Planning Statement

Section 73 Planning Application for proposed deepening of the existing quarry and an extension of time for mineral extraction and restoration operations through the variation of conditions 1 (timescales), 2 (approved plans), 4 (depth of mineral extraction), 6 (phasing plans), 41 (final restoration scheme) and 43 (water level timescales) of planning permission 01/09/0360

at

Back Lane Quarry, Carnforth, Lancashire, LA6 1EA

on behalf of

AGGREGATE INDUSTRIES

by

Heatons

Planning Environment Design

CONTENTS

DRAWINGS

Location Plan	D.006
Current Situation	D.010
Phase A	D.011
Phase B	D.012
Phase C	D.013
Phase D	D.014
Phase E	D.015
Proposed Restoration Scheme	D.016

Heatons Document Management

Revision	Author	Checked by	Date
FINAL	CS/SG/GI	CS/SG	07/05/2024

1 INTRODUCTION

1.1 Purpose of this report

1.1.1 This document is a Planning Statement (PS) prepared by Heatons on behalf of Aggregate Industries UK Limited (the Applicant) to support a planning application at Back Lane Quarry, Back Lane, Carnforth, Lancashire (the site).

1.1.2 Planning permission is being sought for the deepening of existing quarry operations and an extension of time for the quarrying operations to continue until 31 December 2077, with restoration being completed a year later, by 31 December 2078.

1.1.3 This planning application is submitted under Section 73 of the Town and Country Planning Act 1990 and proposes to vary conditions 1 (timescales), 2 (approved plans), 4 (depth of mineral extraction), 6 (phasing plans), 41 (final restoration scheme) and 43 (water level timescales) of planning permission 01/09/0360.

1.1.4 This PS accompanies the planning application and sets out the relevant planning policies to be considered as part of the application determination. The PS also sets out why the application is being submitted and relevant socio-economic considerations. The planning application is accompanied by an Environmental Statement (ES) and Non Technical Summary (NTS).

1.1.5 Back Lane Quarry has been operating for many years and is one of a very limited number of quarries able to meet the carboniferous limestone aggregate demand of the north-west England market.

1.1.6 The site is a strategic supplier of high-grade aggregates, asphalt and concrete products, all of which are essential for the repair, maintenance and improvement of the built environment in the region.

1.1.7 Since minerals are a finite natural resource, and can only be worked where they are found, best use needs to be made of them to secure their long-term conservation. Carboniferous limestone resources are extremely limited within Lancashire and the northwest of England, being confined to the Carnforth area in the north of the county and the Clitheroe area to the south. Further afield, carboniferous limestone resources are generally very heavily constrained by designations such as National Parks and National Landscapes.

1.1.8 It is considered preferable for the existing quarries to seek permission to extract additional minerals from a deeper depth, rather than to pursue a lateral extension to the existing workings.

1.1.9 It is therefore essential that the long-term plans for the site are considered at an early stage to ensure that the resource available is not unnecessarily sterilised or compromised.

1.1.10 The working of Back Lane Quarry is coordinated with the development of Tarmac's adjoining Leapers Wood Quarry which also proposes to deepen the extraction area to the same depth. It is important that the working and restoration of both quarry operations are closely coordinated as the site is essentially a single void.

1.1.11 Details of the proposed development and a site description are outlined within this PS, along with a broad assessment of any potential environmental effects and their significance. Comprehensive assessments and other background information are contained within the technical assessments which are provided as Technical Appendices to the ES. Greater detail of the potential environmental impacts as a result of the proposed development is contained within the accompanying ES. In addition to environmental matters, other considerations material to the preparation and consideration of the planning application are also set out below.

1.1.12 This PS should be read in conjunction with the following documents and plans:

- Environmental Statement;
- Environmental Statement Non-Technical Summary;
- Environmental Statement Technical Appendices.

1.1.13 In addition to the above supporting documentation the following plans are also submitted as part of the application:

- Location Plan D.006
- Current Situation D.010
- Phase A D.011
- Phase B D.012
- Phase C D.013
- Phase D D.014
- Phase E D.015
- Proposed Restoration Scheme D.016

1.2 The Applicant

1.2.1 Aggregate Industries UK Limited are at the frontline of the construction and infrastructure industries, producing and supplying an array of construction materials. With over 200 sites and around 3,700 dedicated employees, Aggregate Industries are

home to everything from aggregates, asphalt, ready-mixed concrete and precast concrete products. In addition, they produce, import and supply construction materials, export aggregates and offer national road surfacing and contracting services. A full range of products is available which help customers work sustainably, safely, professionally and profitably.

1.2.2 Aggregate Industries UK Limited are also a proud member of Holcim, which is the leading global building materials and solutions company with around 70,000 employees in over 80 countries. It holds leading positions in all regions with a balanced portfolio of developing and mature markets.

1.2.3 Operating divisions of the company are committed to managing their businesses to minimise impacts on the surrounding environment and on local communities. Aggregate Industries has accredited all of its sites to the Environmental Management System ISO 14001, which underlies the company's commitment to positive environmental stewardship.

1.2.4 The Company's work in addressing issues such as health and safety, quality control, ethical trading, carbon and water management, biodiversity, and social responsibility has culminated in them becoming the first company in the world to be certified to BES 6001, framework for responsible sourcing of construction materials, by the Building Research Establishment (BRE).

1.2.5 The Company is also working with the Wildlife Trust in relation to their Biodiversity Benchmark Award which recognises a business's ongoing commitment to improving biodiversity on their sites. The award is one that requires the Company to be able to demonstrate that continuous improvement is being made and is the subject of annual review. Bardon Hill Quarry in Leicestershire was the first hard rock site in the UK to attain this prestigious prize and the company operates a further nine quarries which been subsequently awarded Benchmark status.

1.2.6 Further information on the Company can be obtained via the website www.aggregate.com

1.3 Community Involvement

1.3.1 In accordance with good practice and the advice within the National Planning Policy Framework (NPPF), all developers proposing to submit planning applications for major development are encouraged to undertake an element of community involvement prior to submitting their application. Community involvement is an important part of the planning process and ensures that the views of the local

community are considered by the Applicant. In consultation with the Back Lane Quarry liaison committee, Public Exhibitions have been held at Over Kellet, Nether Kellet and Carnforth.

2 SITE APPRAISAL

2.1 Site Location

2.1.1 The site location is shown on drawing D.006. The current situation at the site is shown on drawing D.010 and the proposed extraction depths and consented extraction area are shown on drawings D.011 to D.015.

2.1.2 Back Lane Quarry is located within Lancaster City Council's authority area, lying to the south-east of Carnforth in Lancashire. The site is bounded to the north by the adjoining Leapers Wood Quarry operated by Tarmac Trading Ltd, to the east by woodland, to the south by agricultural land and to the west by woodland, with the M6 beyond.

2.1.3 Carnforth is the nearest major settlement to the site, the town centre of which lies around 1.5km west of the site. Further afield, Lancaster city centre lies 8.5km to the south of the site.

2.1.4 Access to Back Lane Quarry is via Back Lane to the west of the quarry. Back Lane crosses the M6 and then travels north along the eastern edge of Carnforth to a junction with Kellet Road. From here the wider strategic highway network can be accessed.

2.2 Site Description

2.2.1 The site entrance is located to the west of the quarry off Back Lane. To the east of the entrance road is an electricity substation, associated with the 78m tall wind turbine on site, the site offices and workshop buildings. A weighbridge is located directly north of the site offices, with a second weighbridge to the east. Further to the north of the site offices is a lagoon and, further north, HGV parking bays. The site car park is located east of the HGV park, alongside the wind turbine compound.

2.2.2 Further south-east of the site entrance is the plant site, containing an asphalt plant, primary and secondary crushers, primary and secondary screens and associated control room. A laboratory is located to the north-west of the asphalt plant. An asphalt tip is located to the north-east of the primary crusher, close to the northern boundary separating the site from Leapers Wood Quarry.

2.2.3 Within the south-eastern extent of the site is a concrete blockworks and stocking area with associated site offices which are part of the High Roads Quarry.

2.3 Site Context

2.3.1 To the south of the site there are agricultural fields leading down to Back Lane, Main Road and the village of Nether Kellet. Hawthorns Caravan Park lies to the south-east of the quarry. To the west of the site is a belt of woodland screening the site from the M6 which runs in a north / south direction past the site. To the east of the quarry is Kit Bill Wood, an Ancient and Semi-Natural Woodland covering 4.86 ha.

2.3.2 The nearest residential areas to the extraction area lie around 400m to the north-west on the edge of Carnforth, beyond the M6. Over Kellet village lies around 700m to the north-east and Nether Kellet village lies around 550m to the south of the quarry at its nearest point.

2.3.3 There are a number of Listed Buildings within 2km of the site, the closest of which is Grade II* listed 'Church of St Cuthbert' approximately 500m to the east. The nearest cluster of listed buildings are within the village of Over Kellet around 800m north-east of the site.

2.3.4 A Public Footpath (PROW ref: 1-24-FP 7) runs north to south along the eastern side of Kit Bill Wood (to the east of the quarry), reaching Main Road. Here it runs parallel with Main Road before heading east to west (PROW ref: 1-22-FP 5) across the agricultural fields to the south of the quarry.

2.3.5 There are two Sites of Special Scientific Interest (SSSI) within 2km of the site. Crag Bank SSSI is a 3.7ha biological designation located around 1.5km to the west of the site. Thwaite House Moss SSSI is a 7.25ha biological designation approximately 1km to the south-west of the site.

2.3.6 The Forest of Bowland National Landscape and the Arnside and Silverdale National Landscape lie around 1.7km to the east and 1.8km to the west respectively.

2.4 Background and Planning History

2.4.1 Back Lane Quarry is a long established limestone quarry which benefits from a number of planning permissions granted since the 1940's, inter alia, an extension to the quarry and erection of a crushing plant approved in 1948 (ref: 2/5/9), and erection of a coating plant and emission stack approved on 7th March 1983 (ref: 01/82/1118).

2.4.2 The mineral operations are covered by an Environment Act 1995 Review of Old Mineral Permission (ROMP) granted in 2006 (ref: 1/03/1186) which permits working until 2048. The ROMP was varied by planning permission reference 1/09/360 in July 2009 which allowed the controls on stockpile heights to be amended.

2.4.3 Planning permission for the siting of a modular office block and associated car parking on land south-east of Back Lane Quarry was granted in 2004 (ref: 1/03/1591). Planning permission to vary condition 2 of planning permission 1/13/0700 to allow the existing office block to be retained until 7th March 2030 was granted on 30th January 2014 (ref: 01/13/0700).

2.4.4 Installation of a 78m high wind turbine (including blade length) on a former spoil mound within the north-western extent of the site with associated transformer container and substation container was approved on 1st March 2013 (ref: 01/12/0782). A non-material amendment was granted on 8th April 2014 (ref: 01/12/0782NM1) to reduce the size and amend the appearance of the transformer container associated with the wind turbine. A retrospective application for the installation of a sub-station and below ground cable associated with the wind turbine was approved on 17th April 2014 (ref: LCC/2014/0040).

2.4.5 Planning permission for a change of use application for recycling of road planings and road base within an area of the site that has previously been quarried was granted on 9th June 2014 (ref: LCC/2014/0043).

3 DESCRIPTION OF THE PROPOSED DEVELOPMENT

3.1 Introduction

3.1.1 The proposed development comprises a deepening of the currently permitted mineral extraction operations and an extension of time to allow the mineral reserves to be fully worked and the site restored.

3.2 Existing Operations

3.2.1 Back Lane Quarry comprises an operational limestone quarry, a concrete block works, an asphalt plant which supplies up to 120,000 tonnes of coated road stone products per year, areas of stockpiling, site offices and associated car parking. The wider site also accommodates a wind turbine which helps meet a proportion of the site's demand for electricity.

3.2.2 The site is accessed from Back Lane and currently sells approximately 1.1 million tonnes per annum (mtpa) of high quality limestone aggregate.

3.2.3 The current permission for the site restricts working to a maximum depth of 38mAOD via planning condition.

3.2.4 The existing permission also limits the timescales for extraction and restoration of the site to 29 April 2048 and 29 April 2049 respectively.

3.2.5 The existing theoretical reserve remaining on site in January 2023 has been calculated to be 19.4 million tonnes (mt). However, only 6.8mt is currently accessible due to reserves being constrained by plant and machinery, buildings and historic mineral waste tips.

3.3 Description of Proposed Development

3.3.1 This planning application is submitted under Section 73 of the Town and Country Planning Act 1990 and proposes to vary conditions 1 (timescales), 2 (approved plans), 4 (depth of mineral extraction), 6 (phasing plans), 41 (final restoration scheme) and 43 (water level timescales) of planning permission 01/09/0360.

<u>Reserves and output</u>

3.3.2 Back Lane Quarry extracts a high-grade limestone aggregate, the supply of which is critical in facilitating the construction of strategic projects throughout the region. A significant proportion (around 15%) of the aggregate won from the site is used as feedstock in the site's asphalt plant.

3.3.3 This application seeks permission for the deepening of the current quarrying operations in order to extract the limestone reserves to a depth of -37mAOD (i.e. an

additional depth of 75m). Allowing for the joint working of the boundary between Back Lane Quarry and Leapers Wood Quarry, the proposed changes would secure the future of this strategic site and potentially release a further 40 million tonnes (mt) of limestone, providing an overall resource of around 60mt, including the existing workable reserves and those reserves currently constrained.

3.3.4 The existing annual sales from the site of approximately 1.1mt would remain unchanged.

Phasing

3.3.5 The mineral would be extracted in 5 phases (phases A to E).

Phase A

3.3.6 Mineral extraction would continue within the permitted limit of extraction, working southwards to extract rock down to a level of 38mAOD, with subsequent deepening to 23mAOD within the Phase period.

3.3.7 Extracted mineral would be processed on site at the Back Lane Quarry processing plant, temporarily stocked and transported off-site by HGV to point of sale.

3.3.8 Phase A would release approximately 12.455mt of mineral.

Phase B

3.3.9 Phase B would comprise the partial removal of the existing quarry tip, to enable the extraction of mineral below. Tip material would be temporarily stored within the Phase A area, which would also become the 'active tip'.

3.3.10 Mineral extraction would continue within the permitted limit of extraction, with deepening to a depth of 23mAOD within the Phase period.

