing sites within Mid Ulster are intrinsically linked to the minerals won, worked and processed in the District. This is discussed further in Section 5.0 of this submission.

The Council acknowledges that the minerals industry is a ‘primary sector’ business. The Council recognises that mineral extraction is essential to provide raw materials to much of its manufacturing sector. As detailed later in this report, the Council have unsuccessfully prepared an accurate and contemporary evidence base upon which a balanced strategy for minerals development and LDP Policies may be based. Without first fully understanding the economic contribution that the industry makes to the district and the mineral supply and demand position, proposed policies are considered defective on the basis of the test of soundness and the Sustainability Appraisal/Strategic Environmental Assessment (SA/SEA) considered on the requirement of these conditions is also considered to be unsound. This critical issue is discussed in further detail throughout this document.

With respect to economic objectives, the combined operations of our Clients employ over 1600 people; directly across a range of mineral extraction, processing and aggregate production and manufacturing jobs.

Our Clients existing and future proposals for mineral extraction in the District will not only sustain the employment created and supported by their companies through entrepreneurship but provide future employment opportunities across a wide spectrum of skills throughout the plan period.

The Council recognises, within the publication of the DPS, the importance of employment in the primary sectors and recognition of this imperative objective is supported by our Clients. Like the Council, our Clients support objectives which seek to sustain and grow primary sector initiatives throughout and beyond the plan period.

As outlined in Quarryplan's previous representation to the POP consultation, there is a paucity of information provided by the Council, this time within the DPS regarding employment figures within other 'primary' sector industries and developments in the district. These sectors are expressly referred to by the Council within the DPS and relate to Agricultural, Forestry and Rural Development.

In 2015, out of the 24,907 active farms in Northern Ireland, 4,155 were registered to Mid Ulster, second only to Fermanagh and Omagh. The overwhelming majority, c. 78% of these, are classified as "very small". It is considered that along with the paucity of information provided, within the POP and now the DPS, with respect to employment within the agricultural and forestry sectors, as recognised through the publication of the Council's DPS, the minerals industry and associated manufacturing is the largest full time employer within the District's 'primary sector'.

3.2.3 Enhancing the environment and improving infrastructure

Our Clients understand and appreciate the need for the environmental objectives as set out in the Council's DPS and are committed to ensuring quality design, economic opportunities and biodiversity prospects at each of their extraction sites. However, the economic and biodiversity opportunities must be considered by the Council, and emphasis needs to be expressed within the DPS, that consideration of these elements must be weighted rationally and proportionately to the projects as submitted.

Projects have been granted planning permission and consideration has been given to climate change through renewable energy projects, handling overburden and extraction waste to reduce 'double handling' and internal transport requirements. Each of our Clients have promoted biodiversity opportunities, as part of contemporary planning permissions and projects, at their existing extraction sites. However, these opportunities as concepts have not always been afforded rational and proportionate consideration by the consultees; leading to delay in the decision-making process. The DPS should provide more certainty for the public, the minerals industry and the Council's planners in terms of balancing the economic, mitigation and need for the mineral; helping to move the planning system away from the *de facto* consultee led system of the recent past.

In preparing planning applications and proposals for future development, our Clients have considered the natural and built heritage; including regard to landscape and visual implications. Appropriate water management plans have been developed and where appropriate the requisite discharge consents obtained. With respect to the employment of plant to produce aggregate, such as washing and screening plant, water used in this type of process is normally recycled through a closed water system. The discharge of ground water (when working below ground water levels) involves topping up local streams and rivers with water, meeting prescribed standards, which in most

instances is considered to enhance the surface water quality of local waterways.

NIEA statistics⁶ demonstrate that the mineral industry has one of the highest compliance rates for water discharges from permitted sites. Despite prejudicial manifestations, the minerals industry is not identified by statistics or information held by NIEA and Local Environmental Health Departments, as being a source of complaint with respect to noise or impacts on amenity.

The minerals industry represents one of the most heavily regulated sectors in the UK, with regulations covering numerous environmental facets, including but not limited to, ecology and habitat management, water management, waste management, air quality and noise assessment, blasting, archaeological assessment and highway agreements.

The minerals industry is known to be the only industry operating in Mid Ulster that is subject to a specific environmental tax to which our Clients collectively contributed over £6M in the last year alone.

Each of the Companies, represented by this submission, acknowledge that they have a duty to conserve the environment and assess the impact of their proposals; whilst providing a sustained business model, providing future for growth and continuing to underpin the economy of the Mid Ulster District and Northern Ireland. Conversely, the Council and its planning authority is tasked with providing a balanced decision-making process to deliver the continuation of supply of mineral resources which should be directed by the sound publication and adoption of the LDP.

⁶ NIEA Statistics C/O Quarry Products Association for Northern Ireland (QPANI)

3.3 Growth Strategy and Spatial Planning Framework

Paragraph 4.1 of the DPS describes how the Council's growth strategy is based on regional guidance and lists the approach which will be taken regarding various types of development. It is noted that the DPS is silent with respect to the Council's growth strategy for Mineral Development and associated production; indeed, a growth strategy for minerals development is not stated. It is worthy of note you cannot have a growth strategy for other forms of development without the associated growth in supply of the minerals upon which all other forms of development rely.

In terms of the spatial framework detailed within the DPS, this relates largely to built development issues such as settlement hierarchies and the roles of settlements. The strategy identifies Rural Industrial Policy Areas at Desertcreat and Tullyvannon. These designations are discussed later in this document.

4.0 EVIDENCE BASE

As acknowledged in Section 2.2, following the POP consultation, the Council has endeavoured to obtain an appropriate evidence base with respect to the supply and demand for minerals. It is noted that mineral operators, when contacted have not always been forthcoming with information and this is considered to be a result of ignorance as to the importance of information provided. However, as will be analysed later in this submission, the figures published within the DPS have raised numerous questions as to the Council's understanding of the minerals and manufacturing sector within the district.

Our clients still have significant concerns with regards to the content of the DPS, particularly in relation to the collation of evidence; interpretation and the formulation of policy based upon the same.

4.1 Minerals Development Background Evidence Paper

MUDC published a Minerals Development Background Evidence Paper (evidence paper) in February 2018. The purpose of the paper was to provide members with further information on the topic of mineral development, specifically the approach to mineral development concerning valuable minerals and hydrocarbons and to put forward proposed policy wording in relation to minerals development.

The paper is largely a description of the POP Consultation process and the Council's proposed approach to minerals in the draft plan strategy. A proposed chapter on minerals development, including policy wording, for inclusion in the Draft Plan Strategy is included as an Appendix to the Council's evidence paper.

It is considered that the formulation of draft policies and minerals chapter as detailed within the paper was premature and with the proposed policies and

chapter wording based upon a flawed evidence base. The same is not considered to be a sound approach for the preparation of a LDP.

The February 2018 paper has been largely superseded by the subsequent evidence paper published in January 2019 and discussed at Sections 4.2 and 4.6 of this submission . The minerals chapter as was proposed has consequently been superseded and does not reflect the chapter as included within the DPS. For this reason, the previously proposed chapter wording contained within the paper is not considered any further at this stage.

4.2 Preferred Options Paper- Public Consultation Report Update, January 2019

MUDC has published a Report Update⁷ on the findings of its consultation exercise with the mineral industry of MUDC, conducted post publication of the POP. The Report Update outlines the responses received with respect to various proposals within the POP and details how the consultation feedback has been considered with regards to the formulation of the Draft Plan Strategy.

Taking on board the issues raised by consultation bodies and the public, the report describes how the Council considers the key points raised as follows:

1. *The plan should identify areas suitable for mineral development;*
2. *There is objection to Areas of Constraint on Mineral Development based on*
 - a. *an absence of up-to-date landscape assessment; and that*
 - b. *account has not been taken of the location of resources for the mineral industry.*

⁷ MUDC, Towards our Local Development Plan for Mid Ulster 2030. Preferred Options Paper Public Consultation Report Update January 2019

3. *The current policy does not give satisfactory recognition to high value minerals such as metals nor does it give sufficient recognition to the potential for oil and gas.*
4. *There is a lack of clarity in relation to peat extraction.*
5. *The position in relation to Lough Neagh extraction is to be clarified.*

The key points identified above are not considered to address all the significant issues raised by other companies operating within the MUDC area, outside of the 10 operators included in Quarryplan's POP response (QPL 2017).

It is understood through discussions with other responders that issues similar to those presented within the Quarryplan POP submission were raised in response to the POP by them and likewise have not been considered or acknowledged within the DPS.

To recap, the QPL 2017 consultation response detailed how the evidence base with regards to the economic contribution which the minerals industry in MUDC makes to the local and regional economy has not been adequately identified or assessed. Critically, the QPL 2017 response detailed how the employment and production figures were significantly understated; the value of the products were considerably understated and the planning history of mineral sites and permitted reserves were simply unknown and not examined by the Council prior to the publication of the POP. This approach was again reflective in the Minerals Development Background Evidence Paper which included draft Minerals Chapter wording, with little substantiated evidence to support the proposed wording, as detailed in Section 4.1.

As a result of the above, the consultation response described how the baseline figures employed when conducting the SA/SEA were entirely

inaccurate and therefore considered to be entirely unsound basis for policy formulation.

None of the identified significant concerns regarding the baseline evidence and unsoundness appear to have been recognised / addressed in the Council's identification of the key points from the consultation process. This is undoubtedly unsatisfactory as the paucity of a sound evidence basis continues to be a key concern in terms of the content of the DPS.

Consequently, following the feedback on the POP from both the public and consultation bodies, the evidence report provides the following recommendations with regards to Minerals Development:

- *Reduce the land based area of the ACMD and include Lough Neagh within the ACMD along the lines of that set out in the map at Appendix 1.*
- *Include in draft Plan Strategy, amplification on the terms "short term extraction" and "limited environmental impacts."*
- *Introduce a policy hydrocarbon exploration.*
- *Continue to undertake the Landscape Assessment which will in part be used to inform the final lines of the ACMD's*
- *Confirm the policy approach of MIN 1, MIN2 and MIN3 of the POP subject to some clarification with the relevant amplification and inclusion of wording in relation to related industry for MIN 1.*

There is no recommendation within the evidence report for the Council to seek to sustain and substantiate its evidence base on grounds of soundness. Thus, there has been no significant change within the DPS, from the published POP, with respect to the economic figures, employment figures or demand and supply facts expressed within the DPS.

4.2.1 Areas Suitable for Mineral Development

Regarding identifying areas most suitable for [future] mineral development within the plan area, the Council has opted to employ discretion. The SPPS⁸ identifies precisely what Council's should do, including ensuring sufficient local supplies of construction aggregates can be made available for use within local and regional markets⁹. This, the SPPS, advises is to "meet likely future development needs over the plan period". The SPPS is also explicit that Council's should safeguard mineral resources which are of economic or conservation value, to ensure that these resources are not sterilised by surface development which would prejudice future exploitation¹⁰. The SPPS further instructs that Councils should identify areas of constraint on mineral developments (ACMD); areas which should be protected from minerals development because of intrinsic landscape, amenity, scientific or heritage value¹¹. However, the SPPS is equivocal with respect to Councils identifying areas most suitable for minerals development within the plan area. The SPPS unhelpfully states that Councils may...identify areas most suitable for minerals development within the plan area¹².

Whilst the language contained within regional policy is noted, it is acknowledged by the Council that the minerals industry makes a significant contribution to the local economy, stating at Paragraph 14.2 of the DPS that:

"Minerals represent a very important resource for our District. They provide a valuable source of employment as well generating large amounts of revenue on an annual basis".

Given the importance that the industry has upon the local and regional economy, in a district where minerals development makes such a key contribution, it is considered pertinent that MUDC should seek to pro-actively

⁸ Strategic Planning Policy Statement for Northern Ireland, DoE, 2015

⁹ Ibid at page 77 paragraph 6.155

¹⁰ Ibid

¹¹ Ibid

¹² SPPS 2015 at page 77, paragraph 6.156

encourage the sustainable growth of the industry and therefore, the local economy in line with the SPPS¹³..

Data contained within the DFE Mineral Statement 2016, produced by the Department for Economy, provides useful information when trying to identify and understand the geographic spread of resource within Northern Ireland.

The Statement details how over 75% of all sand and gravel produced within Northern Ireland is produced within Mid Ulster¹⁴. Businesses; infrastructure delivery and construction projects in other Council Areas across Northern Ireland are all dependent upon the sand and gravel resource found within Mid Ulster.

The resource is also intrinsically linked to the pre-cast and ready mixed concrete manufacturing industry within Mid Ulster. The industry is a key employer within the area, with the DPS stating that the employment in the district is more reliant upon the Industry than elsewhere in Northern Ireland. Indeed, some of manufacturing business export their products across the UK, attracting expenditure in to the district; constituting the mineral resources of Mid Ulster as being nationally important.

Our clients would encourage the Council to plan pro-actively for the sustainable growth of the minerals industry in the district by identifying areas most suitable for minerals development as provided for within regional policy. The Council should identify areas most suitable for minerals development within the plan area. Please find attached plans Refs 001-003 at **Appendix 1** which Quarryplan would advocate as areas most suitable for mineral development. This position is substantiated later in this report.

¹³ SPPS 2015, at page 77, paragraph 6.156

¹⁴ Table 4-Sand and Gravel, Cumulative total for Mid Ulster; Armagh, Banbridge and Craigavon; and Lisburn and Castlereagh Council Areas. (There are no worked sand and

4.3 Suitable Mineral Development Areas: Substituting “May” for “Should”

The Minerals Section of the SPPS is paradoxical. It is considered that the publication of the LDP provides the Council with an opportunity to resolve ambiguity contained within the Department’s SPPS.

The SPPS is explicit that Councils should, in particular, ensure that sufficient local supplies are made available within the local area, and where appropriate, the regional market area and beyond, to meet the likely future development needs over the plan period. However, the SPPS is less meaningful in its direction with respect to identifying areas most suitable for mineral development within the plan area, suggesting that Councils may also identify these areas, not that they should identify these areas. This provision of two inconsistent approaches within the same policy document is a legacy issue inherent to mineral planning in Northern Ireland which, as it was controlled centrally by the DoE, was neither informed or understood the demand or supply requirements nor the economic importance of the minerals industry to local Council areas, nor regionally. Through its interpretation of the SPPS, and adopting the indistinct approach outlined in the SPPS with respect to identifying areas suitable for mineral development, the Council is in danger of encompassing the old DoE approach and sustaining a legacy which will benefit neither the Council or those it is seeking to aid with the publication of the LDP.

As detailed at Section 5.0, The collective value of the turnover of our Client’s businesses attributed to the extraction of mineral and generated by higher value-added activities, where the mineral is used in manufacturing processes and other products is over **£217 million**.

gravel resources within ABC or LCC Council Areas, figures provided are for Lough Neagh extraction, which is located wholly within Mid Ulster District).

Whilst the Council has provided a figure of 1250 people employed in ‘mineral development’ in Mid Ulster; our Clients collectively employ over **1600 people** with an annual wage bill of **£43 Million per annum**.

The Council produces over 75% of all the sand and gravel produced in Northern Ireland with key sectors within the district, including manufacturing and construction, reliant upon this mineral.

In this context, the publication of the LDP provides the Council with an opportunity to resolve ambiguity contained within the Department’s SPSS. Our clients would encourage the Council to plan pro-actively for the sustainable growth of the minerals industry in the district by identifying areas most suitable for minerals development

4.4 Mineral Reserve Policy Areas

The Council’s POP Consultation report states that the POP put forward MRPA’s, describing how points made by the industry questioned the logic of the two individual designations at Derrgahadoan and Coalisland. The report states that the responses have been noted and that the ownership of the site’s is not a relevant planning consideration. It is unclear as to what relevance this has given that the aim of the policy is to protect mineral of particular economic importance. The Council’s paper concludes discussions on the matter by stating that there appears to be an overall general level of support for MRPA’s but there is disagreement about the approach to modifying the existing boundaries.

The report describes how the industry has called for a systematic approach in designating the MRPA’s, involving more consultation with the industry and the GSNI. Whilst we are aware that an information gathering exercise was undertaken following the POP consultation whereby mineral operators in the district were contacted and information requested with regards to supply and demand. Following this first phase of consultation, the MRPA’s from previous plans have been restated. Our clients are not aware of any further

consultation with the industry with regards to identifying or assessing MRPA's which reflect the most valuable industry's needs. It is considered that the consultation process was limited and following the supply by industry of answers to a limited number of questions, no effective consultation followed and the disparate information received is flawed in terms of providing an accurate evidence base.

It is noted that the MRPA's as proposed within the Draft Plan Strategy remain unaltered. It would therefore appear as though the Council have opted not to explore the issue further. As a result, the comments made in QPL 2017 response to the POP consultation remain unchanged. It remains our Client's view that the approach to modifying the proposed MRPA boundaries needs to follow a systematic and evidenced approach which involves consultation with the industry and the GSNI. Given the annual turnover figures supplied within this report, the economic contribution by our Clients to the MUDC area and rateable value of their businesses, it is paramount that this matter is reviewed by the Council immediately, given the disproportionate weighting given to some mineral resources.

Paragraph 14.12 of the DPS states that:

"Mineral Reserve Policy Areas (MRPAs) are designated because they contain important deposits of local minerals, which have important economic benefits".

As detailed in Quarryplan's previous representation, some of the areas proposed for protection are questionable in terms of their economic importance. Whilst the limestone deposit at Cookstown is worked and actively contributes to the local and regional economy, the Council has acknowledged that brick production, which utilises the clay deposit protected at Coalisland, ceased all operations in 2008/09; therefore offering no economic or conservation contributions to the Council area for over 10 years (equivalent to the plan period).

It is considered paramount importance that corporeal mineral deposits which are fundamental to sustaining and growing the District's prosperity should be protected and promoted to ensure adequate supplies and to protect against prejudicial surface development. As demonstrated within this representation, the value of the existing operational minerals to Mid Ulster Economy far outweighs those mineral reserves designated for protection at Coalisland and must be considered with the same regard as the limestone reserves at Derryhadoan, exploited to sustain downstream cement production.

Further to the above, the Council has undertaken an exercise of cross referencing the minerals map of Northern Ireland with the proposed ACMD's to provide a conceptual map. The conclusion of the mapping exercise is that MUDC considers that comparing the quarry locations and the conceptual map of the ACMD, that the proposed designations will have a **limited impact on the industry**. This directly conflicts with the assessment provided in the 'Identification of ACMD's and Impact of Surface Development on Aggregate Resources in Mid Ulster Background Evidence Paper' prepared by MUDC and published in January 2019 which states that the ACMD and SCA designations are too severe and that their impact would potentially stifle the aggregate industry of the district. The matter is discussed in more detail at Section 4.6.

Concluding on the matter of balancing of identifying areas of constraint and those suitable for minerals development, the Council's assessment states that:

"We would therefore propose that the identification of areas suitable for mineral development, outwith the ACMD area, should come from the industry in accordance with their needs and in line with the relevant planning policy including the criteria set out in the mineral policy".

In view of the above, our clients are disappointed that areas most suitable for mineral development have not been forthcoming within the published DPS. Indeed, it is considered that the paucity of planning policy and direction on areas of future reserves and potential exploitation of the same together with the lack of extension to safeguarding minerals that are tangibly viable to the Council, will result in 'more of the same'. That is the continuation of a consultee led planning system. We would take this opportunity to identify areas which are considered as being most suitable for future minerals development. This information is presented, having regard to known deposits of sand and gravel resource, existing operations, and a cumulative substantial assessment in the form of contemporary environmental impact assessments which have demonstrated that progressive extraction within these areas is unlikely to cause harm to interest of acknowledged important or result in significant environmental impacts. These areas are:

- Land at Draperstown Road;
- Land at Lough Fea; and
- Land at Evishanoran.

The specific extents of these areas will require further investigation, SEA undertakings and consultation, however the maps provided at **Appendix 1** give a useful indication of the areas which are considered appropriate.

4.4.1 Objection to ACMD's and Landscape Assessment

This section addresses the second key point which the Council has identified from the POP Consultation.

The Council's report explains how the Council has considered that the use of the Northern Ireland Landscape Character Assessment 2000 is appropriate to the contemporary LDP. We disagree with the Council's position with respect to its Landscape Assessment despite an updated Landscape Character Assessment being undertaken by the Council and reviewed by GM Design

Solutions. Whilst not party to the brief provided to GM Design by the Council we have significant professional concerns regarding the work undertaken on the updated Landscape Assessment.

The Landscape work has been reviewed by Pete Mullin CMLI of Mullin Design Associates (MDA). A copy of the review is appended at **Appendix 2**.

The MDA Review concludes that without detailed Landscape Capacity and Sensitivity studies specific to mineral development, MUDC's proposed landscape designations are not based upon a robust evidence base and in this respect, the plan is therefore considered to be unsound. The review is discussed further at Section 4.5.

With regard to the position put forward by Quarryplan and other mineral operators, the Council has stated in the paper that there is insufficient evidence to support the designation of ACMD's as proposed within the POP and that the minerals industry has been given an opportunity to provide information with regards to extraction rates. A total of 43 operators were contacted and responses received from 16 operators which deals with 21 active mineral sites. The Council describes that, whilst it does not give the total picture of mineral undertakings in the district, it does give some information to draw a reasoned conclusion from. However, it is considered that the key test of any policy allocated to the LDP is not whether the policy was drawn from reasonable conclusions but whether the evidence has been procured, analysed and understood to be representative to form a base which is sound.

Having reviewed the information presented, Quarryplan and its clients are of the view that the data obtained by the Council is inadequate; acquired after the POP publication, with a reliance on secondary sources to form the base. Therefore, the data **does not provide an accurate representation of the minerals industry, sustained needs and provisions in Mid Ulster for the plan period.**

There are several reasons as to why the information presented within the DPS is inaccurate. The tables are broken down by mineral in to Sand and Gravel (Quarries); Sand and Gravel (Lough Neagh); Sand and Gravel (Land Banks, still subject to planning permission being granted); and Hard Rock Quarries. The contents of each table are considered below.

4.4.2 Aggregate Assessment

In each table the operator and site are referenced and the yearly extraction rate as provided by the operators quoted in the second column. In the third column, anticipated demand over the plan period provided by operators has been quoted. Where this has not been provided, the Council have taken the supply position and provided a multiplier of 13 years (based on the remaining plan period). Whilst this provides an indication of likely demand, it is of limited value as it does not account for changes in market demand (development growth as provided for elsewhere in the plan) or other factors which may alter demand such as reserve consistency, blending the source to form an saleable aggregate and the difference between *in situ* reserves, extractive waste handling and actual saleable tonnages post production.

It is acknowledged that regional guidance in Northern Ireland is considerably weak in terms of assessing supply and demand, there is significant literature and guidance available in Great Britain.

A joint Practice Guide¹⁵ prepared by the Planning Officers Society and Mineral Products Association describes how when estimating supply and demand for land won sand and gravel and crushed rock, data considered should typically include:

- Annual sales

¹⁵ Practice Guidance on the production and use of Local Aggregate Assessments, Planning Officers Society and Mineral Products Association, May 2017

- 10 year rolling average of sales
- 3 year rolling average of sales
- Reserves – tonnage and sites
- Landbanks (based on 10 year average and if relevant alternative figure in Local Aggregates Assessment or adopted Plan)
- Estimated resources in allocated sites (if available – to provide indication of potential future supply)
- Other relevant information

The preliminary point is the rolling average tonnage of the latest available 10 years of aggregate sales from the area. Analysis of this data should allow for market trends over an extended period of time to be identified and acknowledged. The 3 year rolling sales average allows for current fluctuations in the market to be identified. For example, if economic conditions are improving, it is likely that demand for mineral will also increase and vice versa; but not always.

Whilst the 3 and 10-year rolling sales averages are an initial base point, the assessment should also be founded on other relevant local information to secure soundness of the final LDP. This information should include consideration of levels of planned construction, including major infrastructure projects, and planned housebuilding in the Council area and beyond, to an extent and depth which the Council considers relevant. It is considered that this relevant evidence could justifiably extend to include mineral requirements from adjoining Council areas, mineral requirements for manufacturing from Mid Ulster Companies, Mineral requirements for large urban areas such as the Belfast, Derry and Dublin Markets and other export markets (given the reliance on export markets for a number of Client companies).

A checklist for consideration of mineral supply and demand, prepared by the Planning Officers Society and the MPA can be found at **Appendix 3**.

In terms of other relevant information, reference is made within the DPS regarding a range of construction projects, housebuilding; employment creation and the need for improved infrastructure:

- Paragraph 2.8 of the DPS states that travel times from some parts of Mid Ulster to an A&E hospital is over 50 minutes, making the need for improved roads and infrastructure a significant priority;
- Paragraph 3.3 of the DPS states that the Council sees the Mid Ulster District retaining its role as a key industrial centre outside of Belfast with a strong engineering and agri-food base with Paragraph 3.4 of the DPS stating that the key to achieving this vision is ensuring that businesses are linked by excellent communication both in terms of roads infrastructure and the provision of good quality telecommunications and broadband are also key to our vision;
- Paragraph 3.7 of the DPS states that our Plan will promote and encourage the **upgrade and creation of key road transport links** within the District, and to other parts of the region, and in particular the A29 and by-passes around Dungannon and Cookstown.
- Paragraph 3.15 of the DPS states that an objective of the plan is to provide for **11,000 new homes by 2030** in a range of housing;
- Paragraph 3.15 of the DPS also states that it is an objective of the plan to facilitate the creation of at least **8,500 new jobs by 2030** at a variety of locations.

The above information is representative of the other information which needs to be considered when preparing for an adequate and steady supply of minerals.

Site specific information will also provide a useful source of information, for example, in the form of EIA screening and scoping requests or Pre-Application Advice requests.

The tables and assessments within the Council's report do not provide any assessment of production rates and are limited to the single year for which operators have provided in response to the Council's (post POP) consultation as per the pro forma as issued by the Council. The information collected by the Council whilst commendable, albeit after the event, is too narrow to allow for a proper and sound test of supply and demand forecasts throughout the plan period. The assessment includes no appraisal of longer-term trends and does not consider any other information such as the inter-connectivity and integral manufacturing of 'value added' products, housebuilding and the delivery of infrastructure projects.

4.4.3 Land won Sand and Gravel

Having reviewed the tables within the POP Consultation Report Update, January 2019 and the assessment of the same within the report, the information as presented is inaccurate and forms the basis for its "adequate supply" conclusions with respect to sand and gravel. The primary inaccuracy is the inclusion of Lafarge resources of 28.5 and 4.8 million tonnes respectively as sand and gravel reserves. This is clearly incorrect as Lafarge require limestone and shale deposits to produce cement and indeed the Sandholes resource is identified in the Draft Plan Strategy as a MRPA, for the purposes of protecting the limestone deposit at the site which is worked for the production of cement. This miss allocation of resources brings the Mid Ulster planned sand and gravel resource, as presented, down from a figure of 43 million tonnes to a figure in the region of 10 million tonnes, a profound difference.

There is also no reflection in the data as to whether the mineral extracted is sold/available to the open market or whether it is worked solely to provide the

operator concerned with mineral to be used internally in their vertically integrated associated value-added manufacturing process (e.g. pre-cast concrete products, pavements tiles and pipes). As an example, the most commonly won mineral in the plan area is sand and gravel which is extracted at several sites for internal consumption only in an operator's/company's concrete products business. This mineral is not available in the open market but has an impact in terms of the overall supply position. Furthermore, as presented, the sand and gravel and other minerals won by our Clients provides more economic return, supports more jobs and offers more opportunity than the mineral currently safeguarded under the DPS mineral reserve policy areas, for reasons of economic benefit.

4.4.4 Lough Neagh Sand and Gravel

In terms of the Sand and Gravel from Lough Neagh table provided at Appendix 1 of the POP Consultation Report, data is only provided for one of the five operators currently extracting from the Lough. The extraction of sand from the Lough is the subject of a deemed planning application before the Planning Appeals Commission and a planning application currently under consideration by the Department for Infrastructure (DfI) under Planning Application references (2015/E0023-28) and LA03/2017/0310/F respectively.

There are eight established landing/ processing points positioned around the Lough which are directly associated with the dredging of sand from Lough Neagh. Three of these on shore processing and distribution sites are located within the MUDC Area. The historical and proposed sand extraction area of Lough Neagh lies wholly within the MUDC Area. As such, whilst landing and processing points may be located at various points around the Lough, all of the operators are dependent upon the mineral extracted from the existing and proposed extraction area, within MUDC. Therefore, the mineral extracted serves markets within the MUDC Area, neighbouring Council areas, regional markets and beyond.

As detailed in the Environmental Statement submitted as part of the pending regionally significant application, the average yearly extraction rate between 2008 and 2015 has been calculated at 1 million tonnes per annum.

The figure quoted in the Lough Neagh table provided at Appendix 1 of the POP Consultation Report in terms of remaining reserves is some 100 million tonnes. No context is provided to this figure. The planning application seeks the extraction of up to 22.5 million tonnes over a 15 year period. Therefore, the minimum remaining 77.5million tonnes cannot be considered as pertinent to the DPS. It is prejudicial to include all of the potentially available 100 million tonne resource within the supply calculations as doing so would be on the basis that the extraction of mineral is likely to be permitted and the resource will be available at 1million tpa for the next 100 years.

No reference is made to the currently pending planning applications table provided at Appendix 1 of the POP Consultation Report. If the application were to be refused, based on the average extraction rate between 2008 and 2015, an annual demand for c. 1 million tonnes from the Lough would be unmet; placing increased pressure on land based resources, not limited to the Mid Ulster Council Area, to provide the shortfall. There has been no cognisance of this position within the DPS or the SA/SEA. Furthermore, there have been no consultations between neighbouring Council's on the fallout of a refusal to grant planning permission for mineral extraction on Lough Neagh. This is extremely ill-judged, as the Lough Neagh applications concerning Mid Ulster's Council area and all derivatives of potential outcomes to the development management system must be considered within the SEA alternatives presented by the Council. At present, the Council's SEA is silent on the outcome and likely alternatives should it lose the major source of sand supply and what strategic environmental impacts and pressures of such an outcome are likely to ensue within its own plan area and adjoining Council areas.

The Environmental Statement for the pending Lough Neagh planning applications, considers, inter alia, the socio-economic impacts of sand extraction on Lough Neagh. We do not intend to reproduce this information within this submission, however, we would direct the LDP Plan team to **Appendix 4** which is a report prepared by Oxford Economics on the Economic Contribution of the Lough Neagh Sand Traders, submitted as part of the ES package. The report has been reviewed by DFI Economics Branch with the conclusion that the analysis is reasonable and that the report and methodology is sound.

As demonstrated within the Oxford Economics Report (OER), the Lough Neagh Sand Traders generate clear economic benefits. In 2015, the Lough Neagh Sand Traders supported 346 jobs, associated wages of £9.1 million, GVA of £20.1 million and tax receipts and savings to the public purse of between £4.7 million and £5.7 million. Through supply chain and subsequent consumer spending, all sectors of the NI economy benefit from the operation.

The Sand Traders provide significant benefits for the local economies of Lough Neagh including Mid Ulster. As demonstrated in the OER, recent and future growth figures show that the local economies of Lough Neagh face a subdued period of job creation, falling resident employment rates and levels of unemployment above the record lows recorded in 2007. Furthermore, they face the issue of higher levels of long-term unemployed and youth unemployment, suffer from hard to tackle pockets of deprivation and lag below average levels of high skilled residents. In this local context, the benefits arising from Lough Neagh Sand Traders, are significant and positive.

Almost two thirds of those employed in the 234 direct jobs related to sand extraction from the Lough were residents from the three Council areas of Armagh, Banbridge and Craigavon, Mid Ulster and Antrim and Newtownabbey. Anything that has an adverse impact on the supply and price of sand available to the sector (e.g. planning policy constraints), will likely

have an adverse impact on the local Mid Ulster economy, both directly in terms of employment and indirectly in terms of supply chain spending.

Given the scale of such a potential supply shortfall in the circumstances that planning permission is refused, it is considered pertinent that the Council should plan for such an eventuality within the LDP.

4.4.5 Currently pending Planning Permissions

Regarding the two sites referenced in the 'land Banks, still subject to Planning Permission being granted' table at Appendix 1 of the POP Consultation Report. Neither of the two sites have been granted planning permission, therefore the reserves proposed to be worked within each application cannot be taken in to account when assessing the supply position.

It should also be noted that we consider that the term 'landbank' to have been misunderstood and misused by the Council. In the absence of specific NI guidance, DCLG guidance¹⁶ states that:

“The landbank is the sum in tonnes of all permitted reserves for which valid planning permissions are extant. This includes current non-working sites but excludes dormant sites and “inactive sites” (set out under the Planning and Compensation Act 1991 and Environment Act 1995, for which a review is required which may need to include an Environmental Statement, before operation can commence or resume). The length of the landbank should be calculated using the expected provision (supply in response to demand) included in the local minerals plan, expressed on an annual basis”.

The sites as described within the Council's 'landbank table' are not permitted reserves and therefore should not be referred to as landbanks. It is however, encouraging that the Council recognises that additional resources are required

¹⁶ Guidance on the Managed Aggregate Supply System, DCLG, October 2012.

and that the response from mineral operators enable the Council to consider the contribution these additional lands can make throughout the plan period.

The Council's POP Consultation report states that in looking where resources are located throughout the district there is an argument that the ACMD is too large in relation to where important mineral reserves are located and it is the Council's view that by reducing the extent of the ACMD, adequate protection can be provided to the minerals industry.

The above conclusion was reached based upon the evidence previously provided by operators, following the POP Consultation exercise. As discussed further at Section 5.0 below, the evidence upon which the proposed policies have been based is considered to be inaccurate and therefore unsound. The recent data provided by our clients further supports the case that the extent of proposed ACMD's require further consideration in order to define precise boundaries, thereby avoiding areas of important future mineral reserves which may be required in order to ensure sufficient supplies of aggregate are made to satisfy demand over the plan period.

Concisely, there are several inadequacies by virtue of the presentation and misinterpretation of the data collected by the Council. The Council must ensure that the data collected, and its evidence base is adequate and accurate, in order for the policies of the DPS to be considered sound. Presently, we would contend that the DPS is likely to fall foul of the application of the test of soundness based on a paucity of information collected by the Council and misinterpretation of that data in formulating a substantiated evidence base.

4.4.6 The position in relation to Lough Neagh

The fifth key point identified in the Council's POP Consultation Report is the Council's position in relation to Lough Neagh. The report describes how the Council's view on Lough Neagh was not considered within the POP but

“given that an application is with DFI for extraction in the Lough, which would provide a long term supply if permitted, it would be appropriate given the status of the Lough as a RAMSAR site and an area of special environmental importance, to designate it as part of our Area of Constraint on Mineral Development”.

The above statement from the Council has been explicitly provided based on the status of the application and what planning authority is currently processing the same. This is representative of the Council distancing itself from the significant mineral resource the Lough provides and not appropriating resources and efforts into an outcome where this resource is lost in planning terms. The implications, as advised in Section 4.4.4 above, will affect the Council's DPS, and associated SEA, SA and alternatives considered. It is considered that without assessing the economic benefits of the mineral resource of the Lough that it would be *inappropriate* to designate the Lough as an ACMD. As described by the Council, a planning application is currently pending for the continued extraction of sand from the Lough. Any potential ACMD designation could have the potential to conflict with the outcome of the planning application and could give rise to prematurity issues with respect to an application which has been subject to scrutiny since 2016.

Given that the Lough is protected by a number of designations already and mineral extraction from the Lough has taken cognisance of these designations, and an Environmental Statement has been produced to accompany the planning applications, additional protection is considered unnecessary and profoundly disproportionate when considered in line with economic and resource information supplied to the Council.

It is noted that this position of designating the Lough as an SCA is considered within and derived from the Council's paper “Identification of ACMD's and

Impact of Surface Development Paper” published by the Council in January 2019 (see section 4.6) and at Paragraph 14.17 of the DPS which states that:

“the Plan has not introduced a SCA on the Lough, which has historically been used for sand dredging. This activity is subject to a regionally significant application being dealt with by Department of Infrastructure. Mid Ulster District Council will review the approach to extraction in light of the outcome of that application. In the interim the Lough continues to be afforded protection by other statutory bodies through the various environmental designations that have been placed on it by virtue of the RAMSAR, SPA and SAC and ASSI designations”.

The above paragraph implies that it is the Council of the opinion that the protection afforded to the lough through the various environmental designations is sufficient.

We would welcome confirmation of the Council’s position and wish to clarify that we **oppose any Area of Mineral Constraint Designation on Lough Neagh.**

4.4.7 Other Issues

Finally, the sixth point elaborates on some of the other issues which the Council is seeking to address as an outcome of the POP consultation. The Council states that some of the wording as proposed within the POP should be amended. For example, use of the term “special attention” (The POP stated that “*Special attention is paid to accommodating protect species and protecting biodiversity*”) is to be reconsidered in order to become more specific. Our clients welcome amended wording on the matter.

Another point raised under the ‘other matters’ topic was whether Rural Industrial Policy Areas would apply to Mineral Development sites. The report

states that it would not be appropriate, however they do propose a policy to be included within Policy MIN1 which states that

“Where there are existing quarries, outside of an Area of Constraint and outside areas in close proximity to ASSIs, national nature reserves, areas which have been or are able to be designated, scheduled or listed because they contain features of archaeological or historic interest, favourable consideration can be given to a directly related industry such as cement / concrete works or glass manufacture.”

Whilst we note the proposed policy, it is considered that the policy does not go far enough to support the existing industrial sites within the district. The matter is considered further at Section 7.1.1.

4.5 Landscape Character Assessment Review

Following the POP Consultation, the Council has prepared a Landscape Character Assessment Review (LCAR), no publication date is provided for the Review. The Review LCAR describes how its purpose is to provide information on:

- Landscape Character Assessment (LCA) and its use as a tool for decision makers;
- The relevant regional planning policy framework to protect our landscapes; and
- A review of Local Landscape Character Areas for Mid Ulster including key intervening changes since 2000.

The report has been reviewed and audited by GM Design Associates.

Quarryplan Ltd has instructed Mullin Design Associates ('MDA') to review the LCAR and associated GM Design Review and Audit Report and advise on the adequacy of the reports in providing a sound evidence base in terms of identifying areas which should be afforded protection from minerals development.

A copy of the MDA assessment is provided at **Appendix 2**.

The review has been prepared by Pete Mullin CMLI of MDA. Pete is Chartered Landscape Architect with over 25 years' experience studying, teaching and practicing in the sector. In addition to private design practice, for the past eight years Pete has been the Policy Consultant for the Landscape Institute Northern Ireland. Through his private practice work Pete has attended several public inquiries as expert witness and overseen more than 100 Landscape and Visual Impact Assessments. He was also a lead member in the team responsible for development and delivery of the 2015 Northern Ireland Regional Landscape Character Assessment (NIRLCA) of behalf of NIEA.

The MDA Review describes how Landscape Character Assessment (LCA) does not in itself place value judgements on landscape sensitivity relative to a particular development typology, but simply it is designed to form a foundation or 'baseline' from which detailed 'Sensitivity and Capacity Studies' can be prepared. It is Sensitivity and/or Capacity studies which then inform the Development plan process.

The Council's LCA appears to somewhat misinterpret this distinction, as the updated LCA quickly moves from simply recording the locations of new residential units and wind turbines introduced over the past 20 years, to recommending 'Actions' such as a requirement to increase policy control; which has then been interpreted to apply restrictive landscape designations.

To the professional reader there are significant jumps in the process of identifying the new landscape designations. The purpose and reliance on

designations is not in dispute, however the mechanism and justification of its application is unconvincing and is not considered a sound basis upon which to base proposed landscape designations.

The MDA Review demonstrates how the proposed designations have been determined primarily through a two dimensional desktop exercise relying on landcover or contours, rather than through three dimensional modelling and assessment of on-site characteristics. Examples are provided of the visual influence of various development types including quarry development, with the an almost identical visual impact experienced, regardless of whether the proposed development is within a proposed designation or not.

The MDA Review concludes that without detailed Landscape Capacity and Sensitivity studies specific to mineral development, MUDC's proposed landscape designations are not based upon a robust evidence base and in this respect, the plan is therefore considered to be unsound.

4.6 Identification of ACMD's and Impact of Surface Development on Aggregate Resources in Mid Ulster Background Evidence Paper- January 2019

A background paper has been prepared by MUDC to provide information on how proposed ACMD's have been defined for the draft Plan Strategy ('ACMD Impact Paper'). The paper also provides information on the potential impact of surface development and the proposed Special Countryside Area (SCA) and ACMD designations on aggregate resources in Mid Ulster.

The paper describes how, in line with the SPPS, the Council has identified those areas of the district where their intrinsic landscape, amenity, scientific or heritage value (including natural, built and archaeological heritage) and provides that there should be a presumption against minerals development in such areas. The paper sets out how the proposed ACMD designations have

been aligned with proposed SCA designations and proposed Areas of Constraint on Wind Turbines and High Structures.

In identifying the ACMD designations, the Council defines how it has also sought to identify and exclude those areas with the largest concentration of [existing] quarries to ensure that the minerals industry in Mid Ulster can continue to contribute to the construction industry and the economy in Mid Ulster and in Northern Ireland.

The paper states that:

“The important point to make in relation to all of those areas outside of the proposed ACMD is that any mineral development coming forward will still have to satisfy the criteria and tests of Policy MIN 2 as well as the General Principles Planning Policy, Natural Heritage and Historic Environment. This is particularly important for those sites recognised internationally, nationally and regionally as being important and are protected for their wildlife, scientific value or heritage interests such as ASSI’s, SACs, SPAs and RAMSARs. In effect these also act as areas of constraint on mineral development in their own right given the protection afforded to them through separate legislation but also through the application of our Natural Heritage policies”.

We note this contextualisation of the proposed ACMD designations and note the fact that it is acknowledged by the Council that mineral developments are already subject to strict planning policy criteria and that the presence of existing designations already act as de facto ACMD’s. It is evident that the industry is already heavily regulated. It is considered that in light of the Council’s statement which promotes a PPS led planning system (referred to as a consultee led system earlier in this response), whether there is a need for ACMD designations, beyond SAC, ASSI SPA Ramsar designations together with the fanatical protection of undesignated NI Priority Habitats within the LDP at all.

The Council's Evidence Paper identifies 3 areas for potential ACMD Designations:

- Sperrins and Slieve Gallion
- Clogher Valley and Ridges and Slieve Beagh
- Shores of Lough Neagh and Lough Beg and Lower River Bann

Each of the proposed designations is considered in turn below.

4.6.1 Sperrins and Slieve Gallion

The Paper describes how the prominent ridges, as identified in NILCA 2000, have been largely used as the inward extent of the ACMD line. These proposed areas comprise of Beaghmore and the High Sperrin's which are considered by the Council to be rich in terms of archaeology and represent the wilder, unspoilt and most scenically valuable parts of the AONB. The report describes how it excludes those areas where there is a large concentration of existing quarries, for example, the concentration of quarries close to and to the south of Lough Fea and to the south east of Davagh have been excluded. Areas along the A4, predominately to the south of this transport route have also been excluded due to the large concentration of quarries in this area.

The proposed ACMD designation is located wholly within the Sperrin AONB. The designations seeking to protect the outstanding beauty of this part of the district. The Council has described how existing designations already in effect act as an ACMD. Therefore, given that the entire area proposed to be designated as an ACMD is located within the existing AONB Boundary, it is unclear as to why additional protection is needed in this location.

As detailed in Section 4.5, a review of the LCAR has been undertaken by a chartered landscape architect; MDA. The review concludes that the LCAR and other landscape background papers have failed to appropriately assess

the capacity of the various landscapes to accommodate minerals development, instead the 'Assessment' work undertaken by the Council appears to only provide what is in effect, a targeted update to the Northern Ireland Landscape Character Assessment 2000.

Whilst it is noted that the proposed ACMD avoids areas where a large concentration of existing sand and gravel pits are located, the designation does adjoin a number of the existing workings; restricting meaningful lateral extensions to existing proven mineral reserves. No evidence of any assessment which has resulted in the specific boundary extents appears to have been provided within the Council's evidence base.

Policy MIN1 of the Planning Strategy for Rural Northern Ireland states that extensions to existing mineral workings which minimise environmental disturbance in the countryside will normally be preferred to new workings on green field sites. This test is echoed in the SPPS.

