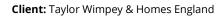


# Environmental Statement: Volume 1 Non-Technical Summary

August 2021







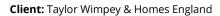


#### Contents

1.	Introduction	1
2.	EIA Approach and Methodology	2
3.	Site Description	7
4.	Alternatives	10
5.	The Proposed Development	12
5.	Planning Policy Context	15
7.	Ecology and Nature Conservation	16
3.	Archaeology and Heritage	19
9.	Landscape and Visual	21
10.	Ground Conditions	24
11.	Drainage and Flood Risk	26
12.	Transport and Access	29
13.	Air Quality and Dust	33
14.	Noise and Vibration	34
15.	Socio-economics	36
16.	Human Health	39
17.	Climate Change	41
18.	Cumulative Effects	43
19.	Summary and Conclusions	44
20.	ES Availability and Comments	45

#### **Appendices**

Appendix I	Red Edge Boundary Plan (Application A)
Appendix II	Red Edge Boundary Plan (Application B)
Appendix III	Land Use Parameters Plan (Application A)
Appendix IV	Land Use Parameters Plan (Application B)
Appendix V	Maximum Building Height Parameter Plan (Application A)
Appendix VI	Maximum Building Height Parameter Plan (Application B)
Appendix VII	Illustrative Masterplan (Application A)
Appendix VII	l Illustrative Masterplan (Application B)
Appendix IX	Indicative Phasing Plan





**Prepared by:** Jonathan Wilks **Approved by:** Richard Kevan

Status: Final

**Draft Date:** August 2021

For and on behalf of Avison Young



#### 1. Introduction

- 1.1 Taylor Wimpey and Homes England (hereafter referred to as the 'Applicants') are seeking to obtain two planning permissions for two separate residential-led mixed-use developments (hereafter referred to as 'Application A' and 'Application B') on land to the east of Penwortham Way known as 'The Lanes, Penwortham' (hereafter referred to as 'the Site'). The Site is located within the administrative authority of South Ribble Borough Council (SRBC). A single 'global' Environmental Impact Assessment (EIA) has been undertaken, and a single Environmental Statement (ES) produced which has assessed the potential impacts of both of the applications which together comprise the 'Proposed Development'.
- 1.2 The wider site is allocated in the South Ribble Local Plan (adopted in July 2015) as a Major Site for Development (under Policy C1) for 1,350 residential dwellings, and the land to the south of the allocated site is designated as Safeguarded Land. The planning applications will bring forward the majority of the allocated site for c. 1,100 residential units that is within the Applicants' control, along with the associated infrastructure required to facilitate the remaining Allocation. The planning application boundaries for the outline applications are shown edged red on an Ordnance Survey (OS) base maps presented at **Appendix I** and **Appendix II**.
- 1.3 The application site which includes both the outline applications, is irregular in shape and occupies approximately 52.27 hectares (ha) on land to the east of Penwortham Way to the south of the settlement of Penwortham (this includes the Application A site area of 45.88 ha and Application B site area of 6.39 ha). The Site is located within the administrative authority of SRBC. The northern extent of the Site is located within the ward of Charnock and the southern extent is located within the ward of Farington West. Parcels of land which lie within the wider C1 allocation have been excluded from the application site as they are not within the Applicants' control.
- 1.4 Avison Young has been commissioned by the Applicants to co-ordinate the EIA process and produce the ES for the Proposed Development. Specialist competent consultants have been appointed to undertake the component studies of the EIA.
- 1.5 This document is the Non-Technical Summary and is Volume 1 of the ES. It has been prepared by Avison Young in accordance with the Town and Country Planning (Environmental Impact Assessment) (England) Regulations 2017.



### 2. EIA Approach and Methodology

- 2.1 An EIA predicts the significant positive and negative environmental impacts associated with a development proposal to provide the Local Planning Authority with sufficient information to make an informed decision on the granting of planning consent.
- 2.2 Once the need for EIA was established, a 'scoping' study was undertaken, and an EIA Scoping Report was formally submitted to SRBC on 14<sup>th</sup> November 2018. The process of scoping identifies the range of possible environmental impacts and the technical assessments that need to be considered further within the EIA process. The scoping process involved a site walkover, initial desk-based work and consultation with SRBC.
- 2.3 A formal Scoping Opinion was issued by SRBC on 17th December 2018 and, in addition, the EIA team have consulted with consultees upto the submission of this application. The EIA team has sought to directly liaise with the various officers at SRBC and other appropriate stakeholders where possible to agree the scope of the technical assessment.
- 2.4 The proposed technical disciplines scoped-in to the EIA are as follows:
  - Ecology and Nature Conservation;
  - Archaeology and Heritage;
  - Landscape and Visual;
  - Ground Conditions;
  - Drainage and Flood Risk;
  - Transport and Access;
  - Air Quality and Dust;
  - Noise and Vibration;
  - Socio-Economics;
  - Health; and
  - Climate Change.
- 2.5 It should be noted that the Scoping Report prepared included third party land and was scoped for a 'hybrid' application, this included outline application for the residential-led mixed use elements and detailed application for a Cross Borough Link Road (CBLR). It was subsequently decided that the application would be:
  - Split into the two residential parcels previously referred to; and,



- The area that was previously scoped for the CBLR now forms the spine road which traverses the application site and is built to a suitable specification to be used as the CBLR if required in the future. The land for the CBLR will therefore be protected from physical development if required in the future in line with Policy A2 of the Local Plan.
- As the two applications present the same potential impacts as the initial strategy, the scope of the 'global' EIA, which covers the potential impacts of both applications, has been prepared in line with the agreed scope as per the Scoping Opinion received December 2018 (see **Appendix 2.1** and **2.2**) In addition, there has been limited change to the baseline on site and detailed consultation has been ongoing on the Proposed Development since the submission of the Scoping Report.
- 2.7 As part of this scoping process and subsequently to inform this new Environmental Statement, a planning application search of the SRBC and Lancashire County Council (LCC) planning portals was undertaken to identify any committed developments (those which are existing and/or approved) with the potential for cumulative effects.

  Table 2.1 shows the potential cumulative sites that have been identified in the vicinity of the Proposed Development and agreed with SRBC and LCC.

Table 2.1: Cumulative Sites

Site Ref.	Application No.	Proposal	Approx. Distance and Direction	Status
1	07/2012/0627/ ORM	Outline application for Residential Development [350 dwellings] (Access applied for).	2km south	Approval with conditions on 30th August 2013
2	07/2014/0184/ ORM	Outline application for Residential development of up to 400 dwellings (access applied for)	1.4km south	Approved on 11th March 2016
3	07/2017/0211/ ORM	Cuerden Strategic Site, Hybrid planning application for retail floorspace (Use Classes A1 & A3) and associated car parking, site access, highway works, drainage and strategic landscaping. Employment floorspace (Classes B1, B2 & B8), hotel (Class C1), health and fitness and leisure (Class D2), creche/nursery (Class D1), retail (Classes A1, A2, A3, A4 & A5), car showrooms (Use Class Sui Generis), residential (Classes C2/C3) and provision of associated car parking, access, public open space, landscaping and drainage (Access applied for)	1.5km southeast	Approved on 20th December 2017



Site Ref.	Application No.	Proposal	Approx. Distance and Direction	Status
4	07/2017/3361/ ORM	Hybrid planning application comprising of Full and Outline development - Environmental Impact Assessment (EIA) development Part A FULL - Site enabling works, the development of highway and drainage infrastructure for the full application site (the Proposed Development site) and the provision of car park accessed off Titan Way (Phase 1); together with the construction of 197 dwellings and associated internal access roads, public open space, green infrastructure, an acoustic barrier and highway infrastructure (Phase 2)  Part B OUTLINE - for the remainder of the Proposed Development site for the development of between 653 and 753 new homes, up to 5,000 sqm of Business Park (Use Classes B1); up to 15,000 sqm of Use Class B2 and up to 8,000 sqm Industrial Estate (Use Class B8), local centre comprising up to 3,000 sqm of accommodation for occupation within any combination of uses within Classes A1,A2,A3, A4,A5,B1 or D1 (including health centre/clinic) (which shall not exceed 2,500 sqm of main town centre uses), a primary school (1.646ha) and associated public open space and green infrastructure (Phases 3-5 and education, employment and local centre phases) (Amended Plans)	3km southwest	Approved on 7th November 2019
5	07/2016/0512/ FUL	Erection of 28 dwellings with associated infrastructure	0.5km east	Approval with conditions on 13th March 2017
6	07/2017/1266/ REM	Reserved Matters application for the erection of 61 residential units comprising of dwellings and apartments with associated landscaping	1.5km north	Approved 14th December 2018
7	07/2014/0190/ ORM	Hybrid application for the erection of approximately 385 dwellings. This is hybrid application which includes two parts - Part A: Outline application permission (excluding Phase 1) for the erection of up to 204 dwellings, with the provision of associated infrastructure (including roads, footpath, cycleways and open space). All matters reserved for subsequent approval  PART B: Full planning permission (Phase 1 as shown on the plans) for the erection of 181 dwellings and the provision of associated	0.5km northeast	Approved on 22nd December 2015



Site Ref.	Application No.	Proposal	Approx. Distance and Direction	Status
		infrastructure (including roads, footpaths, cycleways and open spaces)		
8	07/2015/0315/ REM	Reserved matters application for the erection of 281 dwellings with associated infrastructure and landscaping	1.2km northeast	Approved on 13th August 2015
9	07/2020/00774 /FUL	Proposed redevelopment for open storage (Use Class B8), caravan storage (Use Class B8), caravan site including erection of ancillary building (Sui Generis) and recreation (Use Class E), change of use of existing building to workshop/storage (Use Class B2/B8) and ancillary caravan site/recreation use (Sui Generis), retention of existing building for log store and processing (Class E), siting of static caravan as ancillary office to existing birds of prey centre (Sui Generis) and the retrospective reinstatement of a former track to access the Site.	0.2km west	Awaiting decision – application validated on 18th September 2020
10	LCC/2020/001  Improvement of existing A582 and B5253 Leyland to four lane dual carriageway standard with segregated combined cycle track between broad oak roundabout and Stanifield Lane / Watkin Lane roundabout (A582) and Flensberg Way roundabout to Longmeanygate junction (B5253). The development includes new carriageways, upgrade of existing Croston Road, Sherdl Road and Longmeanygate junctions to fursignalised operation, embankments, attenuation ponds, landscape / ecological mitigation works, new railway bridges, retaining structures and fences, alteration extension of subway, bridges and culvert temporary contractor access and composite		Adjacent to sites western border	Awaiting decision – application validated on 2nd March 2020
11	n/a	Completion of full allocation of Site C1 of the SRBC Local Plan which includes additional 250 residential units on third party land adjacent to the Site	On third party land adjacent to the Site within Site C1 of the SRBC Local Plan	n/a

2.8 It should be noted that the Scoping Report included a cumulative application (ref. 07/2018/9316/OUT) for the construction of up to 100 dwellings and associated works approximately 0.3km south of the Site. This application has subsequently been refused and as such is no longer considered as a cumulative development. Additionally, Site Refs 9 (07/2020/00774/FUL) and 10 (LCC/2020/0014) in Table 2.1 were not included in the Scoping Report as



these applications had not been submitted at the time. These cumulative developments are being considered in this EIA as they are located within the vicinity of the Site and could potentially result in cumulative effects with the Proposed Development.

- 2.9 Each environmental topic adopts the same approach to ensure consistency and the final results are presented to SRBC in a document referred to as an ES. The chapters assessing the environmental topics first establish the baseline conditions on the Site before predicting the potential impacts during both the construction phase and the operational phase of development.
- 2.10 The EIA has identified and assessed the significance of potential environmental effects relating to the topics listed above. The assessment of 'significance' has been undertaken for all potential effects to determine their relative importance.
- 2.11 The type of effect can be adverse, negligible or beneficial; a brief description is provided below:
  - Adverse a negative impact on a sensitive receptor or the existing environment;
  - Negligible no discernible effect on a sensitive receptor or the existing environment; and
  - Beneficial a positive effect on a sensitive receptor or the existing environment.
- 2.12 In addition, the degree of significance can be minor, moderate or major; and a brief description is provided below:
  - Minor slight, short-term, or localised effect on a sensitive receptor or the existing environment;
  - Moderate a noticeable effect on a sensitive receptor or the existing environment; and
  - **Major** a substantial effect on a sensitive receptor or the existing environment.
- 2.13 When a significant adverse impact is identified as a result of the assessment process, then measures to avoid, reduce and, if possible, offset significant adverse environmental effects associated with the proposal are outlined within the assessment. These measures are referred to as mitigation. Embedded mitigation is measures which have been 'designed-in' to the Proposed Development to mitigate potential adverse environmental effects. Identifying and implementing mitigation measures is a key part of the EIA process and the residual impacts which remain after mitigation have been identified and their significance stated.