3.3.11 Extracted mineral would be processed on site within the Back Lane processing plant, temporarily stocked and transported off site by HGV to point of sale.

3.3.12 Phase B would release approximately 6.964mt of mineral.

Phase C

3.3.13 Phase C would comprise the continuation of mineral extraction within the permitted limit of extraction, with the deepening to a depth of 23mAOD within the Phase period, together with the extraction of rock beneath the existing stockyard.

3.3.14 Extracted mineral would be processed on site within the Back Lane processing plant, temporarily stocked and transported off site by HGV to point of sale. Any additional quarry waste rock material would be placed within the temporary tip within Phases A and B.

3.3.15 Phase C would release approximately 5.318mt of mineral.

Phase D

3.3.16 During Phase D, the Back Lane processing plant would be decommissioned and removed from the site. During and after its removal, a temporary mobile processing plant would be used within the quarry void to ensure the processing of rock and to avoid the sterilisation of the mineral resource.

3.3.17 During this phase, the temporary placement / active tip would require relocating within the quarry void (to access the mineral resource).

3.3.18 Mineral extraction would continue within the permitted limit of extraction, with deepening to a depth of 8mAOD and -7mAOD within the Phase period, together with the extraction of rock beneath the existing stockyard and processing plant areas.

3.3.19 Extracted mineral would be processed on site using mobile plant, to be located adjacent to the extraction face. Material would be temporarily stocked within the quarry void and transported off site by HGV to point of sale.

3.3.20 Phase D would release approximately 17.204mt of mineral.

Phase E

3.3.21 Mineral extraction would continue during Phase E with deepening to a depth of -37mAOD within the Phase period.

3.3.22 Extracted mineral would be processed on site using mobile plant, to be located adjacent to the extraction face. Material would be temporarily stocked within the quarry void and transported off-site by HGV to point of sale.

3.3.23 Post mineral extraction, processing and sale of stock, all quarry plant and machinery would be decommissioned and removed from the site. This would include the High Roads Concrete Block Works.

3.3.24 Phase E would release approximately 18.237mt of mineral.

Timescales

3.3.25 In order to efficiently extract the additional reserves within the site, it is necessary to extend the currently permitted timescales. Assuming the existing extraction rates are maintained, this would require an extension from 29 April 2048 to 31 December 2077 for mineral extraction and from 29 April 2049 to 31 December 2078 for restoration.

Employment

3.3.26 The site currently directly employs 112 full time equivalent staff. This comprises 25 staff at the quarry, 3 at the laboratory, 6 at the asphalt plant, 16 at the concrete products factory and 62 at the High Roads regional office. In addition to this there are a significant number of hauliers and contractors reliant upon the continued operation of Back Lane Quarry. No changes are proposed to the current number of staff employed on the site, albeit the proposals would be likely to result in additional jobs being created in the future.

Hours of Operation

3.3.27 Condition 13 and 14 of the site's extant planning permission (ref: 01/09/0360) specify the operating hours for the site, as follows:

Condition 13

- 'The use of explosives shall only take place between the hours of 1000 and 1700 Mondays to Fridays (except Public Holidays) and between 0830 and 1200 on Saturdays and at no other time, except in emergency situations. In such emergency situations the operator shall inform the County Planning Authority prior to blasting or within 48 hours of a blast having taken place'.

Condition 14

- 'Notwithstanding the hours of working contained in condition 13 above, no soils or overburden shall be stripped or re spread from any part of the site nor shall construction of storage, landscape or baffle mounds take place on any part of the site before 0730 hours or after 1800 hours on Monday to Fridays (except Public Holidays) or before 0730 hours of after 1300 on Saturdays or at any time on Sundays or Public Holidays.'

3.3.28 Due to the critical need for flexible working to enable the on-site roadstone coating plant to service specific overnight road construction projects, no restrictions are

placed on hours of operation of the mineral extraction activities within the quarry or the coating plant located within the site.

3.3.29 No changes are proposed to the above established operating hours.

Traffic & Access

3.3.30 The access to the quarry is from Back Lane, to the west of the site. This access is used by all quarry traffic, the roadstone coating plant traffic and all HGV traffic from the concrete products plant. There is also an access from Main Road to the south of the site. However, this southern access to the site is restricted to use only by cars and light goods vehicles from the concrete products plant and offices.

3.3.31 No changes are proposed to the existing site access arrangements.

Lighting

3.3.32 No changes are proposed to the current lighting arrangements within the site.

Restoration

3.3.33 The restoration of Back Lane Quarry would be undertaken as a combined restoration scheme which would be achieved through the restoration and after-use for both Back Lane Quarry and the adjacent Leapers Wood Quarry. An approved restoration scheme exists for the restoration of these sites, as shown on Drawing Number BLQ 5/1 'Combined Conceptual Restoration Scheme'. The scheme is based on the mineral reserves being worked to a depth of 38mAOD. This planning application seeks permission to extract mineral to -37mAOD and therefore, a revised restoration scheme has been prepared.

3.3.34 Given its location close to two National Landscapes, the Lake District National Park and attractive rural parts of the north-west of England, as well as its proximity to the M6 motorway network, the resultant void at the two quarries would be well situated for recreational and amenity after-uses. As with the approved restoration scheme, the proposed restoration scheme recognises the potential for a multi-purpose after-use consisting of water and land-based recreational activities centered on and around a central lake, supplemented by discrete areas of nature conservation habitat, generally located on the quieter outer fringes.

4 PLANNING POLICY CONSIDERATIONS

4.1 Introduction

4.1.1 Section 38(6) of the Planning and Compulsory Purchase Act 2004 states that determination by the relevant MPA, in this instance, Lancashire County Council, must be made in accordance with the Development Plan unless material considerations indicate otherwise.

4.1.2 In reaching a decision on this application, the first consideration is therefore whether the proposals accord with the Development Plan. Having done this, it is then necessary to have regard to all other material considerations, which include all relevant policy considerations contained in the emerging development plan as well as National Planning Policy and guidance.

4.2 The Development Plan

4.2.1 The Development Plan in this case includes:

- Joint Lancashire Minerals and Waste Development Framework Core Strategy DPD (Adopted February 2009);
- Joint Lancashire Minerals and Waste Local Plan - Site Allocation and Development Management Policies (Adopted September 2013);
- Lancaster Local Plan Part One: Strategic Policies & Land Allocations DPD (Adopted July 2020); and
- Lancaster Local Plan Part Two: Development Management DPD (Adopted July 2020).

4.2.2 Material considerations include:

- National Planning Policy Framework (last amended 2023);
- Planning Practice Guidance; and
- Review of the Minerals and Waste Local Plan (Emerging).

<u>Joint Lancashire Minerals and Waste Development Framework Core Strategy DPD (February 2009)</u>

4.2.3 The Core Strategy was adopted in February 2009 as part of the Local Development Framework for Lancashire. The document sets out the future for minerals and waste development in Lancashire until 2021 and outlines the strategic policies required to deliver the vision. However, it should be noted that the DPD is now considered out of date and therefore proposals now fall to be considered against national policy.

Notwithstanding this, policies of relevance within the Core Strategy are set out below.

4.2.4 The Core Strategy has the following objectives:

- To identify and safeguard mineral resources for specific purposes which meet a proven and sustainable need, recognising their environmental, cultural and landscape value and their potential for future working;
- To provide a sustainable supply of locally sourced minerals, sufficient to meet our local, regional, and national needs;
- To provide certainty for businesses, operators, and the public by identifying sites and areas for new mineral extraction, whilst seeking to conserve and enhance Lancashire's environmental assets and ensure a high quality of life for all;
- To support high standards of working practices and environmental protection and take an integrated and innovative approach to enhancing the quality of land and our landscapes during extraction and in restoration for beneficial after-use, including potential benefits to biodiversity, amenity, and access to the countryside; and
- To encourage and enable local communities, businesses, and local authorities to work together in coming to decisions and delivering solutions for sustainable resource management.

4.2.5 Policy CS1 (Safeguarding Lancashire's Mineral Resources) states that minerals will only be extracted where they meet a proven need for materials with those particular specifications. Mineral resources are to be conserved where they have an economic, environmental or heritage value. Mineral Safeguarding Areas will be used to identify mineral resources with the potential for extraction. The site is identified as a limestone site with 'Long-Term Strategic Provision' on the Key Diagram, situated within a 'Limestone Resource Area'.

4.2.6 Policy CS2 (Minimising the Need for Mineral Extraction) requires new developments to maximise the use of recycled and secondary materials.

4.2.7 Policy CS3 (Meeting the Demand for New Minerals) sets out the provision of 57.8 million tonnes of limestone between 2001 – 2021 to be met through a combination of rolling forward and identifying a minimal range of new sites and relying on secondary and recycled aggregates. No additional land was allocated for limestone extraction for aggregate use before 2021.

4.2.8 Policy CS5 (Achieving Sustainable Minerals Production) encourages alternatives to the bulk transportation of minerals by road. Criteria for site identification will be developed in order to ensure new sites identified for minerals development are sustainable. Concurrent mineral working is encouraged where it will maximise the recovery of materials worked.

Joint Lancashire Minerals and Waste Local Plan - Site Allocation and Development Management Policies - Part 1 (2013)

4.2.9 The Site Allocation and Development Management Policies Local Plan (Part 1) provides site specific policies and allocations, and detailed development management policies for minerals and waste planning in the areas covered by the Councils of Lancashire, Blackpool and Blackburn with Darwen. Policies of relevance within the Core Strategy are set out below.

4.2.10 Policy NPPF 1 (Presumption in Favour of Sustainable Development) states that when a planning application accords with the policies in the Local Plan, it will be approved without delay, unless material considerations indicate otherwise.

4.2.11 Policy DM1 (Management of Waste and Extraction of Minerals) supports the extraction of mineral provision as set out in the Core Strategy and management of waste capacity as set out in Policy WM1.

4.2.12 Policy DM2 (Development Management) sets out the parameters for minerals and waste management operations. Minerals and waste developments will be supported that can demonstrate a positive contribution to the:

- Local and wider economy;
- Historic environment;
- Biodiversity, geodiversity and landscape character;
- Residential amenity of those living nearby;
- Reduction of carbon emissions; and
- Reduction in the length and number of journeys made.

4.2.13 Policy DM3 (Planning Obligations) states that where planning obligations are required to make a development acceptable in terms of its social, economic and environmental impacts, the MPA / WPA will seek to ensure the provision of, where appropriate:

- Access or road improvements;
- Long term aftercare or management;
- Provision of new or diverted footpaths;
- Public access to restored sites;
- Compensatory provision elsewhere for ecological mitigation;
- Wider transport improvements highlighted in the development's travel plans;
- District heating infrastructure sought under Policy DM4;
- Time limiting the development; and
- Ensuring full site restoration by a fixed date.

4.2.14 Policy SA2 (Safeguarding of Land for Access Improvements) safeguards land for the 'haulage route through Back Lane and Leapers Wood Quarries', identified as route 'MRT14' on the policies map.

4.2.15 Policy M1 (Managing Mineral Production) states that development will not be supported for any new extraction of sand and gravel, limestone, gritstone or brickshale. If permitted reserves are unable to maintain the required production levels (identified in the latest sub-regional apportionments), increasing the working depth at existing limestone quarries and extraction at Dunald Mill Quarry will be supported.

4.2.16 Policy M2 (Safeguarding Minerals) states that development within Minerals Safeguarding Areas as outlined on the Policies Map will not be supported if it is incompatible by reason of scale, proximity and permanence with working the minerals. The policy also sets out exemptions to this, such as in areas where mineral has no value or where prior extraction can take place.

<u>Lancaster District Council Local Plan Part One: Strategic Policies & Land Allocations DPD (Adopted July 2020)</u>

4.2.17 The Strategic Policies & Land Allocations DPD was adopted on 29th July 2020 and allocates land for housing, employment, services and new investments within Lancaster District.

4.2.18 Policy SP1 (Presumption in Favour of Sustainable Development) echoes guidance contained within the NPPF. The Council are required to take a positive approach

when considering development proposals. Planning applications that accord with the Development Plan should be approved without delay.

4.2.19 Policy SP8 (Protecting the Natural Environment) seeks to ensure that the natural environment is protected, in particular biodiversity and geodiversity. Development should address any potential flood risk issues, taking into consideration the effects of climate change. The district's biodiversity and geodiversity should be maintained and enhanced through the appropriate location of uses, sympathetic design, sustainable construction techniques and appropriate mitigation measures.

4.2.20 Policy SP10 (Improving Transport Connectivity) states that, where appropriate, development proposals will be expected to contribute to the delivery of important transport infrastructure.

4.2.21 Policy EN3 (Open Countryside) requires development proposals in the open countryside to have due regard to the relevant policies contained within the Local Plan, in particular the Development Management DPD. The site is located within the open countryside.

4.2.22 Policy EN7 (Environmentally Important Areas) requires development proposals which may impact upon regionally designated sites to have due regard to Policy DM44 of the Development Management DPD. Part of the site is designated as a regionally important area.

<u>Lancaster District Council Local Plan Part Two: Development Management DPD (Adopted July 2020)</u>

4.2.23 Policy DM29 (Key Design Principles) seeks to ensure that development responds to its environment, having regard to the existing character and quality of the area. The Council will expect development to, inter alia:

- Contribute positively to the identity and character of the area through good design, having regard to local distinctiveness, appropriate siting, layout, palate of materials, separation distances, orientation and scale;
- Ensure there is no significant detrimental impact to amenity in relation to overshadowing, visual amenity, privacy, overlooking, massing and pollution;
- Create buildings and spaces that are adaptable to changing social, environmental, technological and economic conditions.

4.2.24 Suitable and safe access to the existing highway network should be provided to ensure highway safety. Landscaping should be provided to protect adjoining

sensitive users and the open countryside. Potential sources of air quality, noise and light pollution should be minimised.

4.2.25 Policy DM31 (Air quality Management and Pollution) seeks to ensure that development proposals do not negatively impact upon air quality in the district. Proposals must demonstrate how they have sought to minimise polluting emissions and, where necessary, incorporate on-site and/or off-site mitigation measures. Air Quality Assessments may be required for relevant development proposals.

4.2.26 Policy DM33 (Development and Flood Risk) requires development proposals to take a sequential approach which directs development to the areas of lowest risk of flooding.

