

DERBYSHIRE AND DERBY MINERALS LOCAL PLAN

SITE ASSESSMENT ALDWORK/BRASSINGTON MOOR

DECEMBER 2016

Derbyshire County Council and Derby City Council (the mineral planning authorities) are working together to prepare a joint minerals local plan. It will be called the Derbyshire and Derby Joint Minerals Local Plan and cover the geographical area of Derbyshire, excluding the Peak District National Park. It will cover the period to 2030.

Minerals are essential raw materials, which are used to provide the infrastructure, buildings, energy and goods that our country needs. They are vital for economic growth and our quality of life. They are, however, a finite resource and can only be worked where they are found. It is important therefore, that we make the best use of them to enable their long term conservation.

The Plan area has a wealth of mineral resources. Mineral extraction and development has, for a long time, been a part of the Derbyshire landscape and an important part of the local economy, making an important contribution to the national, regional and local need for minerals. Whilst mineral working can also provide environmental benefits, residents and local businesses are often concerned about any unwelcome impacts.

The Councils carried out extensive consultation during 2015 and 2016 in the form of series of papers, which sought to develop further the emerging vision and objectives, strategies and policies of the Minerals Local Plan. The comments and suggestions made at this stage will be used to feed into the Draft Minerals Local Plan which will be published in 2017. We will ask for your views on this document later in the process.

During the 2015 and 2016 Consultation the Councils sought your views on issues relating to the development of a strategy for the provision of industrial limestone; including whether to opt for the identification (allocation) of specific sites to

ensure future supply. Information was included about sites that were being promoted by operators for inclusion in the Plan. The 2015 2016 Consultation also included a Paper which set out the Site Assessment Methodology that would be used to assess hard rock quarries for their suitability to be allocated in the Plan, should that option be chosen as the best way to ensure supply.

The Site Assessment Methodology has been refined in the light of comments made to the previous Consultation Paper and used to carry out an initial assessment of hard rock sites that have been promoted by operators for working. At this stage the Assessment process is intended to discover any positive factors that would support the allocation of the site and any negative factors against its allocation. An allocation of land in a local plan is acceptance, in principle, that a site is suitable for working subject to satisfying detailed planning considerations.

This Paper is about the assessment of a promoted site at Aldwark/Brassington Moor quarry.

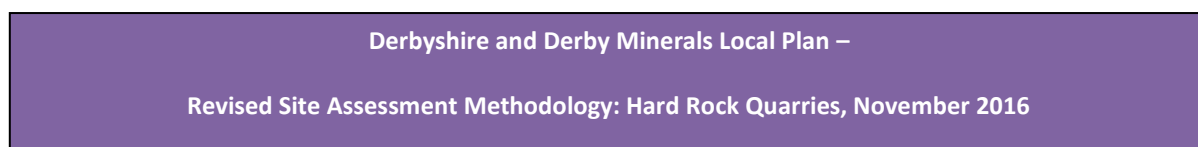
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1. Introduction and Background

The 2015/2016 Consultation 'Towards a Minerals Local Plan' included a Paper about developing a Strategy for Industrial Limestone. This Paper included several Options for ensuring supply including two which required the identification (allocation) of specific sites for industrial limestone working. The 2015/2016 Consultation also contained a Paper setting out a methodology for assessing the sites that had been put forward for possible allocation in the Plan. On the whole the proposed methodology received favourable comments; it has been amended slightly to address concerns raised during the Consultation process. The revised methodology will be used to carry out an initial assessment of the promoted sites.

The revised Site Assessment Methodology can be found in the following Paper:



2. Aldwark/Brassington Moor Quarry

Aldwark/Brassington Moor Quarry lies within the Carboniferous Limestone Resource centred on the Matlock/Wirksworth area. The quarry is currently operated by Longcliffe Quarries Ltd. It produces dried, milled and classified calcium carbonate powders and granules. These are crucial raw materials for the production of animal feed, glass, sealants and adhesives, mastics, plastics and rubber. It also produces bright (white) dusts for precast concrete products and significant volumes of agricultural lime. By-products from these mainstream products are also sold for construction uses. Recent production rates have averaged just below 1mt split equally between industrial and aggregate uses.

Some of the products produced require exacting specifications of mineral which impacts on the suitability of reserves at the quarry. Of particular importance for animal feed products are reserves that are low in cadmium, iron and lead which occur at different locations and depths throughout the quarry. The Company estimates that these reserves will be exhausted between 2025 and 2031. It is proposing an extension to the quarry that would

yield approximately 38 mt of reserve generating between 6.8 and 12.2 mt of low cadmium reserves.

3 Sources of Information for Assessment

The following documents provide the main sources of information used to assess the site:

Derbyshire and Derby MLP Questionnaire for promoted sites

Letter containing supporting information dated 20 October 2016

The following information has been mapped:

Site location, resource, buffer zones, transport features, water designations, nature and heritage assets, landscape character, predictive agricultural land

The site assessment should be read alongside the mapped information which can be found in the following Paper:

Derbyshire and Derby Minerals Local Plan –
Site Assessment Maps: Aldwark/Brassington Moor

4. Site Assessment

The Assessment process is intended to discover any positive factors that would support the allocation of the site and any negative factors against its allocation. These factors are then categorised as having a major or minor impact. In some cases the criteria has been categorised as only having a minor impact on the potential allocation of the site from the outset.

PMAJ - Major positive factor in favour of allocation

PMIN - Minor positive factor in favour of allocation

NMIN - Minor negative factor against favouring an allocation

NMAJ – Major negative factor against favouring an allocation

Criteria	Criteria Ref.	Considerations	Scale of impact	Indicators	Assessment
Economic Criteria					
Need for mineral	01	NPPF requires that local plans should plan for an adequate and steady supply of minerals. For aggregate minerals the level of provision is determined through the LAA. For some industrial minerals, especially those used in cement production and brick clay the NPPF sets out specific requirements for providing a stock of permitted reserves (land bank) to maintain supply. Is there an identified need for additional reserves to be worked over the Plan period?	PMAJ PMIN NMAJ	Detailed evidence to support the need for additional reserves to be worked at that quarry over the Plan period Some evidence to support the need for additional reserves to be worked at that quarry over the Plan period Insufficient evidence to support the need for additional reserves to be worked at that quarry over the Plan period	PMAJ (see Map 1) The Company has submitted detailed evidence to justify the need for additional reserves of Low Cadmium Limestone at Aldwark/Brassington Moor quarry. Current reserves of this quality will last until 2025 at the worst case scenario and 2031 at the best. The new mineral reserves will not be required until the latter part of the Plan period.
Quality/yield of	02	NPPF requires local plans to deliver	PMAJ	Detailed geological evidence to support the quality/yield of the	PMIN

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mineral		development and therefore the economic viability of development is an important consideration. Is the reserve quality/yield sufficient to suggest extraction would be economically viable during the plan period?	PMIN NMAJ	deposit (boreholes) Some geological evidence to support the quality/yield of the deposit (mapped) Insufficient evidence to support the quality/yield of the deposit	The Company has submitted detailed borehole/mapped evidence from the existing quarry which can be used to extrapolate the geochemistry of the promoted site. Detailed borehole is not yet available.
Use of mineral resources	03	NPPF recognises that minerals are a finite resource and therefore it is important to make the best use of them in order to ensure their long term conservation. Is the end use proposed appropriate for the type of mineral?	PMAJ PMIN NMAJ	Detailed evidence provided to justify that the end use is appropriate for the mineral Some evidence provided to justify that the end use is appropriate for the mineral Insufficient evidence provided to justify that the end use is appropriate for the mineral	PMAJ The Company has submitted evidence to support the proposed end use of the mineral. Mineral from the promoted site will be used for highly specified high purity low heavy metal products for markets such as animal feeds, glass, sealants and adhesives, plastics and rubber as well as agricultural lime and bright (white) products for specialised pre-cast concrete products.
Location of Processing Plant	04	Market areas vary greatly for minerals depending on their type from international, national or more local. Where relevant an assessment will be made on the appropriateness of the location of the site to intended market. Is the site appropriately located in relation to the market it is intended to serve?	PMIN NMIN	The site is well located to serve its intended market The site is not well located to serve its intended market	PMIN Markets for industrial limestone are national. The Carboniferous Limestone resource around Matlock/Wirksworth in Derbyshire is a well-established industrial limestone producing area of the Country. Aggregates will be used locally.
Existing Infrastructure	05	Mineral processing plant/infrastructure can be expensive to develop and therefore NPPG states that economic considerations such as the utilisation of existing plant and infrastructure should be taken into account. Is there existing infrastructure that would be utilised by the proposed operation to process the mineral?	PMIN NMIN	Yes existing infrastructure exists on or adjacent to the site No new infrastructure would be required to process the mineral	PMIN The mineral will be processed on site using existing plant and infrastructure.

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Sterilisation of Resources	06	<p>NPPF recognises that minerals are a finite resource and therefore it is important to make the best use of them, including avoiding their sterilisation, in order to ensure their long term conservation.</p> <p>In some cases it might be that if a site isn't allocated to be worked as part of a current operation its' scale or location would affect the likelihood of it being worked in the future effectively sterilising the resource.</p> <p>If the site wasn't allocated would the mineral resources be sterilised from future working due to its location/scale?</p> <p>In many cases a new operation will not be the result of an existing site being abandoned and this will not be an issue.</p>	<p>PMIN</p> <p>NMIN</p>	<p>Yes The site is likely to be sterilised if not allocated</p> <p>No The site is unlikely to be sterilised if not allocated due to its scale/location</p>	<p>PMIN</p> <p>Limestone quarries are expensive to develop and therefore if this site isn't worked as an extension to the existing quarry it is unlikely to be worked in the future.</p>
Employment	07	<p>The minerals industry can provide an important source of local employment. NPPG states that economic considerations such as the retention of jobs should be taken into account.</p> <p>Is it likely that the proposal would lead to the retention of jobs at a currently operational site to the benefit of the local community? Would it be the continuation of an existing operation or a new operation?</p>	<p>PMAJ</p> <p>PMIN</p> <p>NMIN</p>	<p>A new operation which would result in new jobs</p> <p>Working of the site would enable a continuation of the operation leading to the retention of existing jobs at an existing quarry or A new operation that would not result in net job losses</p> <p>A new operation which would result in job losses elsewhere</p>	<p>PMIN</p> <p>Working of the site would enable a continuation of the operation leading to the retention of 175 full time jobs at the existing quarry and 30-40 semi-permanent contractors.</p>
Social Criteria					
Duration of mineral extraction	08	<p>NPPF requires the cumulative impact of proposals to be taken into account; the duration of the operation should be a consideration.</p> <p>The duration of mineral extraction will affect the overall scale of impact on local communities.</p> <p>What is the intended timeframe for working the site (i.e. short term 0-10 years etc.?)</p>	<p>PMAJ</p> <p>PMIN</p> <p>NMIN</p> <p>NMAJ</p>	<p>Short term 0-10 years</p> <p>Medium term 10-20 years</p> <p>Long term 20-30 years</p> <p>Very long term 30+ years</p>	<p>NMAJ</p> <p>Working the site is a very long term proposal in excess of 30 years.</p>
Visual Intrusion	09	<p>NPPG advises that visual intrusion is a consideration that needs to be taken into account.</p> <p>Visual intrusion covers impact of the workings in relation to nearby communities and impact on</p>	<p>PMAJ</p> <p>PMIN</p> <p>NMIN</p>	<p>The site has few or no visually sensitive receptors and/or only small parts of the site will be visible from them.</p> <p>The site has few visually sensitive receptors but large parts (or more than one part) of the site will be visible from them.</p> <p>The site has some visually sensitive receptors and/or some</p>	<p>NMIN</p> <p>The site has some visually sensitive receptors and/or some parts of the site will be visible from them. Whilst there are no sensitive receptors close to the proposed extension area, it will be visible from a number of locations around the site that will</p>

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		<p>landscape during and after working. This section covers impact on communities. Impact on landscape character will be dealt with separately.</p> <p>Assessment makes a judgement of visual impact on 'sensitive receptors'. In terms of visual impact these have been classed as occupied residential properties and places where people go e.g. schools/hospitals/community centres/leisure facilities. Public Rights of Way have also been included in this assessment. The assessment takes into account as far as possible; proximity to sensitive receptors topography of site existing screening measures</p>	NMAJ	<p>parts of the site will be visible from them.</p> <p>The site has many visually sensitive receptors and/or large parts (or more than one part) of the site will be visible from them.</p>	<p>allow for views of parts of the area. These include some properties in Aldwark and Ible, local footpaths, recreational trails including the High Peak Trail and the Limestone Way, and the local road network.</p>
Noise	10	<p>NPPG advises that noise is a consideration that needs to be taken into account particularly where noise sensitive properties are affected. The effects of noise need to be evaluated, controlled or mitigated.</p> <p>At this stage the only factor that we can measure is the proximity of the site to noise sensitive areas and properties which would be adversely affected by an increase in noise levels. These would normally include dwellings/places of worship/educational establishments/hospitals/ livestock farms/ some factories or any other property likely to be adversely affected by an increase in noise levels.</p> <p>NPPG states that Mineral planning authorities should aim to establish a noise limit, through a planning condition, at the noise-sensitive property that does not exceed the background noise level ($L_{A90,1h}$) by more than 10dB(A) during normal working hours (0700-1900).</p> <p>The assessment takes into account the number of sensitive receptors within 200 and 500m of site.</p>	<p>PMAJ</p> <p>PMIN</p> <p>NMIN</p> <p>NMAJ</p>	<p>The site has no noise sensitive receptors within 500m of the boundary of the site</p> <p>The site has no or few noise sensitive receptors within 200m of the boundary of the site and some within 500m</p> <p>The site has no or few noise sensitive receptors within 200m of the boundary of the site and many within 500m</p> <p>The site has many noise sensitive receptors within 200m of the boundary of the site</p>	<p>PMIN (see map 2)</p> <p>The site has no or few noise sensitive receptors within 200m of the boundary of the site and some within 500m. Residential and industrial uses are located at Manor Farm which lies some 350 metres away to the south of the site. The villages of Aldwark and Longcliffe lie just beyond 500 metres away to the north and south west respectively.</p>

Criteria	Criteria Ref.	Considerations	Scale of impact	Indicators	Assessment
Nuisance Dust	11	<p>NPPG advises that dust is a consideration that needs to be taken into account. This criteria deals with nuisance dust only. Dust likely to cause harm to human health is dealt with under air quality.</p> <p>The location of residential areas, schools and other dust-sensitive land uses should be identified in relation to the site, as well as proposed or likely sources of dust emission from within the site.</p> <p>The assessment should explain how topography may affect the emission and dispersal of site dust, particularly the influence of areas of woodland, downwind or adjacent to the site boundary, and of valley or hill formations in altering local wind patterns.</p> <p>Large dust particles (>30um), which make up the greatest source of dust emitted from mineral workings will largely deposit within 100m of sources. Intermediate sized particles (10-30um) are likely to travel up to 200-500 m.</p> <p>Large/intermediate particles are classed as nuisance dust.</p> <p>Assessment takes into account the number of high/medium dust sensitive properties within 200 and 500 metres of sites i.e. area where large/intermediate dust particles are likely to deposit.</p>	PMAJ PMIN NMIN NMAJ	<p>The site has no high/medium dust sensitive receptors within 500m of the boundary of the site</p> <p>The site has no or few high/medium dust sensitive receptors within 200m of the boundary of the site and some within 500m</p> <p>The site has no or few high/medium dust sensitive receptors within 200m of the boundary of the site and many within 500m</p> <p>The site has many high/medium dust sensitive receptors within 200m of the boundary of the site</p>	PMIN The site has no or few high/medium dust sensitive receptors within 200m of the boundary of the site and some within 500m. Residential and industrial uses are located at Manor Farm which lies some 350 metres away to the south of the site. The villages of Aldwark and Longcliffe lie just beyond 500 metres away to the north and south west respectively.
Air Quality/ Human Health	12	<p>Smaller particles (< 10um) which make up a small proportion of dust emitted from most mineral workings can travel up to 1000m or more. These small particles (PM10s) are associated with effects on human health. NPPG states that measures to control fine particulates (PM₁₀) to address any impacts of dust might be necessary if, within a site, the actual source of emission (e.g. the haul roads, crushers, stockpiles etc.) is in close proximity to any</p>	PMIN NMIN NMAJ	<p>Site does not lie within 1000 m of an AQMA</p> <p>Site lies within 1000m of an AQMA</p> <p>Site lies within an AQMA</p>	PMIN The site does not lie within 1000m of an AQMA

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		residential property or other sensitive use. Unacceptable levels of PM10s are one factor that may result in the establishment of an Air Quality Management Area to address the problem. The presence of such an area has been regarded as an indicator that air quality is poor therefore might constrain the location of additional dust generating development. Given that PM10s can travel up to and over 1000m, this has been used as a cut-off point.			
Blasting /Vibration	13	NPPG advises that blast vibration is a consideration that needs to be taken into account. Blasting is often a major cause of concern to residents close to mineral workings. Disturbance is dependent on the quantity of explosive used, the distance to the receptor, the geology of the site and atmospheric conditions. The impact of blasting is a matter not normally addressed in detail at the 'site allocation' stage but as a practical 'rule of thumb' a 200 metre buffer zone is considered more than adequate to protect sensitive receptors from the impacts of blasting.	PMIN NMIN	Distance to nearest sensitive receptor is over 200 metres Distance to the nearest sensitive receptor is within 200 metres.	PMIN Distance to the nearest sensitive receptor at Manor Farm is over 200 metres away.
Transport – Local Amenity	14	NPPG advises that traffic is a consideration that should be taken into account. The movements of minerals and importation of fill material for restoration can generate large volumes of traffic, mainly heavy goods vehicle (HGVs). Such traffic can impact on communities causing problems such as public safety, noise and vibration, air pollution and visual intrusion. These problems are most severe where HGVs use roads unsuited to their weight and size, where they pass through sensitive areas and at the access to the site from the public highway. Will associated mineral traffic pass through sensitive areas on the way to the strategic road network?	PMAJ PMIN NMIN NMAJ	HGVs would have to pass no sensitive receptors between the site and the start of the local strategic network (A Class Road or designated freight routes) HGVs would have to pass few sensitive receptors between the site and the start of the local strategic network (A Class Road or designated freight routes) HGVs would have to pass some sensitive receptors between the site and the start of the local strategic network (A Class Road or designated freight routes) HGVs would have to pass many sensitive receptors between the site and the start of the local strategic network (A Class Road or designated freight routes)	PMAJ (See Map 3) The HGV route to the strategic network (A5012) at Grangemill doesn't appear to pass any sensitive receptors. The B6056 does run along the boundary of the Peak District National Park, although mostly in a deep valley which assists in obscuring vehicles from view. Two accidents were reported at the A5012/B6056 junction at Grangemill over the previous three year period; however neither of these involved a HGV.

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Transport - Safe and effective access to and from the site	15	What are the existing or proposed access arrangements for the site?	PMAJ NMIN NMAJ	Existing approved access to current highway standards Existing approved access not to current highway standard but no pattern of existing collisions at access location or no existing access , but subject to agreement with local highway authority new access likely to be accepted Existing approved access not to current highway standard and current pattern of existing collisions at access location or no existing access and subject to agreement with local highway authority new access unlikely to be acceptable.	PMAJ The existing site access to the south of the B5056 appears to conform to existing highway standards. No accidents have been reported in the vicinity of this junction.
Transport – Export route (vehicular)	16	What is the main export route (vehicular) from the site?	PMAJ PMIN NMIN NMAJ	Direct onto the strategic road network (i.e. and A class road or a road that is a designated freight route. Direct onto a B class road with short haul to strategic road network Direct onto a B class road but with long haul to strategic road network Direct on to minor roads unsuitable for HGVs	PMIN The strategic road network (A5012) is accessed at Grange Mill via the B5056 around 1km to the northeast. This route appears suitable for HGV trips. At the A5012/B6056 Grangemill junction a notable proportion of vehicles route west along Via Gellia to join the A6 at Cromford. The emergence of HGVs at this location (Water Lane) contributes to an increase in congestion and impacts adversely on the Cromford Conservation area. Four accidents occurred at the Water Lane/Cromford Hill junction (non-involved HGVs) over the previous three year period. Therefore a significant increase in HGV movements at this location may not be welcomed.
Transport - Capacity for sustainable transport options	17	NPPF promotes the use of alternatives to road transport provided that they are environmentally preferable. This helps to reduce carbon emissions thus reducing the impacts on the climate. Is an alternative mode of transport to road proposed?	PMAJ PMIN NMIN	All material would be transported by rail or canal Some material would be transported by rail or canal All material would be transported by road	NMIN As with existing operations, it is anticipated that all material would be transported by road.
Benefits from the working, restoration and proposed after-use	18	NPPF advises that the positive benefits of mineral working should be taken into account. What are the overall potential benefits from the proposed working, restoration and after-use of the site?	PMAJ PMIN NMIN NMAJ	Economic, social and environmental benefits would arise Two of the above benefits would arise One of the above benefits would arise No benefits would arise	PMIN Economic-industrial limestone from this quarry is an important raw material for many downstream industries Social – Continued local employment
Cumulative impact	19	Cumulative impact arises not only from successive mineral operations in the same area,	PMIN	There are no significant impacts of past or present mineral extraction or other significant commercial activity in the area.	NMAJ There is a concentration of mineral workings and other

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		but also coupled with other types of commercial activity, which may have an impact on an area over time.	NMIN NMAJ	There are not any current mineral workings in the area but there have been workings in the recent past and there is other commercial activity in the area. There is a concentration of mineral workings and other commercial activity in the areas, which currently have, or have had, impacts either concurrently or successively over a long period of time.	commercial activity in the areas, which currently have, or have had, impacts either concurrently or successively over a long period of time. The site lies adjacent to an active limestone quarry Grange Mill.
Environmental Criteria					
Water Environment – Flood Risk	20	The EA designates flood zones which are susceptible to different risks of flooding. Zone 1 has the lowest probability of flooding and Zone 3 the highest. NPPG advises that a risk-based sequential test should be applied to proposals with the aim of steering new development to areas at the lowest probability of flooding. It classifies land uses according to their vulnerability to flooding; mineral workings (other than sand and gravel workings) are classed as ‘less vulnerable’ development which is appropriate development in zones 1, 2 and 3a. However, mineral working should not increase flood risk elsewhere and needs to be designed, worked and restored accordingly. It sets out that it may be possible to locate ancillary facilities such as processing plant and offices in areas at lowest flood risk. Sequential working and restoration can be designed to reduce flood risk by providing flood storage and attenuation.	PMAJ PMIN NMIN NMAJ	Site lies within flood zone 1- lowest probability of flooding Site lies within flood zone 2- medium probability of flooding Site lies within flood zone 3a- high probability of flooding Site lies within flood zone 3b- functional flood plain	PMAJ (see Map 4) The site lies within flood zone 1 where there is the lowest probability of flooding.
Water Environment – groundwater	21	NPPG advises that groundwater is a consideration that should be taken into account. The EA designates Groundwater Source Protection Zones for important groundwater sources such as wells, boreholes and springs used for drinking water supply. It is important within these Zones not to interrupt the flow or to pollute the groundwater.	PMIN NMIN	Site lies outside a groundwater protection zone Site lies within a groundwater protection zone	PMIN The site lies within a groundwater protection zone

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Water Environment - aquifer protection	22	NPPG advises that groundwater is a consideration that should be taken into account. Permeable rock deposits that store groundwater are known as aquifers. The EA designates two types of aquifer, superficial drift and bedrock deposits. Aquifers are further classified as Principal or Secondary. Principal aquifers usually provide a high level of water storage and may support water supply and/or river base flow on a strategic scale. Consequently they require the greatest protection from development that might be harmful to them.	PMIN NMIN NMAJ	Site lies on a Non Aquifer Site lies on a Secondary Aquifer Site lies on a Principal Aquifer	NMAJ (see Map 5) The site lies on a Principal Aquifer
Ecology – existing impacts from mineral extraction	23	NPPG advises that impacts on internationally, nationally or locally designated wildlife sites, protected habitats and species and ecological networks should be taken into account. Presence or absence of existing impacts from mineral extraction	PMAJ PMIN NMIN NMAJ	Over a wide area habitats have been fragmented by mineral extraction or habitats of limited quality have been created through mineral extraction but have potential to make a major contribution to biodiversity targets Localised but moderate to high impacts Only localised, limited impacts associated with mineral extraction on habitats within or adjacent to the site None or insignificant impacts from mineral extraction on habitats within or adjacent to the site	NMIN The proposed extension site would represent a southward expansion of existing quarrying activities, and so the area lies immediately adjacent to the Brassington Moor and Grange Mill Quarries complex. However, whilst mineral extraction has occurred and is occurring in the wider area (Slinter, Bone Mill and Dene Quarry for example), most of the intervening land has not been disturbed by quarrying. Neighbouring quarrying operations are not known to exert a significance force on local ecological receptors.
Ecology – UK, regional and local BAP priority species and habitats	24	NPPG advises that impacts on internationally, nationally or locally designated wildlife sites, protected habitats and species and ecological networks should be taken into account. Presence or absence of existing priority habitats and species as identified by UK, regional and local BAPs	PMAJ PMIN NMIN NMAJ	Extensive areas of degraded or biodiversity poor habitats that provide a context for possible allocation with an emphasis on habitat creation contributing to UK priority habitats Some areas of degraded or biodiversity poor habitats that provide a context for possible allocation with an emphasis on habitat restoration or creation contributing to UK and local priority habitats Some areas of positive ecological value including UK or local priority habitats or species which should be considered for protection/conservation Extensive areas of positive ecological value including UK priority habitats or species which should be considered for protection/conservation	NMIN (see Map 6) The proposed extension does not include any land designated for its' ecological interests (SSSI or LWS for example), although a small strip of ancient woodland (as identified locally) lies between the proposed extension and the B5056. Habitats within the site appear to consist of managed farmland unlikely to be of significant ecological interest in its own right, although great crested newts have been recorded from within and adjacent to the site. Impacts on this European Protected Species would need consideration and mitigation as part of any application, if a need is proven, although there should be ample opportunity to provide mitigation and enhancement within and adjacent to the extension area.

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Ecology – ecological coherence: Natural Areas/ Wildlife Corridors/linkages	25	NPPG advises that impacts on internationally, nationally or locally designated wildlife sites, protected habitats and species and ecological networks should be taken into account. Does the site have strong ecological coherence?	PMAJ PMIN NMIN NMAJ	The proposed site no longer accords with the established habitats over a wider area. The proposed site has few characteristics that accord with the established habitats over a wider area and its internal ecological coherence is poor OR coherence of the wider area is poor The proposed site generally accords with the established habitats over a wider area (or in part) but the condition of habitats is poor OR few features within the site but encompassed by landscapes which have ecological coherence The proposed site accords with the established habitats over a wider area and habitat pattern is strong	PMIN The site appears to support managed agricultural land. This accords with a very common land use in this area. However, the key ecological receptors in this area are the ancient woodlands of the Via Gellia Woodlands SSSI/SAC complex, and species rich calcareous grasslands found in the wider area. The site therefore does not make a significant contribution to the ecological coherence in the area
Ecology – Habitat Creation	26	NPPG advises that the proposed restoration of the site should be taken into account. Does the site provide opportunities for habitat creation?	PMAJ PMIN NMIN NMAJ	The proposed site offers excellent opportunities to create or enhance UK priority habitats within the site and offers biodiversity benefit over a wider area e.g. by enhancing a habitat corridor. The site offers some opportunities to create or enhance UK or local priority habitats within its boundaries, making overall habitat gain, but may not make appropriate linkages to wider area. Existing habitats are intact and habitat creation would only provide limited biodiversity enhancement within the site or the wider area. Existing habitats are intact and make a strong contribution to priority biodiversity targets for conservation and there is strong ecological coherence within the site; habitat creation would not enhance the site or the wider area.	PMIN The key ecological resources in this area are ancient woodlands and species rich calcareous grasslands, set within a managed pastoral landscape. If soil resources are managed, site restoration should offer the opportunity to deliver restoration to grasslands – which should be calcareous and species rich – with opportunities for woodland creation if deemed desirable. Restoration of or natural regeneration on benches could offer additional complementary habitat gains. Site restoration could therefore deliver a net gain for biodiversity through habitat creation, which would add to resources within the wider area, without necessarily directly enhancing existing habitat corridors.
Landscape-existing impacts from mineral extraction	27	NPPG advises that impacts on landscape character should be taken into account. A particular issue for hard rock quarries is the scope of the landscape character to accommodate mitigation and thereby reduce potential impacts. What is the character of the existing landscape including its scope to accommodate mitigation?	PMAJ PMIN NMIN NMAJ	A landscape of complex character with many landscape characteristics that can be employed in the satisfactory mitigation/restoration of the site A landscape of varied character with some landscape characteristics that can be employed in the satisfactory mitigation/restoration of the site A simple landscape with few landscape characteristics that can be employed in the satisfactory mitigation/restoration of the site An open and simple landscape with very few landscape characteristics that can be employed in the satisfactory mitigation/restoration of the site	NMIN A simple landscape with few landscape characteristics that can be employed in the satisfactory mitigation/restoration of the site

Criteria	Criteria Ref.	Considerations	Scale of impact	Indicators	Assessment
Landscape – Existing infrastructure	28	NPPG advises that impacts on landscape character should be taken into account. Is there existing infrastructure that the site could be worked through and what is the impact in landscape terms from connecting to this?	PMAJ PMIN NMIN NMAJ	There is existing infrastructure within the vicinity of the proposed site that can be readily and easily used There is existing infrastructure within the vicinity of the proposed site that could be connected to with slight adverse effects There is existing infrastructure within the vicinity of the proposed site but there would be significant adverse impacts associated with connecting to it. There is no existing infrastructure and this will need to be developed for the proposed site to be operated	PMAJ There is established fixed plant on site for the processing of materials that can be readily connected to from the proposed extension area, although this will require moving material long distance via an underpass below the B5056.
Landscape – Strength of Landscape Character	29	NPPG advises that impacts on landscape character should be taken into account. Is the character of the landscape strong and visually coherent?	PMAJ PMIN NMIN NMAJ	The proposed site no longer accords with the established landscape character and the restoration of a 'new' landscape is required (Restore/create) The proposed site has few characteristics that accord with the established landscape character and the condition is poor (Enhance) The proposed site generally accords with the established landscape character (or in part) but the condition could be enhanced (Conserve and enhance) The proposed site accords with the established landscape character and is in good condition (Conserve)	NMAJ (see Map 7) The proposed allocation area comprises pastoral fields enclosed by limestone walls with boundaries generally in good condition typical of the established character of the wider landscape. The site abuts and seamlessly connects to the Peak District National Park to the north west.
Landscape/– visual impact	30	NPPG advises that impacts on landscape character should be taken into account. What would be the visual impact on the landscape of working the site?	PMAJ PMIN NMIN NMAJ	The site has few or no visual receptors and/or only small parts of the site will be visible The site has few visual receptors but large parts (or more than one part) of the site will be visible The site has some visual receptors and/or some parts of the site will be visible The site has many visual receptors and/or large parts (or more than one part) of the site will be visible	NMIN NMAJ The proposed extension area will be visible from a number of locations around the site that will allow for views of parts of the area. However, these impacts will be in the context of the existing quarry already exerting significant adverse visual effects on surrounding visual receptors including the settlements of Aldwark and Ible, local footpaths, recreational trails including the High Peak Trail and the Limestone Way, and the local road network.
Landscape – impact on the Peak District National Park	31	NPPF requires great weight to be given to conserving landscape and scenic beauty in National Parks. Many of the hard rock quarries within the Plan area lie in close proximity to the Peak District National Park (PDNP). Would working the site impact on the PDNP?	PMAJ PMIN NMIN NMAJ	The site is not close to the PDNP boundary and no part of the site will be visible from it The site is not close to the PDNP boundary although parts of the site may be visible from it The site lies in close proximity to the PDNP boundary forming part of the wider setting and/or large parts of the site will be visible from it The site abuts the PDNP boundary forming part of its immediate	NMAJ The site abuts the PDNP boundary forming part of its immediate setting and/or large parts of the site will be clearly visible from it

Criteria	Criteria Ref.	Considerations	Scale of impact	Indicators	Assessment
				setting and/or large parts of the site will be clearly visible from it	
Historic Environment – designated sites and settings	32	NPPG advises that impacts on archaeology and heritage features should be taken into account. Would working the site impact on a designated site or its setting?	PMIN NMIN NMAJ	No perceivable impact on a designation and/or its setting Impact on a Grade II designation, conservation area and/or its setting Impact on a Grade I or II* designation, SAM and/or its setting	PMIN (see Map 8) No direct impact on designated sites but any potential impact on the scheduled monument of Moot Low c500m to the east needs consideration.
Historic Environment – Archaeology	33	NPPG advises that impacts on archaeology and heritage features should be taken into account. What is the archaeological importance of the site?	PMAJ PMIN NMIN NMAJ	Little or known earthworks and/or known archaeology with low potential for buried archaeology Occasional or localised earthworks (may not be visually evident) and/or known archaeology with limited potential for buried remains Frequent, visible and interpretable earthworks and/or some known archaeology with significant potential for buried remains Extensive, visible and interpretable earthworks and/or known archaeology with high potential for buried remains.	PMIN No earthworks impacted but the archaeology of these upland areas is also characterised by finds of prehistoric tools and Roman pottery and other finds which can indicate settlement. Some prehistoric finds are known from the site and the immediate surroundings.
Historic Environment – historic landscape	34	NPPG advises that impacts on archaeology and heritage features should be taken into account. Is the historic character of the landscape strong?	PMAJ PMIN NMIN NMAJ	Historic field pattern largely gone Remnant field patterns with significant boundary loss Recognisable field patterns with some boundary loss Evidence of multi-period landscape and/or intact field pattern (as indicated by 1st edition OS or earlier)	NMIN The field pattern within the site is part of a wider intact field pattern of large regular planned enclosure probably dating to the period of parliamentary enclosure in the late 18 th or 19 th centuries. These are not rare but are a characteristic of this upland limestone area.
Geological and Geomorphological features	35	NPPG advises that the impacts on nationally protected geological and geomorphological sites and features need to be taken into account. What is the geological /geomorphological importance of the site?	PMIN NMIN	No impact on a designated site Impact on a designated site	PMIN There are no geological designated sites within or immediately adjacent to the extension area.
Best and most versatile agricultural land	36	NPPG advises that the impacts on soil resources should be taken into account. What is the likelihood of the site containing bmv land? i.e. grade 1,2 or 3a of the Agricultural Land Classification Scheme. At this stage we do not have detailed working and restoration proposals to assess how much bmv land will be conserved and in many cases we do not have information about the presence of bmv land. We have decided therefore to use DEFRA's predictive agricultural land	PMAJ PMIN NMIN	The site lies within an area where there is a low likelihood of bmv land (less than 20% of the land is likely to be bmv). The site lies within an area where there is a moderate likelihood of bmv land (20-60% of the land is likely to be bmv). The site lies within an area where there is a high likelihood of bmv land (more than 60% is likely to be bmv).	PMAJ (see Map 9) The site lies within an area where there is a low likelihood of bmv land (less than 20% of the land is likely to be bmv).

Criteria	Criteria Ref.	Considerations	Scale of impact	Indicators	Assessment
		classification map to indicate whether the site lies within an area where there is a high, moderate or low likelihood of bmv land being present. In principle areas of bmv land should be protected.			
Duty to Cooperate					
Conformity with other local plans (allocations)	37	NPPF requires local planning authorities to cooperate on strategic cross border issues which includes ensuring that local plans are compatible Is the site in conformity with other local plans?	PMAJ NMIN NMAJ	The site is in conformity with other local plans The site is not in conformity but the issue is likely to be resolvable The site is not in conformity with other local plans and the issue is unlikely to be resolved	PMAJ The site is in conformity with other local plans

5. Conclusions

The following commentary seeks to identify those key factors that favour the allocation of the site and those that would constrain the site's allocation. In many cases the impacts are judged to be minor. A tabular summary of the assessment findings is set out below.

The following matters have been assessed as key positive factors favouring allocation:

- Nationally important resource - 85% of industrial grade limestone for animal feeds, glass, sealants and adhesives etc. are quarried in Derbyshire. Longcliffe supplies 30% of that output.
- Important local employer and provider of wealth to local economy in a predominantly rural area where mining is a traditional important local employer
- Whilst transport is road based the site has good transport and access arrangements and HGV's would not pass sensitive receptors to reach the strategic road network
- The site lies in an area where it is predicted that agricultural land will be of poor quality

The following matters have been assessed as key negative factors against allocation:

- Working the site is a very long term proposal which would see the life of the quarry extended by 30 plus years
- There is a concentration of mineral working in the area; the site lies adjacent to Grangemill Quarry operated by Ben Bennetts. Both the quarries have been in operation for a long period of time.
- The landscape character of this site is typical of the wider landscape of the area with features in good condition
- The site will be visible from a number of surrounding locations
- The sites lies adjacent to the Peak District National Park from which large parts of the site will be visible

Where potential negative impacts have been identified the Mineral Planning Authority will carry out further detailed work, in consultation with appropriate bodies, to see if that impact could be mitigated or avoided to enable the site to go forward for allocation.

Summary of Assessment – Aldwark/Brassington Moor

Criteria	PMAJ	PMIN	NMIN	NMAJ	Criteria	PMAJ	PMIN	NMIN	NMAJ
Economic Criteria					Environmental Criteria				
Need for mineral	*				Water Environment – Flood Risk	*			
Quality/yield of mineral		*			Water Environment –groundwater		*		
Use of mineral resources	*				Water Environment-aquifer protection				*
Location of Processing Plant		*			Ecology – existing impacts from mineral extraction			*	
Existing Infrastructure		*			Ecology – UK, regional and local BAP priority species and habitats			*	
Sterilisation of Resources		*			Ecology – ecological coherence: Natural Areas/ Wildlife Corridors/linkages		*		
Employment		*			Ecology – Habitat Creation		*		
Social Criteria					Landscape- existing impacts from mineral extraction			*	
Duration of mineral extraction				*	Landscape – Existing infrastructure	*			
Visual Intrusion			*		Landscape – Strength of Landscape Character				*
Noise		*			Landscape/– visual impact			*	*
Nuisance Dust		*			Landscape – impact on the Peak District National Park				*
Air Quality/ Human Health		*			Historic Environment –designated sites and settings		*		
Blasting /Vibration		*			Historic Environment – Archaeology		*		
Transport – Local Amenity	*				Historic Environment –historic landscape			*	
Transport - Safe and effective access to and from the site	*				Geological and Geomorphological features		*		
Transport – Export route (vehicular)		*			Best and most versatile agricultural land	*			
Transport - Capacity for sustainable transport options			*		Duty to Cooperate				
Benefits from the working, restoration and proposed after-use		*			Conformity with other local plans (allocations)	*			
Cumulative impact				*					

6. Next Steps

The next stage of Plan preparation involves the publication of a Draft Minerals Local Plan which will set out strategies to ensure the supply of minerals. If the identification of specific sites is considered to be the best option for making provision for industrial limestone, the Plan will include the allocation of any sites that we think should be identified for working during the Plan period. Supporting evidence to the Plan would include a full site assessment to accompany sites that are suitable for allocation as well as those that are considered to be unsuitable. Where sites are proposed for allocation they will be accompanied by a list of planning requirements that would need to be taken into account in the submission of any planning application.

It should be reiterated that an allocation doesn't automatically mean that planning permission will be forthcoming; the site will have to be fully evaluated against detailed planning requirements.

Site Assessment: Aldwark/Brassington Moor

Do you have any comments on the Assessment of the site promoted for mineral working at Aldwark/Brassington Moor Quarry? Please give reasons for your answer.