# 3. Site Description

3.1 The Site is irregular in shape and occupies approximately 52.27 ha on land to the east of Penwortham Way to the south of the settlement of Penwortham (this includes the Application A site area of 45.88 ha and Application B site area of 6.39 ha). The Site is located within the administrative authority of SRBC. The northern extent of the Site is located within the ward of Charnock and the southern extent is located within the ward of Farington West. **Figure**3.1 shows the location of each application within the Site.

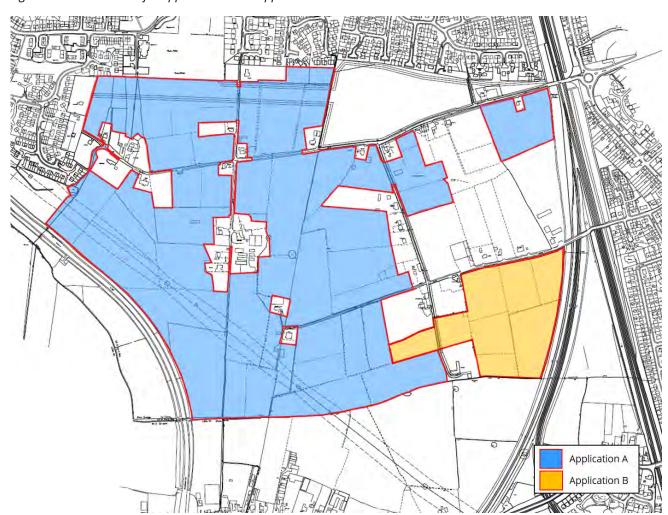


Figure 3.1: Location Plan for Application A and Application B

- 3.2 The Site is currently occupied by a number of individual properties in private ownership which are accessed via Bee Lane, Flag Lane, Lords Lane, Moss Lane and Nib Lane which bisect the Site. Overhead Electricity Pylons pass through the western area of site running in a northwest-southeast direction.
- 3.3 The Site is bound by Penwortham Way to the west, existing residential development south of Kingsfold Drive to the north, the West Coast mainline railway to the east and agricultural fields (safeguarded for development) to the south.



- 3.4 The Site comprises a mix of land uses including:
  - Agricultural land separated into a number of fields by fences, hedgerows and trees and associated buildings;
  - · Pylon corridor; and
  - Roads.
- 3.5 The Site surrounds a number of residential dwellings and light industrial buildings, some of which are controlled by the Applicants. Only a small number of existing buildings lie within the application boundary.
- 3.6 The Site lies within Flood Zone 1 meaning that the Site has a less than a 1 in 1,000 (1:1,000) annual probability of flooding from fluvial sources. Mill Brook forms a short section of the Site's southern border which is a tributary of the River Ribble, which itself is located approximately 1.5km north of the Site. The river Lostock is located approximately 1km southeast of the Site beyond Farrington.
- 3.7 There are a number of Ordinary Watercourse features (defined as a river, stream, ditch, drain, cut, dyke, sluice, sewer (other than a public sewer) through which water flows) present within the Site.
- 3.8 There are no foul or combined sewers present within the Site boundary. The existing properties encompassed by the Site are served by septic tanks and cesspits.
- 3.9 The bedrock geology is that of the Singleton Mudstone Member (Mudstone). This is overlain by Devensian Till (Diamicton) superficial deposits.
- 3.10 There are no active or historic landfills located either within the Site boundary or within 1km of the Proposed Development.
- 3.11 The Site has remained as undeveloped agricultural land since earliest mapping records.
- 3.12 There are no statutory ecologically designated sites either within the Site boundary or within 2km of the Site. No non-statutory ecologically designated sites are located within the Site boundary, however, Preston Junction Local Nature Reserve (LNR) is located approximately 0.8km northeast of the Site.
- 3.13 Within the Site there are 171 individual trees and 95 groups of trees; out of this population 11 individual trees and 4 groups of trees were categorised as high quality (Category A), 83 individual trees and 62 groups of trees were of moderate quality (Category B) and 77 individual trees and 29 groups of trees were of low quality (Category C) features. This is a reflection of the general good condition and relative maturity of the population.
- 3.14 There is a Tree Preservation Order present on the Site.



- 3.15 There are no statutory heritage designations (Scheduled Monuments, Grade I Grade II Listed Buildings, Conservation Areas, Registered Parks and Gardens or Registered Battlefields) within the Site boundary. There are a number of designated heritage assets located within the vicinity of the Site.
- 3.16 The predominant source of local noise originates from road traffic on Penwortham Way to the immediate west of the Site. The West Coast railway line located to the immediate east of the Site is also a source of noise and vibration.
- 3.17 The Site is not located within or in close proximity to an Air Quality Management Area (AQMA); the closest AQMA is located to the east of the Site on Leyland Road (approximately 0.4km east).



#### 4. Alternatives

- 4.1 A statutory requirement for inclusion in an ES is the reporting of the consideration of alternatives in the development of a proposal. The proposals have been developed through the EIA and design process with extensive stakeholder and community consultation. Environmental constraints and potential adverse effects have been identified and as a result mitigation measures have been incorporated into the overall proposals. Alternative Sites were not considered as the Site is allocated in the South Ribble Local Plan (adopted in July 2015) as a Major Site for Development (under Policy C1).
- 4.2 The EIA considered the implications of the development not coming forward, referred to as the 'do nothing' alternative. The do-nothing alternative would be for the Site to remain in its current state and is anticipated to remain in agricultural use. In this do-nothing alternative, a number of implications are identified including:
  - The no development option would be detrimental to national and local policy requiring more housing elsewhere within the borough to address the lack of supply;
  - Socioeconomic conditions would likely remain the same in the area whereas development would bring improvements through provision of housing, retail and community facilities and a primary school; and,
  - Any habitats lost through development would be offset through a biodiversity offsetting exercise. This will
    ensure the proposals represent a net-gain for biodiversity in the long term. In a no development scenario, the
    Site would remain in its current condition and would not benefit ecology.
- 4.3 In the absence of the Proposed Development, potential impacts which are anticipated as a result of the scheme would not occur and the baseline environment would remain as agricultural land for the foreseeable future.
- 4.4 The limited negative impacts of the Proposed Development include landscape and visual impacts during the construction and operational phases, construction phase impacts relating to loss of habitats, construction related emissions, additional traffic on the local highway network and loss of agricultural resource. However, these should be weighed against the benefits of the scheme, particularly with regards to flood risk, socio-economics and SRBC's ambitions for the Site to be developed for a major mixed-use development. Given the above, and the Site allocation, the Applicants have not considered not proceeding with the development of the Site in line with the allocation.

#### **Design Evolution**

4.5 The Applicants and the design team for the outline applications have regularly liaised with SRBC during a series of pre-application meetings in order to ensure that the evolving design meets the aspirations for the Proposed Development site. The Applicants have also engaged with statutory consultees and the public for a number of



years including during the previous submission as outlined in the Statement of Community Involvement (SCI) which is submitted as a standalone report in support of the planning application.

- 4.6 The key points of design evolution of the Proposed Development are as follows:
  - An active travel first approach.
  - Protecting the route of the CBLR in line with Policy A1.
  - Removing orchard land from the Site.
  - Restricting maximum building heights around existing sensitive receptors adjacent to the site.
  - Removing four-storey element from building heights plan.
  - Including landscape buffers along the western and eastern borders adjacent to Penwortham Way and the railway line respectively.



### 5. The Proposed Development

- 5.1 Permission is being sought for two residential-led planning applications with all matters reserved (including scale, layout, appearance and landscaping) except for the principal means of access. The developments propose the demolition of certain existing buildings and construction of residential led mixed-use developments comprising:
  - Application A:
    - Up to 920 dwellings;
    - A new two form entry primary school;
    - A new Local Centre, including a mobility hub and third space<sup>1</sup>;
    - o Green Infrastructure; and
    - Associated Infrastructure.
  - Application B:
    - Up to 180 dwellings;
    - o Green Infrastructure; and
    - Associated Infrastructure.
- 5.2 The planning applications are accompanied by a series of parameters to inform the assessment. These include the description of development, the red edge boundaries, land use parameter plans, maximum building heights parameter plans, demolition plan and means of access plan. The Proposed Development will be brought forward in accordance with these plans submitted for approval.
- 5.3 The planning applications propose a residential led mixed-use development as set out in the Table 5.1 below:

Table 5.1: Development Proposals

Use		Proposal
Residential (Appl and B)	lications A	The scheme proposes the construction of up to 1,100 residential dwellings (Use Class C3 and C2) across the Application A and B sites, comprising a mix of bungalows, detached, semi-detached, mews and apartment properties ranging from 1-4 bedrooms. A proportion of the dwellings could comprise specialist housing for the elderly and 30% affordable housing is proposed in line with policy requirements.

<sup>&</sup>lt;sup>1</sup> The Third Space facility will provide a co space working environment for the use of new residents to the Site and the existing community.





Use	Proposal
Local Centre (Application A)	Retail, commercial, employment and community uses including a mobility hub and third space within Use Classes E (a, b, c, e, f and g) and sui generis; extending up to 2,500 sqm
Primary School (Application A)	A two-form entry primary school within Use Class F1 (a) extending up to 1,200 sqm, on a site area of 2 hectares.
Green Infrastructure (Applications A and B)	Extensive green infrastructure up to 16.09 hectares.

- 5.4 This ES assesses both Application A and Application B together. If Application B is not brought forward then the environmental effects associated with Application A only will not be significantly different to those that are likely to arise in relation to Application A and Application B together, unless otherwise stated in the technical chapters.
- 5.5 **Appendix III** and **Appendix IV** illustrate the Land Use Parameter Plans for Application A and Application B respectively.
- 5.6 **Appendix V** and **Appendix VI** illustrates the maximum building heights throughout the Proposed Development.
- 5.7 Illustrative Masterplans which provide an indicative layout of both outline applications is provided at Appendix VII and VIII respectively.
- Due to the size of the development, a phased approach to construction will be undertaken. The sequencing of the delivery of the indicative phases is currently unknown. Should the application be approved, the Local Planning Authority is invited to impose a condition which requires a detailed phasing plan to be submitted to SRBC as part of the first reserved matters application. An indicative phasing plan for the outline residential-led application is presented at **Appendix IX**. The technical chapters of this ES have assessed the full development (i.e., Application A and Application B) where phasing gives rise to different effects this has been noted in the chapters.
- Application A shall include mixed retail and commercial uses within the residential parameter area. At this stage an occupier has not been identified therefore the units could include a variety of uses, including Use Classes E (a, b, c, d, e, f, and g) and Sui Generis.
- 5.10 Also, within the residential parameter area of Application A will be a new two-form entry primary school which will provide approximately 420 places<sup>2</sup>.
- 5.11 Extensive landscaping and green infrastructure will be provided across the Site. As noted in **Appendix III**, an extensive area of open space is provided adjacent to Penwortham Way. An area of open space is also provided

<sup>&</sup>lt;sup>2</sup> Based on 14 classes with an average size of 30 pupils



along the Site's eastern border which can be seen at **Appendix III** and **Appendix IV**. The green infrastructure will have differing forms, functions and uses and will be connected by the extensive network of green links across the Site. On site green infrastructure provision could include amenity green space, equipped play areas, natural / semi natural open space, playing fields and allotment provision.

5.12 The Proposed Development will be served by a separate foul and surface water drainage network which will be designed to ensure that any potential flood risk during extreme rainfall events is mitigated. The surface water drainage strategy for the Site will provide a reduction in peak discharge flow rates and volumes alongside surface water attenuation which will reduce the impact of the development on the local drainage network and receiving watercourses. Where possible, attenuation ponds and other sustainable drainage system (SuDS) features will be incorporated into the open space areas which will provide amenity, biodiversity and water quality benefits.



### 6. Planning Policy Context

- 6.1 The Environmental Statement identifies and sets out the relevant planning policy context against which the development proposals should be considered. All of the relevant planning policies which form part of the Development Plan for the area have been identified in addition to relevant national planning policy guidance. The Proposed Development has been assessed in light of the National Planning Policy Framework ('NPPF'), National guidance provided by the Planning Practice Guidance ('PPG'), and the South Ribble Borough Council Local Plan 2012-2026.
- 6.2 It should be noted that the Site is allocated for a Major Mixed-Use Development under Policy C1 (Pickering's Farm, Penwortham) of the South Ribble Local Plan. The Site has been allocated to provide for the development of up to 1,350 dwellings and deliver the necessary infrastructure for the area.



