2. Approach

Introduction

2.1 This chapter describes the methodology used to undertake the EIA in accordance with the Town and Country Planning (Environmental Impact Assessment) (England) Regulations 2017 (SI 2017/571) and National Planning Practice Guidance (NPPG).

2.2 The chapter begins with a description of the general approach to assessment and EIA regulatory compliance, including how the planning applications and EIA are linked. EIA procedure and methodology is presented, then the stakeholder consultation process is explained, and the consultees listed, before the spatial and temporal scope of the assessment is discussed.

2.3 Following this, the criteria used for impact prediction, assessing significance and implementing and securing mitigation measures are explained, along with any limitations and assumptions. With regard to the methodologies and assumptions for the technical assessments, each chapter has its own specific assessment methodology and assumptions, which are explained within the relevant sections.

2.4 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.

2.5 A wide range of experience, resources and skills have been coordinated in order to bring together these applications and the project team, along with their professional roles, is presented at the end of this chapter.

EIA Procedure and Methodology

EIA and Regulatory Compliance

2.6 The EIA Regulations, supported by UK case law, provide the legal framework for the process of EIA and contents of Environmental Statements. More specifically, as a result of legal cases relating to the grant of planning permission for the Kingsway Business Park, Rochdale, the 'Rochdale Envelope Principle' is an accepted methodology for assessing the impacts of development comprised in outline applications where full detail is not available. By setting through condition, and then assessing, the parameters for the development, it is ensured that whatever is built pursuant to the outline permission has been assessed.

EIA Parameters

2.7 The outline residential-led mixed-use planning applications will be defined by plans which set the parameters for the development. These parameter plans, along with the written description of the development set out in Chapter

5: The Proposed Development, identify the development to be assessed for the purposes of the EIA process. This ensures the likely significant effects of the development will be assessed and appropriate mitigation measures identified.

2.8 In order to ensure that what is built will have been assessed in the EIA process, the parameter plans will be tied to the planning permission by conditions which will require all reserved matters to accord with the parameter plans. In this way, the likely significant impacts of whatever is built will have been assessed in the ES. This is a robust approach to assessing development in outline planning applications, as established in the Rochdale cases.

2.9 In addition to the parameters plans, a Masterplan for the wider allocated site provides an indication of the likely development layout and associated landscaping proposed and allow informed assumptions about the development to be applied. The Masterplan for the wider site can be seen in the Design and Access Statement (DAS) (5Plus, 2021) which is submitted with the outline applications. The Masterplans shows how the Proposed Development can come forward as part of the wider allocation, and how it helps to contribute to, and will not prejudice the delivery of the objectives of the wider masterplan. The Proposed Developments are in accordance with the Masterplan.

2.10 Due to the outline nature of the application, the precise locations of the primary school and district centre elements have not yet been finalised. In order to assess a worst-case scenario, the assessment of the potential impacts assumes that these elements of the proposals are located adjacent to existing residential receptors which border the Site, or adjacent to new residential receptors forming part of the Proposed Development. Areas of the Site which may be developed for these uses are identified within the Land Use Parameter Plans for Application A and Application B (**Volume 2a: Main Text Figures** - **Figure 5.1** and **Figure 5.5** respectively). Mitigation measures have been recommended where required based on this worst-case assessment, ensuring that no significant impacts are experienced by either existing or proposed receptors wherever the school and district centre is located.

Screening

2.11 Regulation 6 of the 2017 EIA Regulations makes provision for a developer to request a 'Screening Opinion' from the Local Planning Authority (LPA) to ascertain whether an EIA is required if a development is classed as a Schedule 2 development. This decision is based on the likelihood of significant environmental effects arising in relation to the development proposals.

2.12 It has been assumed for the purposes of the applications that an EIA will be required based on the scale of the proposals and therefore the Applicant has undertaken an EIA. It is accepted that the Proposed Developments fall within Schedule 2, Category 10 'Infrastructure Projects' Subsection (b) 'Urban Development Projects' in accordance with the EIA Regulations, and that the development is likely to give rise to at least some significant environmental effects.

Scoping

2.13 Scoping is a process that, through research and consultation, identifies the environmental issues that require assessment as part of the EIA. This essentially refines the focus of the EIA on the environmental aspects which are likely to result in significant environmental impacts whilst also ensuring that no potentially significant areas are overlooked.

2.14 In accordance with Regulation 15 of the 2017 EIA Regulations, a formal request for a Scoping Opinion was made to SRBC on 7th November 2018, accompanied by an EIA Scoping Report.

2.15 A formal Scoping Opinion was issued by SRBC on 17th December 2018. Responses received as part of the scoping exercise are noted in Table 2.1 below. A copy of the EIA Scoping Report can be found at **Appendix 2.1** and a copy of the Scoping Opinion and associated scoping responses received from SRBC and statutory consultees can be found at **Appendix 2.2**.

2.16 The scoping process concluded that there were potentially significant environmental effects in relation to the below topics and that these should be included in the EIA:

- Ecology and Nature Conservation;
- Heritage and Archaeology;
- Landscape and Visual;
- Ground Conditions;
- Flood Risk and Drainage;
- Transport and Access;
- Air Quality & Dust;
- Noise and Vibration;
- Socioeconomics;
- Climate Change; and
- Health.

2.17 SRBC's Scoping Opinion confirmed that the proposed approach to each assessment was acceptable. A summary of the comments provided in the Scoping Opinion and where these are addressed in the ES is set out in Table 2.1.

2.18 A number of other topics were scoped out of the EIA and identified as potentially giving rise to impacts that will be not significant. This approach was approved through SRBC's Scoping Opinion (see **Appendix 2.1**). A description of these topics and reasons for scoping these out of the EIA is provided in Table 2.2.