The ACMD designation, as proposed by the Council, limits the potential for existing sites to expand in order to meet future demand by virtue of the designation's proximity to the existing working areas and the limiting effect this would have for any potential lateral extension in the future. Further assessment work is required by the Council in order to create an evidence base which adequately assesses the landscape impacts of any future mineral workings and the capacity of existing landscapes to accommodate future mineral development. Without such a credible evidence base, the soundness of any future proposed constraints cannot be demonstrated.

4.6.2 Clogher Valley and Ridges and Slieve Beagh

The Council's paper describes how NIEA advise that the Clogher Valley is an area of important Earth Science value in relation to the glacial history of the north Ireland and by extension the British-Irish Ice Sheet (BIIS). NIEA advise that the glacial landforms are superb and remain essentially intact as there

has been little commercial extraction on them, hence the rationale for the proposed ACMD covering these landform areas. The ACMD also includes the Clogher Valley and its escarpment due to its scenic value, and has been extended to include Slieve Beagh, which is also recognised as being an internationally important natural habitat.

As detailed in Section 4.5 of this submission, the landscape background papers have failed to appropriately assess the capacity of the landscape to accommodate minerals development, instead the 'Assessment' work undertaken by the Council appears to only provide what is in effect, a targeted update to the Northern Ireland Landscape Character Assessment 2000.

As noted at Section 4.6 of this submission, the Council has acknowledged that existing designations already act as effective ACMD zoned areas. Most of the proposed ACMD, already afforded EU protection by a SPA designation, is also includes extensive SAC, ASSI and RAMSAR designations. Therefore, it is unclear as to why additional protection beyond these current designated areas is required, given that the landscape has not been adequately assessed in terms of its capacity to accommodate mineral development.

4.6.3 Shores of Lough Neagh and Lough Beg and Lower River Bann

The Council's paper describes how the Lough Neagh / Lough Beg / Lower River Bann shorelines are considered to be particularly sensitive to all types of development given their wealth of natural heritage features, and their high scenic quality.

The Special Countryside Area around the shores Lough Neagh introduces a constraint on all development including mineral extraction in recognition of its landscape qualities and the international importance of this wet land.

As detailed in Section 4.5, the landscape background papers have failed to appropriately assess the capacity of the landscape to accommodate minerals development.

Again, in a similar fashion to the above, it is noted that the shores of Lough Neagh are already included within the existing national and international designation for its wildlife. In light of the Council's earlier conclusions on the duplicitous nature of ACMD's at existing designation, it is questioned whether an extra degree of protection is required, given that the existing designations effectively act as an ACMD and whether the designation of the same, based upon a lack of technical landscape assessment is of sound approach.

It is noted that the existing quays associated with the landing of sand extracted from the lough and the processing and stockpiling of the same are not included within the ACMD/ SCA designation. These omissions are welcomed by our clients.

Whilst the shores are designated as a SCA, the plan has not introduced an SCA on the Lough, which has historically been used for sand dredging.

The paper describes how this activity is subject to a regionally significant application being dealt with by Department of Infrastructure and that MUDC will review the approach to extraction in light of the outcome of that application.

It is considered that it would not appropriate to designate such an area which is currently the subject of a regionally significant planning application. We would however note that this approach differs to that set out in the Preferred Options Paper- Public Consultation Report (see Section 4.4.6) which states that it would be appropriate to designate the lough as an area of mineral constraint. We would re-iterate that our clients oppose this position and would request clarification of the Council's approach.

The Paper describes how in the interim, the Lough continues to be afforded protection by other statutory bodies through the various environmental designations that have been placed on it by virtue of the RAMSAR, SPA and SAC and ASSI designations. It is considered that this protection is adequate with any additional policy protection against minerals development being disproportionate and unnecessarily prejudicial to the pending planning application.

Should the regionally significant planning application for the extraction of Lough Neagh be granted. Given the economic importance of the mineral resource as evidenced within this representation, the Council should ensure that it takes a sound approach in relation to policy formulation with regards to the Lough, basing any future policy upon a credible and robust evidence base.

4.6.4 Methodology

The Council's paper describes the methodology undertaken for assessing the impact of existing surface development on mineral resources and the potential impact of the proposed ACMD's.

The Council's paper describes how ArcGIS software was used to identify infrastructure within the district. Data sets for house locations, road network and water body network have been identified and buffered to create a network of locations where mineral extraction would not be permitted or possible due to these existing surface developments and land-uses. Remaining parcels of land less than 0.15km² were also removed as these were considered by the Council to be of an insufficient size to run a viable operation from. The extent of the remaining land was then calculated. It should be noted that there are numerous sand and gravel pits within the district which are less than the 0.15 km² (15ha). The justification for the selected area is unclear with no evidence provided for its rationale.

Our clients acknowledge the methodology and the Council's undertaking in this regard. We would however stress that the exercise is theoretical, for example the 15ha site size is considered arbitrary. In reality, the area of land available for future mineral development is constrained by a range of other factors, other than just sterilisation via proximity to physical infrastructure. The potential for a site to be developed for minerals extraction is dependent upon a range of factors including:

- Proximity to statutory designations;
- Site specific characteristics e.g. topography;
- Potential visual impacts;
- Adequate access;
- Land ownership;
- The quality and depth of mineral available;
- Residential proliferation;
- The consistency in the mineral;
- Depth of mineral;
- Overburden handling and placement which requires landtake;
- Haulage routes;
- Geotechnical parameters; and

Therefore, whilst the Council's methodology is noted in endeavouring to understand the potential sterilisation of mineral within the district, it must be stressed that the land identified as being potentially available for minerals development is only theoretical and is the best case availability rather than the standard practice of worst case within impact assessment and needs to be subjected to site specific investigation and design protocols. The amount of suitable land available to the minerals industry will only be a fraction of the total land area predicted by the Council.

4.6.5 Outcomes

Table 1 of the Council's January 2019 paper denotes that when buffers from infrastructure as identified above are applied there is anywhere between a 26% and 80% reduction in available resource (varies by mineral) before any ACMD buffers are applied.

Following application of the ACMD buffers, the reduction in available mineral resource is more severe with Table 4 of the paper identifying that the Sand and Gravel resources would be reduced by some 61%, limestone resources would also be reduced by the same amount.

In reality, as a result of the range of factors summarised in Section 4.6.4 above (not exhaustive), the amount of available land to win and work a chosen resource is significantly less than that stated by the Council. Therefore, whilst the Council's efforts to assess the amount of land which is not sterilised in terms of infrastructure or the proposed ACMD designations is noted, further work is required in order to identify and understand the additional constraints upon land and its accessibility and availability for minerals development. These impacts should then be further assessed and considered within the paper.

The paper concludes that due to the reduction in available land from 74% when infrastructure buffers are applied to 33% when ACMD designations are also included, that:

“the ACMD and SCA designations are too severe and that their impact would potentially stifle the aggregate industry of the district”.

The paper then continues:

“Minerals Statements collated by the Department for Infrastructure in 2011 (Table 5) and consultation with operators in the District (Table 6) have

suggested that Mid Ulster has more than sufficient resource to cover the estimated 18.4million tonne requirement with remaining reserves of 43 million tonnes”.

It should be noted that there is no Table 5 included within the paper. It appears as though the Table 5 as referenced above may be named as Table 6 within the paper as the figures presented appear to accord with those presented within the DFE Annual Statements for 2015 and 2016, however these are not from 2011, as referenced.

This section of the paper is erroneous with it unclear to the reader as to which data is supposed to be presented in the tables. The Table 6 referred to is not presented. It is assumed that the table is the same as that presented at Appendix 1 of the POP Consultation Paper however this is unclear. We would be grateful if the Council could provide clarity on the matter.

Copies of the DFE Annual Statements for 2015 and 2016 are appended at **Appendix 5.**

From a review of the DFE Mineral Statements and table of operator responses within the POP Consultation Report, there is a clear disparity in the yearly extraction figures.

The 2015 Annual Mineral Statement states that c. 1.13m tonnes of sand and gravel were produced in Mid Ulster in 2015, the figure is given as c1.32m tonnes in the 2016 Annual Mineral Statement. When compared with the evidence provided by the 16 respondents following the POP consultation, a yearly extraction figure of c. 2.3 million tonnes of sand and gravel is quoted by the Council. There is therefore a disparity of some one million tonnes between the two sources of information. No assessment or justification is presented within the ACMD Impact Paper as to why the extraction figures may differ and which data should be utilised within the evidence base to support policy formulation.

The 2015 Annual Mineral Statement states that c. 616,000 tonnes of Basalt, igneous rock and Limestone were produced in Mid Ulster in 2015. A figure of c. 817,000 tonnes is given for basalt and igneous rock extraction only in the 2016 Annual Mineral Statement, with figures for sandstone and limestone combined with other authorities to protect commercial information.

It is unclear in the first instance as to why the hard rock figure in the 2015 column of Table 6 does not include the limestone and 'other minerals' figures presented within the 2015 Mineral Statement. There is a clear disparity between the 296,000 tonne figure presented in the table and the 430,000 tonne figure provided by operators in the post POP consultation table.

In terms of the 2016 figure, the only hard rock figure solely for Mid Ulster identified in the Annual Statement is for basalt and igneous rock, (the rest of the hard rock minerals are grouped together for commercial sensitivity reasons).

If we were to consider that the total hard rock extraction rate for 2015 as presented in the 2015 Annual Mineral Statement is c. 616,000 tonnes and that the figure in the 2016 Annual Mineral Statement for Basalt only is c.817,000 tonnes it is completely illogical to calculate an average based upon the 2015 and 2016 figures for Basalt only without taking any account of limestone, sandstone or 'other minerals' production.

As demonstrated at Section 5.0 the Council's understanding of the supply and demand position in Mid Ulster is inaccurate. As evidenced via the data provided to Quarryplan by its clients, the supply of sand and gravel and hard rock in the district is not anticipated to meet demand over the plan period.

The paper describes how the proposed ACMD's are considered to be too restrictive, however due to evidence which the Council have referenced they believed the supply over the plan period to be adequate and therefore conclude that the designations proposed reflect a balanced approach. The

evidence we provide is to the contrary. It is demonstrated that the supply of mineral is not expected to meet demand over the plan period and the Council's own evidence suggesting that the ACMD designation will result in a reduction of at 40% of the available sand and gravel resource.

The ACMD Impact Paper states that Mineral Statements collated by DFE from 2015 and 2016 and cross-referenced with the responses received from some of the industry members to the consultation at the time of the POP provides clearer evidence of the adequacy or otherwise of the existing mineral reserves in the district.

As it stands the evidence base is inadequate with the evidence provided in terms of the supply and demand position wholly inaccurate and significantly underestimating the local supply of land derived mineral in the district. The position has now been further clarified through this submission.

The ACMD Impact Paper states that it should also be noted that the sand and gravel figures do not include sand extracted from Lough Neagh.

It is unclear as to why MUDC have not included the sand extracted from Lough Neagh in its assessment given that the area of the lough from which sand is extracted is located wholly within the MUDC administrative area.

As demonstrated in Figure 3.1 of the Environmental Statement submitted as part of the planning application for the currently pending regionally significant application, between 2008 and 2015 the annual average rate extraction from the Lough was some c. 1 million tonnes per annum. This could lead to a shortfall of a figure between 13MT and 19.5MT over the plan period using the Council's own approach to calculating supply requirements.

If we consider this in comparison with the figures quoted in Table 6 of the ACMD Impact Paper, the figure almost doubles the annual extraction rate for sand and gravel for the Mid Ulster area. Given the importance of the

extraction from Lough Neagh, as discussed at Section 4.4.4, it is prudent that extraction rates from the lough are fully considered when assessing the supply and demand position in Mid Ulster.

The overall conclusion of the paper is that whilst the ACMD and SCA designations appear to potential stifle the industry, given that the supply of permitted reserves will meet the demand over the plan period, there is no need to further alter the proposed designations.

Given the supply and demand position as reflected at Section 5.0, it is evident that the Council has significantly misunderstood and therefore underestimated the supply position for both sand and gravel and hard rock and that based on the evidence provided within this representation, the current genuine landbank available for supply of mineral is not expected to meet demand over the plan period.

If the supply position does not meet demand, it then alters the conclusion of the evidence paper. The only reasoned conclusion that can now be reached is that the proposals are not based on a reliable evidence base and are therefore unsound and that the Council should revert back to its original assessment that:

“On the face of it this would suggest that the ACMD and SCA are too severe and that its impact would potentially stifle the aggregate industry of the district”.

5.0 MID ULSTER MINERALS INDUSTRY

Whilst Quarryplan and its clients note the Council's evidence gathering exercise, given the inaccuracies as described above, Quarryplan has sought to undertake its own data collection exercise on behalf of the clients named at Section 2. The follow section should be read in conjunction with the evidence forms provided by operators and appended at **Appendix 6**.

Paragraph 14.2 of the DPS states:

"it is estimated that in excess of 1250 jobs in Mid Ulster are provided by virtue of the minerals industry, either by direct quarrying activity or associated manufacturing activity".

Paragraph 14.3 of the DPS states:

"Whilst it is difficult to place an exact figure on the annual value of minerals which are sold in Mid Ulster, it is believed that this figure may be in excess of £13 million per annum (DFE Annual Mineral Statement 2016)".

The figures presented by the Council within the DPS grossly undervalue the minerals industry within the District.

The Preferred Options Paper- Public Consultation Report Update, January 2019 states that there are 30 mineral operators within the Mid Ulster District Council area. Quarryplan's submission represents one third of those operators listed by the Council. The Client's represented in this submission collectively require in excess of **5 million tonnes of mineral** (per annum) to sustain existing demand, which constitutes some **65 million tonnes** of mineral resource over the plan period.

The collective value of the turnover our Client's have attributed to the extraction of mineral and generated by higher value-added activities, where

the mineral is used in manufacturing processes and other products is over **£217 million.**

Whilst the Council has provided a figure of 1250 people employed in 'mineral development' in Mid Ulster; our Clients collectively employ over **1600 people** with an annual wage bill of over **£43 Million per annum.**

Again, it is reiterated that our clients represent only one third, by number, of the 43 operators listed by the Council. The mineral demand, turnover, employment and annual wage bill will be significantly higher than the amount provided by just our clients.

The conclusion of the data collection exercise is the same as that reached within the MUDC Public Consultation Report in that the current supply of both Sand and Gravel and Hard Rock Aggregates is not sufficient to meet the demand over the plan period. The evidence provided at **Appendix 6** provides a more accurate picture of the supply and demand position within Mid Ulster. Such data will allow a more robust evidence base to be prepared, which will then allow for the strategies and policies contained within the plan to be prepared on a sound basis. Currently, as a result of the inadequacy of the evidence base, the policies cannot be said to have been prepared based upon robust evidence.

Given the highlighted inadequacies, the policies of the DPS are considered to be unsound as they have not been based upon a robust evidence. Furthermore, the SA/SEA which has also been based upon this evidence is inaccurate.

The DPS is therefore considered to fail to comply with soundness tests P3 and CE2.

6.0 MINERALS

6.1 Overview

Section 14 of the DPS acknowledges that minerals represent a very important resource for the district by providing employment and also generating large amounts of revenue. Our clients concur with this statement and welcome MUDC's acknowledgement of the same. Paragraph 14.2 states that:

"it is estimated that in excess of 1250 jobs in Mid Ulster are provided by virtue of the minerals industry, either by direct quarrying activity or associated manufacturing activity"

Paragraph 14.3 of the DPS states that:

"Whilst it is difficult to place an exact figure on the annual value of minerals which are sold in Mid Ulster, it is believed that this figure may be in excess of £13 million per annum (DFE Annual Mineral Statement 2016)".

Quarryplan's Representation of January 2017 detailed how the figures presented by the Council within the POP (3.2 million tonnes of aggregate per annum and £10million per annum to the local economy) had grossly undervalued the minerals industry within the District.

The submission represented only one third of those operators listed by the Council in the POP and its supporting evidence papers. The representation detailed how collectively, the value of our Client's mineral sales to the Mid Ulster Council area was c. **£20.5 Million per annum.**

The representation highlighted that the Council had not considered the VAT or Aggregate Tax value to the Northern Ireland economy, describing how

collectively, our Client's annual VAT and Aggregate Tax figure was c. **£9.5 Million per annum.**

The Council also presented the figure of 1250 people employed in 'mineral development' in Mid Ulster in the POP paper. Quarryplan provided evidence that those clients involved with the Representation collectively **employed 1060** people alone with an annual wage bill of c. **£30 Million per annum.** It is particularly discouraging that the Council has sought to continue to use the employment figure of 1250 people despite the previous representation highlighting that this was likely to be grossly underestimating the number of employees. It is considered that following the POP publication and consultation process, the Council has not taken the opportunity to re-assess these employment figures.

As detailed at Section 5.0, our clients provide employment for over **1600 people.** As was the case previously, it is recommended that further evidence gathering is undertaken so as the Council can more accurately identify the rate of employment within the industry. At this time, the lack of primary evidence gathering by the Council regarding employment could render the Plan unsound.

The collective value of our Client's manufacturing businesses to the Mid Ulster Council area is over c. £217 Million. Given that our clients represent only one third of the operators within the district, a more accurate figure in terms of the overall economic contribution of industry (including employment, taxation and the value of any related manufacturing business) is considered to be in excess of £250 Million pounds.

It is unsatisfactory that rather than analysing the information previously supplied by Quarryplan and the importance of considering the likes of employment, taxation and the value of any related manufacturing business when assessing the value of the industry, the Council have instead sought to rely upon a value (£13 million) from the DFE Annual Mineral Statement 2016.

Primarily it is unclear as to how the figure of £13 million has been reached from those presented within the statement. It is assumed that it is based upon the 'values' presented for Mid Ulster in terms of Basalt and other igneous rock; sand and gravel; and other minerals, as presented in Table 4 of the 2016 Annual Mineral Statement.

Furthermore, it is unclear as to the precise definition for the term "value" relates to, however, this is not the same as the term economic benefit that is also used frequently with the DPS. The term "value" is used several times within the Mineral Returns Form (A copy of the form is provided at **Appendix 7**). Question 2 of the form asks the operator to give an average value per tonne before tax, levy, transportation costs and profitability (i.e. the production cost). Question 5 of the form asks for the value of aggregate or other value-added product which has been exported whilst question 6 asks for the value of an aggregate or other product which has been sold in the last year within each Council district.

The values provided by operators in the answers to Question 2 will vary dramatically to the answers to Questions 5 and 6. For example, the production value will be a relatively low figure, compared with a value-added figure which will be higher as the mineral will have been worked in order to produce a more valuable product.

Due to the ambiguity of the term "value" within the DEF Statement, reliance upon such a statement is of limited importance or significance when accurately assessing the true "value" of the minerals industry within the district. It is considered that the Council needs to undertake a thorough evidence gathering and assessment exercise which allows it to accurately identify the value of the minerals industry (including employment, taxation and the value of any related manufacturing business) rather than relying upon evidence which is ambiguous and can clearly be demonstrated to be inaccurate. Again, is it discouraging that, whilst evidenced within the QPL POP submission, the Council have ostensibly ignored the figures provided

and appear to have failed to collect primary evidence prior to the publication of the DPS.

Paragraph 14.4 of the DPS describes how the construction industry is a very important employer in Mid Ulster with the District being nearly twice as reliant on the construction industry for employment as Northern Ireland as a whole (NISRA Census of Employment 2014). The plan describes how:

“We are a major producer of ‘construction minerals’ or aggregates such as sand and gravel and the continued production of this will also be a direct stimulant to construction industry”.

It is considered important that the terminology used by the Council in Paragraph 14.4 is clarified and why the use of the term ‘aggregates’ to describe sand and gravel is inaccurate and misleading. The British Geological Survey¹⁷ describe how:

“Aggregates are normally defined as being hard, granular, materials which are suitable for use either on their own or with the addition of cement, lime or a bituminous binder in construction. Important applications include concrete, mortar, roadstone, asphalt, railway ballast, drainage courses and bulk fill. European Standard (BS EN12620: 2002) defines aggregates as ‘granular material used in construction. Aggregate may be natural, manufactured or recycled”.

The term “minerals” is used in regional planning policy terms, therefore in order to achieve consistency with the same and avoid confusion, reference to the term “aggregates” should be removed from any policy within the DPS and replaced with the word “minerals” instead.

Our clients would agree that continued supply of minerals is a direct stimulant to the construction industry. As described in the DPS, given that the Council is

nearly twice as reliant on the construction industry for employment as Northern Ireland as a whole, it is imperative that a sufficient local supply of construction aggregate (processed minerals) can be made available for the local market, and where appropriate the regional market area and beyond, to meet likely future development needs over the Plan period, as required by the SPPS.

Paragraphs 14.9 to 14.11 of the DPS set out the Council's strategy towards mineral development. The approach is to designate ACMD's to protect areas which area of intrinsic landscape, amenity, scientific or heritage value. Areas will also be designated as Mineral Reserve Policy Areas (MPRA's), where surface development which would prejudice the future extraction of mineral deposits of 'economic importance' will be resisted.

The Council's strategy also adopts a policy on valuable minerals such as metalliferous minerals and hydrocarbons. This is of little relevance to our clients and to the majority of mineral operators in the LDP area, who are 'conventional' mineral operators and therefore the policies pertaining to such development are not considered further in this representation.

6.2 Policy MIN1- Mineral Reserve Policy Areas

Policy MIN1 states:

"Within a Mineral Reserve Policy Area, surface development which would prejudice the future extraction of minerals, shall not accord with the Plan".

The MRPA's are identified on Maps 1.12 – 1.15 within the DPS and on the District Proposals Map and are comprised of:

¹⁷ Mineral Planning Factsheet: Construction Aggregates, BGS and DCLG, 2013

- an area to the southwest of Cookstown at Ballyreagh, designated to protect limestone deposits associated with cement manufacture;
- an area on the western edge of Coalisland, designated to protect the clay beds, traditionally exploited for the manufacture of clay bricks; and
- an area to the north west of Dungannon, designated protect shale and clay deposits which are used by an existing business in Cookstown.

Our clients welcome the principle of Mineral Reserve Policy Areas but would question the number, extent and importance to the MUDC of the designations proposed to be safeguarded within the DPS.

Whilst our Clients support the protection proposed to be afforded to mineral deposits, it is considered that mineral deposits which are fundamental to sustaining and growing the District's prosperity are required to be protected. MRPA's are recommended under MIN 5 of PSRNI 1993 – *"Where there are mineral reserves which are considered to have particular value to the economy"*.

As detailed in Section 5.0, it is considered that with values directly driven by the primary mineral resources running (likely) in excess of £217M, that the value of the operational minerals to Mid Ulster Economy far outweighs those mineral reserves designated for protection. It is therefore inadequate that no further consideration appears to have been afforded to the protection of the existing mineral reserves which provide such a valuable contribution to the local and regional economy.

As detailed at Section 4.4.4 of this submission, the mineral extracted from Lough Neagh provides a significant local and regional contribution to the Northern Ireland economy. The DPS and supporting evidence state that any designation upon Lough Neagh in terms of mineral development will be resultant upon the outcome of the currently pending regionally significant planning application. Should the development be consented, given its demonstrable economic benefit to the local economy, it is considered that

policy may wish to reflect its importance, perhaps in the same manner as the Limestone, clay and shale deposits identified within the plan are proposed to, subject to any policy being based upon a sound evidence base.

It is contended that the mineral resources within the Lough are of importance to Mid Ulster Council and the whole of Northern Ireland, as demonstrated via the Oxford Economics Report appended at **Appendix 4**. As such we would propose that the extraction and dredging site, an area of 3.1km² on Lough Neagh is provided protection through safeguarding planning policy.

It is also noted that whilst the proposed policy would safeguard mineral resources from surface development which may prejudice the exploitation of the mineral, problematically the policy is silent in terms of applying a presumption in favour of the sustainable extraction of the mineral.

The SPPS states:

“In preparing their LDP councils may also identify areas most suitable for minerals development within the plan area. Such 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”.

As outlined at Section 4.2 of this submission, the Council's valuation of the matter is that the wording of the SPPS states that Council's *should* designate ACMD's, whilst they *may* designate areas most suitable for minerals development. In short, the Council is of the opinion that designating such areas is at their discretion and in this instance, they have exercised this discretion so as not to designate any areas most suitable for minerals development within the plan area.

It is considered that the methodology employed by the Council is not balanced and that areas must be designated which are most suitable for

minerals development, would assist in achieving a sufficient local supply of construction aggregate to be made available for the local market, and where appropriate the regional market area and beyond, to meet likely future development needs over the Plan period, in order for the plan to comply with the requirements of the SPPS¹⁸.

Minerals can only be won and worked where they are found. The MUDC district is the largest producer of sand and gravel within Northern Ireland by some distance, producing c. 75% of all Sand and Gravel produced within Northern Ireland. As detailed throughout this submission, the minerals development makes a significant contribution to the local economy, it is also supports the construction industry within Mid Ulster which local employment is highly reliant upon. Given these set of circumstances, it is considered appropriate that the Council must exercise its discretionary powers to designate relevant areas as suitable for minerals development, assisting in the delivery of a steady and adequate supply of minerals which both the local economy and the regional economy rely upon, to sustain economic growth.

Whilst the principle of identifying and safeguarding MRPA's is welcomed, those presented within the DPS are considered to be too few in number and the clay brick designations are obsolete. The proposed designations do not reflect the importance that the district has in terms of sand and gravel extraction to the regional economy. In this context, it is unacceptable that the Council has used its discretion to choose to not identify areas suitable for minerals development within the district. It is considered that the proposed MRPA's do not go far enough in protecting the tangible important resources within the district. Based on the evidence supplied in this submission alone, it is considered that the Council's evidence base is unsound and areas of safeguarding need to be revisited with a SA/SEA explanation as to why sand and gravel resources have been excluded. This should have been covered by the Council in its SEA alternatives; but like the DPS the SEA is silent with respect consideration of this matter.

¹⁸ SPPS 2015, at page 77

It is recommended that the Council engage with operators to identify important resources within the district and seek to afford these areas suitable planning policy protection. Pending the outcome of the currently pending planning application, the Lough Neagh resource should also be afforded suitable protection.

As a result of the above, the policy is not considered to be sound as it fails to identify a coherent strategy for safeguarding important mineral resources within the Plan Area by safeguarding some minerals which do not make any economic contribution, whilst leaving others which are demonstrably of economic value undesignated. The plan is not based upon a robust evidence base, with the Council failing to identify and take cognisance of the economic importance of the sand and gravel resource within the district. As a result, the plan is considered to conflict with Soundness Tests CE1 and CE2.

6.3 Policy MIN 2- Extraction and processing of Hard Rock and Aggregates

Policy MIN 2 states:

“In Areas of Constraint on Mineral development the extraction and processing of hard rock and aggregates will conflict with the Plan except for minor expansion of an existing mineral working or where it provides important benefits, such as the provision of stone for the restoration and maintenance of vernacular and other buildings of conservation interest.

Elsewhere, extraction and processing of hard rock and aggregates will conform with the Plan, subject to environmental and transportation considerations. Particular attention will be given to significant to potential impact on human health and public safety, caused by dust, noise, blasts and vibrations resulting from activity on the site and vehicles travelling to and from the site.

A precautionary approach will be adopted to assessing mineral development and therefore the onus will be on the developer to demonstrate that development will not:

- a) Prejudice the essential characteristics of a site of international / national or local nature conservation importance including ASSI's, SAC's, SPA's and local /national nature reserves or other heritage interests;*
- b) Result undue harm or loss to protected species or contribute to significant biodiversity loss;*
- c) Cause significant risk to public safety or amenity caused by dust, noise, blasting or the use of chemical and/ or biological agents;*
- d) Impact negatively upon the safety and amenity of occupants of development in close proximity to the mineral working and / or its transport routes as a result of noise, vibration and dust arising from the excavation process or from the transportation of materials. This criteria will be of particular relevance to proposals involving the use of explosives in the extraction process;*
- e) Significantly impair the safety and amenity of road users along the roads where extracted materials will be transported, by virtue of the unacceptable volume of traffic or by vibration, dust or noise associated with the proposed development;*
- f) Cause undue obtrusion in the landscape, particularly by breaking the skyline or failing to utilise natural landscape features to aid integration or as a result of poor siting of plant machinery, waste material or the stockpiling of equipment.*

- g) Scar the landscape for future generations ensuring that adequate restoration proposals are provided in line with Policy MIN 5”.*

Each part of the draft policy is considered in turn below.

At the outset, the ACMD policy should be considered as a stand-alone policy and not conjoined with the remaining proposed planning policy tests of MIN 2. The implication of MIN 2, beginning with ACMD, is hugely negative and reflects poorly the judgement of the Council with respect to mineral operations. The reflection throughout the proposed policy is that minerals are not permitted in the Mid Ulster area. This is further replicated through the ‘precautionary’ approach. Therefore, the Council are ostensibly advising the public and minerals industry, under draft policy MIN 2 that outwith areas of safeguarding in order to achieve planning permission, applicants will be required to address unreasonable precautionary standard , most likely driven by the consultation responses rather than being directed by clear and concise planning policies and a competent planning authority. If anything, draft policy MIN 2 is more negative and delivers inequitable and disproportionate policy tests than any current mineral planning policy and therefore cannot be supported by the industry. We and our Clients wholly reject the policy outright. This statement is substantiated with evidence provided in Section 5.0 and amplified further in 6.3.1 onwards.

6.3.1 Area of Constraint of Minerals Development

Policy MIN2 begins by stating that:

“In ACMD’s the extraction and processing of hard rock and aggregates will conflict with the Plan except for minor expansion of an existing mineral working or where it provides important benefits, such as the provision of stone for the restoration and maintenance of vernacular and other buildings of conservation interest”.

It is considered that the justification for ACMD designations must be sound and based upon a robust evidence base.

As detailed at Section 4.2 of this submission, our clients are fundamentally opposed to the approach taken in identifying the proposed ACMD's. Whilst we welcome the Council's acknowledgement that the ACMD's as proposed within the POP were overly extensive in scale and also the attempt by the Council to identify and assess the potential sterilisation of mineral reserves by virtue of ACMD designations, our clients disagree with the outcome of the exercise.

As also detailed at Section 4.2 of this submission, an exercise was undertaken by MUDC to identify the extent that mineral resources are already constrained in terms of physical infrastructure. Using this data, the Council sought to identify the extent to which ACMD's would further constrain the extraction of minerals.

The outcome of the process was that the proposed ACMD designations in combination with physical infrastructure constraints would reduce the availability of mineral for extraction by over 60%.

The exercise found that, due to the reduction in land available for mineral extraction when infrastructure buffers are applied from 26% to 67% when ACMD designations are also included, that the ACMD and SCA designations are too severe and that their impact would potentially stifle the aggregate industry of the district.

Based upon the evidence collected by the Council in terms of supply and demand over the plan period, the Council concluded that the proposed ACMD and SCA designations are reasonable, given that the Council's interpretation of the data supplied by operators was that supply would be met over the plan period. This is flawed given the misrepresentation of Cement resources as Sand and Gravel for the reasons provided in Section 4.4.3.

We would again reiterate that the figures presented by the Council within the DPS (value of £13 million) grossly undervalue the minerals industry within the District. Information presented at Section 5 details how the collective value of the turnover of our Client's attributed to the extraction of mineral and generated by higher value-added activities, where the mineral is used in manufacturing processes and other products is over £217 million.

Whilst the Council has provided a figure of 1250 people employed in 'mineral development' in Mid Ulster; our Clients collectively employ over 1600 people with an annual wage bill of over £43 Million per annum.

Furthermore, by reversing the theory expounded by MUDC that Mineral Operators would be able to buy a single residential property to alter the availability of a mineral resource and therefore removing all houses in the countryside as a constraint is a preposterous and unique approach to analysis; but without which the buffering exercise undertaken by MUDC and its assessment of the restrictiveness of the designations results in the original conclusions reached by the Council becoming relevant again, in that:

“the ACMD and SCA designations are too severe and that their impact would potentially stifle the aggregate industry of the district”.

The Councils own figure with the reintroduction of rural residential dwellings suggest that 75% of the total sand and gravel resource in the Council area would be excluded¹⁹. The proposed ACMD designations are therefore not fit for purpose as the assessment of their extents upon the mineral industry has been based upon data that has been interpreted and reported incorrectly and has therefore resulted in an incorrect understanding of the supply and demand position within the district.

¹⁹ Table 3 of MUDC – ACMD and Impact of Surface Development on Aggregate Resources – January 2019

Furthermore, the proposed ACMD designations have been formulated upon landscape evidence which provides little assessment of the capacity of landscapes to accommodate mineral development.

Until such time as the Council can prepare a robust evidence base by accurately identifying and assessing the impact that such designations would have upon the minerals industry and the supply of mineral over the plan period, any designation of proposed ACMD's **is considered to be unsound**. As a result, the plan fails to comply with **Test Coherence and Effectiveness Test CE2**.

6.3.2 Extraction of Mineral outside ACMD's

The policy goes on to state that:

“Elsewhere, extraction and processing of hard rock and aggregates will conform with the Plan, subject to environmental and transportation considerations. Particular attention will be given to significant to potential impact on human health and public safety, caused by dust, noise, blasts and vibrations resulting from activity on the site and vehicles travelling to and from the site”.

As discussed earlier in Section 6.0, the terminology used is inconsistent with regional planning policy and therefore could be considered confounding to the public and leads to ambiguity. To provide clarity, reference to hard rock and aggregates should be amended to simply state “mineral”.

As detailed in the Council's own exercise which sought to identify the extent to which minerals development is constrained by existing infrastructure and surface development, it is evident that the winning and working of minerals is constrained. Combined with the additional constraints as outlined at Section 4.6.4 of this submission, the availability of sites suitable for mineral extraction is extremely limited.

The Clients represented within this submission collectively make a contribution of some £217M to the Mid Ulster economy, providing employment for at least 1600 people, often in remote, rural locations where employment opportunities are limited.

The amplification of the policy states that there will be a presumption in favour of minerals development outside of ACMD's. This differs to the wording contained within the policy which states that elsewhere (outside of ACMD's), extraction and processing of hard rock and aggregates will conform with the plan. This term is ambiguous and brings uncertainty to the policy, where it appears none is intended. In order to remove ambiguity, the policy wording should be amended to explicitly state that there will be a presumption in favour of extraction and processing of mineral, as per paragraph 14.18 of the DPS. The presumption in favour is required to be provided within the policy to promote the plan led system being legislated for in NI and provide unambiguous directions with respect to the employment of the SPPS and remaining PPSs in the decision-making (planning) process.

Notwithstanding, it is noted the fact that policy states that elsewhere (outside of ACMD's), extraction and processing of hard rock and aggregates will conform with the Plan, subject to environmental and transportation considerations. The policy tests (environmental and transportation considerations) listed which the policy requires particular attention to are considered to be appropriate to minerals development and reflect existing regional planning policy.

6.3.3 Precautionary Approach

“A precautionary approach will be adopted to assessing mineral development and therefore the onus will be on the developer to demonstrate that development will not...”

It is considered that the application of the precautionary approach is contradictory to the amplification which both precedes the policy and the justification provided beyond the policy test.

This precautionary approach conflicts with the approach required within regional policy. Paragraph 6.154 of the SPPS states:

“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”.

Regional Planning policy therefore requires a balanced approach for mineral development. This differs significantly from the precautionary approach which the draft policy states should be taken towards mineral development. No evidence is presented within the Draft Plan Strategy or the supporting papers as to how this would be a sound approach and why the plan should conflict with regional planning policy by taking a precautionary approach as opposed to a balanced approach.

The precautionary approach echoes the legislation applicable to the protection and preservation of European designated habitats – such as SAC and SPAs. It is considered that the precautionary approach does not accord with the economic tests and balanced decision making required by SPPS and sets an unreasonable expectation with respect to compliance with a planning policy test. If strictly applied, the precautionary principle sets a de facto constraint on mineral development for the entire Mid Ulster Council area as could be read as a ‘presumption against mineral development’. It is considered that the Council’s evidence base, combined with that submitted within this report, demonstrates that the precautionary approach has been applied on unsound evidence base with little or no consideration to economic requirements of the industry and the balance promoted within the SPPS.

Furthermore, it is not clear from the SEA how the precautionary approach, from the alternatives considered, has been deduced to be an appropriate test for mineral development and why mineral development warrants special analysis over an above alternative forms of development. The inclusion of the term precautionary is unwarranted and without any evidential support.

6.3.4 Assessment Criteria

In terms of the criteria which the draft policy states that minerals development should have to demonstrate it will not have an impact upon, the wording and terminology used within the criteria is unclear.

Criterion a) states that the onus will be on the developer to demonstrate that development will not:

“Prejudice the essential characteristics of a site of international / national or local nature conservation importance including ASSI’s, SAC’s, SPA’s and local /national nature reserves or other heritage interests”

The wording is not reflective of regional planning policy. For example, paragraph 6.175 of the SPPS states that

“Development proposals are restricted where they are likely to impact upon the integrity of European or Ramsar sites as these are afforded the highest form of statutory protection”.

The phrase “essential characteristics” is not used anywhere within the SPPS when detailing policy with regards to local, national or international designations.

Paragraph 6.158 of the SPPS states that:

“Minerals development within or in close proximity to an area that has been designated (or is proposed for designation) to protect its landscape, scientific or natural heritage significance will not normally be granted permission where this would prejudice the essential character of the area and the rationale for its designation”.

No reference is made within the criterion to the proximity of the site to the designation; whether the designation is existing or proposed or whether the rationale for the designation should be assessed. The SPPS test states that planning permission will not normally be granted where this would prejudice the essential character of the area and the rationale for its designation. The policy test is therefore in two parts; the development must fail to prejudice the essential character of the area and the rationale for its designation. No such test is included within the criterion with the only test being whether the development would *prejudice the essential characteristics of a site*.

The proposed wording lacks clarity and fails to comply with regional planning policy.

Criterion b) states that the onus will be on the developer to demonstrate that development will not:

“Result undue harm or loss to protected species or contribute to significant biodiversity loss”;

It is considered that this criterion does not accord with the provisions of the SPPS. Paragraph 6.192 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:

- *priority habitats;*

- *priority species;*
- *active peatland;*
- *ancient and long-established woodland;*
- *features of earth science conservation importance;*
- *features of the landscape which are of major importance for wild flora and fauna;*
- *rare or threatened native species;*
- *wetlands (includes river corridors); or*
- *other natural heritage features worthy of protection, including trees and woodland.*

Paragraph 6.193 states that:

“A development proposal which is likely to result in an unacceptable adverse impact on, or damage to, habitats, species or features listed above may only be permitted where the benefits of the proposed development outweigh the value of the habitat, species or feature. In such cases, appropriate mitigation and/or compensatory measures will be required”.

Criterion b) does not reflect the provisions of Paragraph 6.193 of the SPPS for which the policy test is “unacceptable adverse impact on, or damage to” an asset as listed, as opposed to any “undue harm or loss” to a protected species. No reference is made to the provisions of Paragraph 6.193 which states that development which poses an unacceptable adverse impact may still be permitted where the benefits of the proposed development outweigh the value of the habitat and where appropriate mitigation and/or compensatory measures may be provided.

The term “significant biodiversity loss” is also ambiguous. No detail is provided in terms of what “significant biodiversity” or how “significant loss” is defined” is or that factors are to be considered when assessing the same.

The criterion is considered to be overly precautionary and does not reflect the policy approach as set out within regional policy which states that development which has an unacceptable adverse impact may still be approved. The criterion does not reflect this approach with no evidence provided as to why the presented terminology should be used in assessing mineral development.

It is considered that the proposed approach is a missed opportunity to drive certainty in to the plan led system, but as drafted, this element has the reverse effect and is a missed opportunity to remove current discussions with NIEA as to the Council's interpretation of PPS 2.

Criterion c) states that the onus will be on the developer to demonstrate that development will not:

“Cause significant risk to public safety or amenity caused by dust, noise, blasting or the use of chemical and/ or biological agents”;

The wording of the criterion is unclear as amenity impacts cannot be measured in terms of their risk, instead the policy test should be whether the development would significantly impair the amenity of people living or working in proximity to the site, as per paragraph 6.159 of the SPPS.

Criterion d) states that the onus will be on the developer to demonstrate that development will not:

“Impact negatively upon the safety and amenity of occupants of development in close proximity to the mineral working and / or its transport routes as a result of noise, vibration and dust arising from the excavation process or from the transportation of materials. This criteria will be of particular relevance to proposals involving the use of explosives in the extraction process”;

This criterion is opposed for the same reason as set out at Criterion c) above. The policy text as set out within the SPPS is whether the development would significantly impair the amenity of people living or working in proximity to the site. The test of whether the extraction, working or transportation of mineral in close proximity to mineral workings and transport routes would negatively impact upon the safety and amenity of occupants is significantly more restrictive than that set out within regional planning policy. No evidence is provided by the Council as to why this alternative approach is necessary. As such, the criterion is considered to be unnecessarily prohibitive.

Criterion e) states that the onus will be on the developer to demonstrate that development will not:

“Significantly impair the safety and amenity of road users along the roads where extracted materials will be transported, by virtue of the unacceptable volume of traffic or by vibration, dust or noise associated with the proposed development”;

Paragraph 6.159 of the SPPS states that

“Minerals development likely to compromise safety or to significantly impair the amenity of people living or working in proximity to the site will not normally be acceptable. Such adverse impacts could result from noise, vibration and dust arising through excavation, processing or transporting of materials. Where such impacts are judged to be incompatible with standards of amenity acceptable to the planning authority, planning permission should be refused, unless the developer can demonstrate adequate means of mitigation”.

It is noted that regional planning policies focuses on the potential adverse impacts upon the amenity of people living or working in proximity to the site. No reference is made to the proximity of mineral working within the criterion. Instead the criterion states that where the development would significant impair road users along any transport route which is used for transporting

material. The policy is considered impossible to assess as routes between the extraction site and the customer are public roads that are shared by all vehicles.

The amenity of road users is also not detailed or referenced anywhere within regional planning policy, rather, it is the safety and convenience of road users which is identified as the test in determining whether minerals development should normally be approved or refused, as per Paragraph 6.160 of the SPPS. No evidence is provided by the Council as to why this approach is necessary.

Criterion f) states that the onus will be on the developer to demonstrate that development will not:

“Cause undue obtrusion in the landscape, particularly by breaking the skyline or failing to utilise natural landscape features to aid integration or as a result of poor siting of plant machinery, waste material or the stockpiling of equipment”.

The wording providing within the criterion is considered to be reflective of existing regional policy as set out in Planning Strategy for Rural Northern Ireland Policy MIN 2.

The criterion appears to be reasonable, accord with regional planning policy and provides sufficient detail in terms of the matters which the Council to be of particular importance when assessing obtrusion in the landscape. Our clients have no opposition to this criterion.

Criterion g) states that the onus will be on the developer to demonstrate that development will not:

“Scar the landscape for future generations ensuring that adequate restoration proposals are provided in line with Policy MIN 5”.

The language used in the criterion is considered to be negative; does not reflect modern contemporary terminology used when assessing landscape impacts and does not reflect regional planning policy. When assessing landscape matters, suitably qualified experts assess whether a proposed development may pose an adverse impact upon a landscape by assessing the sensitivity of the landscape and the magnitude of change. This methodology is then used to form a reasoned conclusion as to the category of effect or impact the development would have (e.g. negligible, minor, major etc).

Reference to the term “scar” is not considered to be reflective of either the professional terminology used by landscape professional or the language used within planning policy.

6.3.5 Justification and Amplification

Paragraph 14.15 details the Council’s reasons for designating areas as ACMD’s. The reasons are discussed at Section 4.6 and are therefore not repeated here. The paragraph reiterates that existing designations already act as ACMD’s. As per Section 4.6 we would question if it is necessary to designate these areas given that they already act as de facto ACMD’s.

Paragraph 14.16 states:

“New large scale commercial extraction in these areas would have a profound and irreparable impact on the heritage and scenic qualities of the landscape and therefore it is unacceptable”.