#### 7. Ecology and Nature Conservation

- 7.1 An ecological impact assessment ('EcIA') has been undertaken to assess the baseline ecological conditions currently at the Site, evaluate the potential direct and indirect effects of the development, and outline any avoidance and mitigation measures which may be needed to address ecological effects. The assessment has been undertaken by TEP.
- 7.2 In order to assess the ecological value of the Site and the wider study area surrounding the Site, the following ecological surveys have been undertaken:
  - Ecology Desk Study (August 2019)
  - Phase 1 Habitat Survey Report (July 2021);
  - Arboriculture Assessment (July 2021);
  - Hedgerow Survey (July 2019);
  - Badger Survey (July 2021);
  - Barn Owl Survey (July 2021);
  - Bat Roost Survey (August 2019 and July 2021 update);
  - Bat Activity Survey (September 2019);
  - Breeding Bird Survey (August 2019);
  - Wintering Bird Survey (August 2019);
  - Great Crested Newt Survey (August 2019); and
  - Water Vole Survey (September 2019).
- 7.3 The Proposed Development site is dominated by agricultural land, which is of limited value for wildlife due to its improved nature, low diversity and regular disturbance. The main features of value within the Site are the hedgerows, traditional orchard, woodland and trees.
- 7.4 There are seven statutory designated sites within 10km of the Site and these are detailed below:
  - Ribble and Alt Estuaries Ramsar (approximately 6.8km west);
  - Ribble and Alt Estuaries Special Protection Area (SPA) (approximately 6.8km west);
  - Ribble Estuary National Nature Reserve (NNR) (approximately 6.8km west);
  - Beeston Brook Pasture Site of Special Scientific Interest (SSSI) (approximately 5.8km east);
  - Ribble Estuary SSSI (approximately 6.8km west);



- Red Scar and Tun Brook Woods SSSI (approximately 7.4km northeast); and
- Newton Marsh SSSI (approximately 7.5km northwest).
- 7.5 There are six non-statutory designated sites within 2km of the Site and these are detailed below:
  - Preston Junction Local Nature Reserve (LNR) (approximately 850m northeast);
  - Preston Junction Biological Heritage Site (BHS) (approximately 850m northeast);
  - Cop Lane Cutting BHS (approximately 1.1km northwest);
  - Hurst Grange Park BHS (approximately 1.1km northwest);
  - Carr Wood BHS (approximately 1.25km northeast); and
  - Ribble Estuary Upper Tidal Section BHS (approximately 1.7km north).
- 7.6 To minimise the impacts of the Proposed Development a series of mitigation measures have been recommended.

  During the construction phase of the development, a Construction Environment Management Plan ('CEMP') will be produced prior to commencement on site and implemented throughout the construction period. This will manage and reduce the potential effects of this development phase on ecological receptors.
- 7.7 Further mitigation measures include replacing any high to moderate value trees that are lost at a ratio of 3:1. The loss of hedgerows will be minimised where possible or replacement planting with locally suitable species-rich hedges will be provided elsewhere within the scheme on a 1.5:1 ratio. Gap planting of retained hedgerows will also be implemented where appropriate.
- 7.8 Public open space, wildlife-friendly habitats and green corridors will be provided within the landscaping scheme.
- 7.9 Bat boxes will be installed to mitigate for the loss trees with roosting suitability at a ratio of 3:1. These will be installed on retained trees, away from direct disturbance and lighting, prior to commencement of site clearance works to ensure that alternative roost sites are immediately available.
- 7.10 Barn owl boxes are not recommended within 1.5km of a main road or railway line which border the Site to the west and east respectively. In order to mitigate for the likely fragmentation effects to the barn owl/s which may use building B3 (located to the west of Lords Lane to the east of Application A), it is proposed that up to five barn owl boxes or towers will be installed either on the edge of the new development and facing open countryside or on off-site land owned by the Applicants.
- 7.11 Bird boxes will be installed to mitigate for the loss of buildings and trees with nesting suitability at a ratio of 2:1.

  These will be installed on retained trees, away from direct disturbance and lighting, prior to commencement of site clearance works to ensure that alternative nest sites are immediately available.



- 7.12 Reasonable Avoidance Measures (RAMs) will be implemented to minimise impacts to bats, birds, common amphibians, badgers, and hedgehogs, if present, during construction.
- 7.13 Japanese knotweed which is known to be present on site will be eradicated from the Site under a non-native invasive species management plan.
- 7.14 As a result of the mitigation measures during the construction phase the majority of impacts will be **neutral** with the exception of the loss of orchard, tree and hedgerow habitats, which are anticipated to be **minor adverse** in the short term. As the replacement habitat matures, these impacts reduce to **neutral** or **minor beneficial**.
- 7.15 At the completed development stage, a landscape and habitat management plan will be produced and implemented. This management plan will serve to enhance and maintain the quality of retained and newly created habitats in the long-term, including the traditional orchard, deciduous woodland, trees and hedgerows as well as maintenance of bat, barn owl and bird boxes.
- 7.16 A sensitive lighting design will ensure that lighting is minimised along wildlife corridors and nest/roost sites, reducing the potential impact on birds and bats.
- 7.17 The mitigation measures will ensure that a **neutral** impact is experienced on all ecological receptors on site or in the surrounding areas during the completed development phase.
- 7.18 The proposed phasing of the development will not have any additional implications in relation to ecology and arboriculture.



#### 8. Archaeology and Heritage

- 8.1 An archaeological and heritage assessment has been undertaken to assess the baseline archaeology and heritage conditions currently at the Site and the surrounding area, evaluate the potential direct and indirect effects of the development, and outline any avoidance and mitigation measures which may be needed to address potential impacts.
- 8.2 There are no Scheduled Monuments, Registered Battlefields, Registered Parks and Gardens or Conservation Areas recorded within the study site or study area. Whilst no Listed Buildings are recorded within the Site itself, five Grade II Listed Buildings are recorded within the study area. The closest to the study site is Nutters Plat Farmhouse, located approximately 650m to the west. There is no inter-visibility between the Site and any of the Listed Buildings and the Site does not form part of their settings. As such, **no impact** is anticipated on designated heritage assets.
- 8.3 There are no non-designated heritage assets within the Site boundary. There are three non-designated heritage assets within close proximity the Site. These include:
  - Balshaw Farm and Crook's Farm (PRN39395);
  - Proctor's Farm (PRN39396); and
  - Holme Farm (PRN39397).
- 8.4 All the Sites are of Post-Medieval and Modern former farmsteads.
- 8.5 The non-designated heritage assets' setting will be changed from a rural landscape to a construction site landscape during the construction phase. The level of impact is anticipated to be moderate. However, given the low importance of the assets, the significance of effect is predicted to be **minor adverse** for the duration of the construction works within the vicinity of the assets at the local level.
- 8.6 The setting of the non-designated heritage assets will change from a rural landscape to residential development.

  The level of impact is anticipated to be moderate. However, given the low importance of the assets, the significance of effect is predicted to be **minor adverse**.
- 8.7 There is considered to be low potential for currently unknown archaeological evidence of all periods to be present within the Site. However, it is acknowledged that the lack of evidence may reflect the fact that no previous archaeological investigations have been undertaken within the study site or its vicinity.
- 8.8 To mitigate against potential impacts to unknown archaeological assets a phased programme of archaeological investigation would be undertaken. The first phase would consist of archaeological evaluation via geophysical survey and trial trenching within areas of the Site subject to construction works. The scope of these investigations would be agreed with SRBC. If required, further mitigation would consist of archaeological excavation and recording prior to construction works commencing and/or an archaeological watching brief during construction

#### Client: Taylor Wimpey & Homes England

Report Title: ES: Volume 1 Non-Technical Summary

works. Following the implementation of these mitigation measures, the residual impact is anticipated to be **negligible**.

8.9 The proposed phasing of the construction of the development will not have any additional impacts on archaeology and heritage.



### 9. Landscape and Visual

- 9.1 A Landscape and Visual Impact Assessment ('LVIA') has been undertaken to assess the effects of the Proposed Development on landscape character and visual amenity. In particular it identifies and assesses the anticipated effects of change resulting from the Proposed Development on the character and features of the landscape; and on people's views and visual amenity within the surrounding area.
- 9.2 The potential impacts have been assessed following the methodology set out in Guidelines for Landscape and Visual Impact Assessment Third Edition.
- 9.3 The study area for the LVIA extended to 1km from the Site boundary which was based on the landform, surrounding landscape and visual context of the surrounding area of the Site.
- 9.4 At a national level the Site falls within the National Character Area 32 Lancashire & Amounderness Plain. The plain is made up of a series of low-lying landscape types: in the east, undulating lowland farmland on the highly productive coastal plain, and in the west, the former mosslands and their remnant sites, and the coastal marshes and dunes.
- 9.5 At a regional level the Site falls within the Coastal Plain Landscape Type. This landscape type is characterised by gently undulating or flat lowland farmland divided by ditches in West Lancashire and by low clipped hedges elsewhere.
- 9.6 At the local level the Site falls within the Landscape Character Area of 15b Longton Bretherton. This is a primarily agricultural landscape which is influenced by urban fringe elements in Preston, which lies to the northeast, such as schools, colleges, nurseries, glass houses, hotels, horse paddocks, communication masts and electricity pylons.
- 9.7 An area of designated Green Belt is located to the west of the Site defined by the main road, Penwortham Way which acts as the defensible boundary that separates the two areas. The Green Belt land stretches approximately 8km from Lower Penwortham to Tarleton with the boundary defined by the River Douglas.
- 9.8 A number of viewpoints have been identified which represent typical views from which the Proposed Development may potentially be visible within the context of the identified visual receptors.
- 9.9 In order to reduce the potential impact on landscape and visual receptors a number of mitigation measures have been embedded into the Proposed Development. These include:
  - Where possible hedgerows and trees have been retained on site;
  - Development has been set back away from the western boundary which adjoins the Green Belt; and



- Building heights have been restricted to 2.5 storeys close to sensitive receptors and restricted to 3 storeys across the remainder of the Site.
- 9.10 The nature of potential effects during the construction phase are primarily the presence of hoarding, plant (including lighting) storage areas and associated construction traffic within the Site through the progression of the build put simply from west to east.
- 9.11 The building out of the development is expected to occur over an 8-year period and will therefore result in visual effects through this time.
- 9.12 However, these effects will be localised and managed through the CEMP.
- 9.13 As such the effects are not expected to arise in more than **minor adverse** during the construction phase.
- 9.14 At the completed development stage, there will be provision for increased public access through an expanded (and enhanced) Green Infrastructure network throughout the Site. This will result in a **Moderate Beneficial** impact at Year 1 which will increase to a **Major Beneficial** impact by Year 15 (the residual effect) as the landscape elements of the Proposed Development become established.
- 9.15 In terms of the potential impact on the Local Landscape Character, the proposals are anticipated to result in direct and irreversible loss of characteristic landscape features, namely open pasture, trees and hedgerows. However, mitigation measures will see the retention of a large majority of existing trees, hedgerows and the associated lanes. In addition to the retained features, the Proposed Development will introduce new trees and habitats that will be managed through a Landscape and Habitats Management Plan which together with the retained features will form a strong, distinctive landscape structure as an integral component of the Proposed Development. The initial impact will be **Moderate Adverse**; however, this will reduce to **Moderate Minor Adverse** once the landscape elements of the development have matured.
- 9.16 As with the Local Landscape Character, the Proposed Development will result in permanent effects on the Landscape Character Area of 15b Longton Bretherton such as the loss of open pasture, hedgerows and landscape pattern and the assimilation of vernacular settlement. The potential impact will be **Minor Adverse** at Year 1. This will reduce to **Negligible Adverse** at Year 15.
- 9.17 The potential impact on the Green Belt to the west of the Site is **Minor Adverse** at Year 1. After the enhancement and extension of landscape features establishes and matures the effects are expected to diminish to **No Impact** at Year 15.
- 9.18 Some trees and hedgerows within the development site will be required to be removed to facilitate the development which is anticipated to result in a **Major Moderate Adverse** effect at Year 1. As a result of replacement tree and hedgerow planting at a ratio of 3:1 and 1.5:1 respectively, the residual impact at Year 15 will be **Minor Beneficial**.



- 9.19 The proposals would result in the direct loss of extensive areas of open, predominately pasture, ground in the Site.

  It is anticipated that this will result in a **Moderate Adverse** effect at both Year 1 and Year 15.
- 9.20 In terms of impacts to visual receptors, at Year 1 the majority of impacts are determined to be **not significant**. There are three receptors which are anticipated to experience **Major Adverse** impacts at Year 1 which is **significant**. These relate to changes from a rural to a suburban setting at the following viewpoints:
  - PR1 Kingsfold Drive to Penwortham Way via Balshaw;
  - PR2 Kingsfold Drive to Chain House Lane; and
  - PR6 Holme Farm to Penwortham Way
- 9.21 These impacts are reduced to **Moderate Adverse** which is **not significant** once the landscaping features of the Site have matured by Year 15.
- 9.22 There are **no significant** residual effects anticipated as a result of landscape and visual impacts.



