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Linden, Potter St, Spondon
DE21 7LH

Project No: LN.09.25.MRA. 01.07.26

Mr J Oakden
Marrons
Nottingham

Dear Joe,

Re: Mineral Resource Assessment - Land East of Horsepool Grange, Markfield, Leicestershire.

Background

This Mineral Resource Assessment has been produced for Marrons Planning to assist with the planning application for the above site. Planning permission for the construction of up to 10, 500m² of Employment Floor Space has been applied for under application ref: 26/00423/OUT.

The application site falls within a Mineral Safeguarding Area (MSA) for igneous rock as defined by Leicestershire Minerals and Waste Local Plan to prevent potential mineral reserves from permanent sterilisation by other development (policy M11). Therefore, a Mineral Resource Assessment (MRA) of the subject site has been requested by the Local Authority.

Project Brief

The brief for the Mineral Resource Assessment incorporates:

- A review of the site setting, proposed development and layout.
- Review of Leicestershire County Council's - Leicestershire Minerals and Waste Local Plan, Adopted 2019.
- Geological Assessment of the ground conditions by review of online geological mapping and boreholes recorded by the British Geological Survey.

The following sources of information have been reviewed when compiling this

- Updated Concept plan Ref. 05.11.25 provided by the client (included in Appendix A).
- Review of Leicestershire County Council's - Leicestershire Minerals and Waste Local Plan, Adopted 2019.
- British Geological Survey (BGS) Online Geological Mapping.

Site Location/Description

The site is located off Elliots Lane, Stanton Under Bardon, Leicestershire, approximately 7km south east of Leicester city centre.

A site walkover completed during October 2025 confirmed that the site is down to pasture with significant tree planting covering the land. A tarmac road runs around the boundary to the commercial units to the rear (North).

The site has not previously been developed. The area surrounding the site generally comprised agricultural fields with a neighbouring farm. Cliffe Hill Quarry to the north - west of the site has recently (2024) been granted permission to extend its working life until 2042.

The development proposal for the site is for the construction of a number of commercial warehouse units and associated vehicle parking.

Site location and proposed development plans are included in Appendix A, for reference.

Minerals and Waste Local Plan Review

Leicestershire Minerals and Waste Local Plan, Adopted 2019, estimates that around 17.5Mt per annum of minerals are currently provided from sites in Leicestershire. The minerals within the County have been grouped into categories associated with their main uses, namely aggregate minerals (crushed rock and sand and gravel), non-

aggregates (brickclay, fireclay, gypsum and building stone) and energy minerals (coal and oil/gas). Igneous rock extraction accounts for around 73% of the mineral extracted within the County.

The quantities of minerals provided within Leicestershire are shown in the table below:

Mineral	Quantity (tonnes per annum)
Aggregate Minerals	
Igneous Rock	12,765,578 * (2014)
Limestone	1,391,475 * (2014)
Sand & Gravel	1,455,359 * (2014)
Other Construction Minerals	
Clay (for bricks, pipes and tiles)	476,000 ^ (2008)
Fireclay	67,000 ^ (2011)
Gypsum	810,000 #
Energy Minerals	
Coal	515,651 ~ (2014)
Oil	4,090 < (2013)
Total	17,485,153 tonnes

Igneous rock (granite) is the most significant mineral produced in the County. A number of small outcrops of Precambrian/Cambrian igneous rocks occur in Charnwood Forest and in south Leicestershire. Within Charnwood Forest, intrusions form two main groups: a southern group around Markfield, Bradgate and Groby; and a northern group, which extends towards Shepshed. Igneous rock intrusions also occur around Mountsorrel and at a number of locations to the south-west of Leicester, including Enderby, Earl Shilton, Huncote/Croft, Stoney Stanton and Sapcote. Precambrian volcanic lavas occur in exposed masses around Bardon Hill, High Sharpley and Pedlar Tor.

In England, rock resources suitable for road making and building purposes are generally absent south of a line between the Humber and Exe estuaries. Rock reserves within Leicestershire are the nearest to the major market in the South-East of England which means that they are of significant national importance.

Igneous rock extraction is currently taking place at 4 sites: Bardon; Cliffe Hill; Croft; and Mountsorrel. Although a planning extension at Cliffe Hill quarry has recently been granted to extend works until 2042.

