

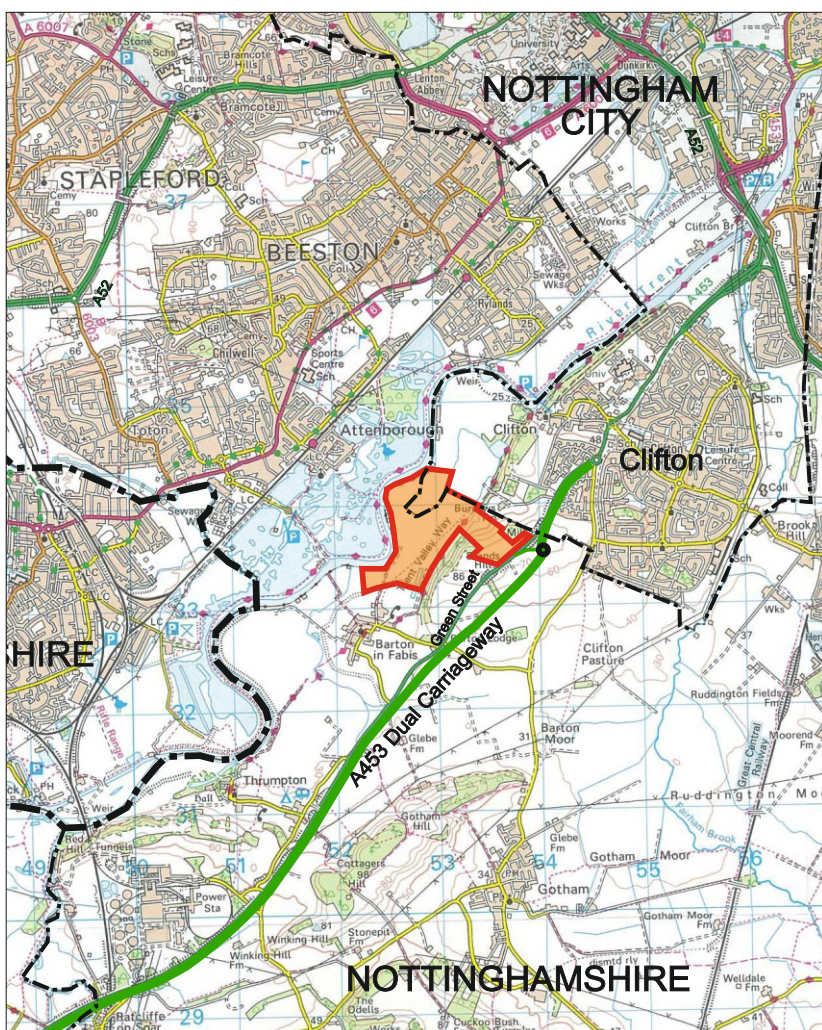
Proposed Sand & Gravel Quarry Development: Land at Mill Hill and Barton in Fabis, Nottingham, Nottinghamshire



Non-Technical Summary (NTS)

Planning Application to allow the extraction and processing of sand and gravel including the construction of a new site access road, landscaping and screening bunds, mineral washing plant and other associated infrastructure with restoration to agriculture and nature conservation areas.

April 2017



The Proposed Mill Hill Quarry Development

Planning Permission to extract 3.4 million tonnes of sand & gravel over a 12-15 year period is being sought by London Rock Supplies Ltd on an area of farmland south of Nottingham, termed land at Mill Hill and Barton in Fabis.

The level of output from the site is expected to average some 280,000 tonnes per annum which would comprise direct aggregate sales. The restoration scheme will include agricultural land and other mixed habitats. On site overburden materials would be used to bring the levels above the local water table in some areas and create shallow wetlands for enhanced biodiversity. The completion of the restoration scheme would take 2 years after the cessation of mineral, total project timescales are anticipated to be 17 years.

The proposed site is approximately 88 hectares (217 acres). Of this total, 77.3 hectares lies within the County of Nottinghamshire and 10.7 hectares lies within the City of Nottingham. The application will be submitted to Nottinghamshire County Council and Nottingham City Council.

