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Mineral Assessment Report Proposed Office Accommodation on Land Opposite Woodfield Garage, Longsight Road, Clayton-le-Dale, Blackburn, BB2 7JA

Prepared for

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Contents

Introduction

Martin Environmental Solutions has been commissioned, to prepare a Mineral Assessment Report in conjunction with a planning application for a proposed Office accommodation on Land Opposite Woodfield Garage, Longsight Road, Clayton-le-Dale, Blackburn, BB2 7JA.

This is an updated report based on a previous report completed in Febraury 2018, and utilises purchased data for that report, considered to still be relevant for the area. This report is being produced following a change in the proposed site plan and alternative boundary outline.

The planning Authority have requested the report as the site falls within a wider Mineral Safeguarding Area (MSA) which extends to the northeast and southwest broadly along the A59 Road.

In light of the established principal of mineral safeguarding within national planning policy, it is necessary to determine the extent and quality of any resource and the likelihood of this being worked in the future

The purpose of this report is to assess if the mineral is likely to ever achieve planning permission to be worked (both on and adjacent to the site), given the site setting and prevailing circumstances, so as to prevent unnecessary sterilisation of mineral resources.

The Site:

Site Address*:* Land Opposite Woodfield Garage, Longsight Road, Clayton-le-Dale, Blackburn, BB2 7JA.

Grid reference: 365852; 432585

An aerial photograph of the site is included in Figure 1.

Current Site use:

The site is currently a used for the storage of various construction items and is roughly rectangular in shape covering approx. 0.64ha. Formally agricultural land, additional agricultural land surrounds the site with the main A59 road running to the northwest. Residential properties are located opposite (68m) and to the west (35m) along Longsight Road. The surrounding area is good quality agricultural land.

Site History

Information on the historic uses of the site has been obtained from historic mapping information (Appendix 2), and environmental data from Groundsure Limited.

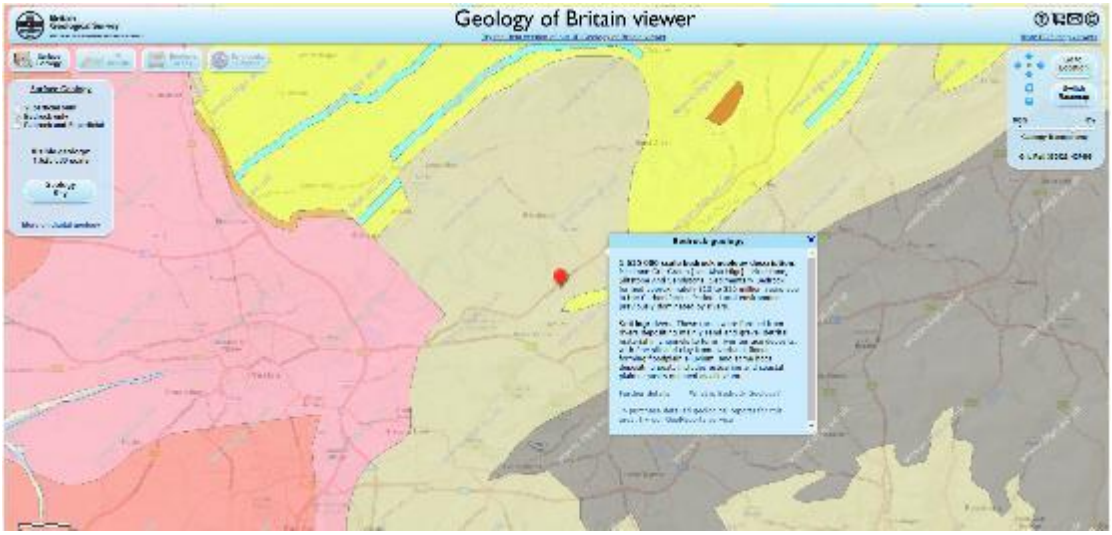
Mapping Year	Changes on Site	Changes off Site
1847	The site forms part of a larger field with the 'A59' running to the northwest.	The area is predominantly agricultural. A few properties/farms are dotted around the area.
1892	No change	No significant changes. 12 ponds are shown within 250m of the site. A small clay pit is located 300m to the west. The nearest property on the far side of Longsight Road, is Wood Field Farm.
1910-12	No change	No significant changes. A further pond is shown 150m to the south.
1931-32	No CHange	A number of the ponds in the area have either been removed from the mapping or are shown as marsh suggesting a general silting up of shallow ponds in the area. While not labelled it appears the clay pit to the west has been expanded eastwards towards the site and is now within 250m of the site. The garage on the opposite side of the road (Woodfield's Garage) is now shown. Some of the farms in the area have expanded slightly.
1938	No Change	No significant changes, some additional properties are located within the area and farms have expanded.
1951	No change	No significant changes
1968-70	No Change	The garage on the opposite site of the road has expanded and the house has been constructed on site. The site to the immediate north has been developed into a petrol service station. There is additional

