# Stairfoot Brickworks

## Environmental Statement Scoping Report

**Prepared for**

GREEN EARTH
DEVELOPMENTS GROUP

**Green Earth Developments (Group) Ltd**

**December 2024**
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# Document Control

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## CONTENTS

## APPENDICES



## FIGURES

# 1.0 INTRODUCTION AND BACKGROUND

## 1.1 Introduction

1.1.1 This document is prepared to support a formal request, under Regulation 15 of the Town and Country Planning (Environmental Impact Assessment) Regulations 2017, to agree the scope of the Environmental Impact Assessment ('EIA') that will be prepared and submitted alongside an application for the restoration of Yew Tree Quarry through the infill with non-hazardous excavated soil materials (the Proposed Development) at the Stairfoot Brickworks, Wombwell Lane, Stairfoot, Barnsley, shown on Figure 1.

1.1.2 This document provides the information necessary for Barnsley Metropolitan Borough Council (BMBC or the Council), the relevant Local Planning Authority, to adopt a 'Scoping Opinion' on the Proposed Development.

## 1.2 The Applicant

1.2.1 The Applicant, Green Earth (Stairfoot) Limited, a wholly owned subsidiary of Green Earth Developments (Group) Limited (GEDG) is a private limited, ethical development company that specialises in brownfield land restoration and re-purposing. With their mission of 're-building nature and re-powering communities', GEDG is a leading developer of renewable energy projects, community assets and natural capital projects including biodiversity net gain. To deliver their value-added regeneration projects with a strong partnership ethos, GEDG works collaboratively with a number of corporate landowners, government bodies and local authorities across the UK to help bring brownfield sites and underutilised land back into beneficial use.

## 1.3 Background

1.3.1 The quarry comprises a series of former clay pits used for the manufacture of bricks dating back as far as the turn of the nineteenth century. In the 1920's Squire Micklethwaite built a new brickworks at the site which was subsequently acquired along with the rest of the site by the Yorkshire Brick Company Limited. By the mid-1970s the majority of the site lay derelict, and the brickworks was closed, with any mineral extracted exported off-site for manufacture elsewhere. The old brickworks

located off Wombwell Lane was finally demolished and cleared post-acquisition of the site by the Hanson Group in 1994.

1.3.2 The quarry was developed for clay extraction purposes incrementally across four primary areas (see Figure 2). The areas are identified as:

a) **North Quarry** – Located in the northern part of the site from the rear of St David's Drive, south as far as the rear garden of No. 90 St Paul's Parade. This area appears to have been restored following the importation of waste material (see planning permission review below) and comprises of a variety of open scrub land and structure planting. This part of the quarry is relatively well screened from adjoining properties to the north and south. One of the existing large water bodies that has remained on the site resulting from historical quarrying activities is located within this part of the site.
b) **South Quarry and Yew Tree Quarry** – Located to the south of North Quarry and adjacent to the rear gardens of St Paul's Parade. The second, larger of the two water filled quarry voids are located in the former Yew Tree Quarry area of the site. The Proposed Development is for the restoration of Yew Tree Quarry.
c) **Marine Band Quarry** – Located to the south of Yew Tree Quarry and north of the former railway line that is now designated a Green Corridor. It is understood that this area of the site was historically used for water management during the operational phase of the quarry.
d) **Area 3 Quarry (also referred to as 'Area B')** – Located to the east of Yew Tree Quarry and Marine Band Quarry. This is an area that is not described on the public file, and consequently the history to it is unclear. It is illustrated on a number of 'loose' plans and aerial photography suggests that clay has never been extracted in this area.

1.3.3 The land is owned by GEDG, who have a Habitat Management and Monitoring Plan agreed and are currently progressing a conservation covenant for the establishment of the Stairfoot Habitat Bank which will commence trading of offset biodiversity units in January 2025. GEDG has carried out initial community engagement in respect of the Habitat Bank and there is overwhelming support from the local community.

Oakhill Primary School have confirmed their interest in the development of an outdoor classroom within the Habitat Bank. The Habitat Bank will support off-site, third-party developments within BMBC area and the wider Nottinghamshire, Derbyshire and Yorkshire Coalfield National Character Area.

## 1.4 The EIA Team

1.4.1 Axis is an independent planning and environmental consultancy specialising in the environmental impact assessment of major development projects. Axis has been appointed as lead planning and EIA consultant and is the author of this Scoping Report. Axis is a consultancy that includes, amongst others, members of the Royal Town Planning Institute (RTPI); Institute of Ecology and Environmental Management (IEEM); the Landscape Institute (CMLI); Institute of Highways and Transportation (IHT); Institute of Water and Environmental Management (IWEM); and Institute of Environmental Management & Assessment (IEMA). The planning application and ES will be prepared in line with the respective organisation's guidance.

1.4.2 Axis will work with in-house transport specialists; and external consultants, to ensure that the each of the impacts are suitably assessed by an appropriate expert. The experts and their roles the in EIA are outlined in the table below:

**Table 1.1 – Consultants and Roles**

| Consultant Name | Role / Responsibility |
|---|---|
| Axis | EIA Consultant |
| | Transport |
| Urban Green | Ecology |
| Noise and Vibration Consultants | Noise |

## 1.5 Purpose of Scoping

1.5.1 EIA is the process culminating in the production of the ES. The objective of the process is to identify and evaluate all significant direct and indirect environmental effects of the Proposed Development on the environment.

1.5.2 Scoping is the process through which the content and extent of matters to be covered by the EIA are identified by considering the potential impacts that could arise from the Proposed Development.

1.5.3 Only the 'main' or 'significant' effects of the development should be subject to full environmental assessment within the ES. Planning Practice Guidance on Environmental Impact Assessment is clear that:

*"…Whilst every Environmental Statement should provide a full factual description of the development, the emphasis should be on the "main" or "significant" environmental effects to which a development is likely to give rise. The Environmental Statement should be proportionate and not be any longer than is necessary to assess properly those effects. Where, for example, only one environmental factor is likely to be significantly affected, the assessment should focus on that issue only. Impacts which have little or no significance for the particular development in question will need only very brief treatment to indicate that their possible relevance has been considered…"*[1]

1.5.4 The process of scoping and environmental assessment ensures that mitigation and enhancement measures are considered at an early stage of the design process. It also provides the opportunity for the Council and other consultees to ensure areas of the environment that have the potential to be significantly affected by the Proposed Development are considered within the ES.

1.5.5 Although the scoping process is often regarded as a discrete stage it should continue throughout the development of the EIA. It may be necessary to alter the extent of research required for a particular discipline as the understanding of the magnitude and significance of an impact is established. This is vital to ensure that resources and efforts are focused on the issues that have the potential to cause the most impact.

1.5.6 This document will be issued to BMBC who will be invited to:

[1] *Planning Policy Guidance, 2020. Environmental Impact Assessment Paragraph: 035 Reference ID: 4-035-20170728. [online]. Available at https://www.gov.uk/guidance/environmental-impact-assessment [accessed 23 September 2024]*

i) comment on the development proposals;
ii) comment on the proposed scope of assessment (i.e. matters to be included within the scope of the ES alongside the extent and nature of the assessments undertaken);
iii) raise any relevant issues for consideration during the EIA process; and
iv) scope out any issues that are considered unlikely to be significant.

## 1.6 Requirement for EIA

1.6.1 The requirement for EIA was prescribed by European law under Council Directive 85/337/EEC. This Directive has been amended four times, with the latest amendment, the Environmental Impact Assessment (EIA) Directive (2014/52/EU) entering into force on 15 May 2014.

1.6.2 In England, the Directive has been enacted most recently into law by the Town and Country Planning (Environmental Impact Assessment) Regulations 2017 [SI 2017 No. 571] – referred to hereafter as 'the EIA Regulations'.

1.6.3 The EIA Regulations prescribe the types of development for which EIA is mandatory (Schedule 1 development) and others which may require an assessment if they have the potential to give rise to significant environmental impacts (Schedule 2 development).

1.6.4 The Proposed Development is not Schedule 1 development and mandatory EIA is not required.

1.6.5 The Proposed Development is a 'Schedule 2' development under Paragraph 11(b) of Schedule 2 of the EIA Regulations as it constitutes 'installations for the disposal of waste'. The Application Site is a 4.7ha former quarry void and the proposal would comprise the importation of material to restore the Site. It is anticipated that 400,000 $m^3$ of non-hazardous excavated material and soils would be imported. This would equate to an average of 80 HGVs per day (160 movements) over a 111 week period.

1.6.6 The Applicant has not undertaken a screening assessment to determine whether significant environmental effects are likely to arise from the Proposed Development. However, pre-application consultation was undertaken with the Council on a similar scheme to the Proposed Development. Whilst the pre-application consultation did not comprise a full screening assessment, the Council concluded that the

development had the potential to give rise to a variety of environmental effects, some of which could be significant in the context of the local environment. Whilst the scale and duration of the Proposed Development has reduced since the pre-application consultation was undertaken, it is acknowledged the development would still give rise to a variety of similar environmental effects. It is on this basis that the Applicant is preparing an EIA for the Proposed Development.

## 1.7 This Document

1.7.1 Following on from this Introduction, Chapter 2.0 of the report briefly describes the Site and its surroundings whilst Chapter 3.0 provides a description of the development. Chapter 4.0 outlines the broad principles of the EIA methodology; Chapter 5.0 sets out the approach to the EIA. Chapters 6.0 to 8.0 describe what the Applicant considers to be the main environmental issues that could arise from the Proposed Development and how they will be assessed. Chapter 9.0 sets out the proposed scope of the landscape and visual effects assessment which is proposed to be scoped out of the ES. Finally, Chapter 10.0 sets out the proposed structure of the ES.

# 2.0 THE SITE

## 2.1 Site Context and Location

2.1.1 The former Stairfoot Quarry Complex (the Quarry) is circa 18 hectares of land located approximately 2km from the centre of Barnsley on the eastern edge of the town. The area is largely residential, made up of a mix of semi-detached properties built between 1950 and 1975 (St Paul's Parade; St David's Parade; Roehampton Rise; Winchester Way; St Andrews Way and St Leonards Way). Further north is the A635 Doncaster Road which connects Barnsley in the west to Doncaster in the east. Directly to the northwest of the Quarry (accessed from Doncaster Road) is Oakhill Primary School, adjacent to which are a number of light industrial units and food outlet establishments.

2.1.2 The Stairfoot Roundabout connects the A635 and A633 to the northwest beyond which is the centre of the town. The A633 (Wombwell Lane) runs broadly north/south to the west of the site and is straddled by a number of retail units and industrial buildings, along with a series of terraced properties fronting the eastern side of the main road. Access to the site is from the former (now cleared) brickworks site off Wombwell Lane. Wombwell Lane runs north/south from the A6133/A633 Stairfoot Roundabout to the A6195/A633 Wath Roundabout at Brampton/Wombwell.

2.1.3 The Quarry is a linear feature running from the urban area of Barnsley northwest of the site to the open countryside to the southeast. The land to the southeast of the Quarry is within the Metropolitan Green Belt which restricts further development from expanding east and helps prevent Barnsley coalescing with Wath upon Dearn.

## 2.2 Application Site

2.2.1 The Application Site (the Application Site) comprises the former Yew Tree Quarry (shown on Figure 2) which is approximately 4.7ha and broadly triangular in shape. The rear gardens of the properties on St Pauls Parade form the northern boundary of the Application Site. To the west of the Application Site is an area of woodland. Footpath 234 runs to the south from the southeast to the northwest of the Application Site, beyond which is South Quarry and the former Stairfoot Brickworks site. The Trans Pennine Trail runs from east to west between South Quarry and the former Brickworks site.

2.2.2 Access to the Application Site would be taken from the historical access into the former Stairfoot Brickworks site, off the A633 Wombwell Lane. An enabling works planning application was approved by BMBC in September 2023 (ref. 2022/1218), which allows for a series of improvements to the existing access junction off Wombwell Lane. This enabling works application relates to a more recent full planning application, submitted by Potters Ballotini Limited, for the redevelopment of the former Stairfoot Brickworks site to comprise a glass recycling and repurposing facility (ref. 2024/0373) which was approved in November 2024.

2.2.3 According to the Flood Map for Planning, the Application Site is located within Flood Zone 1 meaning that there is a low probability of flooding from rivers and sea. The nearest Listed Buildings are located approximately 590m to the north off Doncaster Road.

## 2.3 Planning History

2.3.1 The public planning files are limited in their coverage, consequently certain documentation appears to be missing from the historical records.

2.3.2 The original planning permission for the Quarry is reference B/93/0247/BA, granted 25th November 1993: *"Determination of Conditions on an Interim Development Order Permission – Winning of Minerals, Stairfoot Quarry."* The Planning and Compensation Act 1991 introduced new procedures for dealing with permissions for the winning and working of minerals or the depositing of mineral waste, originally granted under Interim Development Orders (IDOs). These were permissions granted after 21 July 1943 and before 1 July 1948, which have been preserved by successive planning Acts as valid planning permissions in respect of development which had not been carried out by 1 July 1948. The Act required certain actions to be taken if these old permissions were to continue to have effect. Most significantly, holders of IDO permission had to apply to have them registered by 25 March 1992. The IDO process did not allow the LPA to refuse planning permission for working, rather it ensured that relevant workings continue to operate in accordance with modern operational and environmental standards. It is understood that the Stairfoot Quarry IDO covered the entire site identified above (save for the area identified as 'Area 3' on Figure 2) and was subject to 28 conditions.

2.3.3 Condition 1 required the extraction of minerals and restoration of the site to be completed by 10th June 2007. The IDO was specific to the winning / working of mineral and subsequent backfill with mineral waste (where relevant). Condition 22 provided that:

*"Waste materials shall be replaced into the excavated void, in the North Quarry in accordance with the relevant Waste Disposal Site Licence, or its subsequent modification, as to ensure that the site can be adequately drained and will, after the replacement of the subsoil and topsoil generally conform with such contours as are shown on drawing No. NQ10."*

2.3.4 Condition 27 provided that:

*"Within twelve months of the date of this permission a scheme shall be submitted for the approval of the LPA showing the restoration proposals for the North Quarry. Except with the prior written approval of the LPA a restoration scheme for the remainder of the site shall be submitted for the approval of the LPA within 5 years of the date of approval of these conditions. The site shall thereafter be restored in accordance with these schemes… "*

2.3.5 Condition 28 provided that:

*"The Restoration Works on the North Quarry shall be maintained in accordance with a 5-year aftercare scheme to bring the land to the required standard for the use of agriculture/forestry…Except as agreed in writing with the LPA, Marine Band Quarry and Yew Tree Quarry shall be maintained in accordance with a 5 year aftercare scheme to be submitted to the LPA… "*

2.3.6 Whilst it is not entirely clear from the public records, a document entitled; *"Initial Restoration and Outline Aftercare Scheme"* dated May 2011 references a drawing which identifies the areas of the site. It states that planning permission B/93/0247/BA covered the whole of the site, with the exception of Area B (illustrated elsewhere and on the attached plan) as 'Area 3'. It states that this area was covered by a separate permission reference B/95/0832/BA. There is no record on the public file of planning permission B/95/0832/BA, save for a file note dated 16th August 2007 from Keith Pell (Senior Planning Officer), and limited reference within the Committee Report to planning application 2007/1069 (see below) where reference is made to a planning

permission being granted on 24th July 1997 for the working of minerals, water management, and development of a haul road to the east of Marine Band Quarry. Given that there is no record of planning permission B/95/0832/BA, and it appears that the area to which it related has been fully restored to adjoining levels, no further conclusions can be drawn.

2.3.7 On the 11th October 2007 planning permission was granted under Section 73 of the Town and Country Planning Act 1990 for the: *"Variation of Condition 1 of planning permission B/93/0247/BA to extend extraction and restoration period."* (Reference 2007/1069)

2.3.8 Consequently, upon implementation on the 11th October 2007, planning permission 2007/1069 became the 'operative' permission for the majority of working and restoration at the site.

2.3.9 Of relevance, Condition 2 provided that:

*"The extraction of minerals and restoration of the site shall be completed to the satisfaction of the Mineral Planning Authority by 10th June 2016…"*

2.3.10 Condition 3 provided that:

*"Unless otherwise agreed in writing by the MPA, within 12 months of the date of this permission a restoration scheme for the unrestored areas of the site shall be submitted to and approved in writing by the MPA. The scheme shall include (a) details of final restoration levels; (b) precise boundaries of the land uses; (c) patterns of field boundaries; (d) areas to be tree planted; (e) specification of seed mix; (f) details of all tree and shrub planting etc…"*

2.3.11 Condition 4 provided that:

*"Unless otherwise agreed in writing by the MPA, restored areas of the site and areas to be restored shall be maintained in accordance with a five-year aftercare scheme which shall be submitted to and approved in writing by the MPA within 12 months of the date of this permission…*

2.3.12 On the 11th January 2008 a document reference 031/C17/R/00-122(V2) was submitted by Hanson Building Products for approval by BMBC entitled; *"5-Year*

*Restoration and Aftercare Scheme for North Quarry, Stairfoot"*. The document is stamped 'approved' on the 12 November 2008. It is unclear from the document whether it was submitted to discharge the requirements of Condition 3 or 4 (or possibly both) of planning permission 2007/1069, but either way it related solely to the North Quarry area.

2.3.13 A further SLR document is on the public file entitled; *"Initial Restoration and Outline Aftercare Scheme - May 2011"*. The document states that it was submitted pursuant to restoration and aftercare conditions on planning permission B/93/0247/BA (the IDO) and B/95/0832/BA (the southern extension referred to as Area 3, for which no records are available). The submitted restoration across the Yew Tree Quarry area does show a bowl feature running from 60m AOD at the boundary to 50m AOD at the centre. It is unclear from aerial photos whether this reflects the water feature that exists in that part of the site. Nonetheless, it is clear that neither the approved 2008 restoration scheme for the North Quarry, or the 2011 restoration scheme for the rest of the quarry, envisaged large water bodies as part of the final restoration for the site.

2.3.14 To summarise, it is clear that the most recent consent which provides for mineral working and restoration of the Quarry, is 2007/1069 granted 25 June 2007. The permission required that mineral extraction and restoration of the Application Site had to be completed to the satisfaction of the MPA by 10 June 2016.

# 3.0 PROPOSED DEVELOPMENT

## 3.1 Proposed Development

3.1.1 As set out in Chapter 1.0, the Proposed Development comprises the restoration of Yew Tree Quarry. The Proposed Development would ensure the comprehensive restoration of the Quarry delivering biodiversity benefits and removing health and safety risks associated with the large waterbody.

### *Description of the Infilling Works*

3.1.2 The Applicant wishes to re-engineer the landform of the Application Site through the importation of non-hazardous soil materials, and then introduce a new restoration scheme. Material that would be imported would comprise excavated non-hazardous soils from development sites in the local area. It is estimated that circa 400,000m$^3$ of non-hazardous soil materials would be imported over a period of 111 weeks. This would equate to circa 80 HGV tippers on average per day. The distance from which material would be imported from would be controlled by market forces as the cost of transporting soils by road makes it unviable to do so over long distances therefore the material would be generated by development projects within the area.

3.1.3 It should be noted that import material would be sourced on a 'campaign basis' and would therefore be variable and determined by the market and the availability of material. As such, there is likely to be some variability from the average daily HGV traffic forecasts set out above. However, it is anticipated that the number of HGVs to the Site per day would not exceed 200 two-way trips (i.e. 100 arrivals + 100 departures). Volumetrically, this would equate to 22 two-way HGVs per hour, on average. Such a level of trip generation would not be sustained over a long period of time and would be offset by days which are less intensive.

3.1.4 All incoming material would be subject to strict waste acceptance procedures that would be outlined within the Environmental Permit for the Site. The material would not include biodegradable waste and would therefore not require management of landfill gas or leachate.

3.1.5 The Proposed Development would require the construction of a new temporary site compound which would include a wheelwash, parking and welfare facilities.

3.1.6 The Site would receive material 5 days per week, Monday to Friday 07:30 – 16:30. Saturday operations would be limited from 08:00 – 13:00, there would be no vehicle movements during this time.

3.1.7 Restoration material would be delivered straight into the void and placed immediately in accordance with the phasing plan. Stockpiling of materials would not typically be expected to occur.

3.1.8 It is proposed to use the following items of plant and machinery on site:

i) Dozers
ii) Roller
iii) 8 wheel road Tipper HGVs

3.1.9 The plant may be reviewed in accordance with the site management requirements

### *Access*

3.1.10 Access to the Application Site would be taken from the historical access into the former brickworks off Wombwell Lane.

### *Final Restoration*

3.1.11 The Proposed Restoration scheme would include grassland species and shrub boundary planting.

3.1.12 In developing a restoration concept that delivers an appropriate level of Biodiversity Net Gain (BNG) i.e. development of the land so that it leaves biodiversity and ecological habitat in a measurably better state than before the development took place; the Applicant is also looking to ensure that restored site provides the opportunity for improved public access. The owner of the Application Site has historically been forced to maximise appropriate security across the Site in order to dissuade unauthorised access. By removing the risk to health and safety as a result of infilling the historical quarry voids, it allows for a new restoration scheme to be designed that both improves the wider appearance of the site and allows for structured and functional public amenity.

# 4.0 EIA METHODOLOGY

## 4.1 Introduction

4.1.1 This chapter provides a brief description of the approach to the environmental assessment process and describes the broad principles that will be applied within each technical assessment of the 'project'. Each technical assessment will follow a similar approach as follows:

- An introduction describing the basic scope and approach undertaken to the assessment, including details of the professional competence of the person/s undertaking the assessment;
- A description of the methodology applied to the assessment both in terms of any surveys carried out and also the criteria used in the impact assessment, any limitations to the assessments will also be described;
- A presentation of the baseline conditions relevant to that discipline, including an outline of the likely evolution of the baseline;
- An impact assessment that describes the effects that are likely to arise from the Proposed Development. The assessment will include a description of the nature, extent and significance of these effects. The assessment will take into account mitigation measures that have been incorporated into the Proposed Development;
- A description of any additional mitigation measures will be provided, this will include any enhancement or compensation proposed to either further reduce the adverse effects of the Proposed Development or to provide benefits to the local environment; and
- Finally, each chapter will include a section on the significance of residual effects and conclusions of the assessment. This section will describe the residual effects of the Proposed Development following the implementation of any additional mitigation or enhancement and will summarise the findings of the assessment.

## 4.2 Determining Significance of Effects

4.2.1 Each of the technical disciplines scoped into the EIA will describe the predicted environmental effects of the Proposed Development on the baseline conditions of the Application Site and the local environment. The assessment will include a

description of the nature, extent and significance of these effects. The assessment will take into account any mitigation measures that have been specifically incorporated into the development proposals to reduce the environmental effects of the Proposed Development and identify any need for additional mitigation to further reduce levels of effect.

4.2.2 The EIA Regulations do not provide definitive methods for the assessment of significance and a variety of methods are employed within EIAs. The method used to assess the effects will be specific to each discipline. Where available and appropriate the assessments will follow impact assessment criteria and methodology set out by relevant professional institutions (e.g. Institute of Ecology and Environmental Management etc…). Where such guidance is not available or prescriptive methods are not set out by the relevant professional body then assessment criteria will be developed by the technical specialists to enable a clear and structured assessment to be undertaken.

4.2.3 The nature of the effect of the Proposed Development on the environment will, in general, be derived by considering the magnitude of the impact and the sensitivity of the receptor to a change resulting from the project.

4.2.4 Depending on the discipline there will be a number of factors that will need to be taken into account when establishing the type and magnitude of impact, including:

- Whether the impact is adverse or beneficial;
- Whether it is temporary or permanent;
- Extent or spatial scale of the impact;
- Duration of the impact;
- Whether the effect is reversible; and
- Probability/likelihood of the impact.

4.2.5 Similarly, the sensitivity of a receptor will be the function of a number of elements dependent on the discipline and impact being assessed, these could include:

- Designation and legal status;
- Quality;
- Rarity; and

- Ability to adapt to change.

4.2.6 Having established the magnitude of the impact and the sensitivity of the receptor, the level of the effect will then be defined. For some disciplines a matrix will be used to classify the level of effect by correlating magnitude and sensitivity, an example matrix is shown in Table 4.1 below.

**Table 4.1 – Example Level of Effect Matrix**

| | | Magnitude of Impact | | | |
|---|---|---|---|---|---|
| | | High | Medium | Low | Negligible |
| Receptor Sensitivity | High | Major | Moderate | Minor to Moderate | Negligible or Minor |
| | Medium | Moderate | Minor to Moderate | Minor | Negligible |
| | Low | Minor to Moderate | Minor | Negligible or Minor | Negligible |
| | Negligible | Negligible or Minor | Negligible | Negligible | Negligible |

4.2.7 Where a matrix is not used the magnitude of change and the sensitivity of the receptor will be used to make a reasoned judgement to establish the level of the effect and whether it is considered to be significant or not significant. For some topics an environmental risk assessment approach may be used to establish the potential environmental effects of the Proposed Development.

4.2.8 It should be noted that there is no statutory definition of what level of effect is considered to be significant and there is often not a single, definitive, correct answer as to whether an effect is significant or not. However, it is considered that a significant effect is one which is likely to be a key material factor in the decision-making process. A significant effect does not necessarily mean that such an effect is unacceptable to decision-makers. This is a matter to be weighed in the planning balance alongside other factors. What is important is that the likely effects of any proposal are transparently assessed and described in such a way to enable the relevant determining authority to bring a balanced and well-informed judgement to bear as part of the decision-making process.

4.2.9 Where the findings of an assessment are set out as different levels of effect (e.g. major, moderate, minor, etc…) the assessment will clearly set out where an effect is considered to be significant. This approach will be used to assist the decision maker, consultees and other interested parties in establishing the most important environmental effects of the project.

### *Mitigation*

4.2.10 It is a requirement of the EIA Regulations to describe the measures envisaged to prevent, reduce and where possible offset any significant effects on the environment. Mitigation can be achieved in a number of ways as listed below. This approach is often referred to as the mitigation hierarchy with mitigation being selected as high up the hierarchy as possible.


4.2.11 Certain mitigation measures may be incorporated into the Proposed Development as a result of decisions undertaken during the design of the scheme. These measures will be clearly described within the ES.

4.2.12 The mitigation section of each technical chapter will provide a description of additional mitigation and enhancement measures proposed to prevent, reduce or offset adverse effects unavoidable through design, or to provide benefits to the scheme / local environment. An explanation will be provided of how these measures will mitigate / reduce the identified effects of the Proposed Development

## 4.3 Residual Effects

4.3.1 This section will provide a textual description of the residual effects of the Proposed Development following the implementation of any additional mitigation or enhancement measures. Additionally, this section will conclude whether the Proposed Development is considered likely to result in any significant residual environmental effects.

## 4.4 Cumulative Effects

4.4.1 The EIA Regulations require that a description of the likely significant effects of the development on the environment should be included in the ES, including cumulative effects. The EIA Regulations do not define cumulative effects, however, a commonly accepted description is:

*"Impacts that result from incremental changes caused by other past, present or reasonably foreseeable actions together with the project" (European Commission, 1999)"*

4.4.2 There is no defined methodology in the UK as to how cumulative effects should be assessed. In determining the approach to be adopted, reference will be made to the following guidance:

- *Guidelines for the Assessment of Indirect and Cumulative Impacts as well as Impact Interactions* (European Commission 1999);
- *Cumulative Effects Assessment Practitioners* Guide (Canadian Environmental Assessment Agency 1999);
- *Guidelines for Environmental Impact Assessment* (Institute of Environmental Management and Assessment 2006);
- *The State of Environmental Impact Assessment Practice in the* UK (Institute of Environmental Management and Assessment 2011); and
- *Advice note seventeen: Cumulative effects assessment relevant to nationally significant infrastructure projects* (The Planning Inspectorate 2015).

4.4.3 Paragraph 5(e) of Schedule 4 of the EIA Regulations require a *"description of the likely significant effects of the development on the environment resulting from …. the culmination of effects with other existing and/or approved projects"*. In this regard the EIA Regulations are specific about the projects that should be considered to result in cumulative effects i.e. existing and/or approved projects. However, it is proposed to also include projects that are currently awaiting determination within the cumulative assessment as there is a possibility that these projects could be approved whilst the application for the Proposed Development is being determined. Accordingly, the assessment of cumulative impacts will encompass the effects of the Proposed Development in combination with:

- Existing development, either built or under construction;
- Approved development, awaiting implementation; and
- Schemes awaiting determination within the planning process

4.4.4 The presence of operational schemes (and for some disciplines, schemes that are under construction, but not yet operational) is an established influence upon the environment, that will be taken into account when determining the baseline for the non-cumulative assessment for each discipline chapter. The non-cumulative assessment of effects will have full regard to the presence of such schemes when arriving at any conclusions.

4.4.5 As such, the additional schemes that would form part of the assessment of cumulative effects will be major projects that have either been granted planning consent but have not yet been constructed and major projects for which a planning application is awaiting determination. Major projects are considered to be developments of 10,000sqm in size or greater and projects that have been subject to EIA. Projects that fall outside the above criteria will only be included in the assessment if specifically identified by the Council or other statutory consultees.

4.4.6 Each topic will have a different spatial zone where potential cumulative significant effects could occur. A search area of 2km from the Application Site would be used to identify schemes that have the potential to result in likely significant cumulative effects.

4.4.7 Axis has undertaken an online search via the BMBC website and has not found any applications which meet the above criteria.

4.4.8 Axis also invites BMBC to identify any projects it is aware of which it considers has the potential to result in likely significant cumulative environmental effects with the 'project'.

## 4.5 Major Accidents and / or Disasters

4.5.1 Paragraph 8 of Schedule 4 of the EIA Regulations 2017 requires that the ES should include a description of the expected significant adverse effects of the development on the environment deriving from the vulnerability of the development to risks of major accidents and / or disasters which are relevant to the project concerned. In

addition, where appropriate, the description should include measures envisaged to prevent or mitigate the significant adverse effects of such events and the approach to managing emergencies.

4.5.2 The reference to disasters is interpreted to relate to natural events, as indicated by the preamble to the 2014 Directive (2014/52/EU) which states at paragraph 15 *"In order to ensure a high level of protection of the environment, precautionary actions need to be taken for certain projects which, because of their vulnerability to major accidents, and/or natural disasters (such as flooding, sea level rise, or earthquakes) are likely to have significant adverse effects on the environment"*. Nonetheless, it is recognised that disasters can occur as a result of human intervention e.g. conflict and war, political influences etc.

4.5.3 The Proposed Development is located within a politically, geologically and meteorologically stable part of Europe. Accordingly, the facility is not at significant material risk from, for example, civil unrest, war, earthquakes or extreme weather conditions (hurricanes etc.).

4.5.4 With regard to major accidents the 2014 Directive describes that: *"it is important to consider their [i.e. the Proposed Development] vulnerability (exposure and resilience) to major accidents and/or disasters, the risk of those accidents and/or disasters occurring and the implications for the likelihood of significant adverse effects on the environment."*. The focus here, as it is within the EIA Regulations, is on the vulnerability of the Proposed Development to major accidents and/or disasters and the likelihood of significant adverse effects occurring.

4.5.5 Based on the foregoing, it is concluded that the Proposed Development would not give rise to significant adverse effects on the environment deriving from the vulnerability of the development to risks of major accidents and / or disasters, that could not be addressed as part of any forthcoming planning application.

## 4.6 Climate Change

4.6.1 Paragraph 5 (f) of Schedule 4 of the EIA Regulations 2017 (England) requires that the ES should consider the impact of the project on climate (for example the nature and magnitude of greenhouse gas emissions) and the vulnerability of the project to climate change.

4.6.2 The Proposed Development would not result in any direct emissions of greenhouse gases. However, as with most new development there will be indirect emissions, in this case these would be related with importation of material to the Site associated with the restoration of the Quarry.

4.6.3 As set out above, the nature of the effect of climate change on the environment is derived from considering the magnitude of the impact and the sensitivity of the receptor to a change resulting from the project. The Site is not in a sensitive location and given that the vehicles transporting material to the Site would already be utilising the public highway the magnitude is low. In addition to this, carbon emissions would be offset through the proposed planting / woodland enhancement at the Site.

4.6.4 Once complete the restored site would not be significantly impacted by the future impacts of climate change, the planning submission would include an assessment on future impacts of climate change with regards to flooding.

4.6.5 Based on the above, it is concluded that the Proposed Development would not give rise to significant adverse effects on the environment deriving from the impact of the project on climate (such as the nature and magnitude of greenhouse gas emissions) and the vulnerability of the project to climate change that could not be addressed as part of any forthcoming planning application.

## 4.7 Indirect Effects

4.7.1 In order to comply with Regulation 5(2) and Schedule 4 of the EIA Regulations, specifically in relation to the provision of a description of the likely significant direct and 'indirect' effects, the EIA process must consider the likely upstream and downstream effects of the Proposed Development. Upstream and downstream environmental impacts have been considered where:

i) the impact would be an inevitable causation of the Proposed Development; and
ii) the impact would give rise to likely significant effects that are capable of evidence-based meaningful assessment.

4.7.2 It is not considered likely that the Proposed Development would result in any such indirect upstream or downstream impacts that are an inevitable result of the

Proposed Development and could give rise to significant effects, as such, this is scoped out of the ES.

## 4.8 Alternatives

4.8.1 The EIA Regulations indicate that the ES should include an outline of the main alternatives considered and the reasons they were discounted, considering environmental effects.

4.8.2 A number of alternative restoration layout options have been considered. The ES would set out further information on these alternatives.

## 5.0 APPROACH TO THE ENVIRONMENTAL STATEMENT

5.1.1 As outlined above, only the 'main' or 'significant' effects of the development need to be subject to an EIA. In this context, the following section sets out the topics proposed to be 'scoped in' and 'scoped out' of the ES, along with justification for their inclusion or lack thereof. Consideration has been given to the Council's pre-application response in determining whether a topic should be included in the ES or not.

### 5.2 'Scoped In' Topics

5.2.1 The following topics are proposed to be included in the ES.

#### *Noise*

5.2.2 There would be noise associated with the importation of material and site operations this has the potential to impact neighbouring noise sensitive receptors, ecological receptors and visitors using the PRoW. The nearest noise sensitive receptors are St Paul's Parade (north of Site) and Albany Close (south of Site).

5.2.3 In order to determine whether significant effects relating to noise would arise from the Proposed Development, it is proposed that noise would be scoped into the ES.

#### *Transport and Access*

5.2.4 The A633 routes in a general north / south alignment from the A6133 / A633 Stairfoot Roundabout to the A6195 / A633 Wath Road Roundabout at Brampton / Wombwell.

5.2.5 Within the vicinity of the Application Site, the A633 Wombwell Lane comprises a two-way carriageway with a single lane in each direction. A circa 3m wide strip of central hatching is present along the carriageway within the vicinity of the Application Site, which provides a series of right turning pockets to the adjacent commercial uses to the south-west of the Site. It is subject to a 40mph speed limit.

5.2.6 The Trans Pennine Trail (TPT) and Public Footpaths 323 and 324 are all located within or on the boundary of the Application Site.

5.2.7 In order to determine whether significant effects relating to traffic and highways would arise from the Proposed Development, it is proposed that this would be scoped into the ES.

### *Ecology and Biodiversity*

5.2.8 There are no statutory designated wildlife sites of international importance (Ramsar, Special Protection Areas (SPA), or Special Areas of Conservation (SAC)) within 10km of the project.

5.2.9 Four statutory sites of national importance are present within 10km. The closest being Stairfoot Brickworks Site of Special Scientific Interest (SSSI) located immediately adjacent to the southern border of the Application Site. Dearne Valley Wetlands SSSI, Carlton Main Brickworks SSSI, and Seckar Wood SSSI are all also present within 10km of the Application Site.

5.2.10 Four statutory sites of local importance are present within 5km of the proposed development site. The closest being Dearne Valley Park Local Nature Reserve (LNR) located approximately 1.7km north-west of the site. With Worsborough Country Park LNR, Carlton Marsh LNR, and West Haigh Wood LNR all also present within 5km.

5.2.11 Two non-statutory designated wildlife sites are present within 1km of the proposed development site. The closest being Swaithe Flood Meadows Local Wildlife Site (LWS), located approximately 500m south of the site. Stairfoot Disused Railway LWS is also present approximately 790m north-west of the Application Site.

5.2.12 The Application Site also falls within the Impact Risk Zone of the following Statutory Sites, based on consultation with MAGIC:

i) Stairfoot Brickworks SSSI
ii) Dearne Valley Wetlands SSSI

5.2.13 In order to determine whether significant effects relating to ecology and biodiversity would arise from the Proposed Development, it is proposed that this would be scoped into the ES.

## 5.3 'Scoped Out' Topics

5.3.1 The following topics are proposed to be excluded from the ES.

### *Landscape and Visual Impact*

5.3.2 There are no landscape designations covering the Application Site.

5.3.3 The Application Site is located within Landscape Character D3: West Dearne Settled Arable Slopes as listed in Barnsley Borough Landscape Character Assessment 2002 and subsequent review in 2016. Landscape character is said to be moderate with landscape condition poor in this area.

5.3.4 The Application Site is generally visually contained due to the existing mature vegetation and landform within and surrounding the Site.

5.3.5 The Proposed Development would give rise to temporary limited impacts on landscape character and visual amenity. The nearest residential properties to the north would only have views of the infill operation during the latter phases of the development.

5.3.6 Overall, significant effects on Landscape are not considered likely. As such, this is proposed to be scoped out of the ES.

5.3.7 A Landscape and Visual Appraisal will be submitted with the application, the proposed scope of the assessment is set out within Appendix A.

### *Air Quality*

5.3.8 The Proposed Development may give rise to aerial emissions which could give rise to potential impacts and effects on sensitive receptors through vehicle exhaust emissions from vehicles travelling to and from the Application Site and potential dust arising from operations within the Quarry. These potential polluting activities would only occur for a limited time period and can be mitigated against through the use of best practice techniques.

5.3.9 Overall, significant effects on air quality are not considered likely. As such, air quality is proposed to be scoped out of the ES.

5.3.10 An Air Quality Assessment will be submitted with the application.

### *Flood Risk, Drainage and Water Quality*

5.3.11 Based on a review of the Environmental Agencies flood maps, the Application Site is understood to fall entirely within Flood Zone 1.

5.3.12 Subject to details being agreed, surface water from all areas of the Application Site would be managed by a suitable sustainable drainage system (SuDS) scheme, wherever feasible. This would ensure overall runoff rates and the risk of flooding would not increase as a result of the Proposed Development.

5.3.13 On the basis of the above, effects on hydrology would not be significant. As such it is proposed to scope impacts of water quality and flooding out of the ES.

5.3.14 A Flood Risk and Drainage Assessment will be submitted with the planning application.

### *Heritage and Archaeology*

5.3.15 There are no scheduled monuments; listed buildings; conservation areas; registered parks of gardens; or historic battlefields on or immediately adjacent to the Application Site. The nearest heritage asset is the Grade II Listed Ardsley Manor House and Ardsley Manor Cottage, Doncaster Road which is located approximately 590m to the north. Furthermore, given that the most recent use of the Application Site was for quarrying, the likelihood of the Proposed Development impacting on any archaeological remains is very low.

5.3.16 Overall, it is considered that the Proposed Development would not have any significant effects on cultural heritage or archaeology, and therefore it is proposed to scope Cultural Heritage and Archaeology out of the ES.

5.3.17 Where appropriate, effects on heritage would be considered within the Planning Statement.

### *Ground Conditions*

5.3.18 As outlined above, the Application Site comprises part of a former quarry. The Proposed Development is not anticipated to have any adverse impact on the ground conditions of the Application Site or the surrounding area.

5.3.19 It is considered that the Proposed Development would not have any significant effects on ground conditions, and therefore it is proposed to scope ground conditions out of the ES.

### *Major Incidents and Disasters*

5.3.20 The Application Site is not within an area susceptible to any form of natural disaster.

5.3.21 The Proposed Development is designed and maintained to adhere to health and safety standards and would be operated under the control of an Environmental Permit.

5.3.22 Overall, it is unlikely that the Proposed Development would give rise to any significant effects in relation to major accidents and disasters and so it is proposed to scope this element out of the ES.

### *Population, Human Health and Climate Change*

5.3.23 The Proposed Development would not result in any direct emissions of greenhouse gases. However, as with most new development there will be indirect emissions associated with importation and material to the Application Site and construction of the final landform. Once complete there would be no emissions associated with the Proposed Development.

5.3.24 Overall, it is considered that the Proposed Development would not give rise to significant effects with regards to population, human health and climate. Therefore, this topic is proposed to be scoped out of the ES.

5.3.25 Where appropriate, effects would be considered within the technical reports which will support the application.

## 5.4 Summary of EIA Scope

5.4.1 The following table provides a summary of the topics proposed to be 'scoped in' and 'scoped out' of the ES.

**Table 5.1 – Environmental Topics Scoped In / Out**

| EIA Topic | Scoped In / Out |
|---|---|
| Ecology and Biodiversity | Scoped In |

| EIA Topic | Scoped In / Out |
|---|---|
| Noise | |
| Transport and Access | |
| Landscape and Visual Impact | Scoped Out |
| Flood Risk and Drainage | |
| Heritage and Archaeology | |
| Air Quality | |
| Transport and Access | |
| Glint and Glare | |
| Ground Conditions | |
| Major Incidents and Disasters | |
| Climate Change | |

# 6.0 ECOLOGY AND BIODIVERSITY

## 6.1 Scope

6.1.1 Urban Green has been instructed to undertake an ecological scoping exercise and produce an ecological scoping report to inform an ES in relation to the project proposals.

## 6.2 Site Context

6.2.1 The Application Site is located at National Grid Reference SE 38145 05147 and comprises a total area of approximately 4.7ha (see Figure 1).

6.2.2 The Application Site is located in the rural-urban fringe of Barnsley, approximately 3km south-east of the town centre. The Application Site is bound by residential properties immediately to the north and open green space immediately to the east, south, and west. Doncaster Road (A635) is present approximately 300m north of the site, With Wombwell Lane (A633) present approximately 210m south-west of the Application Site.

6.2.3 The wider landscape is dominated by urban development to the north and west while large expanses of open arable land are present to the east and south, including areas of woodland to the south. The River Dearne is located approximately 1.1km north-west of the Application Site.

## 6.3 Purpose of the Scoping Report

6.3.1 This report sets out the methods, results, and conclusions of an ecological scoping exercise that directly informs the ES process.

6.3.2 The purpose of the report is to summarise the project proposals, baseline ecological conditions, potential ecological impacts and to make an assessment on whether the project proposals will likely have any meaningful impact on the ecology and biodiversity on site.

6.3.3 Further information and details of UK legislation for those species which are formally protected is defined in Appendix B, which are considered throughout the assessment.

6.3.4 Ecological scoping is the process through which the content and extent of matters to be covered by an ES are identified by considering the potential impact(s) that could arise from the construction and operation phases of a project.

6.3.5 Only the 'main' or significant/meaningful effects of a development should be subject to full environmental assessment within an ES.

6.3.6 The process of ecological scoping:

i) primarily ensures that species, habitats and/or features that could be negatively impacted are identified, such that they can be mitigated for (including avoidance) correctly in the future.
ii) Secondarily allows for mitigation and enhancement measures to be considered at an early stage of the project lifecycle; potentially influencing the design of the project.
iii) Finally, it provides the opportunity for the Council and other consultees to ensure areas of the environment that have the potential to be significantly affected by a development are considered within an ES.

6.3.7 The EIA Regulations do not provide definitive methods for the assessment of significant impacts, and therefore a variety of methods are employed within ES related assessments.

6.3.8 Within this document the determination of 'significant impact' has been assessed as detailed below:

i) The nature of the effect of the 'project' on the environment would, in general, be derived by considering the magnitude of the impact and the sensitivity of the receptor to a change resulting from the project.
ii) Having established the magnitude of the impact and sensitivity of the receptor, the level of the effect would then be defined, relevant to the ecological feature, and using specific guidance for that feature.
iii) Given the absence of statistical datasets available for the Application Site and the works proposals, the term 'significant' will be used sparingly. Instead, the author will use the ecological and project information available, in combination with their professional judgement to determine if species, habitats or features will likely be subject to an ecologically 'meaningful' impact or not.

6.3.9 Baseline ecological data will therefore be assessed in a systematic fashion, using the methodology described above to conclude whether an ecological receptor will:

i) likely be subject to a negative impact – **Scoped in** for further assessment (i.e. EcIA); or
ii) cannot be ruled out from a negative impact – **Scoped in** for further assessment; or
iii) likely to be unaffected by the project – **Scoped out** from further assessment.

## 6.4 Baseline Ecological Conditions

### *Baseline Ecology Surveys*

6.4.1 The following ecological surveys have been completed at the Site in 2023 to inform the proposed planning application:

i) Preliminary Ecological Appraisal (PEA), including a UK Habitat Classification (UKHab) and ecological desk study (including the purchase of third-party biological records)
ii) Bat Activity Surveys, including activity transects and deployment of static detectors monthly between May and September.
iii) Invertebrate Surveys
iv) Reptile Surveys
v) Breeding Bird Surveys
vi) Great Crested Newt Surveys, including eDNA analysis of three waterbodies.

6.4.2 The above surveys were conducted in the context of a wider site (blue line) boundary that was provided to Urban Green in 2023 (see Figure 1).

6.4.3 An updated site boundary has been provided to Urban Green for the quarry remediation phase of the works, as defined by the red line in Figure 1. Notwithstanding this, the phase 2 ecology surveys and subsequent results have been used to inform this scoping exercise to ensure a robust screening process.

### *Designated Sites*

6.4.4 There are no statutory designated wildlife sites of international importance (Ramsar, Special Protection Areas (SPA), or Special Areas of Conservation (SAC)) within 10km of the project.

6.4.5 Four statutory sites of national importance are present within 10km. The closest being Stairfoot Brickworks Site of Special Scientific Interest (SSSI) located immediately adjacent to the southern border of the Application Site. Dearne Valley Wetlands SSSI, Carlton Main Brickworks SSSI, and Seckar Wood SSSI are all also present within 10km of the Application Site.

6.4.6 Four statutory sites of local importance are present within 5km of the proposed development site. The closest being Dearne Valley Park Local Nature Reserve (LNR) located approximately 1.7km north-west of the Application Site. With Worsborough Country Park LNR, Carlton Marsh LNR, and West Haigh Wood LNR all also present within 5km.

6.4.7 Two non-statutory designated wildlife sites are present within 1km of the proposed development site. The closest being Swaithe Flood Meadows Local Wildlife Site (LWS), located approximately 500m south of the Application Site. Stairfoot Disused Railway LWS is also present approximately 790m north-west of the Application Site.

6.4.8 The Application Site also falls within the Impact Risk Zone of the following Statutory Sites, based on consultation with MAGIC:

i) Stairfoot Brickworks SSSI
ii) Dearne Valley Wetlands SSSI

### *Habitats*

6.4.9 During the UKHab survey, the site was found to comprise of a mosaic of habitats including, a pond, modified grassland, other neutral grassland, hedgerows, broadleaved woodland, and other developed land.

6.4.10 The main feature on-site comprised a historic quarry basin where bare ground was prevalent with some colonisation of ephemeral vegetation and young birch (*Betula* sp.) saplings along the steep embankments.

6.4.11 At the eastern end of the basin stands an artificial waterbody, resulting from the previous quarry works, which fills with rainwater. The water level varies significantly throughout the year changing with periods of prolonged rainfall and periods of drought. A high level of fly tipping was evident within the waterbody owing predominantly to residential waste.

6.4.12 Smaller pockets of grassland, and woodland are also present alongside two lengths of hedgerow that run north-west to south-east along the south of the site.

6.4.13 The Application Site is also directly connected to other valuable habitats within the immediate vicinity including well established woodlands, grasslands, and areas of scrub.

6.4.14 No protected or non-native plant species were recorded on site during the field survey, however rockspray cotoneaster (*Cotoneaster horizontalis*) and Japanese knotweed (*Fallopia japonica*) were recorded in the vicinity of the site.

***Fauna***

6.4.15 Numerous records of protected and notable species were returned in the associated desk study, namely relating to invertebrates, badger, bats, birds, and hedgehog.

6.4.16 A lack of records was returned for other protected or notable species such as common amphibians, great crested newts, white clawed-crayfish, hazel dormice, reptiles, and water vole.

6.4.17 However, the habitats present on site and connectivity to other suitable habitat within the immediate surroundings provide optimal opportunities for a range of species groups.

6.4.18 The Application Site was found to provide value for and potentially support the following species groups:

i) Amphibians
ii) Badger
iii) Bats
iv) Birds
v) Invertebrates

vi) Reptile
vii) Other common mammals

6.4.19 Phase 2 survey work has been completed at the Application Site that has confirmed the use of the site and surrounding habitats by a number of protected and notable taxa.

***Bats***

6.4.20 A suite of bat activity surveys were completed between May and September 2023.

6.4.21 This included monthly transects and monthly static deployment for a period of 5 nights, following best practice guidelines at the time of survey (Collins, 2016).

6.4.22 These surveys found bat activity on the Application Site to be extensive and constant and the site was assessed as providing high value for commuting and foraging.

6.4.23 Due to the substantial number of calls recorded and high level of activity/species diversity it was noted that it is highly likely that bat roosts are present within the surrounding habitats.

6.4.24 A range of species were identified, with common pipistrelle and soprano pipistrelle the most abundant species, noctule and Myotis species recorded occasionally, and rare occurrences of Nyctalus species, Leisler's bat, and brown long-eared bat.

***Reptiles***

6.4.25 Presence/likely absence surveys were undertaken between May and September 2023 utilising 80 reptile refugia mats placed in appropriate locations.

6.4.26 Grass snake were frequently recorded within the survey area, throughout the duration of the survey season.

6.4.27 It was assessed that the population of grass snake within the area were breeding, with adults, sub-adults and juveniles of both sexes recorded.

6.4.28 Grass snake were assigned to have a 'low-to-good' population and the site was considered to be a regionally important refuge area for the species.

***Breeding Birds***

6.4.29 A suite of breeding bird surveys were conducted on site between April and June 2023.

6.4.30 The surveys were based on the methodology for the Common Bird Census (CBC) Survey Methodology and comprised four visits between mid-March and the end of June, with at least ten days between each visit.

6.4.31 The surveys recorded the presence of good numbers of common breeding birds utilising the site and surrounding habitats.

6.4.32 Two BoCC5 Red-Listed were identified as well as several BoCC5 Amber-Listed species.

6.4.33 The Application Site was considered to be of local importance.

***Invertebrates***

6.4.34 A suite of invertebrate surveys were completed on site between May and September 2023, including six survey visits which employed methods such as spot sampling, sweep netting, beating and vacuum sampling.

6.4.35 A total of 268 species were recorded during the surveys, with nine species recorded having national protection status, although five are no longer considered scarce or threatened.

6.4.36 The Application Site was assessed as being of district (low) importance for invertebrates.

***Great crested newts***

6.4.37 eDNA analysis of three ponds (one on-site and two offsite) was conducted in 2023.

6.4.38 Following the samples collected being analysed in a laboratory, all ponds returned negative results for great crested newt.

6.4.39 Great crested newt were assessed as being absent from the Application Site.

***Badger***

6.4.40 A badger survey was undertaken in 2023 which encompassed all habitats on site and within 30m of the wider site boundary, where access allowed.

6.4.41 No evidence of badger was identified on the site, such as latrines, snuffle holes guard hairs, footprints, or setts.

6.4.42 The Application Site was assessed as providing suitable commuting, foraging and sett creation habitat, though no active setts were present at the time of survey.

## 6.5 Potential Effects

### *Overview*

6.5.1 Without proper consideration of the ecological valuable features present within the Application Site and the connection of the site to the wider environment the project would likely result in negative and meaningful impacts of some protected species/groups, designated sites and habitats. These are clearly defined below.

### *Designated Sites*

6.5.2 The Application Site lies in the impact risk zone for Stairfoot Brickworks SSSI and Dearne Valley Wetlands SSSI. The Impact Risk Zones for these SSSIs indicate that the project, namely the operation of an inert landfill, has the potential to have a harmful effect on these sites. It is recommended that Natural England should be consulted for their advice on the nature of these potential impacts and how these might be avoided or mitigated. Therefore, potential impacts to designated sites have been scoped in for further ecological assessment.

### *Habitats*

#### *Broadleaved Woodland*

6.5.3 Broadleaved woodland is a Habitat of Principal Importance (HPI) under Section 41 of the Natural Environment and Rural Communities (NERC) Act (2006).

6.5.4 The project will result in the direct impact to broadleaved woodland (felling of mature trees) both on site and within the immediate surrounding area.

6.5.5 Tree removal will be required in order to facilitate the creation of the proposed access/haul route causing the direct loss of woodland habitat within the site extent.

6.5.6 Broadleaved woodland is an important habitat for many species of fauna providing roosting, nesting and foraging opportunities (namely in the context of birds and bats).

6.5.7 As such, the loss of woodland habitat could lead to the direct impact of other species of fauna (discussed in the sections below).

6.5.8 To that end, it is assessed that there will be direct and meaningful impact to broadleaved woodland on the Application Site and is therefore scoped in for further ecological assessment.

### *Fauna*

6.5.9 The proposed works have the potential to impact local populations of notable fauna through direct, indirect and cumulative pathways such as:

i) Loss of habitat;
ii) Habitat fragmentation;
iii) Altered habitat quality;
iv) Introduction of invasive non-native alien species; and
v) Change to population dynamics, distribution and abundance of notable fauna.

### *Bats*

6.5.10 All species of bat native to the British Isles and their roosts are protected through both international and domestic legislation. They are strictly protected under the Habitats and Species Regulations (2017) as well as protected under the Wildlife and Countryside Act (WCA) (1981), as amended.

6.5.11 The project would lead to the loss of potential roosting sites, foraging areas, and commuting routes. Furthermore, in the absence of mitigation, felling of trees on site could result in the killing and injuring of individual bats.

6.5.12 It is therefore clearly justified that impacts to bats in the form of roosting, foraging and commuting should be scoped in for further ecological assessment.

### *Breeding Birds*

6.5.13 All active bird nests are protected through the WCA (1981) making it an offence to intentionally damage or destroy a bird nest when in active use. Further to this some birds receive further protection under Schedule 1 of WCA (1981) making it an offence to disturb any active nest of these species.

6.5.14 The diversity of habitats on site such as mature trees, shrubs, and hedgerows provides suitable opportunities for both resident and migratory bird species. The project would lead to the direct loss of suitable nesting habitat and potential nest sites of Schedule 1 bird species.

6.5.15 In the absence of mitigation, it is likely that there would be a meaningful impacts to breeding birds in the form of damage or destruction of active bird nests, including Scheule 1 bird species. For that reason, impacts to breeding birds should be scoped in for further ecological assessment.

### *Reptiles*

6.5.16 Common reptiles in the UK are protected from killing or injury through the WCA (1981), as amended, with the addition of smooth snakes and sand lizard also being EPS through the Habitats and Species Regulation (2017), as amended.

6.5.17 Grass snake have been confirmed (via phase 2 surveys) as present within the site extent and the immediate vicinity.

6.5.18 The project, but specifically the regular tracking of heavy machinery, plant and vehicles on site during the operation phase would likely lead to the killing and injury of common reptiles species, including grass snake. Therefore, potential impacts to reptiles are scoped in for further ecological assessment.

### *Invertebrates*

6.5.19 The wider site was found to be of district (low) level importance for invertebrates.

6.5.20 However, the habitats present on site are not synonymous with the invertebrates identified as having nationally important status. The proposed works during the construction and operational phases are not anticipated have any meaningful impacts on invertebrate species as a whole. Therefore, invertebrates have been reasonably scoped out.

### *Badger*

6.5.21 Badgers and their setts are protected through the Protection of Badgers Act (1992).

6.5.22 While no setts are present within the site boundary, it is feasible that the habitat surrounding the site may be used by commuting and foraging badger.

6.5.23 There is a risk that individual badgers may be impacted by the project through direct killing and injuring. Specifically, in the absence of mitigation, commuting badger risk falling into open excavations or being hit by moving plant & vehicles. Albeit a low risk, potential impacts to badgers cannot be ruled out, and therefore should be subject to further ecological assessment.

### *Amphibians*

6.5.24 Great crested newt have been confirmed absent from the site through eDNA analysis of water bodies on site and within 250m. Therefore, there is no potential impact pathway for this species due to the project and can be ruled out from further assessment.

6.5.25 Common amphibians may be present on site, however, their legal protection status is less stringent than that of great crested newt; moreover, their relative abundance is much higher.

6.5.26 In light of these factors, although small numbers of individual common amphibians would likely be impacted by the project, it is not anticipated that that this would have any meaningful impact on the population of these species at a local level or greater. For that reason, amphibians will likely be unaffected by the project and are therefore ruled out from further ecological assessment.

## 6.6 Assessment

6.6.1 It is recommended that that an Ecological Impact Assessment (EcIA) is produced, covering the following ecological items:

i) Designated Sites (SSSIs)
ii) Broadleaved Woodland
iii) Bats
iv) Breeding birds
v) Reptile
vi) Badger

6.6.2 This should be accompanied by relevant figures and technical baseline reports, based on the findings of the surveys, as required.

6.6.3 The EcIA would contain an impact assessment, conforming to the Chartered Institute of Ecology and Environmental Management (CIEEM) 2018 guidance. It would be suitable for and satisfy the requirements of the ecology section of an Environmental Statement (ES).

# 7.0 NOISE

## 7.1 Introduction

7.1.1 The noise chapter of the ES will present an assessment of the potential noise and impacts of the proposal on neighbouring noise sensitive receptors ("NSR") during the operational phases.

7.1.2 Liaison with BMBC would be undertaken to agree the location of sensitive receptors relative to the Site, agree on noise criteria and assessment methodology.

## 7.2 Baseline

7.2.1 It would be necessary to undertake a survey of background sound levels at identified NSR. This would involve an environmental daytime baseline sound survey to be carried out in the vicinity of NSR boundaries to the development site to determine typical details of the existing sound climate. This would include monitoring during a weekday and a Saturday morning period under appropriate weather conditions.

## 7.3 Potential Effects

7.3.1 The possible (likely) environmental noise effects of the Proposed Development are as follows:

i) operational noise associated with the Proposed Development;
ii) increase in road traffic noise;
iii) no blasting is proposed and therefore vibration from site operations is not expected to be perceptible at NSR. As such it is proposed (if agreed) to scope this element out of the operational assessment.

## 7.4 Assessment Methodology

7.4.1 Baseline monitoring would take place over a typical weekday and Saturday morning period on a fixed position (where access allows) and/or spot roaming monitoring basis. The NSR identified from examination of aerial views of the Application Site are at the following locations; however, this would be agreed with the Local Authority Environmental Health Officer (EHO).

i) St Paul's Parade (north of Site);

ii) Albany Close (south of Site);

7.4.2 The above would be undertaken in accordance with appropriate guidance relative to the Development (i.e. National Planning Practice Guidance (NPPG) June 2021 `Guidance on the planning for mineral extraction in plan making and the application process'). This is the most appropriate guidance as it relates to the infilling and restoration of a quarry.

*Review of Noise Predictions*

7.4.3 Information on the proposed site layout, phased workings, plant schedule and library data on noise levels would be reviewed.

7.4.4 Following the review of the proposed site layout and data available on plant noise levels, noise prediction calculations would be undertaken of the effect of the infill and restoration plant in operation. This would consist of producing a noise model with using computer-based noise modelling software for the operation of the facility (CadnaA), which would apply BS5228-1:2009+A1:2014 calculation methodology. This would also include an assessment of the cumulative effect of the brickworks and processing operations on site. The predicted noise levels would assist in establishing the likely impact at the nearest sensitive receptor positions by applying appropriate guidance noise limits.

7.4.5 The results of the baseline noise monitoring would be analysed and assessed against the modelled noise impacts at nearest sensitive receptors (NSR) and results compared with relevant impact criteria to determine the impact magnitude and significance.

7.4.6 Where appropriate, noise control measures will be considered to ensure that noise levels are within relevant noise criteria guidance. Recommendations for appropriate noise control would be detailed by reference to best practice methods as defined in BS5228-1:2009+A1:2014.

7.4.7 Where any increase in road traffic noise is likely, noise arising from road traffic will be determined from the traffic figures provided in the Transport Assessment in accordance with the methodologies provided within 'Calculation of Road Traffic Noise' and the Design Manual for Roads and Bridges LA 111 `Noise and Vibration'.

7.4.8 The impact assessment will be undertaken with reference to the following standards and guidance:

i) Noise Policy Statement for England (NPSE) – March 2010;
ii) Department for Communities and Local Government: National Planning Policy Framework: December 2023;
iii) Planning Practice Guidance (PPG) – June 2021 Minerals `Guidance on the planning for mineral extraction in plan making and the application process';
iv) National Planning Policy for Waste (October 2014);
v) British Standards BS7445: 2003 & BS8233: 2014;
vi) Department of Transport `Calculation of Road Traffic Noise': 1988;
vii) Design Manual for Roads and Bridges, LA 111 `Noise and Vibration' (May 2020);
viii) BS5228: 2009+A1:2014 `Code of practice for noise and vibration control on construction and open sites';

# 8.0 TRANSPORT AND ACCESS

## 8.1 Introduction

8.1.1 The impact of traffic associated with the Proposed Development will be considered through the preparation of a formal Transport Assessment (TA) report. The TA will be submitted as an accompanying document to the planning application. It will comprise a technical highway-related review of the Proposed Development and will include forecasts for the development-related traffic generation and distribution in order to assess the implications of the scheme from a transport perspective.

8.1.1 The TA will be prepared to meet the requirements set out in the Planning Practice Guidance: *"Travel Plans, Transport Assessment and Statements".*

8.1.2 The key findings of the TA would inform the assessment of transport-related environmental effects reported in the Transport ES Chapter. The following sections set out the suggested scope of the Transport ES Chapter in accordance with the *"Environmental Assessment of Traffic and Movement"* produced by the Institute of Environmental Assessment (IEA, now IEMA) (July 2023).

## 8.2 Baseline

### *Access*

8.2.1 The Application Site comprises circa 4.7ha of land associated with the former Stairfoot Quarry Complex. It has historically been (and continues to be) accessed via a private right of way through the former (now cleared) Stairfoot Brickworks site, which connects to the A633 Wombwell Lane.

8.2.2 The Application Site access junction currently takes the form of a ghost-island right turn junction with the A633 Wombwell Lane; however, an application for the redevelopment of the former Stairfoot Brickworks site (ref. 2024/0373), to comprise a glass recycling and repurposing facility was approved in November 2024. This planning application includes a series of improvements to the site access junction in the form of widening to the bellmouth to better facilitate HGVs, and the provision of a pedestrian refuge island.

8.2.3 It should however be noted that the access improvements that are proposed under application 2024/0373 were already recently approved by BMBC on 28th September 2023, under an earlier enabling works application (ref. 2022/1218) for the site's wider redevelopment.

8.2.4 It should also be noted that the applications at the former Stairfoot Brickworks do not prejudice the access to the Proposed Development. The opposite is the case – the works approved and proposed at the former Brickworks site would only serve to enhance access for the Proposed Development, and this issue has been discussed and agree with the applicant team for the former Brickworks site.

### *Local Highway Network*

8.2.5 The A633 routes in a general north / south alignment from the A6133 / A633 Stairfoot Roundabout to the A6195 / A633 Wath Road Roundabout at Brampton / Wombwell.

8.2.6 Within the vicinity of the Application Site, the A633 Wombwell Lane comprises a two-way carriageway with a single lane in each direction. A circa 3m wide strip of central hatching is present along the carriageway within the vicinity of the Application Site, which provides a series of right turning pockets to the adjacent commercial uses to the south-west of the Application Site. It is subject to a 40mph speed limit.

8.2.7 From Tuesday 7th March to Monday 13th March 2023 (inclusive) two Automatic Traffic Count (ATC) surveys were undertaken along the A633 Wombwell Lane, to the north and south of the access to the former Stairfoot Brickworks site.

8.2.8 The results of the ATC surveys are summarised below in **Table 8.1**. It should be noted that the traffic movements recorded on Friday 10th March 2023 are comparatively low when considered against the traffic flows during the other surveyed weekdays. This could have been due to a variety of factors, such as roadworks / diversions as a result of planned or emergency roadworks. In any event, the Friday figures have been discounted for the purpose of the assessment.

**Table 8.1 – Summary of ATC Survey Results**

| Date | Time Period | Observed Two-way Total Vehicle Traffic Flow | | |
|---|---|---|---|---|
| | | ATC 1 (North) | ATC 2 (South) | Average |
| Tuesday 7th March 2023 | 08:00-09:00 | 1,409 | 1,402 | 1,406 |
| | 17:00-18:00 | 1,448 | 1,432 | 1,440 |
| | Daily | 19,602 | 19,718 | 19,660 |

| | | | | |
|---|---|---|---|---|
| Wednesday 8th March 2023 | 08:00-09:00 | 1,501 | 1,492 | 1,497 |
| | 17:00-18:00 | 1,309 | 1,315 | 1,312 |
| | Daily | 18,896 | 19,116 | 19,006 |
| Thursday 9th March 2024 | 08:00-09:00 | 1,354 | 1,330 | 1,342 |
| | 17:00-18:00 | 990 | 965 | 978 |
| | Daily | 15,935 | 16,222 | 16,079 |
| Friday 10th March 2023* | 08:00-09:00 | 590* | 622* | 606* |
| | 17:00-18:00 | 1,067* | 1,088* | 1,078* |
| | Daily | 13,274* | 13,603* | 13,439* |
| Saturday 11th March 2023 | Daily | 16,128 | 16,653 | 16,391 |
| Sunday 12th March 2023 | Daily | 12,896 | 13,064 | 12,980 |
| Monday 13th March 2023 | 08:00-09:00 | 1,374 | 1,380 | 1,377 |
| | 17:00-18:00 | 1,362 | 1,360 | 1,361 |
| | Daily | 19,035 | 19,187 | 19,111 |
| **Average Weekday (08:00-09:00)** | | **1,410** | **1,401** | **1,405** |
| **Average Weekday (17:00-18:00)** | | **1,277** | **1,268** | **1,273** |
| **Average Weekday (Daily)** | | **18,561** | **18,367** | **18,464** |
| **Average Day** | | **17,327** | **17,082** | **17,204** |

*8.2.9 *Figures marked with an asterisk (*) and highlighted in grey have been discounted, and are not accounted for in the calculation of the average daily traffic movements at the bottom of the table.*

8.2.10 Review of **Table 8.1** demonstrates that the A633 Wombwell Lane, in the vicinity of the Site, carries in the region of 18,464 two-way total vehicle movements per weekday, and 17,204 two-way total vehicle movements per average day. During the weekday AM (08:00-09:00) peak hour, the A633 Wombwell Lane caries an average of just over 1,400 two-way vehicle trips, and in the weekday PM peak hour (17:00-18:00), the A633 carries an average of between 1,200 and 1,300 two-way vehicle trips.

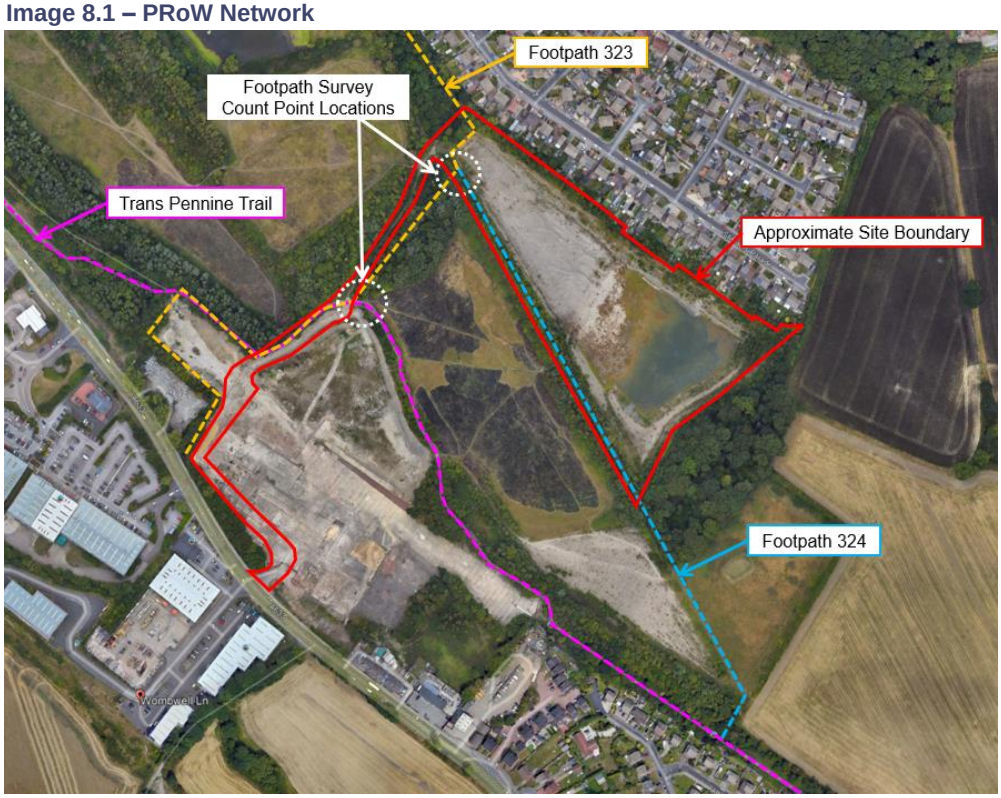
### *Public Rights of Way Network*

8.2.11 The Trans Pennine Trail (TPT) and Public Footpaths 323 and 324 are all located within or on the boundary of the Application Site.

8.2.12 On Thursday 11th July 2024, a footpath survey was undertaken between 07:00 and 19:00, which counted all pedestrian, cyclist and horse rider movements by direction along the TPT and Public Footpaths 323 and 324.

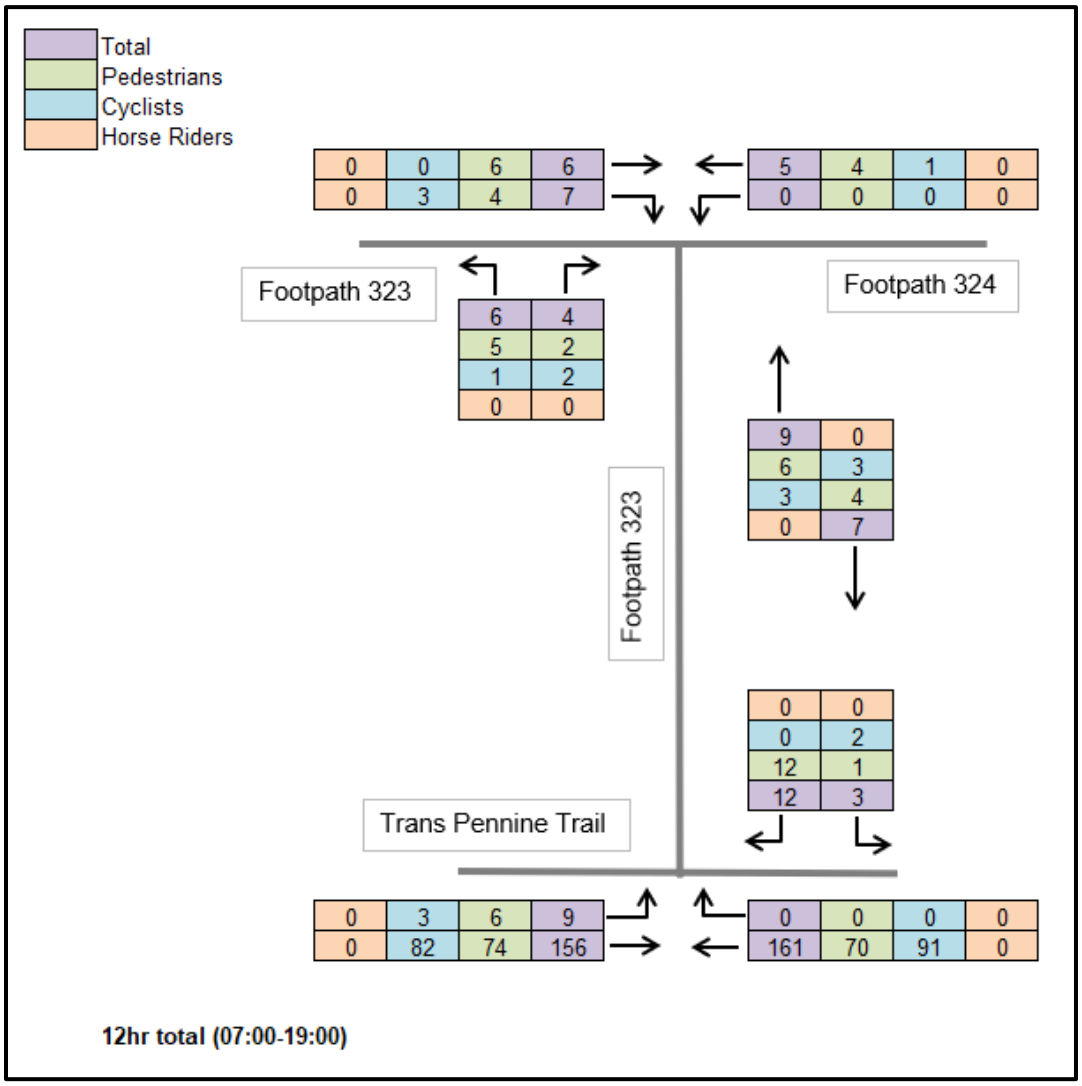
8.2.13 **Image 8.1** shows the location of the TPT and Footpaths 323 and 324 in the context of the Site, alongside the locations at which the footpath surveys were undertaken.

**Image 8.1 – PRoW Network**




8.2.14 The results of the footpath survey are summarised in the diagram shown on **Image 8.2**.

**Image 8.2 – Footpath Survey Results Summary (12hr Total, 07:00 – 19:00)**




8.2.15 Review of **Image 8.2** demonstrates that within the vicinity of the Site, the TPT carries a total of around 326 two-way movements per day (between 07:00 – 19:00), including 150 two-way pedestrian movements, and around 176 two-way cyclist movements. This equates to 27 two-way movements per hour, on average.

8.2.16 The section of Public Footpath 323 which routes to the north of the TPT carries a total of around 24 two-way movements, and Public Footpath 324 carries a total of around 15 two-way movements per day.

8.2.17 It is anticipated that access to all PRoW routes will be maintained during the restoration phase, with management in place to ensure that all routes can be safely used, including temporary diversion where necessary. The proposed mitigation to

manage and limit the impact of the Proposed Development on the PRoW network is set out in later in this Chapter in **Section 8.3**.

## 8.3 Potential Effects (Temporary)

8.3.1 It is anticipated that 400,000m³ of non-hazardous soil materials will be imported to the Site for the infilling of the triangular-shaped area to the south-east of the site (Yew Tree Quarry). This will take place over an approximate 111-week period.

8.3.2 Once infilling operations are completed and the quarry is restored, the Proposed Development would generate an imperceptible level of traffic on the local highway network which would be related to occasional service vehicles accessing the Site for maintenance purposes.

8.3.3 The traffic generating potential associated with the importation of non-hazardous excavated soils to the Application Site has been calculated using a first principles approach utilising industry knowledge and information supplied by the Applicant.

8.3.4 Specifically, the following assumptions have been made:

i) A total of 400,000m³ of non-hazardous restoration soil will be required to be imported to the Site;
ii) The average payload of HGVs importing material to the Site will be 9m³;
iii) The import of soil is anticipated to take place 5 days per week over approximately 111 weeks; and
iv) Delivery hours will be restricted to 07:30 – 16:30, which equals 9 hours per day.

8.3.5 Based on the above assumptions, the Proposed Development is anticipated to generate some 160 two-way HGVs per day, on average, which is inclusive of 80 HGV arrivals and 80 HGV departures. Should HGV deliveries occur at a constant, continual rate throughout the day, this equates to approximately 18 two-way HGV trips per hour, on average (i.e. 9 HGV arrivals + 9 HGV departures per hour, on average).

8.3.6 It should be noted that import material would be sourced on a ‘campaign basis’, and would therefore be variable and determined by the market and the availability of material. As such, there is likely to be some variability from the average daily HGV traffic forecasts set out above. However, it is anticipated that the number of HGVs to

the Site per day would not exceed 200 two-way trips (i.e. 100 arrivals + 100 departures). Volumetrically, this would equate to 22 two-way HGVs per hour, on average. Such a level of trip generation would not be sustained over a long period of time, and would be offset by days which are less intensive.

### *Trip Distribution*

8.3.7 The exact source of the soil import material is unknown at this stage. Material will be sources on a 'campaign basis', as and when available from a number of sources, but primarily from large scale excavation / development projects. It is likely that import material will be derived from within the local authority area, but there may be some material arising from further afield.

8.3.8 Although the exact distribution is unknown, HGV's will nonetheless route via appropriate routes through the strategic highway network, minimising the cumulative impact on sensitive receptors and avoiding residential areas where possible, or where such movements are expressly prohibited (i.e. weight restrictions).

8.3.9 The trip distribution will be calculated based upon a population-weighted gravity model methodology.

8.3.10 For the purposes of the initial investigation provided in this scoping, it is anticipated that the majority of HGVs would route to / from the north of the site via Stairfoot Roundabout, with some HGV's routing to / from the south towards the A6195.

### *Access*

8.3.11 Access to the Application Site would be taken from the historical access into the former Stairfoot Brickworks site, off the A633 Wombwell Lane. As set out earlier, an enabling works planning application was approved by BMBC in September 2023 (ref. 2022/1218), which allows for a series of improvements to the existing access junction off Wombwell Lane. This enabling works application relates to a more recent full planning application, submitted by Potters Ballotini Limited, for the redevelopment of the former Stairfoot Brickworks site to comprise a glass recycling and repurposing facility (ref. 2024/0373).

8.3.12 As mentioned earlier, Axis has liaised with the applicant team for the former Brickworks scheme in order to ensure that their redevelopment plans do not

prejudice the right of way that the Site currently benefits from through this site, and to therefore ensure that safe and suitable means of access can be achieved to facilitate the Proposed Development.

### *Public Rights of Way Network*

8.3.13 As identified earlier in **Section 8.2**, the TPT and Public Footpaths 323 and 324 are all located within or on the boundary of the Site.

8.3.14 As a result of the Proposed Development, a temporary diversion would be required between Public Footpaths 323 and 324, as shown illustratively (in yellow) on **Image 8.3**.

**Image 8.3 – Illustrative Temporary PRoW Diversion Route**


8.3.15 The temporary PRoW diversion route would have the greatest impact on users of Public Footpath 324, as they will be required to re-route along the TPT. However, when having regard to the limited user numbers observed along this Public Footpath (i.e. 15 two-way movements per day, as illustrated on **Image 8.2**) and the temporary nature of the diversion, this is considered to result in minimal disruption to users. It

should also be noted that the TPT also provides users with a more user-friendly, and well surfaced route.

8.3.16 In addition, the proposed access strategy will result in the need for vehicles to cross the TPT. Both routes would remain open and available at all times during the restoration period, however an appropriate temporary crossing arrangement would form part of the Proposed Development in order to ensure that PRoW users are protected, and given priority during times of vehicle movement.

## 8.4 Assessment Methodology

*8.4.1* The assessment of the traffic-related environmental effects of the Proposed Development will be considered against baseline traffic conditions on the local highway network.

### *Baseline Traffic Data*

8.4.2 As set out earlier in **Section 8.2**, ATC surveys have been undertaken along the A633 Wombwell Lane in order to establish baseline traffic flows on the local highway network. A footpath survey has also been undertaken of the TPT and Public Footpaths 323 and 324 in order to establish the baseline conditions on the PRoW network.

8.4.3 To inform the TA work and ES Chapter on Transport, Personal Injury Accident (PIA) data on the local highway network to the Application Site will also be obtained from the online Crashmap resource for the most recently available complete 3-year period.

### *Future Baseline*

8.4.4 The future year traffic flows will be estimated by applying TEMPro growth factors (Version 8, NETMv80_Core_Scenario dataset) to the 2023 baseline traffic data set out above, with adjusted local growth for Middle Super Output Area ‘Barnsley 015’, within which the site is located.

8.4.5 The 2023 baseline traffic flows would be growthed to 2029 (i.e. year of application plus 5 years).

8.4.6 The resultant locally adjusted growth factors that will be used to estimate future year traffic flows are set out in **Table 8.3**.

**Table 8.3 – TEMPro Growth Factors (2023 – 2029)**

| Base – Future Year | TEMPRO Growth Factors | | |
|---|---|---|---|
| | AM Peak Period | PM Peak Period | Average Weekday |
| 2023 – 2029 | 1.0513 | 1.0494 | 1.0513 |

### *Committed / Cumulative Developments*

8.4.7 All relevant committed developments that would impact upon the highway network in the vicinity of the site, including application 2024/0373 for the redevelopment of the former Stairfoot Brickworks Application Site, will be considered within the highways analysis and accounted for in the future baseline traffic flows.

8.4.8 Axis invites BMBC to confirm any additional developments that they consider have the potential to result in significant cumulative environmental effects, and which should therefore be accounted for within the assessment.

### *Guidance*

8.4.9 The TA report would meet the requirements set out in the National Planning Practice Guidance *'Travel Plans, Transport Assessment and Statements'*.

8.4.10 The assessment set out in the Transport ES chapter would follow the *'Environmental Assessment of Traffic and Movement'* (2023) produced by the IEMA.

### *Consultation*

8.4.11 A pre-application has been submitted to BMBC, who provided a formal response, dated 24th November 2022 (ref. 2022/ENQ/00353).

8.4.12 The TA and ES Chapter will be prepared in accordance with the highway-related pre-application advice, as well as any feedback provided through this ES scoping exercise.

### *Scope and Methodology*

8.4.13 The assessment will be undertaken for the restoration phase of the Proposed Development when the maximum number of HGVs are generated (associated with the import of restoration materials). The traffic-related environmental impacts of the trips generated during this phase of the Proposed Development will be assessed against a 'future baseline' scenario which accounts for local growth and trips associated with any committed development.

8.4.14 Development traffic-related environmental effects are typically associated with changes in traffic on the highway network, both in terms of total number of vehicles and the type of vehicles generated e.g. the proportion of HGVs. Key impact types considered in traffic-related environmental assessments are as follows:

- changes in development traffic impacting on prevailing highway safety conditions, accident risk and, network congestion and delay on key links in the immediate vicinity of the Site and further afield;
- changes in development traffic impacting on other local road network users and the immediate community, resulting in a reduced amenity e.g. community severance, pedestrian delay / intimidation, etc.;
- changes in development traffic resulting in noise and vibration effects at surrounding / frontage properties to key access road corridors; and
- changes in development traffic and congestion resulting in local air quality effects at key local network links and junctions.

8.4.15 *'Environmental Assessment of Traffic and Movement'* (2023) produced by the IEMA provides the following 'rules' when considering the initial appraisal or screening of traffic-related environmental impact to determine if more detailed assessment is required:

- **Rule 1:** include highway links where traffic flows would increase by more than 30% (or the number of heavy goods vehicles would increase by more than 30%); and
- **Rule 2:** include any other specifically sensitive areas where traffic flows have increased by 10% or more.

8.4.16 With respect to Rule 1 (30% threshold), IEMA guidance notes that traffic forecasting is not an exact science and that it is generally accepted that accuracies greater than

10% are not achievable. Day-to-day variation of traffic on a route corridor is frequently at least some ± 10 % of data recorded on a single survey date.

8.4.17 The IEMA guidelines therefore suggest that projected changes in total traffic of less than 10% would create no discernible environmental impact and recommended that as a starting point, a 30% change in traffic represents a reasonable threshold for the need to undertake detailed assessment of environmental conditions.

8.4.18 With regards to Rule 2 (10 % threshold), the IEMA guidance states that the assessor should consider the inclusion of locations or network links where a 10% change in traffic demand is predicted which accommodate environmentally 'sensitive' areas.

8.4.19 The IEMA guidance notes that it would not normally be appropriate to consider links where total traffic flows have changed by less than 10% unless there are significant changes in the composition of traffic, e.g. an unusually large increase in the number of HGV movements.

8.4.20 The Application Site is not deemed to be located in a sensitive area or close to sensitive receptors such as schools, hospitals or care homes. Furthermore, the Application Site has previously been developed for quarrying operations.

8.4.21 Consideration of the potential impact of the scheme during each phase will be provided in the full EIA. This will include a detailed average day (AADT) percentage impact assessments along the A633 Wombwell Lane, which will be based on the 2023 baseline traffic count data.

8.4.22 If the assessment of traffic-related environmental effects identifies that a material increase in traffic above the core IEMA thresholds will arise as a result of the Proposed Development, detailed analysis of traffic-related environmental effects would be undertaken and, where appropriate, physical or operational mitigation measures will be identified and set out within the ES chapter. The residual effects of these measures would then be reconsidered in the context of the relevant assessment scenarios.

## 9.0 PROPOSED CONTENTS OF THE ENVIRONMENTAL STATEMENT

9.1.1 The proposed contents and structure of the ES is shown below. It will be produced in four volumes: the first of which is a non-technical summary, the second the main report, the third illustrative figures and the fourth a series of technical appendices containing data and technical assessments undertaken for the ES chapters. Matters in relation to human health and amenity are covered, where relevant, in the topic sections (Chapters 4.0, 5.0 and 6.0).

VOLUME 1 – NON-TECHNICAL SUMMARY

VOLUME 2 – ENVIRONMENTAL STATEMENT (MAIN REPORT)

| | |
|---|---|
| **1.0** | Introduction |
| **2.0** | Scope of the Environmental Impact Assessment (to include methodology, cumulative and indirect effects) |
| **3.0** | Scheme Description and Alternatives |
| **4.0** | Ecology and Biodiversity |
| **5.0** | Noise |
| **6.0** | Transport and Access |
| **7.0** | Summary of Effects |

VOLUME 3 – FIGURES

VOLUME 4 – TECHNICAL APPENDICES

# Appendix A

# 1.0 LANDSCAPE AND VISUAL EFFECTS – NON ES TOPIC

## 1.1 Introduction

1.1.1 A Site visit was conducted in July 2024. An initial visual survey was conducted to consider the key visual and landscape sensitivities of the Site. The Landscape and visual Appraisal (LVA) would describe and evaluate the anticipated change to Landscape and Visual amenity, and the extent to which these changes will affect the perception and views of the landscape.

1.1.2 The Application Site is located to the north of Wombwell Lane between the settlements of Stairfoot and Ardsley. There are no landscape, heritage or ecological designations covering the Site. The Site is located adjacent to the Green Belt and is identified as "Urban Fabric" and "Site with Planning Permission for Mineral Extraction" within the adopted Barnsley Local Plan.

1.1.3 At a local level, the Site is located within Landscape Character D3: West Dearne Settled Arable Slopes as listed in Barnsley Borough Landscape Character Assessment 2002 and subsequent review in 2016. Landscape character is said to be moderate with landscape condition poor in this area.

1.1.4 The Application Site is generally visually contained due to the existing mature vegetation and landform within and surrounding the Site.

## 1.2 Methodological Approach

1.2.1 A Landscape and Visual Appraisal (LVA) would be undertaken to accompany the application and would consider the potential effects of the Proposed Development on the character of the surrounding Landscape, and the potential visual effects on identified key receptors.

1.2.2 The LVA will be informed by and make reference to the following policy documents:

i) The National Planning Policy Framework (Department for Communities and Local Government; revised 2021) - specifically those chapters considered relevant to Landscape and Visual amenity, and
ii) Barnsley Local Plan – Adopted January 2019 - specifically those policies considered relevant to Landscape and Visual amenity.

1.2.3 The methodology draws upon the following established best practice guidance:

i) Guidelines for Landscape and Visual Impact Assessment Third Edition (GLVIA) (Landscape Institute) (LI) and Institute of Environmental Management & Assessment (IEMA, 2013), and
ii) Landscape Character Assessment: Guidance for England and Scotland (Countryside Agency and Scottish Natural Heritage, 2002).

1.2.4 The extent of the area within which the development would be likely to result in significant visual effects or indirect effects on landscape character is limited by the local landform, mature vegetation and the extent of existing built form in the vicinity of the Site. The study area has initially been set at a radius of 2km from the centre of the proposed Site. This is in line with GLVIA guidance. The current baseline for the 2km study area comprises the settlements of Stairfoot, Ardsley and touches on the outlying settlements of Kendray and Wombwell. The area includes a mixture of residential, commercial and agricultural farmland. (Refer to Figure 3 – Site Location and Study Area).

1.2.5 Based upon an initial, high-level, desk-based survey of the study area and an initial visual review, the following landscape receptors are considered most likely to be affected by the development proposals. It is these elements and the those within the Site which are thus likely to form the main focus of the appraisal. These include:

i) Site landscape character
ii) Local landscape character
iii) Existing land use
iv) Public Rights of Way, Trans Pennine Trail and informal footpaths within and adjacent to the Site
v) Existing vegetation within and in close proximity to the Site, and
vi) Site landform.

1.2.6 There are a number of heritage assets within the study area, the closest to the Site include:

i) Grade II Listed Number 726 and attached former barn at Ardsley,

ii) Grade II Listed Ardsley Manor House and Ardsley Manor Cottage,
iii) Grade II Listed Cartshed to the north of Ardsley Manor House, and
iv) Grade II Listed Swaithe Hall Farmhouse, Rosebower Cottage and Swaithe Hall,
v) Grade II Listed Cruck Barn at East Side of Entrance to Swaithe Hall Farm, and
vi) Grade II Listed Stable Block At West Side Of Entrance To Swaithe Hall Farm.

1.2.7 In addition to landscape receptors and heritage assets, there are a number of locations anticipated to experience views towards the Site. These include:

1.2.8 Residents of housing to the north of the Site with views from the upper portions of their dwellings including and not exclusive of portions of St Pauls Parade, St Leonard's Way, St Andrew's Way, Roehampton Rise,

i) Footpaths 323#2 and 324#1 running north west to south east through the Site,
ii) Footpath 323#1 to the south west of the Site,
iii) An informal footpath to the east of the Site, and
iv) Trans Pennine Trail/ Green Way to the south of the Site running west to east.

1.2.9 A representative selection of views suitable to illustrate the existing character of the study area and the potential effects of the proposed development are proposed for inclusion within the LVA. The viewpoints are representative of views typically available to the Site from the surrounding area.

1.2.10 A list of 12 viewpoints would be issued to BMBC for consultation and agreement. Following feedback with BMBC and further Site visits, the viewpoints may be subject to further refinement. Figure 1.2 – Viewpoints - Close Range and Figure 1.3 – Viewpoints, illustrate the 12 representative viewpoints for consideration for inclusion within the appraisal.

1.2.11 An appraisal of the character of the landscape will be made in the baseline appraisal. It will be made through desk-based appraisal and field study of aspects of landscape character, including landscape features, landscape character, designated landscapes and aesthetic/perceptual aspects. It will be informed by consideration of the landscape fabric of the area and will be made with reference to aspects of landscape, their nature and sensitivity. The appraisal will include the classification and description of the local landscape character.

1.2.12 An appraisal of the degree and nature of potential change to the landscape character as a result of the proposed development will be made with reference to the viewpoints from within the areas, which will show the likely degree of change to the typical and important character attributes of each area.

1.2.13 The visual appraisal will consider the effects of the proposed development on the specific views included within the LVA and on the general visual amenity experienced by people.

1.2.14 For both Landscape and Visual effects, the effect significance would be established based on the:

i) The sensitivity of the receptors (landscape or visual), which depends upon the value attached to the landscape or view and the susceptibility to harm due to the development proposal, and
ii) The magnitude of the effect (the change brought about by the development proposal), which depends upon the scale and geographical extent of the change, and its duration and reversibility.

1.2.15 Sensitivity and magnitude will be determined using a combination of quantitative (objective) and qualitative (subjective) methods and would be assessed using professional judgement.

i) The appraisal would follow step-by-step approach
ii) Description of the existing landscape, with an evaluation of different areas
iii) Consideration of the potential effects of the proposals, and of receptor sensitivity to those effects
iv) Appraisal of the magnitude of each effect (involving judgements relating to the scale, extent and duration/reversibility of effects), and
v) Appraisal of the significance of each effect (involving judgements relating to how sensitivity and magnitude combine). At this stage, a separate judgement is made as to whether an effect is beneficial, neutral or adverse.

1.2.16 Table 4.1 in Chapter 4.0 illustrates how the sensitivity and magnitude would be combined to determine the effect significance.

1.2.17 Judgements about the sensitivity of the landscape or visual receptor and the magnitude of the effect on said receptor would be combined to draw conclusions about the effect significance on a case-by-case basis. Note that for both Landscape and Visual receptors, '*there are no hard fast rules about what makes a significant effect, and there cannot be a standard approach since circumstances vary with the local and landscape context and with the type of proposal'* (LI and IEMA, 2013, paragraphs 5.56 and 6.44).

1.2.18 For those judgements, effects of major/moderate or major significance would be considered 'significant' in that they are the principal landscape or visual effects of the proposed development. The identification of '*significant'* effects equally does not necessarily mean that said effects would be unacceptable. Equally, effects considered to be '*not significant'* should not be completely disregarded (LI and IEMA, 2013; paragraph 3.34), but are lesser effects which are considered, with professional judgement, to be less important in decisions regarding the Landscape and Visual effects of the proposed development.

## 1.3 Embedded Mitigation

1.3.1 The embedded mitigation would be evolved in conjunction with the client and consultant team in order to mitigate any Landscape and Visual effects. Proposals would incorporate existing retained landscape features where possible, setting the proposals into a landscape context that is consistent with the surrounding character. Once the proposed fill and associated landform is complete, native tree, shrub, hedgerow and wildflower meadow planting will be incorporated into the design to enhance existing screening and assist in improving upon the Site's biodiversity.

1.3.2 The existing Public Rights of Way and the section of Trans Pennine Trail within the Site may require temporary diversions to be incorporated into Site phasing in order to facilitate construction and vehicle access. Once works are complete, these routes will be positively incorporated into the proposed landscape scheme.

1.3.3 A Landscape Management Plan would be produced, subject to a planning condition, to ensure the landscape proposals and existing landscape features are maintained throughout the lifetime of the Proposed Development.

1.3.4 Embedded Landscape and Visual mitigation would therefore aim to reduce effects on the local landscape, softening the Site's inward views and integrate the proposals into the existing landscape context.

## 1.4 Anticipated Effects

1.4.1 In terms of anticipated landscape impacts, the Site is not designated in landscape terms and the existing Site is considered to be in poor condition due to signs of degradation and limited signs of active maintenance. The remediation of the Site including the new landscaped areas is considered to provide an uplift/ improvement compared to the existing situation on Site, and further detail of the proposals, including the removal / retention of landscape features including trees and hedgerows, will be considered in the LVA in order to give a full indication of the potential impacts on the Site landscape character and the existing vegetation within the Site.

1.4.2 The temporary diversions anticipated for the sections of Public Rights of Way and the Trans Pennine Trail within the Site are not considered to be significant and the positive inclusion of these routes within the landscape scheme is considered to be an improvement on the current situation.

1.4.3 The heritage assets identified within the study area are considered to be physically and visually divorced from the Site and any effects are not anticipated to be significant.

1.4.4 In terms of anticipated visual impacts, there are limited visual receptors in close proximity to the Site which are likely to experience views of the development proposals. These include:

### *Residents of properties*

1.4.5 Views towards the Site from dwellings to the north of the Site include views from dwellings on sections of St Pauls Parade, St Leonard's Way, St Andrew's Way and Roehampton Rise. Views to the Site are considered to be partially screened by existing vegetation lining the Site's northern boundary and within the rear gardens of dwellings on St Pauls Parade. The upper sections of new landform within the Site will be visible above the existing mature vegetation from a number these properties which will be landscaped following completion of the works.

### *Users of Public Rights of Way*

1.4.6 The Public Rights of Way most likely to experience effects resulting from the proposed development would be users of the routes within and in close proximity to the Site. These include sections of Footpaths 323#2, 324#1 and 323#1, the Trans Pennine Trail and the informal footpath to the east of the Site. During construction, the routes of Footpaths 323#2, 324#1 and 323#1 and a short section of the Trans Pennine Trail would require temporary diversions and views into the Site are anticipated to be limited. Once completed the Site will be landscaped with the routes positively integrated into the proposals leading to no significant visual effects. Further views towards and over the Site from Public Rights of Way within the Study are anticipated to be truncated by the existing mature vegetation and built form surrounding the Site and are anticipated to be less than significant.

1.4.7 It is therefore considered that Landscape and Visual Effects should be scoped out of the EIA report due to the anticipated effects not being significant. The LVA will further interrogate the anticipated Landscape and Visual effects.

## 1.5 Potential Mitigation

1.5.1 Additional mitigation measures relating to the construction phase have been identified over and above those designed into the scheme in line with best practice.

1.5.2 These would involve the erection of Site security fencing to the perimeter of the enabling work area, together with protective fencing (to BS5837, 2012, ‘Trees in Relation to Construction’) to the existing trees and mature vegetation to be retained; creating a haul route; setting up the contractors compound; removal of the existing vegetation to facilitate development; and the stripping of grass and topsoil for the development platforms.

1.5.3 The location, extent and height of the contractor’s compound is yet to be determined but would be in consultation with the contractor and landscape consultant, in order to reduce the Landscape and Visual impacts of these elements as much as possible.

1.5.4 All cabins and storage mounds should be as low as possible to minimise the visual effects of these elements. The contractor’s cabins are to be of a muted and visually recessive colour to minimise the visual effect of these temporary elements in localised views. The above is to be agreed with BMBC prior to the commencement

of construction as part of a Construction Environmental Management Plan (CEMP) and as part of the discharge of planning conditions.

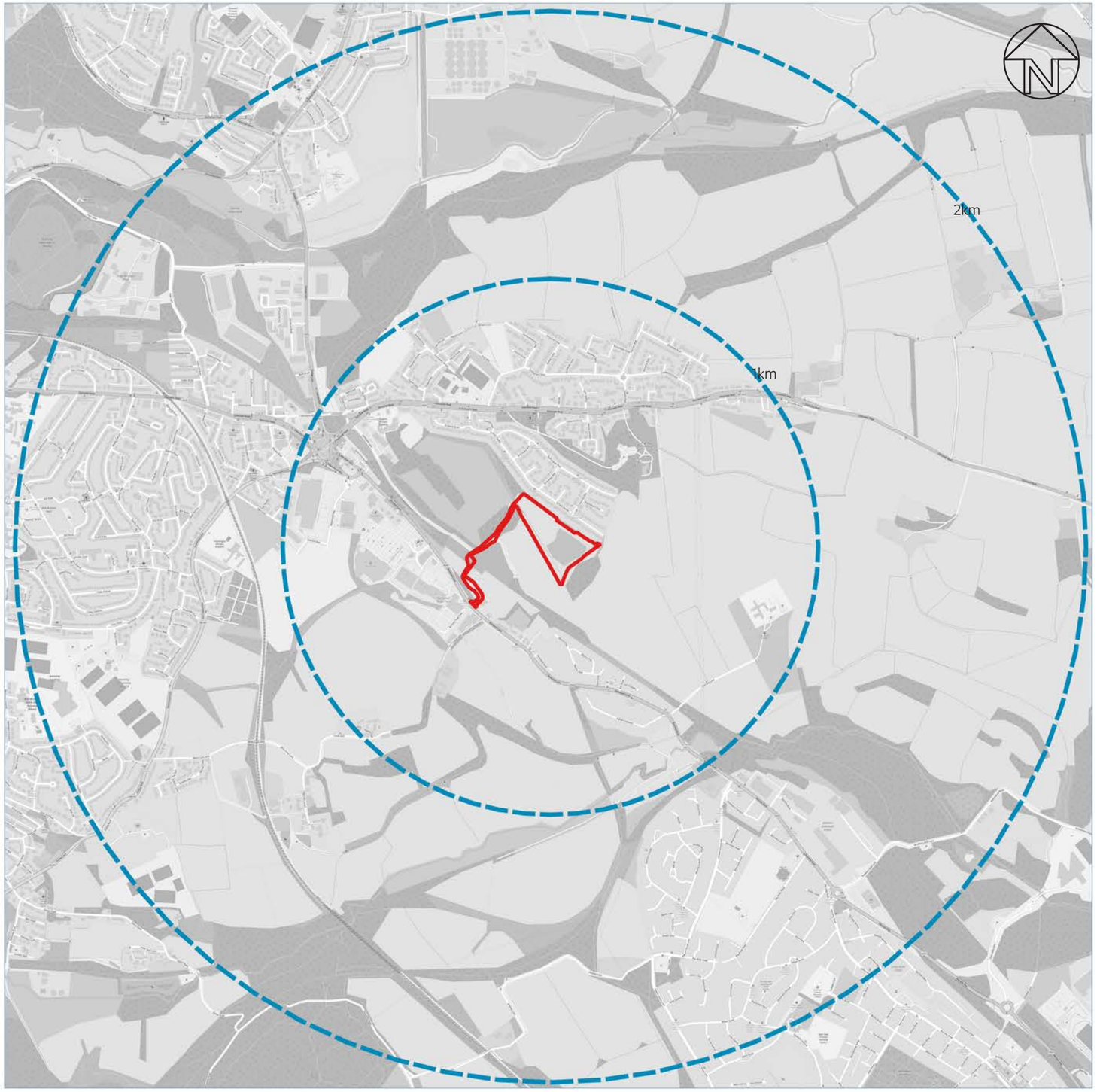
1.5.5 It is anticipated that the contractor's compound and working area would be lit. The lighting of the compound is to be low level and directional into the working area.

## 1.6 Summary

1.6.1 The Landscape and Visual impacts of the proposed development will be fully explored in a detailed Landscape and Visual Appraisal to accompany the application. It is considered that the proposed development of the Site is not considered likely to give rise to any significant or unacceptable Landscape and Visual effects.

**KEY**

- Site Boundary
- 1km
- 2km




0 200 400 600 800 1,000 m

Figure 1.1 - Site Location and Study Area

Stairfoot Quarry, Barnsley
LVIA Scoping Supporting Figures
Revision 03

URBAN GREEN

**KEY**

Site Boundary

Viewpoints

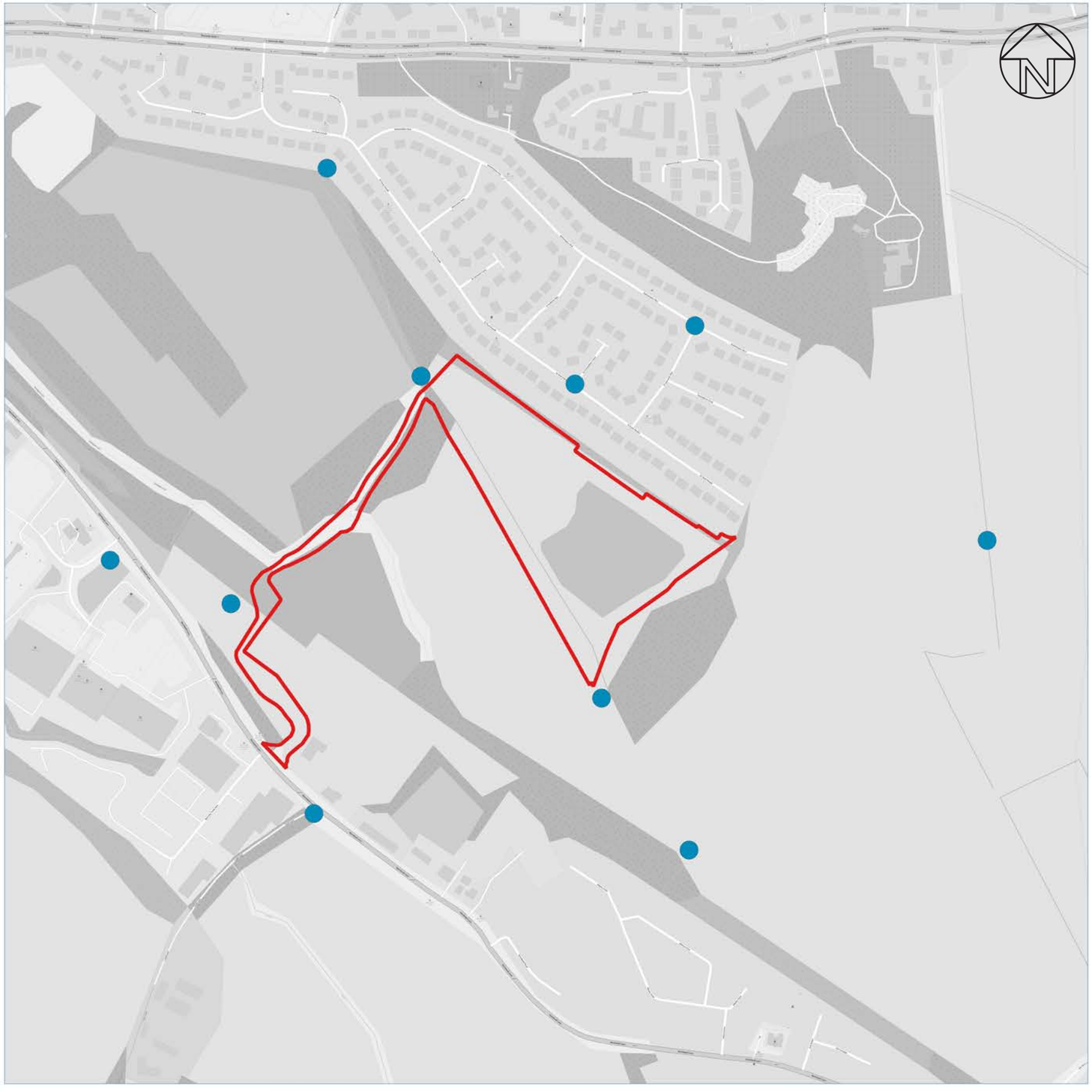


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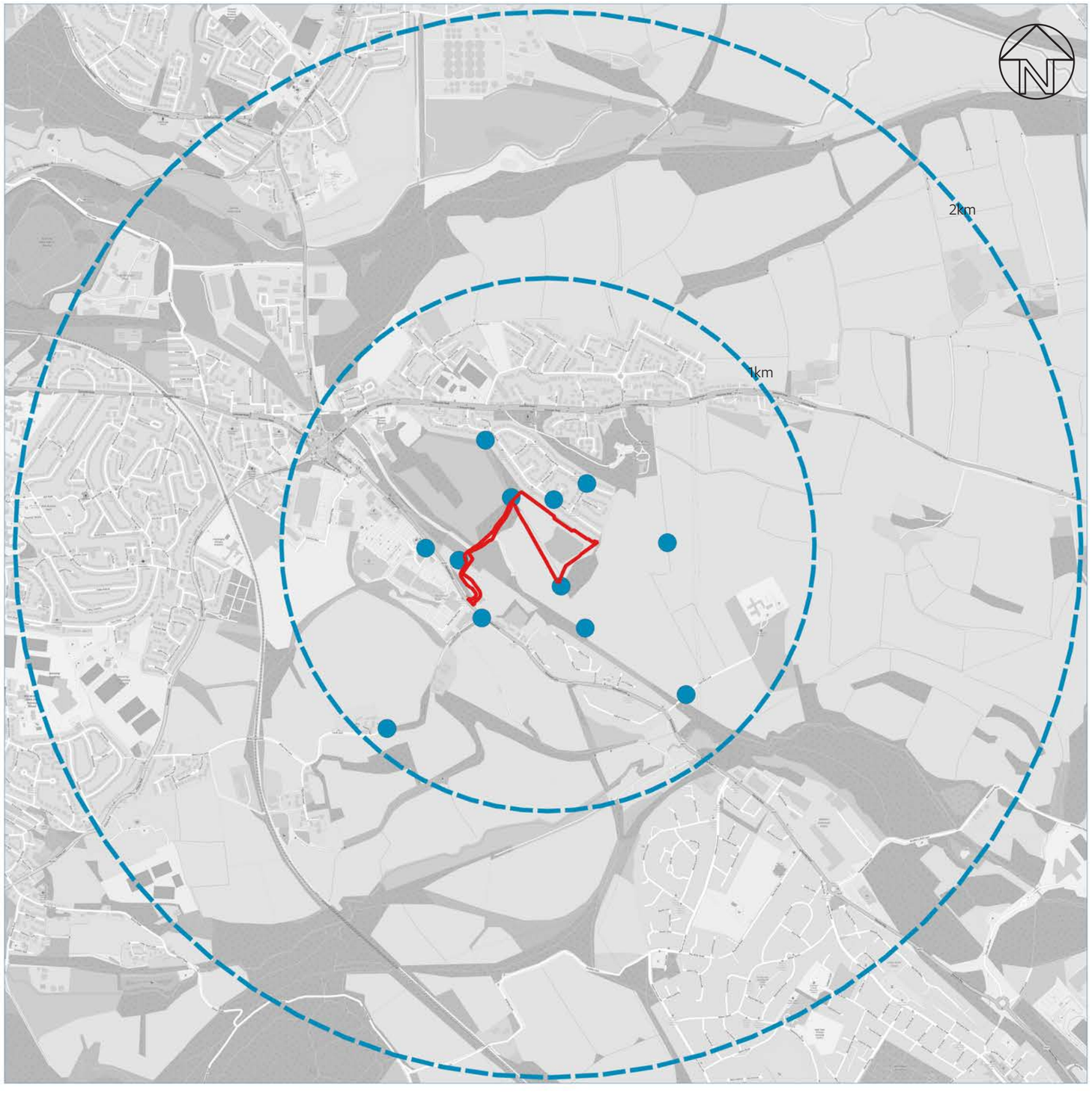
Figure 1.2 - Viewpoints - Close Range

**KEY**

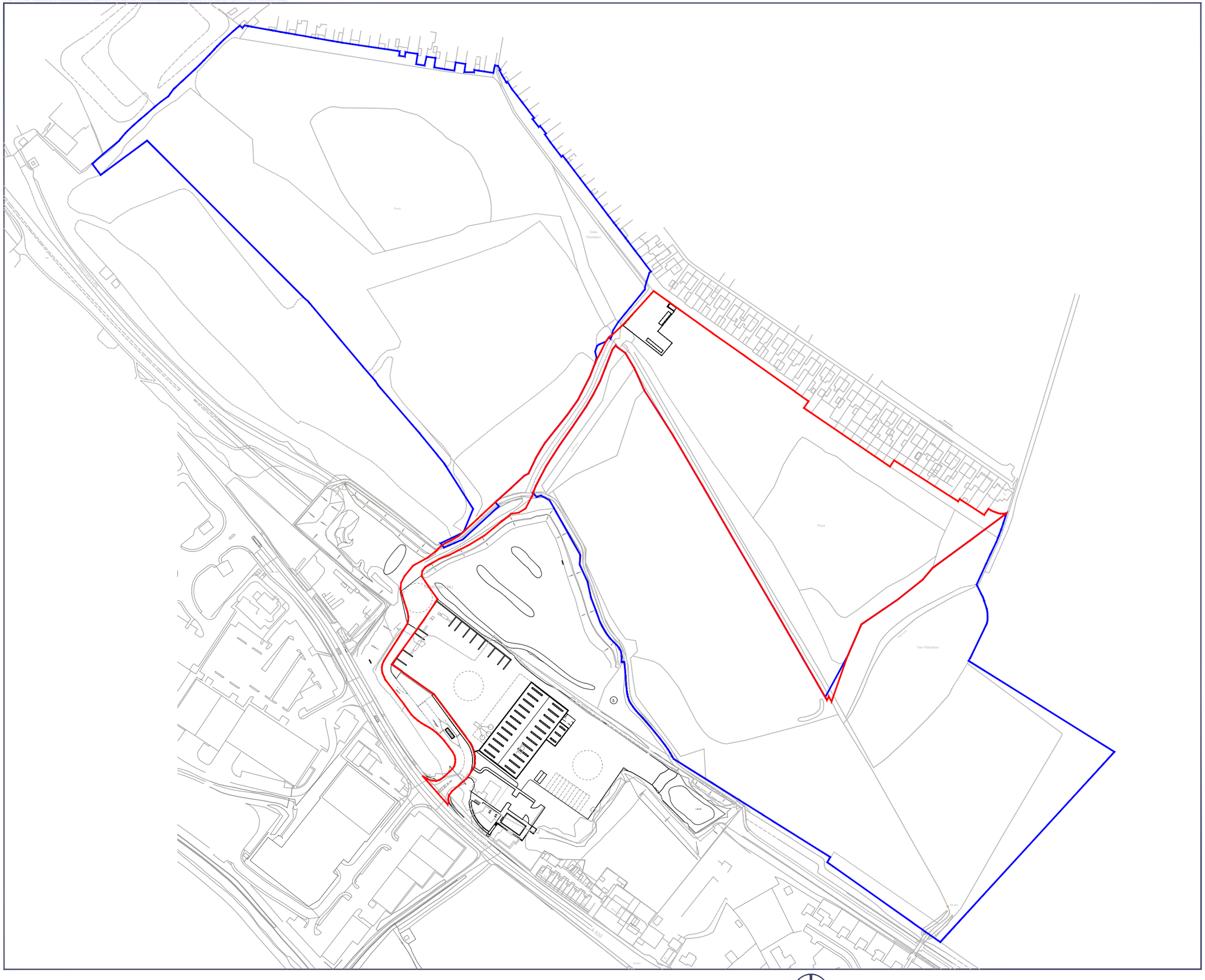
- Site Boundary
- 1km
- 2km
- Viewpoints




0 200 400 600 800 1,000 m

Figure 1.3 - Viewpoints

\\10.10.3.4\Projects\3251-3300\3263-01 Stairfoot Brickworks Redevelopment\Dwgs\CAD\ES Scoping\Figure 1_Site Location.dwg



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Project

**Stairfoot Brickworks Redevelopment**

Figure Number

**Figure 1**

Figure Title

**Site Location**

Scale

**1:3000 @A3**

Date

**November 2024**


NQ North Quarry
YT Yew Tree Quarry
SQ South Quarry
MB Marine Band
YP Yew Tree Plantation
CS Clay Stockpile Area
W Brick Works



N

0 100 200 300 400 500m

0344 8700 007
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Project

**Stairfoot Brickworks Redevelopment**

Figure Number

**Figure 2**

Figure Title

**Site Context**

Scale

**1:5000 @A3**

Date

**December 2024**