This statement is considered to be presumptive and unfounded. Whilst some ‘large scale’ extraction may have the potential to result in an adverse impact upon the heritage or scenic qualities of a landscape, each site’s characteristics are different. The impact a minerals development may have

upon a landscape can depend on a number of factors including (but not limited to) topography; existing land use; surrounding land use; scheme design and restoration proposals. There is no evidence to suggest that a minerals development with a comprehensive design and restoration scheme would irreparably impact heritage and scenic qualities of the landscape.

As detailed at in the MDA Review found at **Appendix 2**, the LCAR's prepared by the Council have failed to assess the existing landscape in terms of its capacity to accommodate future minerals development. Any assumption that the landscape cannot accommodate future development is based upon little expert assessment.

The paragraph goes on to state that:

“Within these areas of constraint, there are a few existing working quarries and it is not the intention of the Plan to prevent their operation, however it must be recognised that even minor expansion needs to be carefully assessed”.

The Quarries operating within ACMD's are understood to be authorised lawful operations. Our clients oppose the designation of ACMD's until such time as proposed designations can be based upon a robust evidence base. Should the Council get to a stage where evidence suggests that ACMD designations are necessary and suitably evidenced designations are identified, it is considered appropriate that given their established nature and contribution to the local economy, that sound provision is made within any future ACMD policy which identifies the importance of existing mineral sites and caters for their continued operation via extension, under appropriate .

Paragraph 14.17 states that the Plan has not introduced a SCA on the lough as it has been historically used for sand dredging and is subject to a regionally significant application being dealt with by DFI. The Plan states that the Council will review this approach following the outcome of that application.

It is disappointing that the Council are unable to express an opinion on the importance of the resource to the Council and the implications of both a negative or positive decision.

As discussed at Section 6.2, if the planning consent is granted, it is considered pertinent that the resource be protected in the same manner as the Limestone, clay and shale deposits identified within the plan. It is noted that the quays along the shoreline used for the landing and processing of sand extracted from the Lough, have also been excluded from the SCA designation. This is welcomed however given their importance to the extraction of mineral from the Lough, it is considered that they should be specifically recognised within the Plan, with areas in their vicinity safeguarded for future expansion, should this be required. The issue is considered further at Section 8.1.1.

Paragraph 14.18 reiterates the presumption in favour of “hard rock and aggregates extraction” and processing in recognition of the importance of this activity to the local economy and its importance in providing materials for construction regionally. Our clients welcome this provision, however as detailed at earlier in this representation, the terminology employed is incorrect and should reference “minerals” and the amplification is in direct conflict with the policy statement and associated tests, for the reasons outlined immediately above.

6.3.6 Summary/ Conclusions

Our clients are opposed to the designation of ACMD's within the Mid Ulster District until such a time as their requirement and if necessary, their extents, are properly evidenced. It has been demonstrated in this response that the Council does not have a sound understanding of either the economic contribution that the Minerals Industry makes to the local economy or the supply and demand position for the plan period. The LCAR's are also lacking in terms of adequate assessment of the capacity of the landscape to

accommodate mineral development. The proposed designations of ACMD's without supporting evidence which demonstrates that the designations would not unfairly stifle the industry is considered to be unsound.

Given the economic contribution the Minerals Industry makes to the local economy and the supply and demand position over the plan period, our clients welcome the provision that mineral development will be acceptable in principle in all areas outside of ACMD's, subject to environmental and transportation considerations, however, to avoid confusion and to ensure consistency, the terminology needs to be explicitly state within the policy wording that that there will be a presumption in favour of minerals development. The wording of the draft policy is ambiguous and does not reflect what appears to be the overall aim of the policy and there is a requirement that the wording does not contradict the SPPS.

The precautionary approach detailed within the draft policy conflicts with regional planning policy with no evidence presented as to why such an approach is necessary. Our clients are opposed to such an approach and would recommend that the Council should seek to take a balanced approach as stated in the SPPS.

The criteria listed in the policy are poorly worded; do not reflect regional planning policy; are unnecessarily prohibitive and in some cases do not reflect the professional language used to assess various impacts of development.

It is considered that the proposed MIN 2 Policy approach is a missed opportunity to drive certainty in to the plan led system, but as drafted, the Policy has the reverse effect and is a missed opportunity to establish the Council's interpretation of mineral development management issues.

For the above reasons, the draft policies are **conflict with Coherence and Effectiveness Tests CE1 and CE2.**

6.4 Policy MIN 3- Valuable Minerals and Hydrocarbons

The clients as listed at Section 2 are considered to be 'traditional' operators and manufacturers. As a result, Policy MIN 3 is not considered to be of relevance at this stage and is not considered any further at this point.

6.5 Policy MIN 4- Peat Extraction

As above, our clients are considered to be ‘traditional’ operators and manufacturers. As a result, Policy MIN 4 is not considered to be of relevance at this stage and is not considered any further at this point.

6.6 Secondary Aggregates

Prior to consideration of the proposed restoration policy below, it is considered necessary to draw the Council’s attention to the role of secondary aggregates and the need for a policy with regards to the same.

There is a wide range of aggregates available in Northern Ireland for use in construction, sources include crushed rock, processed sand and gravel. **It is considered that the Council has overlooked an opportunity to provide local policy direction with respect to secondary aggregates.** Secondary aggregates consist of the recycling of construction and demolition waste through crushing, screening and reuse. The employment of secondary aggregates can often take pressure off natural mineral resources.

As promoted within the SPPS, the planning system has a key role to play in facilitating a sustainable approach to minerals development, including sustaining sufficient local and regional supply levels and appropriate restoration. The SPPS also acknowledges that *“the Sustainable Development Strategy advocates the greater use of recycled building materials in construction so as to reduce the depletion of natural resources and to limit transportation of such materials”*.

As far back as 2002, the Waste & Resources Action Programme (WRAP) Aggregates Programme, funded by DEFRA, was launched to help minimise the demand for primary minerals and aggregates through the promotion of the employment of recycled (secondary) aggregates.

It is considered prudent that the **LDP includes a positive policy construct** which seeks to promote the 'secondary aggregate protocol' (SAP). The policy should steer the industry towards making a positive contribution to the Sustainable Development Strategy by promoting the recycling of construction and demolition waste at sites where the capacity and infrastructure is already in place to accept and produce secondary aggregates. Ideally sites which already have established crushing equipment and screening (washing) plant will normally have the capacity and infrastructure requirements to accommodate, handle and produce secondary aggregates. Indeed, it is considered that most mineral operators should be encouraged to promote the production of secondary aggregates to supplement their outputs and reduce the pressure on the natural mineral reserves which sustain important value-added products.

It is considered that the omission of this policy within the LDP confirms that the subject has not been considered as part of the SEA/SA alternatives. Currently, it is considered that the DPS's silence on this matter demonstrates the Council's failure to consider and promote a draft policy with respect to secondary aggregate use within the Mid Ulster minerals industry. In this regard, the lack of a policy seeking to provide local direction on secondary aggregates and consideration with the SEA/SA alternatives to the policy renders the DPS unsound.

6.7 Policy MIN 5- Restoration of Mineral Sites

Policy MIN 5 states:

"All applications for mineral development must include, where appropriate, satisfactory and sustainable restoration proposals. Restoration proposals should take account of the specific characteristics of the site and its locality and restore and/or enhance the landscape character of the area. Any opportunities for enhancing biodiversity, community recreation and access should be considered.

The site restoration scheme must include a programme of works and a timetable whereby the restoration scheme will be implemented in a phased approach if necessary. Once mineral working has ceased, the land should be reinstated at the earliest opportunity to a suitable standard. Submitted phasing and restoration proposals should provide for the use in progressive on-site restoration of minerals unsuitable for the market to avoid the need for Stockpiling”.

The first part of the policy seeks to ensure that mineral development proposals include appropriate restoration proposals. The policy states that restoration schemes should take account of the specific characteristics of the site and consider opportunities for biodiversity enhancement and treatment.

Our clients welcome this approach and agree that restoration is an important part of minerals development and that restoration proposals should reflect the local character of the area and take any beneficial opportunities to enhance the site where necessary.

The second part of the policy states that once mineral working has ceased, land should be reinstated at the earliest given opportunity. The policy goes on to state that phasing and restoration proposals should provide for the use in progressive on-site restoration of minerals unsuitable for the market to avoid the need for stockpiling.

Our clients welcome the fact that it is acknowledged in policy that a phased approach will only be required where necessary. Often, due to the nature of the mineral working and the quarry design, phased restoration may not always be possible or indeed, suitable.

Furthermore, it is disappointing that the Policy is now silent on matters pertaining to the restoration of former sites and areas and sites that do not

benefit from contemporary planning permission, that were covered in the preceding Cookstown Area Plan 2010, where it stated in Policy MN 4.

“Plan Policy MN 4 Restoration of Despoiled Land

In assessing proposals for mineral development the Department will use its development control powers to encourage the restoration of lands despoiled by mineral extraction, except where such lands have established important nature conservation interests. - Some parts of Cookstown District have been despoiled by previously unregulated and unrestored mineral workings.”

This policy when coupled with the provisions of PPS 11 and in particular Policy WM4 afforded the opportunity for improvement of despoiled sites, or sites that cannot be put back to a beneficial or biodiversity afteruse without the assistance of importation of suitable materials.

“Policy WM 4 Land Improvement

The disposal of inert waste by its deposition on land will only be permitted where it is demonstrated that it will result in land improvement and all of the following criteria are met:

- it will not result in an unacceptable adverse environmental impact that cannot be prevented or appropriately controlled by mitigating measures (see Policy WM 1); and*
- there is a local need for the development, and it can be demonstrated that it is the BPEO;*
- only the minimum quantity of fill necessary to achieve the proposed improvement shall be deposited;*
- detailed measures are included for the appropriate restoration and aftercare of sites that will help to enhance bio-diversity”.*

Furthermore, it is considered that such currently despoiled sites provide an opportunity for the Council to exert control on sites that have fallen out of the development control system and provide an opportunity for restoration to conservation use, with the potential for off setting nature conservation loss elsewhere. It is noted that is reflected in revised Policy WM3, covered later, but the connecting restoration Policy is absent.

The policy as proposed appears to take a balanced approach to restoration and reflects the approach set out within regional planning policy. It is proposed that the Policy should go further and reflect the effective policies from previous plans that confirm the Council’s position with respect to delivery of restoration benefits of legacy sites and sites that are not subject to contemporary restoration requirements.

For this reason, it is not considered to conflict with any of the tests of soundness, but is missing an opportunity to bring forward former beneficial mineral policies.

6.7.1 Justification and Amplification

Paragraph 14.29 DPS states that:

“This policy will apply to all proposals for mineral development”.

This appears to conflict with the provisions of policy which states that all applications for mineral development must include, *where appropriate*, satisfactory and sustainable restoration proposals. Clarification on this amplification is sought from the Council as to the proposed approach.

Paragraph 14.30 states that Mineral Development can have a major impact on the visual amenity of the landscape, particularly in remoter, rural areas. Whilst this may be true of some developments it is not the case for all mineral development. In order to present a balanced approach, it is suggested that the paragraph is altered to acknowledge that minerals development will have a varying degree of impact upon the local landscape but that not all impacts will be major with it dependent upon the capacity of the landscape to accommodate the development. In any event, the operator will be required to restore the site to an agreed standard.

Paragraph 14.31 of the DPS describes how restoration schemes can take many forms and do not always involve a site being simply restored to its former use. Paragraph 14.32 details how the preferred types of restoration and after use depend on the characteristics of the deposits, nature of excavation, availability of fill materials, the surrounding landscape, and the needs of the local community as well as the potential for nature conservation on the site. This amplification provides the opportunity to integrate the former MN4 policy, outlined above.

7.0 ECONOMIC POLICIES

7.1 Policy ECON 2- Economic Development in the Countryside

Policy ECON 2 relates to development in the countryside. The policy state that proposals for economic development in the countryside will conform with the Plan where they represent firm and not speculative proposals consisting of one of a number of listed scenarios and where they do not harm or undermine the character of the countryside or the amenity of nearby residents.

A number of the scenarios are relevant to the minerals industry and are discussed below.

7.1.1 Rural Industrial Policy Areas

The policy states that proposals for economic development in the countryside will conform with the Plan for:

“c) Development within Tullyvannon and Desertcreat Rural Industrial Policy Areas or a designated Rural Industrial Policy Area in the Local Policies Plan providing it accords with any uses and requirements identified in the Local Development Plan”.

Paragraph 4.35 of the Plan states that:

“Mid Ulster also differs from other areas due to the successful economic developments located within the countryside. This success is because the industry is linked to the countryside by way of agriculture or mineral development or related engineering.”

With Paragraph 4.36 stating that:

“It is important that this success is allowed to continue but that it remains properly managed. In the main the policy within this plan is designed to accommodate sustainable expansion. We also recognise the value of clustering businesses. Within the countryside in Mid Ulster there are groupings which are not on an industrial estate but where complementary industry could locate beside it without causing harm”.

Paragraph 4.37 provides further elaboration stating that:

“In recognition of the success of economic development in the countryside in our District and the importance of clustering this Plan Strategy designates Rural Industrial Policy Areas (RIPA’s) which will protect and consolidate existing areas of rural industrial uses and contain them within set limits whereby large-scale expansion would not be permitted”.

The existing manufacturing businesses clustered in the area around Creagh Road, to the south west of Toomebridge is considered to be one such area which would be appropriate for allocation as a Rural Industrial Policy Areas.

The area is home to several manufacturing businesses which manufacture a range of concrete products for products across the Region, the Republic of Ireland; and Great Britain. Three of the clients named at Section 2 current operate manufacturing sites within this area. The three companies employ 650 staff across the three sites. This combined with the other businesses clustering in this area, have driven enterprise in the area; significantly boosted local employment and increased local expenditure.

At present the area is afforded no specific policy protection within the DPS.

Paragraph 4.37 states:

“In selecting locations as potential RIPA’s consideration will be given to the following criteria:

- *it is located in the rural area i.e. outside of any settlement limits as designated in the Plan;*
- *no part of the proposed RIPA site should include or be in close proximity to any environmental designation such as a RAMSAR, SPA, SAC, ASSI or SLNCI;*
- *it will have an established or accepted industrial use and / or related use such as research and development. The use and all buildings must either have the benefit of planning permission or be immune from enforcement action under Article 132 of the Planning Act (Northern Ireland) 2011;*
- *the use must not have ceased or decreased to a level which means it is no longer an economically viable activity;*
- *have the benefit of an existing access which would be capable of serving the existing industrial activity as well as accommodating additional activity if the site were to expand;*
- *be in close proximity to a main transport corridor;*
- *be of a size and scale which means that the character of the immediate surrounding area has been altered to an extent where it could no longer be described as having a distinctly rural character; and*
- *consolidation of existing industry at the site would not lead to any harmful impacts being caused to nearby residential amenity”.*

The area at Creagh Road is considered to accord with all of the above assessment criteria. Given the function that the area performs in terms of the

local manufacturing industry, the local economic benefits generated by the existing companies in the area and the clustering of similar business, it is considered prudent that the area is afforded suitable policy provision which will allow for the sustainable growth of the existing companies.

The designation of sites at Tullyvannon and Desertcreat only fails to sufficiently identify the significant contribution which the manufacturing area at Creagh Road brings to the local economy and the benefits that such an allocation would bring to operations within the area.

7.1.2 Industry related to Quarrying

Policy ECON 2 states that proposals for economic development in the countryside will conform with the Plan:

“Where there are existing quarries, outside of areas designated for their nature conservation, heritage or landscape value, favourable consideration can be given to a directly related industry e.g. cement / concrete works or glass manufacture”

Our Clients welcome provision within Policy ECON 2. As detailed throughout this document, the manufacturing and other industries directly related to mineral extraction provide a significant contribution to the local economy, sustaining employment and generating expenditure in the local area. The provision will assist in supporting the continued sustainable growth of the industry.

It is noted that the policy relates only to development at existing quarries. Often due to the constrained nature of extraction sites, associated industries may be located away from these sites where there is improved transport links and other infrastructure. The proposed policy does not make any provision for such sites. These sites are of equal importance to those located at extraction sites and should therefore be provided for within the policy.

7.1.3 Justification and Amplification

Paragraph 12.24 of the DPS states:

“Mid Ulster has been successful in developing a thriving quarry products related industry. This should be encouraged since it provides jobs locally rather than them being provided elsewhere. Therefore, processing of minerals into quarry products such as cement, blocks and lintels can be given favourable consideration where the quarry has been permitted for long term extraction. In assessing such proposals consideration will be given to the long term net benefits and the balance of environmental and economic issues”.

Our clients agree with this amplification and would support this part of the policy subject to extending it to associated sites which are located elsewhere to the extraction site.

7.1.4 Summary/ Conclusion

Whilst our clients support the provision within the policy of giving favourable consideration to directly related industries, this provision also needs to be extended to sites which are located at sites away from the extraction site where the mineral is won. Given the constrained nature of extraction sites, it is not always possible for related industries to locate at the extraction site. As such, as such, given the economic contribution of the value added process, sites located away from extraction sites should also receive favourable consideration.

The proposed IRPA designations fail to safeguard existing rural industrial areas which are well established and which generate a range of positive economic benefits. The area at Creagh Road is one such area which has not been identified within the designation, despite appearing to accord with the selection criteria.

As a result, the proposed policy fails to set out a coherent strategy with directly related industrial sites often located away from the mineral point of extraction. The policy is not considered to be founded on a robust evidence base and therefore fails to comply with Coherence and Effectiveness Tests CE1 and CE3.

8.0 ENVIRONMENTAL POLICIES

8.1 Policy SCA 1- Special Countryside Areas

The plan introduces Special Countryside Areas in order to protect the quality and unique amenity value of these unique landscapes. Proposed SCA designations are proposed along the shore of Lough Neagh/ Beg; at Slieve Beagh and in the High Sperrins. Within the SCA's there will be a presumption against all new development except for:

- ancillary open development relating to appropriate recreation / open space uses, which have been demonstrated to be in the wider public interest; or
- in-situ replacement of an existing building of a similar size and character.
- communications apparatus to serve a recognised 'not spot'.

A number of topic and background papers have been prepared in order to assess the landscape quality in the district and identify the extents of the proposed SCA's.

Mullin Design Associates have reviewed the LCAR and other landscape background documents prepared by the Council. The review concludes that the Council have failed to assess the capacity of landscapes to accommodate mineral development, focussing only on identifying an up to date baseline. A copy of the review is appended at **Appendix 2**.

8.1.1 Lough Neagh/ Lough Beg SCA

The policy states that:

“Within the Lough Neagh / Lough Beg SCA the policy will allow for consolidation or minor expansion of existing development relating to the commercial fishing industry, including jetties, slipways, and ancillary buildings, where it has been demonstrated that it is essential for the efficient operation of an active and established commercial fishing enterprise (for criteria refer to Policy CT2)”.

It is noted that the landing points for the unloading and processing of sand extracted from the bed of the lough, to the south west of Toomebridge are excluded from the SCA. Given the importance of these sites to the operations on the Lough, it is imperative that the sites are not included within such a prohibitive designation.

The winning and working of mineral of sand from Lough Neagh makes a significant contribution to the local and regional economy, producing over 1 million tonnes of soft sand per annum. In 2015, the Lough Neagh Sand Traders supported 346 jobs, associated wages of £9.1 million, GVA of £20.1 million and tax receipts and savings to the public purse of between £4.7 million and £5.7 million. Through supply chain and subsequent consumer spending, all sectors of the NI economy benefit from the operation.

Given the above, the sites provide important physical infrastructure for delivering the benefits associated with the extraction of sand from Lough Neagh, to the local economy. It is considered prudent to explicitly identify the sites within the policy, identifying that they have been purposely located outside of the designation and development policy which is similar to that afforded to Lough Neagh Commercial fishing, which acknowledges that the activity is of importance and therefore allows for the minor expansion of facilities.

8.2 Policy WM3- Waste Disposal

Policy WM3 relates to waste disposal. The policy states that:

“Proposals for the development of landfill or land raising facilities for the disposal of waste shall accord with the Plan provided that;

- It is suitably located within an active or worked out hard rock quarry or it brings land that is despoiled, derelict or contaminated, back into productive use.*
- In the case of a regional scale land fill or land raising facility, its location must relate closely to and benefit from easy access to key transport corridors and, where practicable make use of alternative transport modes of rail and water”.*

The restoration of quarry voids via infilling can provide important waste disposal facilities, as such, our clients welcome such a policy. The policy is considered to reflect regional planning policy and the relevant tests of soundness.

As discussed at Section 6.6, It is considered that the Council has overlooked an opportunity to provide local policy direction with respect to secondary aggregates.

As promoted within the SPPS, the planning system has a key role to play in facilitating a sustainable approach to minerals development, including sustaining sufficient local and regional supply levels and appropriate restoration. The SPPS also acknowledges that *“the Sustainable Development Strategy advocates the greater use of recycled building materials in construction so as to reduce the depletion of natural resources and to limit transportation of such materials”*.

It is considered prudent that the LDP includes a positive policy construct which seeks to promote the 'secondary aggregate protocol' (SAP). The policy should steer the industry towards making a positive contribution to the Sustainable Development Strategy by promoting the recycling of construction and demolition waste at sites where the capacity and infrastructure is already in place to accept and produce secondary aggregates.

It is considered that the omission of any secondary aggregates policy within the LDP confirms that the subject has not been considered as part of the SEA/SA alternatives. Currently, it is considered that the DPS's silence on this matter demonstrates the Council's failure to consider and promote a draft policy with respect to secondary aggregate use within the Mid Ulster minerals industry. In this regard, the lack of a policy seeking to provide local direction on secondary aggregates and consideration with the SEA/SA alternatives to the policy renders the DPS unsound.

8.3 Policy RNW1- Renewable Energy

Policy RNW1 relates to renewable energy development, stating that outside of SCA's, proposals for renewable energy production or storage will accord with the plan. The policy does however state that a cautious approach will be taken towards development within the Sperrin AONB, Slieve Beagh and the Clogher Valley Ridge Line.

Quarry or associated manufacturing sites can prove to be suitable locations for renewable energy developments, as such, any policy which supports renewable energy proposals are welcomed by our clients. Given the unique character and characteristics of quarry developments and the specific energy requirement of associated manufacturing sites, it is considered that the policy should be tailored to make explicit support for renewable energy development at existing sites. Similarly, the identification of renewable energy facilities as a potential after use to be incorporated within restoration proposals is also

considered to be of merit with quarry sites often providing facilities for future energy production and employment generation.

9.0 SUSTAINABILITY APPRAISAL INCOPORATING STRATEGIC ENVIRONMENTAL ASSESSMENT REPORT

The SPPS states that:

“while it is important that we respect the limits of our natural resources and ensure high level of protection and improvement of the quality of our environment, sustainable development does not prevent us from using and capitalising on such resources. An enduring successful economy will effectively use natural resources and contribute towards the protection of the environment”.

Our Clients are committed to sustainable mineral extraction and the function of the SA/SEA process in relation to emerging plans and policies (as well as the withdrawal/repeal of existing) is key to this process. Our Clients are committed to making a positive contribution to the SA/SEA process and sustain their mineral requirements for the entire plan period.

Regional planning guidance²⁰ states that:

“A robust understanding of the baseline position is important in ensuring a sound evidence base for the plan. Baseline information can also help to identify sustainability problems which the plan should seek to address and also provides the basis for predicting the effects of different options for the plan”.

Paragraph 7.3 of the guidance confirms that:

“Baseline information consists mainly of indicators although both quantitative and qualitative information can be used...The level of detail should be

²⁰ Development Plan Practice Note 4- Sustainability Appraisal incorporating Strategic Environmental Assessment, DFI, April 2015

sufficient to provide a basis for the understanding of the social, economic and environmental characteristics of the area likely to be affected by the draft plan and also how the area would evolve without the implementation of the plan”.

It is also confirmed in the guidance at Paragraph 3.3 that

“SA should help to improve the quality of the plan making process by:

- raising awareness of the social, economic and environmental impacts of the plan;*
- facilitating the identification and assessment of reasonable alternatives for the plan;*
- demonstrating that the plan is the most appropriate given the reasonable alternatives;*
- providing transparency in the decision-making process and facilitating public participation; and*
- facilitating the effective monitoring of implementation of the plan”.*

SA/SEA is critical to the Local Development Plan process. The content of the Council’s scoping report, in particular the baseline and evidential basis upon which the proposed options and mineral policies outlined in the DPS are grounded, is not accurate or sound. Therefore, the socio-economic and environmental profile of the plan area is inaccurate. The information employed by the Council has been provided by the DETI, QPANI and GSNI and whilst it is acknowledged that data has been collected from operators, this only includes a proportion of those operating within the district. Of the data provided, it appears to have been misinterpreted as detailed earlier in the representation.

The result of inaccurate data and incorrect interpretation is that the baseline upon which the SA has been based is incorrect. The inaccurate understanding of the industry in turn provides an erroneous SA/SEA, conclusions and assessment of the DPS and ultimately a strategy that is unsound.

9.1 Minerals- Strategic Approach

Paragraph 5.363 of the SA/SEA report states that the Council considers that there are three options in terms of the strategic approach to minerals:

- i. Consider all applications for minerals development regardless of their location against a criteria based policy.
- ii. A strategy based on Areas of Constraint and Minerals Reserve alongside tailored policy.
- iii. Take forward the existing ACMD designations along with the current policies.

Paragraph 5.364 sets out the reasons for selecting alternatives and states that:

“Minerals are an important resource in Mid Ulster with around 1250 people depending on the industry, considerably more than any other District in Northern Ireland”.

As detailed earlier in this representation, this figure underrepresents the number of people dependent upon the industry in the district.

There also appears to be a number of other reasonable alternatives which have not been assessed within the SA/SEA. One such example is a strategy based upon the designation of ACMD's, MRPA's and areas which are identified as being potentially suitable for minerals development. No assessment of such an alternative appears to have been assessed.

Similarly, no assessment has been undertaken for an alternative approach which would see the Council working in conjunction with neighbouring authorities to identify mineral resource areas and develop a strategy which see's regional or sub-regional identification or areas suitable or not suitable or minerals development as the case may be, but which would optimise the resources available.

Paragraph 5.367 describes how:

“None of the approaches identified have any significant negative impacts. Approach (ii) is in keeping with the SPPS which seeks to protect areas of scientific, amenity, nature or conservation interest from mineral development. This approach has similar economic and social effects because it will still facilitate jobs via the minerals industry but will also protect our more environmentally important areas and for this reason it has scored more favourably in terms of environmental effects”.

The statement is void of any specifics and simplifies what it acknowledges as a challenge i.e. in achieving a balance between environmental and economic interests. The assessment provides no detail on the amount, type or location of jobs which will be facilitated by the approach.

The preferred approach is described as “A strategy based on Areas of Constraint and Minerals Reserve alongside tailored policy”, however this can only be appraised assessed when the extents of the Areas of Constraint and Mineral Reserve Areas are known. For example, the approach of designating large expanses as ACMD's but only a small area as a Mineral Safeguarding Area would have a different economic impact than if the large expanses of land where identified as Mineral Reserve Areas with only a small area identified as an ACMD. Without being able to quantify the extents of the approach, it is unclear as to how the Council could have accurately assessed their alternatives.

9.2 Areas of Constraint on Mineral Development

If we consider the assessment of the preferred option and other alternatives considered regarding the implementation of ACMD's, Paragraph 5.368 of the SA presents three options in relation to ACMD's:

- i. Retain Areas of Constraint on Mineral Development (ACMD) as contained within the Dungannon and South Tyrone Area Plan and the Cookstown Area Plan.
- ii. Review and amend ACMD's designations, involving the removal of the designation in certain areas but introducing it to others, as shown in the Plan Strategy.
- iii. Remove ACMD's from the Plan.

Paragraph 5.369 of the SA states that:

“None of the approaches have been identified as having any significant negative impacts”.

As demonstrated in this representation, neither the economic contribution, nor the supply and demand positions within the district area has been accurately identified or assessed by the Council. As a result, an accurate conclusion cannot be reached on whether the proposed ACMD designation would pose a negative economic impact, without further understanding the economic baseline. If the industry makes a significantly greater contribution to the local economy than is identified within the DPS evidence base, it may be the case that any future constraints on the industry could result in major negative economic impacts, but without accurately identifying what the baseline position is, an accurate appraisal of the economic impacts as a result of the presented options cannot be undertaken.

Paragraph 5.370 states that:

“There is no evidence to suggest that by introducing ACMD’s we would be harming the capability of the District to produce an adequate amount of minerals to meet local and regional needs”.

As detailed earlier in this representation, the Council’s understanding of the supply and demand position is inaccurate, with data provided by our clients demonstrating that that supply will not meet demand over the plan period. Without accurately identifying the baseline in terms of the supply and demand position within the district, the Council cannot accurately reach such conclusions as that quoted above. No detail is provided as to what is considered an adequate amount of mineral to meet local and regional needs. For example, as highlighted earlier in this representation, if planning permission were to be refused for the extraction of sand from Lough Neagh, there is no provision within the DPS to meet the demand.

9.3 Mineral Reserve Policy Areas

With regards to the designation of Mineral Reserve Policy Areas, the Council identifies the following preferred option and alternatives:

- i. Retain Mineral Reserve Policy Areas at Ballyreagh, Derraghadoan and Derryvale Road.
- ii. Retain existing Mineral Reserve Policy Area at Ballyreagh and modify Mineral Reserve Policy Areas at Derraghadoan and Derryvale Road.
- iii. Remove Mineral Reserve Policy Areas from the Plan.

The Council has failed to accurately identify the contribution that the minerals industry makes to the local economy. As detailed in this representation, given the contribution that the existing working of sand and gravel and hard rock

mineral deposits make to the local economy, it is our client's view that based on the evidence provided, that it would be a sound approach to afford these areas and therefore the downstream manufacturing infrastructure and employment suitable policy protection.

The Council has not considered all of the reasonable alternatives to the preferred approach. For example, other reasonable approaches could involve the modification of the Mineral Reserve Policy Areas at Derraghadoan and Derryvale Road and introduction of new areas elsewhere in the district. Another alternative could be the removal of the MRPA's and the introduction of areas identified as being suitable for minerals development. None of these reasonable alternatives appear to have been assessed.

Paragraph 5.372 of the SA states that:

"The protection of these valuable minerals will help our local industries which are major employers, and this will secure jobs".

Two of the three proposed designations are not currently worked nor have they been for some time. It is considered that there are other mineral operators with dependent infrastructure that make a greater economic contribution than any of those proposed to be protected, thus confirming the flawed approach to the alternatives considered. If the sites that are being considered for protection under the MRPA policy have a recognised positive impact, however historic in nature, then the significant contributions made by existing operations would likely generate increased positive economic and social benefits, however this alternative is not considered within the SA.

The SA is also lacking in any quantifiable or qualitative detail. For example, in the assessment of whether to adopt the existing approach as contained within PSRNI or reconfigure policy without fundamental amendments, paragraph 5.380 states that:

“Both approaches will facilitate jobs by allowing mineral development outside ACMD’s and on the other hand both approaches will restrict mineral development within ACMD’s”.

No detail is provided as to how many jobs would be facilitated or specifically how the minerals industry will be restricted. For example, it would be facilitated in terms of land availability for future development sites; reduction in supply and the subsequent market reaction; direct and indirect job loss; contract loss; increased transportation costs to import mineral from outside the district. None of the above appear to have been considered within the SA.

It is considered that if the qualitative and quantified evidence as presented within this representation were to be utilised and an accurate baseline established, alternatives to the options presented could be more accurately assessed.

The above are just a few of the inaccuracies within the SA, however the same issues with regards to the identification and assessment of alternatives with accurate qualitative and quantitative evidence, could be repeated for the other minerals aspects of the SA/ SEA document.

The approach taken by the Council is inequitable and fundamentally flawed. There has been no consideration of alternative mineral reserve policy areas for economic minerals which are currently in production. Nor has there been consideration given to having a ‘joint’ strategic approach between Mid Ulster Council and neighbouring Councils.

9.4 Conclusions

SA/SEA is critical to the Local Development Plan process. The content of the Council’s SA, in particular the baseline on which the proposed mineral policies outlined in the DPS are grounded, is not accurate.

As demonstrated throughout this representation the Council has undervalued the contribution of the minerals industry within Mid Ulster and has failed to understand the issues with regards to the supply and demand position. Where data has been obtained, this report has demonstrated that it is either inaccurate or has been misinterpreted.

The SA fails to identify and assess all reasonable alternatives with regards to the various issues around minerals development. Given the lack of understanding on the Council's part and the absence of a credible and robust baseline, the Sustainability Appraisal (and SEA) is considered to be erroneous. The plan is therefore considered to fail **Procedural Test P3**.

10.0 JOINED UP APPROACH

As detailed in Quarryplan's previous representation, it is considered that as part of the strategic approach to minerals and as part of the 'consideration of alternatives' within the SA/SEA, the Council should consider a collegiate approach with neighbouring Council's with respect to its proposed LDP on minerals.

It is a matter of fact that minerals can only be extracted where they are found. In many cases, the economic mineral deposit will be located across several Council areas. In other cases, some Council areas will have a shortage of a particular mineral and a wealth of another (i.e. Mid and East Antrim & Causeway Coast and Glens – shortage of economic sand and gravel quarries – a wealth of operational basalt). Therefore, the needs of other Council's mineral requirements are required to be considered; indeed, the mineral requirement of the whole of Northern Ireland is a material consideration for the Mid Ulster Council, as they are literally in the centre of the market.

It is considered that the DPS fails to acknowledge the Regional importance of the mineral reserves within MUDC's boundaries. The extraction area in Lough Neagh is one of only two operational Gacio-lacustrine deposits that results in a near 100% sand production, the other being located to the south of Dungiven. The high yield of sand from Lough Neagh has the effect of reducing pressure on land based resources to maximise sand products, this is of importance because most glacial sand and gravel deposits yield at 60% gravel to 40% sand, or at best 50%-50%, with associated land take implications.

According to the Annual Mineral Returns Statement, over 75% of all sand and gravel within Northern Ireland is extracted from within the Mid Ulster District. The district therefore has Key role to play at a Regional Level in providing an adequate supply of sand and gravel to other Council Areas.

It is important that the minerals are not unduly constrained and appropriate safeguarding is implemented to sustain the Northern Ireland minerals industry, whilst balancing appropriate protection of the environment in accordance with the SPPS.

A number of the clients named in Section 2, work across Council boundaries, with some dependent upon importing material in to the district in order to facilitate manufacturing, others are located within close proximity to the boundary and will seek to meet demand in the future by utilising the resources within the Mid Ulster district.

It is proposed that the most appropriate way to deal with these issues would be to introduce a Regional Aggregate Working Party, like those that have been in place in the English and Welsh regions since the 1970's, to consider both local and regional mineral source, supply and demand. Quarryplan have been advocating this approach for some years now and it is understood that this is gaining some traction now in the form of a Regional Mineral Forum and has the support of the Department for the Economy, Geological Survey Northern Ireland and Council Planning Managers.

11.0 SUMMARY AND CONCLUSIONS

This representation has been prepared by Quarryplan Ltd on behalf of its Clients as detailed in Section 2, whom represent the largest operators, employers and producers of mineral in the Mid Ulster district.

This representation provides response to the information contained within the DPS and its supporting background information. The main points of the representation are as follows:

- The evidence base upon which the DPS is based upon is not robust with the evidential base upon which the Council rely fails to identify and understand the value of the Minerals Industry to the local and regional economy and is therefore unsound;
- The Council's understanding of the mineral supply and demand position over the plan period is incorrect;
- In the preparation of the DPS, the proposed Areas of Constraint on Minerals Development have been considered to be acceptable based upon the assumption that there is an adequate supply of mineral in the district over the plan period. This has been demonstrated to be incorrect within this representation and as such, the imposition of ACMD's are premature and unnecessarily prohibitive;
- Mineral Reserve Policy Areas are proposed in order to protect mineral which makes no economic contribution to the district, whilst strategic reserves which support hundreds of manufacturing jobs remain unacknowledged within the plan;

- Policy wording is contrary to the wording of the SPPS and introduces a precautionary test unique to mineral development rather than the prescribed balanced approach.
- Policy wording is ambiguous and is open to incorrect interpretation, likely to result in conflict and challenge during the determination of planning applications;
- The Council has failed to utilise discretionary powers to identify areas as suitable for mineral development, despite resources in the district being of regional importance;
- Failure of the Council to understand the mineral needs for the area and reliance of other Council areas upon the resource located within Mid Ulster and the lack up a joined-up approach in order to co-ordinate mineral supply across the region;
- Inadequate SA/SEA which fails to accurately assess economic impacts of proposed policies and strategic options as a result of flawed evidence base.
- The SA fails to consider all reasonable alternatives.
- Failure of the Council to provide detailed Landscape Capacity and Sensitivity studies specific to mineral development (the Council has merely updated the baseline landscape position for selected areas as opposed to any worthy assessment).
- Failure of the Council to understand the mineral needs for the area and NI (lack of a joined-up approach).

- The Council's failure to consider and promote a draft policy with respect to secondary aggregate use within the Mid Ulster minerals industry and preferential consideration of sites proposing to utilise existing infrastructure and consideration of the same within the SEA/SA alternatives to the policy renders the DPS unsound.

In order for the plan to progress, the Council needs to understand what is currently permitted and forms a planned reserve and the proposed consumption over the plan period of mineral operators. From this will flow an understanding and therefore the ability to safeguard a supply of resource for the plan period. Following confirmation of the same, the Council should seek to protect mineral resources at existing operational sites and other sites identified for future mineral extraction and conversely once a comprehensive understanding has been achieved, seek to protect areas through the reintroduction of Areas of Constraint on Mineral Development.

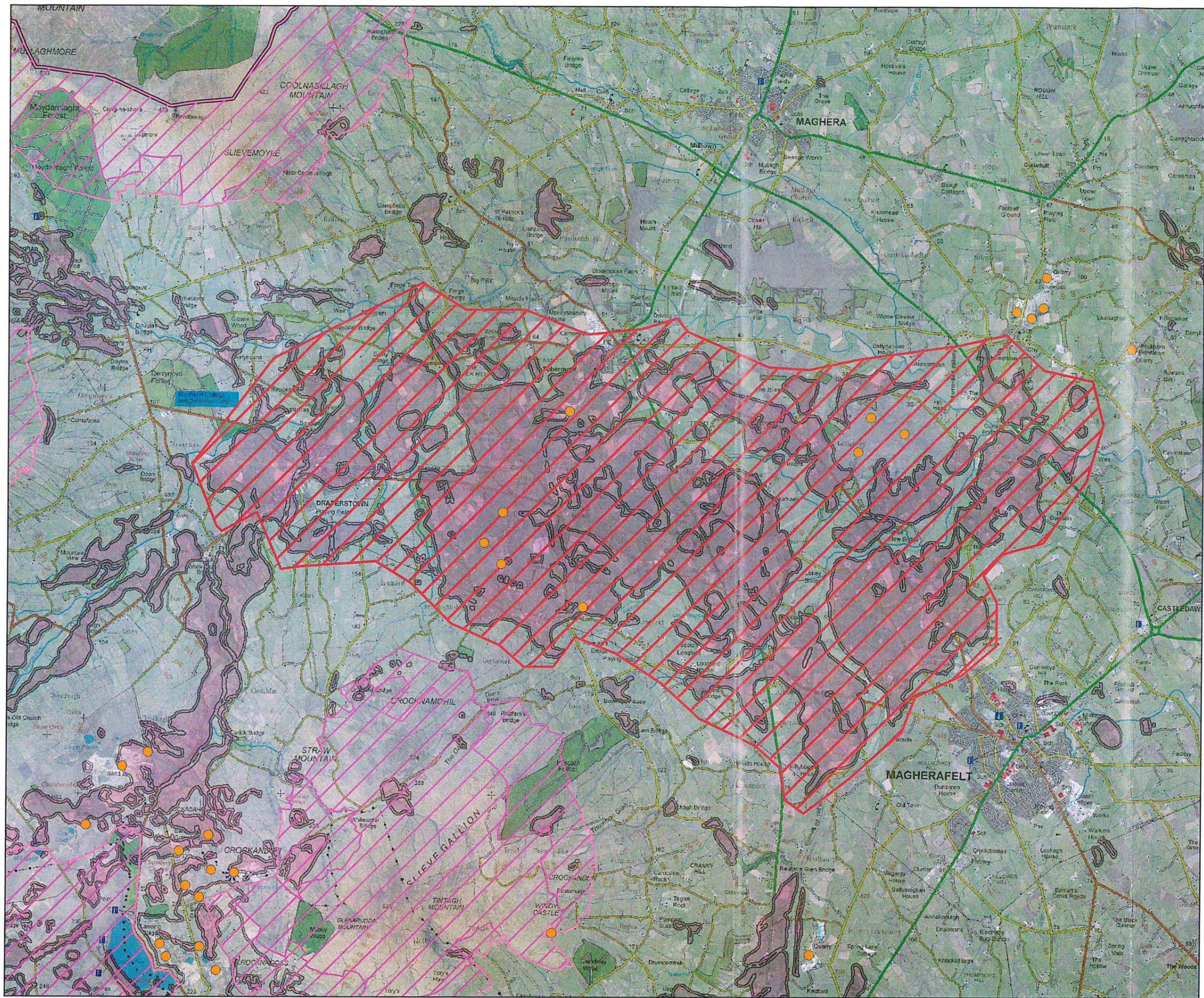
11.1 Soundness

With regards to the above and as detailed throughout this representation, the Draft Plan Strategy, in its current form is considered to fail to comply with a number of the tests provided within DFI Development Plan Practice Note 6, namely tests P3, CE1 and CE2.

As a result, our Clients consider the plan to be **unsound**.

APPENDIX 1

Proposed Areas Most Suitable for Minerals Development Maps



Notes: Includes Bing Aerial Imagery

Legend

- Quarry and Sand and Gravel Sites
- Proposed Areas Most Suitable for Mineral Development- Draperstown Rd
- BGS Sand and Gravel Mapping
- Proposed ACMD and SCA



Contains OS Data © Crown copyright and database right 2011.