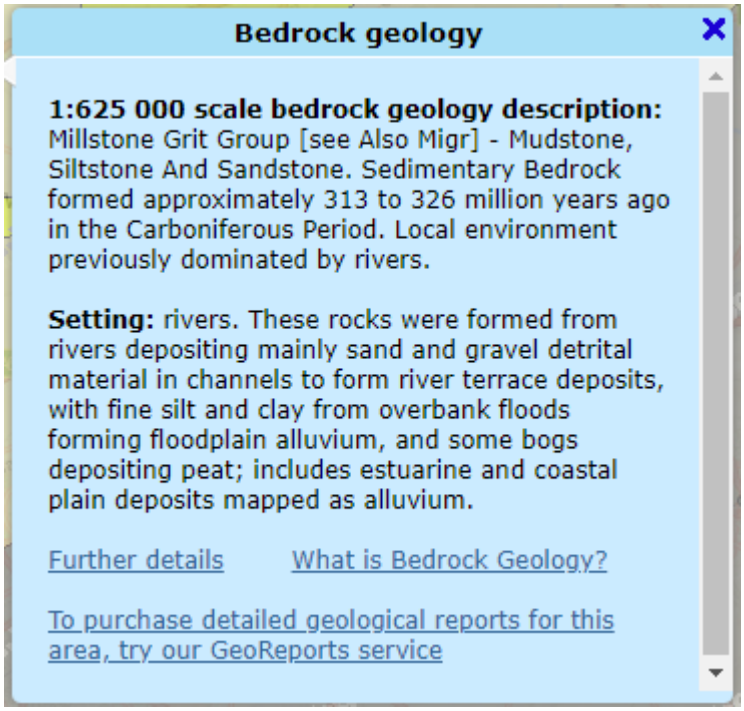
		development to the northeast along Longsight Road. A property has been built on the site of the former clay pit to the east (now the vet's surgery formerly a little chef). Other ponds have dried up and are shown as marsh. Ribble Valley Farm has expanded to the east with rectangular buildings being built approx. 245m away.
1976	No Change	No significant changes further properties have been built in the wider area. The petrol station is no long shown to the immediate north.
1993	No Change	No significant changes, additional ponds are shown as marsh indicating the natural silting up of these shallow areas. The filling station building is still shown to the north but it is not labelled. It can be confirmed from a search of planning applications that the site was not used as a filling station from at least 1995, if not much earlier.
2002	No Changes.	No significant changes. Aerial photographs suggest a structure was removed between 2005 – 2009 to the north, which may have been the old petrol pumps. Approximately the same time the rear of the yard started to be used for the storage of plant.
2010-present	No Changes	No significant changes