Site Description

The application area is located at Grid Reference SK 529 337 and is currently arable farm land and flood plain grazing land. The planning application covers a total area of some 88 hectares, of which mineral extraction will take place over some 53ha.

The site comprises two main areas, the floodplain (mineral extraction area) and the higher level Mill Hill area where the site access and processing plant area will be located.

There are three Public Rights of Way and several Local Wildlife Sites within and surrounding the proposed site. There are two SSSI's (Attenborough Gravel Pits and Holme Pit) located within 2km of the proposed site.

The major local features in the landscape include the northerly flowing River Trent, former Attenborough Quarry and Attenborough Nature Reserve to the west, the sloping Brandshill woodland and new A453 dual carriageway to the east.

Environmental Impact Assessment

Independent specialist consultants have carried out technical studies using recognised techniques to evaluate the potential impacts of the proposed development. This work is called an Environmental Impact Assessment (EIA). The full results of these are published in the Environmental Statement (ES), which can be seen at the offices of Nottinghamshire County Council, Nottingham City council, as well as on the council web sites.

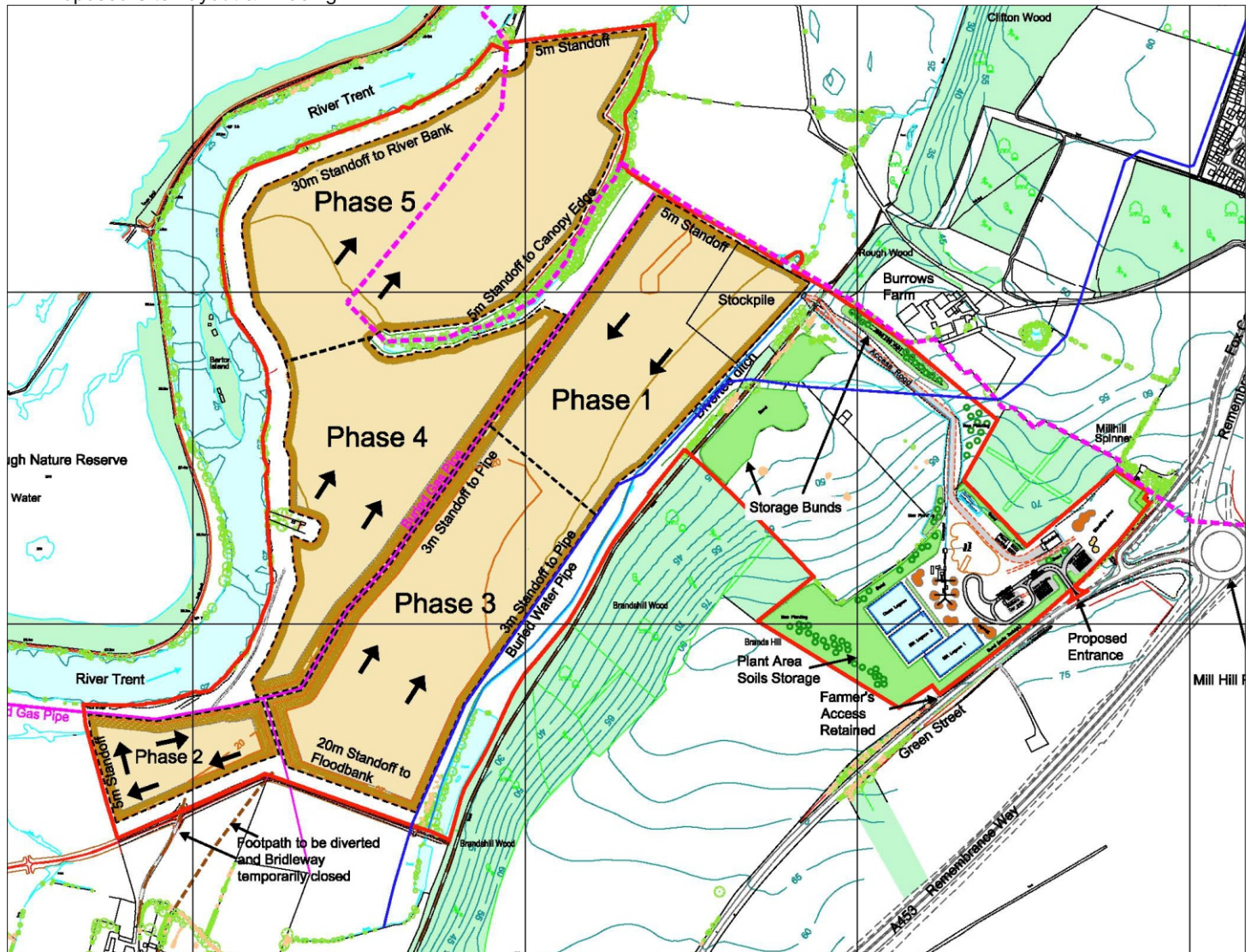
This Non Technical Summary (NTS) highlights the main elements of the ES, thus for a more detailed comprehensive assessment of the proposals please consult the full EIA.

