



Nottinghamshire Minerals Local Plan-  
Call for Sites January 2018  
LAND AT MILL HILL AND BARTON IN FABIS

January 2018

**Nottinghamshire Minerals Local Plan – Call for Sites January 2018  
Land at Mill Hill and Barton in Fabis**

**Project Ref:** GA BTN MLP Call for Sites Submission Jan 18

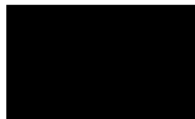
**Project No.:** LRS/BTN/100

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**Client:** London Rock Supplies Ltd

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B.Sc., FGS, MIQ

**Date:** 5<sup>th</sup> January 2018



**Signed:** \_\_\_\_\_

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**Date:** 5<sup>th</sup> January 2018



**Signed:** \_\_\_\_\_

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## 1. BACKGROUND

### 1.1 Planning Application

- 1.1.1 On behalf of London Rock Supplies Ltd a Planning Application for the land at Mill Hill and Barton in Fabis, Nottinghamshire was submitted to, and validated by, Nottinghamshire County Council and Nottingham City Council on the 1<sup>st</sup> September 2017. The Planning reference number is ES3712.
- 1.1.2 The Planning Statement includes a detailed description of the proposed development, geology, policy assessment and need. The planning application is also accompanied by an Environmental Statement (ES) and a Non-Technical Summary (NTS).
- 1.1.3 As part of the Environmental Statement (ES3712) a number of technical assessments have been completed that takes on board the formal Scoping Opinion issued by the County Council and City Council on 22 May 2015.
- 1.1.4 Within the Environmental Statement Appendices, the following assessments can be found: Flood Risk, Hydrology, Transport, Noise, Air Quality, Landscape and visual amenity, Agricultural Land Classification, Aerodrome Safeguarding, Geology, Ecology, Cultural Heritage and Archaeology.

## 2. LOCATION

### 2.1 Proposed boundary of the site

- 2.1.1 The site is located on the eastern bank of the River Trent just south of the City of Nottingham, between the villages of Barton in Fabis and Clifton and is centred at Grid Reference [SK 529 337] as shown on Plan PA17-1. The majority of the site lies within the County of Nottinghamshire (77.3 hectares), and 10.7 hectares of the site lies within the City of Nottingham administrative area giving a total application area of some 88ha.
- 2.1.2 The site (see Plan PA17-2) comprising two parcels of land. The two parcels of land comprise a low lying floodplain grassland area adjacent to the River Trent which is mainly used for grazing and an area of arable farm land located on the higher level land at Mill Hill & Brandshill adjacent to Green Street.
- 2.1.3 The site lies approximately 6.5km to the south west of Nottingham City centre, approximately 10km to the north east of East Midlands Airport and 8km from the M1 (Junction 24) (see Plan PA17-1). The nearest properties are located in the village of Barton in Fabis that lies over 150m to the south of the application area, but an isolated farm (Burrows Farm) lies just to the north of the site.

- 2.1.4 The western boundary of the application area is formed by the River Trent and beyond that is the Attenborough Nature Reserve (formerly Attenborough Quarry). The eastern boundary of the floodplain area is formed by the base of Brandshill Wood. The southern boundary of the site is formed by the flood bank surrounding the village of Barton in Fabis.

## 2.2 The extent of the excavations

- 2.2.1 Within the site an extraction area of 53ha has been identified. The River Terrace Sand and Gravel deposits on the site have been found to range in thickness from 2.2 to 6.5m. Overburden mapped is generally 1.5m in thickness. The overall excavation is not expected to be more than 9m in depth.
- 2.2.2 The excavation area is constrained by a 30m standoff to the River Trent, a 20m standoff to the floodbank surrounding Barton in Fabis and 5m standoffs to other field boundaries, as shown on Plan PA17-5. A 3m standoff to the water pipe and a 3m standoff to the gas pipe (the legal easement) will be fenced off.
- 2.2.3 The southernmost extent of the excavation will be over 150m from nearest residential properties in Barton in Fabis village. The plant area and HGV access will be located over a kilometre from the Barton in Fabis on Mill Hill, over 400m from properties in Clifton, and approximately 200m from Burrows Farm.
- 2.2.4 A geological and geotechnical assessment included as part of the Environmental Impact Assessment for ES3712 concludes that there are no adverse risks by working near the gas main or water pipe. Consultation as part of the planning application has been had with both Severn Trent Water and National Grid.

## 2.3 Proposed access to the site, including a map of key routes from the site to the nearest major roads

- 2.3.1 It is proposed that the existing farm access on to Green Street is upgraded to at the location as shown in Plan PA17-6. The proposed access will be designed to the requirements of the Local Highway Authority (Nottinghamshire County Council) using current standards and specifications for highways construction. The proposed design is shown on Plan PA17-10 prepared by The Hurlstone Partnership.
- 2.3.2 All proposed site HGV traffic would leave the site by turning left on to Green Street, then all HGV's would join the main highway network at the Mill Hill roundabout, about 180m north east of the site entrance. The traffic would then filter on to the national highway network using the A453. All traffic entering the site would do so from the Mill Hill roundabout and turn right into the site. There would thus be no quarry related

HGV traffic using Green Street south of the proposed quarry access towards the village of Barton in Fabis.

#### **2.4 Possible location(s) of processing plant**

2.4.1 The minerals will be processed within a defined plant area which will be located on Mill Hill in the north eastern part of the site (see Plan PA17-6). The soils around the plant area will need to be stripped prior to the plant construction. These will be used to create screening bunds, which will provide a suitable and useful storage solution for the soils and will ensure that the processing plant on Mill Hill will be screened from the public highways. These soils will be retained and later used in the restoration of the plant area back to agricultural land.

2.4.2 The plant area on Mill Hill will also house the site administration facilities, including "portakabin" type offices, wheel wash, car parks, HGV parking, weighbridge and internal access roads.

#### **2.5 Phasing**

2.5.1 The sequence of proposed working involves the progressive removal of sand and gravel within the proposed quarry extraction area. The general phasing of development is shown on the phasing Plan PA17-5.

2.5.2 It is proposed that the sand and gravel will be excavated at the working face and hauled from the extraction area by dump truck to be deposited in an as-raised stockpile, located at the base of Brandshill within the Phase 1 extraction area. This material will then be loaded from the stockpile into a feed hopper on a daily basis to be transported to the plant area by a field conveyor, located on the Brandshill access road, as shown in Plan PA17-6. The sand and gravel will then be stockpiled adjacent to the processing plant or fed directly into proposed sand and gravel washing plant.

2.5.3 It is proposed that the mineral will be extracted on a "campaign basis" over the life of the operations, with about three campaigns per annum of up to 6 weeks during the "dryer" periods of the year. No mineral extraction campaigns are therefore proposed during periods of Environment Agency Flood Warning when high river levels are predicted and flooding is anticipated. At these times, no operations will take place within the flood plain area and mineral processing will continue using material stockpiled adjacent to the processing plant.

2.5.4 It is proposed that the mineral will be worked using a range of excavators dump trucks and wheeled loading shovels. The water table on the site is approximately 1.2m below ground, at the boundary between the overburden and mineral, therefore the mineral

extraction areas will require dewatering to be extracted in a 'dry state'. A scheme of dewatering will form part of this development.

2.5.5 The extraction area excludes the major National Grid Gas pipe and Severn Trent Water pipe that cross the site. Margins will be left at the perimeters of the excavations to ensure support to adjoining un-worked land and to protect the retained peripheral boundary features such as hedgerows, trees and fencing. The excavation area will maintain a margin of 30m to the river, a 20m standoff to the floodbank surrounding Barton in Fabis and 5m standoffs to other field boundaries.

2.5.6 The overburden removal operations will allow progressive restoration to take place across the site, with the main initial restoration works focused on Phase 2 adjacent to the village of Barton.