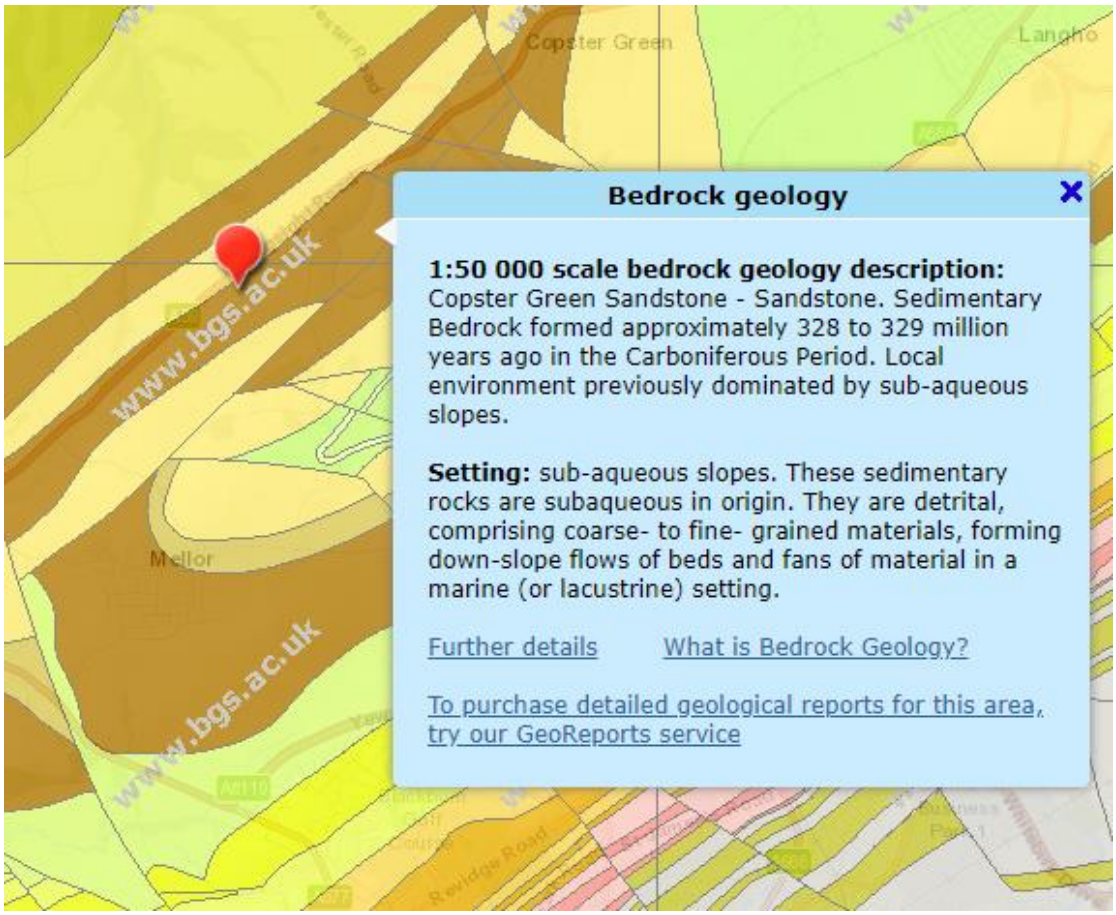
Geological Data

Information from the British Geology Survey (BGS) 1:50,000 mapping identifies the bedrock in the area as Pendle Grit Member, Sandstone overlaid with Till Devensian, Diamicton deposits. The nearest available boreholes identify limestone, although these are general located to the south outside of the MSA. The nearest borehole within the same MSA is at Copster Hall Farm, 2.3Km away which also identifies Limestone.

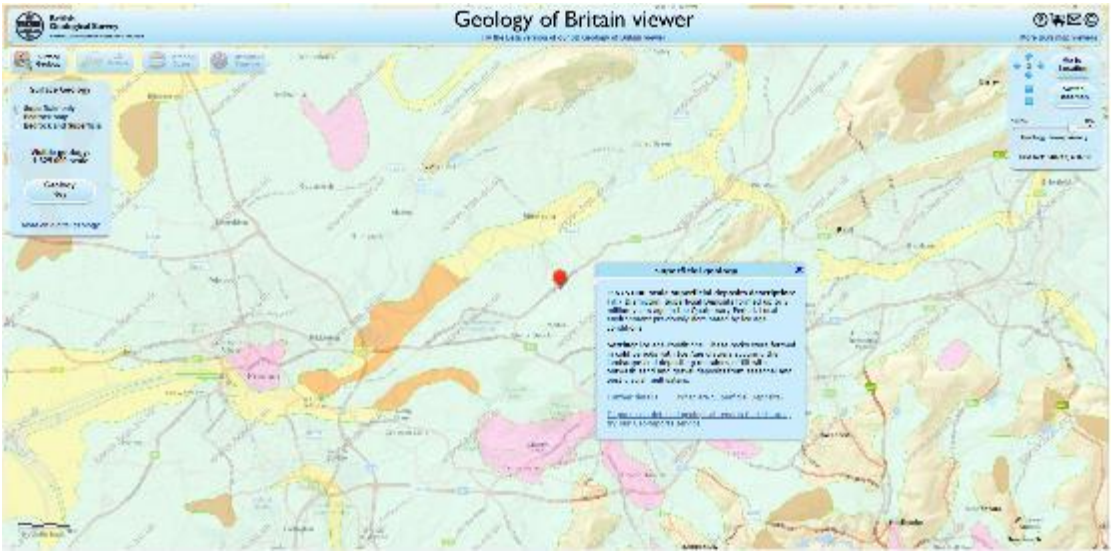
BGS Bedrock Map:

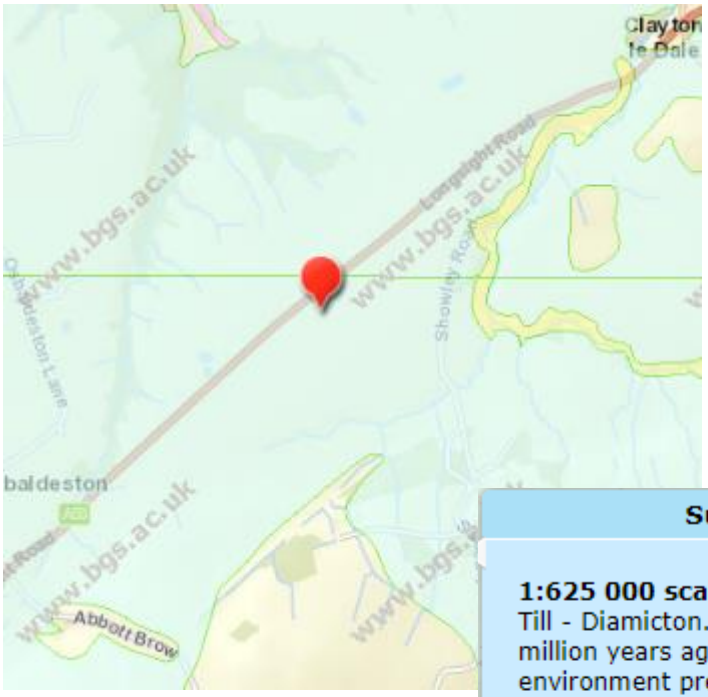





Copster Green
Langho
Mellor
www.bgs.ac.uk
www.bgs.ac.uk
Bedrock geology
1:50 000 scale bedrock geology description:
Copster Green Sandstone - Sandstone. Sedimentary Bedrock formed approximately 328 to 329 million years ago in the Carboniferous Period. Local environment previously dominated by sub-aqueous slopes.
Setting: sub-aqueous slopes. These sedimentary rocks are subaqueous in origin. They are detrital, comprising coarse- to fine- grained materials, forming down-slope flows of beds and fans of material in a marine (or lacustrine) setting.
Further details
What is Bedrock Geology?
To purchase detailed geological reports for this area, try our GeoReports service

BGS Superficial Layer Map





Superficial geology

1:625 000 scale superficial deposits description: Till - Diamicton. Superficial Deposits formed up to 3 million years ago in the Quaternary Period. Local environment previously dominated by ice age conditions.

Setting: ice age conditions. These rocks were formed in cold periods with Ice Age glaciers scouring the landscape and depositing moraines of till with outwash sand and gravel deposits from seasonal and post glacial meltwaters.

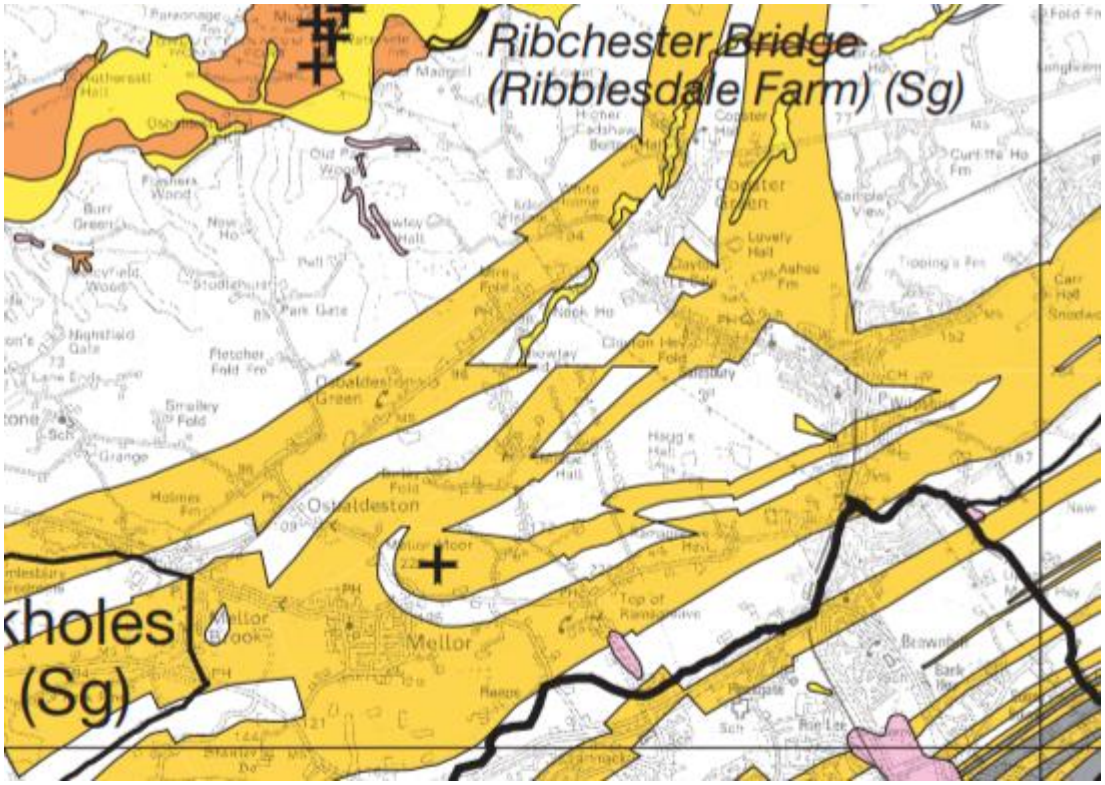
Further details What are Superficial Deposits?