2.19 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 (built to a suitable specification) which traverses the application site. The land for the CBLR will be protected from physical development so the CBLR can be provided in the future in line with Policy A2 of the Local Plan.

2.20 As the Application A and Application B 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 in 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 with SRBC on the Proposed Development since the submission of the Scoping Report.

Table 2.1: Comments on EIA Scope

Consultee	Summary of Comments	Action
SRBC - Planning	The ES should include all items listed in Schedule 4 of the Town and Country Planning (Environmental Impact Assessment) Regulations 2017. In particular the ES should include details of: **Transport Studies** The Transport Assessment (TA) should include a 'Cumulative Assessment of Impacts' with particular reference to: • Delivery of the Site Masterplan • Vehicular access strategy and locations to be agreed • Delivery of the CBLR • Access strategy for sustainable modes and impact on existing PRoW Additionally, there are a number of Network Rail assets including bridges at Flag Lane and at Bee Lane. The impacts of additional loading on these bridges need to be considered. Network Rail also require a Risk Assessment and Method Statement (RAMS) for all works undertaken within 10m of the operational railway under Construction (Design Management) Regulations. The impacts on the type and number of users at level crossings in the areas should also be considered **Gas Pipelines**	The ES has been prepared in line with the Country Planning (Environmental Impact Assessment) Regulations 2017 and includes all information detailed in Schedule 4. The Transport Assessment (**Appendix 12.1**) includes a full assessment of the Site Masterplan, vehicular access via Penwortham Way, and limited amount of access from Bee Lane, the delivery of the spine road which protects a future CBLR route in line with Policy A2 of the Local Plan, access strategy for sustainable modes of transport and the potential impacts on the existing PRoW network. The Transport Assessment has considered the limited amount of traffic that will be passing over Bee Lane bridge. (See Chapter 12: Transport and Access). The production of a RAMS will be considered at the detailed design stage.

Consultee	Summary of Comments	Action
	National Grid / Cadent advise of High or Intermediate pressure Gas Pipelines and associated equipment; Low or Medium pressure gas pipes and associated equipment; Electricity High Voltage Transmission Overhead Lines; and above ground electricity sites and installations and therefore these must fully be considered **Noise Impacts** An assessment of the existing noise emissions due to the proximity of the West Coast Mainline on the Proposed Development. It is advised that early discussions take place with the councils Environmental Health Officers about this and also land contamination and air pollution and the ES should reflect these discussions **Water Management and Flood Risk** A Flood Risk Assessment (FRA) for the development should be prepared in accordance with the NPPF and PPG, including taking into account climate change. **Ecological Studies** The ES should include the results of a comprehensive ecological data search, appropriate surveys and mitigation methods. The ES should thoroughly assess the potential for the proposal to affect designated sites in the area; the impacts on habitats and / or species listed as 'Habitats and Species of Principal Importance' and local wildlife together with relevant management plans or strategies pertaining in the local area. **Landscape and Visual** The ES should include assessments of visual effects on the surrounding area, its landscape; the effects of any tree loss or damaging activities to retained trees; impacts on soils together with	A Utilities Report (**Appendix 10.2**) has assessed the potential impact on services within the Site and surrounding area. Appropriate easements have been incorporated into the Proposed Development. A full noise impact assessment has been undertaken by Ensafe. The Proposed Development will not result in any significant adverse impacts on existing or proposed sensitive receptors (see Chapter 14: Noise and Vibration). An FRA (**Appendix 11.1**) has been produced by Lees Roxburgh which is in full accordance with the NPPF and PPG. The FRA takes the potential impacts of climate change into account. (See Chapter 11: Flood Risk and Drainage). An Ecological Impact Assessment (EclA) has been undertaken by TEP which assesses the potential impacts of ecological receptors including ecologically designated sites, habitats and / or species, and local wildlife and recommends appropriate mitigation which has been incorporated into the scheme where required. The assessment is supported by a suite of ecological surveys. (See Chapter 7: Ecology and Nature Conservation). A Landscape and Visual Impact Assessment (LVIA) has been undertaken by Xanthe Quayle

Consultee	Summary of Comments	Action
	any physical effects of the development (e.g. changes to topography); potential impacts on access land / public open land / right of way in the vicinity of the development. **Pollution** The ES should take account of the risks of air pollution and how this can be managed. **Cumulative Impacts** The ES should include an assessment to identify, describe and evaluate the effects that are likely to result from the project in combination with other projects and activities that are being, have been or will be carried out.	Landscape Architects which assesses the potential impact on the Site's surrounding landscape and the potential impact on the visual amenity as a result of the Proposed Development. (See Chapter 9: Landscape and Visual). The ES includes an assessment on the potential impacts on air quality during the construction and operational phases of the Proposed Development. (See Chapter 13: Air Quality and Dust). The ES includes an assessment of the potential cumulative impacts with development which have been agreed with SRBC and LCC. (See Chapter 18: Cumulative Effects).
Cadent	Cadent have identified operational gas apparatus within the Site boundary. This may include a legal interest (easements or wayleaves) in the land which restricts activity in proximity to Cadent assets in private land. The Applicant must ensure that proposed works do not infringe on Cadent's legal rights and any details of such restrictions should be obtained from the landowner in the first instance. If buildings or structures are proposed directly above the gas apparatus then development should only take place following a diversion of this apparatus. The Applicant should contact Cadent's Plant Protection Team at the earliest opportunity to discuss proposed diversions of apparatus to avoid any unnecessary delays. If any construction traffic is likely to cross a Cadent pipeline then the Applicant must contact Cadent's Plant Protection Team to see if any protection measures are required.	The ES includes an assessment on the potential impacts on utilities within the Site including gas mains at **Appendix 10.2**. Appropriate easements have been recommended which will be factored into the Proposed Development at the detailed design stage.