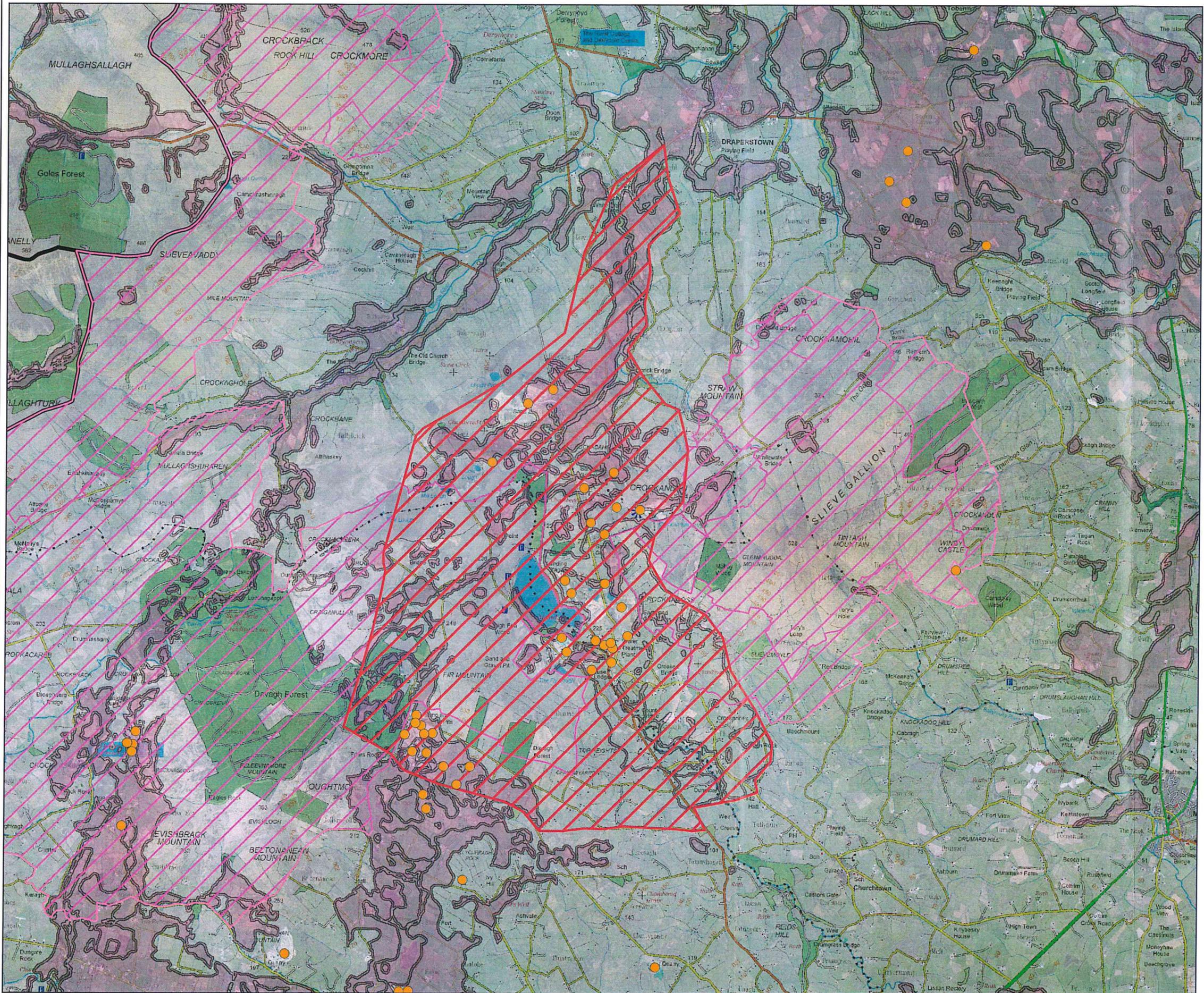
Title: Proposed Area Most Suitable for Minerals Development

Scale: 1:100,000 @A3

Dwg. No.: 001

Drawn By:
CST

Date:
17/04/2019

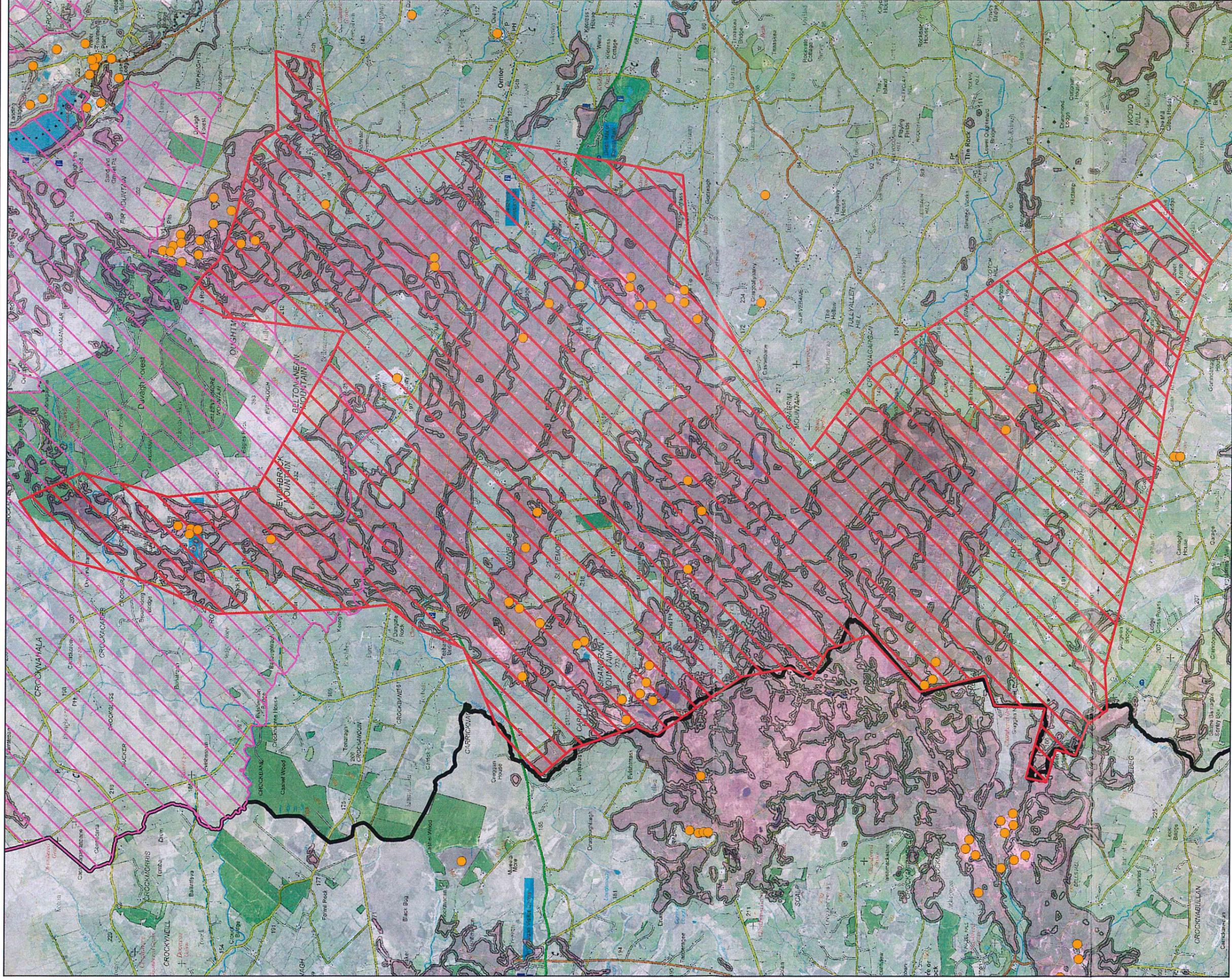


Notes: Includes Bing Aerial Imagery

Legend

-  Quarry and Sand and Gravel Sites
-  Proposed Areas Most Suitable for Mineral Development-Lough Fea
-  BGS Sand and Gravel Mapping
-  Proposed ACMD and SCA

| | |
|---|---|
|  |  |
| <p>Contains OS Data © Crown copyright and database right 2011.</p> | |
| <p>Title: Proposed Area Most Suitable for Minerals Development</p> | |
| <p>Scale: 1:100,000 @A3</p> | |
| <p>Dwg. No.: 002</p> | |
| <p>Drawn By: CST</p> | <p>Date: 17/04/2019</p> |



Legend

- Quarry and Sand and Gravel Sites
- Proposed Areas Most Suitable for Minerals Development
- BGS Sand and Gravel Mapping
- Proposed ACMD and SCA

Notes: Includes Bing Aerial Imagery



Contains OS Data © Crown copyright and database right 2011.

Title: Proposed Area Most Suitable for Minerals Development

Scale: 1:100,000 @A3

DWG. No.: 003

Drawn By: CST

Date: 17/04/2019

APPENDIX 2

Mullin Design Associates Review of Landscape Matters

Mid-Ulster Council

Consultation on Local Development Plan 2030 – Draft Plan Strategy

Consultation Response by MDA Chartered Landscape Architects on behalf of Quarryplan representing:

Acheson & Glover
Breedon
Campbell Contracts
Core Aggregates
Creagh Concrete Products Ltd
FP McCann
Hollow Park Sand and Gravel Ltd
Loughdoo Aggregates Ltd
McGarrity Bros
Norman Emerson Group
Northstone (NI) Ltd
Patrick Keenan
Stanley Bell & Sons Ltd
Tobermore Concrete Products Ltd
Walls and Mulholland

10 April 2019

Purpose and scope

This submission is primarily concerned with aspects of the Local Development Plan 2030 – Draft Plan Strategy relating to **Mineral Development**, with specific consideration to landscape and visual related matters.

Author

This response has been prepared by Pete Mullin CMLI. Pete is Chartered Landscape Architect with over 25 years' experience studying, teaching and practicing in the sector. In addition to private design practice, for the past eight years Pete has been the Policy Consultant for the Landscape Institute Northern Ireland.

Consultation responses and reports prepared include:

- Sustainable Design Guide - Building on Tradition (2011)
- Creative Industries Inquiry - with presentation to Ministers (2012)
- Urban Stewardship and Design Manual (2012)
- Regional Development Strategy 10 year review (2012)
- DARD Inquiry on tree and plant disease (2013)
- Rural Development Programme (2013)
- Living Places – Urban Design Guide (2013)
- Strategic Planning Policy Statement (2014)
- Building a United Community Inquiry (2015)
- Strategic Planning Policy for 'Development in the Countryside' (2016)
- Response to Programme for Government (2017)
- Draft Healthy Places Charter (2018)
- Response to Regional Forestry Plans (2018)

Through his private practice work Pete has attended several public inquiries as expert witness and overseen more than 100 Landscape and Visual Impact Assessments. He was also a lead member in the team responsible for development and delivery of the 2015 Northern Ireland Regional Landscape Character Assessment (NIRLCA) of behalf of NIEA

Other relevant roles have included:-

mda

chartered landscape architects

mullin design associates

559 Ormeau Road, Rosetta, Belfast, Ireland, BT7 3JA

tel. 028 9029 6843 - [REDACTED] - www.mullin.ie

Past Chair of the Landscape Institute Northern Ireland;
Chair of Northern Ireland Environment Link Planning and Land Matters Task Force; and
Member of the Strategic Design Group for Northern Ireland.

Introduction

Firstly it is encouraging that reference and recognition has been given throughout the Local Development Plan 2030 – Draft Plan Strategy to the importance of Mid-Ulster's valuable and unique landscapes.

In addition it is welcome that within the councils jurisdiction endeavour has been made to update the Northern Ireland Landscape Character Assessment 2000 (NILCA 2000) .

As Landscape professionals we believe that a 'Landscape led approach' through the utilization of Landscape Character Assessment (LCA) is essential in order to reconcile the complexities and often conflicting aspects of a workable modern development plan.

This response does not attempt to offer comment on every landscape aspect within the Local Development Plan 2030 – Draft Plan Strategy, but simply highlights some key gaps and areas of concern which we believe could result in the plan being based upon an inadequate evidence base, therefore resulting in an inaccurate Sustainability Appraisal/ Strategic Environmental Assessment (SA/SEA).

European Landscape Convention

Whilst recognised and referenced within the SPSS 2015 - No direct reference has been made within the Mid Ulster Local Development Plan 2030- Draft Plan Strategy to the 'European Landscape Convention' (ratified by both Ireland and the UK) and its core principle that 'All Landscapes Matter'.

By way of example Co Meath Development Plan 2013-2019 makes clear reference to the convention within its section 9.8 'Landscape'

9.8.1. The European Landscape Convention

The European Landscape Convention (ELC) defines landscape as '...an area, as perceived by people, whose character is the result of the action and interaction of natural and/ or human factors', and applies to both rural and urban landscapes. The Convention requires landscape to be integrated into planning policies and promotes interaction between local and central authorities, and transfrontier co-operation to protect landscapes. The Planning and Development Acts 2000/2012 states that landscape in the Act has the same meaning as in Article 1 of the ELC. The convention recognises that landscape has an important public interest role in the cultural, ecological, environmental and social fields, and constitutes a resource favourable to economic activity and whose protection, management and planning can contribute to job creation and is an important part of the quality of life for people everywhere.

Recognition of the Convention within the Mid Ulster LDP is considered an important commitment to Articles 5 and 6 of the Convention which requires signatory states to recognise landscapes in law, and to develop policies focused on appropriate landscape planning, protection and management.

The Draft Plan Strategy's failure to reference the ELC core principle that 'All Landscape Matter' is evident in the draft mapping which proposes multiple protective designations over some lands with no apparent proposed designations over others.

We believe this approach not only devalues lands and landscape outwith proposed formal designations such as 'Special Countryside Areas', but misses potential opportunities to introduce policies which would significantly improve capacity and quality of all landscapes throughout the Councils jurisdiction.

Landscape Character Assessment

It is widely accepted within the professional landscape sector that the NILCA2000 has become somewhat out of date (being almost 20 years old), indeed it is this recognition which led to the preparation of the NI Regional Landscape Character Assessment in 2015.

<https://www.daera-ni.gov.uk/consultations/northern-ireland-regional-landscape-character-assessment>

Firstly the original NIEA 2000 LCA did not include or was not utilised to generate capacity assessments, but simply offered broad descriptions regarding 'Landscape Condition and Sensitivity to Change' which were open for interpretation.

Each LCA included generic statements which offered little assistance to decision makers regarding various potential development typologies. One such statement is:

'The summit and steep slopes of Slieve Gallion are extremely sensitive to change as they are prominent in views throughout the lowlands on the western shores of Lough Neagh'.

The Wind Energy Development Landscapes SPG – published by NIEA in 2010 focused on guidance specific to potential Wind Energy Development. The guidance explored each LCA further than the 2000 LCA, with overall sensitivity for each LCA provided - for example in the case of LCA 41 Slieve Gallion the sensitivity was assessed as – High to Medium.

Indeed within the publicly consulted draft of this document 'Capacity Assessment' was offered outlining the potential extent that wind development could be accommodated within each LCA.

Regrettably this guidance material was subsequently dropped from the final adopted SPG – below is an example of the Draft Capacity Assessment extracted from the Draft Supplementary Planning Guidance to accompany Planning Policy Statement 18 'Renewable Energy' February 2008

LCA 41 Slieve Gallion

Capacity Assessment

- **Turbine groupings.** Part of this LCA may have some limited capacity for small or even medium size wind farm development if very carefully sited. However most of the LCA has no capacity due to its visual prominence and role as a landmark.
- **Turbine height.** Turbines up to medium height may be accommodated in appropriate locations.
- **Opportunities and constraints.** The only area having some capacity is the north-western slopes of Slieve Gallion, where the landscape is affected by widespread sand and gravel extraction. Any development in this area should be set well back from the steeper, more prominent slopes along at the northern edge of the massif to optimise topographic screening. Commercial wind energy development in other parts of this LCA is unlikely to be acceptable. It is especially important to avoid any impact on views westwards across the plateau area around Lough Fea towards South Sperrin LCA and on views of Slieve Gallion from the south and east. Any impacts on natural and cultural heritage features should also be avoided.
- **Domestic/community turbines.** Similar considerations apply to domestic and community wind energy development, which should generally be confined to the lower farmed and wooded slopes.
- **Cumulative/transboundary/seaward issues.** There are no operational or consented wind farms in this LCA. The nearest such wind farms are at Crockagarron around 20km to the south-west and at Rigged Hill and Long Mountain, around 30km to the north and north-west respectively. There are no significant cumulative and no transboundary or seaward issues.
- **Thresholds.** The LCA might accommodate one small or medium wind farm, well separated from any development in adjoining LCAs, notably the Moyola Valley LCA to the south.

Whilst the above example of capacity assessment never reached the final SPG, it is clear that such guidance would have been invaluable for decision makers and indeed applicants and agents.

The inclusion of such capacity assessment is standard practice in other jurisdictions, notably Scotland where significant research has been undertaken by organisations such as Scottish Natural Heritage (SNH) in the field of capacity and sensitivity assessment.

The following sequence of images have been prepared to illustrate that the proposed designations require greater clarification and refinement which would be supported and guided by Landscape Sensitivity and capacity studies.

Figure 1 – Extract from Map 1A - Local Development Plan 2030 – Draft Plan Strategy

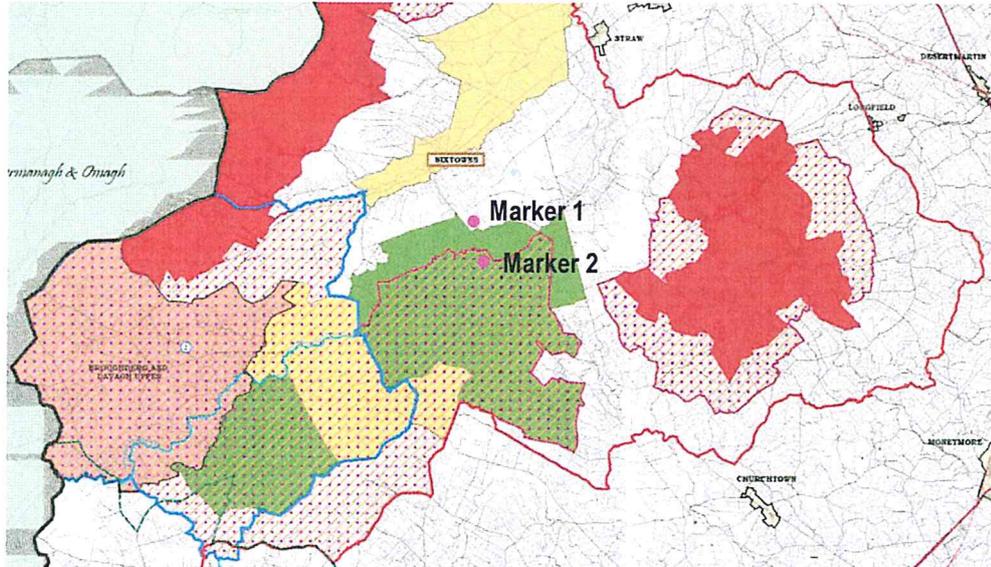
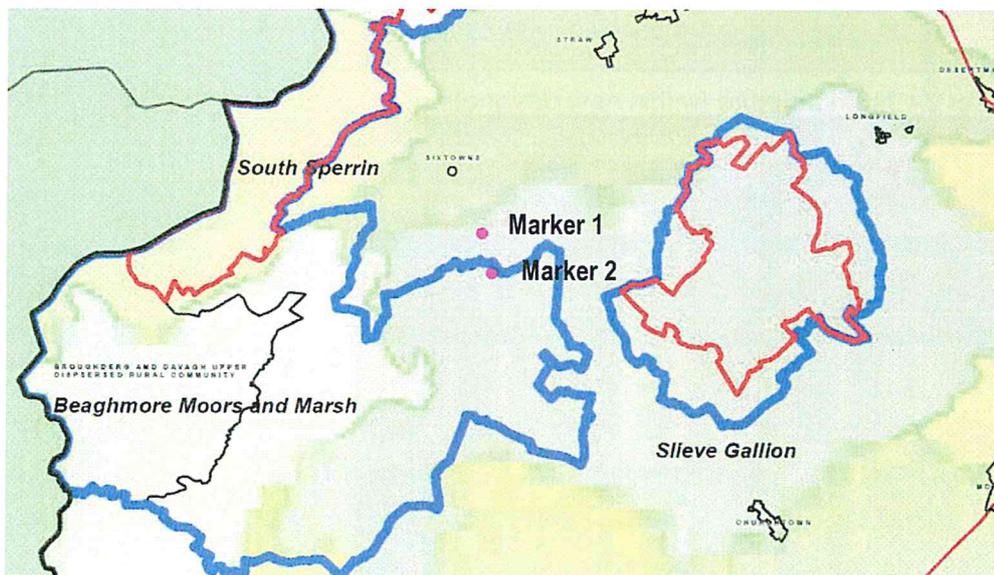


Figure 2 – Extract from updated LCA



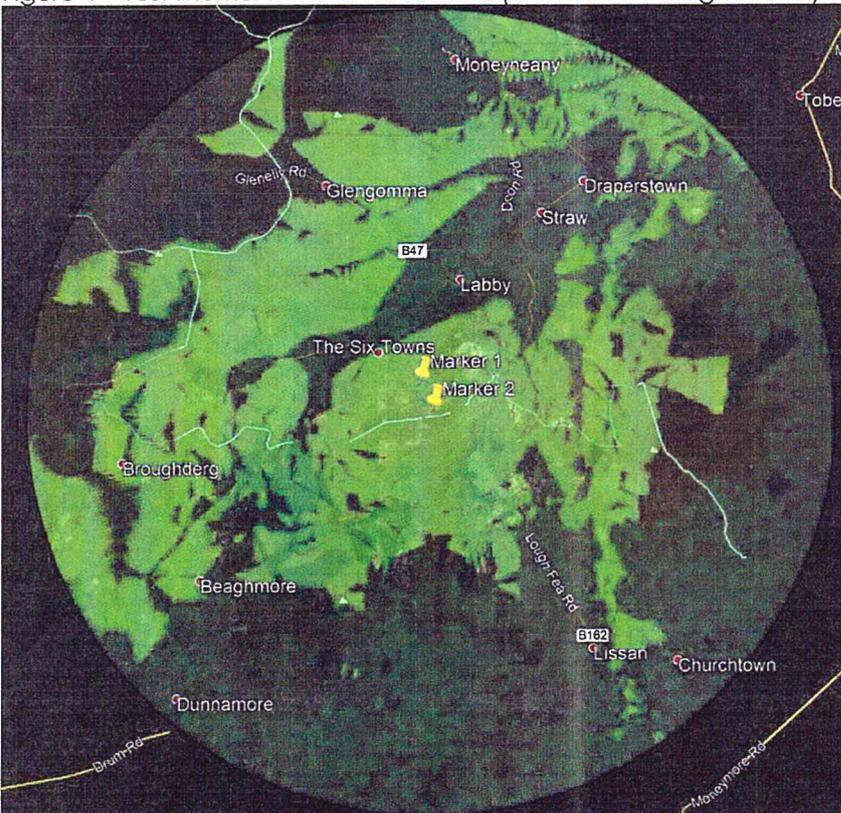
Within these figures two test markers (Magenta dots) have been selected less than 700m apart. Both markers are within LCA 41 Slieve Gallion and The Sperrins AONB however Marker 1 is outwith any of the new proposed designations Marker 2 is within multiple layers of new designation including:

- Areas of Constraint on Wind Turbines and High Structures
- Areas of Constraint on Mineral Development
- Tourism Conservation Zone

Figure 3 – Test Marker 1 = 110m structure (outwith new designations)



Figure 4 – Test Marker 2 = 110m structure (within new designations)



What both figures illustrate is the potential zone of visual influence which would be exerted by a 110m height structure within proposed designated lands (Figure 4) and outwith (Figure 3)

It is clear from this exercise that the visual impact exerted would be almost identical for the proposed development both within and outwith the proposed landscape designations. The rationale for the proposed designation is therefore unclear.

Figure 5 – Test Marker 1 = 2m structure (outwith new designations)

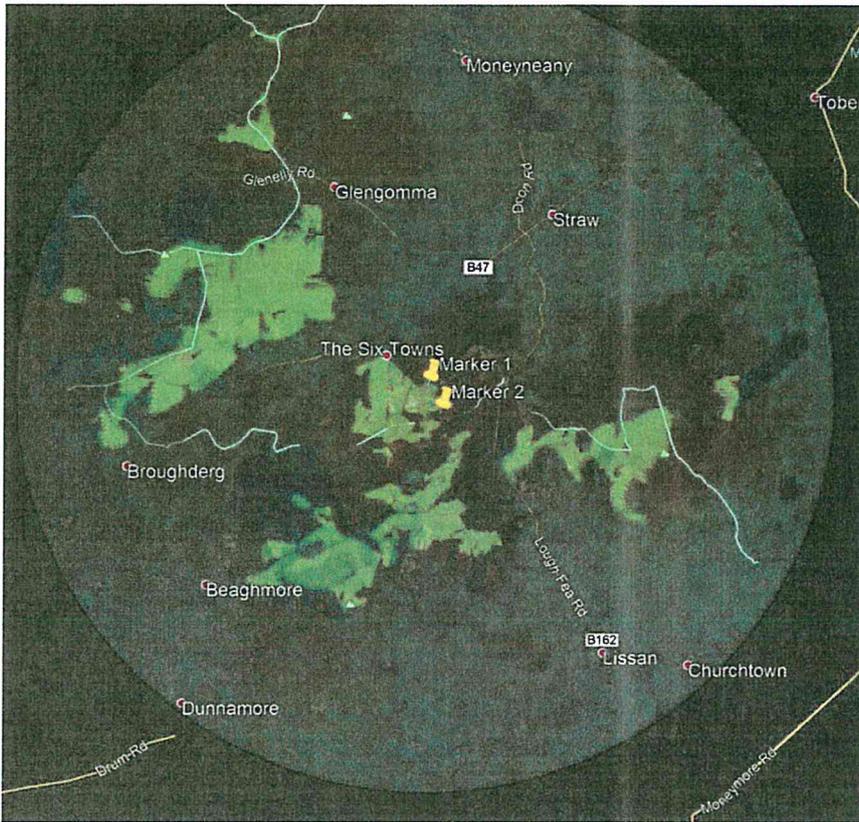
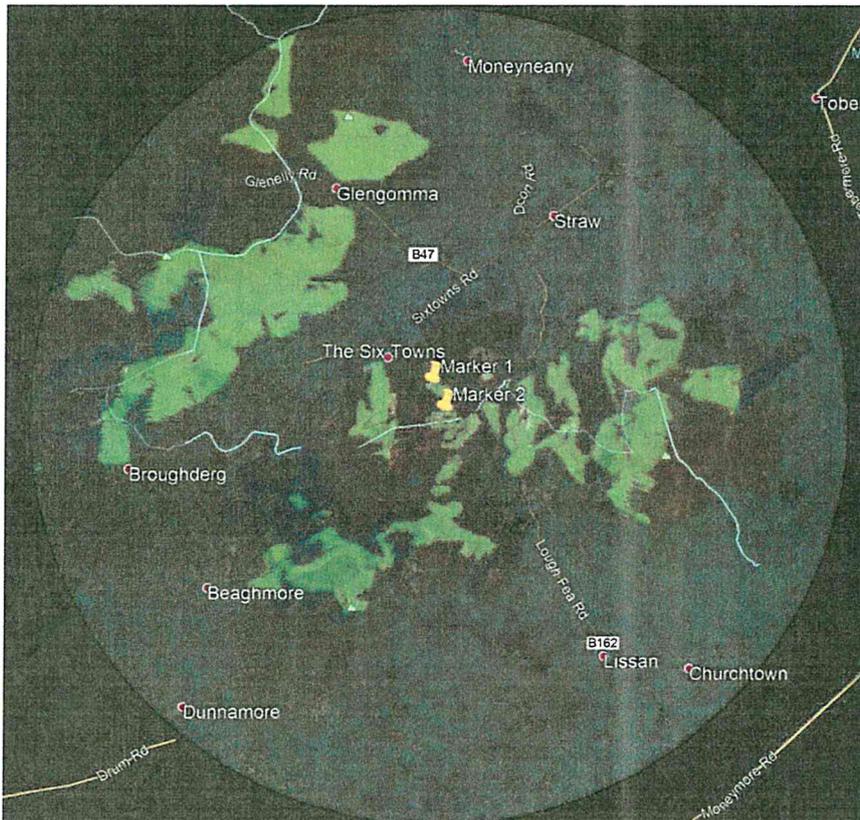


Figure 6 – Test Marker 2 = 2m structure (within new designations)



What both figures illustrate is the potential zone of visual influence which would be exerted by a ground based development such as a quarry within proposed landscape designations (Figure 6) and outwith (Figure 5). It is clear from this exercise that the visual impact exerted would be similar however what is most notable when compared to Figure 3 & 4 which relates to a much higher structure, is that the Zone of Visual Impacts generated would be significantly less.

This simple illustration demonstrates firstly that not all development typologies exert the same visual impact and secondly, that a variety of development types result in an almost identical visual impact, regardless of whether they are within a proposed designation or not.

This raises concern that two of the proposed designations are essentially identical in terms of footprint without adequate justification:

- Areas of Constraint on Wind Turbines and High Structures
- Areas of Constraint on Mineral Development

It is also of concern that by applying new designations to some parts of a particular Landscape Character Area and leaving other parts without designation, that poorly evidenced policies and designations have been proposed which in essence amplify negative differences within a LCA, which suggests an acceptance that there will be future divergence within the LCA.

Undesignated Lands

Whilst the importance of designation is clear, it raises question about control/ management and deplaning over lands which are less protected. This is a matter which could be addressed by a 'catch all rural policy' which relates specifically to undesignated lands.

For example the NIEA 2000 LCA sets out a number of basic and somewhat out of date 'Principles of Landscape Management' – however these are not embedded into the proposed LDP policy and decision making process. We believe this could be captured and expressed within either the Natural Heritage section or section 16.0 Agriculture, Forestry and Fishing.

Below is a suggested example policy for considered inclusion:-

POLICY AFR3 – LANDSCAPE CHARACTER

Development proposals should recognise the Principle of Landscape Management outline in the LCA and proposals should protect and/or conserve and/or enhance the key characteristics of the landscape character area in which it is to be located, and should respond to:

- a) the development pattern of the area, its historical and ecological qualities, tranquillity and sensitivity to change;*
- b) the pattern of woodlands, fields, hedgerows, trees, waterbodies and other landscape features; and*
- c) the topography of the area.*

Much reference has been given to Sensitivity and Capacity studies in this response, therefore Mid Ulster District Council might consider guidance set out within Scottish Natural Heritage - Landscape Capacity Toolkit.

This document is designed to support and guide the production of Capacity and Sensitivity studies:

Link to SNH Website - <http://www.snh.gov.uk/docs/B858929.pdf>

Another useful example is Doncaster Metropolitan Council with its combination of Landscape Character Assessment and Capacity Studies relating to various development typologies.

<http://www.doncaster.gov.uk/services/planning/doncaster-landscape-character-assessment-and-capacity-study>

In summary and specifically in relation to Mineral Development - we consider that without detailed Landscape Capacity and Sensitivity studies specific to mineral development, Mid-Ulster District Councils proposed landscape designations are not based upon a robust evidence base and in this respect, the plan is therefore considered to be unsound.

Yours faithfully

Pete Mullin BA(Hons) CMLI
Chartered Landscape Architect
Practice Partner

mda

chartered landscape architects

mullin design associates

559 Ormeau Road, Rosetta, Belfast, Ireland, BT7 3JA

tel. 028 9029 6843 - [REDACTED] - www.mullin.ie

APPENDIX 3

Minerals Supply and Demand Checklist

CHECKLIST FOR CONSIDERATION BY MINERAL PLANNING AUTHORITIES AND AGGREGATE WORKING PARTIES IN ASSESSING THE ADEQUACY OF LOCAL AGGREGATE ASSESSMENTS

1. Is the draft LAA comprehensive in assessing all supply options:

- a) Recycled and secondary aggregates?
- b) Marine dredged aggregate?
- c) Imports and exports by sea, rail and road?
- d) Land-won resources of rock and sand and gravel?

2. Are the assessments realistic and supported by evidence:

- a) Has the mpa used sales returns from and capacity at sites with extant permission?
- b) Does it identify reasons for significant changes in sales over last 10 years? Does 'other relevant local information' justify further investigation or deviation from use of 10 year average of sales?
- c) Has the mpa used AM data and Crown Estate landing figures and data on licensed reserves?
- d) Is there reliable evidence on the maintenance of supply, and is there adequate capacity at wharves and rail depots to handle the LAA figure for existing and potential landings and imports?
- e) Has the mpa considered a ten year sales average? If it is proposing an alternative figure to this, is there adequate justification regarding other relevant local information?
- f) Is it necessary to carry out a separate assessment and present information for different types of sand and gravel aggregate ?
- g) Are the assumed and planned contributions from the different sources feasible?
- h) Is the estimate for the availability and use of recycled and secondary aggregate a rigorous assessment?

3. Does the draft LAA suitably assess the changes likely to impact on supply and demand over the plan period – has it:

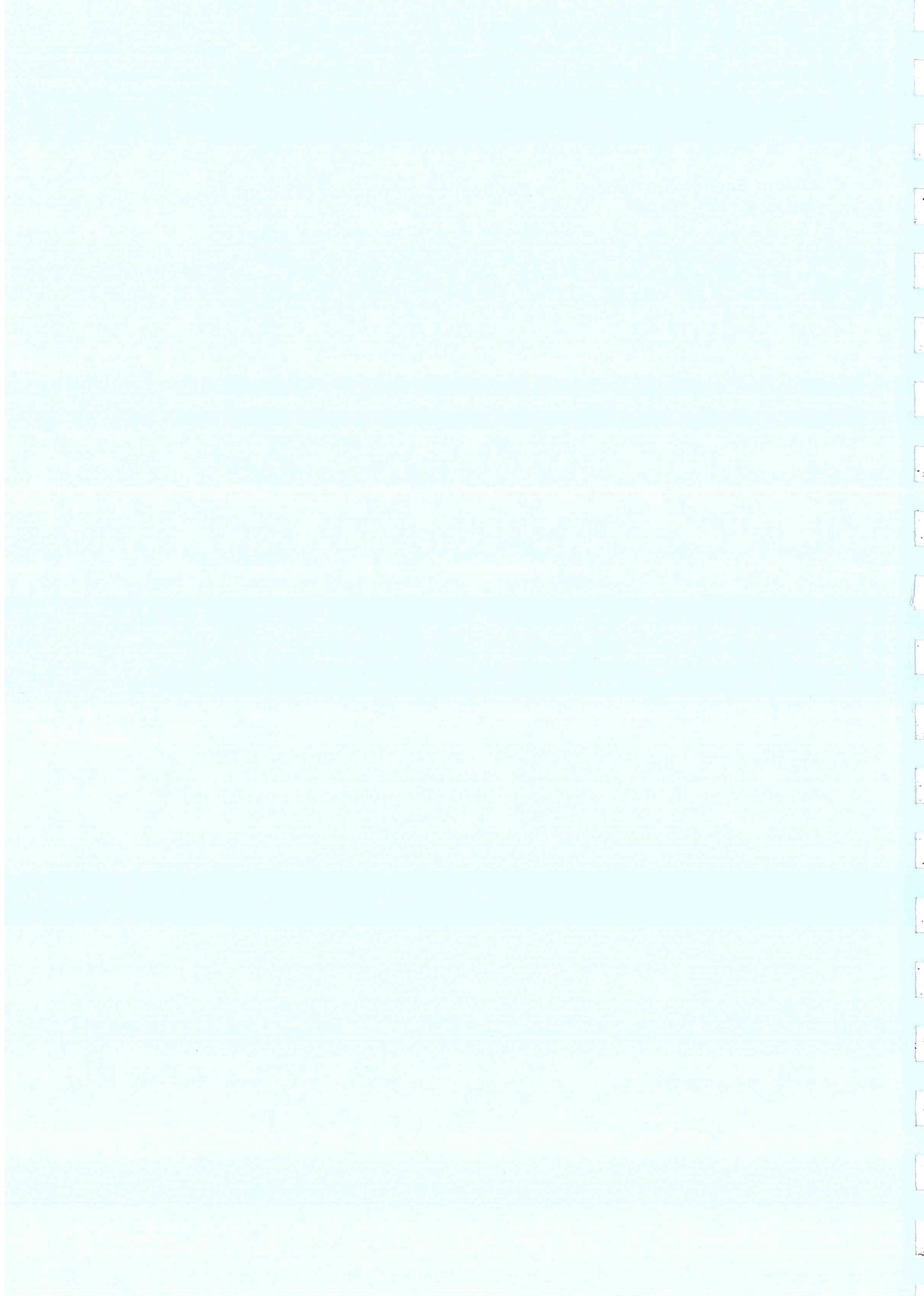
- a) Given consideration of the planned levels of development and infrastructure, including relevant major construction projects outside the mpa area and how these compare to previous years?
- b) Considered the constraints on resources, production and capacity to supply?
- c) Taken into account economic and environmental considerations?
- d) Assessed the implications of such considerations in other authority areas that supply the mineral planning authority?
- e) Identified a shortage of supply (based on forecast of demand, reserves and capacity)? If so, has this been suitably addressed?

4. **In preparing the LAA has the mpa consulted with** *(to contribute to meeting the Duty to Cooperate, especially if the LAA is being used as evidence to support preparation of an MLP):*
 - a) Other relevant mpas including those from/to whom supplies are imported/exported?
 - b) The aggregate industry?
 - c) Environmental bodies?
 - d) Other organisations such as Local Enterprise Partnerships?

5. **What are the implications of the draft LAA figures for the AWP area:**
 - a) On planned provision in the AWP area?
 - b) On the overall contribution of the AWP to national & local supply, compared with the current Guidelines (or the London Plan)?

APPENDIX 4

Oxford Economics Report- The Economic Contribution of Lough Neagh Sand Traders



THE ECONOMIC CONTRIBUTION OF LOUGH NEAGH SAND TRADERS

MARCH 2017

Oxford Economics

Oxford Economics was founded in 1981 with Oxford University's business college to provide economic forecasting and modelling. It is an independent advisory firm providing reports, forecasts and analytical tools on 200 countries, 100 industrial sectors and over 3,000 cities. Its global economic and industry models and analytical tools give it an ability to forecast external market trends and assess their economic, social and business impact.

Headquartered in Oxford, England, with regional centres in London, New York, and Singapore, Oxford Economics has offices in Belfast, Chicago, Dubai, Miami, Milan, Paris, Philadelphia, San Francisco, and Washington DC. They employ over 230 full-time people, including more than 150 professional economists, industry experts and business editors—one of the largest teams of macroeconomists and specialists. Our global team is highly skilled in a full range of research techniques, from econometric modelling, scenario framing, and economic impact analysis to market surveys, case studies, expert panels, and web analytics. Underpinning in-house expertise is a contributor network of over 500 economists, analysts and journalists around the world.

Oxford Economics advises corporate, financial and government decision-makers. The worldwide client base now comprises over 1,000 international organisations, including leading multinational companies and financial institutions; government bodies and trade associations; and universities, consultancies, and think tanks.

An experienced project team were assembled to deliver this work. The project was led by Neil McCullough, an Associate Director within the firm. Neil leads the consultancy services within our Cities Consulting team. He has over 14 years' project management and research experience ranging from leading major international projects to leading local economic impact and forecasting assignments. Whilst at Oxford Economics, Neil has undertaken economic impact studies on:

- The global impact of the semiconductor;
- The regional and national impacts of the 2012 London Olympics Games;
- The economic impacts of local economic development strategies and targets for local councils and Local Enterprise Partnerships;
- The economic impact of the Dutch film industry; and
- The economic impact of various private sector companies.

TABLE OF CONTENTS

| | |
|--|----|
| Executive summary | 1 |
| 1. Introduction..... | 3 |
| 1.1 EIA Context | 3 |
| 1.2 Methodology – potential impacts, positive and negative | 3 |
| 2. Sand Traders’ economic contribution | 5 |
| 2.1 Baseline impacts | 5 |
| 2.2 Sand Trader activity between 2010 and 2015 | 9 |
| 2.3 Alternative scenario impacts | 10 |
| 2.4 Fishing..... | 13 |
| 3. The regional and local impact | 17 |
| 3.1 Subdued outlook for employment growth | 17 |
| 3.2 Difficult conditions locally | 19 |
| 3.3 Population, employment rates and unemployment..... | 22 |
| 3.4 Deprivation and economic conditions | 25 |
| 3.5 Assessment..... | 26 |
| 4. The supply of sand in NI | 27 |
| 4.1 The capacity of the sector in NI | 27 |
| 4.2 Removing Lough Neagh sand would impact prices..... | 29 |
| 4.3 Little capacity to replace Lough Neagh Sand | 30 |
| 4.4 Alternative sources of supply | 30 |
| 4.5 Assessment..... | 32 |
| 5. Enabling construction and other downstream activities | 33 |
| 5.1 Supporting the construction sector | 33 |
| 5.2 Additional uses..... | 36 |
| 5.3 Assessment..... | 37 |
| 6. Conclusion..... | 38 |
| Annex A: Technical appendix..... | 40 |
| Annex B: DfI Economics Branch Consultation response | 43 |
| Annex C: The regional and local impact (Oct 2016 submission) | 47 |

| | |
|---|----|
| 6.1 Subdued outlook for employment growth | 47 |
| 6.2 Difficult conditions locally | 49 |
| 6.3 Population, employment rates and unemployment..... | 52 |
| 6.4 Deprivation and economic conditions | 55 |
| 6.5 Assessment..... | 56 |
| Annex D: Enabling construction and other downstream activities (Oct 2016 submission) | 57 |
| 6.6 Supporting the construction sector | 57 |
| 6.7 Additional uses..... | 60 |
| 6.8 Assessment..... | 61 |

EXECUTIVE SUMMARY

This report is prepared as an annex to the Environmental Statement (ES) submitted on behalf of Lough Neagh Sand Traders in respect of five enforcement notice appeals and a planning application that was lodged on 15th March 2017. It includes an assessment of an alternative baseline where there was no sand extraction activity on or off shore at Lough Neagh.

The report is prepared in the context of the environmental impact assessment regulations. The report has had regard to scoping issues raised by statutory agencies, as well as Oxford Economics' assessment of the issues.

The Lough Neagh Sand Traders generate clear economic benefits: In 2015 the Lough Neagh Sand Traders supported 346 jobs, associated wages of £9.1 million, GVA of £20.1 million and tax receipts and savings to the public purse of between £4.7 million and £5.7 million. Through supply chain and subsequent consumer spending, all sectors of the NI economy benefited from the operation of these five companies.

An assessment against the alternative baseline shows most of these benefits would be lost following the removal of the Lough Neagh sand supply. This would include the loss of 247 jobs, £6.8 million in wages, £14.1 million of GVA and between £3.5 million and £4.2 million in tax revenue and benefit savings.

The Sand Traders provide significant benefits for the local economies of Lough Neagh: Our analysis of recent and future growth shows that the local economies of Lough Neagh face a subdued period of job creation, falling resident employment rates and levels of unemployment above the record lows recorded in 2007. Furthermore, they face the issue of higher levels of long-term unemployed and youth unemployment, suffer from hard to tackle pockets of deprivation and lag below average levels of high skilled residents. In this local context, the benefits arising from Lough Neagh Sand Traders are significant and positive.

Lough Neagh sand has a significant positive impact on the local market: Feedback from the sector suggests there is unlikely to be sufficient levels of consented, exploitable sand reserves in NI to replace Lough Neagh sand if it were lost. Indeed, those we spoke with anticipate rising prices for NI sand should Lough Neagh sand extraction be stopped. The relatively higher price of sand from the Republic of Ireland also supports this view.

Without Lough Neagh sand, imports are likely to rise: given the lack of adequate alternative local supply the NI economy would have to rely on imports, to the extent that this is economic given the influence of transportation costs in the business. This would also represent leakage from the economy, which could have supported direct, indirect and induced employment in NI. Therefore, the Lough Neagh Sand Traders have a significant positive impact on restricting sand imports from the Republic of Ireland.

Operates in parallel with the fishing industry: The available evidence on the fishing sector on the Lough suggests that it is a successful and sustainable

industry. Therefore, there is no evidence that sand extraction is having an adverse impact.

Sand plays an enabling role in the NI economy: This is particularly the case for the heavy building materials manufacturing and construction sector which are significant employers and contributors to the economy. The loss of Lough Neagh Sand would therefore have an adverse impact on these sectors.

1. INTRODUCTION

1.1 EIA CONTEXT

The Department of the Environment (DOE) Determination Sheet dated 27th May 2015 noted that the Environmental Statement submitted on behalf of the Lough Neagh Sand Traders should address economic effects. This report also considers and addresses the response made by the DfI Economics Branch dated 7th March 2017.

1.2 METHODOLOGY – POTENTIAL IMPACTS, POSITIVE AND NEGATIVE

The assessments in this report consider the following baseline potential effects:

- **Adverse** - detrimental or negative effect to the economy;
- **Neutral** - an effect that on balance, is neither beneficial nor adverse to the economy; and
- **Beneficial** - advantageous or positive effect to the economy.

Consistent with the approach of other chapters and reports, the scale of the predicted residual effect has then been classified according to the following scale:

- **Negligible** - imperceptible effect;
- **Minor** - slight, very short or highly localised effect;
- **Moderate** - limited effect (by magnitude, duration, reversibility, value and sensitivity of receptor) which may be considered significant; and
- **Major** - considerable effect (by magnitude, duration, reversibility, value and sensitivity of receptor) which may be more than of a local significance.

Effects have been predicted as either 'significant' or 'not significant'. Significant effects are likely to be those most material to the planning process. Based on the above, residual effects of moderate and major scale may be considered significant.

This report assesses the overall economic contribution made by the five Lough Neagh Sand Traders (Figure 1) directly; in terms of GVA, jobs and wages generated, indirectly through the subsequent rounds of activity they support throughout the local and regional economy and finally through the consumer spending they enable. It also provides an assessment of economic activity should sand extraction stop at Lough Neagh. Furthermore, we provide an analysis of regional and local economic performance and show how the presence of the Sand Traders is locally important.