To purchase detailed geological reports for this area, try our GeoReports service

Site Resources

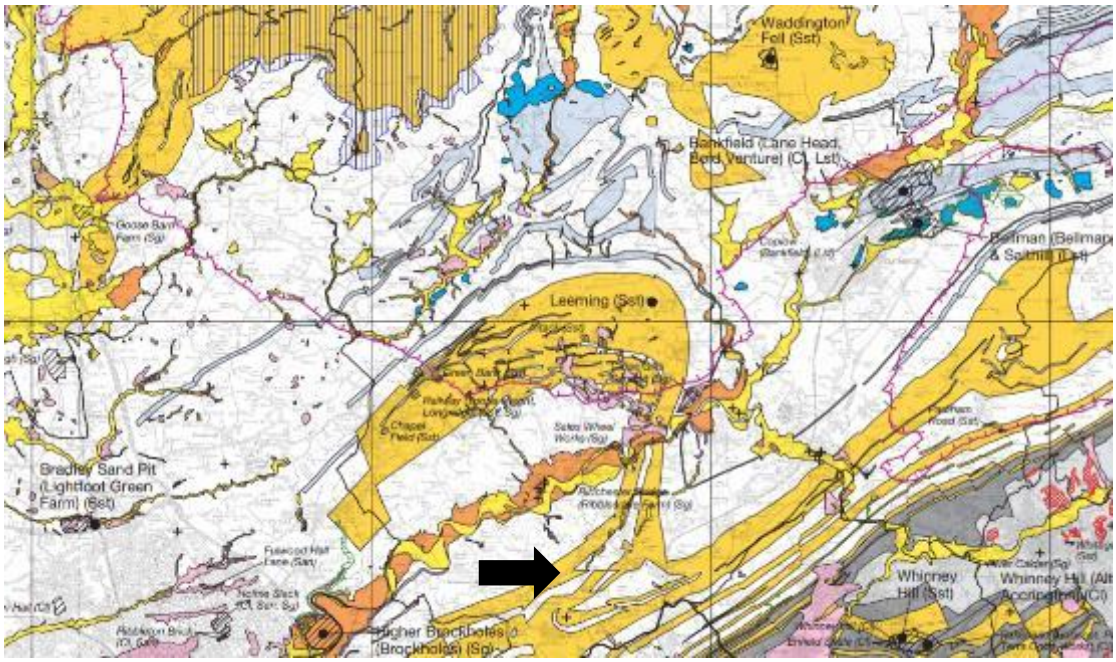
From a review of the BGS Resource maps for Lancashire (extract shown below), the site is shown to comprise sandstone bedrock resources which have been highlighted upon the plan. The resource map also confirms that sandstone resources have previously been worked within the area to the north, the closest area being Chapel Field, Longridge.

The sandstone is noted to be covered by Glacial Till and as such has overburden, which is the probable reason for the former quarrying to be restricted to the to the north. There is no evidence that working would be commercially viable even if it could be undertaken in a manner consistent with the adjacent residential land uses, which seems improbable.



Source: BGS Lancashire Mineral Resources Plan 1:100,000 – red is indicative site boundary.

These resources of sandstone (yellow) are common place locally and indeed regionally as shown on the expanded plan overleaf. It is also noted that reserves locally are located in significantly less developed areas than the subject site.