Consultee	Summary of Comments	Action
Greater Manchester Ecology Unit	**Statutory Nature Conservation Sites** Although the development site is more than 6km from any sites statutorily designated for their nature conservation interest (the Ribble and Alt Estuaries SPA/SSSI) the scale of the proposal is such that the impact of the scheme on this SPA/SSSI should be considered in the Environmental Statement. In particular the potential of the land to be functionally linked to the SPA should be assessed. **Regionally and Locally Important Sites** The EIA should consider and assess any impacts on Local Nature Reserves and Biological Heritage Sites. BHS sites within 2km of the development area include – Preston Junction Local Nature Reserve; Cop Lane Cutting BHS; Hurst Grange Park BHS; The River Ribble BHS; and Carr Wood BHS. **Protected Species** The ES should assess the impact of the development proposal on species protected under the terms of the Wildlife and Countryside Act 1981 (as amended) and the Conservation of Habitats and Species Regulations 2017. For this site these species should include as a minimum – Great Crested Newts; Bats; Water Voles;	An EcIA has been undertaken by TEP which assesses the potential impacts on statutory designated sites which could potentially be impacted on by the Proposed Development. (See Chapter 7: Ecology and Nature Conservation). The EcIA includes an assessment on the Regionally and Locally Important Sites noted. (See Chapter 7: Ecology and Nature Conservation). **Appendices 7.5 – 7.12** include assessments on protected species which have the potential to be affected by the proposals. (See Chapter 7: Ecology and Nature Conservation).

Consultee	Summary of Comments	Action
	Badgers; and Breeding Birds. **Priority Habitats and Species (Habitats and Species of Principle Importance)** The ES should assess the impact of the development proposal on habitats and species listed as Priority habitats and species under the terms of the Natural Environment and Rural Communities Act 2006. To inform this assessment a comprehensive habitat survey of the Site and any identified zone of influence of the development should be carried out. In line with the accepted mitigation hierarchy harmful impacts on important habitats and species should be avoided, mitigated and, as a last resort, compensated. **Net Biodiversity and Environmental Gain** Paragraph 170(d) of the newly revised NPPF states that – "*Planning policies and decisions should contribute to and enhance the natural and local environment by …. minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures*" The Governments 25-year Environment Plan states that government will – "*Embed an 'environmental net gain' principle for development, including housing and infrastructure*" The scope and scale of this planned development is such that there ought to be space and opportunity to achieve environmental enhancements and biodiversity net gain, and to contribute to the creation of coherent ecological networks. This aspiration should be properly assessed and discussed in the ES. I would recommend that using appropriate metrics could be a way of measuring and demonstrating net gain.	The EcIA has included an assessment on Priority Habitats and Species. (See Chapter 7: Ecology and Nature Conservation). Noted. A Biodiversity Net Gain calculation (TEP, 2021) is submitted as a standalone report in support of the planning applications.

Consultee	Summary of Comments	Action
Lancashire County Council (LCC) - Highways	**Access Strategy** It will be necessary to understand the proposed phasing of the development 'build out' with consideration for the timing of necessary infrastructure improvements (demonstrating the certainty of delivery of each). LCC consider the access strategy must be set out as part of the necessary Masterplan for the strategic site. It is their view that piecemeal development in advance of any Masterplan could potentially prejudice the delivery of the wider strategic site and an acceptable access strategy that also delivers suitable sustainable transport connections, and appropriate provision in regard to the completion of the CBLR and the wider implications beyond. The access proposals need to have regard to both short and longer-term scenarios. These include the proposed dualling of the A582 Penwortham Way and completion of the CBLR. The TA should therefore consider a range of scenarios which include delivery of key highway infrastructure improvements as well as the phasing of the residential and other on-site amenities/land uses. Other considerations should include City Deal proposals for Bus Priority on the Leyland Road corridor and traffic management measures on Leyland Road and within Tardy Gate District Centre. It is important that this development supports (in regard to delivery and integration) all proposed strategies and masterplans, whether directly or indirectly. The TA when completed should establish the full impacts of the overall proposals and therefore the measures and mitigation necessary to establish sustainable development in line with the latest local and national planning policy **Committed and Emerging Development** There are a large number of committed and emerging developments currently within the planning process that LCC Highways would recommend are taken into consideration in the assessment of this proposal.	The proposed access strategy, which takes into account the phasing of development, is fully set out in the Transport Assessment (**Appendix 12.1**). (See Chapter 12: Transport and Access). The TA covers the following scenarios: • **Scenario 1**- 2021 Base year • **Scenario 2** - 2031 base year + committed development (no dualling) • **Scenario 3** - 2031 base year + committed development + development at 1100 dwellings)no dualling)