4.2.27 Policy DM34 (Surface Water Run-off and Sustainable Drainage) requires surface water to be managed sustainably. Sustainable drainage systems should be implemented unless it is inappropriate or impractical. A drainage strategy is required for all major development proposals.

4.2.28 Policy DM35 (Water Supply and Waste Water) seeks to ensure that new development does not have a detrimental impact on surface water and groundwater quantity and quality and the quality and standard of bathing water in the locality. Waste-water must be disposed of efficiently and effectively. Proposals should seek to increase water availability and protect and improve the quality of rivers or groundwater where possible.

4.2.29 Policy DM44 (The Protection and Enhancement of Biodiversity) requires proposals to protect and enhance biodiversity and/or geodiversity and minimise both direct and indirect impacts. Where possible, a net gain of biodiversity assets should be delivered. Where harm is identified, developers must demonstrate how the harm will be mitigated or compensated for in line with the mitigation hierarchy.

4.2.30 Developments affecting environmentally sensitive sites and species will not be permitted where there is an adverse effect, unless the benefits of the proposal outweigh the potential adverse effects. If the adverse effects are unavoidable a development proposal will be required to demonstrate that:

- Adverse effects are minimised;
- Provision is made for mitigation and compensation measures, such as on-site landscape works, off-site habitat creation, species relocation and ongoing

management as appropriate, such that there is a clear net gain for biodiversity; and

- The biodiversity value of the site is not compromised, both on its own and as part of the wider network of sites.

4.2.31 Development should protect and enhance the districts soil resource and avoid the use of best and most versatile agricultural land.

4.2.32 Policy DM45 (The Protection of Trees, Hedgerows and Woodland) states that the council will protect ancient trees and ancient woodland. New development should positively incorporate trees and hedgerows, unless justification is provided as part of an Arboricultural Implications Assessment (AIA). Replacement trees will be sought where there are losses. Opportunities to plant new trees, hedgerows and woodland will be supported.

4.2.33 Policy DM45 (Development and Landscape Impact) requires a Landscape and Visual Impact Assessment to be prepared for development that has the potential for significant landscape or visual impact. Development proposals should be designed to avoid negative landscape and visual effects and, where unavoidable, mitigation measures and compensatory measures should be implemented.

4.2.34 Policy DM47 (Economic Development in Rural Areas) supports economic development in rural areas, providing the rural vitality and character of the area is maintained. Proposals will need to demonstrate the community benefits of the scheme. Sites in rural area which are allocated for particular purposes through the Development Plan will be supported in principle.

4.2.35 Policy DM57 (Health and Well-being) requires development in the district to promote health and well-being and contribute to addressing health inequalities. Measures to achieve this include, inter alia, ensuring that development does not have an adverse impact on the environment through air, noise and water pollution.

4.2.36 Policy DM60 (Enhancing Accessibility and Transport Linkages) seeks to ensure that development generating significant footfall and / or motorised vehicle journeys is located where sustainable travel patterns can be achieved. Development proposals should, inter alia, include measures that address matters of highway safety to the satisfaction of the local highway authority and ensure that the proposal site can be accessed safely both during the construction and occupation phases of development. Any significant impacts must be addressed through the preparation of a Travel Plan.

Where highway capacity is insufficient, provision of new transport and highway infrastructure will be sought.

4.2.37 Policy DM62 (Vehicle Parking Provision) requires development proposals to provide car and cycle parking in accordance with the levels and layout requirements set out in Appendix E of the DM DPD.

4.2.38 Policy DM63 (Transport Efficiency and Travel Plans) supports proposals that maximise sustainable modes of transport. Appropriate contributions should be made via development proposals to improve transport infrastructure. A Transport Assessment may be required to assess the likely impacts of a development proposal on the local highway network.

Draft Climate Emergency review of the Strategic Policies & Land Allocation Development Plan Document (March 2022) – Submission Version

4.2.39 In light of Lancaster declaring a climate emergency in 2019, the City Council made the decision to review the Local Plan to seek better environmental outcomes for the district and assist in achieving net zero carbon ambition of the Council.

4.2.40 Policy SP8 is updated to include for proposals considering the resilience of development against climate change.

4.3 Material Considerations

National Planning Policy Framework

4.3.1 The National Planning Policy Framework (NPPF) has been subject to several amendments since it was first published in 2012, the latest being in December 2023. The NPPF sets out the principle of a presumption in favour of sustainable development. Where a proposal satisfies the requirement of NPPF i.e. being sustainable and in accordance with the development plan, planning authorities are directed to grant planning permission without delay unless material considerations indicate otherwise.

4.3.2 Paragraph 7 of the NPPF defines the objective of sustainable development, which can be summarised as meeting the needs of the present without compromising the ability of future generations to meet theirs.

4.3.3 Paragraph 8 states that the planning system has three overarching objectives, which are interdependent and need to be pursued in mutually supportive ways. These are:

- An economic objective – to help build a strong, responsive and competitive economy, by ensuring that sufficient land of the right types is available in the

right places and at the right time to support growth, innovation and improved productivity; and by identifying and coordinating the provision of infrastructure;

- A social objective – to support strong, vibrant and healthy communities, by ensuring that a sufficient number and range of homes can be provided to meet the needs of present and future generations; and by fostering well-designed, beautiful and safe places, with accessible services and open spaces that reflect current and future needs and support communities' health, social and cultural well-being; and
- An environmental objective – to protect and enhance our natural, built and historic environment; including making effective use of land, helping to improving biodiversity, using natural resources prudently, minimising waste and pollution, and mitigating and adapting to climate change, including moving to a low carbon economy'.

4.3.4 So that sustainable development is pursued in a positive way, at the heart of the Framework is a presumption in favour of sustainable development (paragraph 10). Paragraph 11 sets out that decision taking should apply the presumption in favour of sustainable development which means that development proposals that accord with an up-to-date development plan should be approved without delay, and in instances where there are no relevant development plan policies, or policies important for decision making are out of date, permission should be granted unless:

- the application of policies in this Framework that protect areas or assets of particular importance provides a clear reason for refusing the development proposed; or
- any adverse impacts of doing so would significantly and demonstrably outweigh the benefits, when assessed against the policies in this Framework taken as a whole.

4.3.5 Paragraph 38 states that decision-makers at every level should seek to approve applications for sustainable development where possible.

4.3.6 The bulk of the Framework contributes to the definition of sustainable development and includes the following paragraphs which are of particular relevance to this development, following the order of the NPPF document.

A Strong, Competitive Economy

4.3.7 Building a strong, competitive economy, paragraphs 85-89 state that the planning system should operate to create conditions in which businesses can invest, expand and adapt, with significant weight placed on the need to support economic growth and productivity.

Sustainable Transport

4.3.8 Paragraphs 114-117 relate to the approach taken towards considering development proposals in a transport context. Proposals should ensure that safe and suitable access to an application site can be achieved for all users and that significant impacts on the transport network (including highway safety) can be cost effectively mitigated to an acceptable degree.

4.3.9 Paragraph 115 states that development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe.

Conserving and Enhancing the Natural Environment

4.3.10 Paragraph 180 states that determining planning applications should contribute to and enhance the natural and local environment. Measures to achieve this include, inter alia:

- protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils;
- minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures; and
- preventing new and existing development contributing to unacceptable levels of soil, air, water, or noise pollution or land instability.

4.3.11 Paragraph 186 advises that in decision making, refusal of permission should be issued only if adequate mitigation for proposals where significant harm to biodiversity cannot be avoided, cannot be achieved, or, as a last resort, compensated for.

4.3.12 Paragraph 188 advises that 'the presumption in favour of sustainable development does not apply where the plan or project is likely to have a significant effect on a habitats site (either alone or in combination with other plans or projects), unless an

appropriate assessment has concluded that the plan or project will not adversely affect the integrity of the habitats site'.

Conserving and Enhancing the Historic Environment

4.3.13 Paragraphs 195-214 outline the approach to the conservation and enhancement of the historic environment. The NPPF seeks to ensure that in decision making, local planning authorities aim to avoid or minimise any conflict between the conservation of a heritage asset and a development proposal.

4.3.14 Paragraph 200 advises that: 'In determining applications, local planning authorities should require an applicant to describe the significance of any heritage assets affected, including any contribution made by their setting. The level of detail should be proportionate to the assets' importance and no more than is sufficient to understand the potential impact of the proposal on their significance'.

Facilitating the sustainable use of minerals

4.3.15 Chapter 17 of the NPPF relates specifically to minerals and facilitating the sustainable use of mineral assets. Minerals are stated as being essential to supporting sustainable economic growth and the Framework prioritises their long-term conservation.

4.3.16 Paragraph 215 makes it clear that, *'it is essential that there is a sufficient supply of minerals to provide the infrastructure, buildings, energy and goods that the country needs. Since minerals are a finite natural resource, and can only be worked where they are found, best use needs to be made of them to secure their long-term conservation.'*.

4.3.17 Paragraph 216 of the NPPF states that mineral resources should be safeguarded by defining Mineral Safeguarding Areas; and adopt appropriate policies so that known locations of specific minerals resources of local and national importance (such as aggregates) are not sterilised by non-mineral development where this should be avoided (whilst not creating a presumption that the resources defined will be worked).

4.3.18 Paragraph 216 also states that policies should encourage the prior extraction of minerals, where practical and environmentally feasible, if it is necessary for non-mineral development to take place.

4.3.19 Paragraph 217 emphasises that *'great weight should be given to the benefits of mineral extraction, including to the economy'* and that when determining planning applications for mineral extraction, local planning authorities should:

- As far as practical, provide for the maintenance of landbanks of non-energy minerals from outside National Parks, the Broads, National Landscapes and World Heritage Sites, scheduled monuments and conservation areas;
- Ensure that there are no unacceptable adverse impacts on the natural and historic environment, human health or aviation safety, and take into account the cumulative effect of multiple impacts from individual sites and nearby sites;
- Ensure that any unavoidable noise, dust and particle emissions are controlled, mitigated or removed at source and noise limits are established where appropriate;
- Provide for restoration and aftercare at the earliest opportunity to be carried out to high environmental standards through appropriate conditions. Bonds or other financial guarantees should only be sought in exceptional circumstances.

4.3.20 NPPF Paragraph 219 sets out Government planning policy on the provision of construction aggregates in England and advises on a minimum landbank for crushed rock of 10 years in each mineral planning authority area.

Planning Practice Guidance

4.3.21 The National Planning Practice Guidance (NPPG) is a web-based resource which brings together planning guidance on various topics into one place. It was launched in March 2014 and gives guidance on many aspects of planning. The PPG has been reviewed and the topics of particular relevance are as follows:

- Design;
- Noise;
- Travel Plans, Transport Assessments and Statements;
- Minerals;
- Natural Environment;
- Flood risk and Coastal change;

- Open spaces, sports and recreation facilities, public rights of way and local green space;
- Planning Obligations;
- Use of Planning Conditions;
- Water Supply, Wastewater and Water Quality.

Joint Lancashire Local Aggregate Assessment (LAA) (2023 with 2022 data)

4.3.22 The LAA (2023) provides an overview of the sand and gravel, limestone and gritstone reserve position for the joint councils of Lancashire, Blackpool and Blackburn with Darwen.

4.3.23 The latest sub-regional apportionment figure for crushed rock set by the North West Aggregate Working Party was in 2011 and equates to 2.54 mt per annum. The rolling 10 year sales average is 2.25 mt (2013 – 2022) whereas the rolling 3 year sales average is 2.52 mt per annum (2020 – 2022).

4.3.24 The LAA includes housing delivery forecasts for the District which have been calculated using Lancaster City Council's Local Plan forecast. This figure, 3mt, indicates that although permitted reserves and annual outputs are sufficient at present, there may be a need to consider the permitted reserves' ability to meet the forecast demand.

4.3.25 The LAA concludes that the assessment of supply and demand for crushed rock, together with a consideration of the economic and local circumstances, indicates that there is potential for a shortfall towards the end of the forecast demand period of 15 years (i.e. 2021-2036).

North West Aggregates Working Party (NWAWP) Annual Monitoring Report 2021 (including data from 2019 and 2020)

4.3.26 The NWAWP Annual Monitoring Report (AMR) provides sales and reserve data for the period 1st January to 31st December 2020. The report also contains data for 1st January to 31st December 2019, which has been taken from the Government's Aggregate Minerals Survey 2019 (AM2019) undertaken by the BGS.

4.3.27 The AMR provides information on aggregates in the North West of England so that the NWAWP can contribute to the monitoring of the Managed Aggregate Supply System (MASS) and assess whether the North West of England is making a full contribution towards meeting both national and local aggregate needs.

4.3.28 Further information regarding the information contained in the AMR is provided in Section 5 'Need Assessment and Sustainability'.

Review of the Minerals and Waste Local Plan

4.3.29 A review of the adopted Minerals and Waste Local Plan (MWLP) is currently in preparation. A Scoping consultation was carried out in November 2014 and the responses were published in May 2018. Consultation on the Publication version of the emerging MWLP was anticipated in Summer 2019 as per the latest Local Development Scheme (LDS) (August 2018). A revised LDS is anticipated to be published which will provide an updated timetable for preparation of the emerging MWLP.

4.4 Planning Policy Conclusions

4.4.1 Minerals and Waste Core Strategy Policy CS1 (Safeguarding Lancashire's Mineral Resources) safeguards minerals of economic, environmental or heritage value from permanent sterilisation through designating Mineral Safeguarding Areas (MSAs). Policy M2 (Safeguarding Minerals) of the Minerals and Waste Local Plan (Site Allocation and Development Management Policies) (MWLP) states that development within Minerals Safeguarding Areas as outlined on the Policies Map will not be supported if it is incompatible by reason of scale, proximity and permanence with working the minerals. The site is identified within a MSA on 'Policies Map 2' of the MWLP (2009). The site is also identified as a limestone site with 'Long-Term Strategic Provision' on the Key Diagram, situated within a 'Limestone Resource Area'.

4.4.2 MWLP Policy M1 (Managing Mineral Production) states that development will not be supported for any new extraction of sand and gravel, limestone, gritstone or brickshale. The proposals seek to deepen and extend the timescales of an existing permitted limestone quarry. Therefore, the site should not be considered as new extraction.