In recent years, the four active igneous rock quarries together have produced around 11 million tonnes per annum, accounting for a contribution of around 60% of the igneous rock output in England. In 2014, the amount of crushed rock transported by rail was 32.5%, around 4Mt. The main destinations for material exported by rail were the East of England (40% of rail-borne sales) and London and the South East (28%). All the material exported by rail came from the four active igneous rock quarries.

The importance and current distribution of Leicestershire's igneous rock means that it is likely that the County's quarries will continue to supply major infrastructure both in the East Midlands and elsewhere in England. The County Council recognises however that calculating estimates of demand are increasingly uncertain when considering the period to 2031.

The table below provides a calculation of potential future requirements for crushed rock within Leicestershire based on average sales over the last 10 years. The requirements are derived from the latest Local Aggregate Assessment produced by the County Council. The calculation is based on making provision for the period up to 2031. The calculations take account of the level of permitted reserves as at 31st December 2014 together with the additional reserves permitted in 2015. The table indicates that there would be a surplus of crushed rock reserves over the period to 2031 of some 200 million tonnes.

Calculation of Crushed Rock (Aggregate) Provision 2015-2031

Calculation		Million Tonnes
A	Annual Requirement	13.6
B	Total Requirement 2015-2031 (B = A x 17 years)	231.2
Reserves		
C	Total permitted reserves, excluding reserves in dormant sites, at 31/12/2014	412
D	Additional reserves permitted in 2015	20
Surplus		
E(B-C+D)	Surplus 2015 - 2031	200.8

The level of permitted reserves for crushed rock in Leicestershire is sufficient for around 30 years based on average sales over the last 10 years. This is well in excess of the 10 year minimum landbank stipulated for crushed rock, and in theory would meet requirements to the end of the proposed plan period. This would suggest that there is no need for any additional provision to be made and, therefore, no justification for any allocation to be made in the plan for the extraction of crushed rock for aggregates.

A significant proportion of the permitted igneous rock reserves are at inactive sites (21.5% in 2014). None of the inactive sites are now rail-connected nor is there any likely prospect of them being directly linked by rail. As at 2014, the four active igneous rock quarries (which are all rail connected) had total reserves of 278 million tonnes, a collective life of some 22 years based on average sales over the last 10 years.

The County Council granted planning permission for the extraction of 132 million tonnes of mineral from an area adjacent to Bardon Hill Quarry in August 2011. This has extended the life of this site by around 40 years. The stone quarried at the quarry has a high PSV (60), enabling the aggregates to be used more extensively in road surfacing applications, as well as in other asphalt products, concrete and other uses.

Planning permission was granted in October 2015 for the extraction of an additional 20 million tonnes of mineral from an extension to Mountsorrel Quarry. This has extended the life of the quarry to 2040. As mentioned above, an extension to Cliffe Hill Quarry has prolonged extraction until 2042. Planning permission at the two operational limestone quarries at Breedon and Cloud Hill currently expire at the end of 2042 and 2025 respectively.

An approach of giving priority to proposals for crushed rock extraction to be worked as extensions to existing rail-linked site operations is considered to offer benefits due to reduced environmental disturbance (especially where access and mitigation measures are already in place), retention of existing employment and greater resource recovery. Options for the potential extension of existing sites



are limited by geology, depth of overburden, bio-conservation, local amenity and other factors. Its disadvantage is the potential cumulative impact that continued extraction could have on an area if successive extensions are permitted.

The County Council has concluded that deposits of sand and gravel, limestone, igneous rock, shallow coal, fireclay, brickclay and gypsum in Leicestershire are of current or future economic importance.

Geological Assessment

The site specific superficial deposits are anticipated to comprise Oadby Till (silt and clay) across the site. The solid geology comprises the Edwalton Member (Mudstone, gypsum and siltstone).

A site investigation completed by Linden House Environmental in December 2025 reports the following site specific ground conditions:

- Weathered Solid strata of the Edwalton Mudstone group were present at depths to a maximum of 3.5mbgl (refusal). This strata generally consisted of:
 - Stiff brown CLAY with fine to coarse gravel of Diorite.
 - Orange brown firm gravelly CLAY, fine gravel of Diorite.
 - Stiff dark grey CLAY.
 - Stiff dark grey becoming orange CLAY with gravel of Diorite

Superficial strata were not encountered during the site investigation. There are no BGS borehole records within 250m of the site.

The enclosed Figure 5 illustrates the location of Igneous deposits in relation to the site.