## 2.6 OS Map of the Site

2.6.1 OS maps of the site can be found on Plan PA17-1 and PA 17-2.

## 2.7 Estimated number of HGV movements per day/month/year

2.7.1 Dependent on market conditions, it is anticipated that quarry output will be about 280,000 tonnes per annum. All materials would leave the site by HGVs in standard 20 tonne loads and the proposed extraction rate equates to an average of about 57 HGV's leaving the site each day. This will create, on average 114 HGV movements per day (57 in and 57 out of the site).

2.7.2 As part of the planning application (ref. ES3712) an assessment of the baseline traffic flows, highways configuration and the potential traffic impact of the proposed operations has been carried out by The Hurlstone Partnership.

2.7.3 The assessment found that the impact of 114 HGV movements per day would equate to 0.3% of the overall existing traffic flow and 2.6% of the HGV traffic flow on the A453 to the north and south of Mill Hill Roundabout.

### **3. RESERVE DATA**

#### **3.1 Quality and quantity of recoverable reserves**

- 3.1.1 A series of boreholes have been drilled across the application area to assess the potential reserves and quality of the River Terrace Sand and Gravel deposits known to be present, a borehole summary table is shown in Appendix A.
- 3.1.2 River Terrace deposits are mapped across much of the site and all of the boreholes drilled proved mineral to be present. Where proved, the sand and gravel ranges in thickness from 2.2m to 6.5m. All of the boreholes drilled on the site were terminated in firm, reddish brown Mercia Mudstone bedrock that lies beneath the mineral deposits
- 3.1.3 Laboratory testing of the Terrace Sand and Gravels on the site confirms that they appear suitable for a range of construction aggregate uses. Grading analyses and aggregate testing indicates that the Terrace Sand and Gravel deposits can be washed to produce both a fine and coarse concreting aggregate that can be used in ready mixed concrete production and a range of other high quality aggregate products.
- 3.1.4 The representative borehole samples tested confirm that the deposit is gravel rich with predominantly medium to coarse quartz sands. The sand fraction comprises about 38% of the deposit, while the gravel fraction forms on average 59% of the deposit, as shown in Appendix A.
- 3.1.5 Within the extraction areas identified, it is estimated that some 3.4 million tonnes of sands and gravels may be present. To release the workable sand reserves proved, it is estimated that some 858,000m<sup>3</sup> of soils and overburden will have to be stripped from the proposed excavation area of about 53 hectares to allow the extraction of the sand and gravel deposits.

#### **3.2 Estimated output per annum & Estimated lifespan of the mineral workings (years)**

- 3.2.1 It is proposed that this material will be extracted to provide a range of washed aggregates to the local Nottingham market, over a period of 12-15 years, at an output of about 280,000 tonnes per annum. On cessation of mineral extraction on land at Mill Hill and Barton in Fabis there will be an additional 2 years of restoration. The total timescales for the proposed site are therefore 17 years.

#### **3.3 When will the site be ready to be worked?**

- 3.3.1 On behalf of London Rock Supplies Ltd a Planning Application for this site was submitted to and validated by Nottinghamshire County Council (NCC) and Nottingham City Council on the 1<sup>st</sup> September 2017. The Planning reference number is ES3712.

- 3.3.2 Assuming that planning permission is given and will be accompanied by a set of conditions that will require discharging. It is therefore anticipated that the site would be ready to work in 2018.

#### **4. ROLE OF THE SITE/MARKETS**

##### **4.1 Is the site a Greenfield site or an extension?**

- 4.1.1 The proposed land at Mill Hill and Barton in Fabis site is a Greenfield site.

##### **4.2 If a Greenfield site, is it replacing an existing mineral working within or outside the county?**

- 4.2.1 No. However, it should be noted that the site could be a replacement for Attenborough Quarry which is located on the western bank of the River Trent which has been operating for over 100 years. The reserves are now exhausted, and the quarry processing unit and ready mixed concrete plant were closed in early 2017 and are being demolished.

- 4.2.2 The sales of aggregates and concrete from Attenborough (over 200,000 tonnes per annum) have been sold within the Nottingham market (although the extraction has taken place in Derbyshire for the last 15 years). There is no direct replacement site identified to replace this operation within the Nottingham area.

- 4.2.3 Other quarry sites that have been located near Nottingham at Hoveringham and Holme Pierrepont have also closed over the past 10-15 years and have not been replaced.

##### **4.3 What is your planned market area? & Is the location of the site optimum in terms of serving the market?**

- 4.3.1 The planned market area is anticipated to be up to 10km away from the site. The specific policy that relates to development and housing allocation within Rushcliffe is (Policy 3: Spatial Strategy. The main issues and objectives of the policy that can be related to the MLP are that "a minimum of 13,150 (by 2028) new homes will be provided" and that "the sustainable development of Rushcliffe will be achieved through a strategy that supports a policy of urban concentration with regeneration for the whole of Greater Nottingham to 2028."

- 4.3.2 Three defined areas of "Sustainable Urban Extensions" on the edge of the main built up area of Nottingham are identified as Land South of Clifton, Melton Road, Edwalton and Land East of Gamston that comprises both residential and employment land development. These three sites are shown highlighted on the plan in Appendix B, which also includes other significant development allocations within the Broxtowe Local Plan (to the west of Nottingham) and also the location of the proposed mineral development site at Mill Hill / Barton in Fabis.

- 4.3.3 The boundary between Rushcliffe and the City of Nottingham (district of Clifton) lies just to the north of the proposed site entrance and part of the proposed extraction area lies within the City administrative area. Within Clifton, proposals for a large housing area, just 1km to the north of the Mill Hill site entrance has been submitted, which includes the construction of about 300 new properties, termed Clifton West (see Figure Appx5-2). Within the main town of Clifton, the "Clifton Triangle" development has been approved that includes the construction of new houses and apartments, together with the creation of a retail area and major new supermarket. This lies within 2km of the proposed quarry site.
- 4.3.4 There are several major regeneration and new housing and employment projects proposed within the City of Nottingham included in their emerging development plan. The Waterfront regeneration area comprises the completed first phase of the Trent Basin low energy housing development, with a further ~ 500 homes to be built starting in 2017. Just to the west of Trent Basin are the Meadow Lane development proposals for 95 town houses and flats as part of the 'Waterfront regeneration area'. Within the city centre the replacement of the broadmarsh shopping centre and carpark has also commenced.
- 4.3.5 Also within the city are proposals with outline planning permission at the Boots Campus for 40ha of mixed use employment space and 675 residential units. Just to the west of the Boots Campus are the opportunities for the redevelopment of the Imperial Tobacco factory following the closure, which holds potential opportunities of 45ha of employment land (see Figure Appx5-2).
- 4.3.6 Just to the west of the County boundary (within Leicestershire), a "Nationally Significant Infrastructure Project" has been approved that is termed the "East Midlands Gateway Strategic Rail Freight Interchange". This is located in the area between East Midlands Airport and Junction 24 of the M1, about 6km to the west of the proposed new quarry site as shown in Figure Appx5-2. The new quarry site has almost direct access on to the A453 at Mill Hill Roundabout, which then has direct access to the M1 at Junction 24 and this rail freight development.
- 4.3.7 The proposed new quarry site at Mill Hill-Barton can provide a source of construction materials to the identified housing, employment and major infrastructure development projects, which includes the proposed construction of HS2 and the M1 rail freight facility. This development may therefore reduce vehicle delivery distances and potentially reduce overall congestion in the Greater Nottingham conurbation for mineral related traffic due to the location of the site relative to the main construction markets.

## 5. AVAILABILITY OF MINERAL

### 5.1 Do you have the legal rights to work all of the mineral including access to a public highway or any other transport route?

5.1.1 Yes, the Planning Application was submitted on behalf of London Rock Supplies Ltd (LRS), who will become the landowner and operator of the proposed application area, subject to Planning Permission being granted.

## 6. LANDOWNER CONSENT

### 6.1 Who is the legal owner of the site?

6.1.1 The site is covered by two different land owners the John H Plowright Trust and the Simon J Plowright Trust. Subject to planning approval, the land will be acquired by London Rock Supplies Ltd.