Phased Extraction Scheme

Prior to any materials being dug from the site, infrastructure including a new site entrance, processing plant and lagoons together with internal haul roads would be constructed. Soils and clays from the processing plant area would be stripped and stored around the perimeter of the plant area to be used in the site restoration.

Suitable margins around the extraction areas would remain unworked to ensure no impacts to the boundary trees and hedgerows. The sand and gravel would be extracted in three “campaigns” a year, between spring and autumn. This means the minerals would **not** be dug all year round, just in periods of 4 -6 weeks at a time. Land not required for immediate extraction would remain in agricultural use.

Proposed Site Layout & Phasing



During a campaign, minerals would be excavated, transported by dump truck and stockpiled at the base of Brandshill in the north of the site. On a daily basis as-dug material would be moved by a loading shovel onto a conveyor for onward transfer to the processing plant on Mill Hill, located in the north east of the site.

Progressive restoration would follow behind the workings using overburden clay materials from the site to fill in the excavations. This means much of the extraction area would be restored and redeveloped as the site progresses.

Public Rights of Way

Bridleway No.1: Temporarily closed during Phase 2.

Footpath No.2: Diverted around the edge of the River Trent during Phase 1,2,3.

Bridleway No.3: Would remain fully open throughout all operations and restoration.

Typical sand & gravel washing and screening plant



Typical Processing Plant & Equipment

The proposed mineral processing plant would wash and screen the mineral to produce a range of sands and single sized gravels. The products would be suitable for drainage, driveways, construction, road aggregate and mixing in to high quality concrete and concrete blocks.

The sand and gravel will be excavated using a tracked excavator loading dump trucks that place the material in a stockpile, an excavator or loading shovel will then load a conveyor system that transports the mineral to the mineral wash plant.



Groundwater & Surface Water

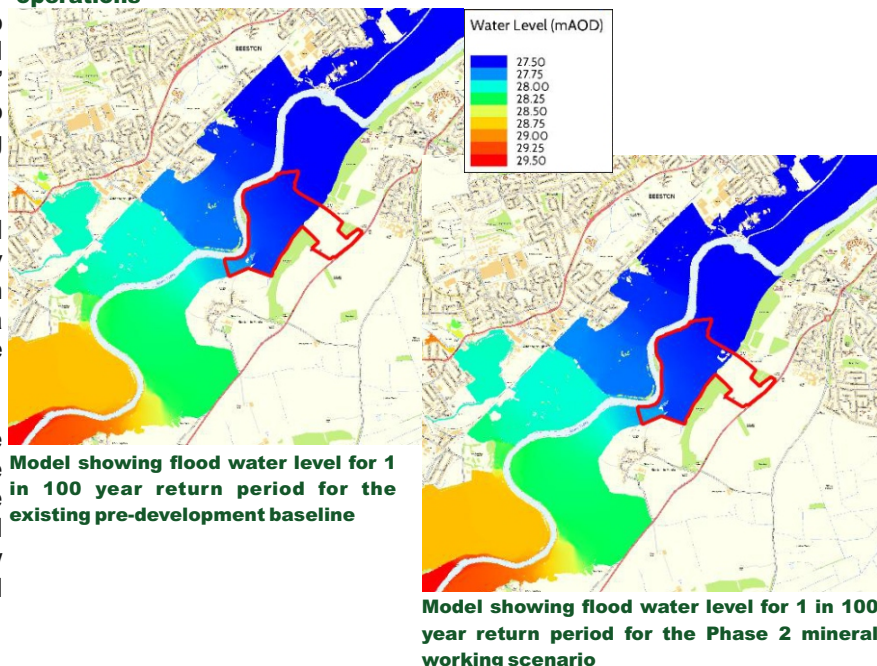
Sand and gravel workings are classified as Water Compatible Development in the NPPF. The detailed flood risk assessment has shown that the mineral extraction operations and restoration concept have no flood risk impacts on any third parties or downstream of the proposed development. There will be no working on the floodplain during EA flood warnings.