#### 10. Ground Conditions

- 10.1 A Ground Condition Assessment has been undertaken which seeks to establish the current baseline conditions in respect of land contamination and stability, before identifying and assessing the potential impacts that may arise due to the Proposed Development, and the effects upon identified receptors from the impacts. It has been prepared by RoC Consulting.
- The ground conditions at the Site have been assessed through an intrusive Geo-Environmental Assessment, a Phase 1 Desktop Study utilising available information for the Site and from site a site walkover..
- 10.3 Topographically, the Site is relatively flat with levels of 33-34mAOD on the eastern extent falling to circa 26-27mAOD on the western extent. The Site is locally undulating towards its central extent with one area of note including a small mound circa 1.0m higher than the surrounding land in the field to the rear of Proctors Farm.
- 10.4 The earliest mapping records for the area dated 1848 indicate the Site has remained largely undeveloped comprising fields of farmland with associated farmsteads until the present day.
- 10.5 Bedrock geology beneath the Site comprises Singleton Mudstone Member which is overlain by drift geology of Devensian Till.
- 10.6 Ground conditions comprise topsoil located across the majority of the Site from ground level to depths ranging between 0.10 and 0.70mbgl. Localised made ground deposits are located in areas of the Site ranging in depth from ground level to 0.10 to 0.99mbgl. Deposits were found to vary in composition and former ponds noted as present.
- 10.7 Natural soils were found to predominantly consist of medium to high strength clays with sand and gravel bands of greater thickness and density with depth. Natural soils were proven to a maximum depth of 20.45mbgl.
- 10.8 Peat deposits were encountered in localised areas across the Site (more predominantly in the northern and central portions) of varying thickness from 0.03m to 1.43m and generally located within the upper metre of site soils. The bedrock geology was not encountered.
- 10.9 There are no geological faults or features indicated within 500m of the Site.
- 10.10 The information gathered as part of the baseline assessment identified the following potential sources of contamination:
  - On site hydrocarbons and PAHs associated with vehicle repair works and made ground and topsoil deposits as encountered during the Site investigation works.
  - On site organic contaminants, heavy metals and pathogens associated with dairy and poultry farms;
  - On site pesticides and herbicides associated with agricultural activities and crop yielding;



- Localised on site ground gas generation associated with infilled pond and areas of infilled ground (noted evidence around access gates to fields); and,
- Asbestos identified at a localised area in the north east of the Site during Brownfield Solutions Ltd site investigation works.
- 10.11 Impacts during the demolition and construction phase can impact ground conditions through the clearance of vegetation, the excavation of soils and materials and through the construction of infrastructure and buildings. A CEMP, Soil Management Plan ('SMP') and Best Practicable Means ('BPMs') will be implemented to ensure no adverse impacts are experienced as a result of construction activity.
- 10.12 The demolition and construction phase of the development can result in exposure to exiting contaminants within the ground and accidental spillages introducing new pollutants into the ground. The CEMP and SMP will include pollution prevention measures to prevent exposure to contaminants and pollution incidents. All site clearance works will be preceded by a pre-demolition asbestos survey on existing buildings to be demolished.
- 10.13 An outline remediation strategy is recommended including the soil capping of made ground deposits left in situ in garden and public open space areas and supplementary investigation in the area where asbestos was encountered in the north east of the Site to properly investigate its spatial extent.
- 10.14 Impacts during the demolition and construction phase are anticipated to range from **minor adverse** to **negligible** which is **not significant**.
- 10.15 During the completed development phase, potential impacts may arise from the accidental spillage of chemicals such as fuel which may enter the soils and groundwater on site. The use of fuel interceptors and a suitable management plan will be implemented to control this risk. The residual impact will be **negligible** which is **not significant**.
- 10.16 It is considered unlikely that any significant enabling or site preparatory works will be required in order to facilitate development, from an earthworks perspective (over and above those that would typically be required as part of a proposed residential scheme) as such, the phased approach to development of the Site will not result in any additional impacts.



# 11. Drainage and Flood Risk

- 11.1 A drainage and flood risk assessment has been undertaken which seeks to establish the baseline conditions currently existing at the Site and surroundings, the potential direct and indirect impacts of the development arising from changes to the existing drainage regime at the Site, the mitigation measures required to prevent, reduce, or offset the impacts and the residual impacts. The assessment has been undertaken by Lees Roxburgh.
- 11.2 The Site is located in entirely within Flood Zone 1 (see **Figure 11.1**) which is defined as a site having less than a 1 in 1,000 (0.1%) annual probability of river or coastal flooding.

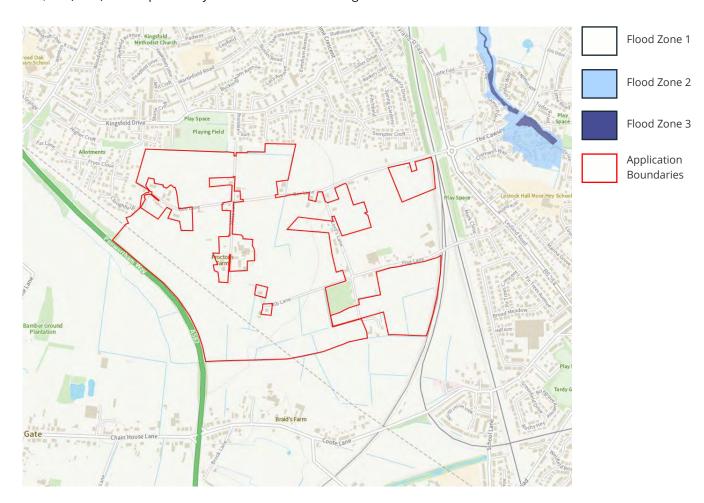


Figure 11.1: Flood Zone Map (Flood Map for Planning: <a href="https://flood-map-for-planning.service.gov.uk">https://flood-map-for-planning.service.gov.uk</a>)

11.3 In terms of surface water flooding across the Site, there are isolated areas of low medium and high risk within the Site. Areas at risk become more concentrated to the west adjacent to Penwortham Way and, more significantly, extending centrally north towards and beyond the northern boundary of the Site as shown in **Figure 11.2** below.



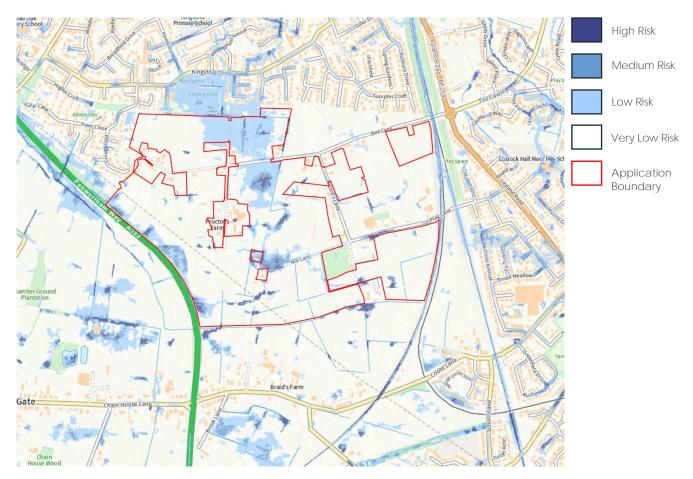


Figure 11.2: Surface Water Flood Risk (Flood Map for Planning: <a href="https://flood-map-for-planning.service.gov.uk">https://flood-map-for-planning.service.gov.uk</a>)

- 11.4 In order to fully understand the Site and the existing drainage, information was gathered from a variety of sources which include: Environment Agency flood maps; OS mapping; site specific LiDAR and topographic data; British Geological Survey geology mapping; site visits; and United Utilities sewer records. Additional hydraulic modelling was also undertaken by McCloy Consulting.
- 11.5 A Surface Water Drainage Strategy has been developed which will incorporate a variety of SuDS features which will include an extensive basin and swale system. The dimensions, volumes and extent of the SuDS features will need to be adjusted as the masterplan develops and during the detailed planning stage.
- 11.6 Due to the impermeable nature of the underlying geology, drainage via infiltration is not feasible. As such, in line with the drainage hierarchy, surface water will be discharged to existing watercourses. Two main surface water outfalls from the development area are proposed. The first is to a tributary culvert which runs just beyond the northern boundary of the Site and flows west into the Kingsfold estate, and the second, direct to the same watercourse where it crosses Penwortham Way to the northwest, downstream of Kingsfold.
- 11.7 The development runoff rates will be significantly restricted to the existing rates.



- 11.8 The drainage strategy will enable flows from storm events up to the 1 in 100-year event plus 40% allowance for climate change to be contained on site within the basin, swale and pipe systems.
- 11.9 The existing lanes and property will continue to be drained by the land drainage system which will be maintained, upgraded and diverted as necessary to ensure land drainage flows continue to drain on a greenfield basis independently of the main pipe systems.
- 11.10 During the construction phase of the Proposed Development, measures will be implemented within the CEMP to ensure that any potential impact on water quality is mitigated by preventing silt / soils entering the surface waters and chemicals from construction vehicles / equipment entering surface and ground waters. Following the implementation of the CEMP and best practice measures the impacts from construction activities is anticipated to be predominantly **minor beneficial** or **negligible**. **Major beneficial** impacts are anticipated with regards to the reduction of surface water flood risk on site during the construction phase. **Moderate beneficial** impacts are also anticipated with regards to infilling of and diverting existing ditches reducing flood risk.
- 11.11 During the completed development phase, spillages from household chemicals have the potential to enter the surface water drainage network, however, the Surface Water Drainage Strategy will reduce the likelihood of pollutants entering the surrounding surface water network and as such the potential impact is anticipated to be **negligible**.
- 11.12 Following the implementation of the Surface Water Drainage Network, there is anticipated to be a **major beneficial** impact with regards to surface water flooding on site and to the land to the north.
- 11.13 The changes to flood risk for the existing and new population is anticipated to be range from **moderate** to **major beneficial**.
- 11.14 All other effects are expected to be **negligible** or **minor beneficial** at the completed development phase.
- 11.15 It is not considered that any significant impact would result from a phased approach to construction as potential impacts during construction will be mitigated through measures within the CEMP and potential impacts within completed phases will be mitigated through the drainage strategy.



#### 12. Transport and Access

- 12.1 A transport assessment has been undertaken to consider the effects of the Proposed Development on transport and mobility. In particular, it considers the anticipated effects of the Proposed Development on the operation of both the local and strategic highway networks in the vicinity. It provides an assessment of the potential transport environmental effects associated with construction and operation. The assessment has been prepared by Vectos.
- 12.2 The proposed development and transport strategy proposes to respond to the challenges of climate change, design with accessibility in mind and seek opportunities to maximise walking, cycling and public transport within the local area. This development is designed with active travel in mind which provides safe and convenient routes for pedestrians and cyclists and not designed with the car in mind.
- 12.3 For this reason, it is important to move away from the predict and provide model of transport planning and move towards a vision and validate approach. This will be even more important as we emerge from the COVID-19 pandemic and begin to consider the impact this has had on people's travel behaviour. By adopting a vision and validate approach to transport planning, developments are able to focus on providing green infrastructure which supports active travel instead of primarily focusing on providing more road space which does not support the goals of National and Local Planning Policy.
- 12.4 Penwortham Way (A582), which forms the Site's western boundary, is a principle distributor road extending for approximately 8km from the M65 / A6 London Way / A6 Lostock Lane / A582 Lostock Lane four-arm roundabout to the A582 Golden Way / A59 Golden Way three-arm roundabout junction. To the east of the Site, the B5254 (Leyland Road) runs along a north south alignment for approximately 4.3 kilometres from the A5083 Stanfield Lane / A582 Farington Road / A582 Lostock Lane / B5254 Watkin Lane four-arm roundabout to the A59/B5254 Leyland Road three-arm roundabout.
- 12.5 Highways within the Site consist of the following:
  - Bee Lane this forms the northern access between the Site and the B5254 Leyland Road and is a single-lane rural road extending for approximately 1.2km. The carriageway is too narrow to allow vehicles to pass one another easily, with trees / vegetation growing in close proximity to the carriageway for most of its length;
  - Flag Lane Flag Lane is a single-lane residential/rural road forming the southern access between the application site and the B5254 Leyland Road and extends for approximately 600m. Footways are provided along both sides of the carriageway in the residential area, varying in width between 0.8 and 2.2 metres;
  - Nib Lane this is a single-lane rural access road extending for approximately 350m along an east-west alignment, connecting the Flag Lane / Lord's Lane / Nib Lane junction with two residential properties. The carriageway is gravel surfaced, varying in width from approximately 2.5 to 2.9m;