Conclusion

Based on the above assessment, it is concluded that the development of the site for the proposed commercial use will not sterilise viable mineral resources for the following reasons:

- The site is not underlain by viable igneous rock strata
- There are viable reserves proximal to the site and across the County.
- Planning permission has been granted for the extraction of existing reserves at Cliffe Hill Quarry over 1Km to the west of the site.
- The permission is for extraction until 2042.
- Additional igneous reserves are located between 500 – 1km of the site.

Therefore, the proposed commercial development does not sterilise mineral resources within the Mineral Safeguarding Area.

Based on the above, it is considered that the proposed commercial development does not conflict with Leicestershire County Council's - Leicestershire Minerals and Waste Local Plan, Adopted 2019, and should therefore be approved in this regard.

We trust the above is sufficient for your purposes. However, should you have any queries, please do not hesitate to contact us.

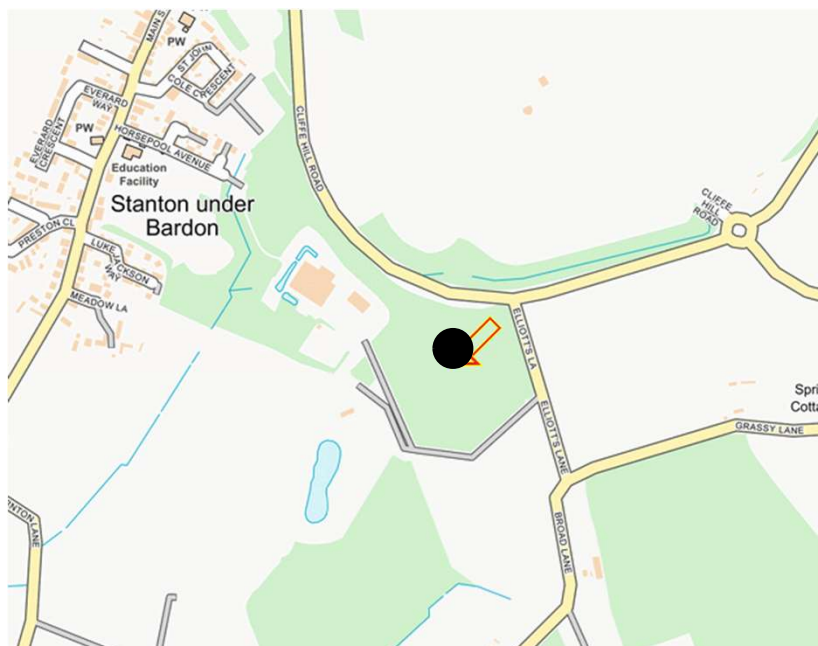


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Yours Faithfully

R P Sutton MRICS

Encl.
Figures



KEY:

● Approximate Site Location

LE67 9TW



Linden
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Linden, Potter Street, Spondon,
Derby DE21 7LH

TITLE:

Site Location Plan

PROJECT:

Land at Elliot's Lane, Stanton Under Bardon

PROJECT No:

LN.09.25

DATE:

07.2026

SCALE:

NTS

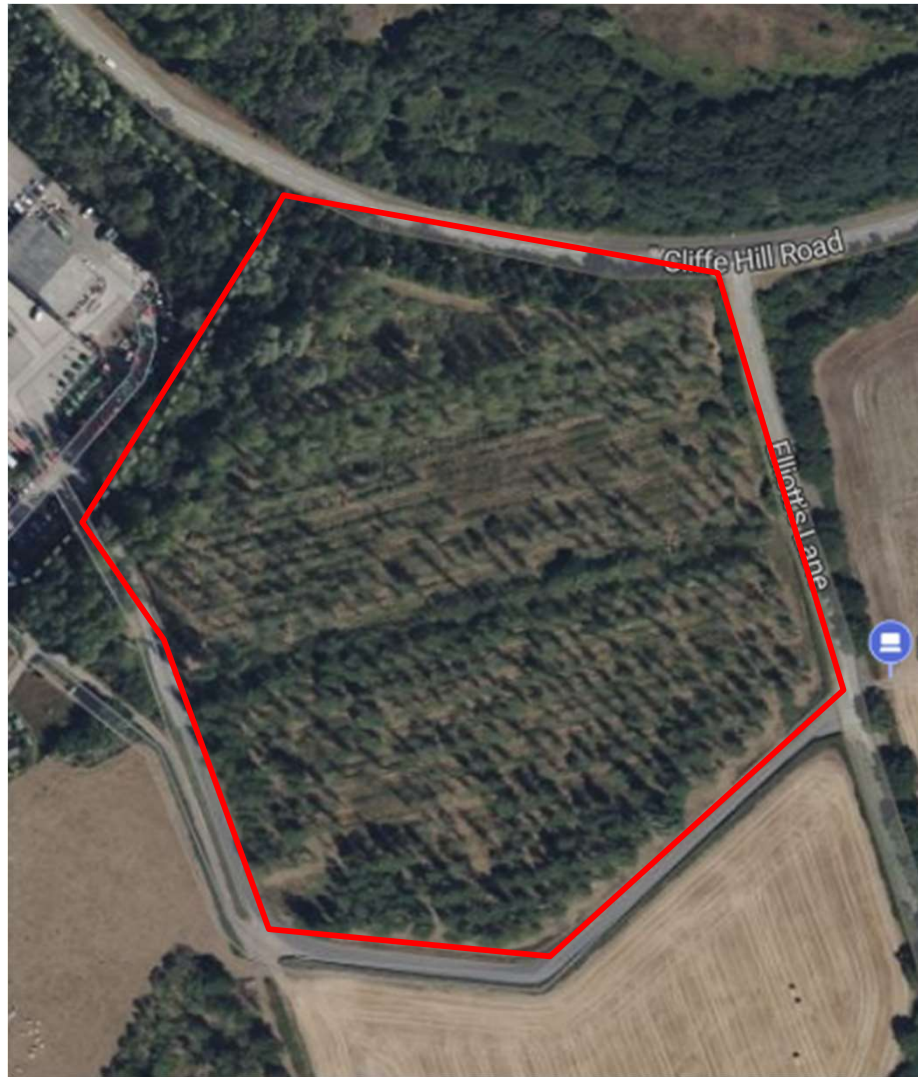
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RPS

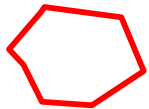
DWG No:

Figure 1

DO NOT SCALE



KEY:



Site Boundary

DO NOT SCALE



Linden
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Linden, Potter Street, Spondon,
Derby DE21 7LH

TITLE:

Site Area

PROJECT:

Land at Elliot's Lane, Stanton Under Bardon

PROJECT No:

LN.09.25

DATE:

07.2026

SCALE:

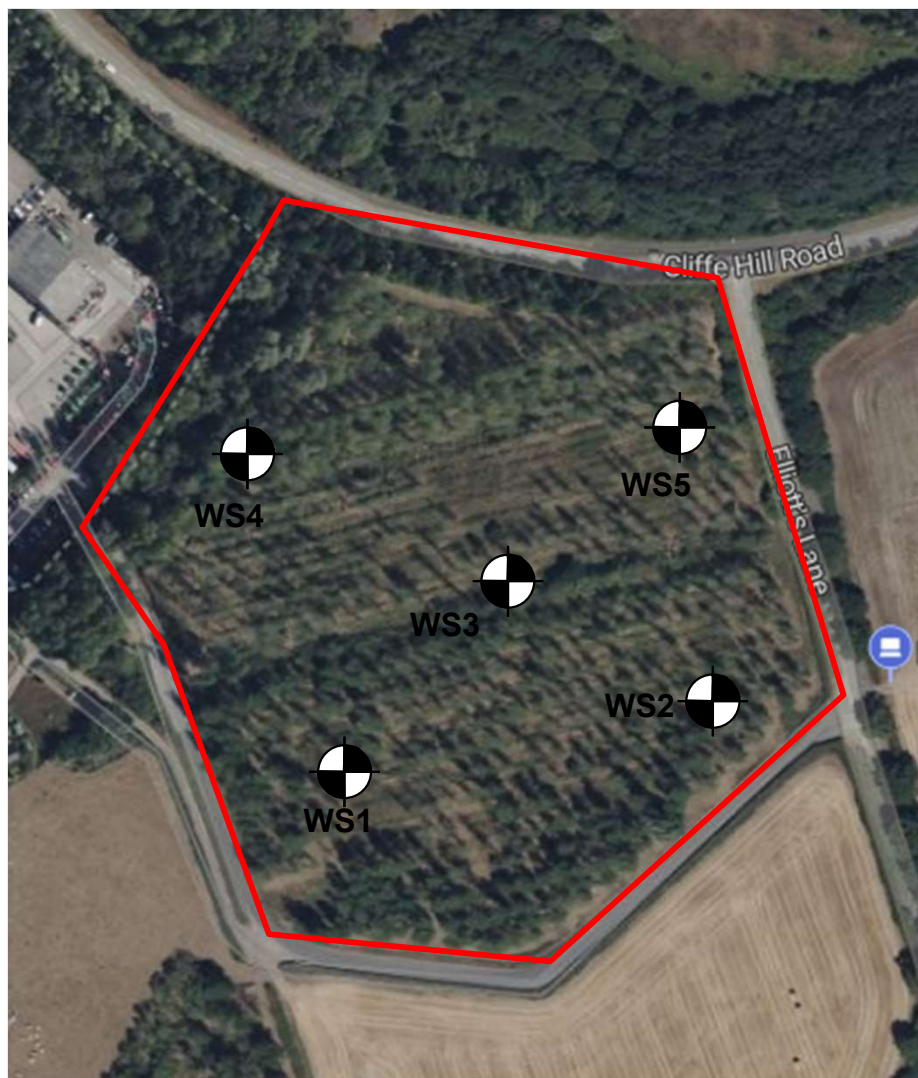
NTS

DRAWN:

RPS

DWG No:

Figure 2



KEY:



WS Borehole

DO NOT SCALE



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Linden, Potter Street, Spondon,
Derby DE21 7LH

TITLE:

Borehole Location Plan

PROJECT:

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PROJECT No:

LN.09.25

DATE:

07.2026

SCALE:

NTS

DRAWN:

RPS

DWG No:

Figure 3



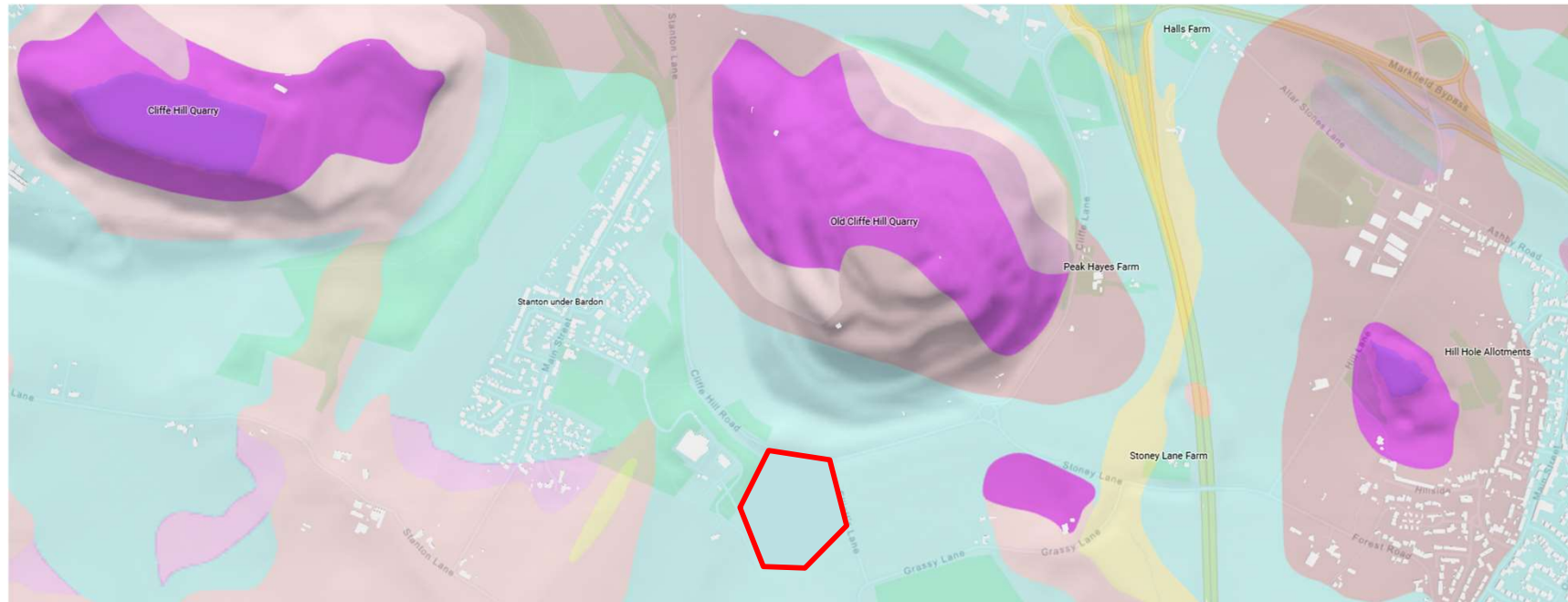


Figure 5