### 6.2 Is the legal owner of the site also a minerals operator?

6.2.1 No.

### 6.3 Has the legal owner made a formal agreement with any mineral operator for minerals exploration and/or minerals extraction

6.3.1 Yes, the Planning Application was submitted on behalf of London Rock Supplies Ltd (LRS), who will become the landowner of the proposed application area, subject to Planning Permission being granted.

6.3.2 LRS will therefore be the operator, landowner and mineral owner of the land and will have the sole rights to operate the proposed quarry site.

## 7. AGRICULTURAL LAND QUALITY

### 7.1 Agricultural land classifications found within the site

7.1.1 As part of the planning application an assessment of the existing soils and agricultural land quality has been carried out that covers the proposed extraction area on the River Trent floodplain as well as the proposed plant area at Mill Hill.

7.1.2 The Agricultural Land Classification (ALC) of the site has shown that of the 'Floodplain area' (~68.5 hectares) contains only 4.54 hectares of land that has been classified as Grade 3a - 'Best and Most Versatile land' (BMV). The majority of the floodplain area is limited to Grade 3b due to the regular frequency of flooding that covers the majority of this low lying area adjacent to the River Trent. The agricultural activities that have historically taken place on this floodplain area comprise mainly summer cattle and sheep grazing, with limited planting of arable crops due to the regular flooding events.



- 7.1.3 The assessment of the Mill Hill area (19.50 ha) identifies that only 6.15 ha of Grade 3a and Grade 2 BMV land to be present. The agricultural activities that have historically taken place on this area comprise planting of arable crops.
- 7.1.4 Over the whole application area (88ha), only 12% is identified as BMV, of which only 5% will be lost (4.54ha) within the proposed extraction area. 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.

## 8. SENSITIVE RECEPTORS

- 8.1 **Is the site located within 250m of any sensitive receptors? (schools, residential dwellings, workplaces, healthcare facilities).**
- 8.1.1 As part of the planning application (ES3712) a number of technical assessments have been completed to determine the impact on any sensitive receptors. Within the Environmental Statement and Appendices, the following assessments can be found: Flood Risk, Hydrology, Transport, Noise, Air Quality, Landscape and visual amenity, ALC, Aerodrome Safeguarding, Geology, Ecology, Cultural Heritage and Archaeology.
- 8.1.2 The southernmost extent of the excavation will be over 150m from nearest residential properties in Barton in Fabis village. The proposed location of the processing plant has been selected at Mill Hill as it is over 1km from the village of Barton, which is screened by Brandshill Wood. It is also over 400m from properties in Clifton, and approximately 200m from Burrows Farm.
- 8.1.3 The results of the noise and air quality assessments carried out at the nearest properties surrounding the site has identified that (at worst-case scenarios), the noise and dust levels from the proposed quarry operations would not exceed the accepted limits as set-out in current Government guidance.
- 8.1.4 There are a number of defined public rights of way that cross the site that are used extensively by the public (See Plan PA17-2). Public rights of way that lie wholly or partly within the site are known as Barton in Fabis Bridleway No.1, Barton in Fabis Footpath No.2 and Barton in Fabis Bridleway No.3, as shown on Plan PA17-2.
- 8.1.5 Impacts and environmental protection measures have been assessed and designed in consultation with the Rights of Way Officers at Nottingham County and City Councils. During the mineral operations the public rights of way temporary diversions will be actioned under the Town and Country Planning Act and other associated legislation.

- 8.1.6 There are no internationally designated statutory nature conservation sites such as Special Conservation Areas (SAC) or Special Protection Areas (SPA) present within a 2km radius of the centre of the application area.
- 8.1.7 There are however four statutory sites such as Site of Special Scientific Interest (SSSI) or Local Nature Reserve (LNR) present within a 2km radius of the application area. These are Attenborough Gravel Pits SSSI, Holme Pit SSSI, Glapton Wood LNR and Clifton Grove, Clifton Woods and Holme Pit Pond LNR (see Plan PA17-3).
- 8.1.8 There are 17 non-statutory nature conservation designations such as Local Wildlife Sites (LWS) within a 2km radius of the centre of the application area. Five of these LWS occur within the site boundary (see Plan PA17-4). These are Barton Flash, Barton in Fabis Pond and Drain, Brandshill Marsh, Brandshill Grassland and Borrow Pits Barton.
- 8.1.9 The remaining 12 LWS are: Holme Pit; Attenborough Gravel Pits; Barton-in-Fabis Fishing Pools; Burrows Farm Grassland; Beeston Canal; Clifton Grove; Clifton Wood; Trent Carr, Clifton; Clifton Fox Covert; Beeston Weir River Deposits; River Trent North Bank and Brandshill Wood (see Plan PA17-4). The closest of these LWS is Brandshill Wood which is located immediately to the south-east of the site.
- 8.1.10 The ecological assessments found that the impact of the proposed development will have a minor significant impact on the local ecology. The mitigation measures proposed will ensure that there will be no impact on any identified protected species and it is considered that the operations will not have an impact on any designated ecological site in the vicinity of the operations.

## 9. RECLAMATION

- 9.1 **Proposed reclamation schemes - what opportunities for environmental benefits do you see arising from the scheme?**
- 9.1.1 The restoration scheme has been developed in consultation with the Environment Agency, Natural England and East Midlands Airport and incorporates a phased sequence of extraction, reclamation and restoration. The scheme includes the creation of 62ha of several key UK and Nottinghamshire LBAP priority habitats such as floodplain grazing marsh, reed bed, lowland wet grassland, marshes, eutrophic and mesotrophic standing water, hedgerows and agricultural land, as shown in Plan PA17-9.
- 9.1.2 The plant, weighbridge and offices will be removed and the soil stored in the peripheral bunds used to restore the Mill Hill area to agricultural land. However, it is proposed that the internal access road from the site entrance down Brandshill Grassland will be

retained for long-term access and maintenance of the restored extraction area. Thus there will be no need for access through the village of Barton in Fabis. The site entrance will revert back to use commensurate with the restoration proposals.