4.4.3 MWLP Policy DM2 (Development Management) supports mineral operations that can demonstrate a positive contribution to, inter alia, the economy, biodiversity and geodiversity, landscape character and the reduction of carbon emissions. The site currently operates under a Biodiversity Management Plan and best practice measures which will be continued. The approved restoration scheme is shown on Drawing Number BLQ 5/1 'Combined Conceptual Restoration Scheme'. The approved restoration scheme combines economic and biodiversity gains through

development of a 42 hectare lake for water and land-based recreational activities with designated areas of nature conservation habitat.

4.4.4 MWLP Policy NPPF 1 (Presumption in Favour of Sustainable Development) states that when a planning application accords with the policies in the Local Plan, it will be approved without delay, unless material considerations indicate otherwise. The proposals are considered to accord with the Development Plan and other material considerations.

5 NEED ASSESSMENT AND SUSTAINABILITY

5.1 Introduction

5.1.1 The proposed development comprises the deepening of the extraction area at Back Lane Quarry to include land which currently accommodates site infrastructure, buildings and mining waste stockpiles, as well as an extension of time for mineral extraction and restoration. With regards to the proposed development, the following considerations are of particular relevance and are discussed below:

- The demand for and supply of limestone;
- The role of Back Lane Quarry in future limestone supply;
- Sub regional apportionment and landbank implications; and
- Operational need for the proposed deepening of the working area.

5.1.2 In addition, the issues relating to sustainability are considered within this section, including the sustainable benefits of relevance to the planning application.

5.1.3 The site currently has planning permission to extract limestone until 29 April 2048. The existing theoretical reserve remaining on site has been calculated to be 19.4 million tonnes (mt) as at January 2024. However, only around 6.8mt is currently accessible due to reserves being constrained by plant and machinery, buildings and mineral waste tips.

5.1.4 Permission is being sought for the deepening of the current quarrying operations in order to extract the limestone reserves to a depth of -37mAOD (an additional depth of 75m). The proposed change would release a further 40 million tonnes (mt) of limestone, assuming the joint working of the boundary between Back Lane Quarry and Leapers Wood Quarry.

5.1.5 The existing annual sales from the site of approximately 1.1mt are anticipated to continue for the foreseeable future.

5.2 Planning Policy Context

5.2.1 The NPPF acknowledges the importance of minerals and states:

'*It is essential that there is a sufficient supply of minerals to provide the infrastructure, buildings, energy and goods that the country needs. Since minerals are a finite resource, and can only be worked where they are found, best use needs to be made of them to secure their long-term conservation.*'

5.2.2 The NPPF requires Mineral Planning Authorities to plan for a steady and adequate supply of aggregates by:

- Preparing an annual Local Aggregate Assessment (LAA), either individually or jointly, to forecast future demand;
- Participating in an Aggregate Working Party;
- Making provision for the requirements of the LAA, including identifying specific aggregate supply sites; and
- Securing aggregate supply by maintaining a sufficient landbank of permitted aggregate reserves (at least 10 years for crushed rock).

5.2.3 The site is located within a Mineral Safeguarding Area as identified within the Joint Lancashire Minerals and Waste Local Plan Policies Map[1]. Policy CS1 (Safeguarding Lancashire's Mineral Resources) of Lancashire's Minerals and Waste Development Framework Core Strategy states that mineral will only be extracted where there is a proven need for that particular resource. Mineral resources are to be conserved, where they have an economic, environmental or heritage value. Mineral Safeguarding Areas will be used to identify mineral resources with the potential for extraction.

5.2.4 Core Strategy Policy CS3 (Meeting the demand for new minerals) sets out the provision of 57.8 million tonnes of limestone for aggregate use between 2001 and 2021. No additional land was to be made available for the extraction of limestone for aggregate use before 2021.

5.3 The Need and Supply of Mineral

The Importance of Limestone

5.3.1 The Mineral Products Association (MPA) report 'Make The Link To Mineral Products' (2022) highlights the essential nature of minerals stating that '*everything we use in daily life – from our homes to our mobile phones – is made with minerals that are quarried or mined*.' It calculates that 400mt of mineral products are used every year (in Great Britain), that 90% of UK mineral products are made and consumed in the UK and that the industry generates almost £6 billion in Gross Value Added, a measure of contribution to the economy. The industries that directly depend on mineral products turn over nearly £600 billion and 3.5 million jobs are supported through the

[1] Note that the Joint Lancashire Minerals and Waste Local Plan expired at the end of 2021

supply chain with 81,000 people being directly employed by the minerals products industry.

5.3.2 Limestone is a versatile mineral. It is an essential component of cement and concrete and crushed rock (aggregate) is used throughout construction schemes for foundations and in applications including asphalt production.

5.3.3 The MPA report acknowledges that the scale and complexity of turning raw materials into essential products for construction and manufacturing requires long term thinking and major investment. It goes on to state that '*like all businesses, mineral products companies need the right economic, political and regulatory conditions to ensure their businesses remain viable and can meet the needs of other sectors and society*'. Here are just some of the areas where long-term commitment is required:

- Researching locations and working with landowners;
- Carrying out environmental reviews and assessments;
- Working with stakeholders to gain workable permissions;
- Recruiting people and developing their competencies;
- Designing, sourcing and building plant and machinery;
- Developing products to meet market demands;
- Organising efficient transport; and
- Restoring quarries to achieve a positive long-term legacy.

5.3.4 The Joint Lancashire Local Aggregate Assessment (LAA) (2023 with 2022 data) states that:

'The surface geology of Lancashire, Blackpool and Blackburn with Darwen (the Plan area) is dominated by Triassic sandstones in the west and Carboniferous sandstones in the east, with small areas of limestone in the north, and significant areas of glacial till. It contains extensive mineral resources (natural concentrations of rocks that are, or may become, of potential interest for economic extraction). They are significant in the region given the extent of urbanisation in Merseyside and Manchester, and the limited availability of hard rock in the south of the North West, and limestone throughout the North West.'

5.3.5 With respect to limestone, the LAA states:

'Carboniferous limestone outcrops suitable for extraction are limited in the area, with quarrying operations confined to two locations in the north; a compact area east of Carnforth, and a complex of quarries east of Clitheroe. The limestone extracted is used as aggregate, though two quarries also provided feedstock for the cement works in Clitheroe.'

Aggregate Demand

Lancashire

5.3.6 The Lancashire LAA (2023) states that in 2021, limestone sales represented approximately 69% of the total aggregate sales in the region. In assessing the demand for limestone, the total sales of crushed rock (limestone) have been considered. According to the 2023 LAA, the rolling 10 year average of limestone sales was 2.25mt and the 3 year average being 2.52mt. In 2020, 2021 and 2022, sales of limestone were 2.26, 2.93 and 2.38mt respectively.

5.3.7 The LAA states that both the 10 year average of sales and the 3 year average continues to rise slowly, which may indicate a more stable economic environment. Table 5.1 below details forecasts of demand, based on the figures described above (i.e. the 3 year and 10 year sales averages), projected over a 15 year period as well as the Core Strategy apportionment and the forecast demand set out in the National and Sub-national Guidelines (2001 – 2016) which were converted into an apportionment by the North West Regional Aggregate Working Party in 2011.

Limestone (mt)	Basis for forecast demand	Forecast demand (over 15 year demand period)
Average of 10 years land won sales data (2021)	2.25	33.7
Average of 3 years sales data (2021)	3.09	37.9
Core Strategy Apportionment (2006)	2.75	41.25
NWRAWP Sub Regional Apportionment (2011)	2.54	38.1
Housing Delivery/Forecast Inferred Demand using Local Plan Forecast (2021)	3.0	45.0

Table 5.1: Forecast demand in limestone sales (mt)

5.3.8 The LAA states that, 'In 2022 there were 43.59 million tonnes of limestone reserves with planning permission. These permitted reserves are held in 4 quarries. Based on the 10 year average of sales the permitted reserves represent a landbank of 19 years, and the landbank of at least 10 years is expected to begin to be eroded in 2031 (17 years if using the 3 year average, bringing this down to 2029)'.

5.3.9 It is also suggested that there are indications that economic activity can be expected to increase during the forecast demand period, though it was acknowledged that this was subject to significant uncertainty. The assumptions made however, showed that there is a moderate to high correlation between past housing completions and total aggregate sales. As a result, future housing projections are also used to infer an indication of future demand for aggregates.

5.3.10 The LAA describes the delivery of houses, as reported by the former Department for Communities and Local Government (now Department for Levelling Up, Housing and Communities) and the projected annual demand for housing as described in district local plan policy. This is illustrated below within Figure 5.1.

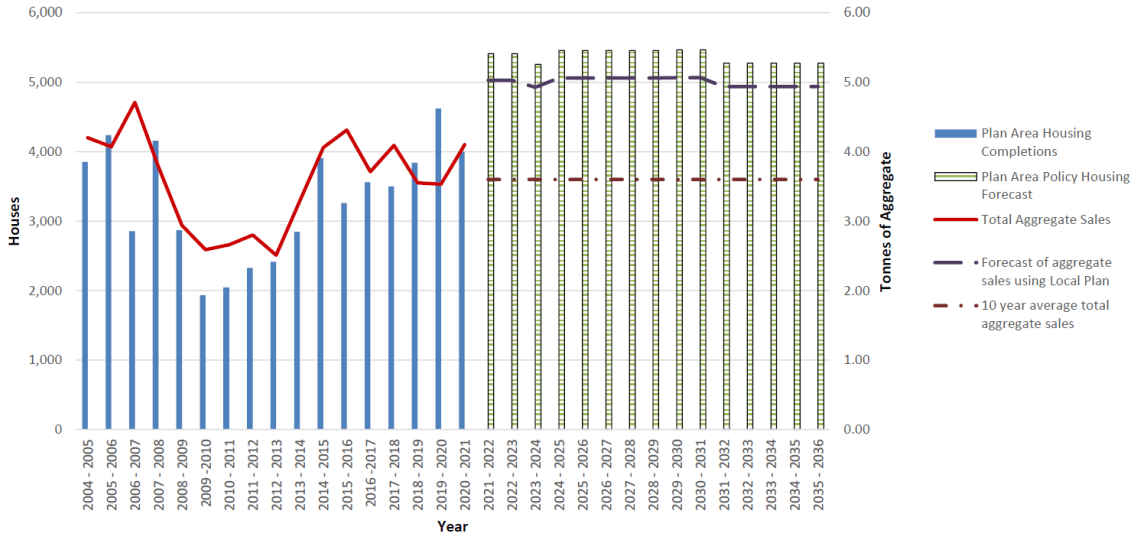

Figure 5.1: Housing Delivery and Projections

5.3.11 Figure 5.1 illustrates a period of significantly depressed housing completions caused by the global financial crisis, recession and subsequent restrictions on bank lending, relative to a Local Plan forecast of housebuilding and other development activities. The figure shows the delivery of housing relative to the sales of total aggregate,

which have shown a similar pattern over the last 10 years. An attempt has been made to forecast future aggregate sales using the correlation between past housing completions and past aggregate sales and applying this to the future housing need figures identified in district Local Plans (used as a proxy for general economic activity and therefore aggregate demand).

5.3.12 This forecasting exercise produces an average aggregate sales figure of 4.9mtpa during the forecast demand period and using the proportions of total sales from the most up to date 10 year average sales figures, this equates to 3mtpa for limestone. The LAA acknowledges that there is considerable uncertainty over some of the figures for the projected annualised housing completions, given past rates of under delivery relative to Local Plan targets in much of the Plan Area. However, it is expected that housing completions (and wider economic activity) will increase, and that this could reasonably be considered to lead to an increase in demand for aggregates.

5.3.13 In terms of planned infrastructure projects, there is a significant level of investment in Lancashire's transport network through the Lancashire City Deal, enabling the delivery of several items of infrastructure set out in the Central Lancashire Highways and Transport Masterplan, including the Preston Western Distributor, the Fylde Heyhouses/M55 Link, and the East-West Link Road. This in turn will unlock sites for the delivery of housing and commercial developments as part of the Central Lancashire Core Strategy.

5.3.14 The LAA states that other sites coming forwards through the City Deal and the Lancashire Enterprise Partnership's growth agenda will result in an increased demand for aggregates, including the Cuerden Strategic Site and the large number of housing developments proposed.

Wider North West Region

5.3.15 The NWRAWP Annual Monitoring Report (AMR) (2021) provides sales data for the year 2020 for the North West region (i.e. Cheshire East, Cheshire West and Chester, Cumbria, Lancashire, Greater Manchester, Merseyside, Halton and Warrington). The AMR notes that operator returns were poor in 2021 and that, other than Cheshire West and Chester Council, all MPAs had to make sales estimates.

5.3.16 The AMR 2021 states that the total crushed rock sales in 2020 were 6.61mt, which represents a decrease from 2019 sales figures which were 7.33mt. Compared with 2019 sales figures, sales in Lancashire increased in 2020, whilst they decreased in

Greater Manchester, Cumbria, Merseyside, Halton and Warrington. The 10 year average sales figure for the North West region is 6.7mt and the 3 year average sales figure is 7.1mt.

5.3.17 Neighbouring areas are also experiencing similar investments as part of their growth deals, and similar future aspirations for growth such as contained in the Northern Powerhouse aspirations and the Greater Manchester Joint Development Plan. In Merseyside large scale, long-term regeneration projects at Liverpool Waters and Wirral Waters are progressing as well as significant commercial/research construction at Liverpool University. Whilst inherent in the Waste Strategies of these schemes is the requirement to reuse and recycle construction and demolition waste on site to minimise the requirement for primary aggregate, it is considered that these projects will require a significant volume of aggregate on a long term basis.

5.3.18 In Greater Manchester there are a number of significant highway improvements schemes, including the M60 and M62 upgrade works. Greater Manchester's 'Places for Everyone' Plan (Publication Stage, August 2021) identifies a number of significant development schemes for the Plan period (2021 - 2037) and, in terms of land planned for residential and commercial development, the Plan states that '*several of the sites are large in scale and will be partially delivered beyond 2037'.* A key objective of the Places for Everyone Plan is to meet the Plan Area's Local Housing Need and, using the Government's standard methodology for housing, this equates to almost 165,000 homes over the period 2021 to 2037. This level of planned development will create significant demand for aggregate and concrete, a proportion of which is likely to be supplied from Lancashire.

5.3.19 Whilst it is acknowledged that there is level of uncertainty associated with the delivery of such infrastructure and construction schemes, it is considered reasonable to take such schemes into account when considering projections of demand, as they represent a significant future demand for aggregates that is not necessarily reflected in past supply.