Waddington Fell (Sst)
Bankfield (Lane Head, Bold Venture) (C) Lst)
Leeming (Sst)
Bradley Sand Pit (Lightfoot Green Farm) (Sst)
Higher Blackbobes (Brockholes) (Sg)
Whitney Hill (Sst)

Mining, Extraction

Coal Mining:

An online search using the Coal Authority interactive map shows that the site is not located within a Coal Mining area and therefore no further consideration is given to the potential for shallow or deep mines or to the presence of unworked deposits of coal.

Natural Extraction:

A review of historic maps shows no quarries or quarry features within a 500m radius of the site. The nearest quarries were identified at Harwood Fold Farm 550m to the East consisting of a Sand Quarry in 1847, then then further east in 1910 a clay pit.

It is considered that the Pendle Grit Sandstones were not quarried in this location due to uneconomic size/demand for aggregate / stone and or unfavourable groundwater / increased overburden thickness in the location.

This is supported by the British Geological Survey document, *Mineral Resource Information in Support of National, Regional and Local Planning: Lancashire (comprising Lancashire and Boroughs of Blackpool and Blackburn and Darwen) Commissioned Report CR/05/144N, 2006*.

The document states that Millstone Grit & Pennines Coal Measures groups have traditionally been extensively used as a source of building with disused quarries being common on the landscape. It continues by stating that most of the sandstones are too weak and porous to make good quality aggregate. At the time of writing there were 12 working sandstone quarries in Lancashire, with several in the adjoining Manchester area. Of the many sandstone units within the group the Pendle Grit Member and Copster Green Sandstone are not among those usually worked.

It is considered that the Pendle Grit Sandstones were not quarried in this location due to uneconomic size/demand for aggregate / stone and or unfavourable groundwater / increased overburden thickness in the location.

Mineral Planning

The safeguarding of non-renewable resources for the benefit of future generations, such as minerals, is considered to be an aspect of sustainable development. Paragraph 143 of the National Planning Policy Framework ('The Framework') (DCLG, 2012), requires Mineral Planning Authorities of specific mineral resources of local or national importance are not needlessly sterilised by nonmineral development, albeit that these carry no presumption the resource will be worked. Where it is deemed necessary for non-mineral development to take place, prior extraction is to be encouraged where practical and environmentally feasible.

It is important to note that the purpose of designating MSA is not to restrict the rights of the land owner, but to ensure that due consideration is given to the potential sterilisation of the mineral resource if an application for alternative development is brought forward. Furthermore, a MSA does not imply any presumption that mineral working will be permitted.

Policy CS1 of the Lancashire Minerals and Waste Local Plan (LMWLP) requires minerals that have economic, environmental or heritage value and potential for extraction now or in the future to be identified and shown as mineral safeguarding areas on the Policies Map.

Policy M2 (Safeguarding Minerals) of the LMWLP identifies that the application site lies in a MSA.

The policy also confirms that within the Plan area, Mineral Safeguarding Areas have been delineated on the Policies map around all deposits of:

- Limestone;
- Sand and Gravel;
- Gritstone (Sandstone);
- Shallow Coal;
- Brickshales; and,
- Salt.

Policy M2 goes on to state that within these mineral safeguarding areas identified, planning permission will not be supported for any form of development that is incompatible by reason of scale, proximity and permanence with working the minerals, unless the applicant can demonstrate to the satisfaction of the local planning authority that:

- The mineral concerned is no longer of any value or has been fully extracted;
- The full extent of the mineral can be extracted satisfactorily prior to the incompatible development taking place;
- The incompatible development is of a temporary nature and can be completed and the site returned to its original condition prior to the minerals being worked;
- There is an overarching need for the incompatible development that outweighs the need to avoid the sterilisation of the mineral resource;
- That prior extraction of the minerals is not feasible due to the depth of the deposit; and, Extraction would lead to land stability problems.

With regard to managing mineral production, Policy M1 confirms that development will not be supported for any new extraction of sand and gravel, limestone, **gritstone** (Sandstone) or brickshale.

The supporting text to Policy M2 clarifies that the Core Strategy (via Policy CS3) called for 4.1 million tonnes of sand and gravel to be given planning permission by 2021. However, since that call, some 6.42 million tonnes of sand and gravel has been granted planning permission. This gives the County Council a landbank figure of 18 years, and as a consequence, the County Council have confirmed that no new reserves will be required for sand and gravel during the plan period or for the foreseeable future.

Contrary to Policy M1, Policy DM2 (Development Management) cites that (in accordance with Policy CS5 and CS9 of the Minerals and Waste Core Strategy), developments will be supported for minerals or waste developments where it can be demonstrated to the satisfaction of the mineral and waste planning authority, by the provision of appropriate information, that the proposals will, where appropriate, make 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.