To allow the mineral to be extracted in a “dry” state, it will require de-watering. De-watering may draw groundwater down within a radius of 45m from the excavation face. The water will be discharged into series of settlement lagoons prior to final discharge to the River Trent or the “Barton Drain” located within the central part of the site. No pumping into the River Trent will take place during periods of flood or high river levels.

Water dependent sites around the proposed development include Holme Pit, which is currently in a vulnerable condition. As discussed with Natural England, the proposals could have a positive impact on this problem, by improving the condition and quality of the water.

It is proposed that the water levels will be monitored within boreholes around the site boundary through the operational phase of the works. The discharge of water into the local drainage ditches will maintain shallow groundwater levels in water dependent ecological sites of interest.

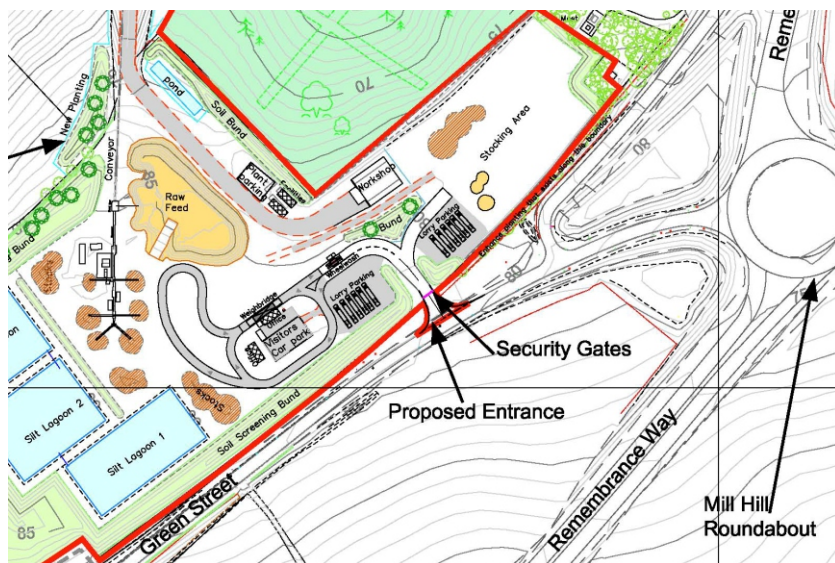
Models show no change in flood water levels during the mineral working operations



Highways & Transportation

A new site entrance will be constructed by upgrading the existing farm access on Green Street. All traffic will enter and leave the site via this new access. All traffic leaving will turn left and join the national highway network at the Mill Hill Roundabout approx 180m to the northeast, thus no HGV's will travel on any local roads. The highways assessment confirms that there will be no road safety or highway capacity issues.

Proposed Location of New Site Access



Archaeology & Cultural Heritage

The cultural heritage assessment has concluded that the proposed development and restoration scheme are likely to result in no significant impact upon the heritage assets within Barton in Fabis or Clifton.

Comprehensive desktop and field studies have been undertaken and the potential impacts of the operations have been assessed. The results confirm that the archaeological activity present on the site that is of interest and certain areas on the site will need to be investigated in more detail. The evaluation concludes that the archaeology present are not of such significance to preclude the proposed extraction. A proposed mitigation strategy for the known archaeological sites of interest within the proposed application area has been formulated that includes proposals for a strip/ map/ record, together with a watching brief during soils.