- Lords Lane Lord's Lane is a rural single-carriageway road varying in width from 3.1 to 4.6m. It runs for approximately 350m along a north-south alignment between the Bee Lane and the Flag Lane / Nibs Lane crossroads; and
- Moss Lane Moss Lane is a single-lane rural access road extending for approximately 220m from the crossroads junction with Bee Lane to a footway connection with Bramble Court in Penwortham. The carriageway is approximately 2.5m in width, connecting Bee Lane with two isolated residential properties.
- 12.6 Access is proposed via a new access on Penwortham Way which will serve the vast majority of the initial 1,100 dwellings, being sufficient for the development demands, whilst not prejudicing the delivery of additional dwellings within the site allocation. An additional vehicular access is proposed from Bee Lane for a small scale of residential development of up to 40 dwellings.
- 12.7 The location and accessibility of the site are excellent, as they allow for opportunities to live locally, undertake healthy living, use sustainable and socially inclusive modes of travel and enhance the vitality of local facilities for existing residents. The mobility characteristics in these respects are of significant benefit.
- 12.8 The mobility hub within the site will provide a focal point, allowing for the seamless integration of different modes of transport, multimodal supportive infrastructure, and placemaking strategies to create an activity centre that can maximise first and last mile connectivity. It will support local living, low-car lifestyles and the reallocation of space from roads and carparking to housing and public realm, and have the potential to contribute significantly to decarbonising transport.
- 12.9 There are currently twenty-one Public Rights of Way (PRoWs) crossing or in the immediate proximity of the Site.
- 12.10 The nearest bus corridor is located along the B5254 Leyland Road (approximately 60m west of the Site). The nearest bus stops to the application site are the Bee Lane, Flag Lane and Fir Trees Road stops along Leyland Road, situated approximately 80m northeast, 120m east, and 315m east of the Site respectively. Additional bus stops are located along Kingsfold Drive at 'Meadowfield and Hawksbury Drive'.
- 12.11 The bus stops in close proximity to the Site provide up to 12 services in peak periods to Preston, Lostock Hall and Chorley. The services operate from around 7.00am to around 8.00pm, making travel by public transport a real alternative to travelling by car for commuting trips.
- 12.12 At this stage, early discussions have already been coordinated with local bus operators regarding how best to service the proposed development so that sustainable modes can be actively promoted. It should be noted that there is a desire from commercial operators to provide bus services within the development.
- 12.13 Discussions to date have sought to explore the options available to provide improved access to public transport services. This has included the potential for improvements to existing services, diversion/extension of existing services and provision of new services. Following early discussions, it is considered that the provision of a new bus



service would be preferable entering and exiting the site via Penwortham Way and providing a connection to Preston city centre and Preston Railway Station. The provision of a new bus service will improve the sustainability and accessibility of the proposed development by ensuring residents have a quality public transport option available which provides them with a link to key services and local facilities within South Ribble and the wider area (i.e. Preston). Based on information provided by the operator, it is envisaged that two buses would operate a fast and direct service every half hour between the site and Preston city centre (including Preston Railway Station).

- 12.14 The environmental implications of construction traffic are considered to relate to issues of driver delay, pedestrian and cycle amenity and highway safety as a result of road works. This is primarily related to construction associated with the proposed new site access on Penwortham Way (which is envisaged to be delivered prior to first occupation), but also considers general construction traffic on the highway network accessing the site to construct the internal road layout, dwellings and other associated infrastructure. There are not anticipated to be any hazardous load deliveries and infrastructure (i.e. footways, controlled crossings and alternative routes) exists to limit the potential for any severance or increased fear/intimidation within the community.
- 12.15 Given the outline nature of the planning application, a detailed forecast of construction traffic has not been undertaken. However, from experience, the construction traffic movements associated with typical highway infrastructure schemes (i.e. to provide the new site access on Penwortham Way) are usually a low level of regular movements over the course of the working day.
- 12.16 With regards to construction activity, and taking into account the successful implementation of the Construction and Environmental Management Plan, the residual effects during construction would be short-term, temporary **minor adverse** which is not significant.
- 12.17 The environmental implications associated with operation of the Proposed Development are primarily considered to relate to driver delay, pedestrian/cycle delay, pedestrian/cycle amenity, severance and highway safety. The possible implications of operation are primarily considered to affect the A582 corridor as well as any vulnerable road users along sections of this route. There are also other local highway links including the Leyland Road corridor which provide access to a range of local shops, services and amenities.
- 12.18 The modelling results lead easily to a judgement that the proposed development would not have a severe impact on the local highway network. When taken in the context of the excellent mobility characteristics, there is a net benefit in transport terms associated with this proposal. The proposals comprise the development of up to 1,100 residential units however the wider masterplan site is allocated for up to 1,350 residential units as part of the Local Plan. Therefore, the trip generation and trip distribution exercise has considered an initial development scale of 1,100 units followed by a consideration of the 1,350 units with this assessment also considering the introduction of a school within the site.
- 12.19 The total trip demand profile for the development during the typical AM peak hour the development would generate 499 two-way vehicle movements and 418 two- way vehicle movements during the typical PM peak period.



In relation to ongoing operation, and taking into account the successful implementation of the Travel Plan and Personalised Travel Planning, the residual effects during operation would be long term, permanent **minor adverse** which is not significant.

- 12.20 Informed by these results, cognisant of the assumptions, and in the context of planning policy, it is reasonable to conclude that traffic impact is not significantly adverse such that it becomes a matter of significant planning weight.
- 12.21 It is considered that the proposed phasing of the development will have a **negligible** effect on receptors.



#### 13. Air Quality and Dust

- 13.1 An Air Quality Assessment has been undertaken to establish the baseline conditions currently existing at the Site and surrounding area, the potential direct and indirect impacts of the development arising from construction and operation, the mitigation measures required to prevent, reduce, or offset the impacts and the residual impacts on air quality. The assessment has been prepared by Ensafe.
- 13.2 The air quality assessment considered the potential for the proposals to impact on local air quality at identified existing receptor locations, during its construction and operation, and the exposure of future occupants of the development to pollutant concentrations.
- During the construction phase of the development there is the potential for air quality impacts as a result of dust emissions from the site occurring as a result of construction activities. With the adoption of good practice dust mitigation measures are implemented through a Construction Environmental Management Plan (CEMP), the residual significance of potential air quality impacts from dust generated by activities is as assessed to be **negligible** and therefore **not significant**.
- 13.4 A road traffic emissions assessment was undertaken to consider the impact of operational phase development-generated vehicles on identified existing receptor locations within the study area. Annual mean concentrations of pollutants assessed (NO<sub>2</sub>, PM<sub>10</sub> and PM<sub>2.5</sub>) were predicted to be below the relevant Air Quality Objectives ('AQOs') at all locations, both 'without' and 'with' the Proposed Development. The impact of road traffic emissions generated by the Proposed Development on local air quality was predicted to be **not significant** in accordance.
- 13.5 The suitability of the Site for the proposed use was also considered. Pollutant concentrations are predicted to be below the AQOs across the Site and therefore mitigation measures are not required.



#### 14. Noise and Vibration

- 14.1 A noise and vibration impact assessment has been carried out to assess the likely impacts associated with the construction and operation of the Proposed Development as well as assessing the suitability of the Site for residential development. The assessment has been undertaken by Ensafe.
- 14.2 In order to establish the baseline noise conditions on the Site, a baseline noise survey was undertaken at locations representative of the nearest sensitive receptors. A baseline vibration survey was also conducted between 8th and 15th August 2018.
- 14.3 To predict the construction and operational phase noise emissions, an acoustic model was prepared to identify the impacts on sensitive receptors both on and off-site. The model also takes into account the modelled traffic flow data which was prepared as part of the traffic assessment.
- 14.4 With regards to the proposed phasing of the development, the average position to the closest phase was used for the basis of the assessment for the majority of receptors. Where the receptors bounds the Site or are within the Site, a distance of 20m is used to account for a robust position for works along the boundary closest to the receptor. Any works that take place closer to the receptor will be for a short period and an average, central position is considered robust.
- Potential impacts associated with construction activities will be mitigated through Best Practicable Means (BPM).

  BPM will be included within the CEMP which will be agreed with contractors working on site. Measures to reduce noise will include:
  - Silencers being fitted to pneumatic tools;
  - Deliveries to be scheduled for normal working hours;
  - Restricted working hours on site;
  - Plant equipment will be well maintained and located away from noise sensitive receptors; and
  - Hoarding, screens or barriers are to be erected as necessary to shield particularly noisy activities.
- 14.6 Measures to reduce vibration impacts may include:
  - Adoption of low vibration working methods. Consideration should be given to use of the most suitable plant;
  - Where processes could potentially give rise to significant levels of vibration, on site vibration levels should be regularly monitored by a suitably qualified person;
  - Where piling is to take place, any obstructions within the ground such as shallow-lying stone, should first be removed;



- The provision of cut-off trenches in order to interrupt the direct transmission path of vibrations;
- Reduction of energy input per blow (applicable to piling); and,
- Application of piling techniques aimed at reducing resistance to penetration e.g. pre-boring for driven piles and adding water to the hole for impact bored piles.
- 14.7 Following the implementation of BPMs, the residual impact of noise is anticipated to be **minor adverse** and for vibration will be **negligible**, both of which are **not significant**.
- 14.8 Given the proximity of the Site to transport links including Penwortham Way and the West Coast mainline railway there is the potential for adverse impacts on proposed residential receptors within the Site. Without mitigation the impacts could reach **major adverse**. However, sensible site layout and design will reduce the potential impact of noise on receptors. The following measures should be implemented at the detailed design stage:
  - Good Acoustic Design with gardens behind dwellings facing the road, gaps kept to a minimum and buildings framing corners;
  - Acoustic barriers at a height that achieves at least thefull line of sight removal may be required in the worst affected areas; and
  - Habitable rooms facing away from the noise source or implementation of alternative ventilation systems.
- 14.9 The residual impact, following the implementation of mitigation measures, is anticipated to be **negligible** at all receptor locations which is **not significant**.
- 14.10 The potential impact from vibration due to train pass-bys is anticipated to be **negligible**. As such, no mitigation is required.



#### 15. Socio-economics

- 15.1 A socio-economic assessment has been undertaken to establish the baseline socio-economic conditions on site and in the surrounding areas and to assess the potential impact that the Proposed Development may have on the existing socio-economic conditions. It has been prepared by Hatch Regeneris.
- 15.2 The existing population of South Ribble has increased at a slower rate than the rest of the region and England. The working population of South Ribble is also shrinking by 4% compared to 0% change in North West England and 2% rise in England as a whole. Simultaneously, the retirement age population has increased by 22%, faster than the increase regionally (17%) and nationally (19%).
- 15.3 Economic activity in the borough is higher than the national average (83.7% compared to 79.5% nationally). Unemployment rates are at 2.9% compared to the regional and national averages of 4.3% and 4.8%. However, challenges remain in the borough, including improving access to employment opportunities locally and in the wider Central Lancashire area for local residents, a below average resident population in employment with higher-level skills, as well as a working-age population which has contracted by 10% over nearly the last decade.
- 15.4 In terms of housing, SRBC has aimed to meet a housing target of 417 dwellings per annum since 2003/04. However, based on data on South Ribble Borough Council's annual monitoring data, over the 5 years from April 2015 to March 2020 South Ribble has delivered an average of 356 homes per annum. However South Ribble has delivered an average of 79 affordable homes per annum (22% of total new homes). This is significantly above the target of 30 affordable dwellings per annum set out in the Central Lancashire Core Strategy.
- There is one nursery school, Stoneygate Nursery School, located within 2 miles of the Proposed Development site. This nursery school is located 1.8 miles from the Site boundary (edge of Preston City Centre) and has a roll size of 91, however capacity data is not available. In addition, there is pre-school childcare (for children aged 2 or/and 3) available at six of the primary schools located within 2 miles of the Proposed Development. There are 25 primary schools within 2 miles of the Proposed Development site. Four of these are in Preston and 21 are in South Ribble. The latest publicly available data shows that there are 378 spare places across 19 of these schools. There are 16 secondary schools within 3 miles of the Proposed Development site. Overall, there are 1,800 spare places across 15 of these schools, with over half of these spare places located in the combined spare capacity at Penwortham Priory Academy (405) and Wellfield Academy (514).
- 15.6 There are 13 GP surgeries within 2 miles of the Proposed Development. The average patient per Full Time Equivalent (FTE) GP ratio is 1,882. This is lower than the ratio of 1,908 for the NHS Chorley and South Ribble Clinical Commissioning Group (CCG)CCG area and higher than the NHS Greater Preston CCG patient FTE GP ratio of 1,642. St Fillan's Medical Centre and New Longton Surgery have notably high patient: GP ratios, both higher than 3,500. Nine of the 13 GP surgeries have a ratio lower than the Chorley and South Ribble CCG average.



- 15.7 There are seven dental practices located within 2 miles of the Proposed Development boundary. Three of the dental practices are generally not accepting new adult patients according to the latest NHS information, two of which are accepting patients only by referral, whereas information is unavailable for the other dentists. This indicates there is little capacity available amongst dental practices within 2 miles of the Site boundary.
- 15.8 Given the size and scale of the Proposed Development, the development will be delivered in phases. The impacts below all assume that the development is complete and fully occupied (i.e. once all phases have been developed).

  Any changes to phasing will therefore not have an impact on the socio-economic assessment.
- 15.9 This assessment has considered the potential socio-economic effects arising from the Proposed Development.