Current Aggregate Supply

Lancashire

5.3.20 The Lancashire 2023 LAA addresses the supply of aggregate within the Plan Area and the ability of the existing and permitted sites to deliver the required volumes of material. It states that in 2022 there were 43.59 million tonnes of limestone reserves with planning permission. These permitted reserves were held in 4 quarries. Based

on the 10 year average of sales, the permitted reserves represents a landbank of 19 years, and the landbank of at least 10 years is expected to be eroded in 2031 (17 years if using the 3 year average, bringing this down to 2029).

5.3.21 In order to ensure the continued steady and adequate provision of aggregate to market, the LAA also considers the permitted quarries' ability to meet the forecast annualised demand. In order to do this, it sets out the expiration dates of the permitted sites within the Plan Area. The number of quarries which have current planning permissions will reduce in 2023 and 2028. Dunald Mill Quarry continues to be mothballed but a planning application was submitted in September 2021 to extend the life of mineral extraction from February 2022 until February 2034. This application is yet to be determined. Ribblesdale Lanehead Quarry and Ribblesdale Cement Bellman Quarry, operated by Hanson UK, primarily supply cement raw materials but a proportion of the reserve is not suitable for this and is sold as aggregate. The sites have permission until 2027. Leapers Wood Quarry, adjacent to Back Lane Quarry, which is operated by Tarmac Trading Limited, has permission until 2048 but if the shared boundary with Back Lane Quarry is not able to be worked, the remaining accessible reserves of approximately 6.8mt would be exhausted before 2030. A planning application is being submitted by Tarmac to extend the operational life of the quarry until 2064 to allow for the deepening of the mineral extraction within the site and to allow the extraction of mineral within the joint boundary with Back Lane Quarry. As with Back Lane Quarry, there are significant mineral resources available at depth within Leapers Wood Quarry, as well as within the shared boundary between these sites, which can be worked without the need for extensions onto green field land.

Wider North West region

5.3.22 The NWRAWP AMR states that the permitted reserves of crushed rock in the North West region at 31st December 2020 amounted to 247.89mt (this includes both limestone and gritstone). This is a decrease in permitted reserves from 2019 at a figure of 282.51mt. Whilst there were increases in permitted crushed rock reserves in both Cumbria and Greater Manchester, Merseyside and Halton and Warrington, there was a significant decrease in crushed rock permitted reserves in Lancashire by 34.49mt in comparison to 2019. The AMR notes that there has been a general decline in the total permitted reserves since 2015 which demonstrates that sales have been at a greater rate than new planning permissions for aggregates.

5.3.23 The NWRAWP AMR states that the overall landbank of permitted reserves in the North West region is 35.99 years, which is substantially above the minimum 10 year requirement. However, it acknowledges that the North West region is '*significantly reliant particularly upon Cumbria and Lancashire to maintain an adequate and steady supply of crushed rock……. There has been a clear decline in replenishment rates over the past 10 years, due to not enough planning applications for primary aggregate extraction coming forwards in the North West region. In the past 10 year there has been a fall in sand and gravel reserves by 39% and a fall in crushed rock reserves by 39%.'*

5.3.24 Beyond the Plan Area, there are a number of limestone quarries within Cumbria, including the Lake District National Park (LDNP), although five crushed rock quarry permissions within the Plan Area will expire before 2030 and none have permission beyond 2043. The Cumbria County Council LAA and NWRAWP AMR identify sites with permission for limestone extraction. Moota Quarry has permission until 2024 and Sandside Quarry has permission until 2029. Eskett and Rowrah Quarries (two parts of quarry now combined into one planning permission) have permission until 2034. However, the Cumbria LAA states that there is a substantial amount of water in Rowrah Quarry and if an environmentally acceptable solution for its dewatering is not found then the reserves could be lost. Goldmire Quarry, Hartley Quarry, Helbeck Quarry, Shap Beck and Shap Blue Quarries (which lie entirely within the LDNP), Silvertop Quarry and Stainton Quarry have permission until 2042. Holme Park Quarry has permission until 2043. Permission at Shapfell Quarry has now expired.

5.3.25 The Cumbria 2022 LAA states that within Cumbria and the Lake District National Park (LDNP), looking at limestone alone which is used only for general aggregate use and not as high specification roadstone, based on 2021 sales and remaining reserves (78.72mt), the 10 year average sales figure (1.99mt) gives a landbank of 39.6 years, which would last until 2061 (these figures exclude limestone reserves for non-aggregate use which are generally the high purity limestone that is used for industrial purposes). In order to maintain a landbank of at least 10 years, new limestone reserves would need to come on stream by no later than 2051.

5.3.26 Swinden Quarry and Horton Quarry, within the Yorkshire Dales National Park, have permission until 2039 and 2042 respectively. However, most of the output from Horton Quarry is likely to comprise high Polished Stone Value (PSV) aggregate and would therefore serve a different market to that of Back Lane Quarry. The Peak District National Park Authority (PDNPA) have an ambition not to extend planning

consents within the National Park beyond 2042 and Topley Pike Quarry within the PDNPA has recently reduced its operational life to require limestone extraction to cease by 2025.

5.3.27 In terms of imports to and exports from Lancashire, data is available from 2019 (the most recently available information on movements) although the split between limestone and gritstone is not available. The data shows that approximately 48% (or 1,545,000t) of the total sales of crushed rock (3,173,000t) was imported to the Plan Area with around 20% being imported from Derbyshire, 10% from Cumbria, 10% from the YDNP and the remainder being imported from the East Midlands, Wales and the North East. Approximately 36% (or 1,154,000t) of the total sales of crushed rock was exported from the Plan Area to the rest of the North West. Overall Lancashire's net imports equate to 368,000t. In considering these figures, the Lancashire LAA states:

'It is assumed that the movements identified above will continue. However, if particular quarries in neighbouring authorities were to cease production it could have an impact on the market in the Plan area and affect the rate of consumption of permitted reserves at particular quarries. This is particularly relevant when considering national NPPF policy, and local aspirations, to limit mineral working in national parks, and the effect this could have on supply when extant planning permissions in the Lake District, Peak District and Yorkshire Dales reach the end of their operational or conditioned life span. 2042 in particular is a date many planning permissions will cease and there can be a relatively high degree of certainty that supply will be affected both in the Plan area and its current market area (this could include changes to the extent of the market area if businesses in areas such as West Yorkshire, which currently source a large proportion of the aggregates used from the Yorkshire Dales National Park, find the quarries in Lancashire to be an economic alternative market).

Current exports are included in the forecast of demand; current imports will be reflected in neighbouring mineral planning authorities' average of 10 years sales data. Should the industry be unable to maintain these outputs then these assumptions, and the forecast demand, may need to be revisited.'

<u>Meeting Forecast Demand for Limestone</u>

Lancashire

5.3.28 The forecast demand for limestone and the permitted reserves have been compared within Table 5.2 below. This indicates that there is sufficient limestone available through the supply options identified above to meet estimated need during a 15 year time horizon. The LAA considered that the landbank will be reduced to below that prescribed by national policy towards the end of the monitoring period (2036), under most of the scenarios.

Forecast Demand Period of 15 Years (2021 – 2036)	Sub Regional Forecast (mt)	10 year Average Sales Forecast (mt)	3 year Average Sales Forecast (mt)	Housing Delivery Forecast Inferred Demand Using Local Plan Forecast (mt)
Demand	2.54	2.25	2.52	3.0
Forecast demand	38.1	33.7	37.9	45.0
Permitted reserves	45.39	45.39	45.39	45.39
Shortfall in supply during forecast demand period	-	-	-	-1.4
Surplus in supply during forecast demand period	5.5	9.9	5.7	-
Surplus represents a landbank of x years	2.2	4.4	2.3	-

Table 5.2: Comparison of Forecast Demand and Permitted Reserves

5.3.29 In conclusion, the assessment of the balance between supply and demand, together with consideration of the economic and local circumstances, indicates that there is potential for a shortfall in supply before the end of the forecast demand period (around 2034).

5.3.30 There are also significant movements of crushed rock both ways across the Plan Area's boundary; the balance represents a slight net import (though this is based on figures collected every 4 years, lastly in 2019). These movements are likely to be influenced by economic activity and growth projections set out in those areas and, at the time of preparing the LAA, this had not been incorporated into the assessment. If growth in these areas is above that forecast in the Plan Area's district housing projections, then the correlation between aggregate sales and housing completions may be affected, and the forecast demand may be an underestimate.

5.3.31 Likewise, if imports are constrained by a reduced supply in neighbouring areas this may affect demand within the Plan Area.

5.3.32 The medium / long term limestone aggregate supply situation in Lancashire is of some concern. Taking into account current reserves, extraction rates and permissions within Lancashire, limestone extraction would most likely cease within the county by the end of 2030. Bankfield Quarry and Dunald Mill Quarry both have current applications seeking to extend their permissions until 2033 but remain undetermined. If the reserve of limestone between the Back Lane and Leapers Wood sites is able to be worked, then this would also extend the life of these sites until the early 2030s. However, beyond 2033 there would be no remaining active sites within Lancashire under the current scenario.

5.3.33 Outside Lancashire, it is possible that aggregate supply could be gained further afield from the Yorkshire Dales National Park, Peak District National Park, south Cumbria and possibly northern Staffordshire. Beyond these geographical areas, the distances are likely to make it economically and physically unviable to transport aggregates by road to Lancashire. However, there are a very limited number of limestone sites within the Yorkshire Dales National Park, Peak District National Park, south Cumbria and northern Staffordshire.

Yorkshire Dales National Park

5.3.34 Horton Quarry has permission until 2042. However, the site is likely to supply the high PSV market rather than meet general aggregate demand. Swinden Quarry has recently secured permission to deepen the workings by 50m and extend the life of the site until 2039. However, the majority of material from Swinden Quarry is taken to Leeds and Yorkshire via the quarry's railhead and so it would be unlikely to be in a position to contribute supply to meet demand in Lancashire.

Derbyshire and Peak District National Park

5.3.35 There are a number of large limestone quarries centred around the Buxton area. Several have permission until 2042 but Topley Pike Quarry (2025) and Ballidon Quarry (2035) are due to close sooner. The location of these quarries means that supply into the general Lancashire market is likely to be limited due to the haulage distances involved and the fact that the majority of the quarries serve customers in Manchester and the Midlands. However, it is reasonable to expect these quarries to serve at least a proportion of the supply to the southern part of Lancashire.

South Cumbria

5.3.36 The main sites in south Cumbria producing limestone are Holme Park Quarry and Sandside Quarry. Holme Park Quarry has permission to extract mineral until the end of 2043 but it is most unlikely to be able to secure any reserve extensions beyond that time due to various designations within and surrounding the site. Sandside Quarry has permission until 2029 but given its location and constrained aspect, it is likely to close in or before 2029.

5.3.37 Other sites in Cumbria are some distance further north and a number of the sites tend to serve markets in Cumbria, the north-east or southern Scotland rather than Lancashire. The highway network and distances involved to Lancashire mean that supplies from these sites are unlikely to be able to be relied upon to help meet demand in Lancashire.

North Staffordshire

5.3.38 The only limestone site in Staffordshire that could potentially supply Lancashire with limestone longer term is Cauldon Low Quarry. However, Cauldon Low Quarry in general sends the vast majority of its output to the Midlands and this is unlikely to change in the future. The haulage distances involved in transporting limestone from Staffordshire to Lancashire are also unlikely to be feasible in the long term.

Operational Need for the Proposed Development

5.3.39 The Lancashire LAA identifies that there may be a shortfall in supply towards the end of the Plan period, but that in the short term, the permitted reserves within the Plan Area are sufficient to meet the current demand. This situation has been acknowledged within this chapter of the Planning Statement. However, there is an operational need to deepen the current quarry workings to ensure that the valuable underlying reserves are not sterilised in the future.

5.3.40 Back Lane Quarry has an estimated 19.4mt of permitted limestone reserves remaining within the site (January 2024) of which only 6.8mt is accessible for extraction. The remaining reserves are currently constrained by plant, machinery, infrastructure, buildings and mineral waste stockpiles. Based on the current output of approximately 1.1mtpa, the site would be worked out in just over 6 years (January 2030). However, in order to access this mineral, all working levels and connecting haul roads would need to be removed which would prevent any further access to around 12.6mt of constrained but permitted limestone reserves. This would result in the cessation of all mineral extraction activities at Back Lane Quarry and the

eventual closure of the site once the site has been restored. Furthermore, by removing the higher working levels and connecting haul roads, there would be no potential to extract the underlying mineral resources including the shared boundary between Back Lane Quarry and Leapers Wood Quarry, which is calculated to represent approximately 40mt of limestone.

5.3.41 Back Lane Quarry extracts the limestone below the natural water table which necessitates continuous groundwater pumping. At times of heavy rainfall, the lower levels of the quarry are often flooded and the site operations therefore rely on the ability to work the higher levels which are dry. If permission is not granted for the proposed deepening of the quarry void, it would be necessary to extract the mineral from these higher dry levels. However, without them, mineral extraction would need to temporarily cease during periods of heavy rainfall until the lower levels of the quarry are no longer flooded. This would result in periods of inactivity and a reduced annual output of limestone as the site would only be worked for part of the year.

5.3.42 In order for Back Lane Quarry to provide a range of mineral products, it is necessary to have stocking areas of an appropriate size which are located on the higher levels of the quarry to prevent the products becoming saturated through flooding. It is therefore essential to retain suitable areas within the higher parts of the site for this purpose. The extraction of all the mineral within the higher parts of the quarry would therefore pose operational difficulties for the applicant and potentially affect the quality of the products produced from the site. It is therefore critical that the applicant has the ability to extract mineral from deeper levels within the quarry to enable the higher levels of the quarry to be retained for essential operational uses, including dry working and product stockpiling.

Conclusion

5.3.43 Lancashire's 2023 LAA compared the balance between supply and demand within the Plan Area over the period until 2036. Demand for limestone is anticipated to continue to increase over the forecast demand period, although there is uncertainty relating to the level of this increase. Forecasting exercises result in an average aggregate sales figure of 3mtpa for limestone. The LAA acknowledges that there is considerable uncertainty over some of the figures for the projected annualised housing completions, given past rates of under delivery relative to Local Plan targets in much of the Plan Area. None the less, it is expected that housing completions (and wider economic activity) will increase, and that this could reasonably be assumed to lead to an increase in demand for aggregates.