This will be achieved through for example:

- The quality of design, layout, form, scale and appearance of buildings;

- The control of emissions from the proposal including dust, noise, light and water;
- Restoration within agreed time limits, to a beneficial after use and the management of landscaping and tree planting; and,
- The control of the numbers, frequency, timing and routing of transport related to the development.

Site Suitability

Constraints upon Mineral Development

The application sites lie within a Minerals Safeguarding Area for Sandstone, designated by Policy M2 of the Lancashire Minerals and Waste Local Plan. This policy requires proposals for development other than non-mineral extraction, to demonstrate that they will not sterilise the resource or that consideration has been given to prior extraction, on site constraints and the need for the proposed development.

In relation to the land off Preston Road, the primary considerations are as follows:

- Access;
- Air Quality;
- Noise;
- Ground Conditions;
- Land Ownership;
- Residential Amenity; and,
- Topography.

Access

It is anticipated that access to the mineral resource would be via Longsight Road, although this would need to be agreed with Lancashire County Council highways prior to any development.

As the access would need to accommodate regular Heavy Goods Vehicles (HGVs) any potential junction would be of a significant scale which could have severe impacts on existing hedgerow and tree loss. Whilst the sites previous use would be adequate for such a junction it would encompass much of the site making mineral extraction difficult.

Whilst Longsight Road may be technically suitable for HGV movements a significant increase of these may not be appropriate given the proximity of existing residential properties.

Air Quality

There is the potential for the following air quality impacts as a result of a potential mineral extraction facility:

- Fugitive dust emissions associated with extraction works on-site;
- Re-suspension of dust from local road surfaces; and,
- Road traffic exhaust emissions associated with vehicles travelling to and from the site.

These may occur throughout the operation of the facility and could cause impacts at sensitive locations in the vicinity of the site. Each issue is considered further below.

There is the potential for fugitive dust emissions to occur as a result of mineral extraction activities. These may cause subsequent impacts at nearby residential properties as a result of dust soiling, as well as health effects as a result of increased exposure to particulate matter with an aerodynamic diameter of less than 10µm (PM10).

The potential for effects at sensitive locations depends significantly on local meteorology during the undertaking of dust generating activities, with the most significant effects likely to occur during dry and windy conditions. Given the operational life of the potential facility, it is likely that dust generation would occur during all meteorological conditions, increasing the risk of impacts occurring. The closest residential properties are located adjacent to the south and west of the site. Given this close proximity, any emissions occurring on site are likely to reach the relevant downwind receptors and cause associated impacts.

There is the potential for vehicles leaving the site to track-out mud and dirt onto the highway network. Once dry, this may be re-suspended and cause subsequent impacts at nearby sensitive locations. There are a number of residential properties within the vicinity of Longsight Road which may be affected by track-out dust if not managed effectively.

Any vehicles, such as HGVs transporting minerals off site or cars and vans used by site staff and visitors, would increase levels of traffic exhaust pollutants in the vicinity of the site. Emissions from HGVs are particularly significant due to the larger engine sizes and loads and may result in impacts at residential properties in the vicinity of access roads.

It is considered that the most significant potential air quality impact would be associated with fugitive dust emissions from mineral extraction works. However, there are also a number of other issues that may cause adverse effects at nearby location receptors. As such, given the significant risk of impacts, the location is unlikely to be considered suitable for such a facility in regards to air quality.

Noise

The National Planning Policy Framework (NPPF – March 2012) offers guidance to Local Planning Authorities on the protection of the local environment, specifically;

Section 11 Paragraph 109: 'The planning system should contribute to and enhance the natural and local environment by preventing both new and existing development form contributing to or being put at unacceptable risk from, or being adversely affected by unacceptable levels of soil, air, water or noise pollution or land instability.'

Section 11 Paragraph 123: 'Planning policies and decisions should aim to avoid noise from giving rise to significant adverse impacts on health and quality of life as a result of new development.'

The NPPF references the Noise Policy Statement for England (NPSE – March 2010) which offers further specific guidance and clarity on current policies to enable noise management decisions to be made within the wider context. The NPSE has several aims, the first of which is to 'avoid significant adverse impacts on health and quality of life from environmental, neighbour and neighbourhood noise with the context of Government policy on sustainable development.'

In support of the NPPF, the document Technical Guidance to the National Planning Policy Framework provides additional guidance to local planning authorities to ensure effective implementation of the planning policy set out in the NPPF. The section 'Minerals Policy' in the document states 'minerals planning authorities are expected to ensure that plan proposals do not have an unacceptable adverse effect on the natural or historic environment or human health.'