  These include:
  - The construction of the Proposed Development will support around 275 temporary construction workers per annum during the construction period;
  - The Proposed Development will be home to around 3,600 residents once completed and fully occupied. It is estimated that 2,520 residents would be of working age (16-64) and 570 will be highly skilled. This will support the local economy by increasing the labour supply and, in the case of higher skilled labour, help to boost the productivity of the local area's labour supply;
  - The Proposed Development will add up to 1,100 homes to South Ribble helping to contribute to meeting housing need in the local authority area;
  - The additional residents will generate demand for education provision, however there is sufficient capacity in both local primary and secondary schools to deal with this additional demand and the proposed primary school with capacity for an estimated 420 pupils will open up further capacity within the local area.
  - The additional 3,600 residents will also generate demand for health services. There are plans to expand local health care provision.
  - The Proposed Development includes the provision of retail, leisure and community use, as well as a strong green infrastructure network.
  - There will be wider benefits such as the creation of jobs on the development site once commercial space is operational (130-140 FTE jobs), household expenditure (£20m per annum), as well as fiscal benefits associated with the completion of the Proposed Development, including the New Homes Bonus payment to South Ribble Borough Council (£7.0m over 4 years) and £1.9m in council tax per annum.
- 15.10 The increase in temporary construction jobs will result in a **moderate beneficial** impact, which is **significant**.
- 15.11 A permanent increase in the local population will result in a **moderate beneficial** impact, which is **significant**.
- 15.12 A permanent increase in the number of highly skilled workers at the District level will result in a **moderate beneficial** impact, which is **Significant**.



- 15.13 The permanent increase in the housing stock within the borough will result in a **major beneficial** impact, which is **significant**.
- 15.14 Potential impacts on the provision of primary and secondary school places and the increase in demand for local health facilities is anticipated to be **negligible**, which is **not significant**.
- 15.15 The increase in demand for local health facilities will result in **minor adverse** impact which is **not significant**.
- 15.16 The proposed phasing of development will not impact on the significance of impacts identified.

Page: 38



#### 16. Human Health

- 16.1 A health impact assessment has been undertaken to establish the potential direct and indirect impacts on the health and well-being of residential communities and other human receptor groups that may be affected during the operation and construction of the Proposed Development.
- 16.2 South Ribble (which encompasses Penwortham) has a smaller population of young working age people and a larger population of older working age and retirement age people, in comparison to the northwest and England.
- 16.3 The South Ribble population has grown at a slower than average rate in comparison to national and regional averages. The working age population has shrunk by 4% between 2011 and 2019. In comparison, the retirement age population has increased by 22% in the same period.
- 16.4 Areas to the south of the Site (in Leyland), areas in the south of Preston, and areas in Penwortham adjacent to the site are some of the most deprived areas in the local area, as well as compared at a national level. To the west, are some of the least deprived areas.
- 16.5 The north and northwest region as a whole is highlighted as an area with low life expectancy in England. Life expectancy in South Ribble is 80.1 for men and 83.6 for women. However, there is approximately a 10.4-year disparity between the most and least deprived areas of South Ribble. Populations within Charnock are slightly lower than the England average for men (2 years) but higher for women (3 years).
- 16.6 The general health of South Ribble, according to the 2011 census is divided into five categories: very good, good, fair, bad, and very bad. 4% of respondents said that their health in general is bad and 1% responded that their health was very bad. Bad health responses are comparable to the north west and England average (4% and 5%, respectively), however the percentage of respondents that said their health was very bad is higher than the north west average (both 0.1%). Around 8% of respondents said that their day to day activities were limited a lot by long term health problems or disability.
- 16.7 In terms of access to health services, there is an average level of accessibility on the Site, however there is notably a lack of access to the northwest of the Site, in the ward of Walton-le-Dale West.
- 16.8 The following measures have been embedded into the Proposed Development that will mitigate the potential impacts on health:
  - Delivery of up to 1,100 homes;
  - A proportion of homes (30%) to be affordable;
  - Delivery of a 2-form entry (FE) Primary School;

Page: 39



- Areas of public open space, play space and wildlife-friendly areas will be incorporated into the proposed development;
- Environmental buffers from Penwortham Way and the railway line;
- Retention of the majority of high and moderate value trees, important hedgerows, parcels of traditional orchard parcels, woodland adjacent to the site;
- The surface water drainage for the site will be embedded for the operational phase of the development.

  Overall development levels will be set to create overland flow paths to ensure that there is no increased risk of surface water flooding to existing property and, where achievable, any existing risk is mitigated;
- Existing Public Rights of Way will be retained along existing and diverted alignments to be determined within the detailed planning applications as the site is brought forward.
- 16.9 With regards to the potential impacts on health as a result of air quality, noise, flood risk, contaminated land, transport and socio-economics, these have been covered in previous sections and no significant impacts are anticipated.
- 16.10 Potential impacts that have not previously been covered include the impacts on community cohesion. Local residents who oppose the scheme could potentially experience stress and uncertainty during the planning and construction phase. In order to mitigate against these potential impacts, a programme of communication will be devised that will inform local residents and interested parties of the latest development plans for the Site. The local population may be deterred from accessing the natural environment as a result of PRoW diversions and the presence of construction activities. A CEMP will be implemented and will include measures to protect biodiversity, control noise and dust and consider PRoW diversions. As a result, the impact during the construction phase is anticipated to be **minor adverse**, which is **not significant**.
- 16.11 During the completed development phase the increase in noise, urbanisation and increased demand for health services could result in significant adverse effects. Appropriate mitigation measures will be put in place which will include good acoustic design at the detailed design stage and biodiversity, landscaping and PRoW strategies will ensure that the residual effects will not be significant.
- 16.12 The phasing of the Proposed Development will not affect the significance of the potential impacts.
- 16.13 No significant impacts are anticipated on human health receptors as a result of the Proposed Development.



### 17. Climate Change

- 17.1 A climate change assessment has been undertaken by Wardell Armstrong to ascertain the potential impact of the development on CO<sub>2</sub> emissions associated with fossil fuel and electricity use.
- 17.2 The baseline scenario does not consider a "do nothing scenario" in which no development is constructed. It assumes that the need for the development is there as the Site is allocated and therefore will be constructed. In doing so, recognition must be paid to the fact that emissions will still be caused by the introduction of a new development and these will contribute to global warming. The baseline scenario in the climate change assessment is considered to be a 'typical' development, delivering the same outputs as the Proposed Development, but built to standard building regulations and using normal construction practices and therefore allows comparison of relative effect.
- 17.3 The assessment considers the operational CO<sub>2</sub> emissions over an 80-year period.
- 17.4 The total baseline energy demand for the 80-year operational lifespan has been modelled as 11,300 MWh, which would equate to baseline emissions of 2,237,416 tonnes of carbon dioxide equivalent (tCO<sub>2</sub>e).
- 17.5 In order to meet local policy requirements, the proposed development will need to ensure that non-residential development complies with BREEAM "Very Good" standards, or where possible, "Excellent" in urban areas. Carbon emissions from residential dwellings are to be reduced by 15% either through additional building fabric insulation measures, or the implementation of appropriate decentralised, renewable or low carbon energy sources. Post 2022, the proposed development must meet the interim uplift to Building Regulations as part of the Future Homes Standard which requires at least a 31% reduction in emissions, and this target rises to 75%-80% for buildings post 2025.
- 17.6 In addition, the Applicant is intending to provide electric vehicle (EV) infrastructure as a measure to support resilience to climate change. The intention is for the provision of one charging point per residential dwelling, and an appropriate number of charging points for the commercial uses, with details to be finalised during reserved matters.
- 17.7 The energy demand associated with EV has been excluded from the projected energy demand and associated GHG emissions for the proposed development. This is because, whilst the use of EV will increase the total energy demand for the site, their use reduces fossil fuel use and therefore offsets emissions. With the intended decarbonisation of the national grid, emissions from EV use should be zero carbon by 2050.
- 17.1 There will be emissions arising from the construction of the proposed development which are difficult to quantify accurately at this early stage without more detailed information. The high-level estimated figure of 25,736 tCO<sub>2</sub>e produced based on the UK average building construction site emissions provides an indication of the possible



impact from construction and decommissioning emissions. The proposed development will actively seek to reduce impacts from the construction phase by employing good construction methods.

- 17.2 In term of climate vulnerability, the proposed development could be adversely impacted on by changing climates. However, through the implementation of best practice measures and good design, the residual effects are anticipated to be **minor adverse** which is **not significant**.
- 17.3 The implementation of a phasing plan does not affect the outcome of the assessment because the impact remains the same regardless of phasing and the significance criteria is not applied to individual receptors.



#### 18. Cumulative Effects

18.1 A review of SRBC planning portal and consultation with SRBC has confirmed that there are developments that have the potential to interact with the Proposed Development and generate cumulative effects. Therefore, a cumulative assessment has been undertaken. The results have identified that there is unlikely to be any significant adverse or beneficial cumulative construction effects for the most part. There may be some adverse landscape and visual cumulative effects on some receptors. There will also be a significant beneficial cumulative impact on the local economy as a result of increased population, housing stock and the subsequent increase in local revenue and indirect job creation.



#### 19. Summary and Conclusions

- 19.1 A comprehensive assessment of the potential effects of the construction and operational phases of the proposed development has been undertaken as part of this EIA to establish the environmental changes associated with the development.
- 19.2 The proposed development has been designed in accordance with the findings and recommendations of the EIA. Any adverse effects identified through the assessment have been minimised as far as possible through the design process or the application of appropriate mitigation measures. Those effects associated with the construction activities will be controlled by a CEMP.
- 19.3 Effects during demolition and construction period are considered to be short term **minor adverse or negligible** for the majority of impacts. Some **moderate-major adverse** and **major adverse** effects are anticipated with regards to landscape and visual amenity which are **significant**. However, these are anticipated to be short term and last the duration of the construction phase.
- 19.4 **Moderate** and **Major beneficial** effects are also anticipated during the construction phase with regards to improving flood risk on site and the creation of construction jobs. These effects are **significant**.
- 19.5 Potential environmental impacts of the completed development are predominantly **negligible**. There are some **moderate adverse impacts** identified at completed development stage relating to potential impact on landscape and visual amenity though these are not deemed to be significant. It is acknowledged that all emissions from the proposed development will contribute to the overall significant effect of climate change, it is considered that the proposed development has and will adopt an appropriate and reasonable level of mitigation and the residual effects should therefore be considered **Not Significant** for the purposes of this EIA. Overall, the majority of the completed development impacts are **Not Significant**. However, **significant beneficial** socio-economic impacts are anticipated as a result of the permanent increase in local population, higher skilled population and housing stock. **Significant beneficial** effects are also anticipated as a result of improvements to the surface water strategy on site.
- 19.6 In summary, the Proposed Development represents a high quality sustainable form of development which will deliver a major development for SRBC, in line with the objectives of Policy C1 in the Local Plan. The Proposed Development will have no significant adverse impacts in the long term. It will result in improvements to the surface water flood and significant socio-economic benefits. There are no reasons, based on the findings of the EIA, that would preclude the granting of planning permission for the Proposed Development and the development would contribute significantly to the sustainable development objectives of SRBC.



### 20. ES Availability and Comments

20.1 The Non-Technical Summary, ES and Appendices are available for viewing at on the SRBC planning portal<sup>3</sup>. Further copies of the ES and Technical Appendices are available on CD at a cost of £25 from Avison Young. Contact details are as follows:

Avison Young South Ribble Borough Council

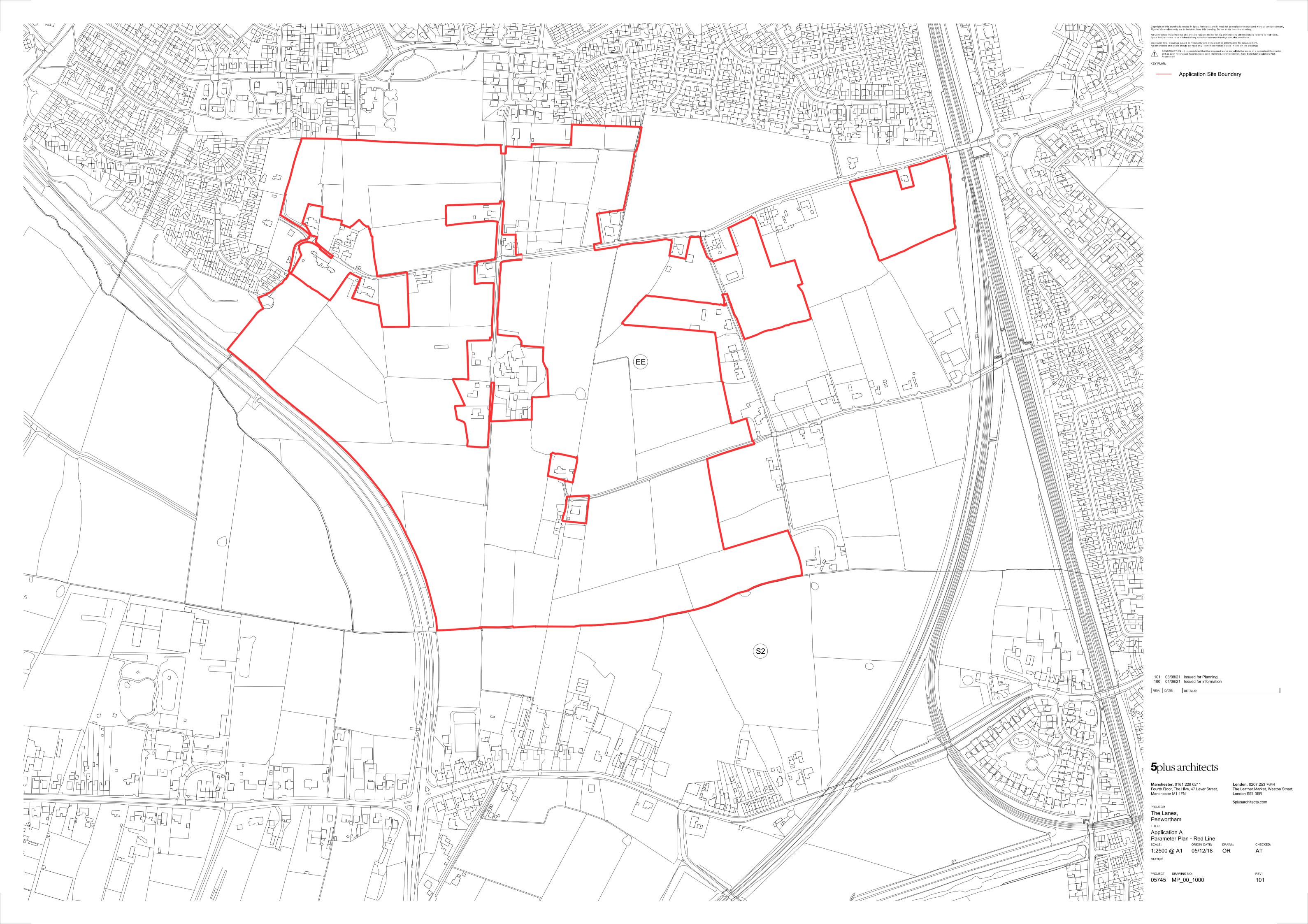
Norfolk House Civic Centre,
7 Norfolk Street West Paddock,
M2 1DW Leyland,
PR25 1DH

Contact: Richard Kevan Contact: Janice Crook

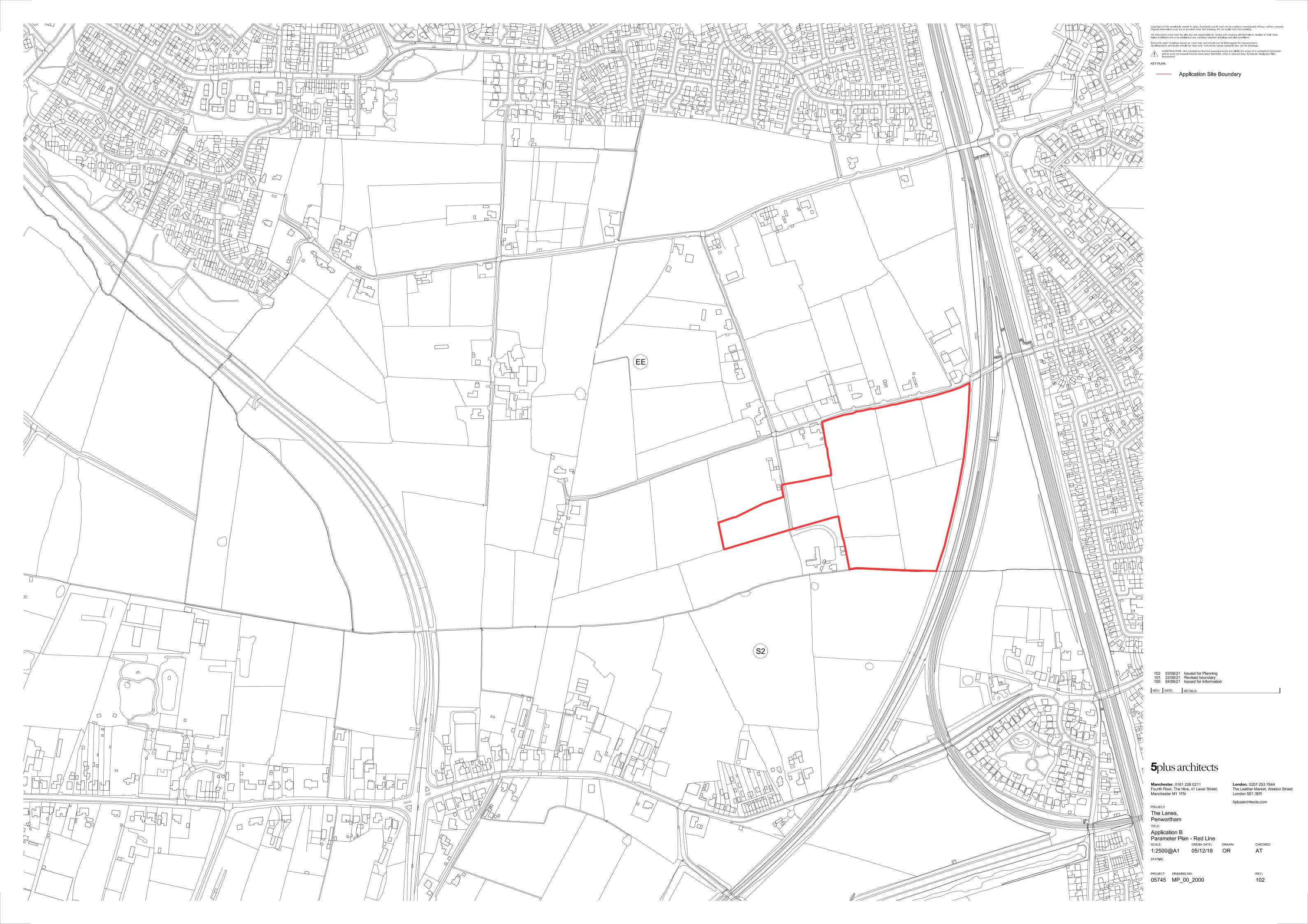
Tel: 0161 834 7187 Tel: 01904 551 550

<sup>&</sup>lt;sup>3</sup> https://publicaccess.southribble.gov.uk/online-applications/

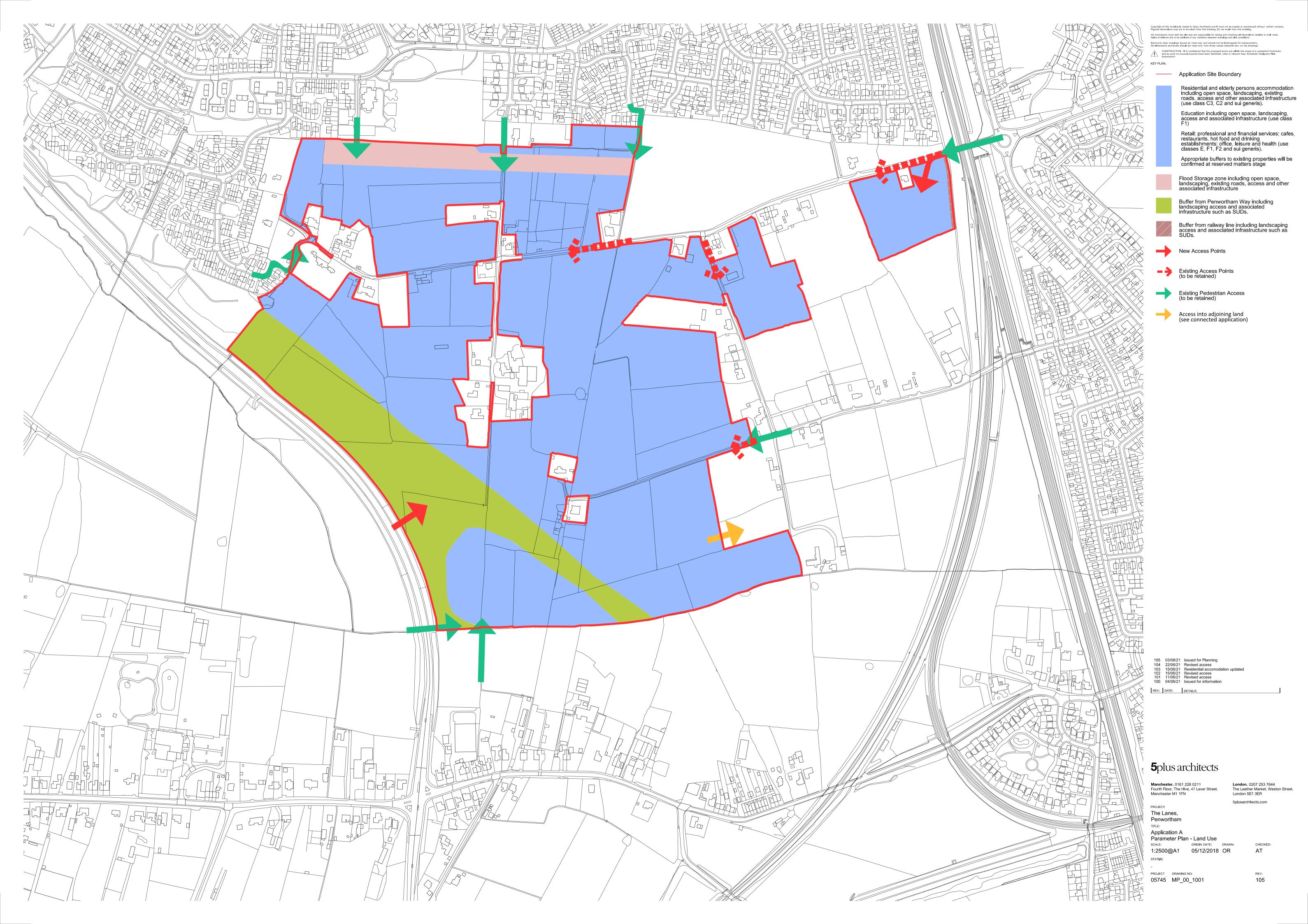
# Appendix I Red Edge Boundary Plan (Application A)



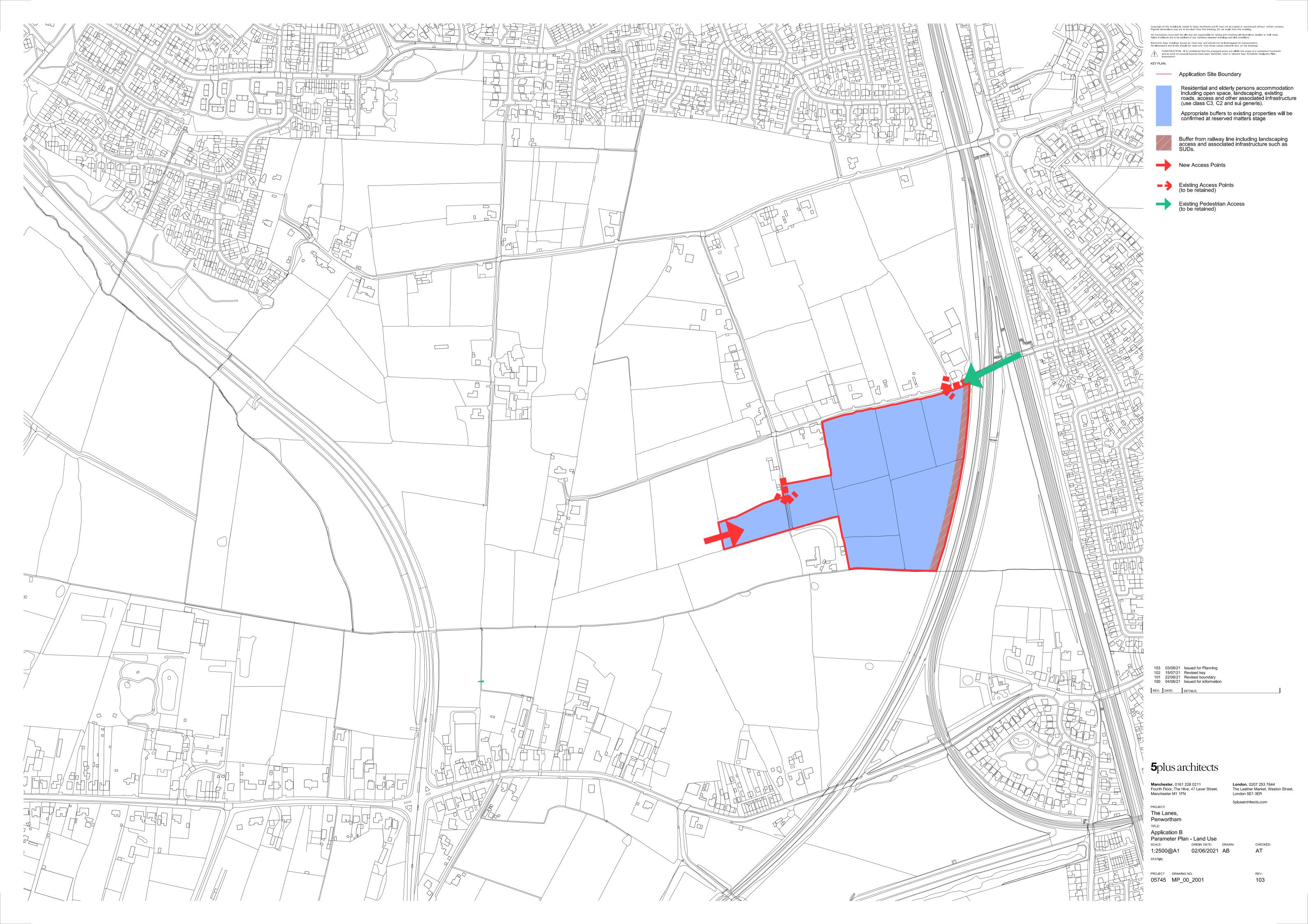
# Appendix II Red Edge Boundary Plan (Application B)