Consultee	Summary of Comments	Action
	The Transport Assessment should detail explicitly all committed and expected developments that have been included in the assessment. LCC Highways recommend, to ensure a robust assessment is undertaken, that the developer include all major committed and also 'live' applications that will result in increased traffic on the local network within a 'Cumulative' development scenario. **Planned and Development Led Network Changes** In addition to the committed and emerging development as highlighted above there are a number of potential further network/infrastructure changes that must also be taken into consideration. This makes the forecasting of appropriate future assessment traffic figures for the assessment of development proposals in this particular area more complex. The key factors that require close consideration and an agreed approach are: Completion of Penwortham Bypass A582 Dualling; and Cross Borough Link Road (CBLR) – delivered by the Proposed Development This development proposal is on the edge of the built environment. Therefore, high quality provision from this development to the existing local network for pedestrians and cyclists will be important. The primary public transport corridor is currently Leyland Road and therefore high quality pedestrian and cycle connectivity will be necessary, particularly in the early phase of site build out and prior to any enhancement to public transport. **Provision for Equestrian, Pedestrian & Cycling, Public Rights of Way and Public Transport**	The following 'sensitivity' scenarios have been assessed in the TA: • **Scenario 4** – 2031 Base + Committed Development + Development at 1,350 dwellings (no dualling); • **Scenario 5** – 2031 Base + Committed Development + Development at 1,350 dwellings (with dualling); and • **Scenario 6** – 2031 Base + Committed Development + Development at 2,000 dwellings scenario (with dualling). The ES includes an assessment of the potential transport impacts with cumulative developments which have been agreed with SRBC and LCC. (See Chapter 18: Cumulative Effects). The completion of Penwortham Bypass, A582 Dualling, and the spine road (formerly CBLR) have been assessed within the Transport Assessment and designed to deliver sustainable development. (See Chapter 12: Transport and Access).

Consultee	Summary of Comments	Action
	There is an extensive network of Public Rights of Way that run through or adjacent to the proposed site and improvement of these existing facilities as well as provision of new links could be expected to deliver sustainable development. The Public Rights of Way (PROW) that will be impacted or influenced by the proposed scheme include: Footpath 24 (west of A582 Penwortham Way) Footpath 43 (crosses A582 Penwortham Way) also potential for connection to Cloughfield; Footpath 50, Bee Lane west to Moss Lane) Footpath 42 connects Bee Lane Kingsfold Drive; Footpath 46 connects Moss Lane (North) to Kingsfold Drive via Bramble Court; Footpath 49 connects Bee Lane to Kingsfold Drive via Queens Court; Footpath 52 connects Bee Lane to Sumpter Croft Footpath 53 connects Bee Lane to Flag Lane Footpath 58 leading on to Footpath 1 connecting Flag Lane to Coote Lane; Footpath 57 Nib Lane (west of Lords Lane); Footpath 55 (from FP 57 on Nib Lane connecting through to Moss Lane and FP 54); Footpath 56 (from Nib Lane connecting to Footpath 54 which then crosses A582 and also Footpath 4 through to Chain House Lane). LCC expect to see full assessment of any proposals that impact existing PROW and associated mitigation measures.	We have designed the scheme to embrace Active Travel and will be providing new facilities and links to existing facilities. A full assessment of the potential impacts on the PRoW network on site and in the surrounding areas and associated mitigation measures have been included within the ES. (See Chapter 12: Transport and Access).

Consultee	Summary of Comments	Action
	Sustainable Urban Drainage Systems (SuDS) LCC are the Lead Local Flood Authority (LLFA) and I would expect LCC Flood Risk Assessment (FRA) team to be consulted separately. Clearly, the development of the Pickering's Farm site application should consider the requirements likely to be asked for in support of a SuDs drainage scheme. These considerations may significantly affect the Site layout/design to include for the likes of swales, storage ponds etc. to control run off rates in accordance with SuDs guidance.	The Flood Risk and Drainage consultants, Lees Roxburgh, have consulted with LCC. (See Chapter 12: Drainage and Flood Risk)
Natural England	The impact of the proposal upon features of nature conservation interest and opportunities for habitat creation/enhancement should be included within the EIA. The ES should thoroughly assess the potential for the proposal to affect designated sites and local wildlife and geological sites. The ES should assess the impact of all phases of the proposal on protected species (including, for example, great crested newts, reptiles, birds, water voles, badgers and bats). The ES should thoroughly assess the impact of the proposals on habitats and/or species listed as 'Habitats and Species of Principal Importance' within the England Biodiversity List. A habitat survey (equivalent to Phase 2) should be carried out on the Site, in order to identify any important habitats present. In addition, ornithological, botanical and invertebrate surveys should be carried out at appropriate times in the year, to establish whether any scarce or priority species are present. Details of local landscape character areas should be mapped at a scale appropriate to the development site as well as any relevant management plans or strategies pertaining to the area. The EIA should consider potential impacts on National Trails, access land, public open land, rights of way and coastal access routes in the vicinity of the development. Impacts from the development should be considered in light of the Government's policy for the protection of the best and most versatile (BMV) agricultural land.	An EcIA has been undertaken by TEP which assesses the potential impacts on statutory and non-statutory designated sites which could potentially be impacted on by the Proposed Development. A full suite of surveys have been undertaken. The ES provides an assessment of protected species which have the potential to be affected by the proposals at **Appendices 7.5 – 7.12** and includes an assessment on Priority Habitats and Species. (See Chapter 7: Ecology and Nature Conservation). The ES includes an LVIA which assess the potential impacts on public recreational routes. (See Chapter 9: Landscape and Visual).

Consultee	Summary of Comments	Action
	The assessment should take account of the risks of air pollution and how these can be managed or reduced The ES should identify how the development's effects on the natural environment will be influenced by climate change, and how ecological networks will be maintained.	The ES includes a full Air Quality Assessment which identifies the potential impacts during the construction and operational phases. (See Chapter 13: Air Quality and Dust) The ES includes an assessment on how the development will impact on climate change as well as providing measures to ensure that the development is resilient to climate change. (See Chapter 7: Ecology and Nature Conservation; Chapter 10: Flood Risk and Drainage; Chapter 16: Human Health; and Chapter 17: Climate Change).
SRBC - Arboriculture	The site comprised a large number of trees which are highly beneficial to the local environment. Where there is an unavoidable loss of trees on site, replacement trees will be required to be planted on site where appropriate at a rate of two new trees for each tree lost. Trees identified as category C are determined to have no material conservation or other cultural value. The removal of these trees, along with category U trees, should be mitigated as part of a future landscaping proposal for the development. The landscaping plan should include trees suitable for planting in the urban environment with careful consideration given to their species, planting location, form, maintenance implications and contribution to biodiversity. Before planning permission is determined an Arboricultural Impact Assessment (AIA) should be submitted to the LPA which evaluates the direct and indirect effects and, where necessary, recommends mitigation. The AIA should take account of the effects of any tree loss required to	An Arboricultural Survey has been undertaken by TEP (**Appendix 7.5**) which assesses the potential impact on the trees on site. (See Chapter 7: Ecology and Nature Conservation). Trees will be retained where possible, any loss of high and moderate value trees will be minimised where possible or replacement planting will be provided within the scheme at a 3:1 ratio, using locally appropriate species this will be policy compliant. Appropriate tree protection measures will be implemented where required when works are in close proximity to retained woodland, orchard, hedgerows and trees and will be included in an Arboriculture Method Statement appended to the CEMP. These measures will accord with BS

Consultee	Summary of Comments	Action
	implement the design, and any potentially damaging activities proposed within the vicinity of retained trees. A tree protection plan should be superimposed on a layout plan, based on the topographical survey to include all hard surfacing within the root protection area of retained trees. Trees listed at Cat A and B should be protected in accordance with BS 5837 2012 to include the default specification of vertical and horizontal framework secured into the ground.	5837:2012. (See Chapter 7: Ecology and Nature Conservation) Noted.
Network Rail	Should there be any requirement to widen / alter any bridges over the railway then early consultation should take place with both Network Rail's Engineering and Property teams. Likewise, should there be a requirement for any other property interests or rights then early consultation should also take place. Network Rail's assets at Flag Lane (Wrought iron, Jack Arch type bridge) appears to have single lane running in operation to reduce loading to the asset. This would need to remain in place which would have an impact to any increase to the flow of traffic. Additionally the asset at Bee Lane (masonry arch bridge) shows minor signs of settlement and any additional loading would need to be kept to a minimum. Network Rail have significant reservations about the use of their assets as part of the proposal. Without knowing the proposals in full they would not be able to formally comment on the validity of the bridges to accommodate the additional loading, however, based on the assumptions made in the submitted documentation, such an increase in volume of traffic would have an adverse effect on the assets. At this stage Network Rail believes that significant strengthening or replacement of each asset to accommodate the proposals would be required. The promotor is to produce a study evaluating the estimated impact of the increased traffic on the existing bridge structures over the railway. Asset protection measures would be required to ensure that the proposal works on site and as a permanent arrangement do not impact the safe operation and integrity of the railway. No proposal should increase Network Rail's liability.	No works to bridges are proposed as part of the development. Noted. The amount of traffic which will enter the Site via Bee Lane and have been assessed as suitable and safe as part of the Transport Assessment. (See Chapter 12: Transport and Access).

Consultee	Summary of Comments	Action
	A Risk Assessment and Method Statement (RAMS) for all works to be undertaken within 10m of the operational railway would be required in addition to any planning consent.	RAMS will be considered at the detailed design stage.
	The applicant should provide a 1.8m trespass proof fence along the development side of the existing boundary fence.	Noted
	Both during construction and operational phases, it should be ensured that the development does not affect the safety, operation or integrity of the existing operational railway / Network Rail land.	Noted
	There must be no physical encroachment of the proposal onto Network Rail land, no over-sailing into Network Rail air-space and no encroachment of foundations onto Network Rail land and boundary treatments.	Noted.
	If vibro-compaction machinery / piling machinery or piling and ground treatment works are to be undertaken as part of the development, details of the use of such machinery and a method statement must be submitted to the Network Rail Asset Protection Engineer for agreement.	Noted
	It is noted that an attenuation pond is proposed in the south-east corner of the masterplan area directly adjacent to the WCML. The location of the pond would increase the risk of flooding, soil slippage and pollution, drainage issues onto the WCML. The applicant should therefore remove the attenuation pond from this location.	The masterplan has been updated and no attenuation ponds are located in the south-eastern corner of the Site.
	Network Rail will need to review and agree all excavation and earthworks within 10m of the railway boundary to determine if the works impact upon the support zone of our land and infrastructure as well as determining relative levels in relation to the railway.	Noted.
	Network Rail would need to review and agree the methods of construction works on site to ensure that there is no impact upon critical railway infrastructure. No excavation works are to commence without agreement from Network Rail.	Noted.
	It should be ensured that the impacts of noise and vibration the rail network on future users of the Site is appropriately mitigated.	A full noise impact assessment has been undertaken and mitigation measures embedded into the Proposed Development to ensure no

Consultee	Summary of Comments	Action
	As the proposal includes works which may impact the existing operational railway and in order to facilitate the above, a BAPA (Basic Asset Protection Agreement) will need to be agreed between the developer and Network Rail.	significant adverse impacts are experienced by future users of the Site. Noted.