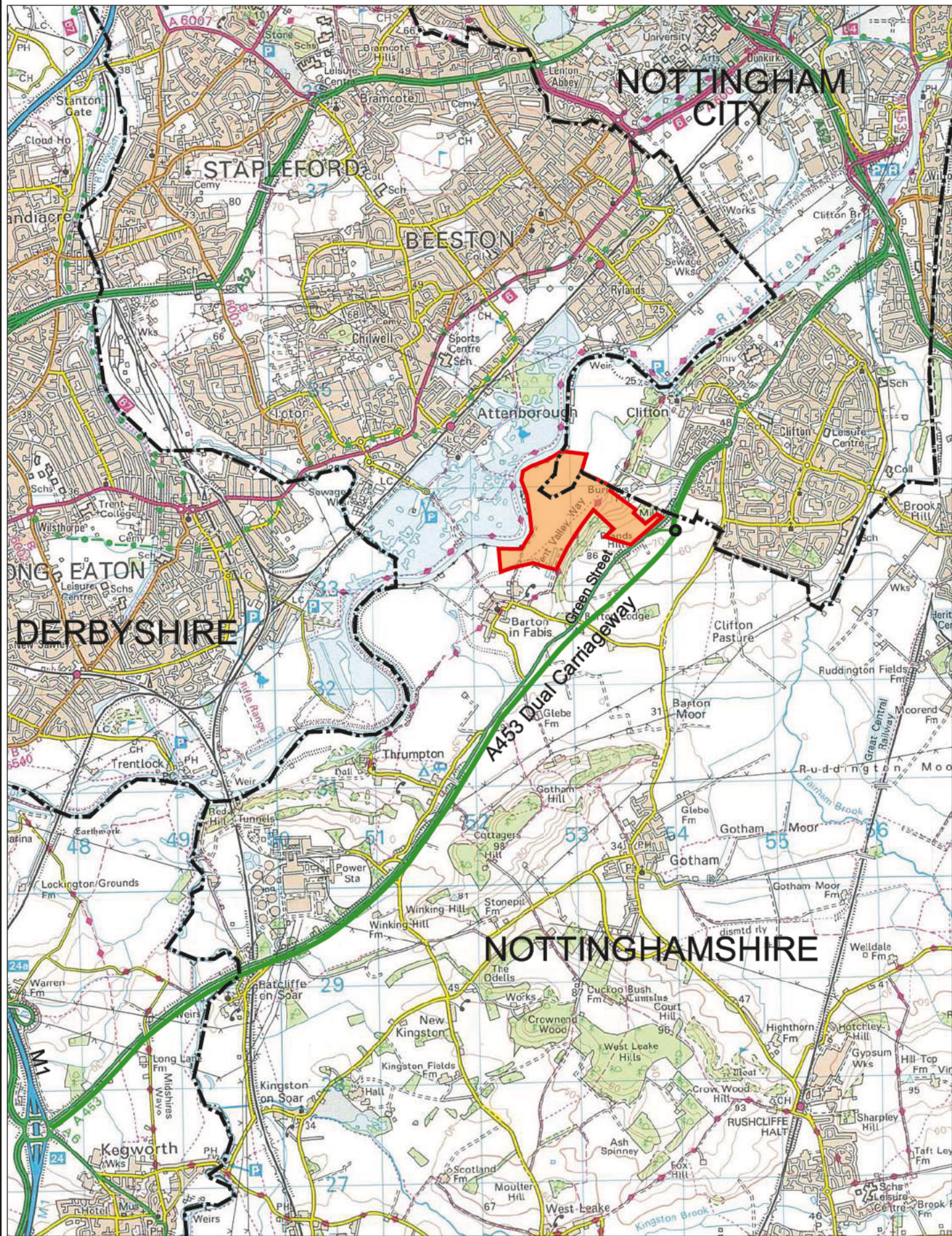
- 9.1.3 It is not proposed that any new Public Rights of Way are opened on the site. However, it is proposed that permissive footpaths through parts of the site may be opened, subject to approval from the relevant stakeholders and authorities to ensure no detrimental habitat impacts are incurred.
- 9.1.4 An aftercare scheme will be implemented for a minimum of five years for the proposed agricultural restoration of the plant area at Mill Hill. This will be managed to deliver the final long-term agricultural restoration objectives for the site. New trees and hedgerow shrubs would be planted to replace any removed during the extraction operations and to re-establish any hedgerows removed. As part of the bird management plan, liaison with East Midlands Airport as part of the aftercare will have to be undertaken to ensure no bird impacts are created as part of the scheme.
- 9.1.5 The restoration proposals for the site are likely to have long-term beneficial impact, especially when compared the current land-use. The proposed scheme will complement the Attenborough Nature Reserve location to the west of the River Trent and assist with the local and national biodiversity action plans for specific habitats.

**9.2 Does the reclamation of the site depend on importing fill? If so, please indicate type of waste, main sources and timescales?**

- 9.2.1 No. There will be no imports of material. Restoration on the site will use soils, overburden and quarry processing silt material.

## PLANS






**Plan PA17-1**

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**Title** Site Location

**Project** Planning Application

**Site** Land at Mill Hill, & Barton in Fabis

 **Planning Application Area**

**Project No.** LRS/BTN/101

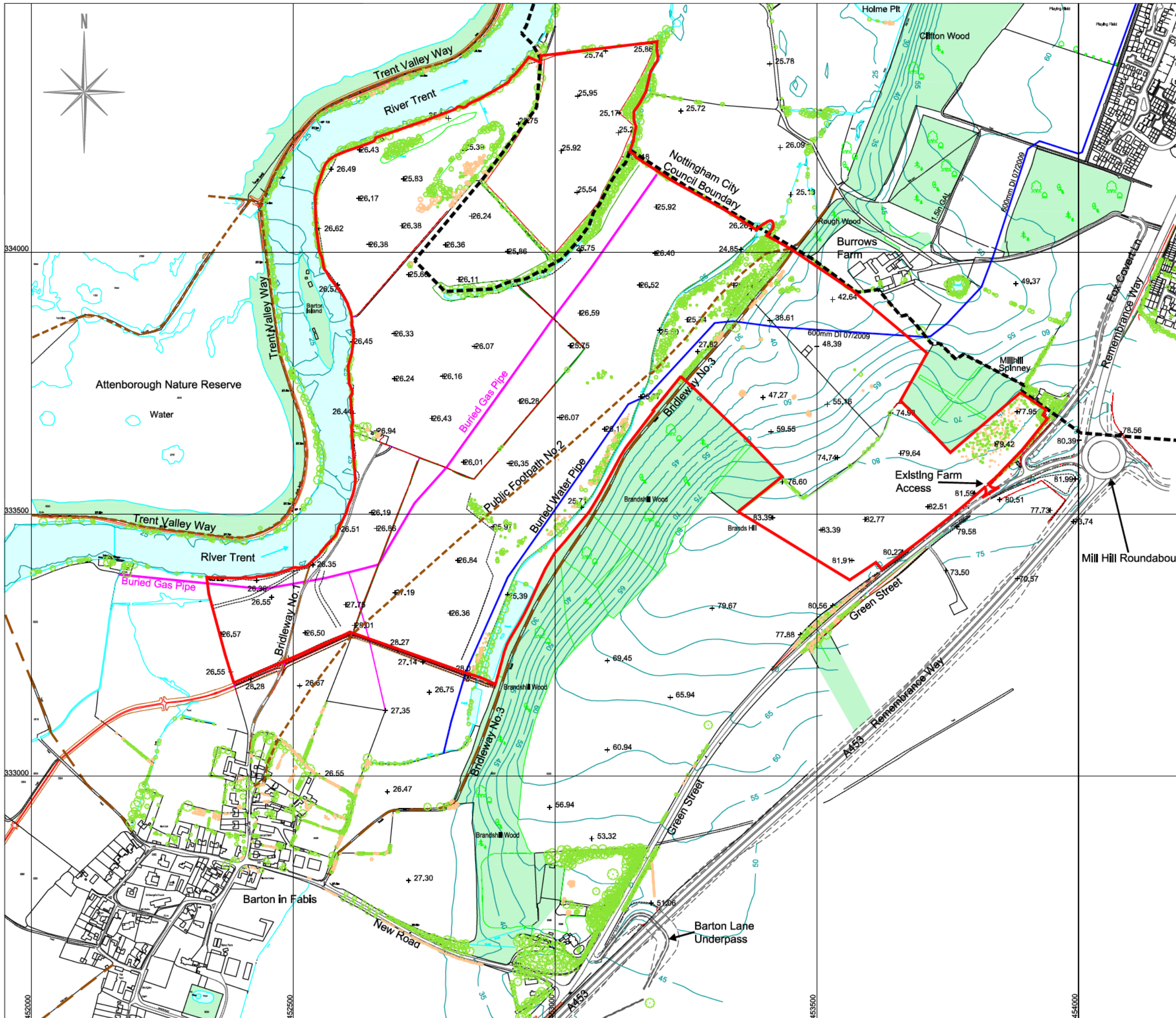
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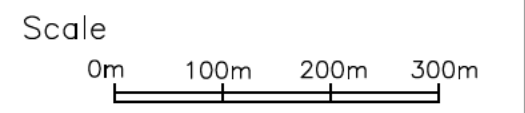
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associates

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Tel (0115) 9372002





- Key**
- Planning Application Area
  - - - Nottingham City Boundary
  - Existing Woodland
  - Water Courses
  - Trees and Shrubs
  - Stream/ Drains
  - Public Rights of Way
  - Buried Gas Pipe
  - Buried Water Pipe 600mm



Site surveyed by Greenfield Associates May 2013  
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**Site**  
 Land at Mill Hill,  
 Barton in Fabis