Ground Conditions

Limited historic quarrying, 1847-1910 has taken place to the north of the site at Harwood Fold to exploit deposits of Sandstone. These operations have ceased.

It is considered that any future quarrying activities would require removal of the overburden (Glacial Till) which is considered to be of significant depth given information obtained previously on the farming activities in the area.

Given the proximity of surface water features, upon quarrying of the underlying sandstone then pumping of groundwater may be required, such activity may have a detrimental effect upon ground stability, causing instability and settlement of the nearby structures and may have a detrimental effect upon the adjacent residential properties and residents.

Given the anticipated thickness of the superficial deposits overlying the bedrock then a significant easement would be required to protect the adjacent road infrastructure (Longsight Road) and residential properties.

Land Ownership

Any potential for mineral extraction would be dependent upon the willingness of the owners to put forward their land for such development. Whilst it may be subject to change, the position of the landowner is a critical factor and potentially an absolute constraint to minerals development for the foreseeable future.

Residential Amenity

There is currently no statutory guidance on minimum working distances of mineral sites from houses. However, Technical Guidance to the Framework states that permissions for mineral extraction close to residential property may not provide adequate protection and in some cases, it may be justified to consider adequate separation distances. Any such distance should be effective but reasonable.

The site is located within 35m of adjacent residential. The proximity to housing would, therefore, present a significant consideration for any future mineral working proposal in terms of resultant impacts arising from noise, dust, air quality, traffic and visual intrusion.

When considering the potential impacts from noise, dust, etc., minimum working distances from infrastructure are based upon cautious geotechnical criteria and would probably entail an unworked margin of at least 100m between the edge of any proposed mineral working and

existing properties (ref: A guide to mineral safeguarding in England, British Geological Survey, October 2007).

County Council policy indicates that a buffer zone of between 250m and 400m would be required between quarrying operations and noise sensitive properties (distances dependent upon requirement for blasting).

It is therefore clear that the recovery of any material would not be a sustainable proposal.

Topography

The site is generally flat. The topography is such that restoration to existing levels would require infilling with inert materials, which would require a recovery or disposal permit.

Summary

In summary the site is bound by residential properties to the south and west which represents a material constraint to any proposed extraction bid due to a contamination of noise, dust, vibration, traffic and wider residential amenity issues.

The closest residential properties are less than 25m from the site boundary. Given this small distance there are a number of issues that may cause adverse effects at nearby location receptors. As such, given the significant risk of impacts, the application site is considered unsuitable for the development of a mineral extract facility.

Conclusions

The application site lies to the east of Longsight Road and is located within a much wider Minerals Safeguarding Area for Sandstone, as designated by Policy M2 of the LMWLP. This policy requires proposals for development other than mineral extraction, to demonstrate that they will not sterilise the resource or that consideration has been given to prior extraction in consultation with the Minerals Planning Authority and that the need for the proposed development outweighs the economic value of the resource.

In the first instance, reserves of sandstone are common place in Lancashire and are predominantly situated in less developed areas than the subject site. It is also acknowledged that the nature of the geology at the site would affect the viability of developing a high-quality quarry at the application site. Even if the deposit was suitable, the constraints outlined in this report demonstrate that only a limited area for working, which, even if mineral deposits occurred at reasonable depth, could not be undertaken in an environmentally acceptable manner.

The site lies in a semi-rural location, with residential properties within a few meters of the south of the site. Given these short distances, it is considered highly likely that the level of noise impacts associated with mineral extraction at the Site would contravene the policies detailed in the NPPF and NPSE. In addition, any extraction activities emissions occurring on site are likely to reach the relevant downwind receptors and cause associated impacts. It is considered that the most significant potential air quality impact would be associated with fugitive dust emissions from mineral extraction works. Given the significant risk of impacts, the location is unlikely to be considered suitable for such a facility in regards air quality.

Based on the characteristics of the surrounding land use and the constrained extent of the sandstone and the geology on the site it is considered that it would be commercially unviable and environmentally unacceptable to extract minerals from the application site.

Overall, this statement has confirmed that the exemption requirements of Policy M2 of the Lancashire Minerals and Waste Local Plan have been engaged. As a result, it is not necessary to undertake prior extraction in advance of the proposed residential development.

Figure 1 – Aerial Photograph

Appendix 1 – Groundsure Data

Appendix 2 – Historical Mapping