Table 2.2: Non-Significant Topics for both the Outline Applications Proposed to be Scoped Out of the EIA

Discipline	Commentary
Lighting	Artificial lighting is provided to encourage a safe environment for a range of activities including driving, cycling and walking. It is also used to enhance the environment by means of decorative and flood lighting of areas, features and buildings. Any new lighting proposed as part of the development at the Site will be in accordance with national bodies including British Standards. The proposed lighting will be selected with reference to the following design standards and codes of practice: • BS EN 5489-1: 2003 +A2 (2008) Code of Practice for the design of road lighting: Part 1 Lighting of roads and public amenity areas; • BS EN 13201-2: 2003 Road lighting – Part 2: Performance requirements; • ILE GN01: Guidance notes for the reduction of obtrusive light; • ILE TR12: Lighting of pedestrian crossings (2007); and • ILE TR25: Lighting for traffic calming features. It is not considered that there will be any significant impacts with regards to lighting and as such this has been scoped out of the EIA.
Daylight, Sunlight and Overshadowing	Development in densely urbanised locations or of a high-rise nature can cause impacts to the levels of light received by adjacent properties. The Proposed Development is not located in a densely urbanised location and is not of a high-rise nature. any potential impacts are anticipated to be insignificant and as such it is proposed that this be scoped out of the EIA.
Wind	The Proposed Development will not comprise buildings of sufficient size and scale to affect wind flow and dynamics such that significant environmental effects could result. As such, a wind assessment is not required to be undertaken for the proposed site and it is proposed that this be scoped out of the EIA.
Waste	Waste will be generated during the construction phase, as a result of the construction of the new buildings. Waste management will be considered carefully throughout the design and construction of the Proposed Development, to ensure compliance with legislation, and to minimise costs associated with waste disposal. The volume of construction waste likely to be generated by the development would be in line with what would be expected from a development of this size and will not significantly affect the capacity of local waste infrastructure. During the operation of the development, waste (including recyclables) generated by dwellings will be managed by the local waste authority, while waste from non-residential uses will be managed by commercial operators. None of the proposed users are anticipated to be major generators of waste and the wastes generated by the Proposed Development should not significantly affect the capacity of local waste infrastructure.

Discipline	Commentary
	It is considered that there will be no significant impacts with regards to waste as a result of the Proposed Development and as such this has been scoped out of the EIA.
Accident and Disasters	The EIA Regulations 2017 require that an ES needs to include a description of the expected effects of the Proposed Development on the environment deriving from the vulnerability of the development to risks of major accidents and/or disasters that are relevant to the project concerned. In this case, the nature of the Proposed Development is not considered to pose risk of major accidents and/or disasters. As such, accidents and disasters are not proposed to be included as part of this EIA.

Consultation

2.21 An integral part of the EIA process is consultation with a range of statutory and non-statutory consultees. Consultation was undertaken at the scoping stage to identify at an early stage any initial environmental concerns associated with the Proposed Development that required examination in greater detail in the EIA. The EIA has been prepared in accordance with the SRBC's EIA Scoping Opinion which was informed through consultation with statutory bodies. Pre-application consultation in respect of the environmental assessments undertaken as part of the EIA will be summarised in this chapter and presented at final submission.

2.22 Consultation has been undertaken as part of the technical assessments as a means of establishing the environmental baseline and assessment methodologies. This includes identifying sensitive components of the environment, e.g. humans, organisms or physical characteristics, or potential effects and reaching consensus on suitable mitigation measures. Details of further consultation undertaken as part of each technical assessment will be described further within each technical chapter as relevant at final submission.

Consultation with SRBC

2.23 Initial contact was made with SRBC on 2nd June 2021 in the form of a request for Officers to confirm the list of application validation requirements prepared by Avison Young. Following a series of email exchanges, SRBC agreed to a pre-application meeting with the Developers which took place on 19th July 2021. This meeting was attended by the Developers, Avison Young and Vectos (Transport Consultants), as well as Jonathan Noad, Janice Crook and Steve Brown of SRBC.

2.24 The purpose of the pre-application meeting was for Avison Young to outline the revised approach to the application to be adopted by the Developers, which would include the submission of two outline applications on adjoining land parcels under their control, both of which would be supported by the revised Masterplan document. Avison Young also provided Officers with a concise overview of the key changes which have been made to the scheme in response to the previous feedback received.

2.25 Vectos attended the meeting and outlined the revised highways strategy, which takes the 'vision and validate' approach in line with Department for Transport (DfT) guidance in order to maximise sustainable movements across new build development sites. Confirmation of S106 Heads of Terms was also requested by the Developers.

2.26 Following the pre-application meeting, SRBC confirmed the list of application validation documents by email on 20th July. SRBC also followed up the meeting with further feedback on the Developers' approach to their new applications and revised highways strategy, to which Avison Young subsequently provided a written response.

Consultation with LCC and Highways England

2.27 Discussions with LCC Highways regarding the local highway network have continued, building upon the discussion coordinated during the previous outline applications and masterplan submission. Initial contact was made with LCC in June with subsequent meetings scheduled for July 2021. The meetings provided the opportunity to introduce Vectos as part of the design team, consider the previous comments LCC had provided in relation to the masterplan and outline applications, and present the opportunity to consider a revised transport strategy focussing on vision and validate not predict and provide. There were also opportunities to present key principles of the emerging masterplan which focus on local living and virtual mobility, active travel, shared travel and then private car usage, whilst encouraging input from LCC regarding their visions for the site masterplan.

2.28 In addition, discussions have continued with Highways England regarding the strategic highway network, building upon the discussion coordinated during the previous outline applications. Again, the initial meeting in July 2021 provided the opportunity to introduce Vectos, understand better any previous comments provided by Highways England to the outline applications and present the opportunity to consider a vision and validate approach to development.

Awareness Leaflet Drop

2.29 The Developers have prepared an Awareness Leaflet to inform local residents and stakeholders of the upcoming application submissions. A copy of the leaflet can be found within the Statement of Community Involvement (SCI) (Avison Young, August 2021) which is submitted in support of the planning applications. The purpose of the awareness leaflet is to inform the local community of the key changes which have been made to the application from that which was previously withdrawn. The leaflet was distributed to all properties within the consultation boundary on 9th August to coincide with the submission of the outline applications.