Fig. 1. Lough Neagh Sand Traders

| | Site locations |
|-------------------------|------------------------------------|
| Northstone (NI) Limited | Toome (x2), Ballyginnif, Sandy Bay |
| Lagans Group | Sandy Bay |
| Norman Emerson Group | Trowagh Bay |
| A&E Mulholland | Derryclone Bay |
| P & J Walls Limited | Toome |

Source: QPA Northern Ireland

Lough Neagh Sand Traders' total core economic footprint in NI is presented using the following key metrics:

- **GVA:** the operators' gross value added (GVA);
- **Employment:** the number of people employed by the Sand Traders and more widely as a result of their activities;
- **Wages:** the total value of remuneration paid to the workers associated with these activities; and
- **Fiscal:** including the tax revenues and benefit savings to the public purse that arise from the activities of the Lough Neagh Sand Traders.

To estimate the economic impacts, we have developed an input-output model using published data from the Office for National Statistics (ONS) and the Northern Ireland Statistics and Research Agency (NISRA). A detailed description of our impact methodology is included in the **technical appendix**.

The forecasts used in this report are taken from Oxford Economics' Local Authority District forecasting model. The hierarchical structure of our models ensures global and national factors (modelled in a set of global and macro models) flow down into our regional and local models and hence have an appropriate impact on the forecasts at the local level. Economic contributions are shown for the whole of NI, and broken down by sub-sector.

The report is structured as follows:

- Section two documents the estimated economic impact made by the Sand Traders within the economy in 2015 and against an alternative baseline scenario, on the basis that there is no sand extraction activity on or off shore at Lough Neagh;
- Section three provides a socio-economic analysis of the local areas most impacted upon by the activities of the Sand Traders;
- Section four analyses capacity of the sector and considers the impacts if Lough Neagh Sand Traders ceased trading;
- Section five examines the importance of the construction sector within the NI economy, the main activity that Lough Neagh sand enables; and
- Section six provides a cumulative assessment of the economic impact of the Lough Neagh Sand Traders.

2. SAND TRADERS' ECONOMIC CONTRIBUTION

This section of the report quantifies the Sand Traders' impacts by using techniques commonly referred to as "economic impact analysis" (see the technical annex for details on our methodology). To quantify the economic contribution of the Lough Neagh Sand Traders' activities within the NI economy we consider three channels of economic impact—direct, indirect and induced.

The direct impacts capture the activities of the Sand Traders operations; indirect impacts capture the benefits associated with the supply chain related to these activities; and induced impacts comprise the wider economic benefits which are realised as those employed spend their wages. The standard economic impact assessment approach allows us to quantify the scale of these benefits using several key metrics, including employment (jobs created or sustained); Gross Value Added (GVA), as a measure of the contribution to the local economy's production of goods and services; earnings; and taxation, in terms of both tax revenues raised and benefit savings to the Treasury.

Our analysis considers the economic impact of Lough Neagh Sand Traders in 2015 using data collected from each company. It also considers an alternative future scenario where there is no sand extraction activity on or off shore at Lough Neagh.

2.1 BASELINE IMPACTS

2.1.1 Direct impact

Our modelling of operational activity uses figures provided by the five Sand Traders licensed to work from Lough Neagh (provided in June 2016). Each Trader provided information on the number of jobs and value of business directly sustained by the sand dredging activity at Lough Neagh.¹

Collectively, sand extraction from Lough Neagh sustained 234 direct jobs in 2015. Approximately one fifth (47) of these jobs were involved directly in the extraction and processing of sand.²

¹ The DfI Economics Branch response (Annex B: pt. 1, 3, 4, 6) suggests that it would have been useful to consider the economic effects during the enforcement notice period between 2010 and 2015. This report provides an analysis of the situation in 2015, however a brief analysis of this period is shown in section 2.2 of this chapter. Figure 32 shows however that the volume of sand produced over this period has fallen (albeit with a slight increase in 2014).

² The DfI Economics Branch response (Annex B: pt. 1, 3, 4) refer to the QPA report 'Lough Neagh Sand Traders delivering for decades' and how the sand extraction figure of 30 differs from that of 47 specified in this report. We cannot comment on the provenance of the QPA's figures or how they define roles "directly working on the lough" and therefore do not comment on the comparison. However our own figures are taken directly from the operating companies and are robust and reliable.

Fig. 2. Direct sand dredging related employment, 2015

| Job functions | Employees |
|------------------------------|-----------|
| Sand barge operators | 17 |
| Lorry drivers | 9 |
| Shovel drivers/ yard workers | 13 |
| Office / technical roles | 8 |
| Total | 47 |

Source: Lough Neagh Sand Traders

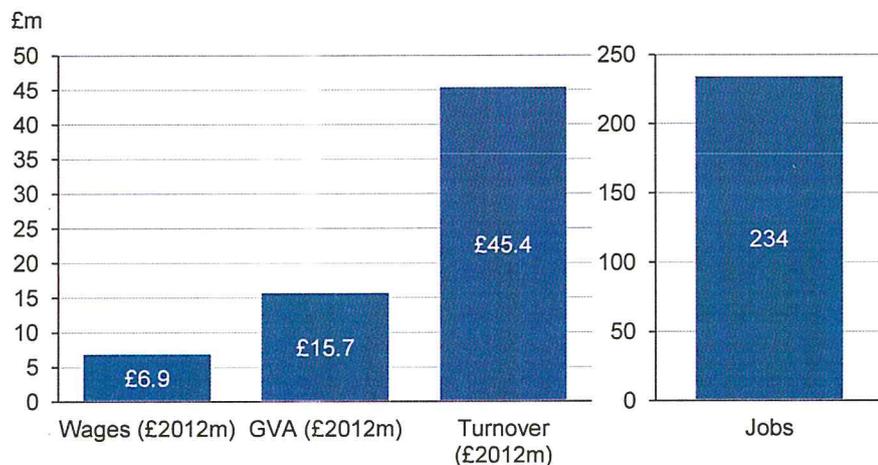
The remaining four fifths of the direct employment involved various forms of value-added activities that rely heavily on the sand, such as the manufacture of cement and concrete products.

Almost two thirds of those employed in these 234 jobs were residents from the three Council areas of Armagh, Banbridge and Craigavon, Mid Ulster and Antrim and Newtownabbey.

Data collected and verified with the Sand Traders shows that these direct jobs generated £6.9 million in wages in 2015. In addition, it shows that the value of turnover (i.e. sales) from Lough Neagh Sand Traders was just over £45 million in 2015, with 16 percent of this output attributed to sand dredging and the remaining 84 percent generated by higher value-added activities, where the sand is used in manufacturing processes and other products.

Using the above turnover data for sand extraction and the separate value added activity of these Sand Traders we were able to estimate their GVA contributions. We do this by using published ratios of output to GVA across the various sectors of the economy. We estimate that in 2015, the Lough Neagh Sand Traders created an estimated £15.7 million in GVA (2012 prices).

Fig. 3. Direct benefits, Lough Neagh Sand Traders, 2015



Source: Oxford Economics, Lough Neagh Sand Traders

Almost one million tonnes of sand were extracted from Lough Neagh in 2015³, the vast majority of which remained within, and serviced, the NI economy.

Two of the Lough Neagh Sand Traders exported sand to markets outside the region. In total, almost 60,000 tonnes of Lough Neagh sand was sold outside of NI in 2015 (6.3 percent of total sand extracted from Lough Neagh). The Republic of Ireland was the key export market for this sand.⁴

2.1.2 Indirect and induced impact

The indirect effects resulting from these operational activities were estimated to be enough to sustain a further 33 jobs in the NI economy (i.e. over and above those directly sustained) with associated wages of £780,000 and £1.7 million in GVA contributions⁵.

The direct and indirect wages, in turn, support induced activity, as employees spend them on goods and services in the wider NI economy. We estimate this induced activity was likely to have sustained an additional 79 jobs, with associated wages of a further £1.5 million and a further £2.7 million in GVA.

Fig. 4. Total annual benefits, Lough Neagh Sand Traders, 2015

| Total benefits | Jobs | Wages (£2012 prices) | GVA (£2012 prices) | Turnover (£2012 prices) |
|----------------|------------|----------------------|--------------------|-------------------------|
| Direct | 234 | £6,865,000 | £15,660,000 | £45,381,000 |
| Indirect | 33 | £780,000 | £1,689,000 | £4,216,000 |
| Induced | 79 | £1,470,000 | £2,706,000 | £5,230,000 |
| Total | 346 | £9,115,000 | £20,055,000 | £54,826,000 |

Source: Oxford Economics

The following table presents the total impacts (direct, indirect and induced) by sector of the economy. As expected, employment effects were identified as being most strongly associated with the mining and quarrying and manufacturing sectors.

³ Based on data provided to Oxford Economics by the industry.

⁴ The DfI Economics Branch response (Annex B: pt. 5) asked if there was any economic leakage during the sand export activities at Lough Neagh. If there was, this is most likely to arise from the use of non-NI based hauliers. However, the Sand Traders have confirmed that they use NI-based hauliers to export sand.

⁵ In estimating indirect and induced wages and GVA we use sectoral wage data published by the Department for the Economy, and sectoral productivity published by ONS.

Fig. 5. Sectoral total annual benefits, Lough Neagh Sand Traders, 2015

| | Jobs (FTE) | Wages (2012 prices) | GVA (2012 prices) |
|--|------------|---------------------|--------------------|
| Agriculture, forestry and fishing | 3.3 | £49,000 | £40,000 |
| Mining and quarrying | 49.4 | £1,538,000 | £3,727,000 |
| Manufacturing | 200.4 | £5,729,000 | £12,899,000 |
| Electricity, gas, steam and air conditioning supply | 0.5 | £21,000 | £105,000 |
| Water supply; sewerage, waste management and remediation activities | 0.4 | £9,000 | £42,000 |
| Construction | 2.7 | £69,000 | £86,000 |
| Wholesale and retail trade; repair of motor vehicles and motorcycles | 24.5 | £382,000 | £895,000 |
| Transportation and storage | 8.3 | £198,000 | £347,000 |
| Accommodation and food service activities | 14.6 | £163,000 | £243,000 |
| Information and communication | 2.2 | £65,000 | £129,000 |
| Financial and insurance activities | 5.9 | £174,000 | £367,000 |
| Real estate activities | 15.0 | £336,000 | £601,000 |
| Professional, scientific and technical activities: | 1.9 | £46,000 | £78,000 |
| Administrative and support service activities | 4.2 | £76,000 | £103,000 |
| Public administration and defence; compulsory social security | 0.9 | £27,000 | £49,000 |
| Education | 2.9 | £68,000 | £99,000 |
| Human health and social work activities | 4.4 | £93,000 | £112,000 |
| Arts, entertainment and recreation | 3.0 | £47,000 | £72,000 |
| Other service activities | 1.7 | £25,000 | £62,000 |
| Total | 346 | £9,115,000 | £20,055,000 |

Source: Oxford Economics

2.1.3 Fiscal impacts

Employment sustained by the Sand Traders' activity, also produces benefits for the Treasury in the form of both tax receipts and savings on unemployment-related payments. In estimating tax receipts to the Exchequer, it is assumed a proportion of total wages are eventually paid towards public accounts. This proportion not only incorporates income tax payments, but value added tax through the purchase of goods and services by those in direct, indirect and induced employment.

We estimate that as a result of Sand Traders wages and direct employment, Treasury receives tax receipts of approximately £3.6 million in 2015 (this includes income tax and VAT). The activity associated with these payments further saved the public purse between £1.0 million and £2.1 million in unemployment-related benefits payments as a result of the jobs it sustained⁶.

⁶ We assume that a job created will either directly remove someone from unemployment, or be taken from someone already employed, who will leave a job vacancy which can be taken by the unemployed, or someone in work (which would leave another vacancy to be filled).

Fig. 6. Tax revenues and unemployment savings, Lough Neagh Sand Traders, 2015

| Tax revenue | Wages (£2012m) | Tax revenue (£2012m) |
|----------------------|-------------------------------|----------------------|
| On-going (per annum) | £9.12 | £3.65 |
| On-going (per annum) | Unemployment savings (£2012m) | |
| | Lower | Upper |
| Direct | £0.7 | £1.4 |
| Indirect | £0.1 | £0.2 |
| Induced | £0.2 | £0.5 |
| Total | £1.0 | £2.1 |

Source: Oxford Economics, ONS

Indeed, the Sand Traders are subject to the same taxation and other costs as aggregate suppliers across NI and the UK. The Sand Traders pay significant income tax, national insurance contributions (NICS), corporation and aggregate tax. Collectively in 2015/2016 they contributed almost £14.7 million towards the public purse.⁷

Fig. 7. Sand Trader tax contributions, 2015/2016

| | Income tax | NICS | Corporation tax | Aggregate tax |
|--------------------------|------------|------------|-----------------|---------------|
| Lough Neagh Sand Traders | £6,017,000 | £6,252,000 | £662,000 | £1,760,000 |

Source: Lough Neagh Sand Traders

2.2 SAND TRADER ACTIVITY BETWEEN 2010 AND 2015

Lough Neagh Sand Trader activity (directly supported by Lough Neagh sand) has undergone varied performance since 2010. Following the recession there was overall very little change in employment and turnover. What change there was in employment, was primarily down to the value-added activity component. However, from 2013 onwards, direct Sand Trader activity has grown more strongly. The value-added component within Sand Trader operations was the main contributor to this growth.

⁷ Tax details relate to the Sand Traders' businesses as a whole (with the exception of corporation tax for Northstone) for the 2015/2016 financial year where available.

Fig. 8. Direct jobs and turnover, Lough Neagh Sand Traders, 2010-2015

| | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
|-----------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Extraction related jobs | 48 | 49 | 48 | 44 | 46 | 47 |
| Value added related jobs | 170 | 161 | 160 | 159 | 180 | 187 |
| Total jobs | 219 | 210 | 208 | 203 | 226 | 234 |
| Extraction related turnover (£m) | £6.4 | £6.3 | £6.2 | £5.8 | £6.5 | £7.5 |
| Value added related turnover (£m) | £27.1 | £27.3 | £26.7 | £28.6 | £36.5 | £39.8 |
| Total turnover (£m) | £33.5 | £33.6 | £32.9 | £34.4 | £43.0 | £47.3 |

Source: Lough Neagh Sand Traders

Note: Turnover in nominal prices

2.3 ALTERNATIVE SCENARIO IMPACTS

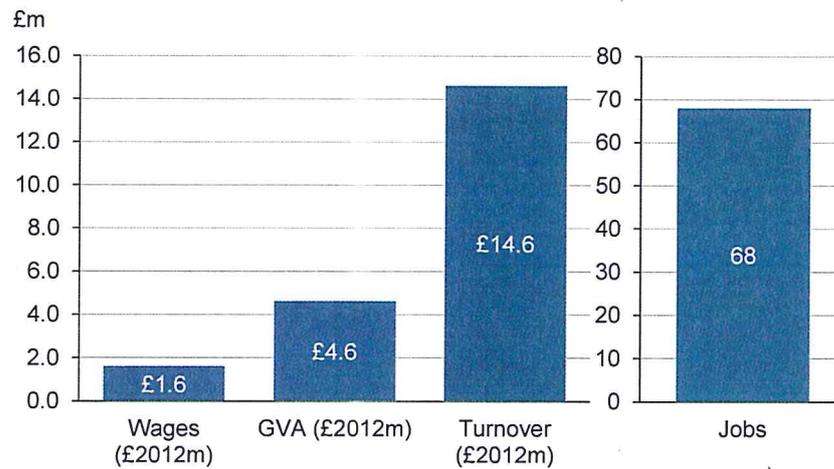
2.3.1 Direct impact

In this scenario there is no sand extraction activity on or off shore at Lough Neagh. Consequently, all 47 direct sand dredging related jobs are lost. In addition, a significant proportion of the value-added activity will cease within the Sand Traders' wider manufacturing operations. This baseline assumes just over 36 percent of these roles (68 direct jobs) would remain in the event of the removal of Lough Neagh sand supply. This proportion of value added activity was considered to continue in this limited case due to one Sand Trader owning land based sand and gravel deposits elsewhere.⁸

Data verified with the Sand Traders show that direct jobs under this restricted scenario would have generated £1.6 million in wages in 2015. Sales from this activity in 2015 were valued at £14.6 million. Using the turnover data alongside published ratios of sectoral output to GVA, we estimate GVA contributions under this baseline at £4.6 million (2012 prices).

⁸ The DfI Economics Branch response (Annex B: pt. 2) suggests that in the absence of sand from Lough Neagh the Sand Traders could find additional resource from elsewhere or move their operations closer to other sources. This assertion is unsupported by any evidence or data. However, we know that in 2010 Lough Neagh accounted for over 50% of all sand and gravel output in Northern Ireland. Given that material extracted from Lough Neagh is almost exclusively sand, this means a significant volume of material would need be extracted from pits to replace lost sand. Equally, the theoretical movement of Lough Neagh Sand Traders sites to alternative sand sources would require significant investment and the Sand Traders have confirmed in affidavits that this would not happen.

Fig. 9. Direct benefits, Lough Neagh Sand Traders, 2015



Source: Oxford Economics, Lough Neagh Sand Traders

Therefore, in comparison to the original baseline, this alternative scenario's gross impact would represent a loss of:

- 166 direct jobs;
- £5.2 million in direct wages;
- £11 million in direct GVA; and
- £30.8 million in sales.

Fig. 10. Direct impact baseline comparison, Lough Neagh Sand Traders, 2015

| | Jobs | Wages (£2012m) | GVA (£2012m) | Turnover (£2012m) |
|----------------------|------|----------------|--------------|-------------------|
| Baseline | 234 | £6.9 | £15.7 | £45.4 |
| Alternative scenario | 68 | £1.6 | £4.6 | £14.6 |
| Difference | -166 | -£5.2 | -£11.0 | -£30.8 |

Source: Oxford Economics, Lough Neagh Sand Traders

2.3.2 Indirect and induced impact

The alternative scenario's direct activity is estimated to be enough to sustain a further 11 jobs within the NI economy. (i.e. over and above the 68 jobs directly sustained). These jobs will generate £268,000 in wages and £578,000 in GVA contributions.⁹

⁹ As before, indirect and induced wages and GVA use sectoral wage data published by the Department for the Economy, and sectoral productivity published by ONS.

Once again, induced activity will be supported as those employed directly and indirectly spend their wages in the wider NI economy. We estimate this induced activity is likely to sustain an additional 20 jobs, with associated wages of £0.38 million and £0.69 million in GVA. Therefore, we estimate this scenario's total impact would equate to 100 jobs, with wages of £2.3 million and £5.9 million of GVA contributions.

Fig. 11. Total annual benefits, Lough Neagh Sand Traders, 2015

| Total benefits | Jobs | Wages (£2012 prices) | GVA (£2012 prices) | Turnover (£2012 prices) |
|----------------|------------|----------------------|--------------------|-------------------------|
| Direct | 68 | £1,630,000 | £4,644,000 | £14,617,000 |
| Indirect | 11 | £268,000 | £578,000 | £1,463,000 |
| Induced | 20 | £375,000 | £689,000 | £1,336,000 |
| Total | 100 | £2,273,000 | £5,911,000 | £17,416,000 |

Source: Oxford Economics

Therefore, in comparison to the baseline, this alternative activity's gross total impact would represent a loss of:

- 247 jobs;
- £6.8 million in wages;
- £14.1 million in GVA; and
- £37.4 million in sales.

Fig. 12. Total impacts baseline comparison, Lough Neagh Sand Traders, 2015

| | Jobs | Wages (£2012m) | GVA (£2012m) | Turnover (£2012m) |
|----------------------|-------------|--------------------|---------------------|---------------------|
| Baseline | 346 | £9,115,000 | £20,055,000 | £54,826,000 |
| Alternative scenario | 100 | £2,273,000 | £5,911,000 | £17,416,000 |
| Difference | -247 | -£6,842,000 | -£14,144,000 | -£37,410,000 |

Source: Oxford Economics

Note: May not add due to rounding

2.3.3 Fiscal impacts

Employment sustained under this alternative scenario will also produce benefits towards the public accounts, through tax receipts and savings on unemployment related benefits. Under this more limited baseline the Treasury receives tax receipts of approximately £0.91 million in 2015 (this includes income tax and VAT). The activity further saved the public purse between £0.3 million and £0.6 million in unemployment-related benefits payments because of the jobs it sustains.¹⁰

¹⁰ We assume that a job created will either directly remove someone from unemployment, or be taken from someone already employed, who will leave a job vacancy which can be taken by the unemployed, or someone in work (which would leave another vacancy to be filled).

Fig. 13. Tax revenues and unemployment savings, Lough Neagh Sand Traders, 2015

| Tax revenue | Wages (£2012m) | Tax revenue (£2012m) |
|----------------------|-------------------------------|----------------------|
| On-going (per annum) | £2.27 | £0.91 |
| On-going (per annum) | Unemployment savings (£2012m) | |
| | Lower | Upper |
| Direct | £0.21 | £0.41 |
| Indirect | £0.03 | £0.07 |
| Induced | £0.06 | £0.12 |
| Total | £0.3 | £0.6 |

Source: Oxford Economics, ONS

The total fiscal benefits under this scenario (tax revenues plus unemployment related savings) is estimated to be within the range of £1.2 million to £1.5 million. This range in potential contribution to the public accounts were significantly weaker than that estimated under the baseline—with estimated benefits accounting for only a quarter of that represented under the baseline typically.

Fig. 14. Total fiscal impact baseline comparison, Lough Neagh Sand Traders, 2015

| | Estimate range (£2012m) |
|----------------------|-------------------------|
| Baseline | £4.7 - £5.7 |
| Alternative scenario | £1.2 - £1.5 |

Source: Oxford Economics, ONS

2.4 FISHING

According to the Quarry Products Association NI (QPA) report “Lough Neagh Sand Traders: Delivering for Decades”, sand extraction remains the largest commercial enterprise on Lough Neagh¹¹. By comparison, the Lough Neagh Fisherman’s Co-operative Limited that engages in eel fishing, had a turnover of £2.8 million in 2015 and 18 employees with a wage, national insurance and pension contribution of some £372,000,¹². However, the Lough Neagh Fishermen’s Cooperative Society (LNFCS) are the licensors for eel fishing and they issue permits to fish for eel to 112 fishermen annually¹³. LNFCS has managed the eel fishery since 1971 and the majority of practicing fishers’ are share holders¹⁴. Whilst the precise number of practicing eel fishermen is not known the contribution to the economy is quantifiable via analysis of the Cooperatives returns, with turnover averaging at £3.04 million for the years 2010 to 2015.

¹¹ Quarry Products Association NI, “Lough Neagh Sand Traders: Delivering for decades”, 2014.

¹² Source Annual Return to DETI 30 April 2015

¹³ Inland Fisheries Group- Lough Neagh Fishery Management Plan September 2015

¹⁴ Inland Fisheries Group- Lough Neagh Fishery Management Plan September 2015

The Co-operative fishes in the region of 2.5m eels a year, or 400 tonnes and is the largest producer of wild eels in Europe¹⁵. The co-operative puts into the lough between three and four million elvers every year. Eighty percent of the eels that are caught are sent to Holland and Germany, while the remainder go to London for the jellied eel industry. Eel fishing is a seasonal operation.

The co-operative also owns the rights to scale fish, which includes pollan, trout, bream, pike, roach and perch.

The co-operative has secured Protective Geographical Indication for the Lough Neagh eel, which was awarded in 2011. Equally, Lough Neagh pollan has been recognised by the EU as a foodstuff of particular quality whilst having an identity associated with a specific area.¹⁶ Within this regulator statement it states that Lough Neagh pollan remains an economically important species and that over the last 15 years between 50 and 200 tonnes have been harvested annually from Lough Neagh.

Declared biomass figures show relatively consistent fishing output from the main stock breeds within the Lough itself. In relation to Pollan, the fluctuations in the recorded figures are noted and between 1996 and 2014 there are years where the recorded catch is significantly lower than in other years. However, the data shows that following these drops in output, a higher catch is recorded in subsequent years—see figure below.

¹⁵ source: <http://www.loughneagheels.com>

¹⁶ UK Government, "Lough Neagh Pollan", *Council regulation (EC) No 1151/2012*, 2012.

Fig. 15. Summary table detailing declared biomass (kg per year) landed from Lough Neagh as per DCAL Licenced Fish Dealers register data

| Year | Bream | Pike | Pollan | Trout | Perch | Salmon | Roach |
|------|--------|--------|---------|--------|--------|--------|---------|
| 1996 | 1,803 | 2,890 | 0 | 0 | 0 | 0 | 0 |
| 1997 | 2,240 | 1,044 | 175,015 | 3,946 | 9,442 | 0 | 0 |
| 1998 | 0 | 0 | 225,461 | 146 | 0 | 0 | 0 |
| 1999 | 0 | 0 | 105,191 | 0 | 0 | 0 | 0 |
| 2000 | 0 | 0 | 355,010 | 1,785 | 0 | 0 | 0 |
| 2001 | 0 | 0 | 348,004 | 0 | 0 | 0 | 0 |
| 2002 | 0 | 0 | 136,679 | 0 | 0 | 0 | 0 |
| 2003 | 0 | 0 | 97,382 | 1,380 | 0 | 149 | 0 |
| 2004 | 890 | 2,166 | 164,848 | 334 | 0 | 66 | 0 |
| 2005 | 1,143 | 1,029 | 83,905 | 3,102 | 0 | 0 | 40,889 |
| 2006 | 3,220 | 21,261 | 120,497 | 3,438 | 0 | 0 | 79,066 |
| 2007 | 0 | 696 | 60,527 | 2,557 | 0 | 0 | 5,601 |
| 2008 | 3,105 | 1,643 | 59,854 | 1,645 | 3,137 | 0 | 67,979 |
| 2009 | 20,921 | 2,358 | 192,496 | 7,857 | 991 | 0 | 202,669 |
| 2010 | 11,328 | 5,526 | 229,167 | 3,760 | 419 | 33 | 64,955 |
| 2011 | 1,207 | 7,160 | 32,288 | 337 | 32 | 0 | 2,883 |
| 2012 | 658 | 5,299 | 223,834 | 8,140 | 2,985 | 28 | 52,517 |
| 2013 | 8,804 | 10,402 | 298,066 | 11,711 | 60,970 | 4 | 209,117 |
| 2014 | 959 | 0 | 26,654 | 7,904 | 2,048 | 0 | 20,986 |

Source: Lough Neagh Fishery Management Plan

Note: There is no legal requirement to record sales of perch, roach or bream by registered dealers

Furthermore, further indication of recent success within Lough Neagh's commercial fishing industry is demonstrated with increasing licence numbers. Anyone fishing on the Lough requires a DCAL licence. The number of those granted have in the main increased between 2005 and 2014; with eel, trout and coarse licence numbers showing significant growth over the period.

Fig. 16. Lough Neagh commercial licence sales, 2005-2014

| Year | Eel Long line <1200 hooks | Eel Draft | Eel Long line >1200 hooks | Eel weir | Fyke nets | Salmon Draft net | Trout net YARDS | Coarse net YARDS | Balt net |
|------|---------------------------|-----------|---------------------------|----------|-----------|------------------|-----------------|------------------|----------|
| 2005 | 58 | 38 | 3 | 3 | 72 | 20 | 13,400 | 22,900 | 34 |
| 2006 | 54 | 28 | 2 | 4 | 80 | 18 | 15,000 | 22,900 | 25 |
| 2007 | 51 | 22 | 3 | 3 | 55 | 15 | 11,800 | 21,400 | 20 |
| 2008 | 62 | 29 | 2 | 3 | 76 | 18 | 11,600 | 23,500 | 34 |
| 2009 | 84 | 32 | 2 | 3 | 120 | 20 | 12,100 | 35,200 | 44 |
| 2010 | 79 | 37 | 2 | 3 | 69 | 16 | 11,400 | 46,300 | 44 |
| 2011 | 93 | 38 | 2 | 3 | nil | 20 | 10,400 | 56,700 | 50 |
| 2012 | 86 | 45 | 9 | 2 | nil | 21 | 12,600 | 61,700 | 70 |
| 2013 | 90 | 47 | 7 | 2 | nil | 24 | 14,300 | 75,000 | 73 |
| 2014 | 81 | 45 | 17 | 2 | nil | 16 | 17,200 | 78,500 | 90 |

Source: Lough Neagh Fishery Management Plan

Given the success and sustainability of fishing on the Lough, there is no evidence to suggest that the activities of the Lough Neagh Sand Traders have any adverse economic impact on the fishing industry in the period covered by the enforcement notice.

3. THE REGIONAL AND LOCAL IMPACT

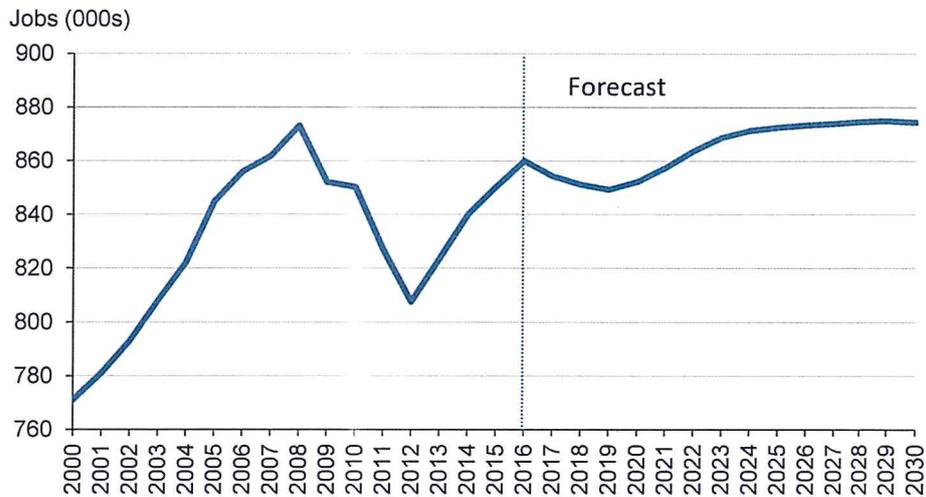
It is Oxford Economics view that the Lough Neagh Sand Traders have a significant beneficial impact on the local economies bordering the Lough. This section of the report provides a brief analysis of the socio-economic conditions in the region and in the local economies most impacted by the Sand Traders to explain our assessment of importance.

This section has been updated to account for our post Brexit referendum outlook. In general, this is reflected in slightly weaker growth expectation in the short to medium term.¹⁷

3.1 SUBDUED OUTLOOK FOR EMPLOYMENT GROWTH

NI's job losses following the 2008 financial crisis ranked amongst the most severe of any UK region. Total employment contracted by almost eight percent between 2008 and 2012 (Fig 17). In comparison, employment in the UK fell by one percent over the same timeframe.

Fig. 17. Total employment, NI, 2000-2030



Source: Oxford Economics

The boom years in the early 2000s helped to foster strong employment growth and low unemployment within the region. However, following the crisis unemployment increased sharply. As a result, the region's unemployment rate rose from 3.9 percent in 2007 to a high of 7.4 percent in 2013.¹⁸ Although this rate has fallen slightly since then, it remains (at the time of writing) stubbornly above the UK level. In addition, it excludes the large pool of inactive working-age people in the region.

Equally, our estimates suggest that NI's employment rate continues to trail that of the national average and the latest ONS figures (at the time of writing) have

¹⁷ See Annex C to compare how our baseline has changed from the previous submission.

¹⁸ Unemployment measured according to the ILO definition.

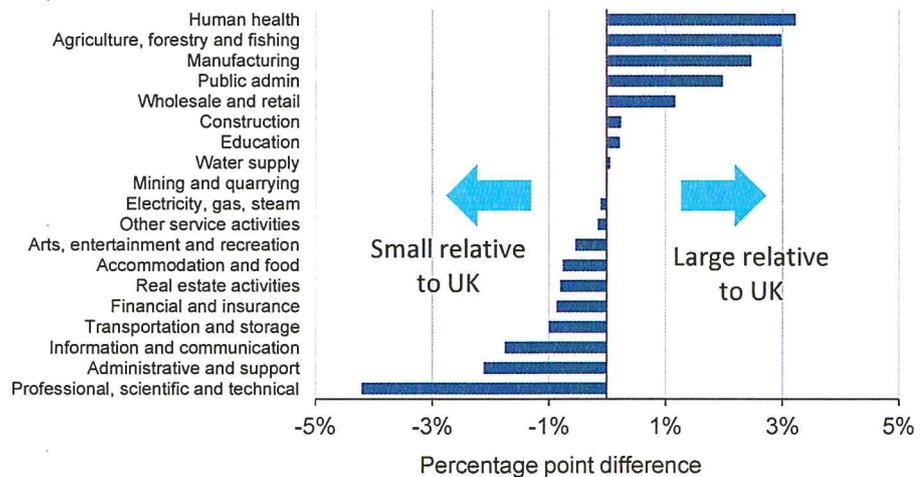
shown economic inactivity to be over four percentage points higher than the UK average in 2016.

Our forecasts suggest over the ten-year period 2016-26, NI's annual job growth will average just 0.2 percent—under half the UK average of 0.5 percent. The particularly 'jobless' nature of the recovery suggests that pre-recession employment levels are unlikely to be recovered before 2026.

NI's weak employment prospects are, in part, explained by the economy's sectoral makeup. Fig 19 shows the region's relative concentration of employment in comparison to the UK average.

NI has above average employment concentrations in sectors which have contracted significantly in recent years. Indeed, manufacturing, retail and construction collectively lost 43,000 jobs between 2008 and 2012. In addition, the construction sector suffered a severe fall in demand following the recession—in just four years the sector lost all the hard won gains earned in the previous eight. In the years since, employment losses in the sector have moderated.

Fig. 18. Sectoral employment comparison, NI vs. UK, 2016



Source: Oxford Economics

Mining and quarrying as an employment sector is proportionately the same size in NI as in the UK overall, reflecting the difficulty of trading its heavy outputs far distances.

Equally, the regional economy is generally underrepresented in some of the fastest growing sectors, including administration and support services, information and communication and professional services. Fig 19 shows that these sectors were in general more sheltered from job losses during the recessionary period and are forecast to enjoy some of the strongest rates of growth over the next decade. Unfortunately, a lack of overall representation weakens the job creating impact of these sectors within the NI economy.

Fig. 19. Employment change and growth, NI, 2008-2026

| Total employment change | 2008-2012 | | 2012-2016 | | 2016-2026 | |
|--|--------------|--------------|-------------|--------------|-------------|---------------|
| | 000s | 4 year % y/y | 000s | 4 year % y/y | 000s | 10 year % y/y |
| Agriculture, forestry and fishing | -3.0 | -2.3% | 5.1 | 3.9% | -2.3 | -0.7% |
| Mining and quarrying | -0.5 | -6.2% | -0.1 | -1.1% | -0.4 | -2.6% |
| Manufacturing | -10.4 | -3.1% | 8.9 | 2.7% | -8.3 | -1.0% |
| Electricity, gas, steam | 0.0 | 0.6% | 0.8 | 10.1% | -0.3 | -1.1% |
| Water supply | 0.2 | 1.1% | 0.1 | 0.3% | -0.4 | -0.8% |
| Construction | -22.4 | -7.7% | -1.8 | -0.8% | 3.4 | 0.6% |
| Wholesale and retail | -10.8 | -1.9% | 3.8 | 0.7% | 1.8 | 0.1% |
| Transportation and storage | -3.8 | -2.8% | -0.1 | -0.1% | 0.6 | 0.2% |
| Accommodation and food | -2.8 | -1.4% | 3.6 | 1.9% | 1.4 | 0.3% |
| Information and communication | -1.4 | -1.9% | 3.5 | 4.7% | 2.3 | 1.0% |
| Financial and insurance | -1.1 | -1.3% | -0.8 | -0.9% | -0.7 | -0.4% |
| Real estate activities | -0.1 | -0.3% | 0.1 | 0.4% | 0.8 | 1.1% |
| Professional, scientific and technical | -1.6 | -1.1% | 5.7 | 4.0% | 4.2 | 1.0% |
| Administrative and support | -1.2 | -0.7% | 10.1 | 5.2% | 7.7 | 1.3% |
| Public admin | -4.0 | -1.6% | -6.3 | -2.8% | -4.6 | -0.9% |
| Education | -1.5 | -0.5% | 2.3 | 0.8% | -0.8 | -0.1% |
| Human health | 0.9 | 0.2% | 11.0 | 2.1% | 5.0 | 0.4% |
| Arts, entertainment and recreation | 0.2 | 0.2% | 1.8 | 2.6% | 2.6 | 1.3% |
| Other service activities | -2.3 | -2.7% | 4.8 | 5.5% | 1.2 | 0.5% |
| Total | -65.6 | -1.9% | 52.5 | 1.6% | 13.3 | 0.2% |

Source: Oxford Economics

Note: Blue shading and red shading refer to the strongest and weakest growing sectors respectively

Given the subdued rates of employment growth expected over the coming decade, job creation is likely to be high on the political agenda. So maintaining and protecting jobs (like those in the sand extraction sector) will also be important.

3.2 DIFFICULT CONDITIONS LOCALLY

At a local authority level, job growth since 2008 has been mixed. While six local economies recorded positive growth in 2010, a sustained recovery in the labour market didn't start until 2013 (see Fig 20).

As a group, the Lough Neagh economies of Mid Ulster; Armagh, Banbridge and Craigavon; Antrim and Newtownabbey; and Lisburn and Castlereagh didn't experience job growth until 2013.

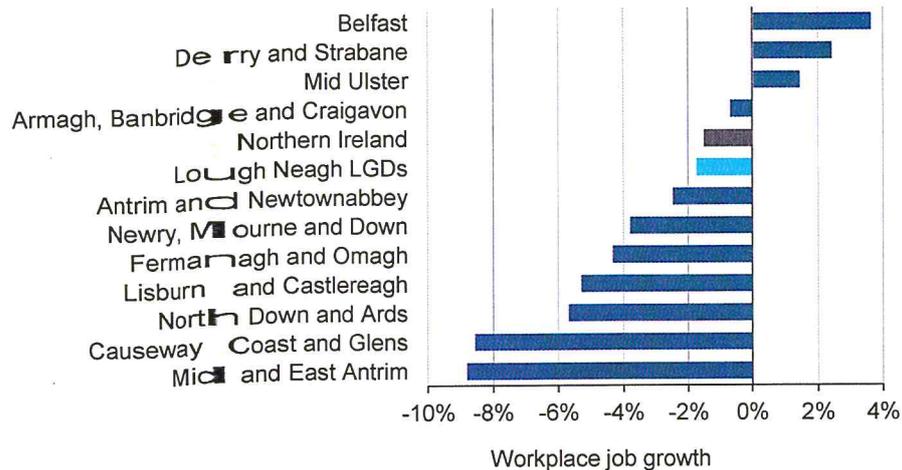
Fig. 20. Annual employment growth, 2008-2016

| | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
|---------------------------------|-------|-------|-------|-------|------|------|-------|------|
| Antrim and Newtownabbey | -1.7% | -0.6% | -1.3% | -2.6% | 2.0% | 0.0% | 0.6% | 1.2% |
| Armagh, Banbridge and Craigavon | -2.6% | 0.6% | -3.0% | -2.6% | 2.2% | 2.3% | 1.1% | 1.5% |
| Belfast | -1.5% | 0.3% | -1.5% | -1.0% | 2.5% | 2.1% | 1.5% | 1.2% |
| Causeway Coast and Glens | -6.5% | 0.8% | -3.1% | -2.8% | 2.1% | 0.6% | -0.3% | 0.7% |
| Derry and Strabane | -1.8% | -0.2% | -1.4% | -2.9% | 1.1% | 3.8% | 2.8% | 1.2% |
| Fermanagh and Omagh | -2.8% | 0.7% | -3.4% | -3.3% | 1.5% | 2.0% | 0.3% | 0.8% |
| Lisburn and Castlereagh | -0.3% | -3.3% | -5.2% | -3.4% | 1.1% | 3.1% | 1.7% | 1.1% |
| Mid and East Antrim | -2.6% | -3.0% | -5.6% | -3.1% | 1.2% | 2.2% | 1.1% | 1.0% |
| Mid Ulster | -4.9% | 1.1% | -2.8% | -1.3% | 3.6% | 2.5% | 2.0% | 1.5% |
| Newry, Mourne and Down | -3.8% | 0.7% | -2.8% | -2.8% | 2.3% | 0.8% | 0.8% | 1.1% |
| North Down and Ards | -1.2% | -0.6% | -3.7% | -4.1% | 0.5% | 1.6% | 0.9% | 0.9% |
| Northern Ireland | -2.4% | -0.2% | -2.7% | -2.4% | 2.0% | 2.0% | 1.2% | 1.1% |
| Lough Neagh LGDs | -2.3% | -0.6% | -3.1% | -2.5% | 2.2% | 2.0% | 1.3% | 1.3% |

Source: Oxford Economics and DETI

Consequently, 2016 employment levels in the four council areas that border Lough Neagh and which accounted for almost one third of NI's total jobs¹⁹ remained below 2008 levels. Indeed, employment in the four local authorities in 2016 was 1.8 percent lower than in 2008 (compared to the NI average of 1.5 percent).

Fig. 21. Employment growth, NI, 2008-2016



Source: Oxford Economics

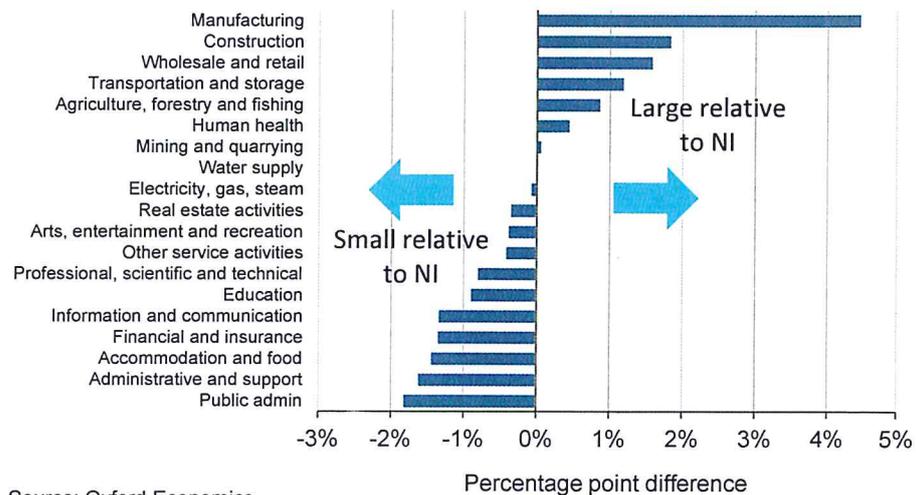
Collectively, these local areas are over reliant on sectors of the economy which have either weaker growth prospects and /or been more severely impacted by the recession. By extension the Lough Neagh economies suffer from below average job shares in growth sectors of the economy including professional, scientific and technical; information and communication; and admin and support

¹⁹ Throughout this analysis the Local Government Districts taken to be adjoined to Lough Neagh are Antrim and Newtownabbey, Armagh, Banbridge & Craigavon, Lisburn & Castlereagh and Mid Ulster.

services. Fig 22 compares the sectoral structure of these local economies to the NI average. It shows that employment is larger in:

- Manufacturing that has been shedding jobs as it becomes more capital intensive and competes on value added rather than costs;
- Construction that was significantly adversely impacted by the 2008 recession and financial crisis;
- Wholesale and retail that suffered from the rising levels of unemployment, stagnant wage levels, debt hang over, and low levels of consumer confidence;
- Transport and storage which is reliant on the general health of the economy;
- Agriculture that has struggled to create jobs and that is vulnerable to health scares; and
- Health which given austerity measures, will not drive job creation in the future.

Fig. 22. Sectoral structure of Lough Neagh economies vs NI average, 2016



Source: Oxford Economics

Given the structure of the local economies there is likely to be strong local supply chain linkages given the large presence of construction, manufacturing, transport and storage, and agriculture. These sectors often service each other and growth in one is beneficial to specific sub-sectors in the others.

Our baseline forecasts indicate that growth in the Lough Neagh economies will continue to lag behind the regional average over the next decade (driven by particularly weak outlooks for Armagh, Banbridge and Craigavon and Mid Ulster). By 2026 employment in the four council areas are forecast to grow by 1,800 jobs or 0.6 percent (compare to 1.5 percent in NI). However, **this is not enough to recover all the jobs lost since the 2008 peak level of employment.**

Fig. 23. Employment growth, NI LGDs. 2016-2026

| Total employment change | 2016-2026 | |
|---------------------------------|-----------|----------|
| | 000s | % growth |
| Antrim and Newtownabbey | 1.8 | 2.8% |
| Lisburn and Castlereagh | 1.2 | 1.8% |
| Northern Ireland | 13.3 | 1.5% |
| Lough Neagh LGDs | 1.8 | 0.6% |
| Armagh, Banbridge and Craigavon | -0.1 | -0.1% |
| Mid Ulster | -1.1 | -1.7% |

Source: Oxford Economics

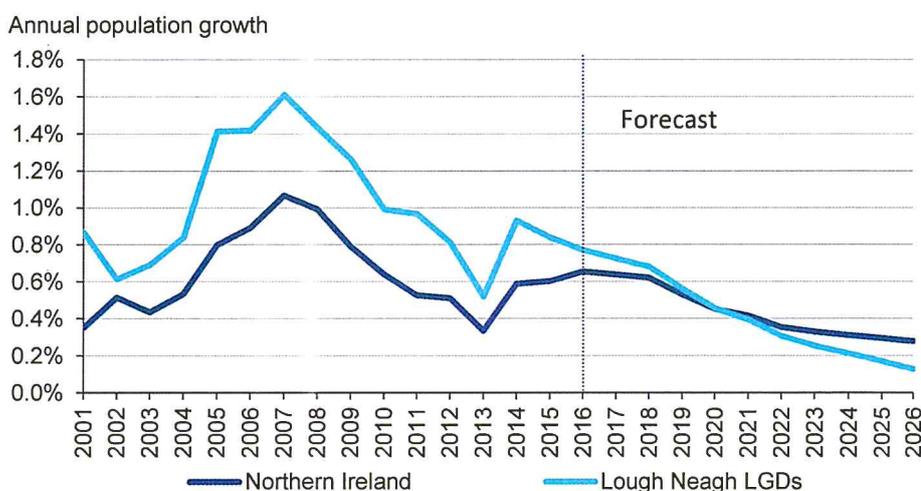
Given the expected poor performance of the jobs market, the direct jobs sustained by the Lough Neagh Sand Traders are important in a local context. Likewise, the indirect and induced employment are also important given the reliance on sectors such as manufacturing and retail.

3.3 POPULATION, EMPLOYMENT RATES AND UNEMPLOYMENT

Strong employment growth in the early 2000s helped to support above average population growth in the Lough Neagh local economies. The local population increased by 9.2 percent between 2000 and 2008—much stronger than the 5.7 percent increase recorded at the regional level. Since the recession population growth has weakened, but remained stronger than the NI average.

Baseline forecasts suggest population growth of four percent between 2016 and 2026 within the local areas surrounding Lough Neagh—compared to an NI average of 4.3 percent.

Fig. 24. Population growth, NI and Lough Neagh LGDs, 2001-2026

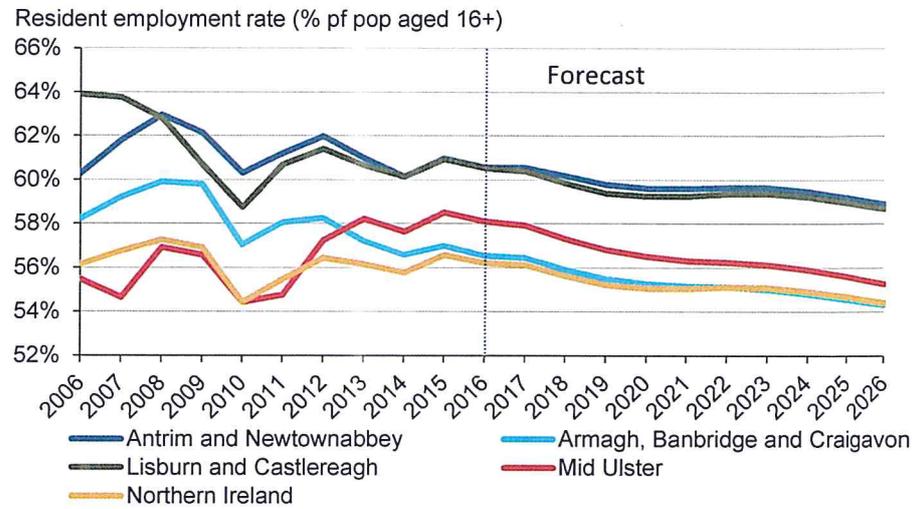


Source: Oxford Economics

The relatively weak employment outlook is likely to make the local area less attractive and thereby weaken the population growth. Indeed, we forecast

employment rates in Armagh, Banbridge and Craigavon and Mid Ulster to decline towards the NI average by 2026.

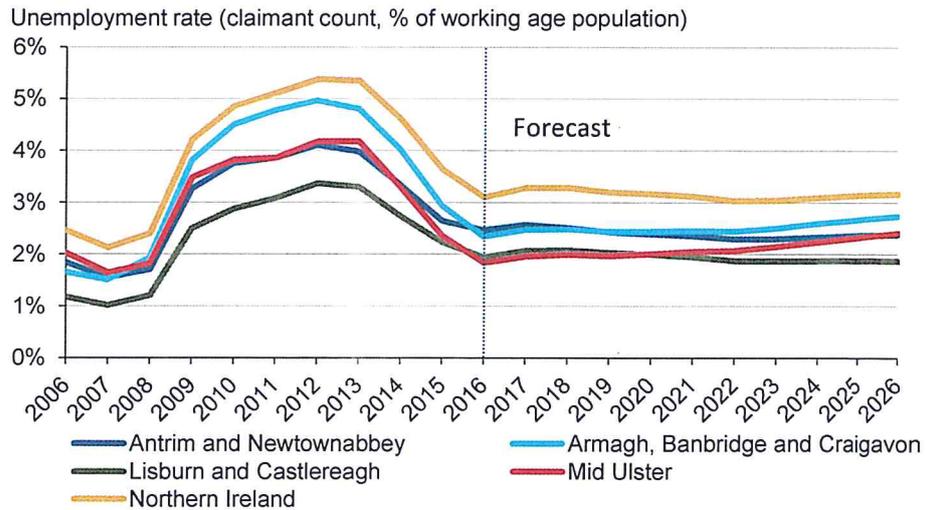
Fig. 25. Employment rates, NI and Lough Neagh LGDs, 2006-2026



Source: Oxford Economics

Although claimant count unemployment rates are below the regional average and are forecast to remain so, we expect them to stay above the record low levels enjoyed in 2007. This is a direct consequence of the subdued employment outlook for the four local economies.

Fig. 26. Unemployment rates, NI and Lough Neagh LGDs, 2000-2026

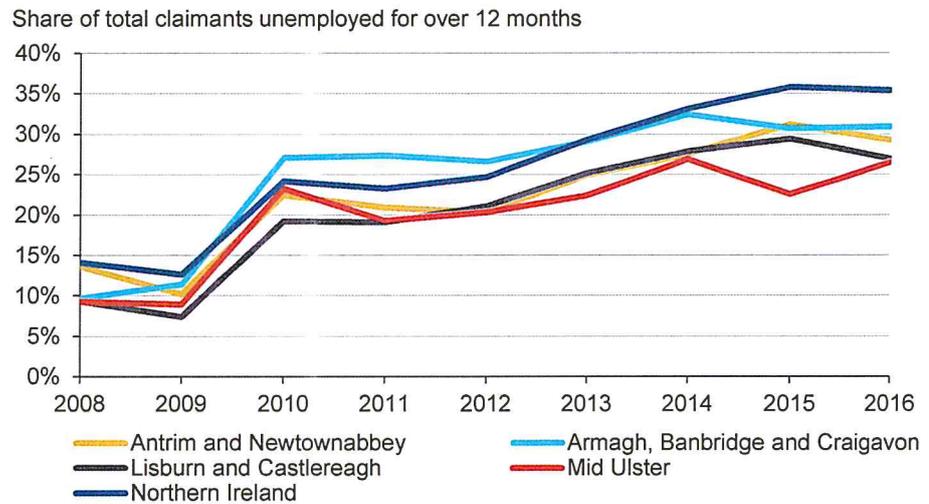


Source: Oxford Economics

As a result, the local labour market is significantly more challenging for those finding themselves among the unemployed. Research shows that the longer an individual is unemployed, the more difficult it is to secure employment. Job seeker claimant statistics show the long term unemployed (i.e. those out of work for over 12 months or more) are forming an increasing share of the total unemployed figure in NI. The share of total claimants unemployed for over 12

months or more has more than doubled between 2009 and 2016. A similar trend is evident in the Lough Neagh local economies.

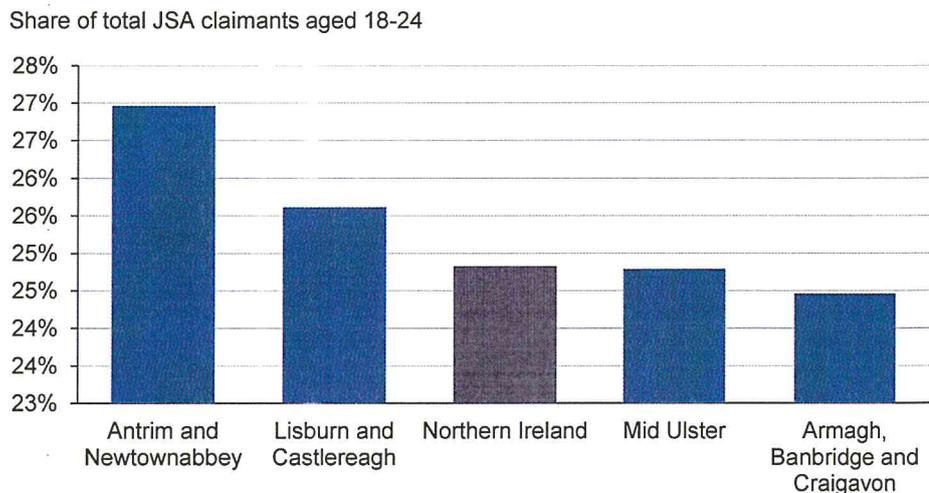
Fig. 27. Long term unemployed, NI and Lough Neagh LGDs, 2008-16



Source: ONS

Equally young people are experiencing a greater unemployment burden as a result of their more limited experience in the job market. Although this group's share within the overall unemployed has fallen in recent years, young people still find themselves over-represented. ONS data shows that those aged between 18 and 24 made up one quarter of the regional unemployment total in 2016.

Fig. 28. Youth unemployment, NI and Lough Neagh LGDs, 2016

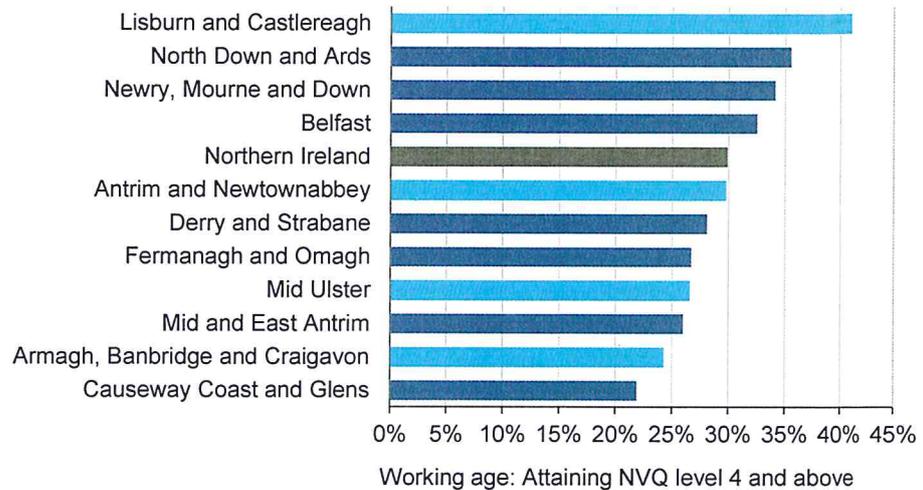


Source: ONS

In addition, as the economy becomes increasingly skills hungry it will become more difficult for unskilled and low skilled individuals to secure employment. Qualification data suggest skills levels are relatively weak in the local areas. With the exception of Lisburn and Castlereagh, the residents within the Lough Neagh catchment demonstrated a below average proportion of working age residents

achieving degree level qualifications (NVQ level 4 and above). Although the residents of these areas performed much better with regards to attainment of mid-level qualifications.

Fig. 29. Higher qualification attainment, NI LGDs, 2015



Source: NISRA

So again, given our expectation that resident employment rates will fall and unemployment rates will remain above recent lows; combined with the current data that shows a rising share of long-term unemployed, high share of youth unemployment and relatively lower level of skills; the importance of existing jobs in Sand Trading and in its supply chain rises.

3.4 DEPRIVATION AND ECONOMIC CONDITIONS

The Lough Neagh council areas exhibited varying levels of deprivation. Armagh, Banbridge and Craigavon was the most deprived of the Lough Neagh areas based on this measure (4th most deprived in NI)²⁰. Across the 285 Super Output Areas (SOAs) which make up the four councils, 28 were ranked among the top 20 percent most deprived within NI. All four of the council areas surrounding Lough Neagh had at least some representation within this most deprived grouping. Within the Lough Neagh areas the top three most deprived SOA areas were found in the Armagh, Banbridge and Craigavon district council area.

Deprivation is difficult to tackle due to a range of self-reinforcing issues. A lack of employment opportunities will push up unemployment and inactivity, which can have an adverse impact on health and crime. Consequently, there is a strong argument for safeguarding existing jobs (and by extension their supply chains and consumer spending impacts) in deprived areas as long as those jobs are not inefficient and uncompetitive (given the Lough Neagh Sand Traders have been

²⁰ NI's Multiple Deprivation Measure was last updated in 2010 and provides an official measure of spatial deprivation from which to draw comparisons. The overall measure is weighted according to a number of categories which aim to capture the main indicators of deprivation including Income; Employment; Health; Education, skills and training; Proximity to services; Living environment; and Crime and disorder.

operating successfully and are seeking planning approval to continue, we can assume they are competitive).

Skills, job opportunities and deprivation all matter to local communities and local and regional government and public services. Research shows that:

- Poor education is associated with poor health;
- Poor health is associated poor employment rates;
- Higher unemployment is associated with increased crime rates;
- Higher crime rates are associated with lower house prices; and
- Higher employability is associated with improved skills/education.

Data provided by the Lough Neagh Sand Traders on the resident location of employees shows how localized their direct impacts are. Almost 40 percent of direct jobs are taken by residents of just nine wards. By far the most concentrated of these were the Ballymaguigan and Derrytrasna areas—residents of which accounted for almost most one fifth of total Sand Traders direct employment.

Both detailed and up-to-date data at the localised level can be difficult to source. However, the latest census (2011) reveals a snapshot of both the Ballymaguigan and Derrytrasna areas. In both these wards unemployment among the working population (16 to 64 year olds) was found to be below the NI average. However, both areas faced a number of challenges. Both long term unemployment and youth unemployment were found to be above the regional average in Ballymaguigan. Equally, an above average share of the unemployed in Derrytrasna had never worked.

Fig. 30. Economic activity, Ballymaguigan and Derrytrasna

| | Unemployed (aged 16-24) | Long-term unemployed (16-74) | Unemployed: never worked (aged 16-74) |
|---------------|-------------------------|------------------------------|---------------------------------------|
| Ballymaguigan | 32.9% | 47.4% | 15.8% |
| Derrytrasna | 36.0% | 40.2% | 17.1% |
| NI | 28.9% | 45.0% | 16.8% |

Source: Census 2011

3.5 ASSESSMENT

Given the subdued labour market, the expectation that unemployment rates will remain higher than they have been, while resident employment rates will fall, the employment Lough Neagh Sand Traders provide (directly, indirectly and through consumer spending) are important in a local context. The lower skills profile, sectoral structure, pockets of high levels of deprivation and local nature of employment in Sand Trading reinforce this conclusion.

4. THE SUPPLY OF SAND IN NI

This section analyses the capacity of the sector and considers the impacts of the supply of sand in NI if Lough Neagh Sand Traders ceased trading.

4.1 THE CAPACITY OF THE SECTOR IN NI

The mineral products industry is an enabling sector within NI and therefore plays a wider role in overall economic activity in the region. In this digital high tech age, it can be easy to overlook the importance of more traditional sectors of the economy, but without readily accessible mineral deposits, many other economic activities would become both costlier and less viable.

Demand for aggregates (or construction materials) is related to economic growth—feeding an uplift in construction activity—alongside population growth. As the economic recovery slowly continues in NI, an increase in the demand for aggregates must be met by adequate supply.²¹

The InterTradeIreland report “Competitive Analysis of the Construction Materials Sector on the Island of Ireland - an Update November 2015” suggests the aggregate sector on the Island of Ireland is running at 26% capacity. However, it is unclear how this breaks down in NI and the Republic of Ireland separately and there are no figures separating sand production from general aggregates (crusher runs and single sized aggregates produced from quarries).

In 2010 there were over 60 sand traders in NI²². According to the Quarry Products Association NI (QPA) report “Lough Neagh Sand Traders: Delivering for Decades”, Lough Neagh sand has accounted for 30 percent of the domestic sand requirements in NI.

However, this could be an underestimate. According to the latest available annual mineral statement—sand and gravel production in NI equalled 2,178,220 tonnes in 2010.²³ Furthermore, figures released by the Sand Traders at Lough Neagh show that sand sales volumes equalled 1,108,195 tonnes that same year – see Fig 31. Therefore, on face value, sand from Lough Neagh accounted for half of all domestically produced sand and gravel (with the balance provided by pits) before the skewing effect of sand to gravel ratios are taken into account.

²¹ Aggregates are defined as Basalt and igneous rocks (excluding granite), Sandstone, Limestone, Sand and Gravel and others (rock salt, chalk, dolomite, fireclay and granite)

²² According to the QPA.

²³ DETI, ‘Annual mineral statement 2010’, <https://www.economy-ni.gov.uk/sites/default/files/publications/deti/annual-mineral-statement-2010.pdf>

Fig. 31. Sand volumes (tonnage), LNST sites, 2008-2015

| Year | PJ Walls Airfield Rd. | Cemex Creagh Rd. | Northstone Hutchinsons | Northstone Ballyginniff | Northstone Sandy Bay | Lagan Sandy Bay | Mulholland Derryclone Rd. | Emersons Ardmore | Total LN tonnages | Annual mineral returns Sand and Gravel | Total LN contribution to NI Sand and Gravel requirement | Total NI sand and Gravel without LN contribution |
|------|-----------------------|------------------|------------------------|-------------------------|----------------------|-----------------|---------------------------|------------------|-------------------|--|---|--|
| 2008 | 45,680 | 316,600 | 142,728 | 171,359 | 191,182 | 342,064 | 88,385 | 313,623 | 1,611,621 | 7,133,719 | 23% | 5,522,086 |
| 2009 | 37,237 | 255,800 | 89,645 | 106,610 | 131,930 | 258,775 | 64,981 | 263,213 | 1,208,191 | 4,856,075 | 25% | 3,647,884 |
| 2010 | 31,871 | 199,700 | 116,153 | 112,098 | 107,301 | 205,982 | 74,593 | 260,097 | 1,108,195 | 2,178,220 | 51% | 1,070,025 |
| 2011 | 33,672 | 161,200 | 84,481 | 95,311 | 95,831 | 207,657 | 40,416 | 185,728 | 904,296 | | | |
| 2012 | 29,807 | 126,500 | 74,328 | 88,399 | 102,005 | 177,211 | 59,048 | 208,403 | 865,701 | | | |
| 2013 | 28,747 | - | - | 92,273 | 80,029 | 249,245 | 53,453 | 221,198 | 724,945 | | | |
| 2014 | 31,819 | - | - | 133,574 | 100,964 | 255,543 | 58,644 | 248,236 | 828,760 | | | |
| 2015 | 35,359 | - | - | 132,605 | 110,864 | 257,872 | 43,610 | 226,040 | 806,351 | | | |

Source: Lough Neagh Sand Traders, DETI

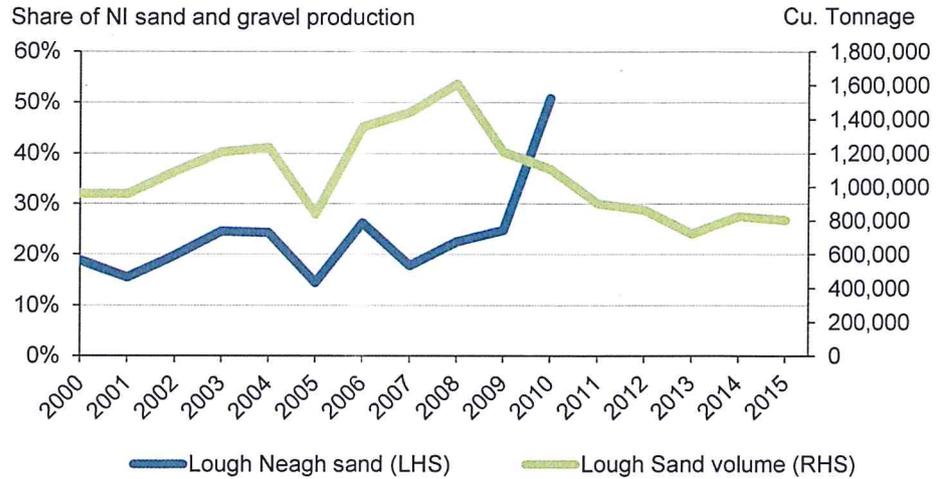
However, Lough Neagh’s supply contribution to the NI sand market could be significantly underrepresented by this comparison. During the extraction process both sand and gravel are generally removed then processed to separate the individual aggregate components. This process helps explain why both are recorded together in official mineral statements.

Consequently, Lough Neagh sand currently forms a prominent component of NI’s sand supply. During the housing / construction boom (2002-2008), Lough Neagh’s contribution to sand and gravel production remained relatively constant (over 20 percent of the total on average). Unfortunately, we do not have data on the volume of sand only, being extracted to fully appreciate Lough Neagh’s contribution.

When construction activity declined following the financial crisis, extraction of sand from Lough Neagh fell back, but its percentage contribution to NI Sand and Gravel increased in 2010. This would suggest that pits were quicker to cut extraction and that Lough Neagh’s greater efficiency and proximity to market place meant that they could continue to operate in a new economic environment of lower demand (Fig 32).²⁴

²⁴ The DfI Economics Branch response (Annex B: pt. 6) suggests that lower sand demand post-2008 would negate the impact on pricing following the removal of Lough Neagh supply. However, available data suggests Lough Neagh remains the dominant contributor to the sand market in this lower demand environment.

Fig. 32. Lough Neagh sand volumes and share of sand and gravel supply

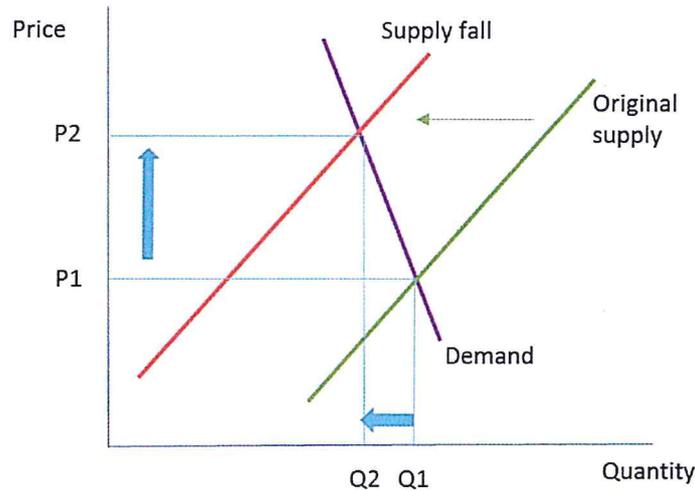


Source: Oxford Economics, Lough Neagh Sand Traders, DETI
Note: NI annual mineral statement no longer published following 2010

4.2 REMOVING LOUGH NEAGH SAND WOULD IMPACT PRICES

In efficient markets the price of any commodity is directly impacted by demand and supply. Therefore, if supply falls (shifts) and demand remains constant this creates a new equilibrium in the market with higher price levels. This is equally the case within the NI sand market. If demand remains constant and supply falls then suppliers and consumers will agree on a new higher price—see Fig 33.

Fig. 33. Demand and supply conceptual illustration



Furthermore, price increases are unlikely to weaken demand for sand significantly and therefore, supply constraints will likely remain. The aggregate market is generally described as price inelastic.²⁵ As such, responsiveness of demand to changes in price are relatively weak.²⁶ Relative price inelasticity of

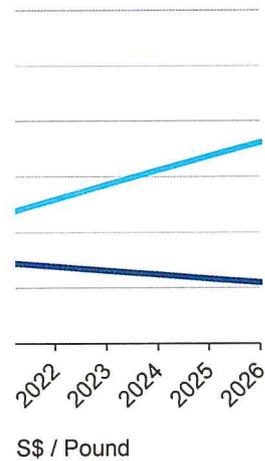
²⁵ HM Government, 'Budget 2016: policy costings', p. 57, March 2016

²⁶ QPA, 'QPA assessment of the impacts of the aggregates levy', September 2003

structure of cement, lime, therefore 5.1 percent of sand related sectors. moderate adverse impact

form or as an input into to be sourced from money from the local, indirect and induced on price and availability factor and on exchange

exit referendum and the Euro by 14 percent the increase of cost of rise over the next ten



Sand extraction would. It would also push up the economy and a

demand indicates that changes in demand are affected to a lesser degree by changes in price. Aggregates are described as such because they generally lack close substitutes and are not regarded as luxury goods. Consequently, price rises will inevitably impact the cost effectiveness elsewhere in the economy and the supply requirement is likely to remain significant.

1.3 LITTLE CAPACITY TO REPLACE LOUGH NEAGH SAND

Unfortunately, data on the supply of sand, capacity to produce and current levels of production are unavailable for each pit²⁷. To gain a better understanding of the potential capacity of the sector, Oxford Economics contacted other sand traders in NI to discuss their current operations, volume of sand and capability to replace the Lough Neagh Sand Traders if they ceased operating. After speaking with four companies, we found:

- That all pit operators were acutely aware of the volume of sand remaining in their pit and therefore the remaining life of the pit. If they were to increase sand extraction, then they would effectively be running down their scarce resource. Consequently, there was a strong need to manage the remaining sand appropriately;
- In two cases sand from the pits were used almost exclusively in the firm's other business operations;
- For three of the four a significant proportion of the sand was destined for markets outside of NI in the form of concrete products i.e. tied to existing manufacturing contracts;
- Three of those we spoke with suggested that if the Lough Neagh Sand Traders were to close, the price of sand would need to rise notably before they thought of either selling in, or selling more in NI; and
- All those we spoke with thought the price of sand would rise if Lough Neagh sand production was stopped.

Therefore, if prices were to rise following the loss of Lough Neagh sand, it cannot be said that other sand suppliers could, or would want to, replace the lost sand (based on our consultation exercise). Nor could they be compelled to do so in an unrestricted market. Sand is a finite resource and current sand producers safeguard their sand for further processing and sale within sustainable business models.

1.4 ALTERNATIVE SOURCES OF SUPPLY

If Lough Neagh sand cannot be replaced by domestic supply, the NI market could theoretically import some of its sand requirement from ROI, thereby representing increased leakage from the NI economy. Ultimately, the magnitude of this leakage will depend on the price disparities between the two economies for sand and logistic costs.²⁸ With sand capacity / availability in the ROI likely to be limited

²⁷ However there is no indication of the split between sand and gravel. ²⁸ Each response (Annex B: pt. 7) points to the 2015 InterTradeIreland report which shows a loss of 26 percent for aggregates in the whole of Ireland. It is suggested that supply and

5. ENABLING CONSTRUCTION AND OTHER DOWNSTREAM ACTIVITIES

Sand is an extremely versatile material. As an input good, it is an essential component in a number of higher value adding products and processes throughout industry. As a result, the Lough Neagh Sand Traders—via their contribution to sand supply (and other sand based products)—facilitate and support growth throughout the NI economy and beyond, and in a wide spectrum of economic industries including commercial industries, tourism and construction.

This section of the report discusses those downstream benefits associated with the Sand Traders' operations at Lough Neagh—identifying the role that sand from Lough Neagh plays in the supply chain of other sectors throughout the economy.

5.1 SUPPORTING THE CONSTRUCTION SECTOR

5.1.1 A significant employer in NI

The construction sector is the most prominent user of sand and sand-based products. In its raw form, sand remains an essential component of most construction-related activity. In addition, after further processing, sand is a vital ingredient in a range of construction-related products.

Despite the downturn, construction remains a significant employer within the NI economy. In 2016 the sector provided over 57,000 jobs (seven percent of total employment) and directly sustained almost £1.9 billion in GVA (measured in 2013 prices).

Oxford Economics forecast that employment in the construction sector will grow by almost six percent between 2016 and 2026, thereby increasing the demand for construction-related materials.

that the NI construction sector has access to an adequate long-term supply of sand and sand based products at competitive prices.

Therefore, the Lough Neagh Sand Traders who provide 30 percent of the NI sand requirement play an important enabling role in the construction sector and in the Investment Strategy for NI. Their central location in the region also makes them strategically placed support projects across NI.

THE ROLE OF CONSTRUCTION IN SUPPORTING ECONOMIC GROWTH

The economic literature points to a firm link between infrastructure investment and economic growth,³² especially in the longer term.³³ The evidence supports the premise that an inadequate supply of infrastructure or unreliability in services can inhibit the investment of productive capital or restrict output. For example, inadequate transport links hinder the movement of labour and thereby push up housing costs in employment centres. These costs are, in turn, passed onto to local firms, making them less competitive overall.

Both housing and infrastructure play significant roles in the health of the economy:

- Infrastructure supports the movement of people and goods; poor roads and bridges for example can limit the size of the labour pool for businesses and restrict productivity.
- Adequate supply of office blocks, manufacturing sites, retail locations etc are required to support growth in the economy, expansion of existing businesses and new investment by foreign sources.
- Likewise, the supply of housing can have an influence on the attractiveness of a location and therefore the labour pool available to local business. If housing is in short supply (or there is a poor mix of housing types) the price of housing can rise and lead to affordability issues.
- In addition, development in the built environment can help transform the prospects of local areas through regeneration projects, benefiting the local population by creating jobs, reducing unemployment and enhancing the local skills base.

5.2 ADDITIONAL USES

Aside from construction, a large number of other industries use sand from Lough Neagh. Its varied usage is in part due to special processing that can be applied to sand following its extraction. Via a process of drying and separation, Lough Neagh sand has a range of more specialist uses, including, for example, the manufacture of glue and improving the efficiency of energy generation in power stations.

³² T.R. Lakshmanan, "The broader economic consequences of transport infrastructure investments", 2011

³³ Dr C. O'Fallon, "Linkages between infrastructure and economic growth", Prepared for the Ministry of Economic Development, 2003.

Equally, sand from Lough Neagh has helped create and maintain sports pitches, equestrian facilities and golf courses throughout Ireland. As well as offering health and well-being benefits, these facilities help to support the tourism offering to both domestic and international visitors. Local areas which host these sporting facilities are, in turn, likely to share in the associated tourism spend as those visiting make use of local amenities during their stay.

Even the silt by-product from sand processing is put to commercial use and is sold to utility companies for bedding and covering of services.

Typical markets for the sand extracted from Lough Neagh include:

- Value added concrete products;
- Ready mixed concrete;
- Dried and mixes;
- Coated road stone producers (Asphalt).

5.3 ASSESSMENT

Given the size of the construction sector in NI, the importance of the sector for jobs in the local economies of Lough Neagh, the commitment by the NI Executive to invest considerable public money in future infrastructure, as well as the economic role that construction plays in a growing economy, the Government and the private sector should take seriously the future supply of local sand.

Given Lough Neagh Sand Traders account for 30% of NI's sand requirement, they should play a major role in the assessment of future streams of sand.

The loss of this sand would have an adverse impact on construction. The scale of the impact is difficult to assess. However, given supply chain spending on sand and sand related products could be as much as 5.1 percent of total spend, the scale of the impact could be minor to moderate in scale.

Given its role in supporting tourism and recreational assets, there is also likely to be an adverse impact if Lough Neagh sand were lost, though this would be relatively minor in the context of the NI economy. However, for small businesses in these sectors that require sand, the likely rise in sand costs might feel more significant.

To calculate the indirect contribution to GDP (i.e. GVA), the total expenditure effect is divided by sector-level GVA/gross output ratios, again calculated from the ONS input-output tables. To calculate the impact on employment, average sectoral productivities (i.e. the GVA-to-employment ratios) in the prevailing sectors involved in the supply chain were applied to the GVA figures already calculated. To calculate the wage impacts, the industry standard wages from the published ASHE data and our own forecasts based on the ASHE data were used.

Measuring the induced impacts

The induced impact was modelled using a similar method; a two-step approach accounted for the activity supported by the wage-financed spending of the Sand Traders' own direct employees and the activity of its suppliers' employees. The total induced effect summed both. The first stage of the estimation of the induced impact was quantifying the effect of the spending of the Sand Traders' direct employees. Using the input-output model, these aforementioned wages were allocated to sectors in a manner that reflected the spending profile of the average household in each sector, allowing for 'leakages' in the form of imports and savings. Using this profile, the total expenditure effects on the NI economy were calculated using sectoral income multipliers (in this case Type II) in the model. The same process as was used in the indirect calculations was followed in terms of converting to GVA (using GVA/output ratios), then to employment (using sectoral productivities), and to wages (industry standards data from ASHE and OE forecasts based on these).

The second step involved estimating the induced impact that was generated by people employed in the Sand Traders' supply chain. To generate this result, the modelling used to calculate the indirect impact was extended to incorporate the aforementioned income multipliers in each sector. This gives the induced expenditure impact. This expenditure is again translated to the three key metrics (GVA, employment and wages) as before.

ANNEX B: DFL ECONOMICS BRANCH CONSULTATION RESPONSE

Garey Vance

Dfl Economics Branch

Clarence Court

10-18 Adelaide St

BT2 8GB

07 March 2017

Consultation Response for Informal Hearing

| | |
|------------------------------|---------------------------------------|
| Application Reference | 2015/E0023 – E0028 EN/2015/0109 |
| Proposal | Extraction of Sand from Lough Neagh |
| Location | Lough Neagh |

Economics Branch has been asked to provide a consultation response for the above planning hearing. The remit for the Branch was to consider the economic evidence presented in the environmental statement (ES) of October 2016, notably the report prepared by Oxford Economics entitled “The Economic Contribution of Lough Neagh Sand Traders”.

Generally, it appears that the report focuses on the economic contribution from 2015 onwards. Given the nature of the appeal, regarding an enforcement notice between May 2010 and May 2015, it would have been useful if the report had estimated the economic impact over this period rather than focus on a snapshot at the end of it. In the ES it is stated, “The ES therefore considers the environmental effects of the LNST extraction preceding the enforcement notices”; unfortunately it appears this consideration has not also been applied to the economic effects. Nevertheless, the issues below should be considered further at the hearing and a number of the points also apply to economic impacts identified in future applications.

Employment and GVA

- 1) The economic report suggests that sand extraction from Lough Neagh sustained 47 jobs in 2015 involved directly in the extraction and processing of sand. Whilst this is the figure for 2015, it is unlikely to have been this figure between 2010 and 2015 as the level of employment would have reflected economic conditions and the demand for the product. Indeed the Quarry Products Association (QPA) report which was referenced in the economic report (Lough Neagh Sand Traders: Delivering for Decades³⁴) states that “There are 30 people employed directly working on the Lough”. The QPA report was produced in 2014 and whilst it does not specify what date the employment figure reflects, it shows that the level of direct employment was lower than 47 during this period. Therefore, the 2015 figure is unlikely to reflect the period 2010 – 2015.

- 2) The economic report also suggests that “collectively, sand extraction from Lough Neagh sustained 207 direct jobs in 2015”. Approximately a quarter (47) of these were involved in the extraction and processing of sand whereas the remainder (160) involved “various forms of value-added activities that rely on the sand, such as the manufacture of cement and concrete products”. It is important to note that whilst these activities might rely on sand, it does not necessarily need to be sand from Lough Neagh. The report appears to assume that sand cannot be sourced from elsewhere and that these companies cannot move their operations should they need to be close to the source.
 Availability of supply is discussed below but it would be useful to clarify the impact on these jobs/companies had they not been able to source sand from the Lough. It is very unlikely that all of these jobs would have been lost as these companies would have reacted by moving operations or sourcing sand from elsewhere and therefore it could be argued that this should not be considered a direct benefit of the operation.
 Note that this point would also need to be considered for future applications.

- 3) As the employment figures feed into the GVA estimate this also needs to be questioned. For example, if the level of direct employment was lower than 47 between 2010 and 2015 and one accepts the impact on the supply chain to be less than reported, then the annual level of GVA is likely to be lower than the £12.6m estimated in the report. Again it would have been useful if the report had estimated GVA for the five years in question.

- 4) The indirect and induced impacts are estimated using the employment and GVA figures; therefore, the results of this are also questionable given the points made above.

³⁴ <http://www.qpani.org/documents/LNSTleaflet.pdf>

- 5) Given almost 60,000 tons of sand was sold outside of NI in 2015, it would be useful to know if there was any leakage of the economic benefits (for example in the transportation of the product) and if this was factored into the assessment.

Supply of Sand and Spare Capacity

- 6) Section 4 in the report (The Supply of Sand in NI) suggests that supply of sand and spare capacity in NI is at a level whereby removing the Lough Neagh sand from the market could increase the price of sand. Again the inference here is related to future impacts rather than the impact between 2010 and 2015. Arguably, the lower level of demand during this period would have negated the impact of a reduction of supply on prices and therefore this is unlikely to have been a notable concern.

- 7) The report outlines a quotation exercise and concludes that sand in NI was on average 26.6% less expensive than in RoI in 2016. Whilst noting that this may not have been the case during the period in question, it raises the issue of why sand is more expensive in RoI. Wage disparity could be one reason, although wages in the sector are actually higher in the UK³⁵. Naturally this may not be the case in NI but earnings statistics specific to NI for quarrying and mining could not be sourced at this time.

Nevertheless, another reason that sand prices are higher in RoI is likely to be linked to supply and capacity. The 2015 InterTradeIreland report³⁶, which was referenced in the economic report, states that "Consultation with the industry indicates that there has been some change in industry capacity in the Republic; while no significant change is evident in Northern Ireland". In other words, capacity in NI has remained at similar levels, even though demand had fallen, whereas in RoI closures have meant a reduction in capacity (or supply) and this has been a factor in the increase in price. The report also shows capacity utilisation is at 26% for aggregates in the whole of Ireland. This therefore suggests that supply and spare capacity would not have been an issue had the Lough Neagh sand not been dredged during 2010 – 2015.

- 8) Linked to the point above, the economic report does not analyse other possible sources of sand within NI that are not currently operational. It would have been useful had the report ruled out alternative sources of supply. This should also be considered for future applications.

In conclusion, the report (and by extension the ES) does not outline the economic contribution made by the Lough Neagh sand traders between 2010 and 2015 or show that spare capacity would have been an issue during that period. Furthermore, clarification is required for the benefits estimated for 2015,

³⁵ In 2016 Q4 average weekly earnings for mining and quarrying [in the RoI](#) was €928 (£836 using the same exchange rate as given in the economic report) whereas [in the UK](#) it £1088 in October 2016.

³⁶ <http://www.intertradeireland.com/media/ConstructionMaterialsReport2015.pdf>

particularly in relation to the direct jobs supported by the operation. Finally, there are issues in relation to spare capacity and economic impacts that need to be considered for future applications.



Departmental Economist

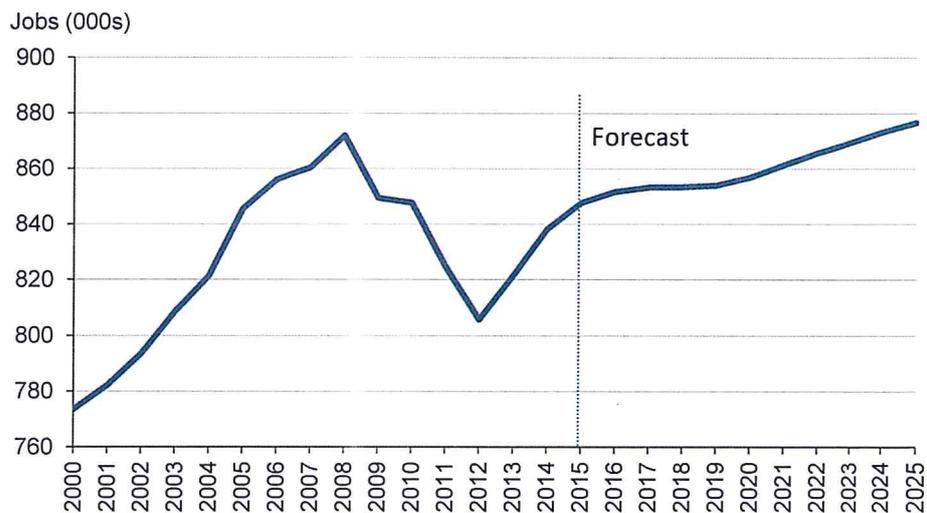
ANNEX C: THE REGIONAL AND LOCAL IMPACT (OCT 2016 SUBMISSION)

It is Oxford Economics view that the Lough Neagh Sand Traders have a significant beneficial impact on the local economies bordering the Lough. This section of the report provides a brief analysis of the socio-economic conditions in the region and in the local economies most impacted by the Sand Traders to explain our assessment of importance.

6.1 SUBDUED OUTLOOK FOR EMPLOYMENT GROWTH

NI's job losses following the 2008 financial crisis ranked amongst the most severe of any UK region. Total employment contracted by almost eight percent between 2008 and 2012 (Figure 8). In comparison, employment in the UK fell by one percent over the same timeframe.

Fig. 2. Total employment, NI, 2000-25



Source: Oxford Economics

The boom years in the early 2000s helped to foster strong employment growth and low unemployment within the region. However, following the crisis unemployment increased sharply. As a result, the region's unemployment rate rose from 3.9 percent in 2007 to a high of 7.4 percent in 2013.³⁷ Although this rate has fallen slightly since then, it remains (at the time of writing) stubbornly above the UK level. In addition, it excludes the large pool of inactive working-age people in the region.

Equally, our estimates suggest that NI's employment rate continues to trail that of the national average and the latest ONS figures (at the time of writing) have shown economic inactivity to be over five percentage points higher than the UK average in 2015.

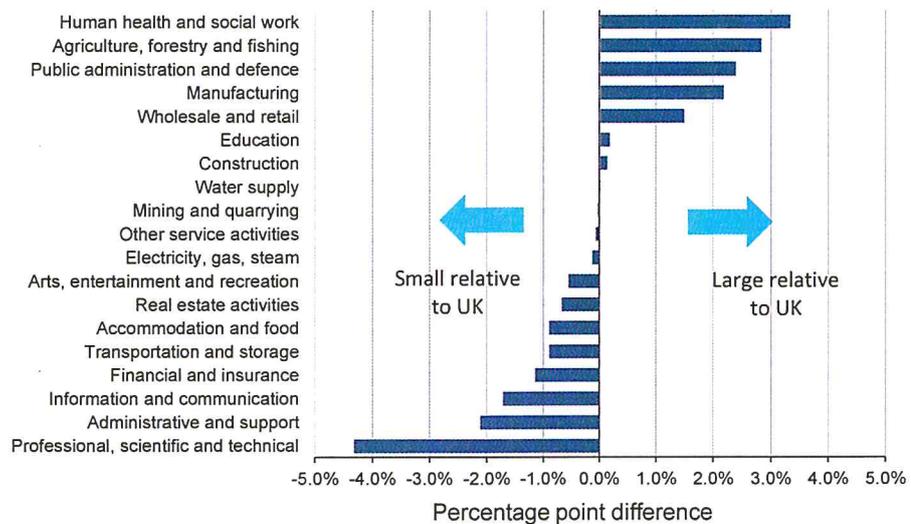
³⁷ Unemployment measured according to the ILO definition.

Our forecasts suggest over the ten-year period 2015-25, NI's annual job growth will average just 0.3 percent—half the UK average of 0.6 percent. The particularly 'jobless' nature of the recovery suggests that pre-recession employment levels are unlikely to be recovered before 2024.

NI's weak employment prospects are, in part, explained by the economy's sectoral makeup. Figure 9 shows the region's relative concentration of employment in comparison to the UK average.

NI has above average employment concentrations in sectors which have contracted significantly in recent years. Indeed, manufacturing, retail and construction collectively lost 43,000 jobs between 2008 and 2012. In addition, the construction sector suffered a severe fall in demand following the recession—in just four years the sector lost all the hard won gains earned in the previous eight. In the years since, employment losses in the sector have moderated.

Fig. 3. Sectoral employment comparison, NI vs. UK, 2015



Source: Oxford Economics

Mining and quarrying as an employment sector is proportionately the same size in NI as in the UK overall, reflecting the difficulty of trading its heavy outputs far distances.

Equally, the regional economy is generally underrepresented in some of the fastest growing sectors, including administration and support services, information and communication and professional services. Figure 10 shows that these sectors were in general more sheltered from job losses during the recessionary period and are forecast to enjoy some of the strongest rates of growth over the next decade. Unfortunately, a lack of overall representation weakens the job creating impact of these sectors within the NI economy.

Fig. 4. Employment change and growth, NI, 2000-25

| Total employment change | 2000-2008 | | 2008-2015 | | 2015-2025 | |
|--|-------------|--------------|--------------|--------------|-------------|---------------|
| | 000s | 8 year % y/y | 000s | 7 year % y/y | 000s | 10 year % y/y |
| Agriculture, forestry and fishing | 0.3 | 0.1% | -2.5 | -1.0% | -3.0 | -0.9% |
| Mining and quarrying | 0.2 | 1.3% | -0.5 | -4.1% | -0.3 | -2.4% |
| Manufacturing | -20.0 | -2.5% | -5.0 | -0.8% | -5.8 | -0.7% |
| Electricity, gas, steam | -1.2 | -8.3% | 0.7 | 6.5% | -0.2 | -0.9% |
| Water supply | 1.4 | 3.8% | 0.0 | 0.1% | -0.3 | -0.6% |
| Construction | 18.9 | 3.5% | -22.6 | -4.7% | 7.8 | 1.3% |
| Wholesale and retail | 21.5 | 2.1% | -4.7 | -0.5% | 2.6 | 0.2% |
| Transportation and storage | 5.1 | 2.0% | -3.7 | -1.6% | 2.2 | 0.7% |
| Accommodation and food | 5.8 | 1.7% | 1.0 | 0.3% | 2.1 | 0.4% |
| Information and communication | 3.9 | 2.8% | 0.3 | 0.2% | 2.8 | 1.3% |
| Financial and insurance | 4.7 | 3.2% | -2.0 | -1.4% | -0.4 | -0.2% |
| Real estate activities | 4.0 | 9.8% | 0.0 | 0.0% | 1.0 | 1.2% |
| Professional, scientific and technical | 6.7 | 2.9% | 3.5 | 1.4% | 5.0 | 1.3% |
| Administrative and support | 18.0 | 6.5% | 7.9 | 2.3% | 8.8 | 1.5% |
| Public administration and defence | -1.7 | -0.3% | -7.1 | -1.6% | -5.3 | -1.0% |
| Education | 5.6 | 1.0% | 1.1 | 0.2% | -0.1 | 0.0% |
| Human health and social work | 21.4 | 2.4% | 8.3 | 0.9% | 7.0 | 0.5% |
| Arts, entertainment and recreation | 2.9 | 1.9% | -0.1 | -0.1% | 2.4 | 1.1% |
| Other service activities | 0.9 | 0.5% | 1.3 | 0.8% | 2.7 | 1.1% |
| Total | 98.5 | 1.5% | -24.1 | -0.4% | 28.7 | 0.3% |

Source: Oxford Economics

Note: Blue shading and red shading refer to the strongest and weakest growing sectors respectively

Given the subdued rates of employment growth expected over the coming decade, job creation is likely to be high on the political agenda. So maintaining and protecting jobs (like those in the sand extraction sector) will also be important.

6.2 DIFFICULT CONDITIONS LOCALLY

At a local authority level, job growth since 2008 has been mixed. While six local economies recorded positive growth in 2010, a sustained recovery in the labour market didn't start until 2013 (see Figure 11).

As a group, the Lough Neagh economies of Mid Ulster; Armagh, Banbridge and Craigavon; Antrim and Newtownabbey; and Lisburn and Castlereagh didn't experience job growth until 2013.

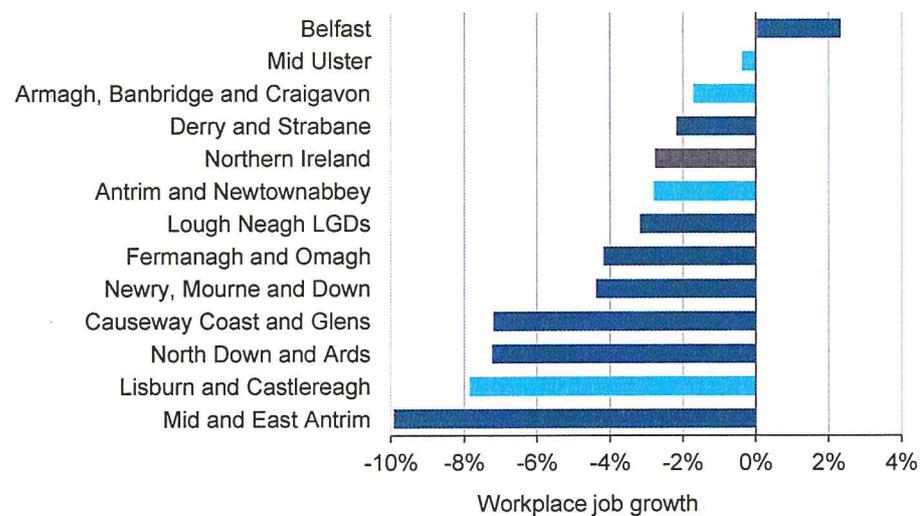
Fig. 5. Annual employment growth, 2008-15

| | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
|--|-------|-------|-------|-------|------|------|------|
| Antrim and Newtownabbey | -1.9% | -0.5% | -1.3% | -2.6% | 2.0% | 0.5% | 1.0% |
| Armagh, Banbridge and Craigavon | -2.7% | 0.6% | -3.0% | -2.5% | 2.2% | 2.5% | 1.3% |
| Belfast | -1.6% | 0.3% | -1.4% | -1.0% | 2.4% | 2.1% | 1.6% |
| Causeway Coast and Glens | -6.5% | 0.8% | -3.2% | -2.8% | 2.1% | 2.1% | 0.5% |
| Derry and Strabane | -1.9% | -0.1% | -1.3% | -2.9% | 1.1% | 2.1% | 1.0% |
| Fermanagh and Omagh | -2.8% | 0.7% | -3.2% | -3.3% | 1.5% | 2.5% | 0.6% |
| Lisburn and Castlereagh | -0.6% | -3.2% | -5.3% | -3.4% | 1.0% | 2.2% | 1.4% |
| Mid and East Antrim | -2.9% | -3.0% | -5.6% | -3.0% | 1.0% | 1.9% | 1.4% |
| Mid Ulster | -5.1% | 1.1% | -2.7% | -1.2% | 3.6% | 2.7% | 1.4% |
| Newry, Mourne and Down | -4.0% | 0.8% | -2.7% | -2.7% | 2.2% | 1.8% | 0.4% |
| North Down and Ards | -1.3% | -0.6% | -3.7% | -4.1% | 0.5% | 1.5% | 0.5% |
| Northern Ireland | -2.6% | -0.2% | -2.7% | -2.3% | 2.0% | 2.0% | 1.1% |
| Lough Neagh LGDs | -2.5% | -0.5% | -3.1% | -2.4% | 2.2% | 2.0% | 1.3% |

Source: Oxford Economics and DETI

Consequently, 2015 employment levels in the four council areas that border Lough Neagh and which accounted for almost one third of NI's total jobs³⁸ remained below 2008 levels. Indeed, employment in the four local authorities in 2015 was 3.2 percent lower than in 2008 (compared to the NI average of 2.8 percent).

Fig. 6. Employment growth, NI, 2008-15



Source: Oxford Economics

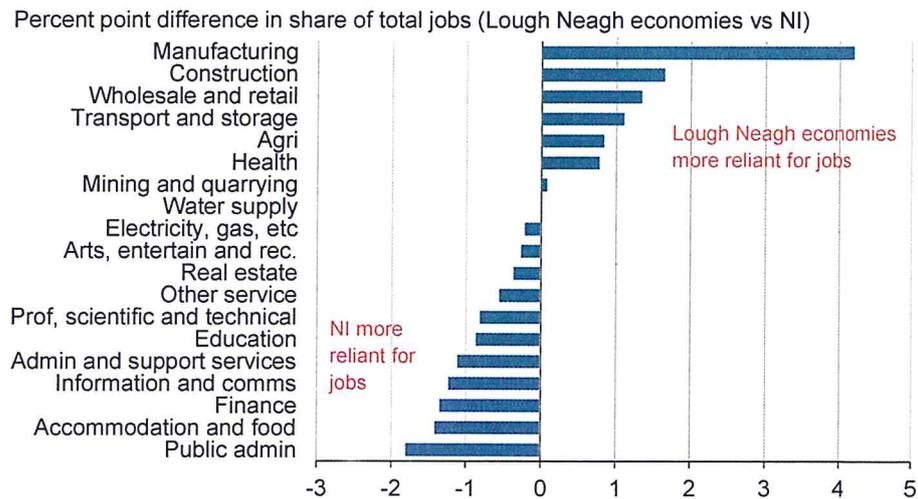
Collectively, these local areas are over reliant on sectors of the economy which have either weaker growth prospects and /or been more severely impacted by

³⁸ Throughout this analysis the Local Government Districts taken to be adjoined to Lough Neagh are Antrim and Newtownabbey, Armagh, Banbridge & Craigavon, Lisburn & Castlereagh and Mid Ulster.

the recession. By extension the Lough Neagh economies suffer from below average job shares in growth sectors of the economy including professional, scientific and technical; information and communication; and admin and support services. Figure 13 compares the sectoral structure of these local economies to the NI average. It shows that employment is larger in:

- Manufacturing that has been shedding jobs as it becomes more capital intensive and competes on value added rather than costs;
- Construction that was significantly adversely impacted by the 2008 recession and financial crisis;
- Wholesale and retail that suffered from the rising levels of unemployment, stagnant wage levels, debt hang over, and low levels of consumer confidence;
- Transport and storage which is reliant on the general health of the economy;
- Agriculture that has struggled to create jobs and that is vulnerable to health scares; and
- Health which given austerity measures, will not drive job creation in the future.

Fig. 7. Sectoral structure of Lough Neagh economies vs NI average, 2015



Given the structure of the local economies there is likely to be strong local supply chain linkages given the large presence of construction, manufacturing, transport and storage, and agriculture. These sectors often service each other and growth in one is beneficial to specific sub-sectors in the others.

Our baseline forecasts indicate that growth in the Lough Neagh economies will continue to lag behind the regional average over the next decade (with the exception of Lisburn and Castlereagh that has a larger share of jobs in growth sectors). By 2025 employment in the four council areas is forecast to grow by 8,200 jobs or 2.9 percent (compare to 3.4 percent in NI). However, **this is not**

enough to recover all of the jobs lost since the 2008 peak level of employment.

Fig. 8. Employment growth, NI LGDs. 2015-25

| Total employment change | 2015-25 | |
|---------------------------------|-------------|-------------|
| | 000s | % growth |
| Lisburn and Castlereagh | 2.7 | 4.1% |
| Northern Ireland | 28.7 | 3.4% |
| Antrim and Newtownabbey | 2.0 | 3.0% |
| Lough Neagh LGDs | 8.2 | 2.9% |
| Armagh, Banbridge and Craigavon | 2.4 | 2.7% |
| Mid Ulster | 1.2 | 1.9% |

Source: Oxford Economics

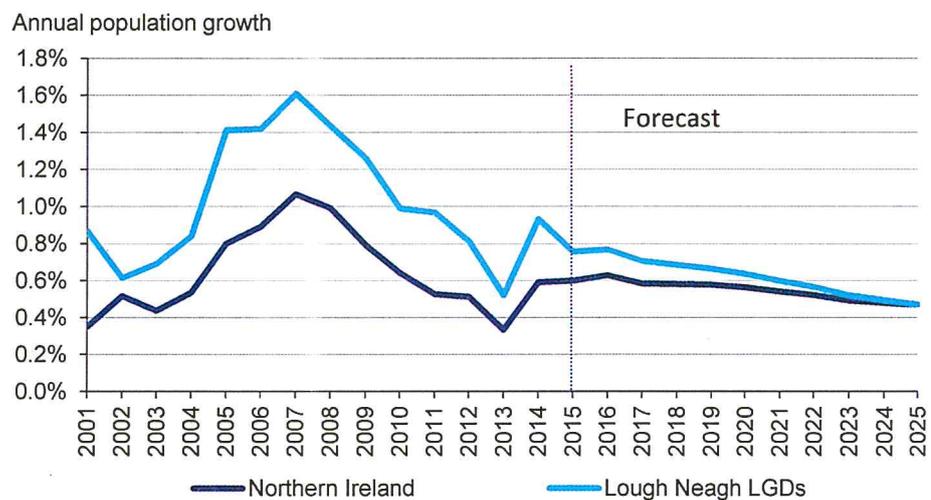
Given the expected poor performance of the jobs market, the direct jobs sustained by the Lough Neagh Sand Traders are important in a local context. Likewise, the indirect and induced employment are also important given the reliance on sectors such as manufacturing and retail.

6.3 POPULATION, EMPLOYMENT RATES AND UNEMPLOYMENT

Strong employment growth in the early 2000s helped to support above average population growth in the Lough Neagh local economies. The local population increased by 9.2 percent between 2000 and 2008—much stronger than the 5.7 percent increase recorded at the regional level. Since the recession population growth has weakened, but remained stronger than the NI average.

Baseline forecasts suggest population growth of 6.3 percent between 2015 and 2025 within the local areas surrounding Lough Neagh—compared to an NI average of 5.6 percent.

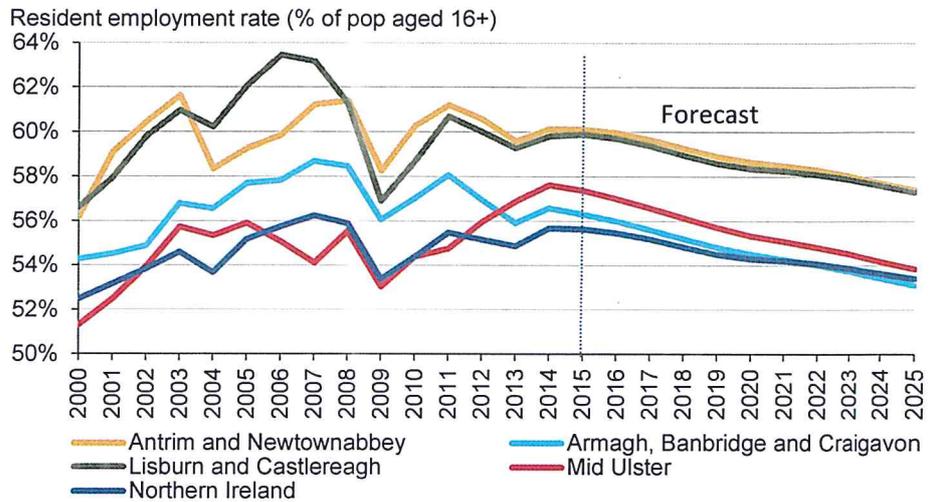
Fig. 9. Population growth, NI and Lough Neagh LGDs, 2001-25



Source: Oxford Economics

This above average population growth, alongside relatively weak employment growth, is likely to push down employment rates in the Lough Neagh local economies over the forecast period. In particular, we forecast employment rates in Armagh, Banbridge and Craigavon and Mid Ulster to decline to the NI average by 2025.

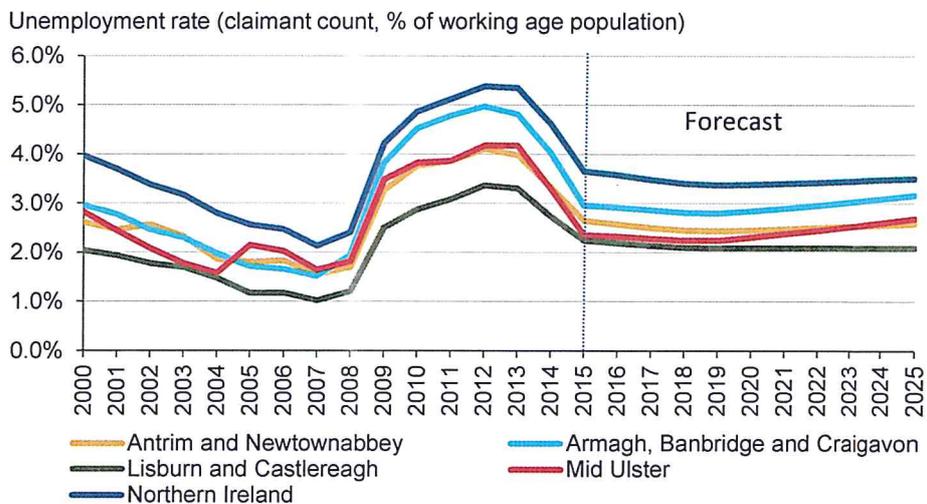
Fig. 10. Resident employment rates, NI and Lough Neagh LGDs, 2000-25



Source: Oxford Economics

Although claimant count unemployment rates are below the regional average and are forecast to remain so, we expect them to stay above the record low levels enjoyed in 2007. This is a direct consequence of the subdued employment outlook for the four local economies.

Fig. 11. Unemployment rates, NI and Lough Neagh LGDs, 2000-25

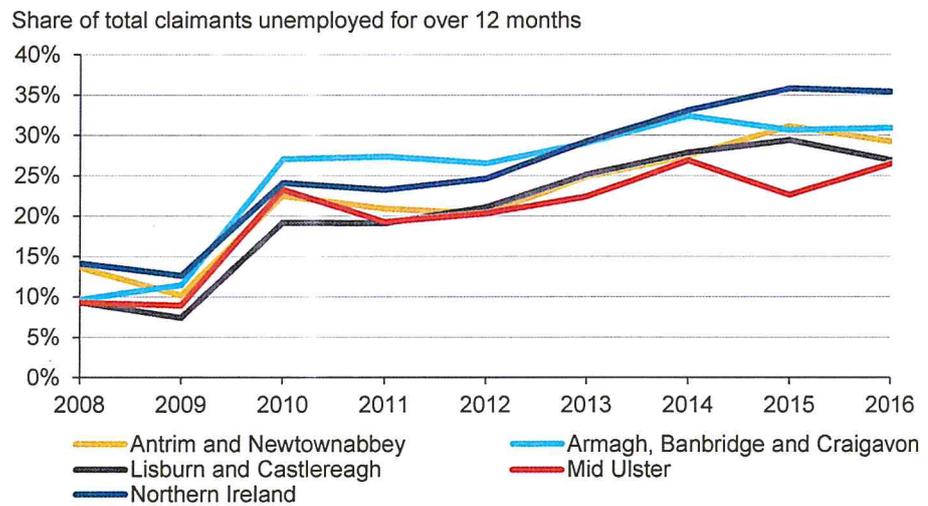


Source: Oxford Economics

As a result, the local labour market is significantly more challenging for those finding themselves among the unemployed. Research shows that the longer an individual is unemployed, the more difficult it is to secure employment. Job

seeker claimant statistics show the long term unemployed (i.e. those out of work for over 12 months or more) are forming an increasing share of the total unemployed figure in NI. The share of total claimants unemployed for over 12 months or more has more than doubled between 2009 and 2016. A similar trend is evident in the Lough Neagh local economies.

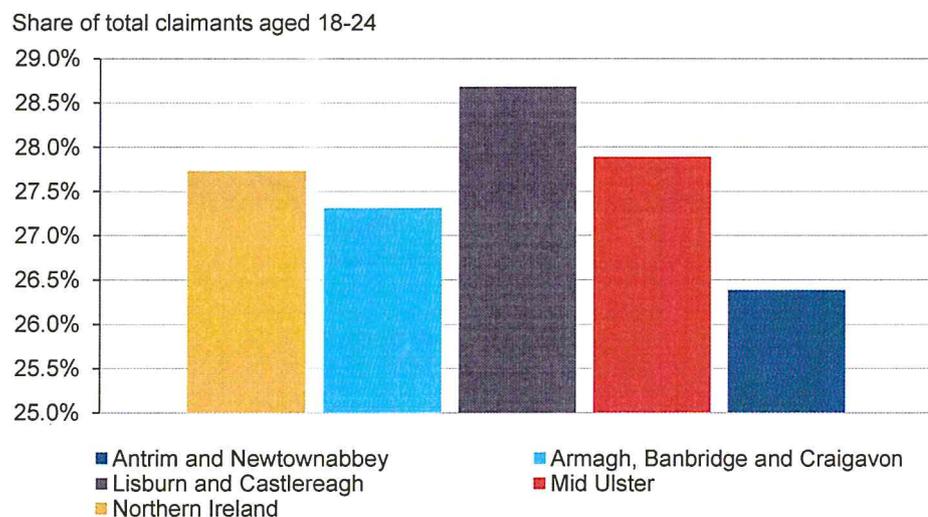
Fig. 12. Long term unemployed, NI and Lough Neagh LGDs, 2008-16



Source: ONS

Equally young people are experiencing a greater unemployment burden as a result of their more limited experience in the job market. Although this group's share within the overall unemployed has fallen in recent years, young people still find themselves over-represented. ONS data shows that those aged between 18 and 24 made up over one quarter of the regional unemployment total in 2015.

Fig. 13. Youth unemployment, NI and Lough Neagh LGDs, 2015

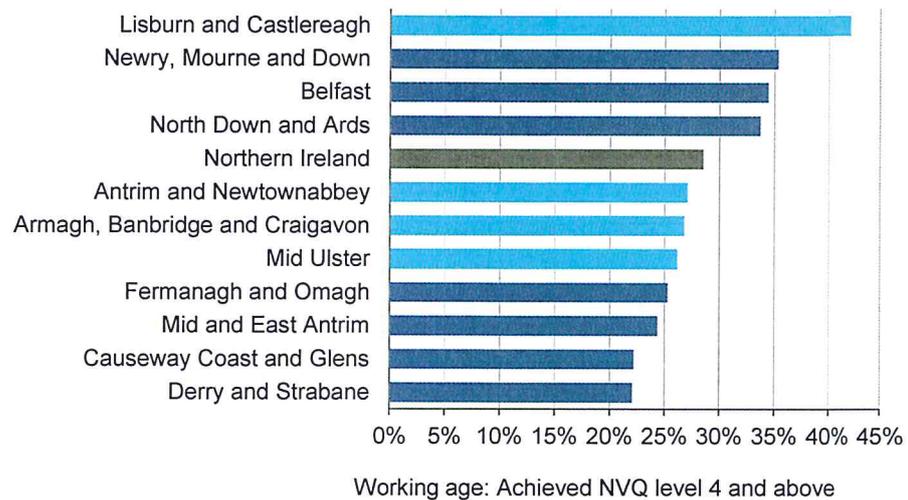


Source: ONS

In addition, as the economy becomes increasingly skills hungry it will become more difficult for unskilled and low skilled individuals to secure employment.

Qualification data suggest skills levels are relatively weak in the local areas. With the exception of Lisburn and Castlereagh, the residents within the Lough Neagh catchment demonstrated a below average proportion of working age residents achieving degree level qualifications (NVQ level 4 and above). Although the residents of these areas performed much better with regards to attainment of mid-level qualifications.

Fig. 14. Higher qualification attainment, NI LGDs, 2014



Source: NISRA

So again, given our expectation that resident employment rates will fall and unemployment rates will remain above recent lows; combined with the current data that shows a rising share of long-term unemployed, high share of youth unemployment and relatively lower level of skills; the importance of existing jobs in Sand Trading and in its supply chain rises.

6.4 DEPRIVATION AND ECONOMIC CONDITIONS

The Lough Neagh council areas exhibited varying levels of deprivation. Armagh, Banbridge and Craigavon was the most deprived of the Lough Neagh areas based on this measure (4th most deprived in NI)³⁹. Across the 285 Super Output Areas (SOAs) which make up the four councils, 28 were ranked among the top 20 percent most deprived within NI. All four of the council areas surrounding Lough Neagh had at least some representation within this most deprived grouping. Within the Lough Neagh areas the top three most deprived SOA areas were found in the Armagh, Banbridge and Craigavon district council area.

Deprivation is difficult to tackle due to a range of self-reinforcing issues. A lack of employment opportunities will push up unemployment and inactivity, which can have an adverse impact on health and crime. Consequently, there is a strong argument for safeguarding existing jobs (and by extension their supply chains

³⁹ NI's Multiple Deprivation Measure was last updated in 2010 and provides an official measure of spatial deprivation from which to draw comparisons. The overall measure is weighted according to a number of categories which aim to capture the main indicators of deprivation including Income; Employment; Health; Education, skills and training; Proximity to services; Living environment; and Crime and disorder.

and consumer spending impacts) in deprived areas as long those jobs are not inefficient and uncompetitive (given the Lough Neagh Sand Traders have been operating successfully and are seeking planning approval to continue, we can assume they are competitive).

Skills, job opportunities and deprivation all matter to local communities and local and regional government and public services. Research shows that:

- Poor education is associated with poor health;
- Poor health is associated poor employment rates;
- Higher unemployment is associated with increased crime rates;
- Higher crime rates are associated with lower house prices; and
- Higher employability is associated with improved skills/education.

Data provided by the Lough Neagh Sand Traders on the resident location of employees shows how localized their direct impacts are. Almost 40 percent of direct jobs are taken by residents of just nine wards. By far the most concentrated of these were the Ballymaguigan and Derrytrasna areas—residents of which accounted for almost most one fifth of total Sand Traders direct employment.

Both detailed and up-to-date data at the localised level can be difficult to source. However, the latest census (2011) reveals a snapshot of both the Ballymaguigan and Derrytrasna areas. In both these wards unemployment among the working population (16 to 64 year olds) was found to be below the NI average. However, both areas faced a number of challenges. Both long term unemployment and youth unemployment were found to be above the regional average in Ballymaguigan. Equally, an above average share of the unemployed in Derrytrasna had never worked.

Fig. 15. Economic activity, Ballymaguigan and Derrytrasna

| | Unemployed (aged 16-24) | Long-term unemployed (16-74) | Unemployed: never worked (aged 16-74) |
|---------------|-------------------------|------------------------------|---------------------------------------|
| Ballymaguigan | 32.9% | 47.4% | 15.8% |
| Derrytrasna | 36.0% | 40.2% | 17.1% |
| NI | 28.9% | 45.0% | 16.8% |

Source: Census 2011

6.5 ASSESSMENT

Given the subdued labour market, the expectation that unemployment rates will remain higher than they have been, while resident employment rates will fall, the employment Lough Neagh Sand Traders provide (directly, indirectly and through consumer spending) are important in a local context. The lower skills profile, sectoral structure, pockets of high levels of deprivation and local nature of employment in Sand Trading reinforce this conclusion.

ANNEX D: ENABLING CONSTRUCTION AND OTHER DOWNSTREAM ACTIVITIES (OCT 2016 SUBMISSION)

Sand is an extremely versatile material. As an input good, it is an essential component in a number of higher value adding products and processes throughout industry. As a result, the Lough Neagh Sand Traders—via their contribution to sand supply (and other sand based products)—facilitate and support growth throughout the NI economy and beyond, and in a wide spectrum of economic industries including commercial industries, tourism and construction.

This section of the report discusses those downstream benefits associated with the Sand Traders' operations at Lough Neagh—identifying the role that sand from Lough Neagh plays in the supply chain of other sectors throughout the economy.

6.6 SUPPORTING THE CONSTRUCTION SECTOR

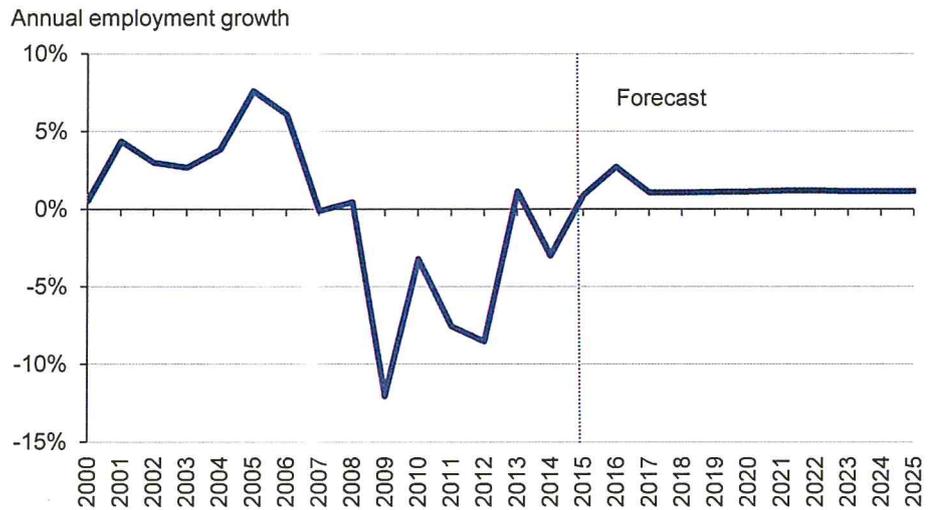
6.6.1 A significant employer in NI

The construction sector is the most prominent user of sand and sand-based products. In its raw form, sand remains an essential component of most construction-related activity. In addition, after further processing, sand is a vital ingredient in a range of construction-related products.

Despite the downturn, construction remains a significant employer within the NI economy. In 2015 the sector provided over 56,000 jobs (seven percent of total employment) and directly sustained almost £1.8 billion in GVA (measured in 2012 prices).

Oxford Economics forecast that employment in the construction sector will grow by almost 14 percent between 2015 and 2025, thereby increasing the demand for construction-related materials.

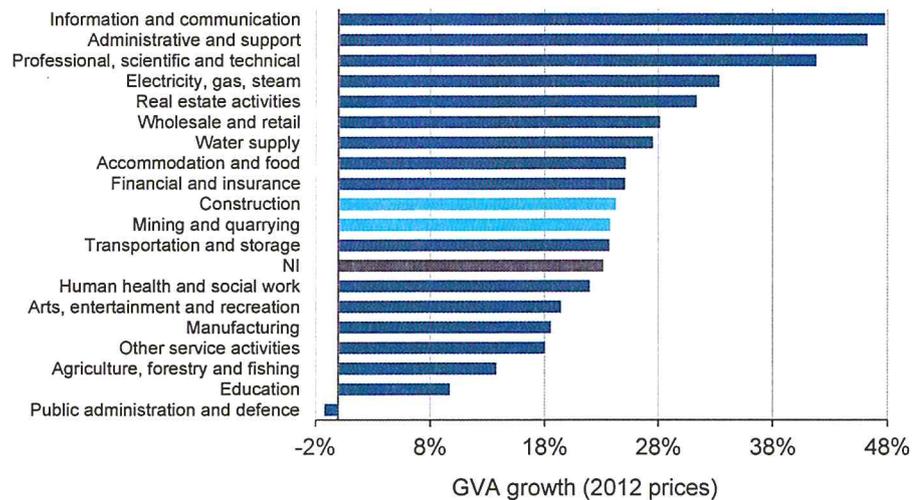
Fig. 16. Construction job growth, NI, 2000-25



Source: Oxford Economics

In addition, over the next decade, construction GVA in real prices is expected to grow by 24 percent, stronger than the NI economy overall. As expected mining and quarrying, is also expected to experience above average GVA growth over the forecast period. These trends are important determinants for future demand for sand.

Fig. 17. Sectoral GVA growth, NI, 2015-25



Source: Oxford Economics

6.6.2 A significant employer in locally

Not only is the future prospects of the construction sector important for the sand trading sector, it is also important for the general health of the Lough Neagh economies. In 2008 all four Lough Neagh economies had above shares of employment in the sector and were therefore more exposed to the recessionary employment decline which followed. By 2015 the share of employment in the construction sector had declined in all NI's council areas, however three of the

four Lough Neagh local economies retained above average-sized construction sectors (as measured by jobs).

Fig. 18. Construction's employment share, NI LGDs, 2008 and 2015

| | Construction employment share | |
|---------------------------------|-------------------------------|-------------|
| | 2008 | 2015 |
| Mid Ulster | 15.3% | 11.9% |
| Newry, Mourne and Down | 12.7% | 9.8% |
| Fermanagh and Omagh | 13.0% | 9.1% |
| Causeway Coast and Glens | 12.4% | 8.9% |
| Lisburn and Castlereagh | 10.2% | 8.5% |
| Antrim and Newtownabbey | 9.6% | 6.8% |
| Northern Ireland | 9.0% | 6.6% |
| Mid and East Antrim | 8.8% | 6.6% |
| Armagh, Banbridge and Craigavon | 9.1% | 6.6% |
| Derry and Strabane | 8.5% | 5.8% |
| North Down and Ards | 9.4% | 5.7% |
| Belfast | 4.0% | 3.2% |

Source: Oxford Economics

Equally, published data show that all four Lough Neagh economies had above average shares of construction related registered business in 2015. Mid Ulster had the highest share, with over 16 percent of total business activity in the area being construction-related.

Given our earlier findings that up to 5.1 percent of supply chain spending could be on sand or sand related products, anything that has an adverse impact on the supply and price of sand available to the sector, will likely have an adverse impact on the Lough Neagh economies.

6.6.3 Construction's role in supporting economic growth

There is a strong body of literature that shows the outputs of the construction sector support economic growth (see the box below). It is due to the importance of this economic (and social) role of infrastructure that the Investment Strategy for NI commits significant public money. Since 2008 the NI Executive's Investment Strategy has sought to deliver unprecedented levels of capital investment, in which construction of course plays a pivotal role.⁴⁰

Furthermore, the strategy identifies the use of local businesses and suppliers in helping to deliver the investment strategy and thereby helping to protect jobs in all parts of the supply chain. To this end, investment projects are expected to be designed to better use local natural resources and skills, with the aim of improving value-for-money whilst also benefiting local suppliers.

⁴⁰ NI Executive, "Investment Strategy for NI 2011-21 – building a better future", <http://isni.gov.uk/about/>, [Sourced March 2016]

Given the scale of planned investment from the Investment Strategy, and the general need for construction related activity in a growing economy it is important that the NI construction sector has access to an adequate long-term supply of sand and sand based products at competitive prices.

Therefore, the Lough Neagh Sand Traders who provide 30 percent of the NI sand requirement play an important enabling role in the construction sector and in the Investment Strategy for NI. Their central location in the region also makes them strategically placed support projects across NI.

THE ROLE OF CONSTRUCTION IN SUPPORTING ECONOMIC GROWTH

The economic literature points to a firm link between infrastructure investment and economic growth,⁴¹ especially in the longer term.⁴² The evidence supports the premise that an inadequate supply of infrastructure or unreliability in services can inhibit the investment of productive capital or restrict output. For example, inadequate transport links hinder the movement of labour and thereby push up housing costs in employment centres. These costs are, in turn, passed onto to local firms, making them less competitive overall.

Both housing and infrastructure play significant roles in the health of the economy:

- Infrastructure supports the movement of people and goods; poor roads and bridges for example can limit the size of the labour pool for businesses and restrict productivity.
- Adequate supply of office blocks, manufacturing sites, retail locations etc are required to support growth in the economy, expansion of existing businesses and new investment by foreign sources.
- Likewise, the supply of housing can have an influence on the attractiveness of a location and therefore the labour pool available to local business. If housing is in short supply (or there is a poor mix of housing types) the price of housing can rise and lead to affordability issues.
- In addition, development in the built environment can help transform the prospects of local areas through regeneration projects, benefiting the local population by creating jobs, reducing unemployment and enhancing the local skills base.

6.7 ADDITIONAL USES

Aside from construction, a large number of other industries use sand from Lough Neagh. Its varied usage is in part due to special processing that can be applied to sand following its extraction. Via a process of drying and separation, Lough Neagh sand has a range of more specialist uses, including, for example, the

⁴¹ T.R. Lakshmanan, "The broader economic consequences of transport infrastructure investments", 2011

⁴² Dr C. O'Fallon, "Linkages between infrastructure and economic growth", Prepared for the Ministry of Economic Development, 2003.

manufacture of glue and improving the efficiency of energy generation in power stations.

Equally, sand from Lough Neagh has helped create and maintain sports pitches, equestrian facilities and golf courses throughout Ireland. As well as offering health and well-being benefits, these facilities help to support the tourism offering to both domestic and international visitors. Local areas which host these sporting facilities are, in turn, likely to share in the associated tourism spend as those visiting make use of local amenities during their stay.

Even the silt by-product from sand processing is put to commercial use and is sold to utility companies for bedding and covering of services.

Typical markets for the sand extracted from Lough Neagh include:

- Value added concrete products;
- Ready mixed concrete;
- Dried and mixes;
- Bitumen producers.

6.8 ASSESSMENT

Given the size of the construction sector in NI, the importance of the sector for jobs in the local economies of Lough Neagh, the commitment by the NI Executive to invest considerable public money in future infrastructure, as well as the economic role that construction plays in a growing economy, the Government and the private sector should take seriously the future supply of local sand.

Given Lough Neagh Sand Traders account for 30% of NI's sand requirement, they should play a major role in the assessment of future streams of sand.

The loss of this sand would have an adverse impact on construction. The scale of the impact is difficult to assess. However, given supply chain spending on sand and sand related products could be as much as 5.1 percent of total spend, the scale of the impact could be minor to moderate in scale.

Given its role in supporting tourism and recreational assets, there is also likely to be an adverse impact if Lough Neagh sand were lost, though this would be relatively minor in the context of the NI economy. However, for small businesses in these sectors that require sand, the likely rise in sand costs might feel more significant.



**Europe, Middle East,
and Africa:**

Global headquarters

Oxford Economics Ltd
Abbey House
121 St Aldates
Oxford, OX1 1HB
UK
Tel: +44 (0)1865 268900

London

Broadwall House
21 Broadwall
London, SE1 9PL
UK
Tel: +44 (0)20 7803 1418

Belfast

Lagan House Sackville Street
Lisburn
County Antrim, BT27 4AB
UK
Tel: + 44 (0)2892 635400

Paarl

12 Cecilia Street
Paarl 7646
South Africa
Tel: +27(0)21 863-6200

Frankfurt

Mainzer Landstraße 41
60329 Frankfurt am Main
Germany
Tel: +49 69 95 925 280

Paris

3 Square Desaix
75015 Paris
France
Tel: +33 (0)1 78 91 50 52

Milan

Via Cadorna 3
20080 Albairate (MI)
Italy
Tel: +39 02 9406 1054

Dubai

Jumeirah Lake Towers
Dubai,
UAE
Tel: +971 56 396 7998

Americas:

New York

5 Hanover Square, 19th Floor
New York, NY 10004
USA
Tel: +1 (646) 786 1879

Philadelphia

303 West Lancaster Avenue
Suite 2e
Wayne, PA 19087
USA
Tel: +1 (610) 995 9600

Mexico City

Emerson 150, Despacho 802
Col. Polanco, Miguel Hidalgo
México D.F., C.P. 11560
Tel: +52 (55) 52503252

Boston

51 Sawyer Road
Building 2 - Suite 220
Waltham, MA 02453
USA
Tel: +1 (617) 206 6112

Chicago

980 N. Michigan Avenue,
Suite 1412 Chicago
Illinois, IL 60611
USA
Tel: +1 (773) 372-5762

Los Angeles

2500 Broadway, Building F,
Suite F-125
Santa Monica, 90404
Tel: +1 (424) 238-4331

Florida

8201 Peters Road,
Suite 1000
Plantation,
Miami 33324
USA
Tel: +1 (954) 916 5373

Toronto

2425 Matheson Blvd East
8th Floor Mississauga, Ontario
L4W 5K4
Canada
Tel: +1 (905) 361 6573

Asia Pacific:

Singapore

6 Battery Road
#38-05
Singapore 049909
Tel: +65 6850 0110

Hong Kong

30/F, Suite 3112
Entertainment Building
30 Queen's Road Central
Tel: +852 3103 1096

Tokyo

4F Tekko Building
1-8-2 Marunouchi
Tokyo
100-0005
Tel: +81 3 6870 7175

Sydney

Level 56, MLC Centre
19-21 Martin Place
Sydney, NSW
Tel: +61 2 9220 1707

Email:

mailbox@oxfordeconomics.com

Website:

www.oxfordeconomics.com

APPENDIX 5

DFE Annual Mineral Statements 2015 and 2016



ANNUAL MINERAL STATEMENT 2015

TABLE 1
Mineral production in Northern Ireland 2015
 (Mined under the Mines Act 1969 and Quarries (NI) Order 1983).

| MINERAL | QUANTITY PRODUCED (TONNES) | SELLING VALUE (£) |
|--|----------------------------|-----------------------|
| Basalt and Igneous Rock (excluding Granite) | 2,586,647.16 | £12,015,047.14 |
| Sandstone | 3,946,221.15 | £14,507,737.51 |
| Limestone | 1,708,627.47 | £7,662,080.10 |
| Sand and Gravel | 2,480,976.96 | £11,008,939.09 |
| Other | 1,043,674.79 | £9,844,770.92 |
| TOTAL | 11,766,147.53 | £55,038,574.76 |

TABLE 2 (See Note 1)
Number of persons employed at mines and quarries in Northern Ireland 2015

| MINERAL | INSIDE PIT OR EXCAVATION | OUTSIDE PIT OR EXCAVATION | MANAGEMENT AND ADMINISTRATION | TOTALS |
|--|-----------------------------|------------------------------|----------------------------------|------------|
| | | | | 2015 |
| Basalt and Igneous Rock (excluding Granite) | 101 | 103 | 68 | 272 |
| Sandstone | 100 | 31 | 44 | 175 |
| Limestone | 50 | 21 | 34 | 105 |
| Sand and Gravel | 85 | 107 | 48 | 240 |
| Other | 33 | 34 | 19 | 86 |
| TOTAL | 369 | 296 | 213 | 878 |

TABLE 3
Health and Safety Certification Information (Number of quarries)

| CERTIFICATION | ISO 9000 | ISO 14001 | OHSAS 18000 | |
|---------------|----------|-----------|-------------|------------------|
| | | 11 | 19 | 7 |
| | SAFECERT | BS8555 | OTHER | NO CERTIFICATION |
| | 7 | 0 | 11 | 74 |

TABLE 4**Mineral production in Northern Ireland in 2015 by Council area 2015**

| BASALT AND IGNEOUS ROCK (OTHER THAN GRANITE) | QUANTITY PRODUCED (TONNES) | VALUE (£) |
|--|-----------------------------------|------------------|
| CAUSEWAY COAST AND GLENS | 549,383.00 | £2,078,880.92 |
| MID AND EAST ANTRIM | 929,816.00 | £4,312,877.04 |
| MID ULSTER | 296,182.31 | £1,702,639.71 |
| FERMANAGH AND OMAGH | 108,464.00 | £663,772.57 |
| NEWRY, MOURNE AND DOWN | 81,572.67 | £242,859.00 |
| ARMAGH, BANBRIDGE AND CRAIGAVON , ANTRIM AND NEWTOWNABBEY and LISBURN CITY AND CASTLEREAGH | 621,229.18 | £3,014,017.90 |

| SANDSTONE | QUANTITY PRODUCED (TONNES) | VALUE (£) |
|--|-----------------------------------|------------------|
| LISBURN CITY AND CASTLEREAGH | 623,085.00 | £2,036,568.75 |
| ARMAGH, BANBRIDGE AND CRAIGAVON | 990,997.44 | £4,531,701.81 |
| NEWRY, MOURNE AND DOWN and ARDS AND NORTH DOWN | 2,212,311.83 | £7,617,000.11 |
| FERMANAGH AND OMAGH | 119,826.88 | £322,466.84 |

| LIMESTONE | QUANTITY PRODUCED (TONNES) | VALUE (£) |
|---|-----------------------------------|------------------|
| FERMANAGH AND OMAGH | 1,029,176.00 | £3,192,459.10 |
| MID ULSTER | 315,946.00 | £1,226,629.58 |
| ARMAGH, BANBRIDGE AND CRAIGAVON | 131,604.16 | £460,614.56 |
| DERRY CITY AND STRABANE and MID AND EAST ANTRIM | 231,901.31 | £2,782,376.86 |

| SAND AND GRAVEL | QUANTITY PRODUCED (TONNES) | VALUE (£) |
|--|-----------------------------------|------------------|
| MID ULSTER | 1,132,238.19 | £4,853,048.80 |
| FERMANAGH AND OMAGH | 294,714.88 | £1,240,675.56 |
| ARMAGH, BANBRIDGE AND CRAIGAVON | 250,895.00 | £1,410,370.00 |
| CAUSEWAY COAST AND GLENS | 157,171.00 | £785,855.00 |
| DERRY CITY AND STRABANE | 128,547.00 | £373,044.40 |
| NEWRY, MOURNE AND DOWN | 15,621.89 | £39,139.29 |
| ANTRIM AND NEWTOWNABBEY and LISBURN CITY AND CASTLEREAGH | 501,789.00 | £2,306,806.04 |

| OTHER | QUANTITY PRODUCED (TONNES) | VALUE (£) |
|------------------------------------|-------------------------------|---------------|
| MID AND EAST ANTRIM | 888,331.91 | £9,063,208.91 |
| MID ULSTER | 5,356.24 | £13,606.15 |
| ARMAGH, BANBRIDGE AND CRAIGAVON | 113,621.64 | £459,182.46 |
| DERRY CITY AND STRABANE | 30,434.00 | £120,903.00 |
| NEWRY, MOURNE AND DOWN | 4,860.00 | £185,300.00 |
| FERMANAGH AND OMAGH | 1,071.00 | £2,570.40 |

NOTES FOR GUIDANCE

- Under Article 18(1) of the Quarries (Northern Ireland) Order 1983 a return is required each year to DfE in respect of quarries operating in Northern Ireland.
- Gathering this information and producing the annual mineral statement is DfE's only responsibility in respect of quarries; quarry activity is governed by the Planning regime.
- 2015 data is based on 106 quarry returns**
- Copies of Annual Mineral Statements are provided on the DfE website at <https://www.economy-ni.gov.uk/publications/annual-minerals-statements> . Returns have not been published for a number of years so the latest data covers the 2016 year. Data from years 2011 through to 2015 will be published shortly. It should be noted that due to variations in responses for individual years the information presented should not be assumed to represent trends in output over this period.

Table 1

- The return includes salt which is a mineral vested in the Department for the Economy under the Minerals Development Act (Northern Ireland) 1969 but excludes precious metals which are vested in the Crown. Other extraction activities are regulated under the planning regime.

Table 2

- The people employed inside and outside the pit are directly involved in extraction. Lorry drivers and road teams etc. are excluded. The number of management and administration staff cannot be broken down further. A number of quarry operators failed to provide information on the number of staff involved in the operation.
- Only 1 Industrial mine is included in the data.

Table 4

- Basalt information combined for Antrim and Newtownabbey DC and Lisburn City and Castlereagh DC to protect commercial information.

9. Sandstone information combined for Mid Ulster DC and Derry Strabane DC to protect commercial information.
10. Limestone information combined for Derry City DC and Mid and East Antrim DC to protect commercial information.
11. Sand and Gravel information combined for Antrim and Newtownabbey DC and Lisburn City and Castlereagh DC to protect commercial information.



ANNUAL MINERAL STATEMENT 2016

TABLE 1
Mineral production in Northern Ireland 2016
(Mined under the Mines Act 1969 and Quarries (NI) Order 1983).

| MINERAL | QUANTITY PRODUCED (TONNES) | SELLING VALUE (£) |
|---|----------------------------|-----------------------|
| Basalt and Igneous Rock (excluding Granite) | 4,215,787.23 | £19,793,216.01 |
| Sandstone | 5,042,617.83 | £19,187,972.39 |
| Limestone | 2,146,171.822 | £8,335,025.22 |
| Sand and Gravel | 2,353,891.90 | £12,252,294.88 |
| Other | 1,264,406.92 | £10,122,168.34 |
| TOTAL | 15,022,875.702 | £69,690,676.84 |

TABLE 2 (See Note 1)
Number of persons employed at mines and quarries in Northern Ireland 2016

| MINERAL | INSIDE PIT OR EXCAVATION | OUTSIDE PIT OR EXCAVATION | MANAGEMENT AND ADMINISTRATION | TOTALS |
|---|--------------------------|---------------------------|-------------------------------|------------|
| | | | | 2016 |
| Basalt and Igneous Rock (excluding Granite) | 124 | 104 | 85 | 313 |
| Sandstone | 108 | 39 | 59 | 206 |
| Limestone | 41 | 19 | 32 | 92 |
| Sand and Gravel | 47 | 107 | 33 | 187 |
| Other | 47 | 32 | 24 | 103 |
| TOTAL | 367 | 301 | 233 | 901 |

TABLE 3
Health and Safety Certification Information (Number of quarries)

| CERTIFICATION | ISO 9000 | ISO 14001 | OHSAS 18000 |
|---------------|----------|-----------|-------------|
| | | 29 | 34 |

| SAFETCERT | BS8555 | OTHER | NO CERTIFICATION |
|-----------|--------|-------|------------------|
| 10 | 0 | 14 | 75 |

TABLE 4
Mineral production in Northern Ireland 2016 by Council area 2016

| BASALT AND IGNEOUS ROCK (OTHER THAN GRANITE) | QUANTITY PRODUCED (TONNES) | VALUE (£) |
|--|-----------------------------------|------------------|
| CAUSEWAY COAST AND GLENS | 1,494,218.00 | 5,782,961.98 |
| MID AND EAST ANTRIM | 1,118,273.00 | 4,856,604.37 |
| MID ULSTER | 816,992.84 | 4,696,949.88 |
| FERMANAGH AND OMAGH | 183,101.00 | 1,205,633.17 |
| NEWRY, MOURNE AND DOWN | 105,368.32 | 403,197.28 |
| ANTRIM AND NEWTOWNABBEY and LISBURN CITY AND CASTLEREAGH | 497,834.07 | 2,847,869.33 |

| SANDSTONE | QUANTITY PRODUCED (TONNES) | VALUE (£) |
|--|-----------------------------------|------------------|
| ARDS AND NORTH DOWN | 1,933,748.00 | 6,691,242.15 |
| LISBURN CITY AND CASTLEREAGH | 1,031,853.00 | 3,887,923.20 |
| ARMAGH, BANBRIDGE AND CRAIGAVON | 1,025,665.29 | 4,640,770.30 |
| NEWRY, MOURNE AND DOWN | 911,210.82 | 3,563,161.92 |
| FERMANAGH AND OMAGH | 107,224.73 | 314,086.84 |
| MID ULSTER and DERRY CITY AND STRABANE | 32,915.99 | 90,787.98 |

| LIMESTONE | QUANTITY PRODUCED (TONNES) | VALUE (£) |
|------------------------------------|-----------------------------------|------------------|
| FERMANAGH AND OMAGH | 1,243,595.00 | 3,610,940.44 |
| ARMAGH, BANBRIDGE AND CRAIGAVON | 173,686.82 | 769,535.48 |
| MID ULSTER and MID AND EAST ANTRIM | 728,890.00 | 3,954,549.30 |

| SAND AND GRAVEL | QUANTITY PRODUCED (TONNES) | VALUE (£) |
|--|-----------------------------------|------------------|
| MID ULSTER | 1,321,400.94 | 7,760,300.50 |
| FERMANAGH AND OMAGH | 276,755.35 | 943,026.14 |
| ARMAGH, BANBRIDGE AND CRAIGAVON | 256,587.00 | 1,539,522.00 |
| CAUSEWAY COAST AND GLENS | 198,740.40 | 993,702.00 |
| DERRY CITY AND STRABANE | 83,146.53 | 167,307.32 |
| NEWRY, MOURNE AND DOWN | 11,414.68 | 25,048.92 |
| ANTRIM AND NEWTOWNABBEY and LISBURN CITY AND CASTLEREAGH | 205,847.00 | 823,388.00 |

| OTHER | QUANTITY PRODUCED (TONNES) | VALUE (£) |
|------------------------------------|-------------------------------|--------------|
| MID AND EAST ANTRIM | 735541.98 | 6,813,184.91 |
| LISBURN CITY AND CASTLEREAGH | 267336.00 | 1,462,327.92 |
| MID ULSTER | 98523.94 | 997,590.51 |
| ARMAGH, BANBRIDGE AND CRAIGAVON | 93950.00 | 404,925.00 |
| DERRY CITY AND STRABANE | 62775.00 | 249,266.00 |
| NEWRY, MOURNE AND DOWN | 5486.00 | 193,053.00 |
| CAUSEWAY COAST AND GLENS | 499.00 | 998.00 |
| FERMANAGH AND OMAGH | 295.00 | 823.00 |

NOTES FOR GUIDANCE

1. Under Article 18(1) of the Quarries (Northern Ireland) Order 1983 a return is required each year to DfE in respect of quarries operating in Northern Ireland.
2. Gathering this information and producing the annual mineral statement is DfE's only responsibility in respect of quarries; quarry activity is governed by the Planning regime.
3. **2016 data is based on 117 quarry returns, (as compared to 106 in 2015)**
4. Copies of Annual Mineral Statements are provided on the DfE website at <https://www.economy-ni.gov.uk/publications/annual-minerals-statements>. Returns have not been published for a number of years so the latest data covers the 2016 year. Data from years 2011 through to 2015 will be published shortly. It should be noted that due to variations in responses for individual years the information presented should not be assumed to represent trends in output over this period.

Table 1

5. The return includes salt which is a mineral vested in the Department for the Economy under the Minerals Development Act (Northern Ireland) 1969 but excludes precious metals which are vested in the Crown. Other extraction activities are regulated under the planning regime.

Table 2

6. The people employed inside and outside the pit are directly involved in extraction. Lorry drivers and road teams etc. are excluded. The number of management and administration staff cannot be broken down further. A number of quarry operators failed to provide information on the number of staff involved in the operation.
7. Only 1 Industrial mine is included in the data.

Table 4

8. Basalt information combined for Antrim and Newtownabbey DC and Lisburn City and Castlereagh DC to protect commercial information.
9. Sandstone information combined for Mid Ulster DC and Derry Strabane DC to protect commercial information.
10. Limestone information combined for Mid Ulster DC and Mid and East Antrim DC to protect commercial information.
11. Sand and Gravel information combined for Antrim and Newtownabbey DC and Lisburn City and Castlereagh DC to protect commercial information.

APPENDIX 6

Client Evidence Forms



| Site Address | Operator Name & HQ | Aggregate Extracted since commencement | Yearly Extraction rate | Remaining Reserves | Demand up until 2030 (2019-30) | Time remaining on Existing Planning | Extension Potential | Do You intend to expand this site before 2030 |
|---------------------------|---|--|-----------------------------|--------------------|---|-------------------------------------|--|---|
| 210 Camlough Road, Pmeroy | Acheson and Glover Limited, 127 Creevehill Road, Fivemiletown, BT75 0SY | Unknown | c. 100,000 tonnes per annum | 500,000 tonnes | Up to 150,000 tonnes per annum dependent on market conditions | N/A | Yes, potential lands adjacent to site with potential for future mineral extraction | No |

Other Info

Company Turnover: £22m per annum

No. of staff employed: (Extraction) 14 no. (five at Pomeroy; nine in Fivemiletown)
(Manufacturing) 91 no. (across six production sites in Northern Ireland)
(Sales and Admin) 100 no. (75% in Northern Ireland)

Annual Wage Bill: £5m across six manufacturing sites

Annual Rateable Values:
Fivemiletown- £60,000
Toome - £45,495
Carryduff - £48,540

Signed:



On behalf of: Acheson & Glover Limited

Date: 9th April 2019

Mid Ulster Local Development Plan 2030- Draft Plan Strategy
Mineral Supply Form



Dungannon - £43,740

Ballygawley - £97,170

Pomeroy- £18,300



| Site Address | Operator Name & HQ | Aggregate Extracted since commencement | Yearly Extraction rate | Remaining Reserves | Demand up until 2030 (2019-30) | Time remaining on Existing Planning | Extension Potential | Do You intend to expand this site before 2030 |
|--|---|---|------------------------------------|---|---|--|--|---|
| <p>Extraction area c. 3.2 miles to the east of Ballyronan.</p> <p>Landing Point at Sandy Bay;</p> <p>19 Shore Road, Upper Ballinderry, Lisburn, Antrim, BT28 2LF</p> | <p>Breedon</p> <p>5 Blackwater Road, Mallusk, Newtownabbey, Co Antrim, BT36 4TZ</p> | <p>Unknown- sand has been historically dredging from the Lough for decades.</p> | <p>c. 282,000 per annum (2018)</p> | <p>No permitted reserves- the extraction of sand from the Lough is the subject of a deemed planning application before the Planning Appeals Commission and a planning application currently under consideration by the Department for Infrastructure (Dfi) under the Planning Application references (2015/E0023-28) and LA03/2017/0310/F respectively.</p> | <p>Up to 450,000 per annum</p> <p>Combined output restricted to 1.5 million tonnes per annum.</p> | <p>Planning permission is sought for a period of 15 years.</p> | <p>Yes- calculated resources of up to 100 million tonnes in Lough.</p> | <p>N/A</p> |

Other Info

Turnover:

£20 million (Internal Breedon revenue for which sand from Lough Neagh is used in Asphalt and Concrete Products). Additional **£1.6 million** – generated from External revenue from direct sand sales (ex works). (The above figures include Aggregate levy and VAT)

No. of staff employed: 8 (Extraction)
69 (Manufacturing)

Annual Wage Bill: £3.3 million

Annual Rateable value: N/A



On behalf of: *White Mountain Quarries Ltd*

Date: *17 April 2019*

| Site Address | Operator Name & HQ | Aggregate Extracted since commencement | Yearly Extraction rate | Remaining Reserves | Demand up until 2030 (2019-30) | Time remaining on Existing Planning | Extension Potential | Do You intend to expand this site before 2030 |
|--|--|--|---|--|---|---|---|--|
| Sand and Gravel Resource, Knockmany Road, Augher, Co. Tyrone | Campbell Contracts Ltd, 100 Drummackan Road, Coolcran, Tempo | None - mineral landbank | 100,000tpa | Approx 2 million tonnes | 100-150,000tpa | Not applicable | Yes deposit required to be extracted. | Yes. |
| Campbell's Quarry, Letterbailey, Tempo | Campbell Contracts Ltd, 100 Drummackan Road, Coolcran, Tempo | 482,167 Tonnes | 120,000 Tonnes per year from March 2017 to March 2019 | at least 1 million tonnes | 150000 tonnes per year as production increasing annually | Planning passed from Sept 2010 until Sept 2035 - 16 years remaining | scope to expand | Yes - scope for expansion which would improve the visual impact of the rock quarry after extraction. |
| Campbell's Quarry, Letterbailey, Tempo | Campbell Contracts Ltd, 100 Drummackan Road, Coolcran, Tempo | 177,369 Tonnes | 33,000 Tonnes Per year from March 2017 to March 2019 | 120,000 Tonnes Reserves figures revised due to investment in new washing plant that minimises waste. | 35000 tonnes per year – production increased due to demand for sand from concrete producers | Planning passed from Sept 2010 until Sept 2035 - 16 years remaining | Limited scope for sand and gravel expansion in area | Yes - however we have not yet identified a suitable area for development in the vicinity of the current sand and gravel quarry |

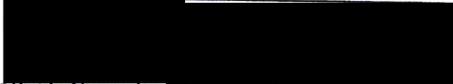
Other Info

Turnover: £7,500,000

No. of staff employed: 85 Total (Quarry) 12

Annual Wage Bill: £2,013,000

Annual Rates: £7913.80

Signed: 
On behalf of: Campbell Contracts
Date: 16/4/2019

| Site Address | Operator Name & HQ | Aggregate Extracted since commencement | Yearly Extraction rate | Remaining Reserves | Demand up until 2030 (2019-30) | Time remaining on Existing Planning | Extension Potential | Do You intend to expand this site before 2030 |
|--------------------------------------|---|--|---|---|--|-------------------------------------|--|---|
| 15 Crancussy Road Cookstown BT80 9PW | Core Aggregates 155 Drum Road Cookstown | 2.275m tonnes | 265,000 to 300,000 tonnes Demand is expected to increase in line with growth in the construction sector. | 2.6MT est within Phase 1. 2MT est within Phase 2 | 300,000 tonnes per year – minimum estimated demand | No time limit | Additional reserves are available at depth within the existing approval for Phase 1 and Phase 2. There is also potential for a lateral extension to the site. | Yes, by seeking additional extraction of reserves within Phase 1 at depth prior to progressive restoration, that are not currently approved. Potential lateral Extension as shown in drawing Core 1, shown by directional arrows subject to control. |

Other Info

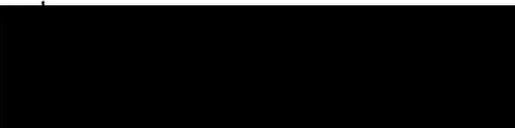
Turnover: £ 1.5m

No. of staff employed: 5 (Direct & Indirect) (Extraction)

0 (Manufacturing)

Annual Wage Bill: £ 200,000

Annual Rateable Value: £45,000

| |
|--|
| Sign  Mr Loughran On behalf of: Core Aggregates Limited Date: - 18th April 2019 |
|--|

| Site Address | Operator Name & HQ | Aggregate Extracted since commencement | Yearly Extraction rate | Remaining Reserves | Demand up until 2030 (2019-30) | Time remaining on Existing Planning | Extension Potential | Do You intend to expand this site before 2030 |
|--------------------------------|---|---|---|---|--------------------------------|-------------------------------------|--|---|
| Disert Road Draperstown | Creagh Concrete Products Limited 36 Blackpark Road, Toome | 15 Million tonnes | 250K to Maximum of 550K tpa Depending on market conditions | Estimated at 3.5million saleable tonnes following grant of planning permission in 2019. | 6 million tonnes | Circa 8 years | Yes. Company controls and has vested interests in lands north, east and west of existing operational activities See attached Plan Brackagh Potential Expansion Plan | Yes Recent grant of planning permission potentially releases estimated 3.2million tonnes of mineral Likely northerly and westerly extensions in the plan period as stipulated. |
| Magheraglass Road Cookstown | Creagh Concrete Products Limited 36 Blackpark Road, Toome | 3 – 4 million tonnes Following purchase of the site by Creagh in mid 1990's. | 150 – 200 tonnes per annum | 30,000 | 2.2million tonnes | Less than 1 month | Yes Company have vested interest in lands to the west and east of the site. See attached plan. Magheraglass Potential Expansion Plan. | Yes. Planning Application currently pending decision by Council. Company have vested interest in lands to the south, west and east of the site. See attached plan. Likely easterly and south westerly directions. |

Mid Ulster Local Development Plan 2030- Draft Plan Strategy
Mineral Supply Form



| | | | | | | | | |
|---|--|--|---|---|--|--|--|--|
| Murnells Road Cookstown | Creagh Concrete Products Limited 36 Blackpark Road, Toome | 50, 000 tonnes following purchase of site in 2016 | Maximum of 100K tpa | Estimated at 80K tonnes under historic grants of planning permission | 1.1million tonnes | Less than 1 month | Yes Company have vested interest in land to the south and north of the existing site. | Yes. Current application with the Council which will release c. 850, 000 tonnes of mineral and rationalise the site. Further mineral will be required to sustain the company and downstream value added products. Likely northerly extension to be submitted in the time period as stipulated. |
| Land to the north of Crocknamohill Road and East of Iniscarn Road, Draperstown | Creagh Concrete | None- site has been the subject of an EIA scoping exercise. No planning application has yet been submitted. | Proposed to extract up to 130,000 tonnes per annum. | 0.5 million tonnes of in situ sand and gravel | 3.8 years of life if granted planning permission | No planning application yet submitted. | Potential to extend in North and North West | Whilst at present there are no plans to expand the site before 2030, The Site may require future expansion, dependent upon future market conditions and availability of land- won sand and gravel. |

Other Info

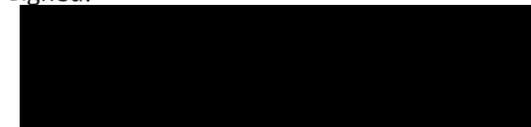
Turnover: £80million per annum

No. of staff employed: (Extraction) = 18
(Manufacturing) = 502 Total in Mid Ulster
Indirectly -sub consultants = 74

Annual Wage Bill: £18 million (500 jobs and 135 contractors).

Annual Rateable Value: £153, 188

Signed:



On behalf of: Creagh
Concrete Products Limited
Date: 17th April 2019

Mid Ulster Local Development Plan 2030- Draft Plan Strategy
Mineral Supply Form



| Site Address | Operator Name & HQ | Aggregate Extracted since commencement | Yearly Extraction rate | Remaining Reserves | Demand up until 2030 (2019-30) | Time remaining on Existing Planning | Extension Potential | Do You intend to expand this site before 2030 |
|---|--------------------|--|------------------------|------------------------|--|--|---|---|
| 3 Drumard Road Knockloughrim Magherafelt (Hard Rock) | FP McCann Ltd | Unknown | Up to 300,000 tonnes | Approx. 3.1M tonnes | Up to 3.3M tonnes (based on recent outputs) | No time limit on any of our permissions at Knockloughrim | Yes – additional lands will be required | Yes |
| Feegarron Road Cookstown (Hard Rock) | FP McCann Ltd | Unknown | Up to 60,000 tonnes | Approx. 750,000 tonnes | Up to 6.6M tonnes (based on recent outputs) | Not time limited | Possibly, if market demand increases slightly. Additional lands will be required. | Possibly, if market demand requires it |
| Tullybrick Road, Cookstown (Sand & Gravel) | FP McCann Ltd | <1,000 tonnes | Up to 35,000 tonnes | Approx. 450,000 tonnes | Unknown – dependent largely on sales of precast and other quarry products. | Not time limited | Limited potential for expansion | Expansion is unlikely before 2030 |

Mid Ulster Local Development Plan 2030- Draft Plan Strategy
 Mineral Supply Form



| | | | | | | | | |
|--|--|---------|--------------------|--------------------------|---|------------------|--|-----|
| Lough Fea Road Cookstown (Sand & Gravel) | FP McCann Ltd (previously worked by Henry Brothers Ltd) | Unknown | Up to 5,000 tonnes | Approx. 56,000 tonnes | Unknown – dependent largely on sales of precast and other quarry products. | Not time limited | Yes – additional lands will be required | Yes |
|--|--|---------|--------------------|--------------------------|---|------------------|--|-----|

Other Info

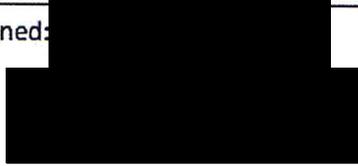
Turnover: £16.2M (Quarrying & manufacturing in Mid Ulster Only)

No. of staff employed: 10 (Directly in Extraction in Mid Ulster)

160 (Manufacturing in Mid Ulster)

Annual Wage Bill: £4.25M (Mid Ulster Only)

Annual Rateable Value: £45,000 (Mid Ulster Only)

Signed: 

On behalf of: FP MCCANN LTD

Date: 17/04/2019

| Site Address | Operator Name & HQ | Aggregate Extracted since commencement | Yearly Extraction rate | Remaining Reserves | Demand up until 2030 (2019-30) | Time remaining on Existing Planning | Extension Potential | Do You intend to expand this site before 2030 |
|--|-----------------------------------|---|---|--|--------------------------------|--|--|---|
| Land to the north of Crocknamohill Road and East of Iniscarn Road, Draperstown | Hollow Park Sand & Gravel Limited | None- site has been the subject of an EIA scoping exercise. No planning application has yet been submitted. | Proposed to extract up to 130,000 tonnes per annum. | No permitted reserves- planning application to be submitted. | Up to 150,00 tonnes per annum. | No planning application yet submitted. | Potential to extend in future. Any extension would be subject to future investigation and consideration of likely environmental impacts. | Whilst at present there are no plans to expand the site before 2030, The Site may require future expansion, dependent upon future market conditions and availability of land-won sand and gravel. |

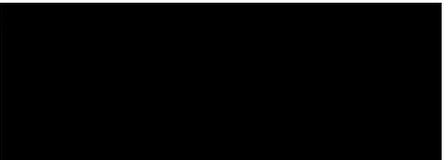
Other Info

Turnover: N/A

No. of staff employed: 0 (Extraction)
0 (Manufacturing)

Annual Wage Bill: £ N/A

Annual Rateable value: N/A

Sig: 

On behalf of:

Date: 8/4/2019.

Mid Ulster Local Development Plan 2030- Draft Plan Strategy
Mineral Supply Form



| Site Address | Operator Name & HQ | Aggregate Extracted since commencement | Yearly Extraction rate | Remaining Reserves | Demand up until 2030 (2019-30) | Time remaining on Existing Planning | Extension Potential | Do You intend to expand this site before 2030 |
|---|--|--|--------------------------------------|---|---|-------------------------------------|--|--|
| Crocknawarke Sand and Gravel Loughdoe Road, Cookstown | Loughdoe Aggregates Ltd Loughdoe Road Cookstown | c. 2 million tonnes | Average of 150, 000 tonnes per annum | Landownership issues Reduction to c. 400, 000 tonnes | 1.65million tonnes of saleable(processed sand and gravel) | 2.6 years | Yes, lands north east of the existing quarry site. | Yes. Planning permission was granted in 2004 for mineral development at this site. The site is nearing exhaustion and landownership issues will result in an extension application in 2019/2020. |
| Crockadoe Sand and Gravel Keenan Road, Cookstown | Loughdoe Aggregates Ltd Loughdoe Road, Cookstown | 50, 000 tonnes | Average of 50, 000 tonnes per annum | 450, 000 tonnes | 550, 000 tonnes of saleable sand and gravel | c. 7 years | Yes – adjacent lands | Yes. 2020 – 2021. |

Mid Ulster Local Development Plan 2030- Draft Plan Strategy
 Mineral Supply Form



| | | | | | | | | |
|-----------------------------------|--|---|---------|----------|----------|---|-----|-----|
| Murphy's Site Knockaleery Road | Loughdoo Aggregates Loughdoo Road, Cookstown | Unknown – acquired in 2007 Circa ½ million tonnes of sand and gravel since 2007 | 50, 000 | 300, 000 | 550, 000 | t | Yes | Yes |
|-----------------------------------|--|---|---------|----------|----------|---|-----|-----|

Other Info

Turnover: Undisclosed

No. of staff employed: (Extraction) 2 -4
 (Manufacturing) & Haulage 10

Annual Wage Bill: Undisclosed

Annual Rateable Value: Undisclosed

Signed: 

On behalf of: Loughdoo Aggregates

Date: 16 April 2019



| Site Address | Operator Name & HQ | Aggregate Extracted since commencement | Yearly Extraction rate | Remaining Reserves | Demand up until 2030 (2019-30) | Time remaining on Existing Planning | Extension Potential | Do You intend to expand this site before 2030 |
|---|----------------------------|--|--------------------------|--------------------------|--|-------------------------------------|---------------------|---|
| Production Facility Fermanagh and Omagh/ Mid Ulster Council Border #15 Inishakel Road Concrete production and distribution, blocks, floor slabs etc depend on continued supply of mineral - sand and gravel. | McGarrity Brothers Limited | N/A | 250,000 tonnes per annum | (whitebridge road site?) | c.2.8million tonnes of saleable sand and gravel over the plan period | N/A | Yes | We need to research within a 20km radius of our production facility at Carrickmore We are currently visiting interests in the Mid Ulster District Council Sand and Gravel resources heading east along and lands south of the ASOS Omagh - Cookstown |

Other Info

Turnover: £4.3million
 No. of staff employed: (Extraction) & (Manufacturing) 30
 Annual Wage Bill: £532, 547
 Annual Rateable Value: £25, 906

Signed: 

 Noel McGarrity
 On behalf of: McGarrity Brothers Limited
 Date: 08 04 2019

| Site Address | Operator Name & HQ | Aggregate Extracted since commencement | Yearly Extraction rate | Remaining Reserves | Demand up until 2030 (2019-30) | Time remaining on Existing Planning | Extension Potential | Do You intend to expand this site before 2030 |
|--|---|---|------------------------------------|---|---|--|--|---|
| <p>Extraction area c. 3.2 miles to the east of Ballyronan.</p> <p>Landing Point at</p> <p>116-118 Ardmore Road Derryadd BT66 6QP</p> | <p>Norman Emerson Group Ltd</p> <p>116-118 Ardmore Road Derryadd BT66 6QP</p> | <p>Unknown- sand has been historically dredging from the Lough for decades.</p> | <p>c. 300,000 per annum (2018)</p> | <p>No permitted reserves- the extraction of sand from the Lough is the subject of a deemed planning application before the Planning Appeals Commission and a planning application currently under consideration by the Department for Infrastructure (DfI) under the Planning Application references (2015/E0023-28) and LA03/2017/0310/F respectively.</p> | <p>Up to 350,000 per annum</p> <p>Combined output restricted to 1.5 million tonnes per annum.</p> | <p>Planning permission is sought for a period of 15 years.</p> | <p>Yes- calculated resources of up to 100 million tonnes in Lough.</p> | <p>N/A</p> |

Other Info

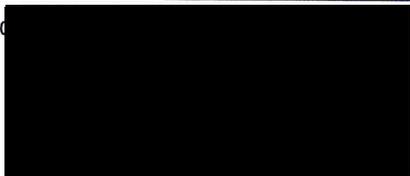
Turnover: £7.8 million

No. of staff employed: 5 (Extraction)

56 (Manufacturing)

Annual Wage Bill: £1.53 million

Annual Rateable value:

Signed 

On behalf of: *NORMAN EMERSON GROUP.*

Date: *11th APRIL 2019.*

Mid Ulster Local Development Plan 2030- Draft Plan Strategy
Mineral Supply Form



| Site Address | Operator Name & HQ | Agg Extracted since commencement | Yearly Extraction rate | Remaining Reserves | Time remaining on Existing Planning | Extension Potential | Demand up until 2030 2017-30 | Do You intend to expand this site before 2030 |
|----------------|---|----------------------------------|--|---|---|---|---|---|
| Lough Neagh | Northstone NI Ltd, Kingsway, Dunmurry BT17 9NU (Sandy bay) | Unknown | c. 150,000 tonnes per annum landed at quay in Mid Ulster District. (5 yr average) | No permitted reserves- currently subject to planning application. | N/A – but development proposed to be limited to 15 years. | Yes- calculated resources of up to 100 million tonnes in Lough. | 100,000 to 200,000 tonnes per annum at quays in Mid Ulster District. Combined output restricted to 1.5MT.pa | N/A |
| Lough Neagh | Northstone NI Ltd, Kingsway, Dunmurry BT17 9NU (Ballyginniff) | Unknown | c. 120,000 tonnes per annum landed at quay in Antrim and Newtownabbey District. (5 yr average) | No permitted reserves- currently subject to planning application. | N/A – but development proposed to be limited to 15 years. | Yes- calculated resources of up to 100 million tonnes in Lough. | 100,000 to 200,000 tonnes per annum at quays in Mid Ulster District. Combined output restricted to 1.5MT.pa | N/A |
| Lough Neagh | Northstone NI Ltd, Kingsway, Dunmurry BT17 9NU (Toome) | Unknown | c. 190,000 tonnes per annum landed at quay in Mid Ulster District. (Average) | No permitted reserves- currently subject to planning application. | N/A – but development proposed to be limited to 15 years. | Yes- calculated resources of up to 100 million tonnes in Lough. | 200,000 to 300,000 tonnes per annum at quays in Mid Ulster District. Combined output restricted to 1.5MT.pa | N/A |
| Greggs Pit | Northstone NI Ltd, Kingsway, Dunmurry BT17 9NU | Unknown | 110,000 tonnes per annum | 3,200,000 t | N/A | Yes | 100,000 – 200,000 tonnes per annum x 10 years (1-2 million tonnes) | Dependent upon potential increase in demand and continued availability of Lough Neagh resource. |
| Carmean Quarry | Northstone NI Ltd, Kingsway, Dunmurry BT17 9NU | Unknown | Limestone 100,000 tonnes per annum. Basalt 200,000 per annum for 2 years. | Limestone 1.1MT Basalt 200kt | Unlimited | Yes | 100-150,000 tonnes per annum | Yes if demand for product increases from stated 100Ktpa level. |

Other Info

Turnover: £27.55M (Mid Ulster) + Additional £10.7M generated by manufacturing processes in other plant Sites in NI, enabled by mineral extracted in Mid Ulster.

No. of staff employed: 29 (Sand Extraction)

80 (Manufacturing)

Annual Wage Bill: £3.33M

Annual Rateable Value: £55K

Signature



Brian Watt – Technical Director

On behalf of: **Northstone (NI) Limited**

Date: **11/04/2019**

| Site Address | Operator Name & HQ | Aggregate Extracted since commencement | Yearly Extraction rate | Remaining Reserves | Demand up until 2030 (2019-30) | Time remaining on Existing Planning | Extension Potential | Do You intend to expand this site before 2030 |
|---|--------------------|--|----------------------------------|--------------------|--------------------------------|-------------------------------------|---|---|
| Corvanaghan Quarry 29 Corvanaghan Rd. Cookstown Co. Tyrone BT80 9TN | Patrick Keenan | Not Known | 100,000tpa | 600,000 tonnes | 1.5MT | Main site not time limited | Yes see I/2012/0308/DETEIA, scoping request and determination. Plan attached. | Yes EIA studies underway. |
| Rocktown Quarry 35 Rocktown Road Knockloughrim BT45 8QE | Patrick Keenan | Not known | Currently Dormant H/1979/0206 | 1MT approx | | Site not time limited | | Intend to reopen during the plan period. |

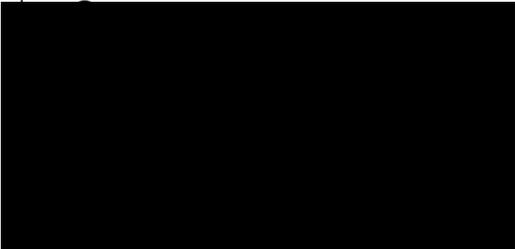
Other Info

Turnover: £ £8,000,000

No. of staff employed: 71 (Extraction)
25 (Manufacturing/Asphalt laying and production)

Annual Wage Bill: £ n/a

Annual Rateable Value: £ £20,000



On behalf of: P.Keenan
Date: 10/4/19



| Site Address | Operator Name & HQ | Aggregate Extracted since commencement | Yearly Extraction rate | Remaining Reserves | Demand up until 2030 (2019-30) | Time remaining on Existing Planning | Extension Potential | Do You intend to expand this site before 2030 |
|------------------------------|--|--|---|---|---|-------------------------------------|--|---|
| Ballynagilly Road, Cookstown | Stanley Bell And Sons Ltd The Quarry, Ballynagilly Road Cookstown. Co Tyrone BT80 9TD | Unknown | c. 90,000 tonnes per annum of sand and gravel and c. 60,000 tonnes per annum of hard rock | <p>SAND + GRAVEL 10-12yrs ???</p> <p>HARD ROCK 25yrs.</p> | Up to 150,000 tonnes per annum of sand and gravel and up to 100,000 tonnes of hard rock, dependent on market conditions | N/A | Yes, potential lands adjacent to site with potential for future mineral extraction | YES |

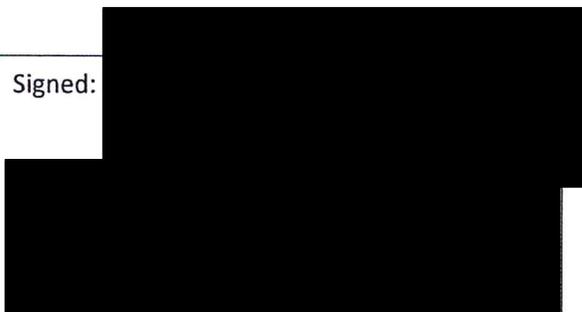
Other Info

Turnover: 2.0M

No. of staff employed: 5 (Extraction)
3 (Manufacturing)

Annual Wage Bill: 225K

Annual Rateable Value: 81,950-

Signed: 

On behalf of:

Date: 10. April 2019.

| Site Address | Operator Name & HQ | Aggregate Extracted since commencement | Yearly Extraction rate | Remaining Reserves | Demand up until 2030 (2019-30) | Time remaining on Existing Planning | Extension Potential | Do You intend to expand this site before 2030 |
|--|--|--|--------------------------------|---|------------------------------------|---|---|---|
| Extraction area c. 3.2 miles to the east of Ballyronan. Landing Points at Toomebridge; Ballyginniff; Sandy Bay; Gawley's Gate; Ardmore. | Lough Neagh Sand Traders, comprising of: Breedon; Norman Emerson; Mulholland; Northstone; and PJ Walls. C/O Ardmore Road, Derryadd, BT66 6QP | Unknown- sand has been historically dredging from the Lough for decades. | c. 1 million tonnes per annum. | The extraction of sand from the Lough is the subject of a deemed planning application before the Planning Appeals Commission and a planning application currently under consideration by the Department for Infrastructure (Dfi) under the Planning Application references (2015/E0023-28) and LA03/2017/0310/F respectively. | Up to 1.5 million tonnes per annum | Planning permission is sought for a period of 15 years. | Yes- calculated resources of up to 100 million tonnes in Lough. | N/A |

Other Info

Turnover: £45 million

No. of staff employed: 46 (Extraction)
211 (Manufacturing)

Annual Wage Bill: £7.5 million

Annual Rateable value:

Signed:



On behalf of: LOUGH NEAGH SAND TRADERS COMPANY LTD
Date: 11th April 2019

| Site Address | Operator Name & HQ | Aggregate Extracted since commencement | Yearly Extraction rate | Remaining Reserves | Demand up until 2030 (2019-30) | Time remaining on Existing Planning | Extension Potential | Do You intend to expand this site before 2030 |
|--|---|--|--|---|--|-------------------------------------|--|---|
| Tobermore Concrete Products Ltd. Lough Fea Quarry 6, Spawell Road, Cookstown. Co. Tyrone BT80 9TT | Tobermore Concrete Products Ltd. 2, Lisnamuck Road, Tobermore. Co. L'Derry BT45 5QF | Extracting since foundation of company in 1942, Estimated to have extracted 12-15 Million Tonnes | Jan-Dec 2012 161,210.65 Gross (+10%) Jan-Dec 2013 177,602.02 Gross (+27%) Jan-Dec 2014 226,811.26 Gross (+19%) Jan-Dec 2015 269,813.56 Gross (+4%) Jan-Dec 2016 280,672.77 Gross (+24%) Jan-Dec 2017 347,880.94 Gross (+1%) Jan-Dec 2018 352,627.72 Gross | 10,000,000 - 1,469,991 =8,563,009 | 2019 +15% 2020 +15% 2021 +15% 2022 +12% 2023 +12% 2024 +10% 2025 +10% 2026 +10% 2027 +10% 2028 +10% 2029 +10% 2030 +10% | | Yes- potential for lateral or vertical extensions during the plan period, however area is constrained by the presence of the proposed ACMD | Yes |

Other Info

Turnover: April 2018 = **£42.9 Million** (forecast April 2019 = **£50 million**)

No. of staff employed: **268 No.** = (Extraction) **10 No.** + (Manufacturing) **107 No.** + (Sales/Admin) **151 No.**

Annual Wage Bill: April 2018 = **£8.5 Million** (forecast April 2019 = **£9.2 Million**)

Annual Rateable Value: Lough Fea sandpit (rate assessment for period 01 Apr 2018 to 31 Mar 2019)

Sand pit and buildings/ workshop = £74,286

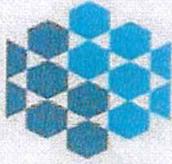
Main Office and Factory = £175,768

On behalf of:
Tobermore Concrete Products Ltd

Date: **09/04/19**

APPENDIX 7

DFE Mineral Returns Form



Year 2017 (1 January 2017 – 31 December 2017)

1. Quarry Details

| | |
|--|--|
| Name of Occupier | |
| Name of Quarry | |
| Site Address (including postcode) | |
| District Council Area | |
| Grid reference (if known) | |
| Business Office Address (including postcode) | |
| Telephone Number | |
| E-mail Address | |

SIGNED.....DATE.....

NAME IN CAPITALS.....

POSITION IN
COMPANY.....

2. **Output/Value NOTE** : please give average value per tonne before Tax, levy, transportation costs and profitability (i.e. the production cost)

| Minerals extracted for the year 2017 (1 January 2017 – 31 December 2017) | | |
|--|-------------------|---|
| Type of Mineral | Quantity (Tonnes) | Average Value per tonne (£) (see note above) |
| Basalt and Igneous Rock (other than granite) | | |
| Sandstone/Gritstone | | |
| Limestone | | |
| Sand and Gravel | | |
| Chalk / Ulster White Limestone | | |
| Fireclay | | |
| Granite | | |
| Rock Salt | | |
| Others (please specify) | | |

If no minerals were extracted, please give reason.....

.....

3. **Employee Details**

| | |
|---|--|
| Number of employees inside the pit or excavation | |
| Number of employees outside the pit or excavation (washing, dressing, grinding etc) | |
| Number of management and administration employees | |

The following sections are not required by law but will provide important information on the quarry industry in Northern Ireland as a whole. DfE is working closely with District Councils in the progressing of Local Development Plans, (LDP's) and returns will greatly assist this process

4. Reserves

Information on the amount of material available at the site (reserves) can assist with planning future developments. If known, please indicate the anticipated year when the current know reserves will be depleted to the point the quarry will close.

| | Tonnage | Anticipated closure date based on known reserves and current extraction rate. |
|--------------------------------|---------|---|
| Current permitted reserves | | |
| Estimated additional resources | | |

5. Exports

What quantity of aggregate or other value added product have you exported in the last year.

| | Material exported | Tonnage | Value |
|---------------------|-------------------|---------|-------|
| Republic of Ireland | | | |
| Great Britain | | | |
| Other | | | |

6. Sales (Northern Ireland)

What quantity of aggregate or other product have you sold in the last year in each District Council Area?

| District Council Area | Material sold | Tonnage | Value |
|------------------------------------|---------------|---------|-------|
| Antrim & Newtownabbey | | | |
| Ards and North Down | | | |
| Armagh City, Banbridge & Craigavon | | | |
| Belfast City | | | |
| Causeway Coast & Glens | | | |
| Derry City & Strabane | | | |
| Fermanagh & Omagh | | | |
| Lisburn & Castlereagh | | | |
| Mid & East Antrim | | | |
| Mid Ulster | | | |
| Newry Mourne & Down | | | |

7. Quarry status

What is the current status of your quarry? Please tick the relevant box below.

| | |
|---|--|
| Active – in production | |
| Inactive – not currently worked but reserves still contained | |
| Inactive – Planning permission received but quarry not yet active | |
| Closed – Exhausted | |

8. Recycled Aggregates

| | | | |
|--|------------|--|-----------|
| Does this site have a Waste Management Exemption Licence from NIEA to receive waste (Construction & Demolition Waste) for reprocessing as recycled aggregates? | | | |
| <i>Please tick</i> | Yes | | No |

| | |
|--|--|
| Quantity (tonnes) of waste accepted for reprocessing? | |
| Quantity (tonnes) recycled aggregates produced for end market? | |
| What is the disposal route for unsuitable material? | |

9. Site Registration with Third Party Accredited Management Systems

| | | | |
|--------------------|-----|--------------------|-----|
| ISO 9000 | Y/N | OHSAS 18000 | Y/N |
| ISO 14001 | Y/N | BS 8555 | Y/N |
| SAFE-T-CERT | Y/N | OTHERS | |

10. Aggregate Imports

Please indicate the type of material you have imported in 2016 (if any), the quantity, the country you imported it from, the country of origin, and if you are an end-user of the material or a supplier.

| Material | Quantity (tonnes) | Imported from |
|----------|-------------------|---------------|
| | | |
| | | |
| | | |

Draft Only