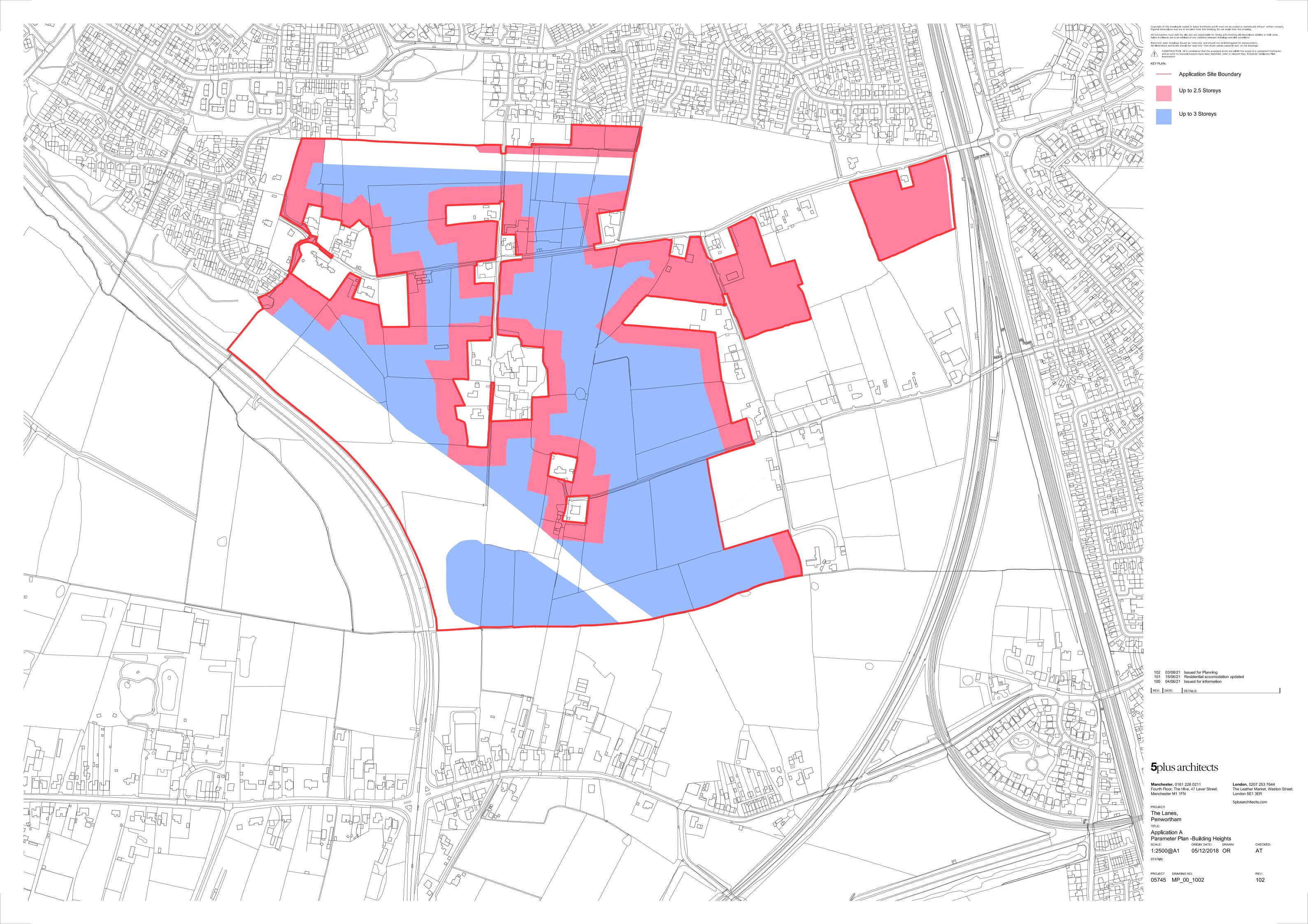
# Appendix III Land Use Parameters Plan (Application A)



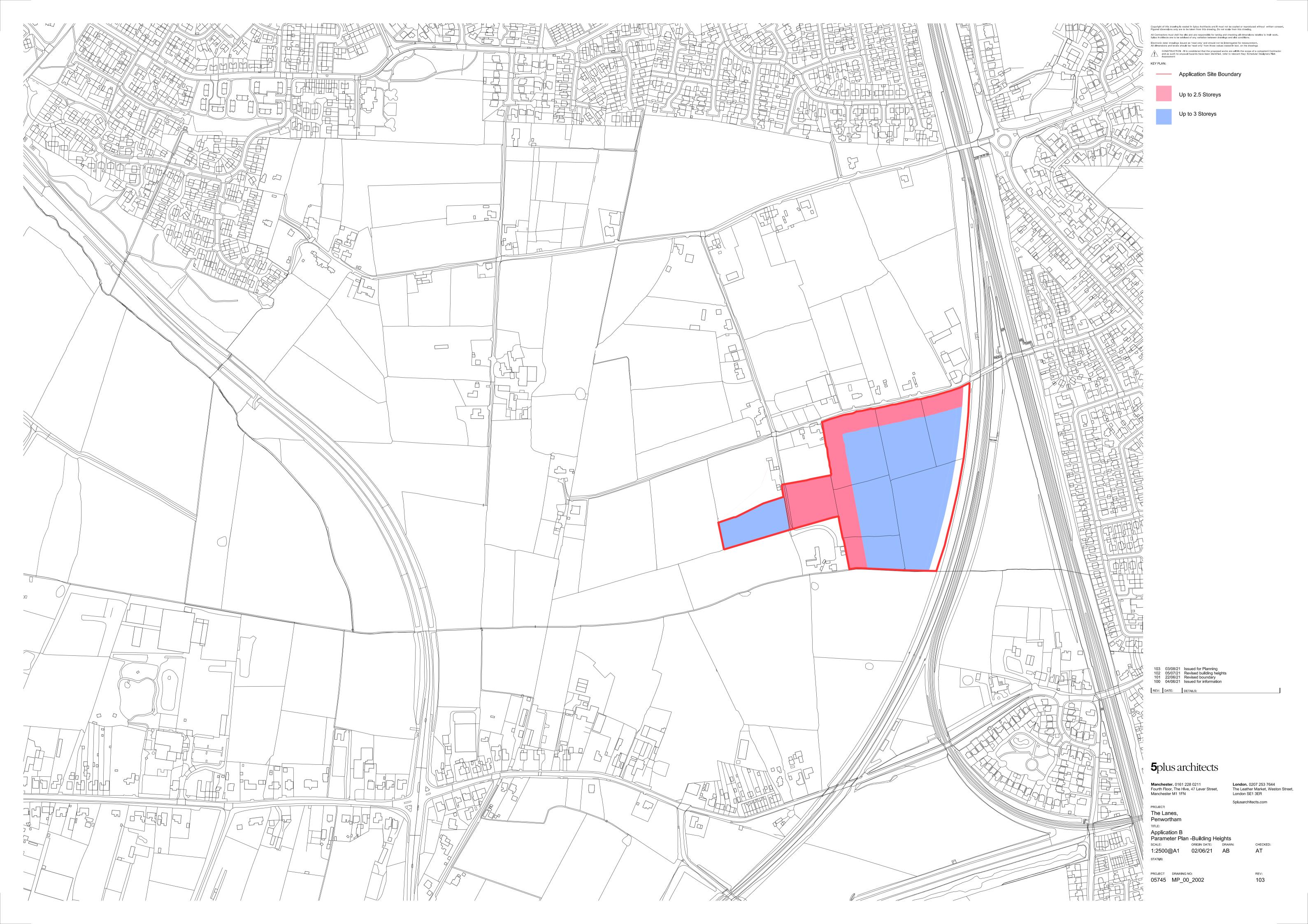
# Appendix IV Land Use Parameters Plan (Application B)



Appendix V Maximum Building Height Parameter Plan (Application A)



Appendix VI Maximum Building Height Parameter Plan (Application B)



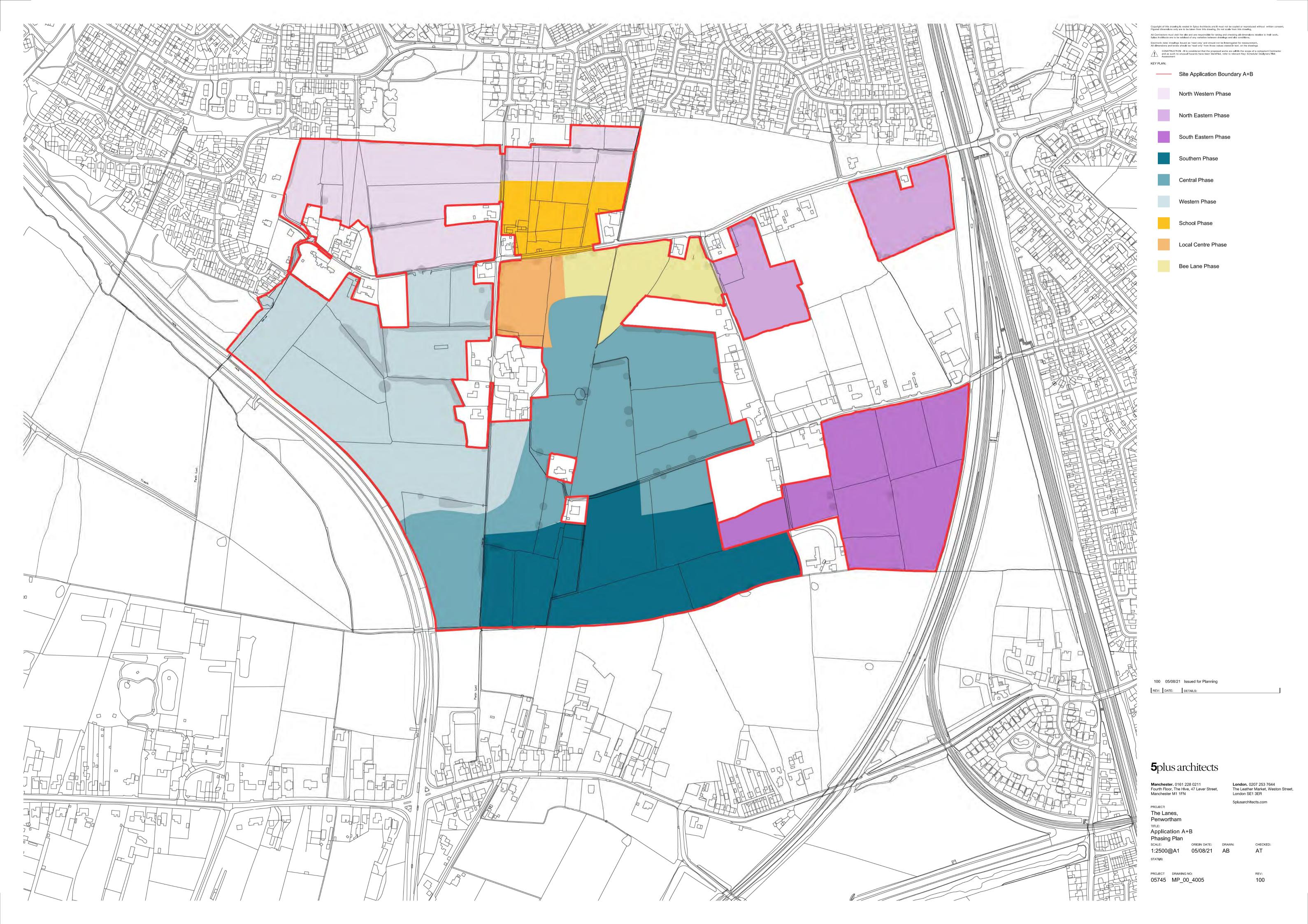
# Appendix VII Illustrative Masterplan (Application A)



# Appendix VIII Illustrative Masterplan (Application B)



### **Appendix IX Indicative Phasing Plan**



### **Contact Details**

#### **Enquiries**

Richard Kevan 0161 834 7187 Richard.Kevan@avisonyoung.com

Visit us online

avisonyoung.co.uk