2.30 A copy of the leaflet and accompanying correspondence has also been issued to Ward Members and Penwortham Town Council, with an offer to meet with Avison Young and the Applicants to discuss the new proposals.

EIA Methodology

2.31 In addition to observing the formal requirements of the EIA Regulations, further formal guidance has been drawn from National Planning Practice Guidance (NPPG). Specific technical guidance is referenced in the individual technical chapters as appropriate.

Consistency

2.32 To assist the reader in understanding the technical assessments a consistent approach has been adopted throughout the EIA to ensure that likely significant effects are identified and evaluated in a transparent manner. Each environmental assessment topic has adopted the following approach:

- Baseline Assessment and Identification of the Study Area;
- Identification of Sensitive Receptors;
- Identification of Embedded Mitigation Measures;
- Identification of Potential Effects during Construction and Operation of the Proposed Development (including indirect, direct, adverse and beneficial);
- Assessment of Impact Significance;
- Identification of Impact Significance;
- Identification of Mitigation Measures;
- Assessment of Residual Effects; and
- Assessment of Cumulative Effects.

Spatial and Temporal Scope of Assessment

2.33 The spatial extent of the EIA is described by the geographical area potentially affected by the proposed schemes and will need to take into account:

- The physical extent of the proposed schemes defined by the limits of land to be used both during construction and operation (temporary and permanent);
- The position of sensitive receptors within or outside of the Site boundaries; and
- The nature of the baseline environment and the way in which the impacts are likely to be propagated.

2.34 The effects for each of the disciplines are likely to extend to different spatial extents. The spatial scope for each discipline will be described within each of the topic chapters as required.

2.35 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 Proposed Development is presented at **Figure 5.9**. 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.

2.36 The environmental baseline studies undertaken as part of the EIA consider the current conditions of the Site. Therefore, each technical chapter will contain a description of the relevant study area that may be affected by the scheme.

2.37 With reference to the baseline conditions, the impact assessment will be made against existing baseline conditions. The assessment will address effects arising from the construction and operation of the proposed schemes as follows:

- Construction effects may arise directly from construction activities but also from the temporary use of land (e.g. construction sites) or from associated changes in traffic movements; and
- Operational effects may arise from the permanent operational activities and ongoing use of the Proposed Development and new infrastructure, including but not limited to highways, noise, and air quality.

2.38 The significance of the effects that will arise in each of these phases is based on any changes compared to the baseline conditions (i.e. those conditions which would exist if the proposed scheme did not go ahead).

2.39 Due consideration has been given to the build-out programme which is anticipated to run from 2023 to 2031 (see Chapter 5: Proposed Development). Comprehensive assessments have been undertaken which considers this timescale. If the baseline conditions change materially in future years, then the Applicants acknowledge that further assessment may be required.

Impact Prediction

2.40 The 2017 EIA Regulations state that an ES should include:

> *"A description of the likely significant effects of the development on the environment resulting from inter alia:*
>
> *(a) The construction and existence of the development, including, where relevant, demolition works;*
>
> *(b) the use of natural resources, in particular land, soil, water and biodiversity, considering as far as possible the sustainable availability of these resources;*
>
> *(c) the emission of pollutants, noise, vibration, light, heat and radiation the creation of nuisances, and the disposal and recovery of waste;*
>
> *(d) The risk to human health, cultural heritage or environment (for example accidents and disasters);*

(e) The cumulation of effects with other existing and/or approved projects, taking into account any existing environmental problems relating to areas of particular environmental importance likely to be affected or the use of natural resources;

(f) The impact of the project on climate (for example nature and magnitude of greenhouse gas emissions) and the vulnerability of the project to climate change;

(g) The technologies and substances used."

2.41 Predictions of environmental impacts are carried out using quantitative methods, or in some cases, qualitative terms using expert opinion. All assumptions used and any areas of uncertainty are defined in the relevant chapters.

2.42 The following types of effect are considered:

- Direct impacts that arise from activities that form an integral part of the proposed scheme (e.g. new infrastructure/land take);
- Indirect impacts that arise from activities not explicitly forming part of the proposed scheme (e.g. noise changes due to changes in road traffic flows on existing roads resulting from the operation of the scheme);
- Secondary impacts that arise as a result of an initial effect of the proposed scheme;
- Permanent impacts that result from an irreversible change to the baseline environment (e.g. land take) or impacts which persist for the foreseeable future (e.g. visual impact);
- Temporary impacts that persist for a limited period only, for example, due to particular construction activities (e.g. noise from construction plant);
- Beneficial impacts that have a positive influence; and
- Adverse impacts that have a negative influence.

Significance Criteria

2.43 The significance of effect is assessed by looking at what the changes will be against the existing or predicted baseline as a result of both the construction and operation of the schemes. It is a product of the sensitivity of the receptor, and the magnitude of the impact upon it. The criteria used to define the sensitivity of a receptor and magnitude of impact is provided in Table 2.3 and Table 2.4 below. These criteria are used as a guide only and the specific criteria for each technical assessment will be presented within each chapter.

Table 2.3: Description of the Sensitivity of an Environmental Receptor

Sensitivity	Typical descriptors
Very High	Very high importance and rarity, international scale and very limited potential for substitution.
High	High importance and rarity, national scale, and limited potential for substitution.
Medium	High or medium importance and rarity, regional scale, limited potential for substitution.
Low	Low or medium importance and rarity, local scale.
Negligible	Very low importance and rarity, local scale.

2.44 Descriptions of the magnitude of impact are provided in Table 2.4 below.

Table 2.4: Description of the Magnitude of an Impact

Magnitude of Impact	Impact Type	Typical criteria descriptors
Very Large	Adverse	Loss of resource and/or quality and integrity of resource; severe damage to key characteristics, features or elements
	Beneficial	Large scale or major improvement of resource quality; extensive restoration or enhancement; major improvement of attribute quality
Large	Adverse	Loss of resource, but not adversely affecting the integrity; partial loss of/damage to key characteristics, features or elements
	Beneficial	Benefit to, or addition of, key characteristics, features or elements; improvement of attribute quality

Magnitude of Impact	Impact Type	Typical criteria descriptors
Medium	Adverse	Some measurable change in attributes, quality or vulnerability; minor loss of, or alteration to, one (maybe more) key characteristics, features or elements
	Beneficial	Minor benefit to, or addition of, one (maybe more) key characteristics, features or elements; some beneficial impact on attribute or a reduced risk of negative impact occurring
Small	Adverse	Very minor loss or detrimental alteration to one or more characteristics, features or elements
	Beneficial	Very minor benefit to or positive addition of one or more characteristics, features or elements
No change	n/a	No loss or alteration of characteristics, features or elements; no observable in either direction.

Identification of Significant Effects

2.45 Based on the sensitivity and magnitude criteria set out above, specific significance criteria have been used in each technical assessment and these are explained in the methodology sections within each technical chapter. Often, these are based on clearly defined criteria from published best practice guidance. However, wherever possible, the following terminology has been utilised:

- Major Beneficial;
- Moderate Beneficial;
- Minor Beneficial;
- Negligible;
- Minor Adverse;
- Moderate Adverse; and
- Major Adverse.

2.46 Where potential environmental impacts have been found, further to assessment which are of no significance, they are said to have no effect.

2.47 The assessment of likely significant effects has been undertaken for all potential effects to determine their relative importance. This has taken into account the following considerations:

- Magnitude (size of impact);
- Sensitivity of the surrounding environment and receptors;
- Spatial extent (size of the area affected);
- Duration (short, medium or long term);
- Nature of the effect (direct or indirect, reversible or irreversible);
- Inter-relationships and combination effects;
- International, national or local standards; and
- Relevant policy guidance.

Mitigation

2.48 The development of measures designed to avoid, reduce or offset significant adverse environmental effects associated with a proposal is one of the key elements of EIA. Measures to mitigate environmental effects of the Proposed Development can take two forms;

- Embedded mitigation - is the consideration of mitigation embedded into the fixed scheme (as per the parameter plans) with the aim where possible, of avoiding, reducing or offsetting significant adverse effects, determined during the course of the assessment; and
- Further mitigation – is the mitigation that is not embedded into the proposals and which requires further action than already proposed.

2.49 As noted above, a number of design responses have been embedded into the parameters of the development. These are set out in Chapter 5: Description of Development. A summary of the embedded mitigation, is listed below:

- Restricting building heights to between 2 and 3 storeys;
- Inclusion of a 2-form entry primary school;
- Retention of internal layout of 'green' lanes (Moss Lane, Bee Lane, Nibb Lane and Lords Lane);
- Retention of a number of hedgerows across the Site;
- Provision of a pylon corridor; and
- Setting residential dwellings back from noise sources of Penwortham Way and the West Coast mainline railway.

2.50 Where environmental mitigation measures have not been integrated into the proposals through design, it is expected that all other requisite measures or 'further mitigation' will be secured by appropriate planning conditions or obligations. Descriptions of these mitigation measures are included in the appropriate technical chapters and summarised in Chapter 19: Summary of Mitigation and Residual Effects.

Cumulative Effects

2.51 The assessment of cumulative effects is set out in two forms. The first relate to the impacts of the Proposed Development in conjunction with other developments in the area. These developments should be existing, consented or reasonably foreseeable in terms of delivery and should be located within a realistic geographical scope where environmental effects could combine to create a more significant effect on a particular sensitive receptor. The second type of cumulative effect is that of the combination of the various types of impacts from the Proposed Development. These are referred to as synergistic effects.

2.52 Schemes for consideration in the cumulative effects assessment were initially identified through a planning application search of the SRBC planning portal and agreed through the formal EIA Scoping process (see **Appendix 2.1**). This process identified a total of 11 projects to be included within the cumulative assessment. The list of sites considered as part of the cumulative assessment are provided along with the assessment in Chapter 18: Cumulative Effects.

2.53 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 18.1 of Chapter 18: Cumulative Effects 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.

Limitations and Assumptions

2.54 The EIA has been undertaken based on the planning application drawings and description of the development submitted with the planning applications. The technical assessments have been based on the current land uses and the existing baseline conditions at the Site. Any assumptions made or limitations relating to individual technical assessments are presented, where applicable, in the relevant technical chapters.

The Project Team

2.55 The ES has been compiled using a wide range of sources and with inputs from competent, technical specialists. The organisations and their roles in the project team are listed in Table 2.5 below. See **Appendix 1.1** for details of the technical team's credentials.

Table 2.5: The Project Team

Discipline	Company
Client	Taylor Wimpey and Homes England
Architect	5Plus Architects
Planning Consultant and EIA Co-ordinator	Avison Young
Ecology and Nature Conservation	TEP
Heritage and Archaeology	RPS Group
Landscape and Visual	Xanthe Quayle Landscape Architects
Ground Conditions	ROC
Flood Risk and Drainage	Lees Roxburgh
Transport and Access	Vectos
Air Quality and Dust	Ensafe
Noise and Vibration	Ensafe
Socio-economic assessment	Hatch
Health	Stantec
Climate Change	Wardell Armstrong