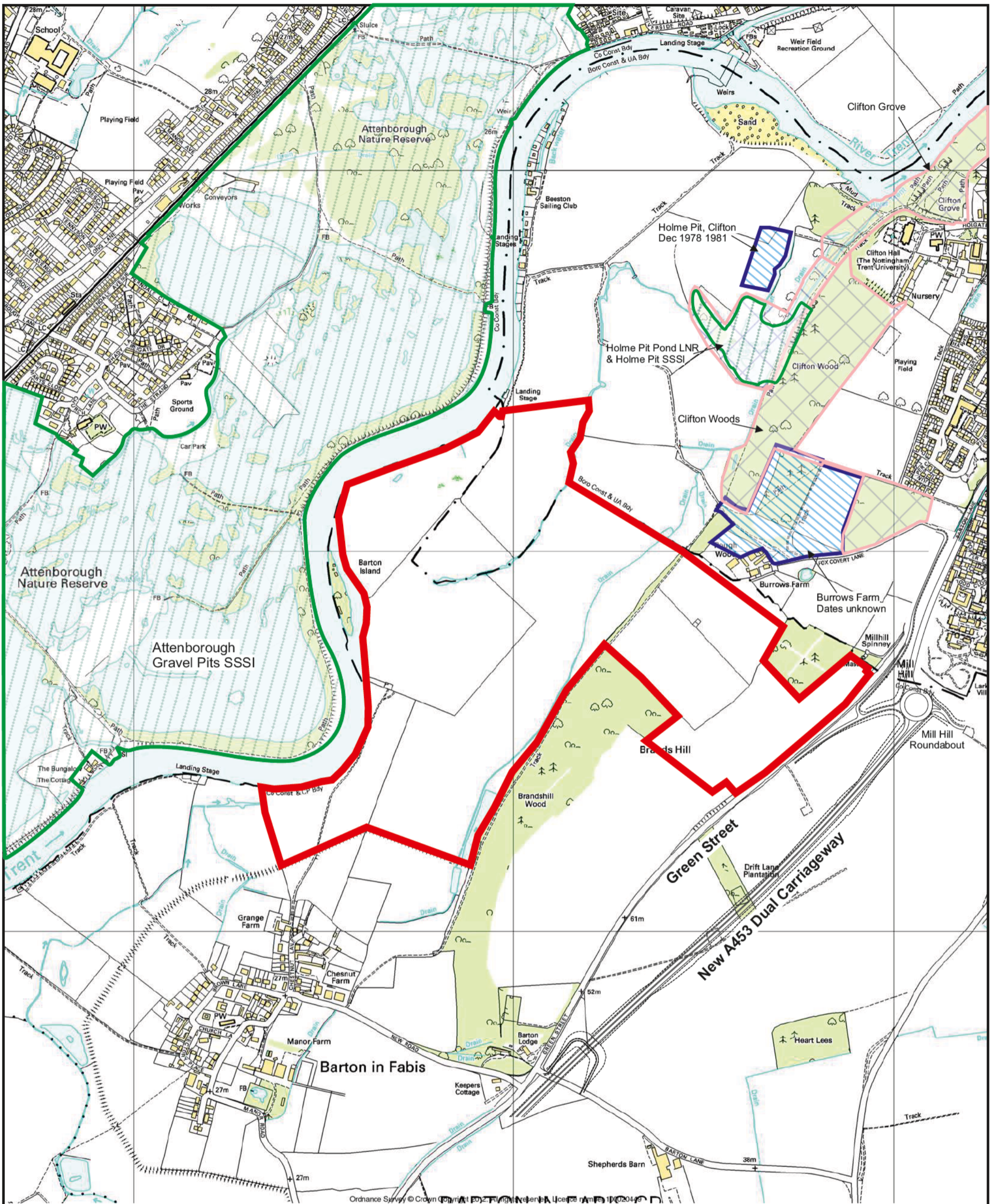
**Project**  
 Planning Application





**Plan**  
 PA 17-2  
 Site Plan

**Greenfield**  
*associates*

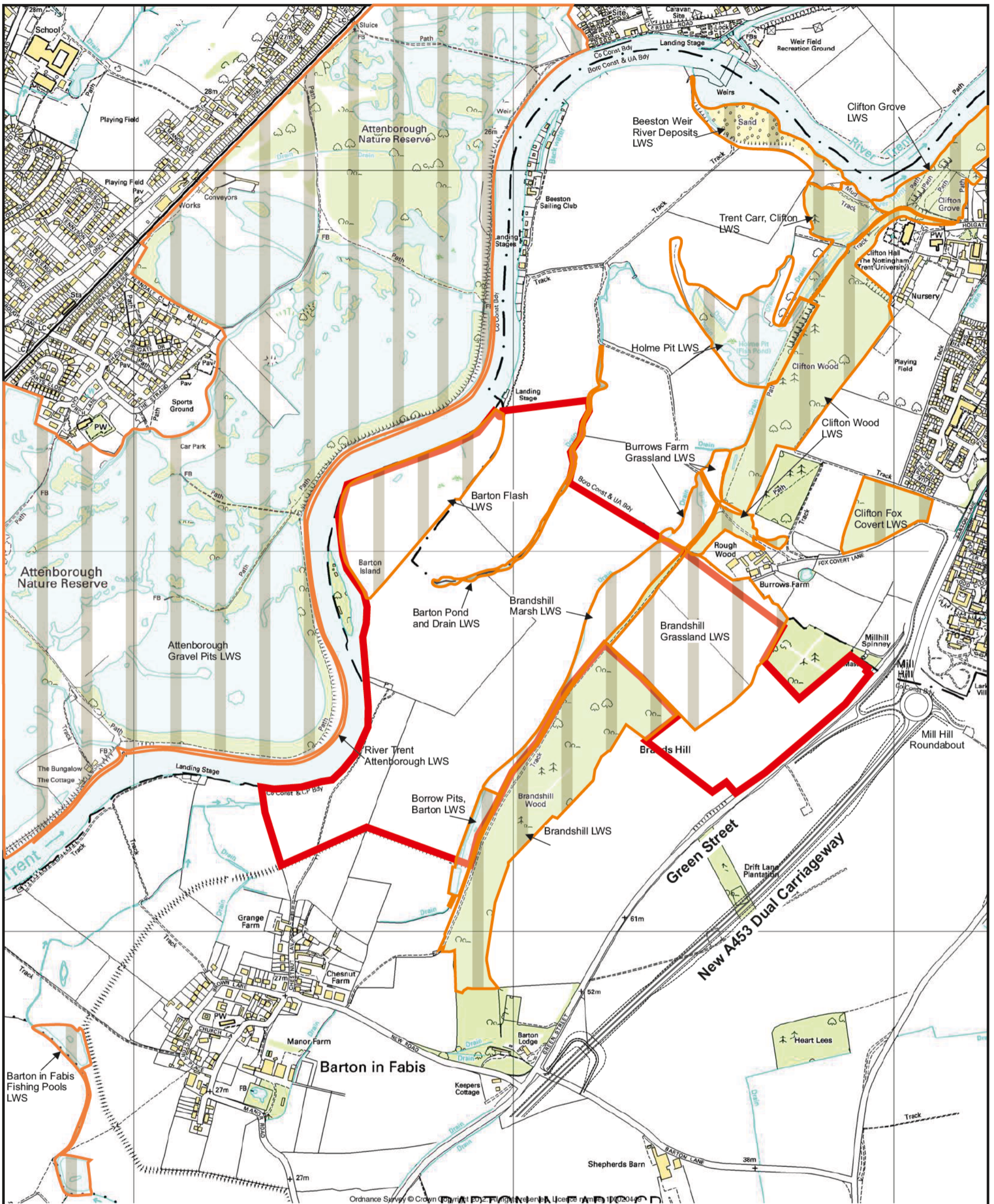
1 Commercial Rd, Keyworth, Nottingham, NG12 5JS.  
 Email: admin@greenfield-associates.co.uk  
 Tel: (0115) 937 2002