5.3.44 Based on the 10 year average of sales, the permitted limestone reserves represents a landbank of 19 years, and the landbank of at least 10 years is expected to be eroded in 2031 (17 years if using the 3 year average, bringing this down to 2029).

5.3.45 There are a number of operational justifications for seeking permission to allow the deepening of the quarry void. If permission is not granted, it would be necessary to work the higher quarry levels and remove the remaining haul roads. This would not only sterilise the remaining permitted limestone reserves but would remove the ability of the site to be worked all year round, including during periods of heavy rainfall, and would mean that mineral products would have to be stockpiled within parts of the site which are affected by seasonal flooding and waterlogging. The loss of more than 40mt of quality limestone from the site is considered to be significant in the context of the long term supply of limestone within Lancashire and the wider North West region.

5.3.46 Critically, the quarry only has 6.8mt of unconstrained, accessible reserves remaining for extraction. Based on the current output of approximately 1.1mtpa, the site would be worked out in just over 6 years (January 2030).

5.4 Sustainability

5.4.1 Paragraph 7 of the NPPF defines the objective of sustainable development, which can be summarised as meeting the needs of the present without comprising the ability of future generations to meet their own needs. So that sustainable development is pursued in a positive way, at the heart of the Framework is a presumption in favour of sustainable development (paragraph 10). Paragraph 11 states that decision taking should apply a presumption in favour of sustainable development which means that development proposals that accord with an up-to-date Development Plan should be approved without delay.

5.4.2 Section 17 of the NPPF relates specifically to minerals and facilitating the sustainable use of mineral assets. Minerals are stated as being essential to supporting sustainable economic growth and the Framework prioritises their long-term conservation.

5.4.3 The Applicants propose to continue undertaking best practice measures with regards to promoting sustainability and managing the effects of climate change and are committed to ensuring that site operations at Back Lane Quarry are as sustainable and energy efficient as possible.

5.4.4 As a major supplier to the UK construction industry, the company are being challenged by its customers, to support their commitment to deliver greener solutions. The company has committed to innovate and be the leading supplier of green construction solutions in the UK. In order to do this, it has set itself a number of goals to achieve by 2025.

5.4.5 The company has developed and will deliver a leading carbon reporting tool to provide accurate carbon information. Not only will the company provide dynamic carbon data to its customers, but it can also analyse and challenge its own commercial behaviour against its sustainability goals:

- The company will grow revenue from green products and solutions to 25% of its total revenue by 2025. It is reviewing all its product portfolios across all business divisions to identify its green products. Within the following phase it will ensure that it has effective tools and literature that help its customers select the right sustainable product choices;
- The company aims to expand its portfolio of sustainable products and solutions. New product development processes will focus on products that meet a sustainable criterion, focusing on the key principles of low carbon, circular economy, building more with less and building efficiency.

5.4.6 Aggregate Industries UK Limited are part of a global company, are able to draw on the expertise of Holcim's extensive R&D infrastructure, who are working to understand and develop new technologies that allow the company to innovate more sustainable products.

5.4.7 The company is proud to have a number of sustainable products that exist in the market today. Including ECOPact green concrete, SuperLow-Carbon Asphalt and Aggneo recycled aggregates. The company is committed to collaborating across the supply chain, not only to bring sustainable products to market but to accelerate the use of these new products and new technologies, so they become tomorrow's standard way of constructing.

5.4.8 In conclusion, the proposed development would meet the sustainability objectives of national planning policy, as set out within the NPPF, as well as the sustainability related policies of the Development Plan.

6 ENVIRONMENTAL AND TECHNICAL CONSIDERATIONS

6.1 Landscape and Visual Impact

6.1.1 A full Landscape and Visual Impact Assessment was undertaken and is included within the accompanying Environmental Statement.

6.1.2 The nature of the application is principally for deepening the existing operational disturbance / effects of quarrying activities which are already present in the landscape. The main change is the time element with development taking a further 29 years. The effects of this have been considered along with the potential for resulting cumulative impacts.

6.1.3 The site is not located within a designated landscape e.g National Park or National Landscape. It is however, located approximately 1.8km to the south and east of Arnside / Silverdale National Landscape, and 1.7km to the west of the Forest of Bowland National Landscape. Given a combination of positioning and elevation there is opportunity for intervisibility between these designated areas and the site. Given the proposed deepening nature of the application together with intervening landform and vegetation structure it is assessed that the proposed development will not harm the setting of these National Landscapes.

6.1.4 The quarry is located within the Landscape Strategy for Lancashire – Landscape Character Assessment Character Area – 12a: Low Coastal Drumlins; Carnforth – Galgate – Cockerham, and partially within adjacent 13c: Drumlin Fields; Docker – Kellet – Lancaster LCA. Both the character areas are assessed as medium sensitivity to the type of proposed development (including existing quarry activities). It is assessed that during the extended operational period of the proposed development, the magnitude of effect will be medium. When combining the judgements on sensitivity and magnitude the resulting level of significance of effect is assessed as Moderate Adverse. This is not a significant level of effect.

6.1.5 At Post Restoration the proposed development will result in a landscape character the same / very similar to the permitted scheme. This will comprise a slightly larger waterbody, quarried faces and benches, retention of strong western, southern and eastern vegetation structure with calcareous grassland and minor areas of shallows. There will also be a future opportunity to utilise a flat platform, currently utilised by the blockworks, for leisure / recreational infrastructure. It is therefore assessed that at Post Restoration the proposed development will result in a Neutral Effect on landscape character compared to the permitted scheme.

6.1.6 Visually, the site is generally very discrete and not observed as a result of localised landform and topography and adjacent local woods / vegetation structure. The visual nature of the development is restricted to the deepening of the existing quarry void.

6.1.7 It is assessed that no representative visual receptors will receive a Significant Adverse level of visual effects (i.e., a Severe, Major or Notable Effect) from the proposed development during its operational period. It is also assessed that no receptor will receive a Moderate Adverse effect.

6.1.8 During the operational stage it is assessed that 7No. receptors will receive a Slight Adverse Effect, 1No. receptor will receive a Very Slight Adverse Effect, 3No receptors will receive a Minimal Adverse Effect and 19No receptors will receive a Neutral Effect. 1No receptor will receive a Moderate Beneficial Effect.

6.1.9 The main sources of the effects are the existing elevated quarry waste tip and minor disturbed faces of Back Lane Quarry. It is noted that potential receptors of these elements are generally from mid to longer distances. Views are panoramic, of which, the elements of Back Lane Quarry occupy a small visual proportion.

6.1.10 The potential for cumulative adverse effect has been considered in respect of the proposed development and other similar local quarries and large scale developments. Taking the above into consideration and in accordance with statutory receptors and good practice guidance we assess that there will be no likely cumulative significant effects on Landscape Character or visual receptors.

6.1.11 Baseline and assessment works have been carried out to provide information to address and comply with national and Lancashire planning policies and in conclusion, based upon landscape and visual grounds, the site is a good location for continued mineral extraction and will not result in any significant adverse impacts on landscape or visual receptors during the operational period. At final restoration and post restoration the scheme is considered to have a Neutral effect compared to the permitted scheme baseline.

6.1.12 In conclusion, no changes are proposed that would give rise to any unacceptable impacts on the landscape character of the locality or on the visual amenity of nearby receptors. It is considered that the proposals are therefore in accordance with the relevant policies of the Development Plan.

6.2 Ecology and Biodiversity

6.2.1 A full Preliminary Ecological Appraisal (PEA) and breeding bird surveys have been undertaken.

6.2.2 The site supports suitable habitats, including grassland and quarry (rocky areas) which favour the qualifying bird species for Morecambe Bay (SAC, SPA, RAMSAR and SSSI). Out of the qualifying list, three birds were noted during the breeding bird survey effort in 2022 (oystercatcher, lesser black-backed gull *Larus fuscus* and herring gull *Larus argentatus*).

6.2.3 The operational impacts of the proposed works only result in a loss of existing quarry habitat. Table 6.1 details the impacts of the habitats outside the mineral extraction boundary as part of the proposed works.

Ecological Feature	Direct Impact	Indirect Impact	Proposed Restoration
Lowland Mixed Deciduous Woodland	No direct impacts anticipated as works set to be restricted to current mineral extraction boundary only	Any indirect impacts noted will be managed through the implementation of a BMAP. Therefore, an **adverse impact is not anticipated**	Set to be retained throughout the works and managed as lowland mixed deciduous woodland. 3.35 ha of retained woodland to be enhanced and 0.13 ha of woodland is set to be created
Calcareous Grassland			Retained, further creation of naturally regenerated grassland on exposed rock benches. 1.84 ha of calcareous grassland is set to be created

Table 6.1: Summary of the impacts of proposed works on the habitats noted within the site boundary

6.2.4 Table 6.2 below summarises the assessment of the potential impacts on each important ecological features, proposed mitigation and assessed residual effects.

Important Ecological Feature	Potential Impacts	Initial Classification of Effect (with embedded mitigation)	Additional Mitigation	Residual Effect Significance
International Statutory Designated Sites	No direct impact. **Potential for indirect impact due to changes in air quality (dust)**	Negligible. **Implementation of BMAP**	No additional mitigation required	Negligible

Important Ecological Feature	Potential Impacts	Initial Classification of Effect (with embedded mitigation)	Additional Mitigation	Residual Effect Significance
Statutory Designated Sites	No direct impact. **Potential for indirect impact due to changes in air quality (dust)**	Negligible. **Implementation of BMAP**	No additional mitigation required	Negligible
Non-Statutory Designated Sites	No direct impact. **Potential for indirect impact due to changes in air quality (dust)**	Negligible. **Implementation of BMAP**	No additional mitigation required	Negligible
Priority Habitats	Direct impact (open mosaic habitat only). **Potential for indirect impact due to changes in air quality (dust)**	Adverse impact (open mosaic habitat only). **Creation of open mosaic habitat, calcareous grassland, woodland, wetland habitat and naturally generated benches and faces as part of the restoration proposals. Implementation of BMAP**	No additional mitigation required	Beneficial effect
Lowland Mixed Deciduous Woodland	No direct impact. **Potential for indirect impact due to changes in air quality (dust)**	Negligible. **Some retained areas enhanced. Creation of woodland as part of the restoration proposals. Implementation of BMAP**	No additional mitigation required	Beneficial effect
Mixed Plantation Woodland	Direct impact. **Potential for indirect impact due to changes in air quality (dust)**	Adverse impact. **Some retained areas enhanced. Creation of woodland as part of the restoration proposals. Implementation of BMAP**	No additional mitigation required	Beneficial effect
Dense / Continuous Scrub	Direct impact. **Potential for indirect impact due to changes in air quality (dust)**	Beneficial impact. **Creation of scrub as part of the restoration proposals. Implementation of BMAP**	No additional mitigation required	Beneficial effect
Calcareous Grassland	No direct impact. **Potential for indirect impact due to changes in air quality (dust)**	Negligible. **Creation of calcareous grassland and further creation of naturally regenerated benches and faces as part of the restoration proposals. Implementation of BMAP**	No additional mitigation required	Beneficial effect

Important Ecological Feature	Potential Impacts	Initial Classification of Effect (with embedded mitigation)	Additional Mitigation	Residual Effect Significance
Open Mosaic Habitat	Direct impact. **Potential for indirect impact due to changes in air quality (dust)**	Adverse impact. **Creation of open mosaic habitat, wetland habitat and naturally generated benches and faces as part of the restoration proposals. Implementation of BMAP**	No additional mitigation required	Beneficial effect
Inland Rock and Scree (Active Quarry)	Loss of existing quarry habitat through deepening	Beneficial impact. **Creation of wetland habitat and naturally generated benches and faces as part of the restoration proposals**	No additional mitigation required	Beneficial effect
Bats (Roosting)	Loss of suitable habitat. Potential for direct and indirect impacts from blasting, dust, light, vibration and noise	Negligible. **Mosaic of suitable habitat habitats created as part of the restoration proposals (woodland, grassland, wetland and naturally generated benches and faces). Implementation of BMAP**	Further surveys and mitigation if required	Beneficial effect
Badgers	No direct impact. **Indirect impacts through general quarrying processes**	Negligible. **Suitable habitat incorporated into restoration proposals (woodland and grassland). Implementation of BMAP**	No additional mitigation required	Beneficial effect
Breeding Birds	Loss of nesting habitat / disturbance during nesting season	Negligible. **Mosaic of suitable habitat habitats created as part of the restoration proposals (woodland, grassland, wetland and naturally generated benches and faces). Implementation of BMAP**	No additional mitigation required	Beneficial effect
Invertebrates	Loss of suitable habitat	Negligible. **Mosaic of suitable habitat habitats created as part of the restoration proposals (woodland, grassland, wetland and naturally generated benches and faces)**	No additional mitigation required	Beneficial effect

Table 6.2: Assessment of potential impacts on each important feature

6.2.5 The operational phase would be subject to measures and procedures as set out within a Biodiversity Management and Action Plan (BMAP). The BMAP will include a range of measures to mitigate potential impacts on ecological habitats, protected species and the water environment, which accord with legal compliance and good practice guidance. The BMAP would include measures to minimise dust, deposition, air pollution, pollution incident, light spillage, and noise and vibration which would all assist in minimising impacts upon biodiversity receptors, in particular priority and notable habitats within the zone of influence.

Biodiversity Net Gain

6.2.6 Enhancements have been incorporated within the restoration proposals to ensure that a net gain is achieved.

6.2.7 The proposed enhancements include incorporating:

- Standing open water – a area of open water is located to the west of the current mineral extraction area. As part of the proposed restoration the area is set to be enhanced from poor condition to good condition, providing opportunities for a variety of species, such as foraging bats, amphibians and invertebrates;
- Woodland – an area of woodland to the south of the current mineral extraction area (Long Riddings Wood). As part of the proposed restoration plan the area is set to be enhanced to woodland, providing opportunities for a variety of species, such as roosting bats, nesting birds, badgers and invertebrates; and
- Open Mosaic Habitat - An area of partially restored land is located to the south of the current mineral extraction area. However, due to the area being previously worked, and the presence of the substrate beneath, an area of open mosaic habitat has formed. Due to this providing a mosaic of periphery habitat types, in an area dominated by woodland habitat, it is considered to enhance the site by providing various different habitat types and ecotones.

6.2.8 In addition to the enhancements above, there will be the creation of the following habitats:

- Woodland – upon completion of mineral extraction, scattered woodland blocks would be created on the peripheries of the existing quarry workings. This will include the planting of locally sourced (where possible), native species;

- Marl lake – upon completion of mineral extraction, a waterbody will form within the quarry void due to ingress from rainfall, groundwater and fissure / cave systems;
- Reedbeds – upon completion of mineral extraction, small areas of reedbed will form around the peripheries of the lake;
- Open Mosaic Habitat – upon completion of the mineral extraction, an area west of the created marl lake and extending partially south, will be left and managed to form open mosaic habitat;
- Scrub – upon completion of mineral extraction, scattered blocks of scrub will be created within the created calcareous grassland and open mosaic habitat;
- Calcareous grassland – upon completion of mineral extraction, an area south-east of the created marl lake and extending partially south, calcareous grassland will be created; and
- Other inland rock and scree – upon completion of mineral extraction, exposed quarry benches will be retained and left to naturally generate.

6.2.9 New habitat creation will provide opportunities for species within the site. In addition to these enhancements which were embedded into the proposed quarry design, a range of additional ecological enhancement measures will be delivered as part of the proposed development, as identified below. Further details will be set out in a Biodiversity Action Plan (BAP) at the detailed design stage, however as an indicative guide these would comprise:

- Inclusion of plant species of known wildlife value within the landscaping scheme, including night-scented varieties to benefit bats, fruit bearing varieties to benefit birds and nectar-rich varieties for invertebrates;
- Provision of new bat roosting opportunities (i.e. bat boxes). These will be a purpose built, durable and long-lasting variety such as those available from Schwegler or 'Habibat' or equivalent;
- Provision of new bird nesting opportunities (i.e. nesting boxes). These will be a purpose built, durable and long-lasting variety such as those available from Schwegler or 'Habibat' or equivalent; and
- Creation of log piles and / or brash piles to provide hibernacula for reptiles and amphibians.

Conclusions

6.2.10 No significant residual negative effects on important ecological features were anticipated to result from the proposed works, following the inclusion of impact, avoidance and mitigation measures described above.

6.2.11 The proposed deepening of the site and extension of time would not give rise to any significant impacts in terms of ecology.

6.2.12 In conclusion, no changes are proposed that would give rise to any unacceptable impacts upon ecology or biodiversity and the restoration scheme being proposed would provide a net gain as required by the NPPF. It is considered that the proposals are therefore in accordance with the relevant policies of the Development Plan.

6.3 Transport

6.3.1 The accompanying Transport Assessment (TA) sets out the detailed appraisal of highway network operational impact in terms of percentage link flow change and local network operational performance (junction capacity).

6.3.2 Given that the proposed quarry extension would effectively ensure that enough mineral reserves are available to work at the site, such that existing quarry operations could continue up to a revised cessation date of 2077, operational site traffic would continue to distribute across the highway network on the same basis as current operations.

6.3.3 Loaded HGVs travelling to and from the quarry are currently subject to a routing restriction. This routing restriction is identified within the S106 Legal Agreement associated with the extant planning permission for the quarry, albeit it also includes for vehicles travelling to and from the on-site asphalt production facility.

6.3.4 Loaded HGVs travelling to and from the site, and unloaded HGVs travelling towards the site, are required to do so via the route of Back Lane to the north of the Back Lane Quarry access, and up to its junction with the B6254 Kellet Road. HGV routing from the site is controlled through an existing Section 106 Legal Agreement. Loaded HGVs are not permitted to travel via the route of Back Lane to the south of the access. Exceptions to the above HGV routing agreement are defined within the S106 Agreement and include for exceptional circumstances such as local deliveries or road closures affecting the HGV route.

6.3.5 Assessment of the impact of the development proposals has been carried out through the consideration of both link flow impact and junction operational capacity across the study area as summarised below:

- Site Access/Back Lane priority T-junction;
- Back Lane/B6254 Kellet Road priority T-junction; and,
- B6254 Kellet Road/B6601 priority T-junction.

6.3.6 In line with the typical assessment approach, assessments of link impact have been undertaken for the anticipated "First Year" of 2024, which should experience the maximum proportional impact of the development proposals under any new planning permission – proportionally the impact of development will reduce over time as general network traffic grows. Assessments consider the change in traffic flows arising in the "Do Something" scenario against the "Do Minimum" scenario which represents the effective future baseline traffic flow conditions across the study area highway network.

6.3.7 Similarly, assessments of study area network junction capacity have been undertaken for both the anticipated 2024 First Year as well as the Future Year of 2033, for all scenarios ("Do Minimum" and "Do Something"). These 2033 Future Year traffic flow forecasts would represent the worst-case assessment conditions for junction capacity when compared to the 2024 First Year conditions (future year conditions would see a higher total volume of traffic assessed at each junction that opening year conditions). Accordingly, this PS only presents and considers the results of the worst-case future year assessment scenarios (full results of all scenarios are included in the Appendices of the supporting TA).

6.3.8 Link change analysis and junction capacity assessments for the surrounding local highway network indicate that local routes and junctions could be expected to operate with a notable level of spare capacity, even including for future year traffic growth and the operation of the Proposed Development. The continued operation of the quarry under the Proposed Development would not generate significant traffic levels during traditional network AM and PM peak hour periods, with quarry related traffic spread relatively evenly across the core working day and maximum hourly development demand taking place during off-peak daytime periods.

6.3.9 There is no evidence of any material local road safety hazards that would call the Proposed Development scheme into question. No additional local network safety or

capacity improvements are therefore considered necessary to accommodate relatively low levels of predicted traffic demand.

6.3.10 Reference to IEMA screening guidelines would suggest that overall quarry related traffic levels over the immediate local network associated with the Proposed Development (when compared to "Do Nothing") would fall significantly below the threshold for requiring further, more detailed assessment of environmental effects. Whilst analysis of the change in HGV traffic levels has identified links which may experience changes above IEMA thresholds, further, more detailed, assessment of the likely environmental effects of development related HGV traffic across these links has identified that any level of effect would predominantly be negligible, with just one minor adverse potential effect. Accordingly, it is considered that the traffic-related environmental effects of the continued operation of Back Lane Quarry would not be significant, and therefore no mitigation measures are required to minimise or further reduce this level of effect.

Conclusions

6.3.11 Given the review of anticipated future operational highway conditions and reference to appropriate guideline standards, it is concluded that the proposed development would not result in a severe impact on operational or environmental conditions over the local transport network. Traffic-related environmental effects are not anticipated to be significant, and so there is no requirement for off-site transport improvement or mitigation works. It is therefore concluded that the proposed development would not give rise to any significant long-term residual traffic-related environmental effects.

6.4 Noise

6.4.1 The proposals are for the deepening of existing quarry operations and an extension of time for the quarrying operations to continue until 31 December 2077, with restoration being completed a year later, by 31 December 2078.

6.4.2 The application boundary is not to increase from the area already permitted under the latest ROMP for the site in 2006 (ref: 1/03/1186) and the extant planning permission from 2009 (ref: 01/09/0360) and therefore the workings will be no closer to the nearest dwellings to the site.

6.4.3 As the operations are to continue in the existing extraction area, but to a greater depth, there will be no requirement for soil stripping or bund formation operations

that are considered temporary operations (with a higher site noise limit) in Planning Practice Guidance (Minerals).

6.4.4 The mineral extraction operations, processing operations and use of the asphalt plant and concrete block works will not change from the current situation.

6.4.5 Following completion of the mineral extraction works, the void will be restored as per the proposed revised restoration scheme.

6.4.6 The intention of this assessment is to establish that the noise impact of the continuation of the existing site operations with mineral extraction to a greater depth and for a longer duration, would not be expected to generate noise levels at the nearest noise sensitive properties that would exceed the existing site noise limits as required by extant planning permission conditions or increase the site noise levels at the dwellings from the current levels.

6.4.7 Site noise monitoring data at the nearest residential locations where monitoring has been undertaken has been reviewed to establish the ongoing compliance of site noise with those limits.

6.4.8 Consideration of the site plans and the topography to explain why there is a potential increase in noise attenuation due to the greater depth of workings has been included in the assessment to demonstrate that site noise levels will not increase.

6.4.9 Site noise monitoring over the last twenty years has indicated that site noise (even at the top of the mineral) has complied with the site noise limits throughout the life of the site. Allied to this, working at greater depth will result in potentially greater barrier attenuation for the nearest dwellings to the site and therefore the proposed deepening and continued mineral extraction operations should not constitute an increase in site noise levels or an adverse impact on the dwellings.

6.4.10 The site can therefore continue to be worked within environmentally acceptable noise levels.

6.4.11 The cumulative impact of the continuing operations at Back Lane Quarry with the operations at the adjacent Tarmac Leapers Wood Quarry has also been examined and also shown to be of low impact.

6.4.12 In conclusion, no changes are proposed that would give rise to any unacceptable impacts upon receptors from noise. It is considered that the proposals are therefore in accordance with the relevant policies of the Development Plan.

6.5 Air Quality and Dust

6.5.1 An Air Quality and Dust Assessment was undertaken to support the proposals for the deepening of the existing Back Lane Quarry and an extension of time for mineral extraction and restoration operations. Both the footprint of the quarry and the output of material will be unchanged by this application. The application is made in conjunction with Leapers Wood Quarry, to the north, which is operated by Tarmac. The extraction areas of the two operations are connected and form a single quarry void but will continue to operate as two entities.

6.5.2 Mineral extraction will continue within the current permitted limit of extraction. The period of baseline measurements for dust deposition and PM_{10} concentrations suggested a minimal impact from the quarry at the monitoring locations. As the stand-off distances between mineral extraction and receptors will be unchanged by the development, it may be assumed that the impact from dust will not change. Indeed, the site will benefit from the extraction of mineral being undertaken at increased depth, which will afford a degree of natural dust mitigation. Therefore, providing correct dust management procedures are enforced, the extraction, processing, stocking, restoration and movement of material on the application site will not generate excessive levels of fugitive dust. Nevertheless, to ensure effective adherence of mitigation, it is recommended that a detailed scheme of dust management and monitoring be prepared pursuant of planning approval. This will be prepared by the Applicant and will set out in further detail the procedures to be employed which will, as a minimum, contain all the measures recommended in the Air Quality and Dust Assessment.

6.5.3 The scheme will recommend the implementation of a proactive monitoring strategy for nuisance dust and the measurement of PM_{10} / $PM_{2.5}$ concentrations in order to demonstrate compliance with appropriate air quality standards and dust deposition criterion. Monitoring would be undertaken at the nearest / most sensitive receptors to the quarry with the resultant data disseminated to the Regulatory Authorities. Particulate matter measurements will utilise equipment that complies with the requirements of the Air Quality Strategy.

6.5.4 The amount of mineral exported from the quarry will also remain unchanged from current volumes. As such there will be no undue impact on air quality pollutants along the public highway.

6.5.5 In conclusion, no changes are proposed that would give rise to any unacceptable impacts upon receptors from air quality or dust. It is considered that the proposals are therefore in accordance with the relevant policies of the Development Plan.

6.6 Groundborne Vibration and Air Overpressure

6.6.1 In order to regularise a criterion for restricting vibration levels from production blasting whilst addressing the need to protect amenity for nearby residents, it is recommended that the current criterion of 6.0 mm per second (mms^{-1}) for 95% of events is considered a satisfactory magnitude for vibration from blasting at Back Lane Quarry.

6.6.2 All blasts shall be designed to ensure that ground vibration levels arising from blasting shall not exceed a peak particle velocity of $6mms^{-1}$ in any mutually perpendicular plane and calculated with a 95% confidence limit. No individual blast shall exceed a peak particle velocity of $9mms^{-1}$ as measured at any vibration sensitive property which is not under the direct control of the Applicant / operator.

6.6.3 All vibration will be of a relatively low order of magnitude and would be entirely safe with respect to the possibility of the most cosmetic of plaster cracks.

6.6.4 All vibration will also be well below those levels recommended for blast induced vibration as being satisfactory within British Standard Guide BS 6472-2: 2008.

6.6.5 With such low ground vibration levels, accompanying air overpressure would also be of a very low and hence a safe level, although will be perceptible on occasions at the closest properties.

6.6.6 If the Applicant / operator accords with the recommendations given, there is no reason for blasting operations resulting from the proposed deepening of Back Lane Quarry to give rise to any adverse or significant impacts due to increased vibration at any of the dwellings or structures in the vicinity. In fact, for blasting operations in the current void, any resultant effects should be lower due to the greater depth of working.

6.6.7 In conclusion, no changes are proposed that would give rise to any unacceptable impacts upon receptors from vibration or air overpressure. It is considered that the proposals are therefore in accordance with the relevant policies of the Development Plan.

6.7 Water Environment

6.7.1 A full Flood Risk Assessment and Hydrogeological Impact Assessment have been undertaken. Pre-application liaison with the Environment Agency has also taken place.

6.7.2 The proposal involves the deepening of the quarry workings to -37 mAOD within a single quarry void. The volume of water entering the quarry void will increase with depth and be derived from three sources: direct rainfall, diffuse flow from the mass of the limestone and conduit flow from truncated karst features. The maximum theoretical volume of water that could occur within the karst system, and that could potentially enter the quarry void, has been calculated. The ingress would be managed via dewatering, with discharge to ground via the Leapers Wood sinkhole, the Back Lane lagoon sinkhole and the Back Lane French Drain, either individually or in combination.

6.7.3 The characteristics of the local groundwater regime within the limestone are influenced principally by topography, geological structure and the hydrogeological characteristics of the different rock types present, including karst features. The overall groundwater flow direction in the immediate vicinity of the quarries is west-northwestwards. The majority of groundwater within the limestone is discharged to a spring located 1.5 km to the north of the site. The resultant water discharges to a tributary of the River Keer.

6.7.4 Dewatering of the quarry void will continue, to permit safe and efficient mineral extraction by working the site dry. This will cause temporary lowering of the groundwater table in the vicinity of the site. By returning the majority of water to the aquifer, down-gradient of the site, any reduction in groundwater levels or baseflow to the north and northwest of the site will be mitigated.

6.7.5 Upon cessation of mineral extraction active water management will cease and the quarry void will start to fill with water. Passive outfall structures will be constructed to convey water to the existing discharge points. The design water level of the restoration waterbody is 45mAOD.

6.7.6 Based upon the proposed water management and the characteristics of the structural geology, it is considered that there will be no discernible impacts to any of the identified environmentally sensitive sites or groundwater-supported surface water features or groundwater abstractions. Continuation of the existing groundwater level monitoring regime is proposed.

6.7.7 The implications for flood risk associated with the proposed development have been assessed. The current discharge routes will continue to be used for the duration of mineral extraction. Volume calculations, including allowance for climate change effects, indicate that the total discharge can be restricted to the greenfield run-off rate throughout the proposed development. During storm events water would be stored temporarily within the quarry void. The latter provides massive flow balancing capacity, thereby allowing subsequent discharge to be undertaken at a controlled, appropriate flow rate.

6.7.8 During the extraction phase, sumps within the quarry will ensure that there is sufficient settlement provision to remove suspended solids from the discharge. Adherence to pollution control and best practice measures are such there will be no risk of pollution from the accidental release of contaminants. With the proposed controls and mitigation in place, there is not anticipated to be discernible impacts to water quality as a result of the proposals.

6.7.9 Future mineral extraction and dewatering may occur at Dunald Mill Quarry but it is not anticipated that this would be concurrent with the proposed development at Back Lane and Leapers Wood Quarries. Consequently, dewatering would not occur simultaneously at both sites and cumulative impacts would not arise.

6.7.10 In conclusion, no changes are proposed that would give rise to any unacceptable impacts upon the water environment. It is considered that the proposals are therefore in accordance with the relevant policies of the Development Plan.

6.8 Climate Change

6.8.1 Whilst national planning policy states that new development should be located so as to reduce greenhouse gas emissions, minerals are a finite resource that can only be worked where they are found (NPPF).

6.8.2 The proposed development comprises the deepening of the existing mineral extraction operations as well as an extension to the life of the site to allow for the additional extraction activities to be completed.

6.8.3 In terms of carbon emissions and potential effects on climate change, it would be necessary to continue the use of mobile plant to extract the mineral and transport it to the on-site processing facility located in the west of the site. Whilst the proposed development would result in the site being operational for an extended period of time, it would not intensify the number of mobile plant movements. Technology relating to electric mobile plant is rapidly developing and it is considered likely that

in the medium to long term the site's diesel powered mobile plant would be replaced by electric equivalents. This would significantly reduce the carbon footprint associated with the extraction of mineral at the site.

6.8.4 Limestone is currently processed on site using aggregate wash plants and screens which are powered by diesel generators. The proposed development would extend the period of time over which the plant and machinery are used but would not result in any significant changes to the use of the processing plant. As with the mobile plant and machinery described above, it is considered reasonable to assume that during the extended operational period, electric static plant and machinery would be introduced and eventually be procured as the industry standard. This would significantly reduce the carbon footprint associated with the processing of limestone on site.

6.8.5 In terms of the transportation of limestone from the site, it is not possible to transport materials to or from the site using sustainable modes of transport, for example rail or water. However, it is proposed that the output rate would continue at approximately 1.1mtpa. Therefore, the proposed development would only extend the period of time for the mineral extraction activities and would not result in an intensification in the number of HGVs entering and leaving the site. As discussed above, given both the currently permitted and proposed timescales for mineral extraction, it is considered reasonable to assume that technology will be developed to enable electric HGVs to be logistically and commercially viable for the Applicant's vehicle fleet. The Applicant is already committed to upgrading its commercial fleet of HGVs to minimise the company's carbon footprint and the use of an electric fleet of vehicles in the future would significantly reduce the carbon emissions associated with the transportation of mineral from Back Lane Quarry.

6.8.6 As the proposals would result in the joint boundary between Back Lane Quarry and Leapers Wood Quarry being worked to a depth of -37mAOD, it has been necessary to prepare a revised restoration scheme which encompasses both quarries. However, the revised scheme would not result in a requirement to import restoration materials and would not result in any significant change to the carbon emissions associated with the restoration of the site. Whilst there would be no specific requirement for restoration materials to be imported to the site, the proposed planting and landscaping would result in a relatively small number of vehicles delivering landscaping materials and planting specimens to the quarry. However, these vehicles would also be required to deliver materials for the currently

approved restoration scheme and would not therefore represent a significant change in the number of vehicles. As far as possible, the use of larger bulk haulage vehicles would be encouraged to deliver restoration materials to the site, in order to minimise the number of vehicle movements and wherever possible, material would be sourced from local projects in order to minimise vehicle mileage. Furthermore, given the proposed timescale for the restoration of the site (i.e by 2078) it is reasonable to assume that electric vehicles would be in commercial use, as standard. This would significantly reduce the carbon emissions associated with the restoration of the site.

6.8.7 In order to minimise emissions associated with their use, all mobile plant and machinery would be regularly serviced and maintained and would be switched off when not in use.

6.8.8 The effects of climate change and the vulnerability of the development proposal to these changes has been considered as part of the preparation of the EIA, particularly in terms of hydrology/ flood risk and ecology (i.e. the impacts of climate change on habitats and species).

6.8.9 The development proposal would not result in any significant impacts with respect to hydrology, hydrogeology or flood risk even when taking account of the predicted likely effects of climate change.

6.8.10 The proposed development would result in the creation of a lake feature with areas of shallows and reedbeds around the periphery. The proposed restoration would provide enhancements to the ecological value of the site, creating new habitats which would be sustainably managed and maintained throughout the aftercare period. As the lake's aquatic vegetation would benefit from occasional inundation by flood water, it is considered that the effects of climate change, for example increased rainfall, an increased risk of flooding or higher ambient temperatures, would not have any significant direct or indirect environmental effects on the restored site which is classed as 'water compatible development' within the NPPF/PPG.

6.8.11 Leapers Wood Quarry lies immediately adjacent to the application site. Given the nature and scale of the mineral extraction activities within Leapers Wood Quarry, and its proximity to Back Lane Quarry, the potential for cumulative and in-combination climate change effects has been considered.

6.8.12 Leapers Wood Quarry currently has permission to extract limestone to a depth of 38mAOD, with a permitted end date of September 2048 for mineral extraction and

of September 2049 for restoration. A planning application has been prepared, and is due to be submitted to the MPA, which seeks permission for the deepening of mineral extraction operations to a depth of -37mAOD with an extension of time for mineral extraction until the end of December 2064 and the completion of interim restoration by the end of December 2065. Final restoration of Leapers Wood Quarry would be completed by 2078 in conjunction with the restoration of Back Lane Quarry. The current activities and proposed development at Leapers Wood Quarry are therefore similar to those at Back Lane Quarry, with the exception of a shorter proposed life of the site at Leapers Wood Quarry.

6.8.13 As with the proposals at Back Lane Quarry, the operations at Leapers Wood Quarry require the use of mobile plant and machinery to excavate limestone and transport it to its on-site processing plant. HGVs transport the processed mineral from the site. Currently the majority of HGVs and mobile plant and machinery (including the processing plant) are diesel operated. The proposed development at Leapers Wood Quarry would result in a deepening of mineral extraction operations and an extension of time over which the quarry would be worked and restored. However, it would not result in any changes to the extraction rate and therefore there would not be an intensification in the use of mobile plant or HGV movements.

6.8.14 It is considered realistic to assume that, in the medium to long term, both Back Lane Quarry and Leapers Wood Quarry will be operated using electric mobile plant and machinery as diesel generated plant is phased out. Furthermore, whilst HGVs associated with the sites are currently diesel operated, it is also considered reasonable to assume that electric HGVs will be used as standard in the future. The cumulative and in-combination effects on climate change associated with the operation of plant and machinery and transporting mineral using HGVs in order to deepen the quarries and operate both sites beyond the currently permitted end dates, are not therefore considered to be significant.

6.8.15 Leapers Wood Quarry also lies within Flood Zone 1 and the quarry is also worked dry through dewatering of the quarry void. The current and proposed site activities within Leapers Wood Quarry would not have any cumulative effects in terms of the risk of flooding at Back Lane Quarry, or off site within the surrounding area.

6.8.16 Taking into consideration the extensive mitigation measures which are integrated into both the current and proposed site operations at Back Lane Quarry, it is considered that the proposed development would not have any significant environmental effects in terms of climate change.

Conclusions

6.8.17 In terms of the effects on climate change, taking the above considerations into account, it is evident that the proposed development represents an appropriate continued use of the site whilst avoiding increased vulnerability to the range of impacts arising from climate change. No changes are proposed that would give rise to any unacceptable impacts upon climate change. It is considered that the proposals are therefore in accordance with the relevant policies of the Development Plan.

6.9 Land Stability

6.9.1 The results of the stability analyses undertaken as part of the assessment indicate that the tip is overall stable and historical observations confirm this finding. A Factor of Safety value of c.1.50 is usually considered appropriate in such circumstances.

6.9.2 Given the ground conditions encountered at the site it is considered that the calculated Factor of Safety values are adequate for the as-built tip structure and that there should be no adverse effect on the nearby M6 motorway National Highways asset.

Monitoring

6.9.3 Daily visual inspections of excavations by Tarmac / Aggregate Industries personnel, as required by The Quarries Regulations 1999, would be undertaken to identify any evidence of instability or variation in expected ground conditions.

6.9.4 Geotechnical Assessments by a geotechnical specialist will be continued throughout the life of extraction at both sites.

6.9.5 In conclusion, no changes are proposed that would give rise to any unacceptable impacts in terms of land stability. It is considered that the proposals are therefore in accordance with the relevant policies of the Development Plan.

6.10 Human Health

6.10.1 An Air Quality and Health Impact Briefing Note has been prepared by Savills and accompanies the application.

6.10.2 In summary, public health statistics show that respiratory health in the area is good and there is no evidence of any impact from current operations.

6.10.3 There are a range of mitigation measures which are currently being implemented at the Back Lane Quarry site and contribute to baseline air quality in the local area remaining well within AQS objective thresholds which are set to protect the environment and human health.

6.10.4 Provided that appropriate mitigation measures continue to be implemented, dust generation from the continuation of activities would be negligible and there would be no change in health risk. It is considered that the proposals are therefore in accordance with the relevant policies of the Development Plan.

7 CONCLUSIONS

7.1 Summary

7.1.1 This PS has been prepared to support an application at Back Lane Quarry for the deepening of the existing quarry operations and an extension of time for the quarrying operations to continue until 31 December 2077, with restoration being completed a year later, by 31 December 2078.

7.1.2 This planning application is submitted under Section 73 of the Town and Country Planning Act 1990 and proposes to vary conditions 1 (timescales), 2 (approved plans), 4 (depth of mineral extraction), 6 (phasing plans), 41 (final restoration scheme) and 43 (water level timescales) of planning permission 01/09/0360.

7.1.3 This PS accompanies the planning application and sets out the relevant planning policies to be considered as part of the application determination. The PS also sets out why the application is being submitted and relevant socio-economic considerations. The planning application is accompanied by an Environmental Statement (ES).

7.1.4 This PS sets out baseline and background information and also sets out the details of the development having regard to the location, scale and nature of the proposals.

7.1.5 This PS identifies the relevant national and Development Plan policies that will be used in the determination of the application. In this regard the proposal is considered to be compliant with the main planning policy tests set out in the Development Plan and advice set out in national planning policy.

7.1.6 The working of Back Lane Quarry is coordinated with the development of Tarmac's adjoining Leapers Wood Quarry which also proposes to deepen the extraction area to the same depth. It is important that the working and restoration of both quarry operations are closely coordinated as the site is essentially a single void.

7.1.7 The site is a strategic supplier of high-grade aggregates, asphalt and concrete products, all of which are essential for the repair, maintenance and improvement of the built environment in the region.

7.1.8 Minerals are a finite natural resource and can only be worked where they are found. Carboniferous limestone resources are extremely limited within Lancashire and northwest of England, being confined to the Carnforth area in the north of the county and the Clitheroe area to the south. Carboniferous limestone resources are

otherwise generally very heavily constrained by National Parks and National Landscapes.

7.1.9 It is considered preferable for the existing quarries to seek permission to extract additional minerals from a deeper depth, rather than to pursue a lateral extension to the existing workings. It is therefore essential that the long-term plans for the site are considered now to ensure that the mineral resource available is not unnecessarily sterilised or compromised and that continuity of supply is secured.

7.1.10 No unacceptable impacts have been identified in relation to residential amenity, air quality, designated nature conservation sites, ecology and biodiversity, the water environment, landscape character or the highway network.

7.1.11 The mitigation of potential impacts through the imposition of planning conditions and appropriate planning agreements is in accordance with Development Plan policy and national planning advice. No significant residual or cumulative environmental impacts are anticipated to result from the development.

7.1.12 The proposed scheme will bring about a number of environmental and significant economic benefits. This includes providing an essential supply of carboniferous limestone aggregate and associated products, helping to meet the need for crushed rock within the region, alongside significant benefits to the local economy from the jobs created and local expenditure.

7.1.13 The NPPF makes it clear that *'great weight should be given to the benefits of mineral extraction, including to the economy'* and that '*it is essential that there is a sufficient supply of minerals to provide the infrastructure, buildings, energy and goods that the country needs. Since minerals are a finite natural resource, and can only be worked where they are found, best use needs to be made of them to secure their long-term conservation'*. The proposals clearly accord with this national policy.

7.1.14 In overall conclusion, it is considered that the proposals are environmentally acceptable and support the economic, social and environmental roles of sustainable development required in NPPF. Where it is considered that adverse impacts would arise from the proposed development, appropriate mitigation has been proposed that would ensure there would be no unacceptable effects. Any mitigation can be formalised as appropriate through the imposition of planning conditions and other development control mechanisms. The potential environmental and local amenity impacts are therefore considered acceptable and the proposal accords with the Development Plan.

7.1.15 At the heart of the NPPF is the presumption in favour of sustainable development for proposals which are in accordance with the Development Plan. Section 38(6) of the Planning and Compulsory Purchase Act 2004 requires that applications for planning permission should be determined in accordance with the provisions of the Development Plan unless material considerations indicate otherwise.

7.1.16 The Planning Statement and supporting assessments have demonstrated that the proposed development is, on balance, in accordance with the Development Plan and there are no material considerations which indicate otherwise.