Landscape & Visual Impact

A detailed landscape and visual impact assessment has been made of the current site, together with the proposed operations and potential restoration. In terms of Landscape Character, there is a potential Medium Sensitivity. Due to the temporary nature of the quarrying operations, the short term potential minor adverse impacts can be mitigated during the operational phases and restoration to agricultural and UK BAP priority habitats may have potential benefits.

There are residential properties in Barton in Fabis, Burrows Farm and Clifton. The mitigation measures are proposed to ensure that there will be no adverse visual impacts on these properties, including the creation of soil screening bunds around the processing plant area that will be grass seeded and maintained, allowing hedgerows to grow higher and also strengthening the boundary hedgerows at key locations.

The users of the Public rights of Way (PROW) have been assessed as experiencing minor significant change during the operational period when the PROW will include diversions. Progressive restoration using soils or overburden from within the site on the completed excavation faces will also ensure that any visual impacts from the excavation workings will be of short duration.

Summary of average predicted HGV movements for the Proposed Quarry

| | Mineral Extraction |
|----------------------------|--------------------|
| Tonnes | 3,400,00 |
| Time period in years | 12 to 15 |
| Tonnes per year | 280,000 |
| Working days per year | 245 |
| Tonnes per day | 1,143 |
| Tonne capacity truck | 20 |
| Deliveries per day | 57 |
| Two-way movements | 114 |
| Deliveries per hour | 5 |
| Two-way movements per hour | 10 |

Proposed Working Hours & Traffic Impacts

Monday - Friday: 07:00 to 18:00

Saturday: 07:00 to 13:00

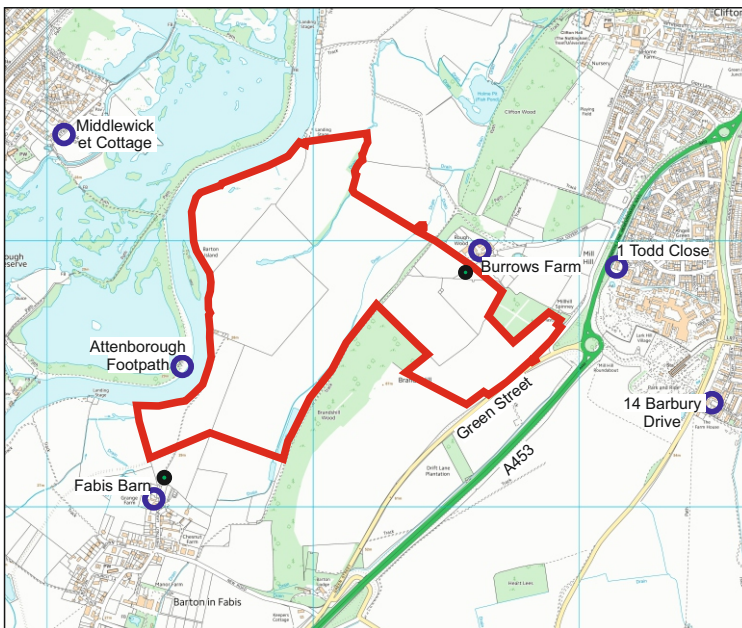
Closed Sunday's & Bank Holidays

The proposed site access has been designed to prevent HGVs travelling through Barton in Fabis by directing all movements to/from Mill Hill Roundabout.

The proposed HGV movements equate to approximately 0.3% of the overall traffic flow and 2.6% of the HGV flow on the A453. This is considered to be an insignificant volume and within what would be expected to occur as a result of normal day to day and seasonal variation.

Air Quality

Standard best practice dust control measures, as described in National Planning Policy Guidance would be used on site. These would include agreeing a dust management plan with the Minerals Planning Authority and monitoring any dust emissions. The air quality assessments confirm that by using standard best practice and following relevant guidance there will be no air quality or dust issues created throughout the working and restoration phases of the site operations.



Background Noise and Dust monitoring Locations
Proposed Monitoring Locations

Soils & Agriculture

Over the whole application area (88ha), only 12% is identified as Best and Most Versatile, of which only 5% will be lost (4.54ha) within the proposed extraction area.

The restoration scheme proposes the replacement of these Best and Most versatile soils to the Mill Hill area to enable the land to be returned to agricultural land. It is considered that the overall value of the land following the restoration will be significantly greater than the current situation, since the areas will contain a wide range of species and habitats that are considered a priority within the UK and Nottinghamshire Biodiversity Action Plan.

Aircraft safeguarding

The proposed site lies within the safeguarding area of East Midlands Airport, thus all the operations must ensure that they do not present any potential hazards to aircraft in the local area. To ensure that no potential bird strike hazards are created all ponds and lagoons will be kept to a minimum and will be engineered to discourage flocking birds. The site restoration has been designed in consultation with EMA safeguarding officers to create a balance between nature conservation and bird strike hazard management.

Noise

The processing plant will be located well away from any residential property, situated near the new dual carriageway and roundabout on Mill Hill, it is predicted that there will be no noise impact from plant or loading of lorries.

All vehicles working on the site will have silencers that will be well maintained and all mobile plant will be fitted with white noise reversing alarms not reversing beepers. Noise monitoring will be carried out on the site to assess the noise levels during operations.

Carefully located soil screening bunds will also ensure that no noise will be carried off site.

| Location | Existing Noise Levels (dB(A)) | Predicted Worst Case | Government Guidance (dB(A)) |
|----------------------------------|-------------------------------|----------------------|-----------------------------|
| | $L_{Aeq,T}$ | (dB $L_{Aeq,1h}$) | Max L_{Aeq} |
| 1 Todd Close | 57 | 41 | 55 |
| 14 Barbury Drive | 51 | 39 | 55 |
| Burrows Farm | 51 | 49 | 55 |
| Fabis Barn, Chestnut Lane | 47 | 50 | 55 |
| Middlewicket Cottage, The Strand | 56 | 41 | 55 |

| Location | Predicted Worst Case (dB $L_{Aeq,1h}$) | Government Guidance (dB(A)) |
|---|---|-----------------------------|
| Attenborough Nature Reserve Footpath - Closest Approach | 55 | 65 |

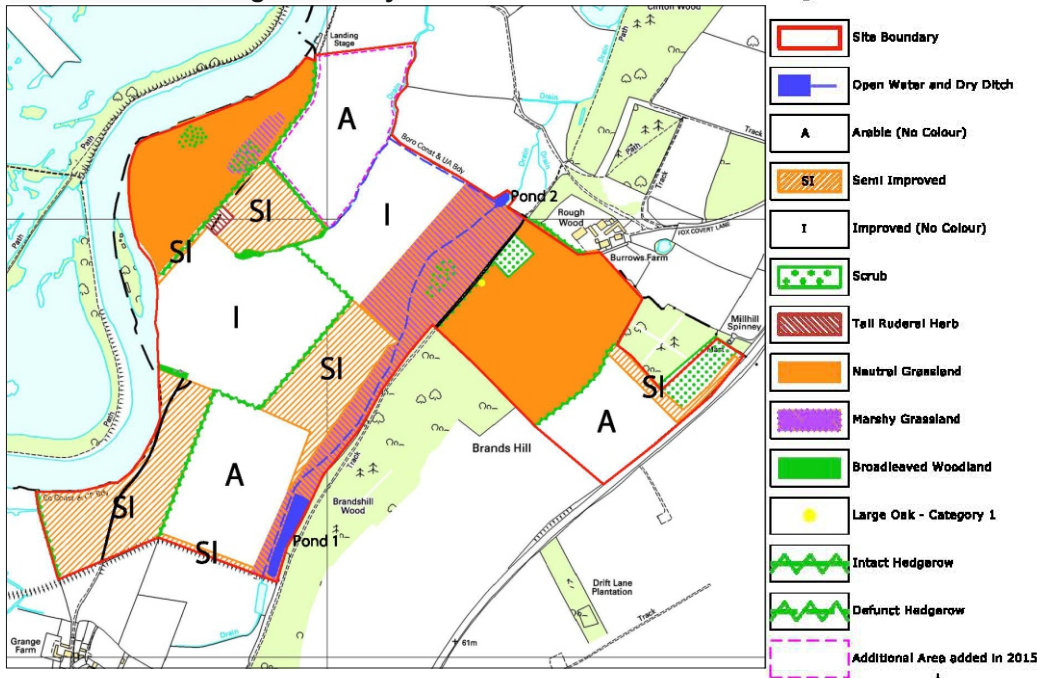
A series of noise predictions have been made at noise sensitive locations around the proposed quarry, these have been assessed against the criteria set out in the NPPF (Government Guidance). All the predicted noise levels refer to worst case scenarios, when the operations are undertaken at their closest distances to sensitive properties and therefore have the greatest influence on the noise levels at these locations.

The results indicate that the proposed operations can be undertaken without exceeding acceptable Government noise limits.



Monitoring noise levels during wash plant operations

Results of the Ecological Survey



Ecology

An assessment of the site ecology and the potential impact of the proposed operations has been carried out, together with the baseline studies shown below:

Ecological Walkover Survey: July 2014 & May 2015
 Bat Activity Surveys: April - September 2015
 Bat Roost Surveys: September 2015
 Otter and Water Vole Survey: June & July 2015
 Great Crested Newt Survey: April-June 2015
 Reptiles Survey: April - September 2015
 Breeding Bird Survey: April - June 2015
 Wintering Birds Survey: January - March 2015
 Invertebrates Survey: May, June, August 2015
 Tree Survey and Impact Assessment

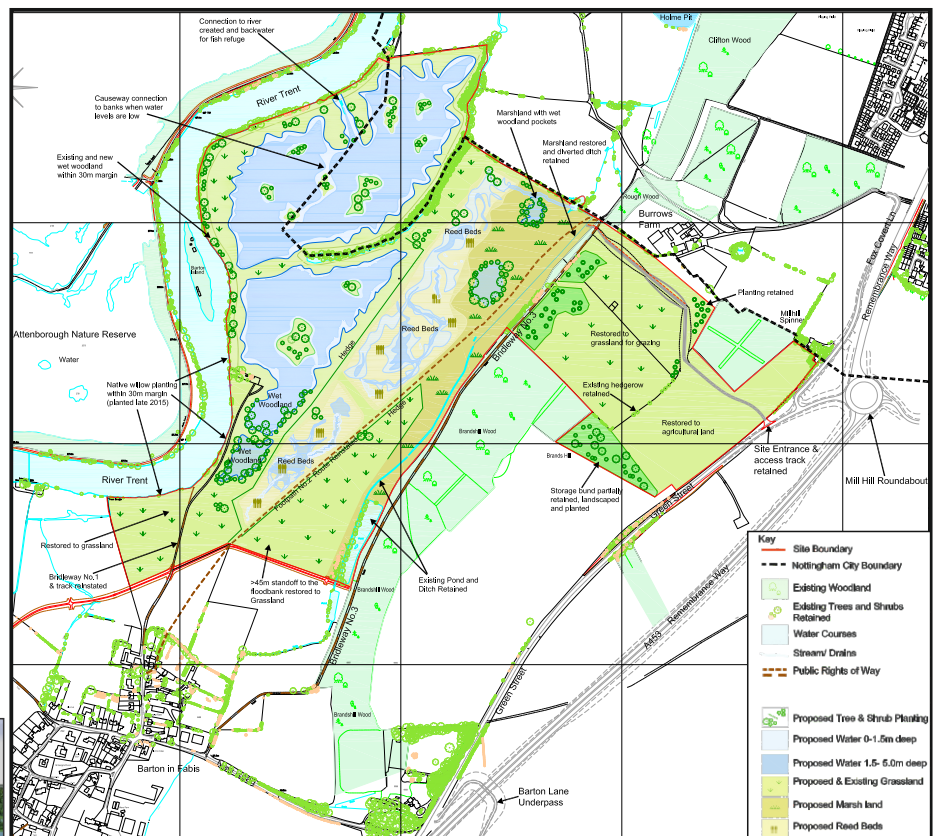
All boundary trees and hedges will be retained as they act as movement corridors for local fauna.

No Bat roosts, Great Crested Newts, Otters, Water Voles, Badgers or Reptiles were recorded during the survey visits. The results of the surveys indicate that the impact of the proposed development will be of minor significance on the local ecology. The work has also confirmed that the site operations will not have any adverse impact on any designated ecological sites (including Holme Pit, Attenborough Nature Reserve) in the vicinity of the operations. A series of environmental protection measures have been recommended in the EIA.

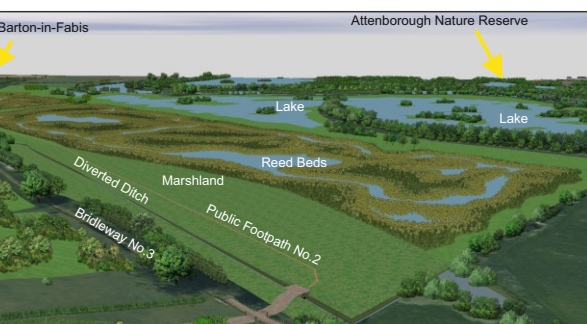
Restoration

The proposed development has been designed to incorporate phased sequence of extraction, reclamation and restoration.

The conceptual restoration scheme includes several key UK and Nottinghamshire BAP (Biodiversity Action Plan) priority habitats such as floodplain grazing marsh, reedbed, lowland wet grassland, marshes, eutrophic and mesotrophic standing water and agricultural land. In addition hedgerow and tree planting will be provided throughout the site.



Conceptual Restoration Scheme



Alternatives to the Proposed Scheme

The permitted reserves within the operating quarries located within Nottinghamshire will not satisfy the supply requirements for Nottinghamshire and Nottingham City at the present time. This site will be able to supply the identified aggregate requirements to ensure that there is no shortfall in the short or long term provision of aggregates for the construction and building industries.

The reason for the Mill Hill-Barton site coming forward in 2014 as a potential site in the emerging MLP, was the construction of the new A453 dual carriageway road that linked central Nottingham to M1 at Junction 24. The construction of this road allowed an excellent access from the proposed quarry site on to the old A453 (named Green Street), at Mill Hill, directly adjacent to a major roundabout on the A453.

Alternatives

- Wait for Shelford and Flash Farm sites to open.

Emerging MLP states both would be in production during 2016, but neither site has come forward with a planning application (as at April 2017). No application is considered likely in the short term and the landbank of permitted reserves is rapidly reducing below the required landbank of "at least 7 years".

- Barge material on River Trent

Wharf facilities required on the River Trent for loading and unloading mineral. No nearby facilities as Attenborough Quarry has closed. River Trent at this location is not a commercial waterway, and weir to the north would mean all mineral barges would have to travel through Beeston Canal. HGV's would still be required to transport material from the wharf to the market.

- Import aggregate from outside the County

This is not a sustainable option as it increases HGV transport distances which in turn increases emissions and reduces the reserves in the adjacent counties.

Technical Advisers

| | |
|-----------------------------|-------------------------------|
| Air Quality | Vibrock Ltd |
| Archaeology | CgMS Ltd |
| Ecological Assessment | Pleydell Smithyman |
| Flood Risk | Edenvale Young |
| Geology & Geotechnical | Greenfield Associates |
| Hydrology & Hydrogeology | Hafren Water Ltd |
| Land Classification & Soils | R.G.O Burton |
| Landscape Architects | Pledell Smithyman |
| Noise & Vibration | Vibrock Ltd |
| Planning Consultants | Greenfield Associates |
| Transportation | The Hurlstone Partnership Ltd |

The Future

If planning permission is granted for this development, the operations would be monitored by Nottinghamshire County Council, Nottingham City Council and other specialist organisations.

The operator will have to commit to check air and noise emissions and monitor the local water environment to ensure that there will be no impacts from the proposed quarry operations.

Aggregates are an essential raw material for many construction and building industries and the deposit at this site offers a valuable resource of recognised local and regional importance.

For Further Information Contact:

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The NTS will be available on the website:
www.nottinghamshire.gov.uk
www.nottinghamcity.gov.uk
www.londonrock.co.uk/millhillquarry