<p><b>Plan Ref:</b> PA 17-3</p>	<p><b>Title</b> Statutory Sites with Protective Designations &amp; Historic Landfills</p>	<p><b>Key:</b></p> <ul style="list-style-type: none"> <li> Clifton Grove Woods and Holme Pit Pond Local Nature Reserve (LNR)</li> <li> Sites of Special Scientific Interest (SSSI)</li> <li> Historic Landfill Sites</li> </ul>	 <p><b>LONDON ROCK SUPPLIES LTD</b></p>
<p>Based upon the 2012 Ordnance Survey 1:10,000 map with the permission of The Controller of Her Majesty's Stationary Office Crown Copyright Greenfield Associates, 1 Commercial Rd, Keyworth, Nottingham Licence No. 100020449</p>	<p><b>Project</b> Planning Application</p>	<p><b>Scale</b> not to scale</p>	<p><b>Greenfield</b> <i>associates</i> 1 Commercial Road, Keyworth, Nottingham, NG12 5JS Email: admin@greenfield-associates.co.uk Tel: (0115) 9372002</p>
<p><b>Site</b> Land at Mill Hill and Barton in Fabis</p>			

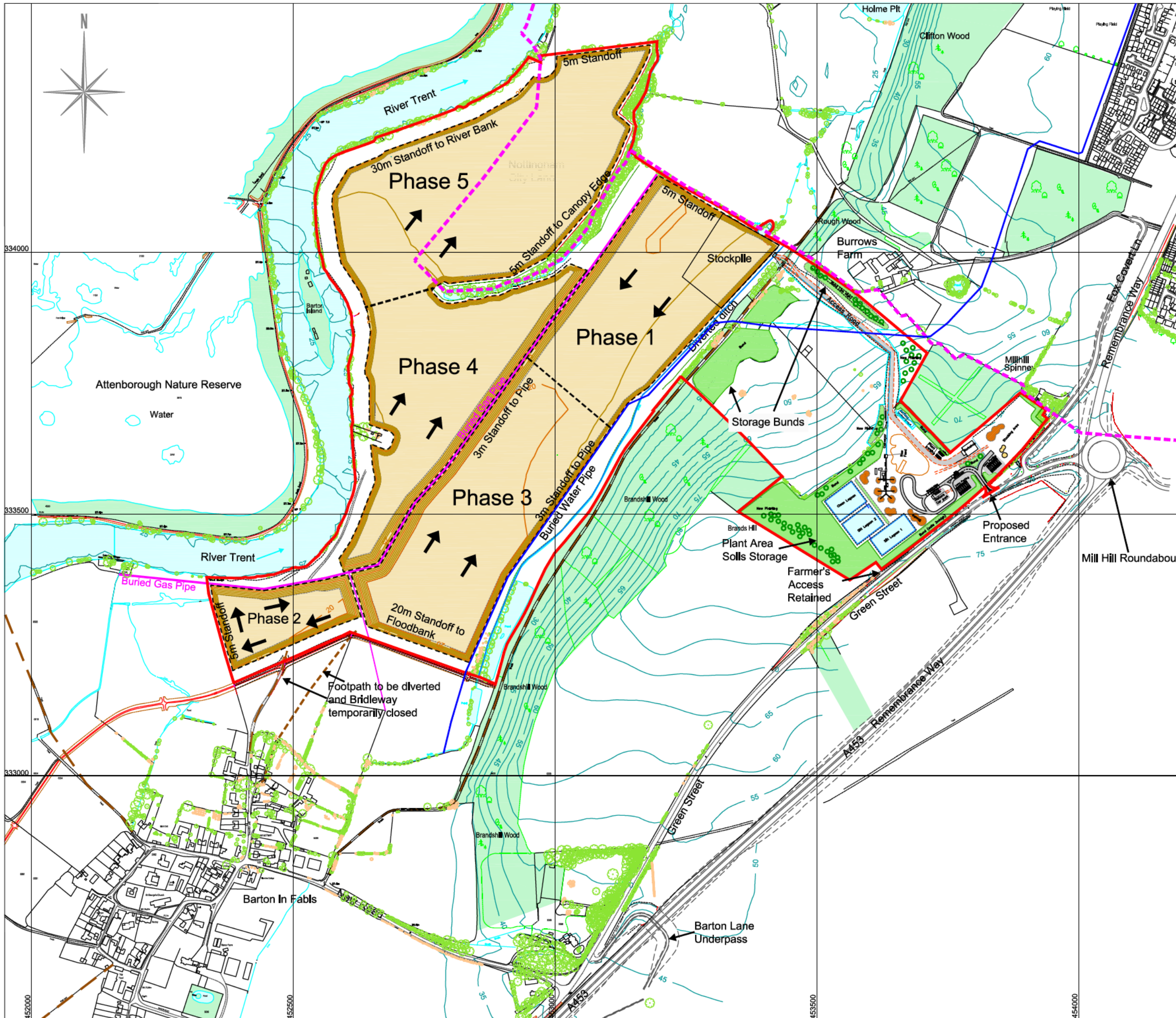




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<p><b>Plan Ref:</b> PA 17-4</p>	<p><b>Title</b> Non-Statutory Sites with Protective Designations</p>	<p><b>Key:</b>  Local Wildlife Sites (LWS)</p>	 <b>LONDON ROCK SUPPLIES LTD</b>
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<p><b>Site</b> Land at Mill Hill and Barton in Fabis</p>			





**Key**

- Planning Application Area
- - - Nottingham City Council Boundary
- Excavation Area
- Existing Woodland
- Existing Trees and Shrubs
- Water Courses
- Stream/ Drains
- - - Public Rights of Way
- Buried Gas Pipe
- Buried Water Pipe 600mm

**Scale**

0m 100m 200m 300m

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Scale: 1:7000 @A3 or 1:3,500 @ A1  
 Date: 26/03/2016  
 Project No: LRS/BTN/103  
 File: BTN\_Site Layout Plan V4.dwg  
 Drawn by: SFH

**Site**  
 Land at Mill Hill and Barton in Fabis

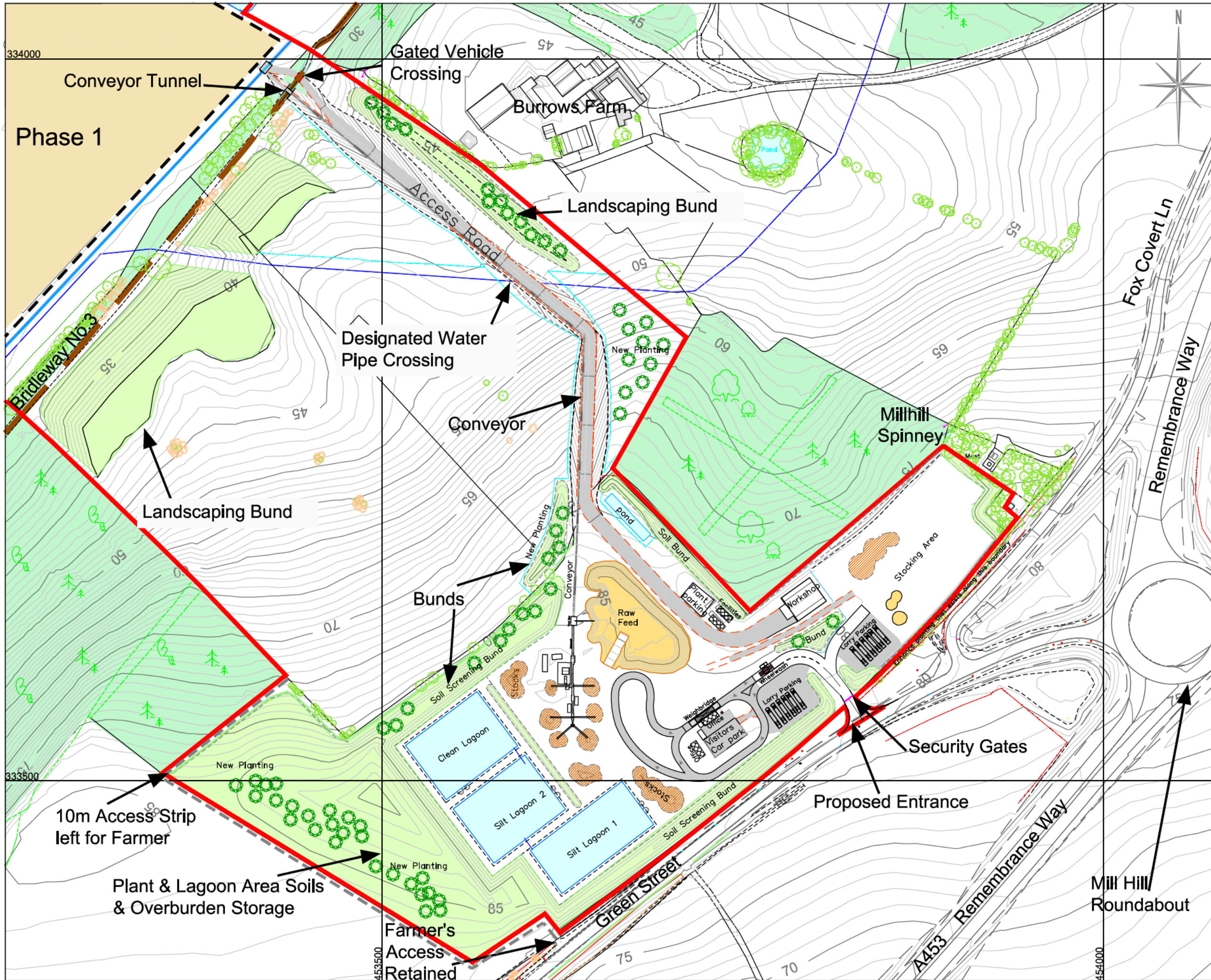
**Project**  
 Planning Application

**Plan**  
 PA 17-5  
 Proposed Site Layout

**Greenfield**  
*associates*

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 Tel: (0115) 937 2002





**Key**

- Planning Application Area
- Excavation Area
- Proposed Bunds
- Proposed Planting
- Existing Woodland
- Existing Trees and Shrubs
- Lagoons/ Surface Water Collection Ponds
- Stream/ Drains
- Public Rights of Way
- Buried Water Pipe 600mm

**Scale**  
0m 50m 100m

Site surveyed by Greenfield Associates May 2013  
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Scale: 1:2,500 @ A3  
Date: 11/11/2016  
Project No: LRS/BTN/103  
File: BTN 17-6 V2 Site Layout Plan.dwg  
Drawn by: SFH

**Site**  
Land at Mill Hill and Barton in Fabis

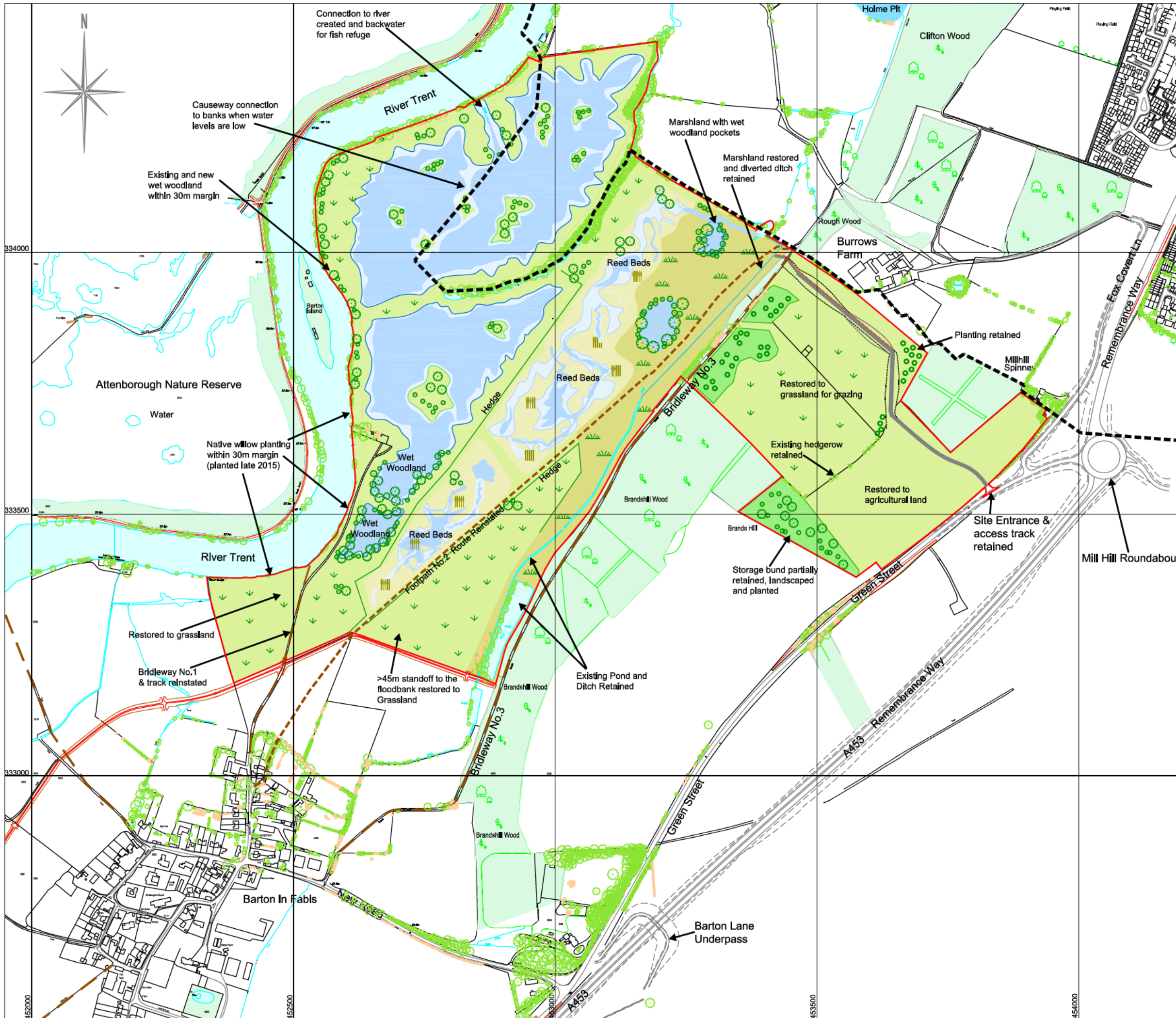
**Project**  
Planning Application

**Plan**  
PA 17-6  
Proposed Site Layout

**Greenfield**  
*associates*

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**Key**

- Site Boundary
- Nottingham City Boundary
- Existing Woodland
- Existing Trees and Shrubs Retained
- Water Courses
- Stream/ Drains
- Public Rights of Way
- Proposed Tree & Shrub Planting
- Proposed Water 0-1.5m deep
- Proposed Water 1.5- 5.0m deep
- Proposed & Existing Grassland
- Proposed Marsh land
- Proposed Reed Beds

**Scale**  
0m 100m 200m 300m

Site surveyed by Greenfield Associates May 2013  
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Scale: 1:7000 @A3 or 1:3500 @A1  
 Date: 03/01/2017  
 Project No: LRS/BTN/103  
 File: BTN PA17-8 Rest Concept V6.dwg  
 Drawn by: SFH

**Site**  
 Land at Mill Hill and Barton in Fabis

**Project**  
 Planning Application

**Plan**  
 PA 17-9  
 Conceptual Restoration

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## APPENDIX A

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**APPENDIX 4 GEOLOGICAL INFORMATION****Table 1 General Stratigraphy of the Nottingham District*****Drift***

<b>Quaternary</b>	Alluvium River Terrace Deposits <i>(Hemington Member)</i> <i>(Holme Pierrepont Sand &amp; Gravel Member)</i> Boulder Clay
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***Solid***

<b>Triassic</b>	Mercia Mudstone Group Sherwood Sandstone Group
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<b>Carboniferous</b>	Coal Measures
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**Table 2 Summary of Borehole Information**Boreholes Drilled 28<sup>th</sup>-31<sup>st</sup> May 2013 on Land at Mill Hill & Barton in Fabis

Borehole	Borehole Coordinates		Surface Level	Overburden Thickness	Base of Overburden	Mineral Thickness	Base of Mineral
	Easting	Northing	m AOD	m	m AOD	m	m AOD
CP13/1	452644	334015	26.375	1.8	24.57	4.0	20.57
CP13/2	452789	333824	26.288	1.7	24.58	4.1	20.48
CP13/3W	452659	333659	26.364	3.0	23.36	2.2	21.16
CP13/4W	453375	334045	25.795	1.1	24.19	3.2	20.99
CP13/5	453253	333871	25.741	1.2	24.54	2.9	21.64
CP13/6	453161	333937	26.522	1.6	24.92	4.7	20.22
CP13/7	453029	333822	25.751	1.4	24.35	4.1	19.95
CP13/8	452997	333582	26.823	2.1	24.72	3.9	20.82
CP13/9	452881	333476	25.965	2.8	23.16	4.1	19.06
CP13/10W	452965	333705	26.216	1.9	24.31	4.4	19.91
CP13/11	452649	333503	26.192	1.3	24.89	4.2	20.69
CP13/12W	452617	333288	27.469	1.3	26.16	6.5	19.66

Boreholes Drilled 2<sup>nd</sup> to 4<sup>th</sup> of March 2016 on Land at Mill Hill & Barton in Fabis

Borehole	Borehole Coordinates		Surface Level	Overburden Thickness	Base of Overburden	Mineral Thickness	Base of Mineral
	Easting	Northing	m AOD	m	m AOD	m	m AOD
BTN16/1	453041	334278	25.93	1.7	24.2	3.2	21.0
BTN16/2	452851	334027	26.25	1.5	24.7	3.6	21.1
BTN16/3	452766	334182	26.31	3.3	23.0	1.5	21.5
BTN16/4	452678	333748	26.23	3.4	22.8	2.4	20.4
BTN16/5	453231	334055	26.16	2.1	24.1	4.1	20.0
BTN16/6	452765	333386	27.15	1.3	25.9	6.7*	19.2*
BTN16/7	452428	333278	26.61	1.75	24.85	4.3	20.55

\*Base of mineral not proved.



**Table 3 Summary of Mean Borehole Grading Information**

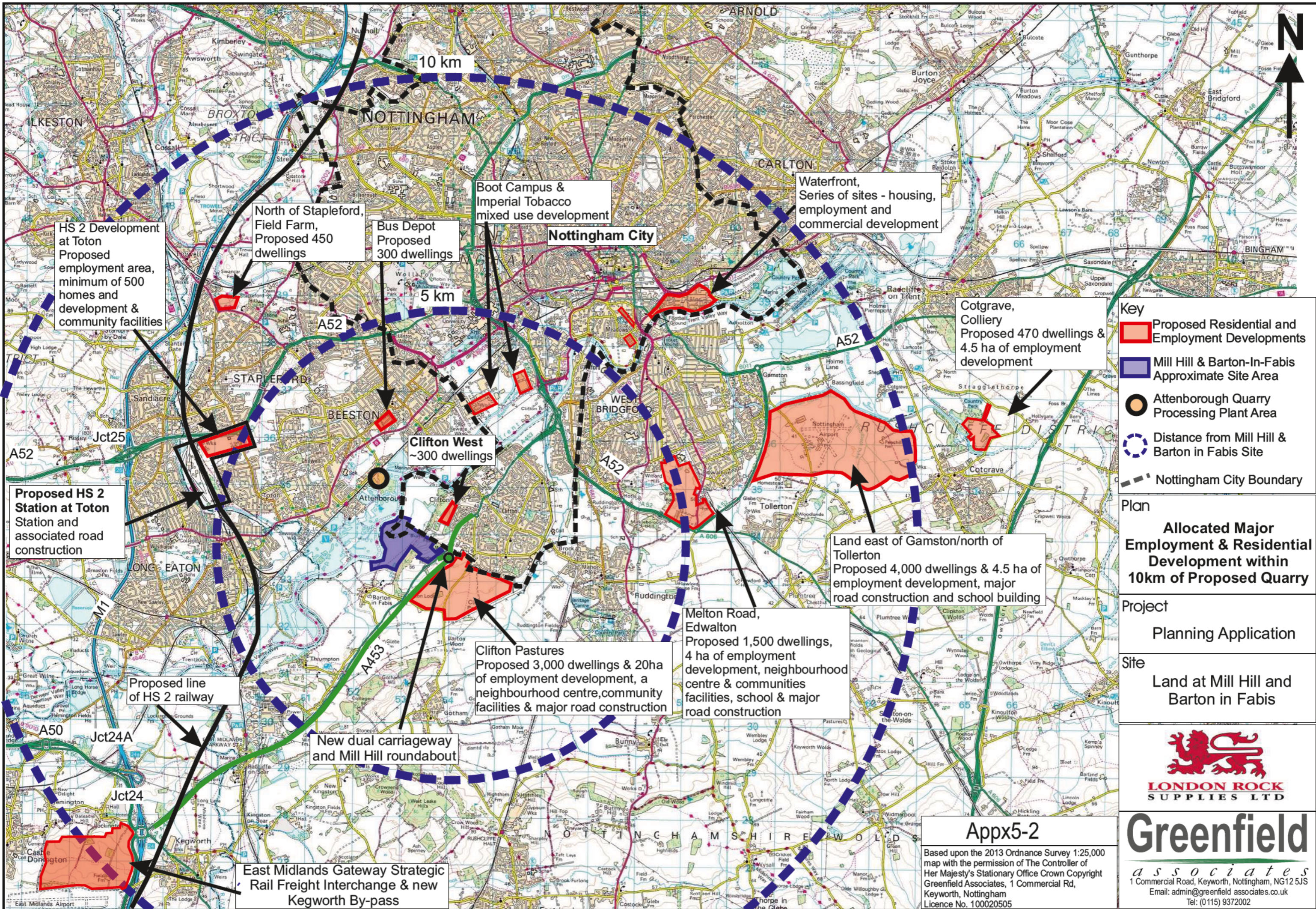
Percentage Passing (%) – Sieve Sizes

	0.063	0.125	0.25	0.50	1.0	2.0	4.0	6.3	8.0	10.0	16.0	20.0	31.5	40.0	80.0
<b>Sand &amp; Gravel</b>	3	3	5	20	31	35	41	48	52	57	71	78	91	96	100

	<b>Fines</b> (-63 $\mu$ m)	<b>Sand</b> (-4mm)	<b>Gravel</b> (+ 4mm)
<b>Sand &amp; Gravel</b>	3 (1-7%)	38%	59%

## APPENDIX B





HS 2 Development at Toton Proposed employment area, minimum of 500 homes and development & community facilities

North of Stapleford, Field Farm, Proposed 450 dwellings

Bus Depot Proposed 300 dwellings

Boot Campus & Imperial Tobacco mixed use development

Waterfront, Series of sites - housing, employment and commercial development

Cotgrave, Colliery Proposed 470 dwellings & 4.5 ha of employment development

Proposed HS 2 Station at Toton Station and associated road construction

Proposed line of HS 2 railway

New dual carriageway and Mill Hill roundabout

East Midlands Gateway Strategic Rail Freight Interchange & new Kegworth By-pass

Clifton West ~300 dwellings

Clifton Pastures Proposed 3,000 dwellings & 20ha of employment development, a neighbourhood centre, community facilities & major road construction

Melton Road, Edwalton Proposed 1,500 dwellings, 4 ha of employment development, neighbourhood centre & communities facilities, school & major road construction

Land east of Gamston/north of Tollerton Proposed 4,000 dwellings & 4.5 ha of employment development, major road construction and school building

- Key**
- Proposed Residential and Employment Developments
  - Mill Hill & Barton-In-Fabis Approximate Site Area
  - Attenborough Quarry Processing Plant Area
  - Distance from Mill Hill & Barton in Fabis Site
  - Nottingham City Boundary

**Plan**

Allocated Major Employment & Residential Development within 10km of Proposed Quarry

**Project**

Planning Application

**Site**

Land at Mill Hill and Barton in Fabis



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**Appx5-2**

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