

5. Development Specification: Proposed Scheme

- 5.1 This Chapter provides a description of the Proposed Scheme, including a description of how the Proposed Scheme would be constructed and its timescales. This development specification represents what planning consent is sought for. The Proposed Scheme is part of a wider development, referred to as the Project for Assessment. The development specification for the Project for Assessment which considers the comprehensive development, as defined in **Chapter 2: Approach to EIA**, is provided in **Chapter 4: Development Specification – Project for Assessment**. Chapter 4 has considered the wider development for which the Proposed Scheme in this Chapter forms part of.
- 5.2 The description provided within this Chapter is not in addition to, nor supersedes that provided within **Chapter 4**, but provides a description of the Proposed Scheme in isolation for the purposes of assisting with the identification of significant effects associated with the Application, separate to that associated with the Project for Assessment.
- 5.3 This description as well as that within **Chapter 4: Development Specification – Project for Assessment**, together with the supporting spatial plans within the ES, form the basis for the technical assessments presented in **Technical Chapters 7 – 18**.
- 5.4 The description of the Proposed Scheme includes primary and tertiary mitigation, which is committed to and will be secured through the Environmental Management Plan (EMP) (**Volume 3: Environmental Management Plan**).
- 5.5 The EMP also provides any additional primary mitigation associated with the wider Project for Assessment, which is presented for information only.
- 5.6 The description of the completed Proposed Scheme should be read in conjunction with the supporting **Parameter Plans**, as follows:
- **Figure 5.1:** Proposed Scheme – Parameter Plan 1, Uses;
 - **Figure 5.2:** Proposed Scheme – Parameter Plan 2, Scale; and
 - **Figure 5.3:** Proposed Scheme – Parameter Plan 3, Excavation, Retention and Demolition.

Proposed Scheme — Application Boundary

- 5.7 The Application Boundary includes for all potential temporary and permanent works which may take place within the boundary as defined on **Figure 1.2**. The Application Boundary extends to approximately 210ha.
- 5.8 The Proposed Scheme is described as:

'Application for outline planning permission (all matters reserved) for a national-scale employment development, comprising Storage & Distribution (Use Class B8) and

Industrial (Use Classes B2, E(g)(ii) and E(g)(iii)) uses (including, but not limited to, Logistics, Manufacturing Processes and Data Centres), with supporting ancillary uses including Hotel (Use Class C1), Commercial, Business & Service (Uses Class E(a-g)), Education (Use Class F1(a)), Local Community (Use Class F2(a-c) uses, Sui Generis uses (in accordance with the Uses Schedule), and associated demolition works, landscaping, drainage, ecological enhancements, highway works, cycleway and footpath linkages and other ancillary infrastructure.'

Spatial Zoning

5.9 Due to the scale of the Application Boundary, terminology has been developed in order to apportion elements of the Proposed Scheme into distinct areas, and aid the identification of location-specific impacts, and mitigation strategies. These have been defined as 'Application Plots' relating to the Application Boundary.

5.10 These are spatially defined on both **Figures 5.1** and **5.2** and are detailed further below.

Application Plots

- **Application Plot A** – The area to the east of Moss Hall Road, south of Pilsworth Road and north of Pilsworth Clough / gas pipeline: 6790_1071;
- **Application Plot B** – The area to the west of Moss Hall Road and north of Pilsworth Clough / gas pipeline: 6790_1071;
- **Application Plot C** – The area to the east of Moss Hall Road, south of Application Plot A and bordered to the south by Birch Business Park;
- **Application Plot D** – The area to the east of Whittle Brook, west of Moss Hall Road and north of the M62;
- **Application Plot E** – The area to the south of Birch Business Park, east of Moss Hall Road; and
- **Application Plot F** – The area to the east of Birch Business Park.

Potential Ecological Mitigation (Outside of the Application Boundary)

- **Potential Ecological Mitigation** – Potential area for ecological mitigation which may be required to deliver Biodiversity Net Gain (BNG) or compensatory habitat.

Overview of Site Preparation and Construction Stage

Timescales

5.11 Preparation and construction of the Proposed Scheme is anticipated to commence in 2026, with the construction being completed over 19 years. The Proposed Scheme will be fully operational in 2045¹.

¹ We note that that timescales for PfE run to 2039, although it is noted within PfE that the delivery of Northern Gateway will go beyond this, currently assumed to be the mid-2040's.

Phasing

5.12 The **Parameter Plans** define the following spatial areas:

- **Application Plots (A-F); and**
- **Potential Ecological Mitigation.**

5.13 These spatial areas do not represent a chronological order for delivery.

5.14 It is assumed that enabling works and earthworks within different Plots are likely to occur over one or more Plots at the same time. Construction may also overlap with some enabling works and earthworks and there may be construction over one or more Plots at the same time.

5.15 Phasing is influenced by the:

- Extent of available capacity within the surrounding strategic road network (SRN) and the implementation of necessary mitigation;
- The delivery of the new off-site foul drainage infrastructure to the west and likely upgrades to the water mains; and
- The demand and market requirements for the various elements of the development.

5.16 In the absence of further information on phasing, it has been necessary to make a number of assumptions.

5.17 The initial phases of development will commence with employment and mixed uses and are likely to be within the northern part of the Proposed Scheme (**Application Plots A and B**) which will provide an extension to the existing built development.

5.18 These initial phases will utilise highway infrastructure that already exists. It is assumed that initial phases will also use the local highway improvements to Pilsworth Road (from Junction 3 of the M66 / Moss Hall Road Junction).

5.19 It is assumed that the potable water infrastructure upgrades (required for the Proposed Scheme) along Pilsworth Road to the UU water main would occur during the upgrades to Pilsworth Road (as well as off-site upgrades to foul water by third parties, which is required earlier in the programme)².

5.20 The improvement works to Junction 3 of the M66 are assumed to occur by 2032 to support the initial phase of development.

5.21 Improvements to the existing spine road, (Moss Hall Road and Whittle Lane) running south through the Application Boundary will also be required to allow initial phases of employment development in the northern part of the Application Boundary.

² New foul water pumping station and rising main(s).

- 5.22 As outlined below, temporary surface water drainage will be installed as necessary to mitigate flood risk and sediment loading and, where possible will align with the permanent drainage solution (discussed below).
- 5.23 Later phases of development will be built out from the north and comprise further employment uses (**Application Plots C, D, E, F**) and the proposed mixed uses (**Application Plot E**).
- 5.24 The delivery of landscape and ecological mitigation will also be phased. At this stage, it has been considered likely to be in accordance with the following chronological order:
- Enhancement of the open space to the north including the Brightley Brook corridor;
 - Enhancement of other brook corridors including Whittle Brook corridor; and
 - Further ecological mitigation as required within the **Potential Ecological Mitigation**.
- 5.25 The perimeter landscape buffers are largely retained features, however, may be enhanced on a phased basis, where that perimeter landscape buffer is relevant to a particular Plot.

Overview of Construction Activities

- 5.26 As outlined above, construction activities may take place across one or more Plots at the same time.
- 5.27 The key activities to be undertaken in each work area during the construction stage are summarised below:
- Securement of the working area boundaries;
 - Formation of construction access(es) and set up of temporary construction compounds/site accommodation;
 - Implementation of protective measures around features to be retained;
 - Enabling works, site clearance and removal of hardstanding/buildings as required;
 - Site preparation and appropriate surveys (including ground/archaeological investigations and any archaeological mitigation works, as required);
 - Earthworks, including mineshaft and mineworkings treatment, installation/diversion of any utilities, formation of temporary and permanent drainage features and re-profiling to create development plateau levels;
 - Construction of infrastructure, including internal accesses and secondary/tertiary road networks, active travel routes, travel hubs, mains utilities, drainage and public open space; and

- Construction of the Proposed Scheme, including implementation of spatial zones for built development, public realm, landscaping and ecological mitigation.

Construction Access and Routing

- 5.28 Construction access will be from the existing Moss Hall Road route via the Moss Hall Road /Pilsworth Road junction to the north.
- 5.29 It is assumed that the primary and secondary access corridors within Plots will be constructed early in the construction stage for use as a haul roads to facilitate construction within these areas and provide construction access to the later phases of development.
- 5.30 The exact routing of vehicles during construction is under determination. However, the routing of construction traffic, principally Heavy-Duty Vehicles (HDVs), is assumed to utilise the primary road network to Moss Hall Road via either the M66 and Pilsworth Road or via the M62 and Queen Elizabeth II Way.
- 5.31 PROW will be appropriately extinguished or diverted in advance of construction commencing in each of the work areas.

Site Securement and Compounds

- 5.32 It is assumed that temporary fencing and hoarding will be erected around the perimeter of work areas.
- 5.33 Temporary secure access gates will be provided to manage the movement of vehicles, plant, equipment and personnel required for the construction of the Proposed Scheme. Welfare facilities and other temporary infrastructure (e.g. construction compounds, material laydown areas, storage areas etc.) will be set up at designated locations within work areas, as determined by the appointed contractor and subject to sequencing of development. Where required, smaller satellite compounds will be provided around work areas, as required. Any construction compounds will avoid locations on the boundaries of the Proposed Scheme and areas which are in close proximity to residential receptors.

Features for Retention and Removal

- 5.34 The construction of the Project for Assessment will require much of land within the Application Boundary to be reprofiled. As a consequence of this, a number of features will need to be removed. Where it is not possible to confirm which features are being removed (or retained), a 'worst case' has been assumed. The maximum extent of excavation is defined on **Figure 5.3**.

Existing Businesses and Properties

- 5.35 Birch Business Park is outside of the Application Boundary but is located within the centre of the Proposed Scheme. It is assumed that Birch Business Park will remain in-situ and operational, with only limited works associated with access and the alignment of Moss Hall Road / Whittle Lane.
- 5.36 The existing businesses and properties to be retained and demolished are defined on **Figure 5.1** and **5.3**.

Vegetation

- 5.37 There are no veteran or ancient trees or trees subject to Tree Preservation Orders within the Application Boundary.
- 5.38 The wider vegetation to be retained is defined within **Figure 5.1** and **5.3**, essentially the land which falls outside of the maximum extent of excavation.
- 5.39 Trees and vegetation will be retained within the following principle areas as defined in **Figure 5.1**:
- The Inner Zones (see definition below) along the brook corridors³;
 - The landscape buffers to the north of the M62; and
 - Areas within the heritage setting offset.
- 5.40 All other trees, hedgerows and vegetation within the Application Boundary (including all Category A and B trees) will be removed.

Water Features

- 5.41 The alignments of Hollins Brook, Whittle Brook, Brightly Brook / Pilsworth Clough and parts of the un-named water course on the eastern border of **Application Plot E** will be retained in their existing alignments within the Application Boundary. Their retention is accommodated within the Wetland Habitat Corridors as defined on **Figure 5.1**.
- 5.42 Tributaries of brooks may require removal but as their purpose will be replaced by a new surface water drainage strategy (see 'Surface Water Drainage Strategy'), their existing purpose will be removed.
- 5.43 Most other linear water features will be removed to allow for reprofiling of the Application Boundary.
- 5.44 The Wetland Habitat Corridors and Landscape Mitigation are defined on **Figure 5.1**. There will be limited development within this Corridor. This reflects the necessary flood risk mitigation. However, some works will be required within this Corridor, albeit limited to structural interventions to enable access across brooks (bridges). This allows the retention of the majority of the ecological habitats within this Corridor.
- 5.45 Beyond the Wetland Habitat Corridor, on either side is 'Landscape Mitigation'. No buildings will be built within this Zone. However, changes in ground levels, parts of the overall drainage strategy, active travel, highways and new landscaping will be required in this area.
- 5.46 To allow primary and secondary access routes across the Application Boundary, it is intended that bridge spans/crossings will be implemented on a section(s) of all Main Rivers. There is no intention to culvert the Main Rivers in the interests of flood management and biodiversity. There may be some very minor localized culverting of retained tributaries but future designs will attempt to avoid this where feasible. Works

³ Whittle Brook, Brightly Brook, Hollins Brook, Pilsworth Clough and the un-named water course on the eastern border of **Application Plot E**.

required for primary and secondary access routes will not be undertaken within the channel of the Brook itself.

- 5.47 Where water features are to be retained, they will be afforded protection throughout the construction stage with adherence to best practice measures set out by Pollution Prevention Guidance (PPG)^{4,5}, the EA permitting system and the LLFA section 23 Land Drainage Act 1991.

Historical Buildings

- 5.48 No built heritage features within the Application Boundary are to be retained. The historical buildings to be demolished within the Application Boundary are defined on **Figure 5.1** and **Figure 16.2**.
- 5.49 Coal Pits Farm, a Non Designated Heritage Assets (NDHA), is within the Assessment Boundary and enclosed within Application Plots A and B. A landscape buffer has been provided around Coal Pits Farm within the Application Boundary as shown on **Figure 5.1** as 'Landscape Mitigation Area'.

Existing Utilities

- 5.50 The following existing utilities will be retained:
- Potable and foul water to Birch Business Park and existing buildings; and
 - The gas main (Cadent gas pipeline: 6790_1071).
- 5.51 See '*Utilities and Connections*' section below.

Ground Investigations and Remediation

- 5.52 There is potential for contamination and ground gas due to presence of the Pilsworth landfill and made ground in infilled quarries across the Application Boundary as well as nearby former historical uses including a bleachworks. Five mineshafts have also been identified associated with Sand Rock Mine close to Higher Barn Farm and Coal Pits Farm. There is also potential for unrecorded mineshafts to be present in the area around Higher Barn, Higher Farm, Coal Pits Farm, the northern part of Moss Hall Road and the Reservoir. Mineworkings are known to be present across the whole of this area at depths of between near-surface to more than 50m below existing ground level.
- 5.53 Ground investigations will build on information already available, and will obtain further information about the extent of coal mining beneath the Application Boundary. This will identify any unrecorded mineshafts which may be present. Excavations of near surface mineworkings and grouting of deeper mineworkings are likely to be required. Excavation / treatment requirements will take account of cut/fill levels.

⁴ Environment Agency (2014) Pollution Prevention Guidelines: Works in, near or over watercourses, PPG5. Available at: <https://assets.publishing.service.gov.uk/media/5a758f5aed915d6faf2b3eed/pmho1107bnkg-e-e.pdf> [Accessed 26/03/2024].

⁵ It is acknowledged that PPG5 was withdrawn by the Environment Agency in 2015, however its recommended pollution prevention measures are still considered to deliver best practice construction methods.

Mineshafts will be treated and capped prior to construction. Ground Investigation(s) targeting the areas of mine workings, recorded and potential unrecorded mine entries will be undertaken under a Mining Remediation Authority (MRA) Permit and in line with CIRIA C758D¹, Abandoned Mine Workings Manual guidance, to prove the extent and condition of them.

- 5.54 Structures over mineshafts will be avoided where possible; where this is not possible build over agreements will be sought from the MRA.
- 5.55 Ground investigations will also be required to be undertaken for some of the Application Plots to determine the absence/presence, type and distribution of any forms of ground contamination and ground gas and establish the groundwater conditions within the Application Boundary. . Ground gas emissions will be monitored with suitable risk mitigation measures to be incorporated, in line with the BS8485:2015+A1:2019 and CIRIA's Assessing risks posed by hazardous ground gases to building. The outcomes of these investigations will determine the requirements for any remediation prior to the commencement of construction activities and during the development works. The outcome of the investigations will also confirm the requirements for dewatering which may be required locally. A remediation strategy will be submitted and agreed with BC and RBC in advance of works taking place. This will also identify the requirement for any construction specific method statements (e.g. for contamination hotspot removal).

Earthworks, Cut and Fill

- 5.56 To achieve appropriate development plateau levels, it is anticipated that there will be areas where levels will both substantially reduce (areas of cut) and areas where levels will increase (areas of fill). In general, it is expected that material will be cut from the east and placed in the west due to the general topography which slopes towards the west.
- 5.57 Preliminary cut and fill balance analysis has been undertaken for the Application Boundary which indicates a net area of cut is likely resulting in a net surplus of material which can be accommodated within the Application Boundary.

Levels

- 5.58 The ground level changes across the Proposed Scheme will vary depending on the Plot. **Table 5.1** defines the maximum changes in existing ground levels as defined on **Figure 5.2**.
- 5.59 This should be read in conjunction with the **Existing Ground Levels Plan (Figure 3.1)**. This should also be read in conjunction with the **Maximum Extent of Excavation**.

Table 5.1: Maximum Changes in Existing Ground Levels

Application Plot/Area	Maximum Increase in Height (m AGL)
A	6
B	6
C	8
D (North)	24
D (South)	10
E	6
F	6
<u>Potential Ecological Mitigation</u>	0m

Foundation Design

- 5.60 Foundation design within the Application Boundary is likely to be variable dependent on the structure loading as well as the compressibility of superficial deposits, depth to bedrock and depth to mineworkings.
- 5.61 Piled foundations are likely to be required below mine workings, even following any grouting required.
- 5.62 Below ground attenuation may be required within all Plots.

Utilities Connections

- 5.63 As outlined above, the following gas main located within the Assessment Boundary will be retained:
- Pipeline: 6790_1071 Cadent Gas Ltd.
- 5.64 The easement for which there will be no construction works are defined in **Figure 5.1**.
- 5.65 Birch Business Park is assumed to have on-site foul treatment which discharges to site ditches. The same assumption has been made of the other farm buildings across the Application Boundary. There are no public sewers in the Application Boundary.
- 5.66 Existing foul and potable water connections service the existing Birch Business Park and retained farm buildings will be retained or modified.

Temporary Drainage

- 5.67 Temporary surface water drainage will be installed as necessary to mitigate flood risk and sediment loading and, where possible will align with the permanent drainage solution (discussed below). Temporary drainage will be subject to good site working practices and adherence to best practice guidance such as CIRIA's Control of water pollution from construction sites⁶.

⁶ CIRIA (2001) Report C532: Control of water pollution from construction sites.

Construction Material and Waste Strategy

5.68 Waste arisings for the construction of the Proposed Scheme in isolation have not been calculated; however the total waste arising for the Project for Assessment are set out in **Table 5.2**.

Table 5.2: Estimated Construction Waste Arisings

Use ⁷	Floor Area (m ²) (approx.)	Waste (m ³)	Waste Quantity (tonnes)	Diversion from landfill (m ³)	Residual waste (m ³)
Non-residential E(a-d) Commercial, Business and Service	605,000	80,465	67,155	68,395	12,070
Total	605,000	80,465	67,155	68,395	12,070

- 5.69 All construction arisings will be separated into stockpiles to maximise material re-use/recycling. A mini 'recycling centre' will be established in working areas where appropriate. Materials will be processed for re-use in accordance with an earthworks specification. Relevant permits and exemptions will be obtained to facilitate the mini 'recycling centre'.
- 5.70 Any contaminated materials will be held on-site prior to treatment or off-site disposal for the shortest amount of time that is practical. Control measures will be used as needed including bunds for liquid run-off, fencing and tarpaulins for wind-blown debris. Spill kits will be available for any spillages.
- 5.71 Where sand and gravel deposits are encountered and are required to be 'cut' the material will be recovered for reuse as appropriate and implemented.
- 5.72 Sustainable sourcing of materials, specifically sustainable materials with a high recycled content will be implemented, where possible.
- 5.73 Specification of sustainable timber (FCS certified, or similar) will be implemented.

Construction Environmental Management Plan

- 5.74 A CEMP will be developed and implemented by the appointed contractor and sub-contractors to set out all of the relevant environmental management measures and controls which are required by the planning consent.
- 5.75 The CEMP commitments associated with the Proposed Scheme are set out within the EMP (**Volume 3: Environmental Management Plan**). The EMP defines the actions needed to manage the environmental effects during the construction (and operational) stages of the Proposed Scheme.

⁷ Waste from site clearance is not known. Waste from site clearance calculated for the Project for Assessment provided in **Table 4.2** in **Chapter 4: Development Specification – Project for Assessment** provides for a worst case scenario.

- 5.76 The EMP also provides any additional CEMP commitments associated with the wider Project for Assessment, which is presented for information only.

Site Working Hours and Days

- 5.77 Unless otherwise agreed with BC and RBC, construction working hours would be 07:30 to 18:00 Mondays to Friday; 07:30 to 13:00 on Saturday. There will be no construction on Sundays, Public and Bank Holidays.

Cranes

- 5.78 It is anticipated that mobile cranes will be used during the construction of the Proposed Scheme, however it is not anticipated that static cranes will be required.

Development Principles

Land Use and Maximum Quantum

- 5.79 The Proposed Scheme will include the following land uses and quantum (**Table 5.3**).

Table 5.3: Land Uses and Quantum (for the Proposed Scheme)

Use Class ⁸	Use	Maximum quantum
B2	General industrial	180,000m ²
E(g)(ii)	Research and development of products or processes which can be carried out in any residential area without causing detriment to the amenity of the area	
E(g)(iii)	Industrial processes which can be carried out in any residential area without causing detriment to the amenity of the area	
B8	Storage and distribution	420,000m ²
C1	Hotels, boarding and guest houses where no significant element of care is provided (excludes hostels)	5,000m ²
E(a)	Display or retail sale of goods, other than hot food	
E(b)	Sale of food and drink for consumption (mostly) on the premises	
E(c)(i)	Financial services	
E(c)(ii)	Professional services (other than health or medical services)	
E(c)(iii)	Other appropriate services in a commercial, business or service locality	

⁸ Excludes 175,460m² of B2/B8 from the 1,200,000 m² already consented through South Heywood.

Use Class ⁸	Use	Maximum quantum
E(d)	Indoor sport, recreation or fitness (not involving motorised vehicles or firearms or use as a swimming pool or skating rink)	
E(e)	Provision of medical or health services (except the use of premises attached to the residence of the consultant or practitioner)	
E(f)	Creche, day nursery or day centre (not including a residential use)	
E(g)(i)	Ancillary offices to carry out any operational or administrative functions which can be carried out in any residential area without causing detriment to the amenity of the area	
F1(a)	Provision of education (this will not include schools)	
F2(a)	Shops (mostly) selling essential goods, including food, where the shop's premises do not exceed 280 square metres and there is no other such facility within 1000 metres	
F2(b)	Halls or meeting places for the principal use of the local community	
F2(c)	Areas or places for outdoor sport or recreation (not involving motorised vehicles or firearms)	
Sui generis	• fuel stations; • 'Alkali work' (any work registerable under the Alkali, etc. Works Regulation Act 1906 (as amended)); • retail warehouse clubs (being a retail club where goods are sold, or displayed for sale, only to persons who are members of that club); • public houses, wine bars, or drinking establishments; • drinking establishments with expanded food provision; and • hot food takeaways (for the sale of hot food where consumption of that food is mostly undertaken off the premises).	
Total Maximum Quantum		605,000m²

5.80 The land uses are proportioned within two types of developable areas within the Application Boundary as shown on **Figure 5.2**. The developable areas include:

- **Developable Area 1 (Application Plots C, D and F)** – this may include land use classes: B2, B8, E (g) (i-iii); and
- **Developable Area 2 (Application Plots A, B and E)** – this may include land use classes: B2, B8, C1, E(a-b), E(c)(i-iii), E(d-f), E(g)(i-iii), F1(a), F2(a-c) and Sui Generis Uses.

5.81 For B2/B8 uses, this may include manufacturing, logistics, industrial, data centres, storage and distribution.

Maximum Heights

5.82 The heights of buildings across the Proposed Scheme will vary by location and will respond to both the existing and proposed ground levels as defined on **Existing Ground Levels (Figure 3.1)**. The maximum heights should be read in conjunction with this. The heights of buildings should also be read in conjunction with the maximum changes in existing ground levels in **Table 5.1** which are repeated in **Table 5.4** below alongside the maximum changes in height following maximum increases in ground levels.

Table 5.4: Maximum Changes in Existing Ground Levels and Maximum Building Height

Application Plot/Area	Maximum Increase in Ground Levels (m AGL)	Maximum Change to Ground Level <u>and</u> Maximum Building Height (m AGL)
A	6	36
B	6	36
C	8	53
D (North)	24	69
D (South)	10	40
E	6	51
F	6	51
<u>Potential Ecological Mitigation</u>	0m	0m

5.83 The maximum heights include any plant screening, overhangs or other roof mountings including rood top wind as defined in the 'Energy Strategy' below.

Operational Access

Vehicular Access

5.84 For all Application Plots, access corridors will be delivered through the Proposed Scheme from two access points, providing connectivity across the Application Boundary. Access will be suitable for all vehicular traffic apart for HGV restrictions on Whittle lane. The access points are as follows:

- **Primary Access, Moss Hall Road** – utilising an existing access point from the north, a primary access point will be provided from Moss Hall Road/Pilsworth Road junction as defined on **Figure 5.2**. Access to the Birch Industrial Estate will be maintained and provide connection to a primary access corridor to the west of the Proposed Scheme; and
- **Initial Primary Access, Whittle Lane** – utilising an existing access point from the south, an initial primary access point⁹ will be provided from Whittle Lane (and its junction with Heywood Old Road which is outside of the Application Boundary). Access to the Birch Industrial Estate will be maintained and provide connection to the Proposed Scheme. Whittle Lane is subject to an HGV weight restriction¹⁰.

5.85 Secondary access points will provide active travel routes connecting to primary access corridors.

5.86 Secondary roads will in due course lead off the primary access corridors to service localised Plots.

Pedestrian/Cycle Access

5.87 Pedestrian and cycleway access will be made available throughout the Proposed Scheme in the alignment of access corridors, via a combination of segregated routes, routes divorced from roads and shared routes.

5.88 Pedestrian and cycleway access routes will connect to the wider Project for Assessment and surrounding area. It is assumed that to allow development of the Plots, all existing PROW across the Application Boundary will be extinguished. A network of replacement PROW will ensure permeability through the Application Boundary and connectivity between PROW throughout the Assessment Boundary. The replacement PROW are to be provided to a higher standard than is currently provided across the Application Boundary, ensuring accessibility for all users.

5.89 A network of replacement footpaths/cycleways will be delivered with reference to the Greater Manchester's Streets for All Design Guide (2023).

5.90 Approximately two active travel hubs are to be incorporated along primary and secondary access routes across the Proposed Scheme.

5.91 Cycle parking must be provided for both staff and visitors and positioned near building entrances for maximum convenience (Design Code P2-2 Cycle Parking).

Landscape and Biodiversity Strategy

5.92 As outlined above under 'Features for Retention and Removal', retained trees and vegetation are as defined on **Figure 5.3**. This corresponds with the maximum extent of excavation.

⁹ Primary access point in the short to medium term.

¹⁰ This may be altered in future to provide active travel and bus access only as part of an emerging TfGM strategy.

5.93 The alignments of Hollins Brook, