

| EFFECT                                     | RECEPTOR                                                      | JUSTIFICATION FOR INSIGNIFICANT EFFECT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|--------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                            |                                                               | capacity. <sup>16</sup> At a more local level, the three primary schools have in the local area currently operate with 14% capacity, and the seven secondary schools in Cambridge currently have 14% capacity.                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Availability of healthcare services</b> | GP & A&E provision (current and future residents and workers) | It is expected that workers at the Proposed Development (and their families) will continue to access primary healthcare facilities near to their places of residence. Though GP practices are permitted to register new patients living outside their catchment areas, they are not obliged to do so – particularly where there is already a shortage of capacity to serve the local resident population. In terms of A&E provision, a significant increase in admissions as a result of the operation of the commercial floorspace provided by the Proposed Development is not expected. |
| <b>Housing provision</b>                   | Current and future residents                                  | The Proposed Development provides no housing and hence this effect is proposed to be scoped out of the EIA.                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Access to play space</b>                | Current and future residents                                  | As above, the Proposed Development provides no housing and so is not expected to have a material effect on the residential population in the local area. The levels of children present in the area are not expected to change, and so access to play space is proposed to be scoped out.                                                                                                                                                                                                                                                                                                 |
| <b>Crime and antisocial behaviour</b>      | Current and future residents and workers                      | The Proposed Development is not expected to materially change crime and anti-social behaviour in the local area. The Applicant is committed to best practice, including secured by design and crime prevention through environmental design principles, so if anything, the effect is likely to be beneficial but not significant.                                                                                                                                                                                                                                                        |

## Approach and Method

- 11.15 Where flexibility is sought or Class E is applied, the assessment will define two scenarios, a minimum and maximum scenario. The scenario applied will vary by effect so that a reasonable worst-case assessment is applied for all effects. For example, the minimum commercial scenario will be used to estimate jobs and worker spending impacts. Any such assumptions and scenarios will be clearly outlined in the socio-economic chapter.
- 11.16 In accordance with the HCA Additionality Guide,<sup>17</sup> the likely effects of the Proposed Development will be considered at various geographic scales (i.e., local area, local authority, county, regional, and national). All of these will be clearly described in the ES chapter.
- 11.17 Modelling and accepted metrics, such as employment densities, average worker expenditure, and indirect multipliers, will be used in order to calculate primary, secondary, and indirect effects.

<sup>16</sup> DfE, 2022. Edubase - Establishment Data

<sup>17</sup> Homes and Communities Agency, 2014. Additionality Guide Fourth Edition 2014.

Guidance used will be the HCA Employment Density Guide<sup>18</sup> for estimating direct employment impacts, and the HCA Additionality Guide, which will be used to estimate indirect and induced impacts.

- 11.18 Where standard or accepted methods do not exist, benchmarking exercises will be undertaken, professional experience and judgement will be applied and presented clearly and transparently, along with any assumptions made.
- 11.19 The assessment of effects will be undertaken against the future baseline. Where there are no projections, plans or policies, or the cumulative schemes are not expected to significantly change the future baseline, effects will be assessed against the current baseline.
- 11.20 Any required mitigation or monitoring shall be identified.
- 11.21 The assessment shall conclude with a summary of the likely significant socio-economic effects.

#### Cumulative effects

- 11.22 A blended approach will be undertaken for the cumulative assessment depending on the effect being assessed. In the case of employment, the assessment will be inherently cumulative as impacts are being assessed against a future baseline that includes employment projects, as described in the future baseline section. These projects will implicitly include the impacts of other schemes being brought forward in the relevant geographical area (local area or local authority level).
- 11.23 In contrast, the assessment of cumulative effects on other specific effects, such as open space/public realm, will be carried out by determining whether other developments identified will directly impact these. Whilst the manner in which these cumulative developments may cause a change in population demand is captured by the population forecasts, any direct change in the provision of community infrastructure caused by these developments must also be considered.

#### Consultation

- 11.24 No additional topic specific consultation is proposed for socioeconomics. The ES chapter will consider all points relevant to socioeconomics coming from the consultation exercise but because there is no residential provision, there is no need to consult with the local CCG or school place planning team.

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<sup>18</sup> Homes and Communities Agency, 2015. Employment Density Guide Third Edition.

## 12.0 Transport

### Introduction

- 12.1 The Transport Chapter of the ES will consider the potential operational and construction effects which could occur on the network in the vicinity of the Site. The Chapter will be prepared in accordance with reference to the IEMA Guidelines for the Environmental Assessment of Road Traffic (1993).
- 12.2 A Transport Assessment (TA) for the Proposed Development will be prepared in support of the planning application and will provide detailed analysis of the issues, characteristics and mitigation proposed and will be appended to the ES. The TA will be prepared in accordance with national (National Planning Practice Guidance, NPPG) and local (Cambridgeshire County Council) guidance.
- 12.3 The assessment will be carried out with due regard to the following guidance:
- National Planning Policy Framework (NPPF), 2021;
  - Design Manual for Road and Bridges (DMRB);
  - Manual for Streets 1 and 2 (MfS);
  - Local Plan; and
  - Cambridgeshire and Peterborough Combined Authority (CPCA) Local Transport Plan.

### Baseline Conditions

- 12.4 The Site lies between two key road corridors to the northeast of the City Centre, namely A1134 Newmarket Road and Coldhams Lane. A1134 Newmarket Road forms part of the principal road network, catering for significant levels of movement. Coldhams Lane is predominantly residential in character but caters for a significant east-west movement. Both roads give rise to degrees of severance for non-car modes.
- 12.5 Connections to modal interchanges (Cambridge and Cambridge North Stations), in addition to the existing public transport network will also be assessed, seeking upgrades to service frequencies and/or routing. Walking and cycling connections are also key, in terms of accommodating future users of the site and associated infrastructure.
- 12.6 The Site is currently large-scale retail, generating high levels of car-borne traffic. The Proposed Development changes the use of the Site to a predominantly employment destination favouring sustainable modes, resulting in a reduced reliance on private cars. The Site also accommodates the alignment of, and connections to the Chisholm Trail.

- 12.7 Through engagement with CCC, a suite of traffic and pedestrian/cycle counts has been collected to inform the assessment and resulting junction modelling on the network.
- 12.8 The Proposed Development also aligns with emerging policies and programmes being promoted by CCC, C&PCA and the Greater Cambridge Partnership. These all seek to limit car use and traffic levels in the city.

## Potential Impacts

### Construction Impacts

- 12.9 During, construction staff and materials will need to access the Site. It is envisaged that staff movements will be managed through a Construction Phase Travel Plan, including measures to prioritise use of the existing Park & Ride and rail/bus regime. Deliveries of goods and materials that have to take place by road will be directed to use the principal road network (i.e., via A1138 Newmarket Road) and to avoid residential areas, schools where possible. Timing of deliveries and exits to the network will also be implemented.

### Operational Impacts

- 12.10 The Proposed Development will operate a robust Monitor & Manage strategy through the Travel Plan. This is predicated on limited on-site parking, and limited access to parking based on eligibility criteria, together with a robust public transport provision and supporting enhancements to the walking and cycling connections to/from the Site. The net effect of the strategy, applied from the outset, though all build out phases, is to reduce the number of vehicles associated with the Site compared to the existing use.
- 12.11 Junction capacities are not expected to be adversely affected due to motor vehicle use from the Proposed Development, although assessments will be carried out to ensure cycle movements associated with the development will be accommodated.

## Approach and Method

### Baseline Data Collection

- 12.12 The baseline conditions will be established through an extensive data collection exercise including:
- An accessibility audit of the existing transport networks surrounding the Site;
  - Procurement of observed Manual Classified Count (MCC) and Automatic Traffic Count (ATC) data at key junctions and highway links associated with the Site;
  - A review of historic Personal Injury Accident (PIA) data for the most recent 3-year period; and
  - A review of National Census 2011 travel and car ownership characteristics data.

### Trip Generation

- 12.13 The proposed land use trip generation is informed by comparable sites in the Cambridge area, including mode shares associated with similar development characteristics. The existing vehicular trip generation for the Site will be determined from an analysis of observed data for the Site and also using the TRICS database. The trip generation methodology will be agreed with CCC during pre-application discussions.

### Scope of Methodology & Assessment

- 12.14 The main vehicular access to the Proposed Development will comprise the same as the existing situation which is the junction with Coldhams Lane. The local and wider highway network, to be agreed during pre-application discussions, will form the study network to be assessed.
- 12.15 The transport effects during the construction and operational phases will be analysed according to the trip generation and the methodology set out above. It is expected that the impact of the construction phase will also be considered in greater detail as part of a Construction Logistics Plan (CLP) and/or Construction Environmental Management Plan (CEMP).
- 12.16 Subject to confirmation of anticipated development timeframes and pre-application scoping, it is expected that the following scenarios will be considered within the ES Chapter in relation to the operational phase of the Proposed Development:
- Baseline 2022;
  - Opening Year Baseline without the Development (with committed 'cumulative' development); and
  - Opening Year with the Development (with committed 'cumulative' development).

### Inherent Mitigation and Enhancement Measures

- 12.17 The transport strategy for the Proposed Development is based on the '*Decide & Provide*' approach to assessment; this is also the method deployed by CCC in the Strategic Outline Business Case for the Eastern Corridor (A1138 Newmarket Road) proposals. The approach defines the preferred 'vision' for the strategy and establishes the necessary, committed, measures to achieve it. The approach also reinforces the road user hierarchy by ensuring walking, cycling and public transport are considered from the outset.
- 12.18 The sustainable travel strategy will be presented within the TA with the overarching aim of minimising the effect of new vehicular trips associated with the Proposed Development through a range of sustainable, deliverable, transport measures and initiatives.
- 12.19 The TA will be supported by a Travel Plan (TP) which will detail the opportunities for sustainable and active travel, as well as contain initiatives to encourage travel by these modes. The Travel Plan will also outline the health, social and economic benefits of walking and cycling.

- 12.20 It is proposed to engage with local transport operators in order to develop options for improved public transport provision to serve the Site.
- 12.21 An improved access junction will be provided at the Site access with Coldhams Lane, designed to accommodate the forecast trip generation associated with the Site alongside anticipated walking/cycling flows. The proposed junction will be designed to accommodate movements by all modes of travel, including cyclists and pedestrians.
- 12.22 In terms of the ES, the IEMA Guidance notes screening criteria of:
- Roads where traffic flow would increase by more than 30% as a consequence of a Proposed Development; or
  - Roads where traffic flows would increase by 10% and pass close to or through sensitive areas.
- 12.23 The routes to and from the Site are all considered sensitive given the Site's location relative to existing residential areas, the City Centre, its position within the Cambridge AQMA and the anticipated increase in walking and cycling movements.
- 12.24 The degree of each potentially significant effect will be considered, and an assessment will be made as to whether the Proposed Development would result in minor, moderate or major adverse impacts or would be beneficial. The criteria used to determine the significance of each of the traffic-related environmental effects will be based on the advice given in the IEMA Guidance as summarised below.
- **Changes in traffic flows:** increase and / or decrease in road traffic flows resulting from the Development, compared to the baseline conditions;
  - **Severance:** perceived division that can occur within a community when it becomes separated by a major traffic artery (e.g., road);
  - **Driver delay:** valuation of the delay (or benefit) to drivers/riders resulting from the Development;
  - **Pedestrian delay:** the change in the ability of pedestrians to cross a given highway link due to changes in traffic flow, speed, composition, highway design;
  - **Pedestrian amenity:** the relative pleasantness of a pedestrian's journey, influenced by traffic flow but also including consideration of the overall relationship between pedestrian and traffic (e.g., air quality and noise);
  - **Fear and intimidation:** linked to pedestrian amenity and influenced by factors including traffic flow, composition and pavement conditions; and
  - **Accidents and safety:** increase or decrease in risk of road traffic accident resulting from changes in traffic flows and highway layout.

## Consultation

- 12.25 To date, 12 Meetings and workshops held with Greater Cambridge Shared Planning Service over 2022, of which transport / highways was covered in more detail on 23/09/2022.
- 12.26 Extensive stakeholder consultation, including public consultation events took place on 16/06/2022 and 18/06/2022.
- 12.27 A web-based discussion took place with the Coldhams Lane Residents Association on 03/08/2022.
- 12.28 Meetings with CCC took place on 27/04/2021, 24/05/2022 and 03/11/2022 to review information and agree scope of assessment.

## 13.0 Cumulative Impacts

### Approach

- 13.1 The EIA Regulations require an ES to consider cumulative effects resulting from the ‘cumulation of effects with other existing and/or approved projects, taking into account any existing environmental problems relating to areas of particular environmental importance likely to be affected or the use of natural resources.’ Schedule 4, 5(e).
- 13.2 No cumulative impact assessment guidance methodology exists for EIA within the Town and Country Planning regime; thus, standard practice has been developed based on approaches used in other types of EIA, as well as professional experience. The proposed approach for cumulative effects draws on these resources and is set out in the following section.

### Screening of Cumulative Projects

- 13.3 The Cumulative Screening Assessment has been undertaken according to the following methodology. Firstly, existing and approved projects in line with the requirements of the EIA Regulations have been identified. Secondly, projects which are known to be in the earlier stages of planning (pre-consent) are considered. There will be less information available about non-consented projects, and consequently this will have limitations on the level of assessment that will be undertaken.
- 13.4 To assist with the identification of the cumulative projects, the following criteria have been applied:
- Development which is within a zone of influence of the Proposed Development. This zone has been set at 2km;
  - Planning applications during the last two years;
  - Development which is expected to be constructed at the same time as the Proposed Development;
  - EIA development (which is likely to have significant effects in its own right);
  - Development which introduces sensitive receptors in close proximity to the Site (acknowledging that the agent of change principle means the introducer of any sensitive receptors is responsible for assessing impacts on those receptors); and
  - Major Development and infrastructure projects which have a reasonable prospect of coming forward before or at the same time as the Proposed Development. This includes:
    - Major developments where a planning application has been submitted and information is in the public domain, but the application has not yet been determined; and

- Major development proposals currently at Scoping Stage.

13.5 Major Development is classified as development involving one or more of the following:

- The winning or working of minerals or the use of land for mineral-working deposits;
- Waste development;
- The provision of dwelling houses where:
  - The number of dwelling houses to be provided is 10 or more; or
  - The development is to be carried out on a site having an area of 0.5 hectares or more.
- The provision of a building or buildings where the floor space to be created is 1,000 square metres or more.
- Development carried out on a site having an area of 1 hectare or more.

13.6 These criteria have been used to identify applications which should be assessed for likely significant cumulative effects in conjunction with the Proposed Development. Reasons have been provided for the inclusion or exclusion of applications for this assessment in **Table 13.1**.

**Table 13.1: Results of Cumulative Impact Screening Assessment**

| PROJECT                                                                      | PLANNING REFERENCE | KEY ELEMENTS OF PROPOSAL                                                                                                                                                                                                                                                | REASONS FOR INCLUSION/EXCLUSION BASED ON CRITERIA PROVIDED ABOVE                                                                                                                                                                                                                                                                                                                                                |
|------------------------------------------------------------------------------|--------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Projects to be Included in the Cumulative Assessment</b>                  |                    |                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Land North of Cambridge North Station Milton Avenue Cambridge Cambridgeshire | 22/02771/OUT       | A hybrid planning application for:<br>a) An outline application for the construction of three new residential blocks providing for up to 425 residential units and two commercial buildings<br>b) A full application for the construction of three commercial buildings | This project is approximately 1.8km north of the Proposed Development and has not yet been granted planning permission.<br><br>If this project is granted planning permission, there may be overlap with the construction of the Proposed Development which could contribute to additional vehicles trips on the local road network. This project has therefore been included within the cumulative assessment. |
| Land North of Cherry Hinton                                                  | 18/0481/OUT        | Outline planning application for a                                                                                                                                                                                                                                      | This project is approximately 1.5km east of the Proposed                                                                                                                                                                                                                                                                                                                                                        |

| PROJECT                                                                | PLANNING REFERENCE | KEY ELEMENTS OF PROPOSAL                                                                                                                                                      | REASONS FOR INCLUSION/EXCLUSION BASED ON CRITERIA PROVIDED ABOVE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|------------------------------------------------------------------------|--------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Coldhams Lane<br>Cambridge<br>Cambridgeshire                           |                    | maximum of 1200 residential dwellings a local centre primary and secondary schools, community facilities, open spaces, allotments, landscaping and associated infrastructure. | Development and was granted outline permission in December 2020.<br><br>Reserved matters applications for the project were submitted in July and September 22/03140/REM (landscaping, layout and scale) and 22/04037/REM (show homes) respectively. Given this is a major development and 1,200 dwellings will take many years to be built, there could be some overlap in with the construction of the Proposed Development which could contribute to additional vehicles trips on the local road network. This project has therefore been included within the cumulative assessment. |
| <b>Projects to be Excluded from the Cumulative Assessment</b>          |                    |                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Development Land At 75<br>Cromwell Road<br>Cambridge<br>Cambridgeshire | 19/0288/FUL        | Erection of 295 dwellings                                                                                                                                                     | This project is approximately 160m east of the Proposed Development and was granted permission in October 2019. This project is already under construction and given the application for the Proposed Development is for an outline application, there is unlikely to be an overlap in the construction works. This project has therefore been excluded from the cumulative assessment.                                                                                                                                                                                                |
| Land South of<br>Coldhams Lane<br>Cambridge<br>Cambridgeshire          | 21/05476/FUL       | Hybrid planning application comprising: For Parcel A: outline application for development of 31,400sqm (GEA) of commercial floorspace, For                                    | This project is approximately 1km southeast of the Proposed Development. The project was submitted in December 2021 but not yet been granted planning permission. Given the application for this project is a full application, there are                                                                                                                                                                                                                                                                                                                                              |

| PROJECT                                                                         | PLANNING REFERENCE | KEY ELEMENTS OF PROPOSAL                                                                                                                                                                                                                                                                   | REASONS FOR INCLUSION/EXCLUSION BASED ON CRITERIA PROVIDED ABOVE                                                                                                                                                                                                                                                                                                                          |
|---------------------------------------------------------------------------------|--------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                 |                    | Parcel B: full application for ecological enhancements through habitat creation and management with restricted public access; For Parcel C (the Lakes): full application for the opening of the Site to public access for passive recreation, alongside delivering ecological enhancements | unlikely to be any overlap in the timing of construction works, therefore this project has been scoped out of the cumulative assessment.                                                                                                                                                                                                                                                  |
| Devonshire Gardens<br>Devonshire Road<br>Cambridge<br>Cambridgeshire<br>CB1 2BJ | 22/01982/FUL       | Demolition of existing depot building and redevelopment of site to provide three new buildings comprising Class E, two new residential buildings comprising 70 residential units.                                                                                                          | This project is approximately 630m south of the Proposed Development. This project was submitted in April 2022 and was granted planning permission in August 2022. Given this project is a full planning application, there is unlikely to be any overlap in construction timings with the Proposed Development. This project has therefore been scoped out of the cumulative assessment. |
| Mill Road Depot<br>Mill Road<br>Cambridge CB1 2AZ                               | 17/2245/FUL        | Erection of 182 dwellings                                                                                                                                                                                                                                                                  | This project is approximately 300m south of the Proposed Development.<br><br>The project is almost fully constructed, therefore there will not be any overlap in the timing of construction with this project and the Proposed Development. This project has therefore been excluded from the cumulative assessment.                                                                      |
| 10A Cheddars Lane Cambridge                                                     | 22/01825/FUL       | Proposed new office building of                                                                                                                                                                                                                                                            | This project is approximately 430m north of the Proposed                                                                                                                                                                                                                                                                                                                                  |

| PROJECT                                                                                    | PLANNING REFERENCE | KEY ELEMENTS OF PROPOSAL                                                                                                                                                                                                                                                   | REASONS FOR INCLUSION/EXCLUSION BASED ON CRITERIA PROVIDED ABOVE                                                                                                                                                                                                                                                                                                                                                                       |
|--------------------------------------------------------------------------------------------|--------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Cambridgeshire<br>CB5 8LD                                                                  |                    | approximately 2,971sq.m in floor area and is split across a maximum of three stories with a roof plant level.                                                                                                                                                              | Development. The application for this project was submitted in April 2022 but has not yet been granted planning permission.<br><br>Given the application for this project is a full application, there is unlikely to be any overlap in construction timings with the Proposed Development. This project has therefore been scoped out of the cumulative assessment.                                                                   |
| Blocks B2 & F2,<br>Devonshire<br>Quarter<br>Devonshire Road<br>Cambridge<br>Cambridgeshire | 21/00264/FUL       | Erection of two new buildings comprising Class E(g)i/E(g)ii floorspace                                                                                                                                                                                                     | This project is located approximately 1.13km from the Proposed Development and was granted planning permission in April 2022. Given the distance of this project from the Proposed Development and that the application for the Proposed Development is only at outline stage, there are unlikely to be any cumulative effects with the Proposed Development. This project has therefore been scoped out of the cumulative assessment. |
| 104 - 112 Hills<br>Road Cambridge<br>Cambridgeshire                                        | 20/03429/FUL       | The demolition of Betjeman House, Broadcasting House, Ortona House, Francis House, and the rear multi-storey carpark to Francis House, together with existing refuse and cycle stores; to allow for construction of two new commercial buildings of five and seven storeys | This project was determined at appeal in early 2022 and is located approximately 1.3km southwest of the Proposed Development.<br><br>Given the distance of this project from the Proposed Development and that the application for the Proposed Development is only at the outline stage, there are unlikely to be cumulative construction effects with the Proposed Development. This project has therefore been                      |

| PROJECT                                                                   | PLANNING REFERENCE | KEY ELEMENTS OF PROPOSAL                                                                                                                                               | REASONS FOR INCLUSION/EXCLUSION BASED ON CRITERIA PROVIDED ABOVE                                                                                                                                                                                                                                                                           |
|---------------------------------------------------------------------------|--------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                           |                    |                                                                                                                                                                        | scoped out of the cumulative assessment.                                                                                                                                                                                                                                                                                                   |
| Lockton House<br>Clarendon Road<br>Cambridge<br>Cambridgeshire<br>CB2 8FH | 20/04826/FUL       | Demolition of Lockton House and 1&2 Brooklands Avenue and replacement with two new buildings comprising offices (Use Class E), flexible commercial space (Use Class E) | This project is approximately 1.5km southwest of the Proposed Development and was granted permission in September 2021.<br><br>Given the application for the Proposed Development is an outline application, there is unlikely to be any overlap in construction. This project has therefore been excluded from the cumulative assessment. |

## Conclusion

13.7 Projects to be considered in the Cumulative Assessment in the ES are:

- Land North of Cambridge North - 22/02771/OUT; and
- Land North of Cherry Hinton Coldhams Lane Cambridge Cambridgeshire - 18/0481/OUT.

## 14.0 Proposed Structure of the ES

- 14.1 Outlined by Schedule 4 of the Regulations, the ES will comprise three parts: The Main Report, its Technical Appendices and the Non-Technical Summary (NTS). The ES forms part of a sequence of reports that will support the planning application for the Proposed Development.
- 14.2 In recognition of the consultant team approach proposed for preparing the ES, the document will be structured on a topic basis. This is an alternative to the process approach, whereby baseline conditions are described first, then the construction and operational effects, then the mitigating measures and finally any residual effects. This approach will, however, be adopted in the presentation of each of the individual topic chapters.
- 14.3 After the initial context setting sections, each topic chapter will approach the assessment by following a consistent structure, which is generally as follows:

### Introduction

- 14.4 The introduction provides a brief summary of the topic to be addressed.

### Assessment Methodology

- 14.5 This section will outline the methods used to undertake the assessment of the environmental effects for the particular topic area. Reference will be made to the data sources used and the relevant standards, guidelines and best practice. Sensitive receptors and significance criteria are also identified.

### Baseline Conditions

- 14.6 The assessment of baseline conditions is fundamental to the EIA process; environmental effects are measured by the degree of deviation from the baseline. In addition, this section will cover how the baseline environment would otherwise evolve without the Proposed Development. The detailed studies and surveys that inform the baseline will be included in the Technical Appendices.

### Predicted Impacts (and their Evaluation)

- 14.7 This will address the nature, extent and magnitude of any potential effects, as a consequence of the Proposed development, both during the construction phases and once the development is complete, operational and occupied.
- 14.8 Where possible, estimation of impacts will be in measurable quantities with ranges and/or confidence limits, as appropriate.
- 14.9 Where potential environmental effects are identified, this section will outline:

- The source and/or cause of the effect(s);
- The receptor(s) of the effect;
- The way in which the effect is transmitted from the source to receptor; and
- Potential consequences.

14.10 The significance of predicted impacts will be assessed and categorised as follows:

- Major, minor or no significance;
- Adverse, beneficial;
- Short, medium or long term;
- Permanent or temporary;
- Reversible or irreversible;
- Direct or indirect; and
- Unavoidable or uncertain.

## **Mitigation and Monitoring**

14.11 This section will detail the scope for mitigation of any adverse effects and the effectiveness of the mitigating measures, along with any monitoring of the suggested mitigation measures, if necessary.

## **Residual Impacts**

14.12 This section will evaluate the significance of any unavoidable or residual impacts that remain after the mitigation measures. Monitoring of residual impacts, if necessary, is also addressed.

## **Summary and Conclusions**

14.13 A table to summarise the impacts will be provided in this section.

14.14 The EIA will be compiled into an ES, which will be produced in accordance with the EIA Regulations.

14.15 The ES will comprise the following chapters:

- Volume 1: Main Report

- Chapter 1 Introduction
- Chapter 2 Methodology
- Chapter 3 Site Context
- Chapter 4 Description of the Proposed Development (including assessment of alternatives)
- Chapter 5 Planning Policy Context
- Chapter 6 Air Quality
- Chapter 7 Cultural Heritage
- Chapter 8 Flood Risk and Drainage
- Chapter 9 Ground Conditions and Contamination
- Chapter 10 Townscape and Visual
- Chapter 11 Noise and Vibration
- Chapter 12 Socioeconomics
- Chapter 13 Transport
- Chapter 14 Cumulative Effects
- Chapter 15 Summary of Effects
- Volume 2: Technical Appendices
- Volume 3: ES Non-Technical Summary

## References

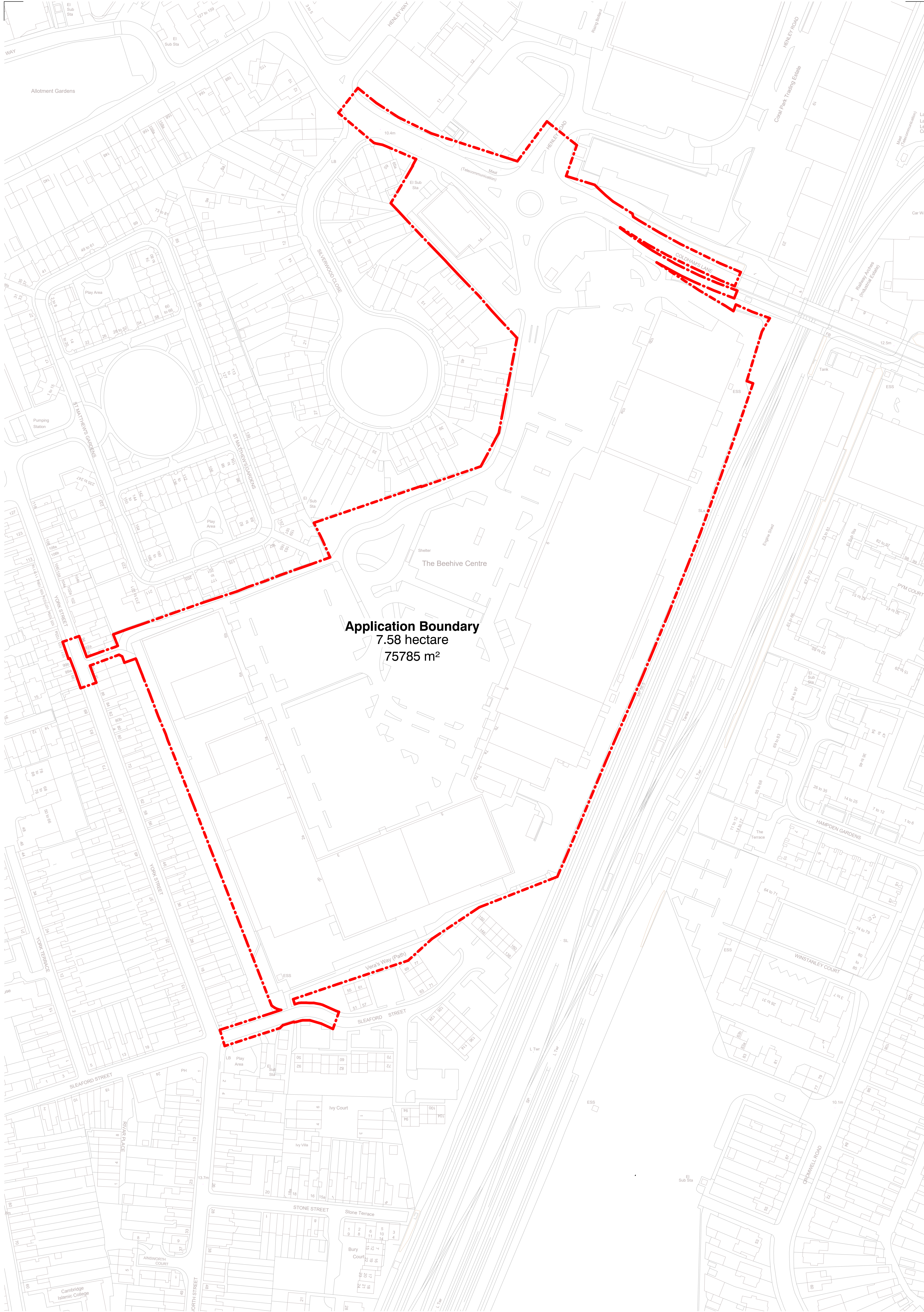
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- Cambridge Landscape Character Assessment (April 2003).
- Cambridge Local Plan (October 2018).
- Department for Levelling Up, Housing and Communities and Ministry of Housing, Communities & Local Government (2021) National Planning Practice Guidance.
- Department for Transport (2020) Cycle infrastructure design (LTN 1/20).
- Department for Transport and Ministry of Housing, Communities & Local Government, Manual for Streets (2007).
- DfE, 2022. Edubase - Establishment Data.
- 'Guidelines for Landscape and Visual Impact Assessment', (GLVIA3) produced by the Landscape Institute with the Institute of Environmental Management and Assessment (Third Edition, 2013).
- HCA, 2014. Additionality Guide Forth Edition 2014.
- HCA, 2015. Employment Density Guide Third Edition.
- Institute of Environmental Management & Assessment (2004) 'Guidelines for the Environmental Assessment of Road Traffic.
- Mill Road Area, Conservation Area Appraisal (June 2011).
- Ministry of Housing, Communities & Local Government (2021) National Planning Policy Framework.
- National Highways Design Manual for Roads and Bridges (DMRB).
- National Planning Policy Framework (February 2019).
- Natural England, National Landscape Character profiles.

- NPPF, 2021. National Planning Policy Framework.
- Residential Visual Amenity Assessment' (RVAA), Technical Guidance Note 2/19, by the Landscape Institute (15 March 2019).
- Tall Buildings' Historic England Advice Note 4, by Historic England (December 2015 and 2<sup>nd</sup> edition March 2022).
- Townscape Character Assessment', Technical Information Note 05/2017, by the Landscape Institute (5 December 2017).
- Visual Representation of Development Proposals'. Technical Guidance Note 06/19, by the Landscape Institute (17 September 2019).

APPENDIX 1

PARAMETER PLANS

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**Application Boundary**  
7.58 hectare  
75785 m<sup>2</sup>

**Boundaries**  
--- Application Boundary

Dimensions to be verified on site.  
Use figured dimensions only. Do not work from reduced scale drawings.  
Please refer to scale and sheet size as indicated.  
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| 1                                                                                                                                                                                           | 17.10.22 | EIA Scoping Issue | LK | ME      |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-------------------|----|---------|
| Rev.                                                                                                                                                                                        | Date     | Revision          | By | Checked |
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| <b>Client</b><br><b>RAILPEN</b> <b>RIDGELIFT</b><br>Development Management                                                                                                                  |          |                   |    |         |

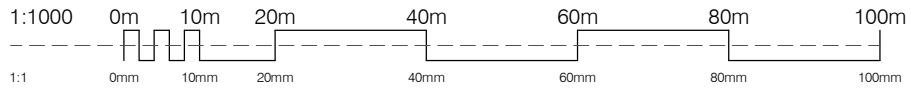
**Project**  
The Beehive, Cambridge

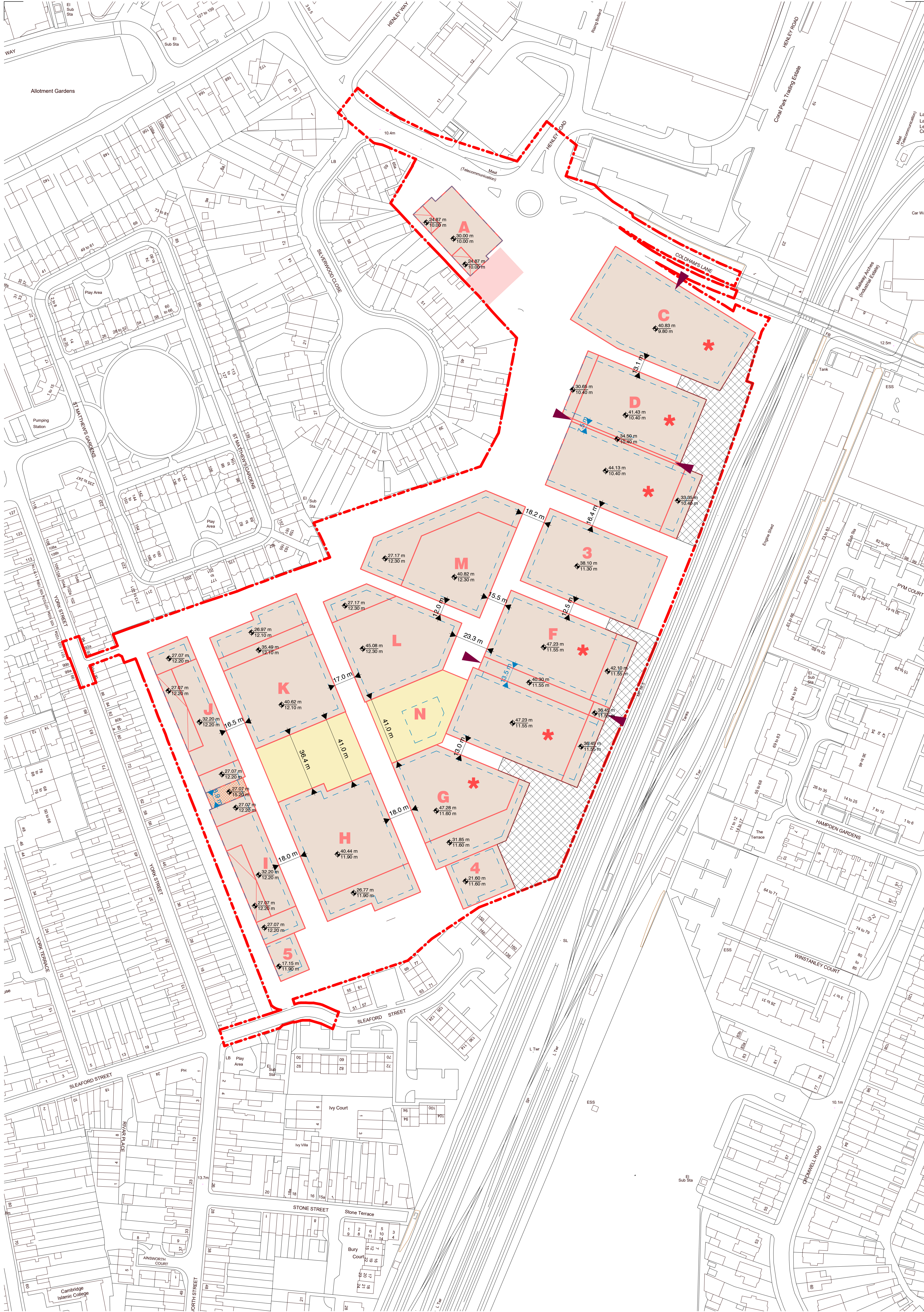
**Drawing Title**  
Red Line Boundary

|                                                               |                           |
|---------------------------------------------------------------|---------------------------|
| <b>Project Number</b><br>1004                                 | <b>Suitability</b><br>ME  |
| <b>Drawn by</b><br>LK                                         | <b>Checked by</b><br>ME   |
| <b>Scale @A1</b><br>1 : 1000                                  | <b>Date</b><br>17/10/2022 |
| <b>File Identifier</b><br>PO - LDA - ZZ - XX - DR - A - 08000 | <b>Revision</b><br>1      |

**Purpose of Issue**  
EIA Scoping

**Project Status**  
PRELIMINARY





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### Maximum Percentage Plot Coverage

| Plot | Percentage |
|------|------------|
| A    | 100%       |
| C    | 85%        |
| D    | 90%        |
| F    | 85%        |
| G    | 85%        |
| H    | 85%        |
| I    | 90%        |
| J    | 90%        |
| K    | 85%        |
| L    | 85%        |
| M    | 85%        |

**Boundaries**

--- Application Boundary

**Building Plots**

Maximum building plot

--- Illustrative building footprint

Recessed break in primary facade line. Refer to individual building design codes for conditions.

Zone for storey pavilion building(s). Maximum height of 11.0m above local ground floor area, up to two stories. Maximum combined total ground floor (GEA) of 450m<sup>2</sup> across all highlighted areas.

**Building Heights**

Top AOD  
Base AOD

Maximum building height

Top: AOD measured at parapet level and includes rooftop plant and PV but excludes any fume extract flues. Base: AOD of primary ground floor level of the building

Sloped parameter height zone. Slope runs in direction of arrow

Top: to match adjoining maximum height parameter  
Base: as annotated within the sloped parameter zone

**Separation Between Buildings**

Minimum separation between buildings

Minimum separation between building elements

**Flues**

Location for fume extract flues: to be located anywhere within the marked parameter height zone

Maximum height of flues to be an additional 25% of the host building as measured from ground floor to its highest point

No. of flues at each location to be determined at reserved matters applications

A maximum of 4 of the 6 proposed flue locations may be used

**Other**

Principal zone for supporting service structures including bulk bottled gas storage and primary electrical substations. Additional supporting infrastructure may be provided through reserved matters applications

Zone for linking element between buildings above ground floor. No enclosed building elements permitted below 1st floor

Zone for single storey covered cycle parking structures.

Plot identifier

| 2         | 25.10.22 | EIA Scoping Reissue - Amended | LK      | ME |
|-----------|----------|-------------------------------|---------|----|
| 1         | 17.10.22 | EIA Scoping Issue             | LK      | ME |
| Rev. Date | Revision | By                            | Checked |    |

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**Client**  
**RAILPEN** **RIDGELIFT**  
DEVELOPMENT MANAGEMENT

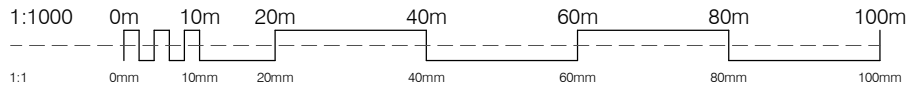
**Project**  
**The Beehive, Cambridge**

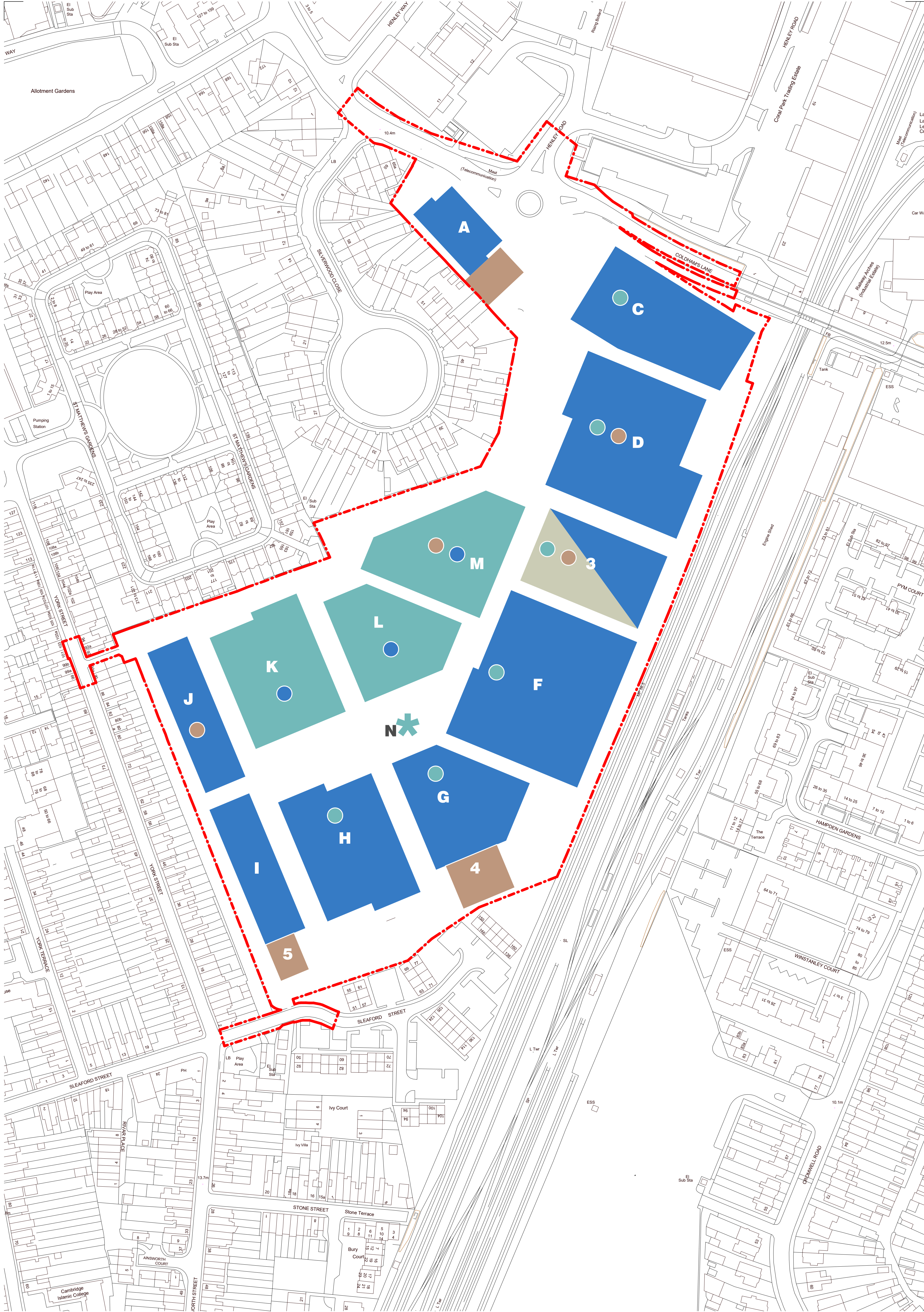
### Drawing Title Maximum Building Heights & Plots

|                                     |             |
|-------------------------------------|-------------|
| Project Number                      | Suitability |
| 1004                                |             |
| Drawn by                            | Checked by  |
| LK                                  | ME          |
| Scale @A1                           | Date        |
| 1 : 1000                            | 17/10/2022  |
| File Identifier                     | Revision    |
| PO - LDA - ZZ - XX - DR - A - 08001 | 2           |

**Purpose of Issue**  
**EIA Scoping**

**Project Status**  
**PRELIMINARY**





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**Boundaries**  
--- Application Boundary

**Primary uses**  
Workplace: E(g)(i), E(g)(ii)  
Mixed Use: E(a-f), F1(b-f), F2(b, d)  
Cycle Parking: Suis Generis  
Car Parking: Suis Generis

**Secondary uses**  
Workplace: E(g)(i), E(g)(ii)  
Mixed Use: E(a-f), F2(a, b, d)  
Cycle Parking: Suis Generis  
Car Parking: Suis Generis

**Other**  
Pavilion building: To be Mixed Use: E(a-f), F2(a, b, d). For limits on size and location, refer to Plot N pavilion zone as defined on the Maximum Building Heights and Plots rameter plan.

Notes:

A use is classed as primary if it occupies more than 50% of the useable floorspace of an individual floor.

A use is classed as secondary if it occupies less than 50% of the useable floorspace of an individual floor.

Basement provision for ancilliary cycle parking and supporting building infrastructure to be determined at reserved matters applications.

Car Parking may also be provided at basement level with location and access to be determined at reserved matters applications.

Should Plot 3 be brought forward for Workplace use, car parking may be provided in a single location at basement level with location and access to be determined at reserved matters applications.

1 17.10.22 EIA Scoping Issue LK ME  
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**Client**  
**RAILPEN** **RIDGELIFT**  
PROPERTY MANAGEMENT

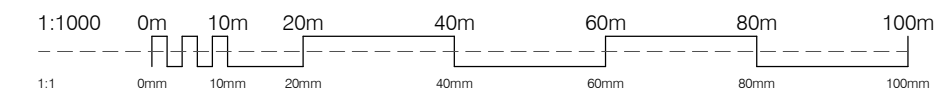
**Project**  
**The Beehive, Cambridge**

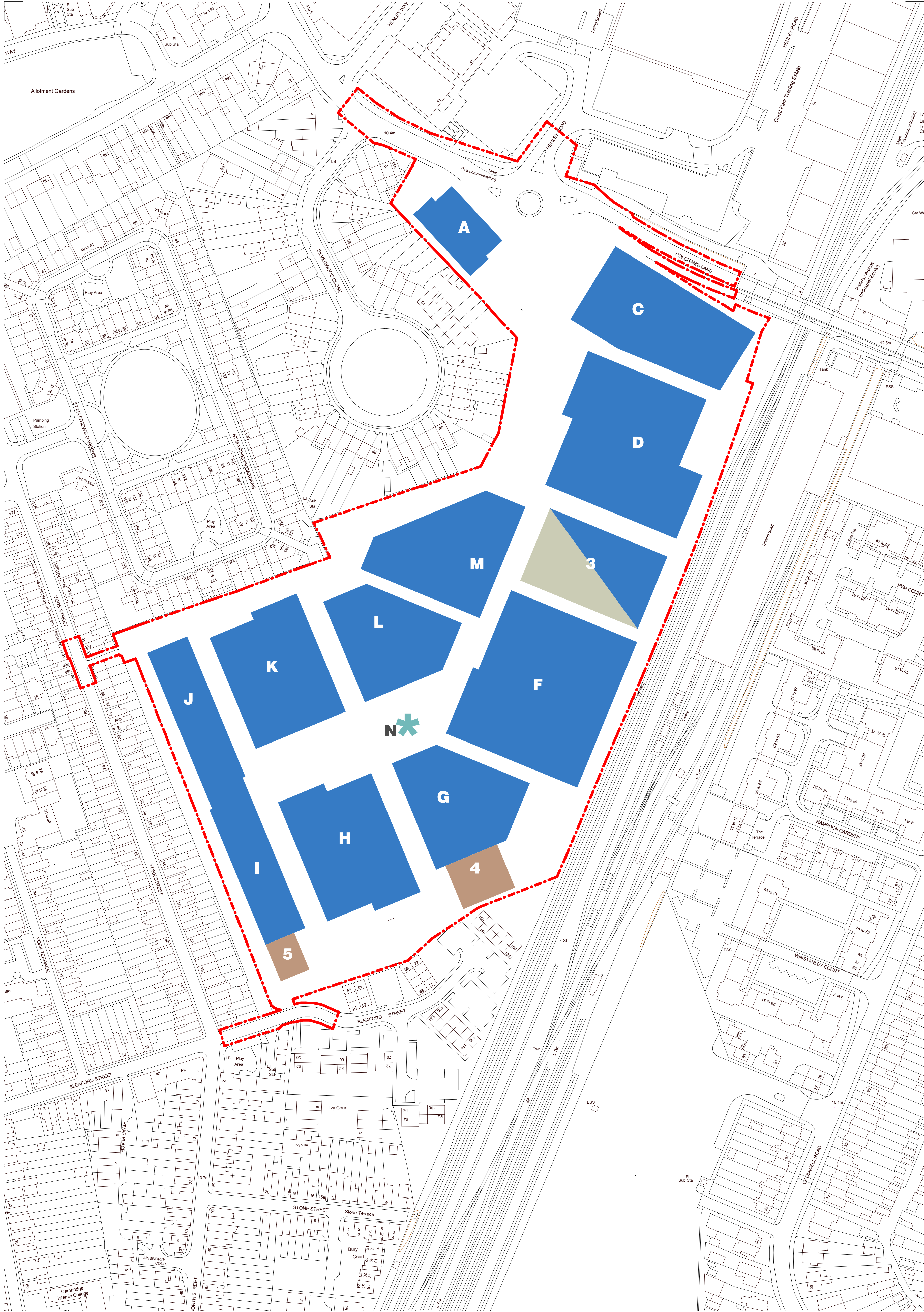
**Drawing Title**  
**Land Use - Ground Floor**

|                                     |             |
|-------------------------------------|-------------|
| Project Number                      | Suitability |
| 1004                                |             |
| Drawn by                            | Checked by  |
| LK                                  | ME          |
| Scale @A1                           | Date        |
| 1 : 1000                            | 17/10/2022  |
| File Identifier                     | Revision    |
| PO - LDA - ZZ - XX - DR - A - 08002 | 1           |

**Purpose of Issue**  
**EIA Scoping**

**Project Status**  
**PRELIMINARY**





**Boundaries**  
--- Application Boundary

- Primary uses**
- Workplace: E(g)(i), E(g)(ii)
  - Mixed Use: E(a-f), F1(b-f), F2(b, d)
  - Cycle Parking: Suis Generis
  - Car Parking: Suis Generis

- Secondary uses**
- Workplace: E(g)(i), E(g)(ii)
  - Mixed Use: E(a-f), F2(a, b, d)
  - Cycle Parking: Suis Generis
  - Car Parking: Suis Generis

**Other**

Pavilion building: To be Mixed Use: E(a-f), F2(a, b, d). For limits on size and location, refer to Plot N pavilion zone as defined on the Maximum Building Heights and Plots rameter plan.

Notes:

A use is classed as primary if it occupies more than 50% of the useable floorspace of an individual floor.

Should Plot 3 be brought forward for Workplace use, car parking may be provided in a single location at basement level with location and access to be determined at reserved matters applications.

Provision for roof terraces and plant areas to be determined at reserved matters applications.

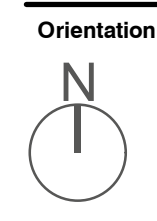
A use is classed as secondary if it occupies less than 50% of the useable floorspace of an individual floor.

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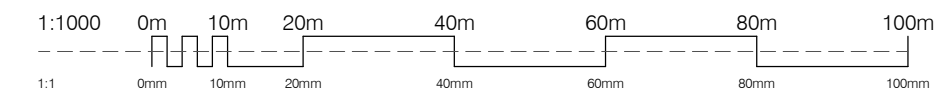
**Client**  
**RAILPEN** **RIDGELIFT**

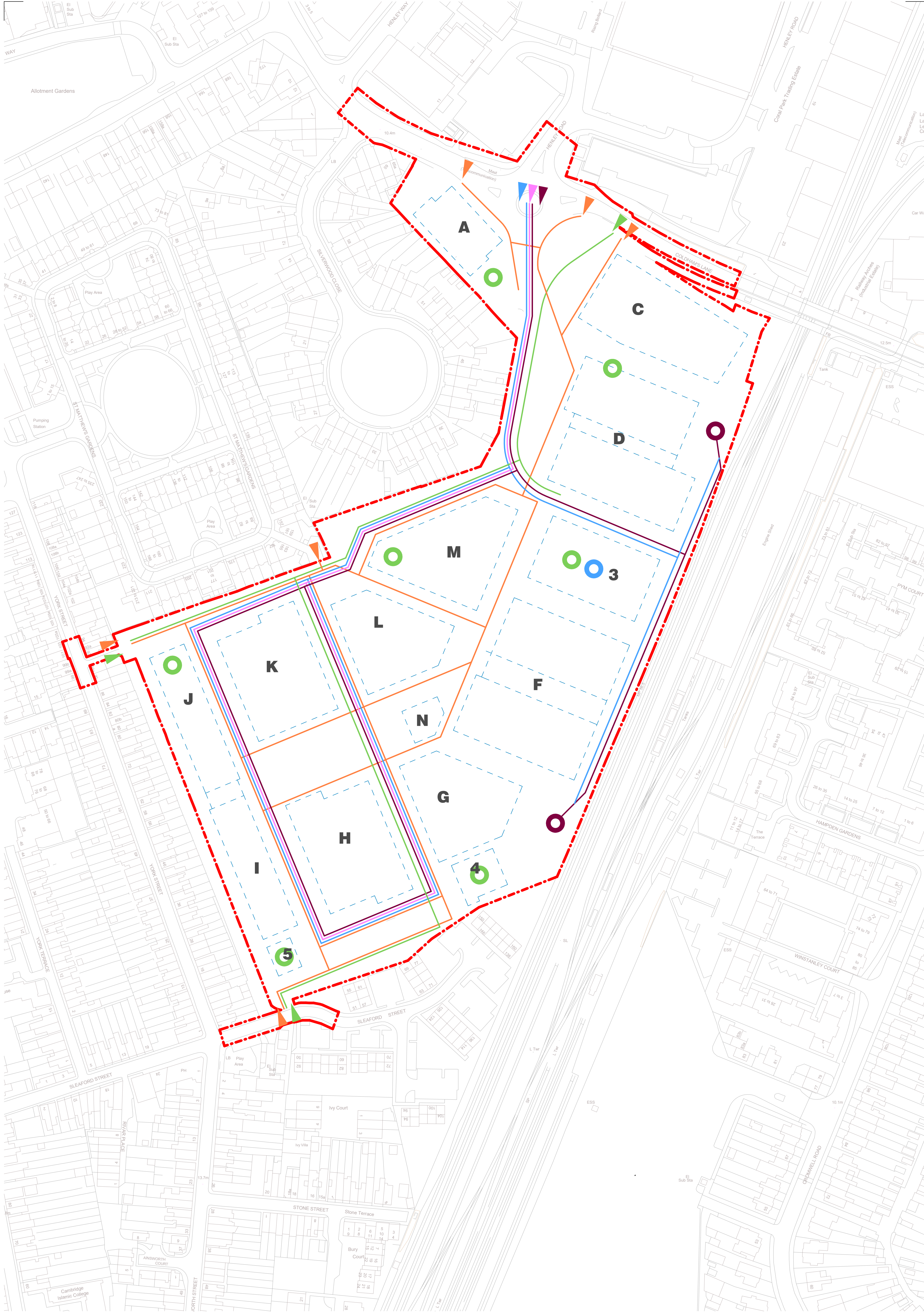
**Project**  
The Beehive, Cambridge

|                                     |             |
|-------------------------------------|-------------|
| Drawing Title                       |             |
| Land Use - Upper Floors             |             |
| Project Number                      | Suitability |
| 1004                                |             |
| Drawn by                            | Checked by  |
| LK                                  | ME          |
| Scale @A1                           | Date        |
| 1 : 1000                            | 17/10/2022  |
| File Identifier                     | Revision    |
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**Purpose of Issue**  
Pre-App

**Project Status**  
PRELIMINARY





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- Boundaries**
- Application Boundary
- Entrances**
- Pedestrian Entrance
  - Cyclist Entrance
  - Private Vehicle Entrance
  - Bus Entrance
  - Service Entrance

- Routes**
- Main Pedestrian Route
  - Main Cyclist Route
  - Main Private Vehicle Route
  - Main Bus Route
  - Main Service Vehicle Route
- Building Footprints**
- Illustrative Building Footprint

- Parking and Service Areas**
- Multi-Storey Car Park
  - Primary Cycle Parking
  - Service Yard

Notes:

Only the proposed framework of routes is presented, not their precise alignment

Additional routes may be proposed at reserved matters

Strategic cycle parking indicates only approximate locations

Minor service provision to be provided as part of reserved matters applications for individual buildings

Additional cycle parking locations (e.g sheffield hoops) to provided externally across the site

Should Plot 3 be brought forward for Workplace use, car parking may be provided in a single location at basement level with location and access to be determined at reserved matters applications.

Accessible car parking bays and roadside drop-off and service bays to be provided adjacent to buildings as required

Illustrative building footprints are subject to the parameters laid out on the Maximum 'Building Heights and Plots' parameter plan

| 1                                                                                                                                                                                           | 17.10.22 | EIA Scoping Issue | LK | ME      |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-------------------|----|---------|
| Rev. Date                                                                                                                                                                                   | Revision |                   | By | Checked |
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| <b>Client</b><br><b>RAILPEN</b> <b>RIDGELIFT</b>                                                                                                                                            |          |                   |    |         |
| <b>Project</b><br>The Beehive, Cambridge                                                                                                                                                    |          |                   |    |         |

Drawing Title  
Access and Circulation

|                                                        |                    |
|--------------------------------------------------------|--------------------|
| Project Number<br>1004                                 | Suitability<br>ME  |
| Drawn by<br>LK                                         | Checked by<br>ME   |
| Scale @A1<br>1 : 1000                                  | Date<br>17/10/2022 |
| File Identifier<br>PO - LDA - ZZ - XX - DR - A - 08004 | Revision<br>1      |

Purpose of Issue  
EIA Scoping

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**Boundaries**

--- Application Boundary

**Landscape Zones**

**Publicly Accessible Green Areas:**  
Areas characterised by soft landscape supported by areas of hard landscape and pedestrian and cycle routes

**Publicly Accessible Hard Landscape Areas**  
Areas characterised by hard landscape supported by incidental green space planting and pedestrian routes

**Green Planting Areas**  
Areas characterised by soft landscape and tree planting with little or no direct public access

**Streetscape Areas**  
Areas characterised by hard landscape to support pedestrian, cycle and vehicle movement supported by incidental green space planting

**Private Service or Access Areas**  
Areas characterised by hard landscape to support the functional requirements of neighbouring buildings

**Building Footprints**

--- Illustrative Building Footprint

**Notes:**

Final design of the landscape is subject to reserved matters applications

Please refer to drawing 08001 for parameters relating to building footprints

Illustrative building footprints are subject to the parameters laid out on '08001 - Maximum Building Heights and Plots

| 1    | 17.10.22 | EIA Scoping Issue | LK | ME      |
|------|----------|-------------------|----|---------|
| Rev. | Date     | Revision          | By | Checked |

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|---------------|----------------|------------------|

**Project**  
The Beehive, Cambridge

|                                     |                                 |
|-------------------------------------|---------------------------------|
| <b>Drawing Title</b>                | <b>Landscape and Open Space</b> |
| <b>Project Number</b>               | <b>Suitability</b>              |
| 1004                                | 1004                            |
| <b>Drawn by</b>                     | <b>Checked by</b>               |
| LK                                  | ME                              |
| <b>Scale @A1</b>                    | <b>Date</b>                     |
| 1 : 1000                            | 17/10/2022                      |
| <b>File Identifier</b>              | <b>Revision</b>                 |
| PO - LDA - ZZ - XX - DR - A - 08005 | 1                               |

**Purpose of Issue**  
EIA Scoping

**Project Status**  
PRELIMINARY

APPENDIX 2

**TVIA BASELINE ASSESSMENT REPORT**

---

**PROJECT OTTER  
TOWNSCAPE AND  
VISUAL IMPACT  
ASSESSMENT  
PRE – APPLICATION  
BASELINE**

---

## Quality Assurance

Site name: The Beehive Centre, Coldhams Lane, Cambridge

Client name: Railway Pension Nominees Limited

Type of report: Townscape & Visual Impact Assessment Pre-Application Baseline

| Date:      | Status: | Prepared by:                      | Reviewed by:                          |
|------------|---------|-----------------------------------|---------------------------------------|
| 08.12.2020 | Issue   | Joshua Geale<br>BA (Hons) MA      | Martina Sechi<br>BSc Be MALA CMLI     |
| 31.03.2022 | Rev A   | Martina Sechi<br>BSc Be MALA CMLI | Chris Surfleet<br>MA MSc PGDipUD IHBC |
| 24.10.2022 | Rev B   | Martina Sechi<br>BSc Be MALA CMLI | Chris Surfleet<br>MA MSc PGDipUD IHBC |



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## 1.0 Introduction

Bidwells has been commissioned to undertake an assessment of the potential townscape and visual effects arising from the proposed development of site of the Beehive Centre, Coldhams Lane, Cambridge (the Site). The Townscape and Visual Impact Assessment (TVIA) will form part of the Environmental Statement (ES) submitted to Cambridge City Council (CCC).

The purpose of this document is to set up the TVIA methodology and the baseline that will be considered. In addition, a list of the townscape/landscape and visual receptors that will be the subject of the TVIA are presented.

### 1.1 The Site Location

The Site is located east of the city centre, along the west side of the rail line that heads north out of Cambridge Station. The Site is accessed via Coldhams Lane which forms the northern Site boundary and connects to Newmarket Road which is a main vehicular route into the city, whilst to the east the road leads to Coldham's Common, one of Cambridge's key open green spaces. The Site is roughly 10 minutes' cycle and 25 minutes' walk from the city centre.

The Site, known as the Beehive Centre, is part of a wider extent of retail development which stretches north from here along Newmarket Road and the train line. To the south west, the Site is bordered by 19<sup>th</sup> terrace housing Century which forms part of the Mill Road conservation area. To the north west and directly south are some mid and late 20<sup>th</sup> Century housing estates.

### 1.2 The Proposal

The development proposal consists of new commercial uses including labs, offices and a car barn. A central green spine provides the public real framework for the new buildings, which sits around the public space.

The building heights vary, with the taller elements located along the railway line and drop towards the west and south boundary where the contextual low-lying residential terraces are located. The proposed massing steps down towards the railway line as well, although less prominently.

Although the proposed development is the result of initial iterative process with the TVIA, it is acknowledged that the design is not yet fixed and further iteration could occur. The following baseline and assumptions on the townscape and visual effects are based on the current proposal and will be appropriately updated once the scheme is fixed.

## 2.0 Appraisal Methodology

The appraisal accords with the current best practice guidance, namely:

- ‘Guidelines for Landscape and Visual Impact Assessment’, (GLVIA3) produced by the Landscape Institute with the Institute of Environmental Management and Assessment (Third Edition, 2013);
- ‘Visual Representation of Development Proposals’. Technical Guidance Note 06/19, by the Landscape Institute (17 September 2019);
- ‘Townscape Character Assessment’, Technical Information Note 05/2017, by the Landscape Institute (5 December 2017);
- ‘Tall Buildings’, Historic England Advice Note 4, by Historic England (December 2015 and 2<sup>nd</sup> edition March 2022); and
- Policy 60 and Appendix F, Cambridge Local Plan (2018).

Given the proximity of residential properties, the following guidance has also been considered:

- ‘Residential Visual Amenity Assessment’ (RVAA), Technical Guidance Note 2/19, by the Landscape Institute (15 March 2019).

In response to the particular urban nature of the Site context this assessment refers to townscape impacts, rather than purely landscape impact. The GLVIA3 defines townscape as *‘the landscape within the built-up area, including the buildings and the relationship between them, the different type of urban spaces, including green spaces, and the relationship between buildings and open spaces’*. It also stresses the importance to consider the historic evolution of landscape and townscape to reveal how villages, towns and cities change over time to reach their current character.

It should, therefore, be noted that for the purposes of this assessment the term ‘townscape’ is used to encompass all the urban and landscape characteristic of the Site and its context. It incorporates the meaning and role of the general concept of ‘landscape’ used within the GLVIA3.

In accordance with the GLVIA3 approach to assessment there are differences between townscape and visual impact of the development which will result in certain effects:

**Townscape Effects** relate to changes in the fabric, character and quality of the urban landscape. These include direct impacts such as loss of vegetation and additional built form, or indirect impacts such as changes to tranquilly. Townscape effects do not need to be visible.

**Visual Effects** relate to specific changes in views and the effects on visual receptors (e.g. users of public rights of way or recreational facilities). Changes to the visual setting of protected cultural heritage features are also considered (e.g. Scheduled Monuments, Listed Buildings and Conservation Areas).

A detailed methodology of how the appraisal of the above elements are applied can be found in Appendix 1. Generally, townscape or visual effects are considered significant if:

- They result in a major loss of or irreversible negative effect over an extensive area, and/or a valuable feature, and/or a sensitive receptor; and
- The quality of change is of such scale and nature to cause a major and unacceptable mutation of the distinctive characteristics and value of the receptor (i.e. a non-characteristic, discordant or intrusive element).

Finally, due to the outline nature of the application a Year 15 scenario is not considered as the parameter plan will not include sufficient details to adequately inform the assessment of the impact of mature planting on the identified effects. However, the allocation of strategic open space or landscape areas will be considered where relevant and appropriate.

## 2.1 Study Area

Initial baseline investigations noted that the Site is located within the dense urban fabric of Cambridge suburbs, which surrounds the existing retail centre. The proposal is similar in nature to the existing commercial use and introduces a coherent townscape character to the baseline condition. It is therefore considered that 1km radius would be appropriate to the assessment of the relevant townscape effects. The study area would also include local townscape designations that are of particular relevance to the TVIA, such as Mill Road Conservation Area, including Registered Parks and Gardens, and the public open space and Green Belt area at Coldham's Common.

On the other hand, in terms of visual effects, it is noted that the Site is relatively enclosed by built form with residential development around the entirety of the southern and western Site boundaries. To the north, large scale retail premises and the location of the vehicular bridge crossing the rail line restrict views into the Site from the Newmarket Road area. Nevertheless, it is envisaged that the visibility of the proposed buildings, due to their considerable heights, might encompass an envelope beyond the 1km to include critical views listed in the Local Plan documents. Although any significant visual impact is likely to concentrate within the 1km radius, views beyond such area will be considered to inform the extent of the study area for the visual effects.

## 2.2 Desk-Based Study

A desk-study is undertaken to identify planning policy and designations relevant to the assessment of landscape and visual effects, this will include:

- Ordnance Survey 1:10,000 scale Application Site-centred digital raster map;
- National Planning Policy Framework (February 2019);
- Cambridge Local Plan (October 2018);
- Adopted Cambridge Policies Map (October 2018);
- Mill Road Area, Conservation Area Appraisal (June 2011);
- Natural England, National Landscape Character profiles;
- Cambridge Landscape Character Assessment (April 2003);
- Multi-Agency Geographic Information for the Countryside (MAGIC): Web-based interactive GIS mapping site ([www.magic.gov.uk](http://www.magic.gov.uk)); and
- Aerial photography: Google Maps (<http://maps.google.co.uk>).

## 2.3 Field Study

A field survey was undertaken the 24<sup>th</sup> and 25<sup>th</sup> of November 2020 to:

- Familiarise with the surrounding landscape/townscape characteristics of the Site and its context; and
- Define the location of visual receptors and representative viewpoints.

The surveys were generally undertaken from roads, bridleways, tracks, footpaths and publicly accessible viewpoints within 2 km of the Site. A second site visit will be undertaken following the pre-application response to complete the photographic survey based on any Local Authority comments.

## 3.0 Planning Policy Context

### 3.1 National Planning Policy Framework (NPPF)

The National Planning Policy Framework 2019 (NPPF) sets out the overall economic, social and environmental objectives that the planning system should follow to achieve sustainable development. At the heart of the NPPF is a *'presumption in favour of sustainable development'* (Para. 11).

The NPPF stresses the concept of good design as a key aspect of sustainable development, it *'creates better places in which to live and work and helps make development acceptable to communities'* (Para. 124). Furthermore, the policy states that development must (Par. 127):

- be *'sympathetic to local character and history, including the surrounding built environment and landscape setting, while not preventing or discouraging appropriate innovation or change (such as increased densities)'*; and
- *'establish or maintain a strong sense of place, using the arrangement of streets, spaces, building types and materials to create attractive, welcoming and distinctive places to live, work and visit'*.

Therefore, design quality and appropriateness to its surroundings is an important part of the evaluation of planning proposals. *'In determining applications, great weight should be given to outstanding or innovative designs which promote high levels of sustainability, or help raise the standard of design more generally in an area, so long as they fit in with the overall form and layout of their surroundings'* (Para. 131).

Conservation and enhancement of the natural environment are also at the heart of the NPPF objectives. Planning decisions should contribute by *'protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan)'* (Para. 170).

Valued landscapes might also be found within an urban context; however, it is noted that the NPPF does not clearly define what constitutes a 'valued landscape'. Useful in the NPPF 2019 revision is the update to Para. 11 which provides some additional guidance through footnote 6. This defines, more thoroughly than before, *'areas or assets of particular importance'* as: *'habitats sites (and those sites listed in paragraph 176) and/or designated as Sites of Special Scientific Interest; land designated as Green Belt, Local Green Space, an Area of Outstanding Natural Beauty, a National Park (or within the Broads Authority) or defined as Heritage Coast; irreplaceable habitats; designated heritage assets (and other heritage assets of archaeological interest referred to in footnote 63); and areas at risk of flooding or coastal change.'* However, for the purposes of this TVIA, it is believed that the 'Stroud DC v Gladman High Court judgement (reference CO/4082/2014) is still relevant to identify what is a 'valued landscape'; therefore, to be valued in terms of the NPPF the landscape is required to show *'some demonstrable physical attribute rather than just popularity,'* ie. it has to be 'out of the ordinary.'

### 3.2 Local Planning Policy

The **Cambridge Local Plan** (2018) forms part of the development plan for Cambridge, setting out vision and guidance for developments and land use within the city council. The following policies are relevant to the TVIA.

- Policy 55: Responding to Context

The policy states that *‘development will be supported where it is demonstrated that it responds positively to its context and has drawn inspiration from the key characteristics of its surroundings to help create distinctive and high quality places.’*

More specifically the proposal is required to fulfil the following parameters:

- *‘identify and respond positively to existing features of natural, historic or local importance on and close to the proposed development site’; and*
- *‘use appropriate local characteristics to help inform the use, siting, massing, scale, form, materials and landscape design of new development.’*

The policy aims to enhance and protect the special character of Cambridge. For this purpose, it is important to understand the proposal context including *‘land uses, open spaces, the built and natural environment and social and physical characteristics.’* The proposal is required to be appropriate to its context and *‘complement the local identity of an area.’*

- Policy 57: Designing New Buildings

This policy identifies desirable qualities for new developments, namely:

- *‘a positive impact on their setting in terms of location on the site, height, scale and form, materials and detailing, ground floor activity, wider townscape and landscape impacts and available views;’ and*
- *‘include an appropriate scale of features and facilities to maintain and increase levels of biodiversity in the built environment.’*

Once more the importance of the proposed buildings appropriateness to its context is highlighted, putting further stress on qualities such as scale, height, form, proportion and materiality.

- Policy 59: Designing Landscape and Public Realm

This policy promotes a coordinated approach to the design of the open space associated with new development to ensure *‘the design relates to the character and intended function of the spaces and surroundings buildings’*. Furthermore, the policy *‘requires existing features including trees, natural habitat, boundary treatments and historic street furniture and/or surfaces to be retained and protected’*; proposed materials are to be *‘of a high quality and respond to the context to help create local distinctiveness’*.

- Policy 60: Tall Buildings and the Skyline of Cambridge

The policy sets out criteria that should be considered to protect or enhance the character and qualities of Cambridge’s skyline, these include:

- *‘location, setting and context – applicants should demonstrate through visual assessment or appraisal with supporting accurate visual representations, how the proposals fit within the existing landscape and townscape;’*
- *‘impact on the historic environment - ... including impact on key landmarks and viewpoints, as well as from the main streets, bridges and open spaces in the city centre and from the main historic approaches, including road and river, to the historic core. Tall building proposals must ensure that the character or appearance of Cambridge, as a city of spires and towers emerging above the established tree line, remains dominant from relevant viewpoints as set out in Appendix F;’ and*
- *‘scale, massing and architectural quality – applicants should demonstrate through the use of scaled drawings, sections, accurate visual representations and models how the*

*proposals will deliver a high-quality addition to the Cambridge skyline and clearly demonstrate that there is no adverse impact.'*

The policy describes Cambridge as free form clusters of modern towers and bulky buildings, except for the hospital and airport areas, which contrast with the surrounding low-lying suburbs. Also noted is the difference between the 'background buildings' in the historic core and the suburb's built-form. The former rises between three to five storeys with occasionally, modern, six storey buildings, while the latter is largely characterised by two storey buildings with only a few areas with three storeys. *'This characteristic leads to the setting of height thresholds against which proposals will be judged in accordance with the criteria of Policy 60.'*

Policy 60 continues to say: *'Trees form an important element of the Cambridge skyline, within both the historic core and surrounding suburbs. Elevated views from the rural hinterland and from Castle Mound reveal a city of spires and towers emerging above an established tree line. Buildings therefore work with subtle changes in topography and the tree canopy to create a skyline of 'incidents', where important buildings rise above those of a prevailing lower scale.'*

Appendix F (Tall Buildings and the Skyline) provides further guidance in regard to Policy 60.

Relevant to this assessment are the following criteria listed in Appendix F:

- *'maintain the character and quality of the Cambridge skyline;'*
- *'ensure that tall buildings, as defined in this guidance, which break the established skyline are well considered and appropriate to their context;'* and
- *'support only new buildings which are appropriate to their context and contribute positively to both near and distant views.'*

Appendix F acknowledges that is the nature of the contextual townscape that defines a tall building, based on this in Cambridge a tall building is *'any structure that breaks the existing skyline and/or is significantly taller than the surrounding built form.'*

It goes on to say that within the suburbs (where the Site is located) *'buildings of four storeys and above (assuming a flat roof with no rooftop plant and a height of 13m above ground level) will automatically trigger the need to address the criteria set out within the guidance.'*

The key characteristics of Cambridge's skyline identified in Appendix F include:

- *'Trees form an important element in the modern Cambridge skyline, within both the historic core and the suburbs. Many of the elevated views of the city from the rural hinterland and from Castle Mound show a city of trees with scattered spires and towers emerging above an established tree line.'*; and
- In the suburb, the height of the building is generally lower with some three-storey Victorian and Edwardian buildings on the main approach roads.

Figure F.3 from the Cambridge Local Plan 2018 (see below) provides a list of 'Strategic Viewpoints', which include Castle Mound, Castle Hill, (32m AOD), the only vantage point affording significant panoramic views across the city, (apart from the tops of tall buildings).

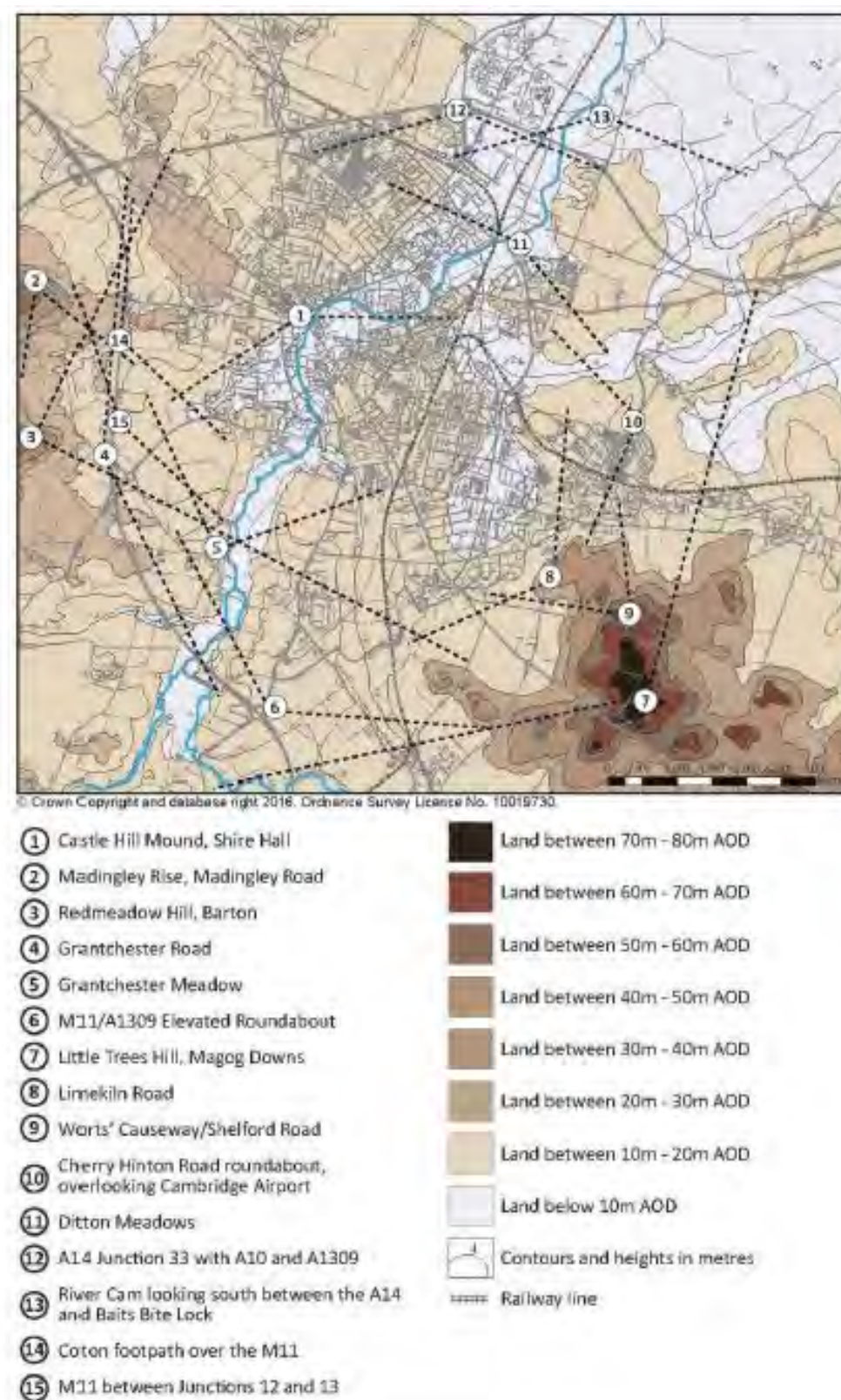


Figure 1 - Figure F3. from Cambridge Local Plan 2018

- Policy 61: Conservation and Enhancement of Cambridge's Historic Environment

This policy largely concerns the preservation of significant historic assets and the following parameters inform the assessment of townscape qualities. Proposals should:

- *'retain buildings and spaces, the loss of which would cause harm to the character or appearance of the conservation area;'* and
- *'be of an appropriate scale, form, height, massing, alignment and detailed design which will contribute to local distinctiveness, complement the built form and scale of heritage assets and respect the character, appearance and setting of the locality.'*

As the policy states, it is important to understand the qualities of Cambridge's historic environment as it *'defines the character and setting of the city, and contributes significantly to Cambridge residents' quality of life.'* Enhancing the character of the city Cambridge benefits of *'a number of registered parks and gardens of special historic interest, including college grounds, cemeteries and the Cambridge University Botanic Garden.'*

- Policy 67: Protection of Open Space

The principal aim of the policy is to prevent the loss of or cause harm to the character of open spaces. The policy places emphasis on protected open space (POS) as they *'make a significant contribution to the character of Cambridge.'*

- Policy 71: Trees

The policy is aimed at preventing the loss of trees of amenity, or other value. It highlights that existing trees and hedgerows contribute to the townscape character, including Cambridge's open spaces and streetscapes. It lists the importance of urban trees as focal points, or landmarks, providing a sense of place. According to the policy, *'trees on or affected by development sites are a material consideration in the determination of applications. They are an important facet of the townscape and landscape and the maintenance of a healthy and species diverse tree cover brings a range of benefits for health, well-being, social and microclimate.'*

## 4.0 Townscape Baseline

### 4.1 Townscape Designations

Planning designations and constraints, within 2 km of the Site, relevant to the assessment of landscape and visual effects are set out in Table 1 and shown on Map 4a in Appendix 2.

Table 1. Landscape Designations

| DESIGNATION/PROTECTION                                      | STUDY AREA STATUS                                                                                                                                                                      |
|-------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| National Park                                               | None within the study area.                                                                                                                                                            |
| Area of Outstanding Natural Beauty                          | None within the study area.                                                                                                                                                            |
| Area of High Landscape Value (or similar local designation) | None within the study area.                                                                                                                                                            |
| Green Belt                                                  | Yes, the Cambridge Greenbelt extends along Coldham's Common to the east of the Site and up to Ditton Meadows to the north.                                                             |
| World Heritage Sites                                        | None within the study area.                                                                                                                                                            |
| Scheduled Monuments                                         | Yes. The Old Cheddar's Lane pumping station is located approximately 670m north east of the Site. Other Scheduled Monuments are located at further distance from the Site, see Map 4a. |
| Conservation Area                                           | Yes, there are two Cambridge Conservation Areas covered within the Study Area, with the Site located adjacent to the Mill Road Conservation Area, see Map 4a.                          |
| Listed Buildings                                            | Yes, there is a number of Listed Buildings within the Study Area, see Map 4a.                                                                                                          |
| Registered Parks and Garden                                 | Yes, Mill Road Cemetery located approximately 275m south of the Site.                                                                                                                  |
| County Wildlife Sites                                       | Yes, Coldham's Common to the east of the Site and Mill Road Cemetery to the west.                                                                                                      |
| Local Nature Reserves                                       | Yes, Coldham's Common LNR to the east of the Site. As well as Logan's Meadow LNR 540m north west of the Site.                                                                          |
| Recreational Routes and Public Rights of Way (PRoW)         | Yes, the majority of the PRoWs are located along the River Cam and in Coldham's Common, including several Recreational Routes, see Map 1b in Appendix 2.                               |
| Tree Preservation Orders (TPO)                              | Trees in the Conservation Area have a similar protection to trees covered by a TPO.                                                                                                    |
| Flood Risk                                                  | Yes, refer to Map 9 in Appendix 2.                                                                                                                                                     |

### 4.2 Townscape Character

The assessment of landscape and townscape character is an integral part of prescribed methodology for determining landscape effects which requires a full appreciation of the components that make up the quality and value of an area. Identification of the components will also inform future mitigation measures.

In this case, the Site is located within the urban area of Cambridge, therefore it is not included in the Landscape East or The Cambridgeshire Landscape Guidelines (1991) landscape character assessments. The townscape character is, instead, very relevant to the assessment of the Site and its context.

Landscape and townscape character are considered at three levels:

- National setting, in relation to the National Character Area Profiles, produced by Natural England;
- Local townscape and landscape character taking into account the objectives of the Cambridge Landscape Character Assessment (April 2003); and
- Local Setting as observed on Site.

#### 4.3 National Landscape Character

The Site is located within the National Character Area (NCA) profile 88: Bedfordshire and Cambridgeshire Claylands. This is a *'broad, gently undulating, lowland plateau dissected by shallow river valleys that gradually widen as they approach The Fens NCA.'* Generally the NCA is sparsely populated with settlements, such as Cambridge, located within the river valleys. *'A feeling of urbanisation is brought by numerous large towns, including Milton Keynes, Bedford, Cambridge, Huntington and Peterborough, and major transport routes...'*

Generally, settlement expansion caused a decline of tranquillity within the NCA which is also affected by visual intrusion, noise and light pollution from agriculture. *'Strong contrasts exist between greater tranquillity in more rural, inaccessible areas (including sections of the river valleys) and lower tranquillity in areas with a settled, urban and developed feel.'* On the other hand, the NCA is focused on new growth and development. *'Transport infrastructure, business and commercial development are now major components of the NCA's character, with good transport links north and south and particular nodes along the corridors of the A1, M1 and A14.'*

Notably, the NCA largely describes landscape rather than townscape qualities. However, it is noted that some areas of the landscape area characterised by extensive clay extraction for brick making. This is one of the diverse materials used for buildings within the NCA, which also include render, thatch and stone. Locally quarried limestone is the cause of distinctive landscapes along the river valleys and is also featured in the local architecture. *'The locally quarried limestone is used in the buildings in villages north of the River Great Ouse whereas clay tile and brick is commonly found to the south and east. Surviving examples of timber-frame buildings and thatch and the occasional use of colour-washed render add to the eclectic nature of the area's building stock.'*

The NCA notes the importance of recreational facilities linked to the enjoyment of the outdoors and landscape. Large towns within this character area provide substantial green spaces within the urban fabric including improved green infrastructure links to the wider countryside.

#### 4.4 Cambridge Landscape Character Assessment (April 2003)

Generally, Cambridge is defined as a collegiate city in a rural setting, with good accessibility to the countryside and green corridors. The assessment considers that compactness and sense of arrival are important features and *'where the edges are positive, and the City is anticipated by glimpsed and distinctive views to the skyline or landmarks, this is a Defining Character of views and setting.'*

The assessment recognises that although intrinsic to the quality of Cambridge, the notion of compactness and sense of arrival is difficult to delineate. *'The 'Defining Character' of Cambridge is therefore restricted to physical features as follows:*

- *Buildings and Historic Core;*
- *Green Fingers and Corridors;*
- *Water Courses and Bodies;*
- *Open Green Spaces within the City;*
- *Setting and Views of the City Skyline; and*
- *Separation.'*

Contribution of the Site to each Defining Character will be considered through the assessment of the development's impact on the townscape. To this purpose it is important to note that the Site is located adjacent to one of Cambridge's nine Conservation Areas and in proximity to Coldham's Common, a green finger within the city and part of the River Cam valley.

The assessment highlights important views of the City skyline which are particularly distinctive when approaching from the south east and west.

*'The adopted meaning of 'Defining Character' precludes features and areas which are also very important to Cambridge and its character, but not so important that their removal or development would completely change the distinctive character of Cambridge. The importance of these areas are defined as 'Supporting Character'. Where features are identified as Supporting Character they are regarded as very important to the character of Cambridge. This importance should be a material consideration and new development should take account of these characters, and where possible conserve or improve upon existing character.'*

The areas of Supporting Character relevant to the assessment of the development include:

- *Local Open Space;*
- *Local Views; and*
- *Ancient Woodland, Tree Cover, Hedgerows and Veteran Trees.'*

These areas make substantial contribution to the character of the locality and setting of Cambridge. As an example, Mill Road Cemetery is a local open space with value even if it's not a Defining Character. The tall chimney at the Museum of Technology is considered a positive strategic landmark.

Cambridge is considered overall a well-treed City. Tree belts and avenues are characteristics of many streets and contribute to the City's character, however, if they coincide with major green spaces, setting or views they become by association Defining Character.

According to the assessment definition of character areas and types, the Site is located in the Residential Character Type and, more specifically, in the Post 1900 Suburb Cambridge Character Type (see Map 7 in Appendix 2). No particular character areas are identified for this type.

Key characteristics of the Post 1900 Suburb character areas are:

- *'Concentrated to areas in the north, east and south-east.'*

- *'Characterised by their mostly rectilinear layout, and include areas built later last century.'*
- *'The plots are of medium size with medium size front gardens. The house types tend to be semi-detached or detached. The gardens tend to have mature, well-established trees and shrubs.'*
- *'Various house styles and building materials are evident, but each area has a typical palette of material and style giving a uniform and orderly look.'*
- *'There is 'little or no open space provision within the main area.'*
- *'The roads tend to be of medium size with enough room for parking within the dwelling curtilage.'*
- *'There are often grass roadside verges sometimes with highway trees planted along the roads.'*
- *'Individual garden trees can contribute significantly to the scene.'*

Adjacent to the Site on the southern boundary is the Pre 1900 Residential Terraces and Large Terraces Character Type. The study area particularly reflects the characteristics of the Pre 1900 Residential Terraces type. Key characteristics include:

- *'Similarities of the street pattern, the tight grain with small street frontages, prominent chimneys that develop a strong rhythm, and the building materials.'*
- *'The presence or absence of front garden, boundary and path details, the width of road and the presence or absence of street trees provides local distinctiveness.'*
- *'Where the terraces have been built in a piecemeal fashion there is a diversity of house heights.'*
- The housing layout is generally in a rectilinear pattern with back-to-back formation.
- While the majority of this character type is largely residential, with pubs often being significant buildings in the streets or on streets corners, some areas towards the east have a mixture of residential and minor industry, adding diversity to the streetscape.
- *'Vistas along the street either tend to be long, out to areas of open space, including the commons, and often to significant trees, or stopped by other terraces or feature buildings at right angles to that street.'*

According to the assessment definition of character areas and types, the Site appears to also fit the description of the Industrial and Commercial Character Type, and more specifically, in the Industrial - Railway Corridor Cambridge Character Type.

The Railway Corridor Cambridge Character Type overlaps markedly with the Road Corridor Character Type and the Site embodies this overlap in its location between Newmarket Road and the Fen Line which connects Cambridge Station to Kings Lynn. The rail line runs north - south through the eastern side of Cambridge which expanded rapidly around it in the latter 19<sup>th</sup> Century.

The assessment identifies a hinterland created along the Rail Corridor that was *'mostly unsuited to housing'* where industry associated with the railway and later other industrial buildings including *'sheds, warehouses and large retail concerns'* established. The assessment also identifies a trend for these industrial areas being replaced by new and usually smaller-scale development.

Notably this Cambridge Character Type is characterised by *'miscellany of buildings and wasteland following the railway track'*, which suggest an overall neglected townscape.

The assessment highlights the opportunity in this character area type to *'improve and create a new district with its own character.'*

Key characteristics of the Railway Corridor include:

- *'large warehouses and derelict sites;'*
- *'derelict and underused large urban spaces – gradually passing out of this phase;'*  
*and*
- *'rail corridor gives poor impression to those entering City.'*

## 4.5 Local Landscape Context

The Site is located within Cambridge's urban area within the suburb of Petersfield. While clearly the urban character prevails, there are landscape features within the Site context that provide relief into the dense fabric. Also, due to Cambridge strong network of Public Open Spaces, the Site has a wider context of good connectivity to open landscapes which connect out the city's rural edge.

### Vegetation Cover

Cambridge is known as a well-treed city. Tree cover is provided in the parks and along avenues, as well as in private gardens. The Site consists of large warehouses operating as retail concerns with vehicular access and parking taking up the remainder of the Site. There is some shrub and tree planting typical to large scale car parks and some boundary vegetation, but these have little impression on the local landscape character much beyond the Site boundary.

The boundary vegetation along the southern and western boundaries is stronger and more in-keeping with the residential areas it separates the Site from. The continuation of large-scale retail and commercial land use north and to some extents east of the Site mean that the somewhat sylvan character of the adjacent private gardens ends at the Site boundary.

Over the road bridge which crosses the rail line, Coldhams Lane meets Coldham's Common which is one of the green corridors and strategic open spaces within Cambridge as well as part of the Cambridge Green Belt. Coldham's Common is largely characterised by open grazing fields, bounded by dense vegetation and crossed by the train line to Norwich and Ipswich.

The green open space at Coldham's Common includes a discreet woodland cover. Although these mature trees provide some screening to the industrial warehouses along the railway line, the urban influence is not missed within the green space. There is no ancient woodland within the Site context, but notable woodlands listed as Priority Habitats are located within some of the city's parks (see Map 5 in Appendix 2). Grassland along the River Cam is also a Priority Habitat.

### Topography

The Site is located on a largely flat plateau that gently falls towards the River Cam valley to the west and north and to a valley associated with Coldham's Brook to the east. Castle Hill almost 2km to the north west is the only notable high ground within the Site context at 20-30m AOD (see Map 3 in Appendix 2).

### Tranquillity

The Site is a shopping centre and Coldham's Lane which forms the northern Site boundary is transiently an exceptionally busy road during peak times. The Site offers very little in to the experience of tranquillity as even when the shops are closed, the Site still has the connotations of its function and the open space is dominated by car parking.

Some relief from the noise and activity of the urban townscape is afforded within Coldham's Common. However, despite the tree enclosure, the visual and auditory urban influence causes a decline in the sense of tranquillity.

#### 4.6 Local Townscape Context

The Site itself is part of a wider area of retail and commercial properties distributed along the rail line and Newmarket Road that extends to the Airport and Marshalls site at the eastern edge of the city. Within the Site there are some 6no. separate building masses. The most northerly is the smallest and most isolated. The building is a showroom with office space and the building has a modern form with curved roof and the material and architectural quality are by far the highest of any building on Site. The other buildings on Site are large retail sheds, like you might expect to find at an out-of-town shopping centre. The sheds are typically steel framed with flat or very gently sloping corrugated steel roofs and clad in brick and/or steel with largely glazed fronts. The northern retail shed is divided internally into two retail units and is roughly the same size as the two buildings in the southern corner of the Site which are split into a larger number of slightly smaller units. In the western corner a slightly smaller building houses two retail units. The largest building on the Site is mostly taken up by an ASDA supermarket but also has some smaller units on the southern end. Each retail unit has a large billboard over its entrance to advertise its presence and these sit higher than the facades, breaking the rooflines. The roofline itself is often a non-distinct assemblage of shallow slopes at perpendicular angles to cover the extents of floorspace required. To the back of all the buildings are the plant and service areas and accesses to the buildings which contrast with the sparse and ordered front facades of the buildings. These buildings are designed to be seen from one direction.

The Cambridge Landscape Character Assessment includes the Site in the Industrial Railway Corridor Cambridge Character Type. This is a non-residential urban typology which is dominated by transport movement and large scale commercial and retail buildings. The Site sits at the city end of the corridor, including large-shed development that stretches down Newmarket Road from Cambridge Airport. As a result of this, the Site context is partly commercial and retail urban edge but is also city centre residential edge.

The railway corridor has seen many recent developments, evolving the character of this townscape type with a prominence of large-scale building for residential and commercial uses. On the northern end of this railway corridor is the recent development around Cambridge North Station. The development at CB4 and the Cambridge North East Fringe can be seen as a northern expansion of a corridor of new-scale development in the city that has started around Cambridge Station with the CB1 development. The residential developments at CB1 has spread north along the railway corridor via the Mill Road Depot site and residential apartments on Cromwell Road, east of the rails. South of Hills Road Cambridge Assessment and several residential developments show similar building forms moving south towards Addenbrookes hospital and Cambridge Biomedical Campus.

The Site sits at one of relatively few crossing points of the rail line and on an axis between urban commercial, residential and open space. It is a barrier to access as it is unappealing to pedestrians and cyclists when busy due to the prominence of vehicular traffic, and it is unappealing when quiet due to a lack of perceived security. Improving the permeability for

sustainable travel methods such as cycling and walking and making the Site more inviting to travel through would help connect the various areas around the Site.

The Site has limited permeability as it is bounded by the railway to the east and the road bridge crossing the railway forms a physical barrier for much of the northern Site boundary. The residential areas along the western and southern site boundaries are largely closed to the Site, with small pedestrian cut-throughs to Sleaford Street, York Street and St. Matthew's Gardens. The main access to the Site is via the roundabout from Coldhams Lane which also serves Cambridge Retail Park to the north.

The Site is bounded along its eastern extents by a tall, galvanised security fence prohibiting access to the operational rail lines on the other side. The northern boundary is also mainly inaccessible as it meets the raised form of the road bridge over the rail lines. Where access is possible from the northern boundary, it is largely dominated by vehicular access via the roundabout on Coldhams Lane.

The western boundary is formed most of its length by a tall brick wall with boundary vegetation from the residential properties beyond growing over the top. There is a pedestrian and cycle access which links through to St. Matthew's Gardens before another closed boundary leads to the western corner where there is a narrow cut-through to York Street. The Chisholm Trail, new cycle route which connects Cambridge and Cambridge North railway stations and is due to open in 2021 passes through the Site, crossing the railway over the bridge on the Site's northern boundary and exiting the site via the cut through onto York Street. Currently the proposed route uses the Site's car park access roads.

The south-western and south-eastern boundaries are essentially formed by the retail units which are backed by boundary vegetation, save for another cut-through which allows pedestrian and cycle access through the delivery yards of some of the units via Sleaford Road.

## 5.0 Visual Baseline

### 5.1 Potential Visual Receptors

The Site is located in a highly-urbanised area in proximity of Coldham's Common public common land. The current buildings on site have little impact on their surroundings despite their massive size as they are relatively low-rise and the local topography raises up to the south, making the adjacent residential area sit higher than the Site. Despite this, Cambridge is a topographically very flat city and the built form is predominantly 2-4 storeys and so any taller buildings will tend to be visible from much of the city and environs.

There is a slope that raises up towards the Newmarket Road area from the river. This, along with a number of newer apartment buildings which have risen notably above the typical Victorian suburbs of the area serve to screen views of potential development of the Site from much of the river corridor within the city. There is, though, certain to be visual impact on other key open spaces, namely Coldham's Common and Ditton Meadows. The Site is adjacent to the Mill Road Conservation Area and due to its proximity will likely have some visual impact on places within this conservation area.

Long views of the city skyline are possible from many areas in the surrounding countryside due to the flat topography of the area, this is particularly true to the south and west of the city, where the land rises gently to provide vantage points over the city. Any development notably larger than the typically fine grain of the city is likely to have a visual impact on those area which provide a long view panorama of the city skyline or from a raised position. Castle Hill Mound Scheduled Monument in particular offers a panoramic view of the city centre and much of the rest of the city and will likely be visually impacted by development on the Site.

It is therefore considered that the following groups of visual receptors are likely to experience some effects from the proposal:

- Visitors to Castle Hill Mound Scheduled Monument;
- Ramblers on Coldham's Common;
- Ramblers on Fen Ditton and river towpath;
- Ramblers on Redmeadow Hill;
- Drivers on Worst's Causeway;
- Ramblers on Little Trees Hill;
- Residents of the adjacent residential area to the south and west, including within the Mill Road Conservation Area; and
- Pedestrians on Mill Road Bridge.

### 5.2 Representative Viewpoints

12 viewpoints were selected to represent typical views from potential receptors, at varying distances and orientations from the Site. The viewpoints are mostly located within 1 km of the Site with 4no. longer-distance views. (see viewpoint locations map in Appendix 3).

The viewpoints used in the assessment are:

#### ***Viewpoint 1: Castle Hill Mound***

Viewpoint 1 represents Strategic Viewpoint 1 from Cambridge Local Plan 2018 Appendix F. This viewpoint demonstrates the views of the visitors of a publicly accessible open space and Scheduled Monument looking north towards the Site. The Site is located centrally within the view, it is in the middle distance, towards the far edge of the visible built form but and is screened by intervening vegetation and built form.

This is a distinctive panoramic view of the city centre and surrounding suburbs. In the foreground is the historic core of the city and the historic open spaces of Jesus Green and Midsummer Common. Much of the city is obfuscated by the abundance of tree cover due to the low-rise nature of built form across the city. A typical character of Cambridge's skyline are the church spires and steeples and solitary towers which protrude from the tree cover that cloaks the city, even throughout winter. The fine grain of the city stretched out into the suburbs and the edge of the city where the arable land beyond gently raises up to the south. At the north east edge of the city the larger forms of the buildings associated with Cambridge airport stand out.

#### ***Viewpoint 2: Coldham's Common - north***

This viewpoint is taken from the public footpath which connects Newmarket Road to Coldham's Lane across Coldham's Common, looking south west towards the northern end of the Site with the Mill Road Conservation Area behind. Receptors are the ramblers and cyclists walking for leisure, commuting to work or travelling to the centre of town from the Abbey Ward. The Site is currently screened by vegetation and built form.

The Common consists of unimproved grassland which is seasonally grazed. The area is largely open, split into three parcels by the trainline which connects to Cambridge Station and forms the Norwich and Ipswich line and the trees associated with the rail line and Coldham's Brook.

In the near distance, sheds associated with the rail-side light industrial, storage and retail are visible through the boundary trees and lend the common a suburban quality. At the centre of the viewpoint, cranes and raised residential apartment buildings show the expansion of high-rise development along the rail line to the east of the city centre.

#### ***Viewpoint 3: Coldham's Common - south***

This viewpoint is also taken from Coldham's Common, looking west towards the northern end of the Site. The city centre lies behind the Site from this approach. Receptors are the ramblers and cyclists walking for leisure, commuting to work or travelling to the centre of town from the Abbey Ward. The Site is currently screened by vegetation and built form.

This parcel of the common is much more open to the adjacent suburban area which is on the opposite side of the London – Kings Lynn rail line to the Site. The boundary of the common to Coldhams Lane is much less treed than the majority of other boundaries around the common and affords open views of the immediate suburban housing and apartment buildings behind as well as the large storage sheds adjacent to the rail corridor.

Further beyond, the top stories of taller apartment buildings onto Newmarket Road are just visible over the treeline. The skyline is perhaps a little higher than is typical of Cambridge suburban areas due to the larger blocks of apartment buildings and commercial sheds which flank the trainline. This location has again a very suburban look despite the abundance of open space in the foreground.

#### ***Viewpoint 4: York Street***

Viewpoint 4 is located within the Mill Road Conservation Area and directly adjacent to the southern corner of the Site. Receptors are the local residents and road users (although this is a

low traffic area for motor vehicles) travelling to and from the city centre, the rail station or to the retail centre along Newmarket Road. The Site is visible, despite built form screening some extents and boundary vegetation partially screening the rest. This viewpoint is taken from the Victorian terrace, York Street, which is typical of the Mill Road Conservation Area. The character of the view is largely residential.

The viewpoint is in close proximity to the southern corner of the Site and is afforded a view into the Site by a break in the terraced housing where it opens onto Sleaford Street. The narrow streets and lack of curtilage to the front of properties in the Conservation Area create a restricted skyline of gutters and chimneys for a majority of the area.

#### ***Viewpoint 5: Mill Road Cemetery***

Viewpoint 5 is located within the Mill Road Conservation Area, 400m south west of the Site. This viewpoint is taken from the centre of Mill Road Cemetery looking towards the southern end of the Site. Receptors are visitors to the cemetery. The Site is screened by the intervening built form and the boundary vegetation of the cemetery. As it is typical of the Conservation Area, which consists of a well-preserved Victorian suburb, rooflines that are visible are relatively low and are the linear ridgeline of slate roofs of 2-2.5 storey terraced housing or the outline of a Victorian brick light industrial or storage building which is scarcely higher than the houses that surround it. The cemetery is well vegetated at its boundaries, screening the immediate built surroundings and softening the skyline with tree canopies.

#### ***Viewpoint 6: Elizabeth Way Bridge***

This viewpoint is taken from the pedestrian footpath on the northern side of Elizabeth Way Bridge, looking south east towards the Site. Receptors are road users crossing the river in this direction. The Site is screened by the built form in front.

The viewpoint looks over the largely Victorian suburban terraced housing of the Riverside and Stourbridge Common Conservation Area which leads up the slope from the river to Newmarket Road. At Newmarket Road newer and larger volumes of apartment buildings (the Beacon Rise and 16 Abbey Street) and hotel (the Travel Lodge) sit atop the skyline with a clutch of cranes beyond hinting at the ongoing development along the railway corridor.

#### ***Viewpoint 7: St. Matthew's Gardens***

This viewpoint is taken from the entrance to St. Matthews Gardens from York Street and is on the very edge of the Mill Road Conservation Area, looking east towards the Site. Receptors are residents of St Matthew's Gardens and drivers, pedestrians and cyclists travelling along York Street and pedestrians and cyclists entering St. Matthew's Gardens to access what is currently the Beehive Centre (the Site). The Site is screened by the built form of St. Matthew's Gardens.

St. Matthew's Gardens is a 21<sup>st</sup> Century residential development set out around a central open space. It is inward looking and closed on all side apart from a vehicular and pedestrian access onto York street, which is the location of this viewpoint. The built form of the residential development around the central gardens is a consistent 2.5 storey terrace punctuated by attached, but protruding facades of taller 3-storey town house style dwellings.

The closed and constant form of the residential development in St. Matthew's Gardens serves to form an effective visual barrier to the Site behind. The skyline of the viewpoint is dictated by the roofline of St. Matthew's Gardens. The built form of the residential development around the central gardens is a consistent 2.5 storey terrace punctuated by attached, but protruding facades of taller 3-storey town house style dwellings.

### ***Viewpoint 8: Mill Road Bridge***

This viewpoint is taken from Mill Road Bridge, looking north, up the railway line from Cambridge Station to Cambridge North Station. The rail line forms a no-man's land between the two halves of the Mill Road Conservation Area. Receptors are road users crossing the bridge, which has been recently restricted to bus access, cyclists and pedestrians. The vista along the railway corridor is interrupted by the cluster of train infrastructure and features and the Site is not visible from this viewpoint.

Besides the rail lines and sidings, the foreground and mid-ground are dominated by the residential development taking place at the former Council Depot site, now branded 'The Ironworks'. The open corridor created by the railway itself does allow for an unbroken view almost as far as the Site which sits directly adjacent the rail line. The existing buildings on Site are screened by the intervening built form. Although glimpses of the eastern Site's boundary are visible along the railway line, the existing buildings are set back from the Site's edge and therefore are not evident.

The skyline is dominated by the construction works at The Ironworks, followed by the existing residential built form and railway infrastructure. It will eventually be largely defined by built form, besides the tree canopies to the right of the view. Nevertheless, this view affords extensive appreciation of the open sky.

### ***Viewpoint 9: Ditton Meadows and River Towpath***

Viewpoint 1 represents Strategic Viewpoint 11 from Cambridge Local Plan 2018 Appendix F. This viewpoint is taken from the public footpath on the north side of the River Cam on the eastern side of the rail bridge. The viewpoint looks south west towards the site over Ditton Meadows, receptors are pedestrians and cyclists who use the towpath and to some extents the meadow on the other side of the river. The Site is screened by vegetation at the edge of the meadows and the built form beyond.

The viewpoint looks back along the rail line towards the Site. The foreground of the meadow is ended at a tree-lined boundary which screens views of the city beyond, save for the occasional light industrial unit associated with the northern end of Newmarket Road and areas around the rail line. However, the clear corridor of the rail line allows for some visual penetration further towards the Site.

The skyline over Ditton Meadows is fairly distant and low and is dominated by the trees which form the boundary of the meadow. The occasional façade or partially screened form of a light industrial unit can be seen in places. Towards the Site, the flood lights of Abbey Stadium are visible over the line of the boundary trees.

### ***Viewpoint 10: Redmeadow Hill***

The viewpoint represents Strategic Viewpoint 3 in the Cambridge Local Plan 2018 Appendix F. This viewpoint is taken from a publicly accessible vantage point near Barton, which affords a panoramic view of the city from the countryside to the west. Receptors are ramblers and visitors to the viewpoint. The Site is screened by the intervening built form and vegetation of the city.

The view of the city from this location is largely that of the skyline, with prominent features including church steeples and spires, such as the impressive spire of the Church of Our Lady and the English Martyrs. The white-painted steel structure of the footbridge over the railway from Devonshire Road is visible above the skyline as another single vertical accent.

Further south from the city centre, CB1, the development around Cambridge rail station looms as a large conglomerate bulk, CB1 would be the most prominent group of recent tall buildings in Cambridge, but can be seen as part of a pattern of taller development along the rail corridor through the eastern side of the city. From this viewpoint, the Site sits alongside the raised skyline of the CB1 development.

#### ***Viewpoint 11: Worts' Causeway***

The viewpoint represents Strategic Viewpoint 9 in the Cambridge Local Plan 2018 Appendix F. This viewpoint is taken from Worts' Causeway, a public highway to the south of Cambridge which affords panoramic views of the city from an elevated position as the land slopes steeply upwards here from the city edge. The view looks north west towards the southern end of the Site. Receptors are road users and potentially ramblers using the Wort's Causeway Road as part of a recreational route Public Right of Way. The Site is not easily distinguishable from this distance however glimpses of the warehouses' roof are visible amongst the vegetation.

To the western side of the city we see the large-scale modern structures of Addenbrookes Hospital with the modern core behind it. As you look further east, the city skyline is again very low and consistent with a few spires and towers visible above the tree line.

The area of skyline around the Site is characteristically low, but there are larger scale horizontal breaks in the tree cover which represent the buildings of Anglia Ruskin University and the large commercial and light industrial sheds around Newmarket Road which include the retail units currently occupying the Site.

#### ***Viewpoint 12: The Beehive Centre***

This viewpoint is taken from within the Site, on the western boundary with St. Matthew's Gardens, looking to the eastern Site boundary. Receptors are local residents to St. Matthew's Gardens, cyclists and pedestrians travelling to and from St. Matthew's Gardens, York Street and Coldhams Lane. The majority of the Site is visible from this viewpoint.

The viewport shows the internal Site area which is predominantly car park with the retail units along the east and southern boundaries with loading bays behind.

The viewpoint shows the established boundary hedge which extends along most of the west and southern boundaries and the car park trees in the foreground which partially screen the frontages of the retail units from this angle. The retail units are all of a similar height of around 15m or so and form a consistent skyline but are visually monotonous.

The viewpoint faces away from the city centre and so there are no tall buildings beyond the retail units to break their roofline.

#### ***Viewpoint 13: Little Trees Hill***

This viewpoint represents Strategic Viewpoint 7 in the Cambridge Local Plan 2018 Appendix F. It is taken from a publicly accessible country park to the south-west of the Gog Magog hill and it affords panoramic views of Cambridge and its skyline. The Site is located at the centre of the view and it is largely screened by intervening vegetation and built-form.

The view is rather verdant with prevailing rural qualities. Cambridge appears well nested in the dense tree canopies; spires and towers are certainly distinctive in the skyline albeit not prominent in the view as the buff coloured, large blocks of the contemporary urban development around the railway station and as far as the fire station is more dominant. The depth view is quite long and the wooded character is still dominant in the distant horizon line.

## 6.0 Conclusion

### 6.1 Receptors

This initial baseline study and the information gathered during the site visit, suggest that the following receptors will be affected by the proposed development and will be subject to further analysis within the TVIA.

#### 6.1.1 Visual receptors:

- Road users within proximity of the Site;
- Road users within the wider infrastructure network, particularly where bridges might create an elevated a vantage point;
- Users of Ditton Meadows, which is a public open space within the river corridor;
- Users of Coldham's Common, particularly pedestrians and cyclists on the public footpaths;
- Visitors to Castle Hill Scheduled Monument;
- Ramblers on Little Tree Hills;
- Residents within the Site proximity; and
- Residents of tall buildings in the wider context.

During the site visit a series of viewpoints to represent typical views from the potential visual receptors were identified, see Appendix 3.

#### 6.1.2 Townscape receptors are divided into character areas/types and townscape components.

Townscape areas/types:

- Industrial – Railway Corridor Cambridge Character Type; and
- Residential Character Type: Post 1900 Suburb

Townscape components:

- Cambridge skyline: The city skyline and the setting of important landmarks such as the Christ Church on Christchurch Street which are collectively a distinctive character of the city and its townscape;
- Setting of open green spaces: The Site is located in proximity of Coldham's Common which is a strategic open space within the city;
- Setting of the Green Belt: The Site is located in proximity of a green corridor that brings into Cambridge urban fabric an open Green Belt area;
- Setting of Public Rights of Way: The Site is located in proximity of popular footpaths within the Coldham's Common and the Chisholm Trail; and
- Setting of the conservation area: The Site is bounded by Mill Road Conservation Area, which is largely characterised by low-lying residential buildings.

### 6.2 Potential Effects

The definitive development impact on the identified receptors will be revealed by the completion of the TVIA. However, this preliminary assessment concludes that the following visual and townscape effects are to be expected:

- The building volumes and height would alter the views from strategic green spaces, namely Coldham's Common and Ditton Meadows;
- Views from within the Mill Road Conservation Area could be visually impacted by development on Site;
- Building heights on Site in excess of those around are likely to have an impact on nearby and long-distance views identified in the relevant Local Plan's policies; and
- The change in land use that would come with the proposed diversification of offering on the Site would change the experiential quality of the Site and so the setting of the adjacent residential areas.

# APPENDIX 1

## METHODOLOGY

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This assessment is prepared in accordance with the guidelines as set out in 'Guidelines for Landscape and Visual Impact Assessment: Third Edition', (GLVIA3) published by the Landscape Institute and the Institute of Environmental Management and Assessment. However, given the urban nature of the context of the Site, the GLVIA3 approach is applied with reference to townscape impact rather than landscape impact. The term townscape is in fact used to encompass all the urban and landscape characteristics of the Site and its context.

The 'Design Manual for Roads and Bridges: Volume 11' (DMRB), Section 3 Environmental Assessment Techniques (August 2009) is also considered where appropriate. Particularly, reference is made to Chapter 8 'Variation for Urban Scheme' which emphasises the assessment of impact on townscape features.

Similarly, the 'Residential Visual Amenity Assessment' (RVAA), Technical Guidance Note 2/19, and the 'Townscape Character Assessment', Technical Information Note 05/2017, by the Landscape Institute have been considered in the definition of the assessment criteria presented in Table 1 and 2.

Preparation of this assessment involves the following key stages:

- Baseline survey;
- Identification of sensitive townscape and visual receptors;
- Description and quantification of the changes to the baseline;
- Identification of potential effects;
- Evaluation of the predicted effects; and
- Identification of mitigation measures.

Effects are assessed on townscape receptors, (townscape impact assessment) and visual receptors (visual impact assessment). The significance of effect on a receptor is a function of the sensitivity of the receptor and the magnitude of change caused by the proposed development.

Given the urban context, the density of development may restrict the geographical scope for the townscape effects; the definition of the study area is based on the Townscape Character Assessment and field study. However, the area within which significant effects on view and visual amenity are predicted to occur may be larger, the study area for visual effects is informed by the Zone of Theoretical Visibility mapping.

### Viewpoints photography and visualisations

Consultation with the Local Authority is undertaken to decide the appropriate technical visualisation Types. Unless otherwise stated in the relevant Appendix, appropriate Visualisation Type and AVR have been prepared as per the Landscape Institute guidance (Visual Representation of Development Proposals, Landscape Institute Technical Guidance Note, 06/19 (TGN 06/19)).

It should be noted that the images taken from the viewpoints illustrate the views from these locations, but there is no substitute for visiting the Site personally to ascertain the views and potential impacts.

### Baseline Survey

The baseline survey is carried out to record and analyse the existing townscape characteristics and relevant townscape or landscape policies. The baseline survey will inform the value of the townscape and visual resources within the study area.

The baseline survey includes:

- Desk study to identify the landscape character and likely Zone of Theoretical Visibility (ZTV);
- Research to establish the townscape context including nature conservation interest;
- Site visit/s; and
- An analysis of townscape characteristics in order to understand how they are made up and experienced as well as ascertaining their relative sensitivity.

### Assessment of potential effects

The development effects are considered for both townscape and visual receptors. The term 'receptor' is used in landscape and visual impact assessments to mean an element or assemblage of elements that will be directly or indirectly affected by the proposed development. In this instance, townscape receptors are considered due to the urban nature of the Site's context. The baseline survey informs the identification of sensitive receptors.

In both townscape or visual terms, the sensitivity of the receptor is a function of the value and susceptibility to change.

Identification of the value attached to the views is dependent upon the location and context of the viewpoint and viewing opportunities, as illustrated by the viewpoints. Key consideration is the presence of designations or recognition of the particular value of the view in relation to heritage assets, guided books or touristic maps, etc. Visual susceptibility is defined by the occupation or activity of the people experiencing the views at particular locations and by the extent to which their attention or interest may be focused on the views.

Assessing townscape receptor value is a complex task often subjective to the individual due to perception and experience. Box 5.1 of the GLVIA3 provides useful parameters to aid the identification of the value of landscape; some of these factors are also applicable to townscape value. The DMRB guidance also lists a series of parameters that should be taken into consideration to assess the character and quality of the townscape. It is noted that, while the presence of designations and their hierarchy is an important factor to define the townscape value, this is also dependent on the perceived scenic quality of the area, its distinctiveness, historical and cultural association. Therefore, the absence of designations does not equate to a low value.

Tranquillity is also considered, as per GLVIA guidance, to define the townscape receptors value. According to the 'Tranquillity – an Overview' Technical Information Note 01/2017 by the Landscape Institute *'The interpretation of tranquillity is often linked to an association or engagement with the natural environment and it is this interpretation that places the term within the realms of landscape related study and research. Tranquillity is commonly associated with 'wildness' and 'remoteness' but it is widely recognised that none of these terms is synonymous.'* Although the definition seems to contradict the typical characteristics of a townscape (i.e. not remote or wild, but crowded and urbanised) the *'relative tranquillity in an urban greenspace may*

*be very high, despite intrusion from background traffic noise or the presence of many other people.* Therefore, tranquillity should be considered and valued where appropriate, considering also that planning policies typically encourage development to maintain or improve the existing level of tranquillity. For the purpose of this TVIA the following criteria are to be considered to establish whether tranquillity is a factor that raises value of the townscape receptors or not:

- Proximity to urban greenspace or countryside;
- Traffic disturbance;
- Noise disturbance;
- Existing uses (i.e. residential, commercial, educational, recreational, etc);
- Tranquillity maps, if available (i.e. CPRE and The Countryside Agency mapping); and
- Hard and softworks balance.

Finally, with regard to the value of townscape receptors, it is considered that recent positions adopted nationally and locally by several public and government bodies declaring the climate change emergency urges assessment works to cautiously include this as a criterion to define receptor values. With the rise of literary evidence supporting the role of green spaces in relation to public health and wellbeing, it appears sensible to consider this parameter as an indicator of the value and distinctiveness of landscape elements within an urban context.

Landscape susceptibility is defined as *“the ability of the landscape (whether it be the overall character or quality/condition of a particular landscape type or area, or an individual element and/or feature, or a particular aesthetic and perceptual aspect) to accommodate the proposed development without undue consequences for the maintenance of the baseline situation and/or the achievement of landscape planning policies and strategies”* (Paragraph 5.40 of GLVIA3). Such definition applies to townscape susceptibility within the TVIA.

The principles to identify visual and townscape receptors sensitivities are set out in Table A.

*Table A - Receptors value and susceptibility*

| SCALE | RECEPTOR           | VALUE/SUSCEPTIBILITY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|-------|--------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| HIGH  | Townscape receptor | <p><b>Value:</b></p> <p>Internationally or nationally designated resource. Resources of national importance or protected by an Act of Parliament or the NPPF policies (i.e. AONB, National Parks, Conservation Areas, etc).</p> <p>There are strong historic and cultural associations and the receptor makes a positive contribution to the character of the Conservation Area, if any.</p> <p>Distinctive urban landscape features, nationally designated areas as well as Site of Scientific Interest, National Parks, and Scheduled Ancient Monuments with no or limited potential for substitution.</p> <p>The value of such townscape is usually well recognised due to high aesthetic appeal and intact townscape features, with particular consideration for award-winning architecture or landscapes. There is a distinctive and strong sense of place. The buildings’</p> |

| SCALE         | RECEPTOR           | VALUE/SUSCEPTIBILITY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|---------------|--------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|               |                    | <p>materiality and streetscape are coherent and make an important contribution to the local character.</p> <p>This townscape makes a large contribution to the public's recreational experience and health/wellbeing of the relevant community.</p> <p>Tranquillity is an important feature of the receptor's context and qualities.</p> <p>This receptor or elements of it greatly contribute to mitigating climate change.</p> <p><b>Susceptibility:</b></p> <p>The receptor cannot accommodate the Proposed Development without notable consequences for the maintenance of the baseline and/or relevant planning policy</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|               | Visual receptors   | <p><b>Value:</b></p> <p>The view is valued at a national or regional level.</p> <p>The view is of high scenic quality, often protected by planning designations.</p> <p>It is a visitor destination, or heritage asset, where views of the surroundings are an important contributor to the experience.</p> <p>The townscape aesthetic is visually intact and coherent, there are no detracting/deteriorated features.</p> <p>There are references to the view in literature or art, or the view appears in guidebooks or on tourist maps.</p> <p>It is a strategic location or viewpoint which may attract a large number of viewers.</p> <p><b>Susceptibility:</b></p> <p>Communities or residents at home, where views contribute to the setting or visual amenity (primary/main view) of the house or settlement.</p> <p>Ramblers on recreational or scenic routes, (including public rights of way) where awareness of views is likely to be high.</p> <p>People who are engaged in outdoor recreation, whose attention or interest is likely to be focussed on the townscape, or on particular views.</p> |
| <b>MEDIUM</b> | Townscape receptor | <p><b>Value:</b></p> <p>Locally designated resources. Components of the landscape which are of regional or local importance such as Regional and County Parks or Wildlife Sites; townscape with elements which are protected or valued through local or neighbourhood planning policies, such as locally listed buildings, protected open space or group of listed buildings.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |

| SCALE | RECEPTOR           | VALUE/SUSCEPTIBILITY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|-------|--------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|       |                    | <p>Limited historic and/or cultural associations.</p> <p>The condition of this townscape is of moderate aesthetic appeal and distinctive features are replicated elsewhere in the local or regional context (i.e. they are not unique). There are detractive elements such as main transport infrastructure or industrial areas.</p> <p>It makes a moderate contribution to the public's recreational experience and health/wellbeing of the relevant community.</p> <p>Tranquillity is not a prevailing feature of the receptor's character and value.</p> <p>This receptor or elements of it contribute moderately to mitigating climate change.</p> <p><b>Susceptibility:</b></p> <p>The receptor has some ability to accommodate the Proposed Development. There would be some consequences for the maintenance of the baseline and/or landscape planning policy.</p> |
|       | Visual receptors   | <p><b>Value:</b></p> <p>The view is valued at a local level. It is mostly frequented by local people. The view is not publicised or signposted. It is reasonably attractive but otherwise unremarkable. There are some detracting features in the views.</p> <p><b>Susceptibility:</b></p> <p>Travellers on road, rail, or local paths for which views are not the primary focus, although they do contribute to the setting of the route.</p> <p>In residential visual amenity terms, it is a secondary/periphery view.</p>                                                                                                                                                                                                                                                                                                                                              |
| LOW   | Landscape receptor | <p><b>Value:</b></p> <p>Components of the townscape with limited interest, weak or discordant elements and elements of distraction that interfere with the quality of the area.</p> <p>The townscape/features are rarely intact and/or in poor condition, with little or no aesthetic appeal.</p> <p>Lack of designations or distinctive elements. Without historic/cultural association.</p> <p>Resources of local importance with potential for substitution. Makes little or no contribution to the public's recreational experience and health/wellbeing of the relevant community.</p> <p>Tranquillity does not contribute to the quality of the receptor and its context.</p>                                                                                                                                                                                       |

| SCALE | RECEPTOR         | VALUE/SUSCEPTIBILITY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|-------|------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|       |                  | <p>This receptor or elements of it make little to no contribution to mitigating climate change.</p> <p><b>Susceptibility:</b></p> <p>The receptor has the ability to readily accommodate the Proposed Development without undue consequences for the maintenance of the baseline and/or landscape planning policy.</p>                                                                                                                                                                                                                                                         |
|       | Visual receptors | <p><b>Value:</b></p> <p>The view is not valued, or is of limited local value.</p> <p>The view is of low aesthetic quality and may detract from the surroundings.</p> <p>It is not a publicly accessible location.</p> <p><b>Susceptibility:</b></p> <p>People engaged in activities which do not involve or depend upon the appreciation of views of the surrounding townscape.</p> <p>People at their place of work, whose attention may be focussed on their work or activity, not on their surroundings, and where the setting is not important to the quality of life.</p> |

The effects of the proposal are quantified by identifying the magnitude of the change on the townscape and the visual receptors.

The magnitude of change on townscape features and characters includes consideration of the scale and nature of features either removed or introduced, the extent of loss of vegetation and other urban features and the degree to which the townscape character may be altered. The magnitude of townscape effects resulting from the construction and/or the operation of a particular development is categorised as high, medium, low or negligible. In accordance with the approach advocated in Paragraphs 5.48 – 5.52 of GLVIA3, the magnitude of townscape effect considers the size and scale of the change, the geographical extent over which each townscape effects would be felt and their duration and reversibility.

The magnitude of visual effect is gauged by the degree to which specific views would change with the development and the type of viewer. The magnitude of visual effect is categorised as high, medium, low, or negligible which is in accordance with the guidance on the use of word scales that is provided in Paragraph 3.27 of GLVIA3. The magnitude of visual change takes into account possible changes in a receptor's view caused by the construction and/or operation of the development. This would also depend upon distance, for example, on views of increasing distance the effect becomes less.

The magnitude of visual and townscape effects is generally assessed in relation to size or scale, geographical extent of the area influenced, and duration and reversibility.

Table B defines the magnitude of effects on the townscape and visual receptors.

Table B - Magnitude of effects

| MAGNITUDE OF EFFECTS | RECEPTOR           | CHARACTERISTICS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|----------------------|--------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| HIGH                 | Townscape receptor | <p><b>Size and/or scale:</b> The extent and relative proportion of the urban element(s) to be lost/added would be large and/or the lost/added element(s) make a key contribution to townscape character and/or value. Introduction of new built elements that would be likely to be perceived to be a dominant urban feature.</p> <p>Large scale alteration to the aesthetic and perceptual characteristics of the townscape.</p> <p>The proposal is in great contrast with the receptor key qualities.</p> <p><b>Geographical extent:</b> Effects would be discernible across a large majority or the entirety of the townscape designation or character area associated to the receptor.</p> <p><b>Duration and reversibility of effects:</b> Effects of the introduction of new features would be long-term i.e. will last for over 15 years or will be permanent. Loss of townscape features that are irreplaceable or can only be replaced in the long-term.</p>                                                                                                                                                               |
|                      | Visual receptors   | <p><b>Size and/or scale:</b> A major change or obstruction of a view appearing as a dominant or prominent feature.</p> <p>If effects on the residential visual amenity are considered, the proposal is blocking the only available view from the property or a main/primary view and/or it is overwhelming in all the directions.</p> <p>The proposal causes a substantial change in the skyline introducing a contrasting feature in the otherwise open and/or uninterrupted horizon.</p> <p>The additional feature contrasts with a strong/characteristic urban skyline and detracts from existing landmark buildings.</p> <p><b>Geographical extent:</b> The receptor is located in close proximity of the development (i.e. the development is visible in the foreground) and therefore this is directly/centrally visible and takes a large portion of the view.</p> <p>The view is experience at slow speed (i.e. by pedestrians or cyclists).</p> <p><b>Duration and reversibility of effects:</b> Effects of the introduction of new features would be long-term i.e. will last for over 15 years or will be permanent.</p> |
| MEDIUM               | Townscape receptor | <p><b>Size and/or scale:</b> The extent and relative proportion of the urban element(s) to be lost/added would be</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |

| MAGNITUDE OF EFFECTS | RECEPTOR           | CHARACTERISTICS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|----------------------|--------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                      |                    | <p>moderate and/or any lost/added elements make a moderate contribution to townscape character and/or value. Introduction of new built elements that would be likely to be perceived to be a feature.</p> <p>Moderate scale alteration to the aesthetic and perceptual characteristics of the townscape.</p> <p>The proposal is in contrast with some of the receptor key qualities.</p> <p><b>Geographical extent:</b> Effects would be discernible across a moderate proportion of the townscape designation or character area associated with the receptor.</p> <p><b>Duration and reversibility of effects:</b> Effects of the introduction of new features would be medium-term i.e. will last for between five and fifteen years. Loss of townscape elements that can be fully replaced within the same period.</p>                                                                                                                                                                                                                                                                                                           |
|                      | Visual receptors   | <p><b>Size and/or scale:</b> A moderate change or partial view of a new element within the view that may be readily noticed. The change is partly screened, or glimpsed views are available.</p> <p>If effects on the residential visual amenity are considered, the proposal is blocking a secondary view.</p> <p>The proposal causes a noticeable change in the skyline introducing a contrasting feature in the largely uniform horizon.</p> <p>The additional feature contrasts with the urban skyline and detracts from some of the existing landmark buildings.</p> <p><b>Geographical extent:</b> The receptor is located at some distance from the development which will be visible within a portion of the view.</p> <p>The change is obliquely visible and/or appearing as a noticeable feature in the middle ground.</p> <p>The view is intermittent or experienced from a vehicle moving at moderate speed (i.e. speed controlled areas).</p> <p><b>Duration and reversibility of effects:</b> Effects of the introduction of new features would be medium-term i.e. will last for between five and fifteen years.</p> |
| LOW                  | Townscape receptor | <p><b>Size and/or scale:</b> The extent and relative proportion of the urban element(s) to be lost/added would be minor and/or any lost/added elements make only a minor contribution to townscape character and/or</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |

| MAGNITUDE<br>OF<br>EFFECTS | RECEPTOR           | CHARACTERISTICS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|----------------------------|--------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                            |                    | <p>value. Introduction of new elements that would be likely to be perceived to be a small-scale townscape characteristic.</p> <p>Small scale alteration to the aesthetic and perceptual characteristics of the townscape.</p> <p>The proposal is only partially in contrast with the receptor key qualities.</p> <p><b>Geographical extent:</b> Effects would be discernible across a small proportion of the townscape designation or character area associated to the receptor.</p> <p>Effects are restricted to the close vicinity of the development site.</p> <p><b>Duration and reversibility of effects:</b> Effects of the introduction of newly built features would be short-term i.e. will last for between one and five years. Loss of townscape elements that can be fully replaced within the same period.</p>                                                                             |
|                            | Visual receptors   | <p><b>Size and/or scale:</b> A low level of change, affecting a small part of the view. The change is largely screened, or few glimpsed views are available.</p> <p>If effects on the residential visual amenity are considered, the proposal is blocking a peripheral view.</p> <p>The proposal causes a small change in the skyline and it is largely integrated with the horizon.</p> <p><b>Geographical extent:</b> The receptor is located at a considerable distance from the development which will be visible within a limited portion of the view.</p> <p>The changes are obliquely visible and/or appearing in the background.</p> <p>The view changes rapidly, i.e. from fast-moving road vehicles or trains.</p> <p><b>Duration and reversibility of effects:</b> Effects of the introduction of newly built features would be short-term i.e. will last for between one and five years.</p> |
| NEGLECTIBLE                | Townscape receptor | <p><b>Size and/or scale:</b> The extent and relative proportion of the urban element(s) to be lost/added would be barely perceptible and/or any lost/added elements make a minimal or no contribution to townscape character and/or value. Introduction of new built elements that will be likely to be imperceptible.</p> <p>Minimal alteration to the aesthetic and perceptual characteristics of the townscape.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |

| MAGNITUDE OF EFFECTS | RECEPTOR         | CHARACTERISTICS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|----------------------|------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                      |                  | <p>The proposal largely fits within or is in keeping of the receptor key qualities.</p> <p><b>Geographical extent:</b> Effects would only be discernible within the development site or immediately alongside it.</p> <p><b>Duration and reversibility of effects:</b> Effects of the introduction of new built elements would last for less than a year. Any loss of townscape elements can be fully replaced immediately.</p>                                                                                                                                                                                                                                                                                                                  |
|                      | Visual receptors | <p><b>Size and/or scale:</b> A small change to the view. The proposal is substantially screened by intervening features.</p> <p>The proposal has minimal effects on residential visual amenity.</p> <p>The proposal fits within the skyline and/or doesn't introduce prominent features.</p> <p><b>Geographical extent:</b> The receptor is located at a far distance from the development which will be barely visible within the view.</p> <p>A change to the view that may be obliquely viewed and/or viewed at high speed over short periods and capable of being missed by the casual observer.</p> <p><b>Duration and reversibility of effects:</b> Effects of the introduction of new built elements would last for less than a year.</p> |

The significance of effects on a townscape or visual receptor is a function of the magnitude of the effect and the sensitivity of the receptor. The relationship between the two factors is portrayed in Table C. The potential impacts identified in the TVIA help inform the mitigation measures to be incorporated into the design.

The effects can be beneficial or adverse. Table C sets out the level of effects, which are described as beneficial, neutral, or adverse. These are largely professional judgments drawn from the assessment process.

In townscape terms, **adverse** effects may be the result of direct loss of essential/distinctive elements that contribute to the characterisation of the Site's context. Such loss compromises the integrity of the townscape character and designations. An adverse effect could also be caused by means of great contrast between the qualities of the proposal and a valued townscape. However, sometimes architecture of the greatest quality can mitigate the changes.

Instead, **beneficial** effects enhance the townscape character and contribute to the value of the Site's context at various scales. In this instance, the contrast with a valued townscape is considered positively as the result of a high-quality design.

In visual terms, the effect is considered **adverse** if there is a loss of visual amenity or a distinctive feature/landmark; visual competition that will diminish the appreciation of the existing asset is also considered negatively. On the other hand, should the proposal produce an enhancement or improvement of the visual amenity then the impact is considered **beneficial**. High-quality design is therefore also considered positively where it contributes to the visual amenity without interference with distinctive features.

A **neutral** effect would be the result of a development that does not worsen the baseline condition, nor it causes the loss of visual amenity or valued landscape/townscape features. This would certainly be the case of development that replaces ‘like for like’ the existing built form.

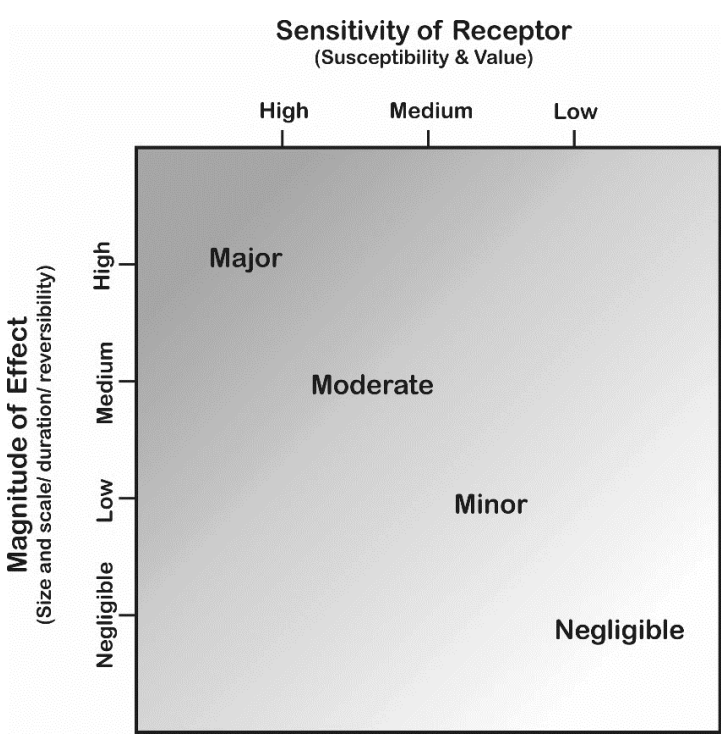
In line with GLVIA3, the assessment considers possible townscape and visual effects at three stages, which will be included as appropriate based on the case-by-case approach and consultation with the Local Authority:

- During demolition and construction;
- Opening Year (Year 1); and
- Following 15 years of occupation (Year 15).

For the purpose of the Environmental Statement a ‘Major’ or ‘Major/Moderate’ (Table C) level of effect (townscape or visual) is considered to be a ‘Significant Effect’. It should be noted that other disciplines within the ES would also consider significant effects that score a ‘Moderate’ level; within the TVIA this will be considered if appropriate on a case-by-case basis.

In the case of significant adverse effects, efforts will be made to appropriately design the proposal so that the significance of such effects will be prevented or avoided. If the significant adverse effects cannot be completely extinguished at Year 1, then all reasonable efforts should be made to mitigate the remaining townscape or visual effects at Year 15 or pursue off-setting measures.

Table C - Significance of landscape/townscape and visual effects



## APPENDIX 2

# MAPPING

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## Project Otter

### Map 1b - Site Location

#### Legend

-  Proposed Development Site
-  1km Radius
-  Recreational Route
-  National Cycle Route
-  Public Footpath
-  Public Bridleway
-  Existing Woodland
-  Green space sites

Drawing Number: B.16600a  
Date: 02/11/2020  
Scale: 1:12,500 @ A3  
O.S. Ref: TL 4658



# BIDWELLS



## Project Otter

### Map 2 - Aerial

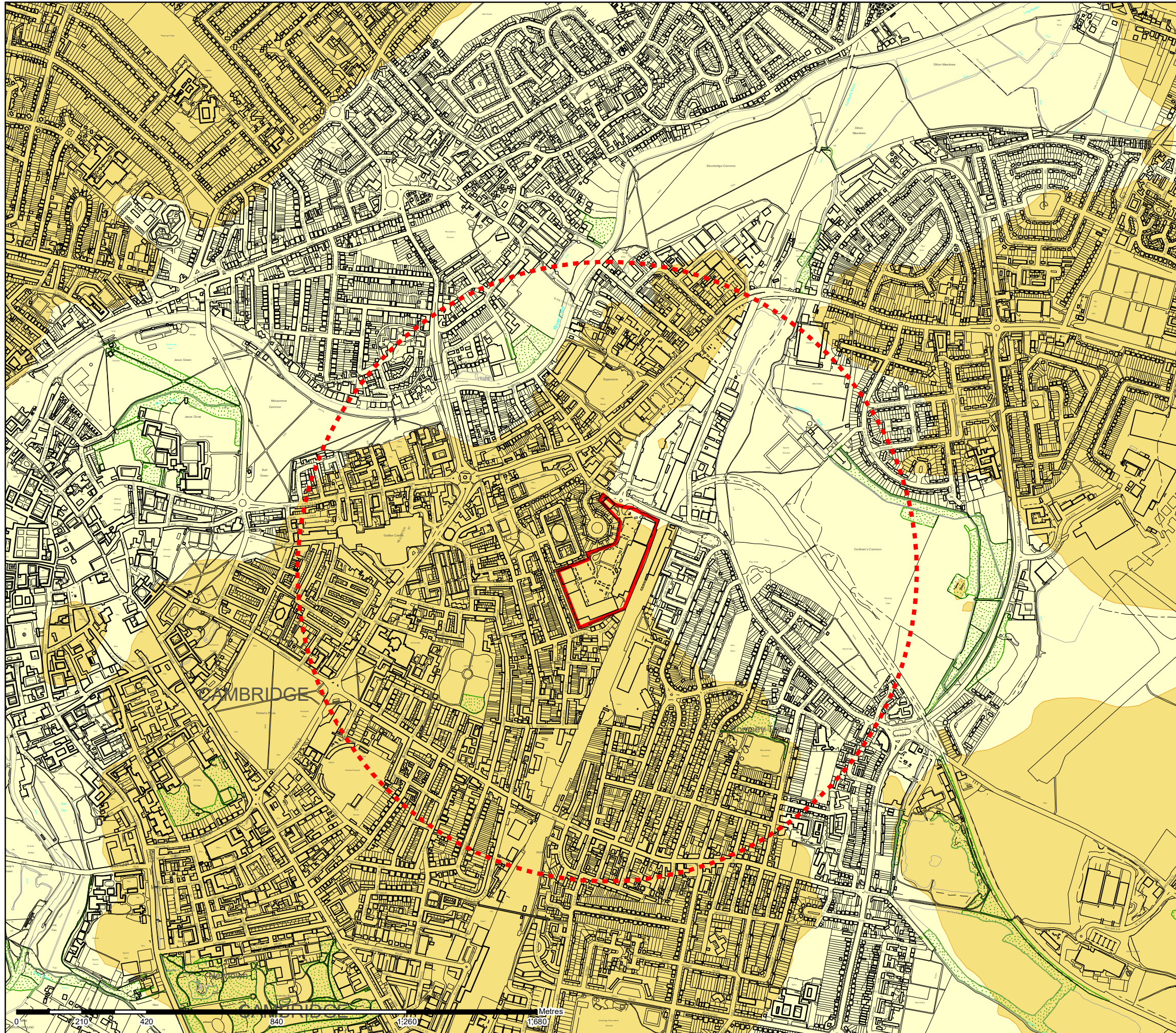
#### Legend

-  Proposed Development Site
-  1km Radius

Drawing Number: B.16,600b  
Date: 01/11/2020  
Scale: 1:12,500 @ A3  
O.S. Ref: TL 4658



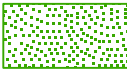
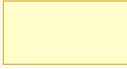
# BIDWELLS



## Project Otter

### Map 3 - Topography

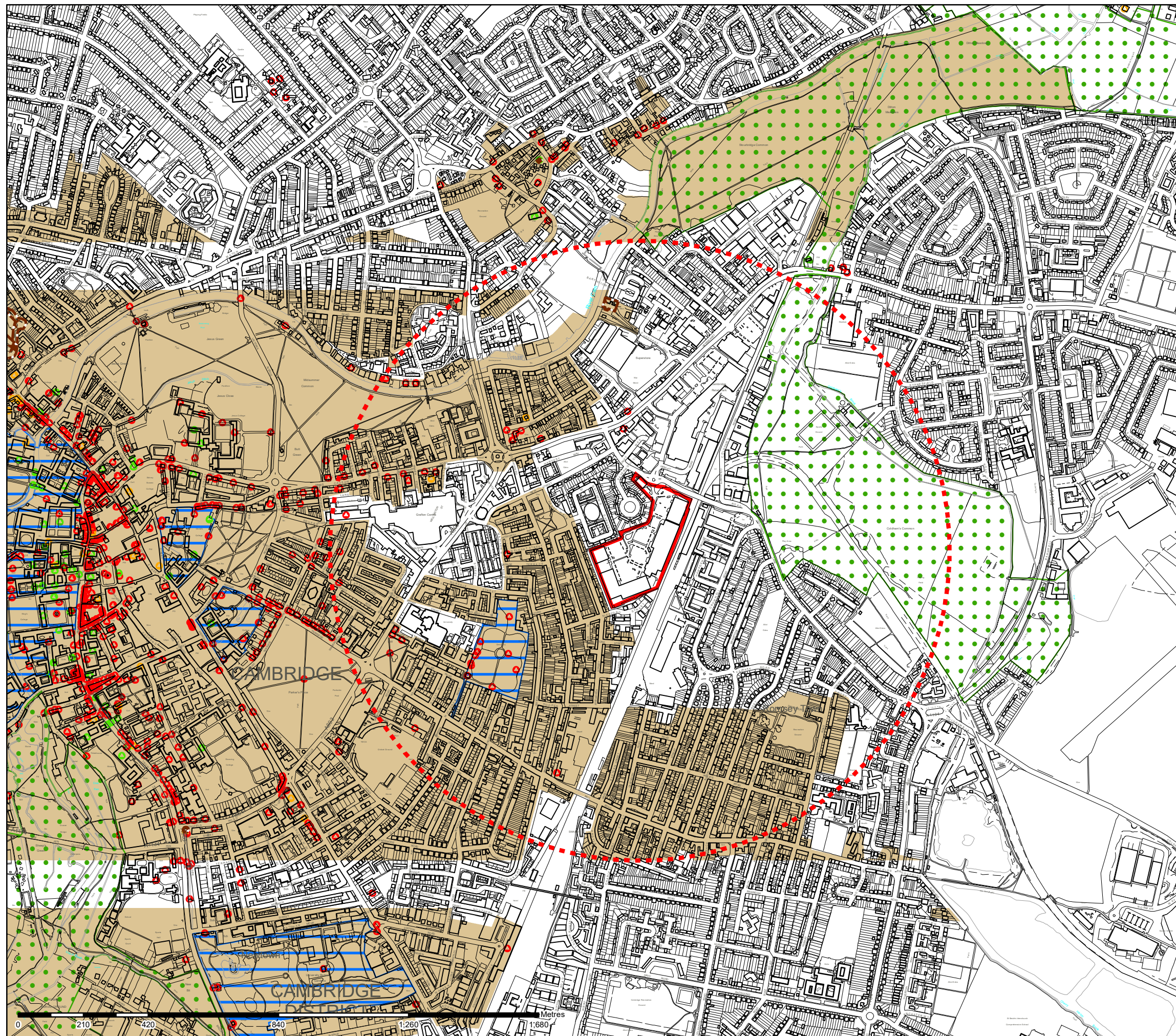
#### Legend

-  Proposed Development Site
-  1km Radius
-  Existing Woodland
-  0m - 10m
-  10m - 20m
-  20m - 30m
-  30m - 40m
-  40m - 50m

Drawing Number: B.16,600c  
Date: 02/11/2020  
Scale: 1:12,500 @ A3  
O.S. Ref: TL 4658



# BIDWELLS



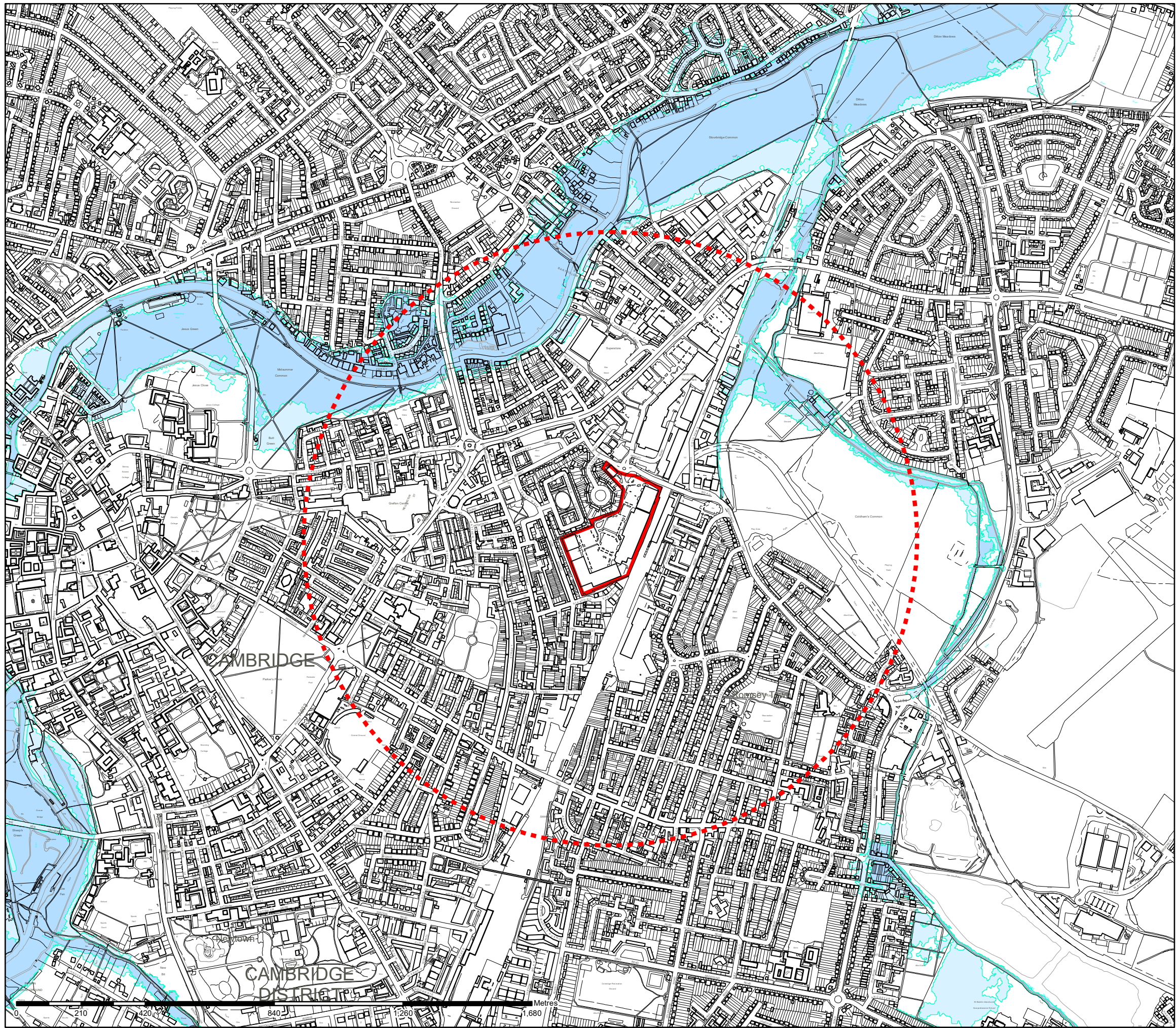
## Project Otter

### Map 4a - Designations

#### Legend

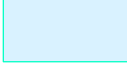
-  Proposed Development Site
-  1km Radius
-  Scheduled Ancient Monument
-  Green Belt
-  Registered Parks and Gardens
-  Conservation Area
-  Grade I Listed Building
-  Grade II\* Listed Building
-  Grade II Listed Building

Drawing Number: B.16,600d  
Date: 02/12/2020  
Scale: 1:12,500 @ A3  
O.S. Ref: TL 4658

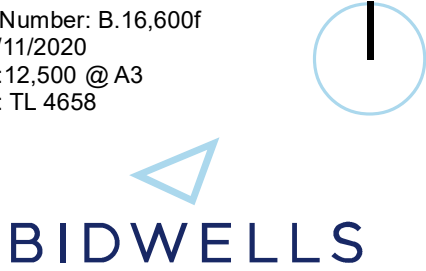


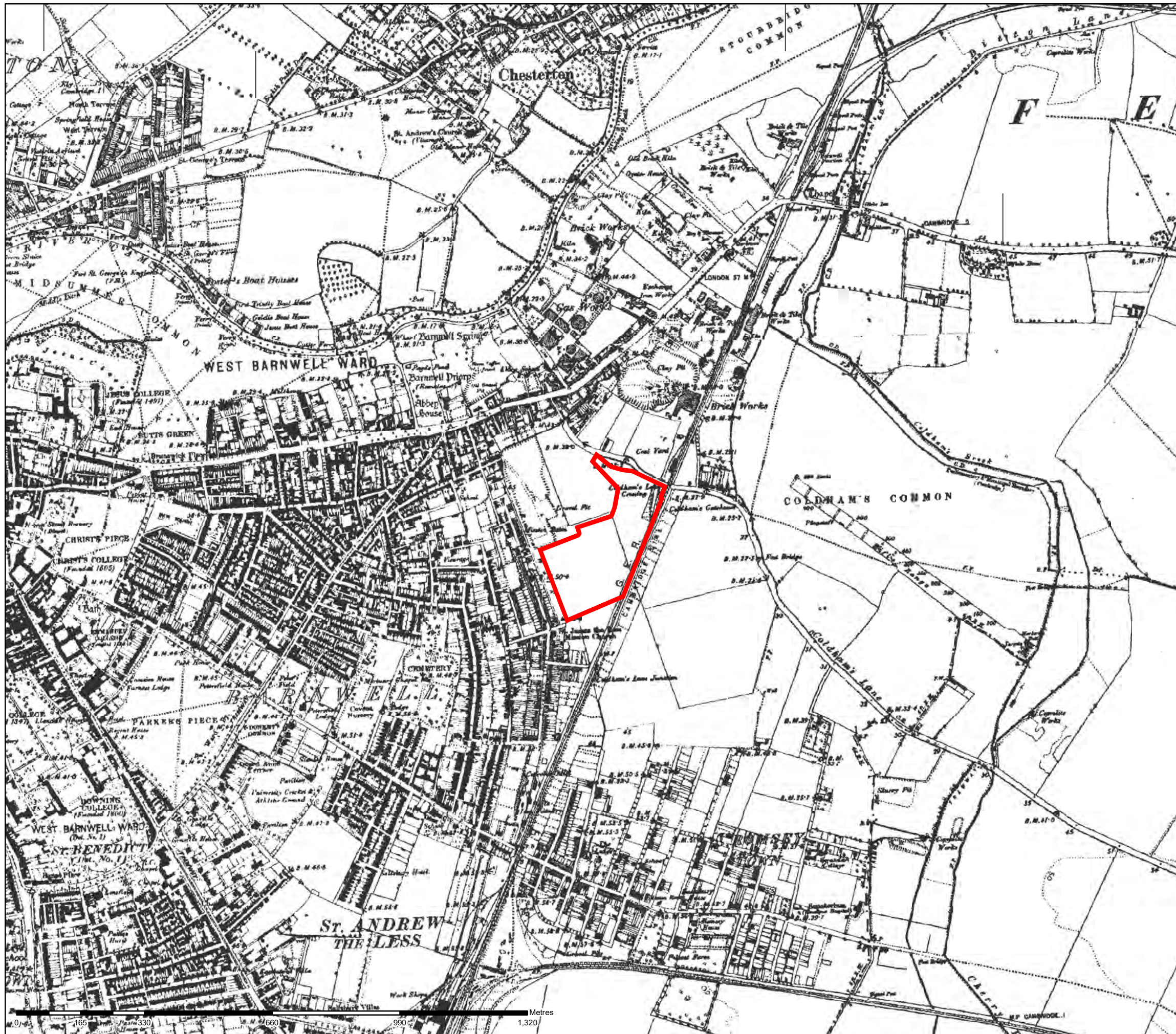
**Project Otter**  
Map 9 - Flood Risk

**Legend**

-  Proposed Development Site
-  1km Radius
-  Flood Zone 3
-  Flood Zone 2

Drawing Number: B.16,600f  
Date: 02/11/2020  
Scale: 1:12,500 @ A3  
O.S. Ref: TL 4658





# Project Otter

## Map 10a - Historical - 1889

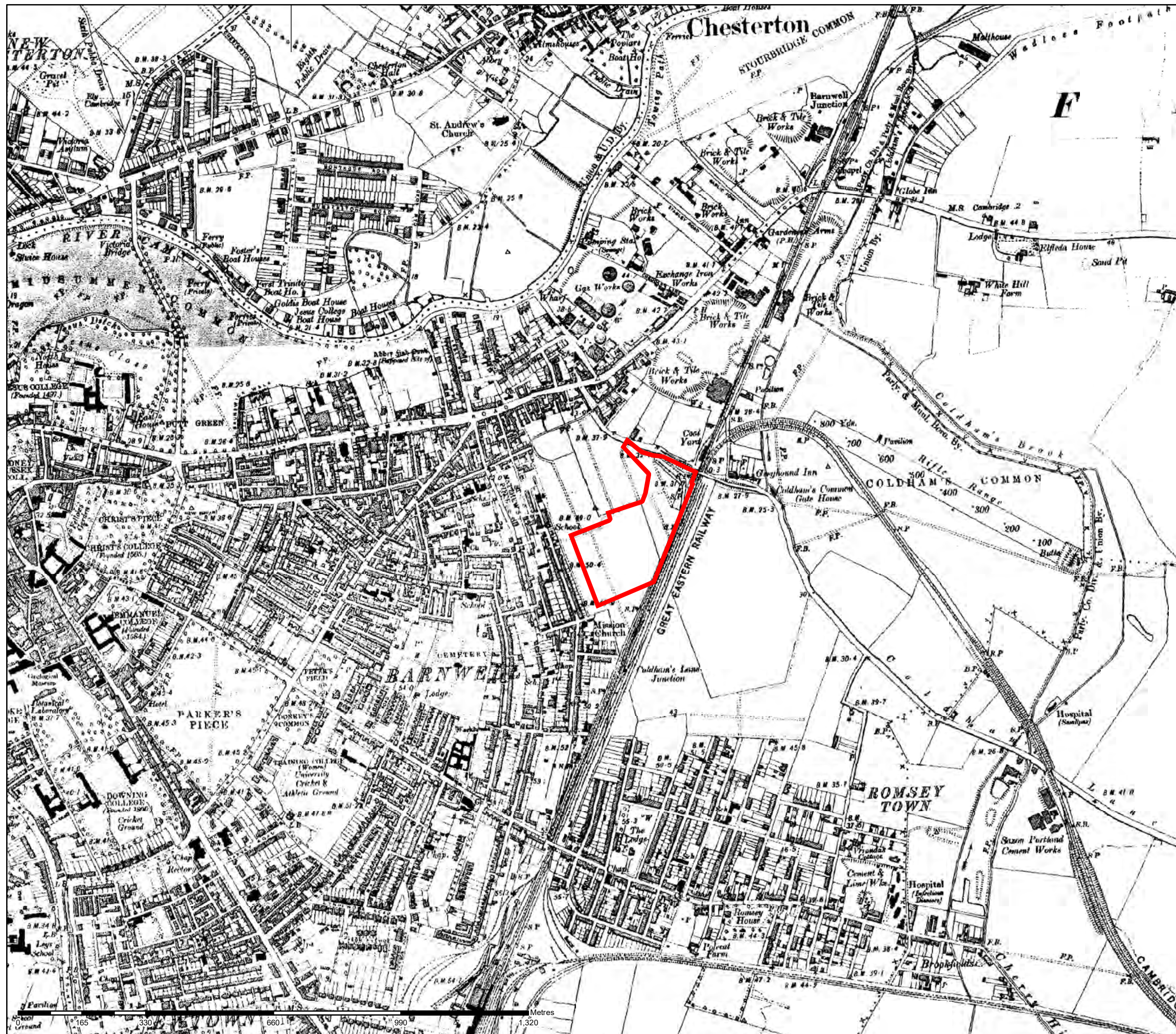
### Legend

 Proposed Development Site

Drawing Number: B.16,600g  
Date: 02/11/2020  
Scale: 1:10,000 @ A3  
O.S. Ref: TL 4658



  
**BIDWELLS**



## Project Otter

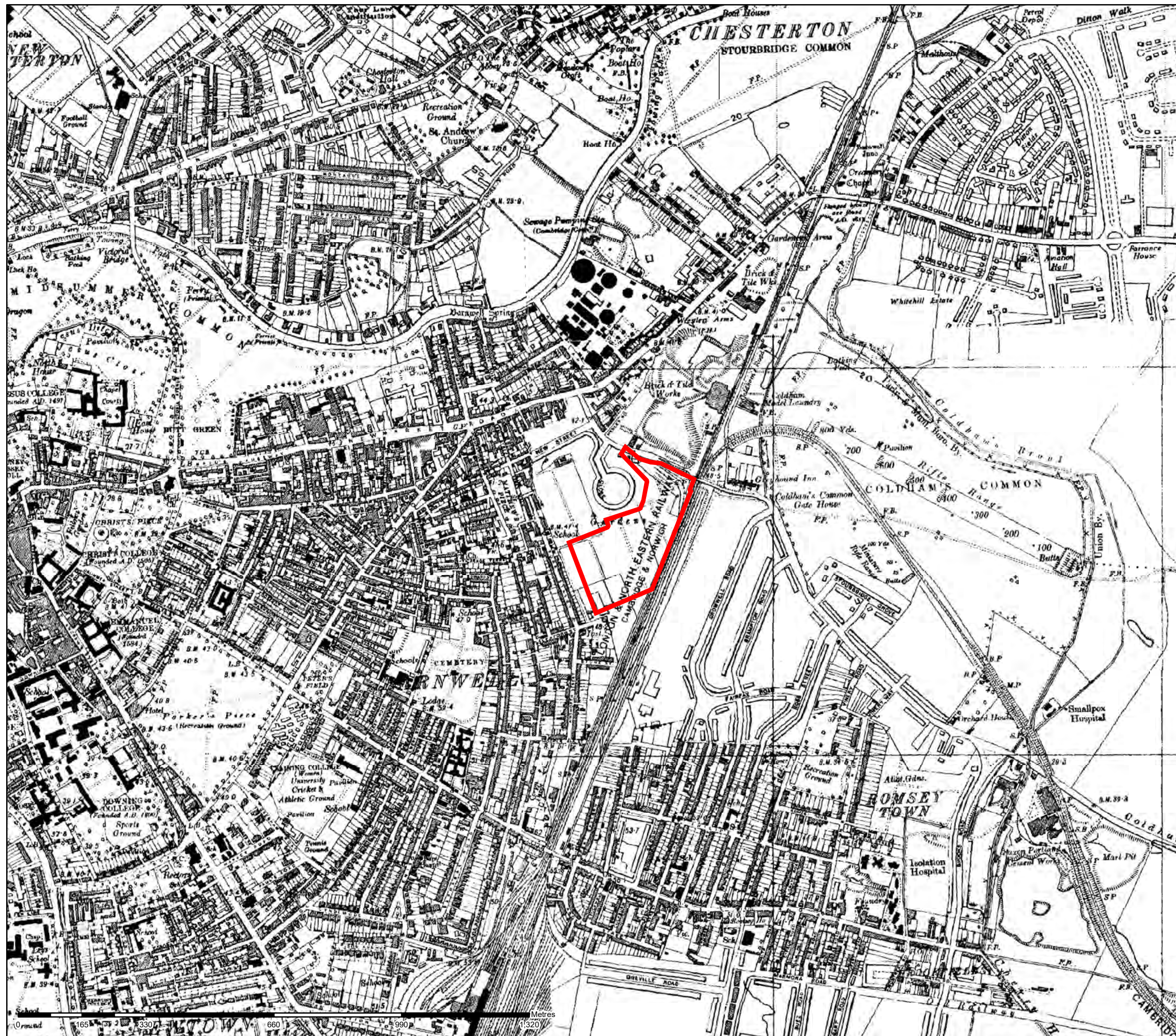
### Map 10b - Historical - 1904

#### Legend

 Proposed Development Site

Drawing Number: B.16,600h  
Date: 02/11/2020  
Scale: 1:10,000 @ A3  
O.S. Ref: TL 4658

  
**BIDWELLS**



# Project Otter

## Map 10c - Historical - 1951

### Legend

 Proposed Development Site

Drawing Number: B.16,600i  
Date: 02/11/2020  
Scale: 1:10,000 @ A3  
O.S. Ref: TL 4658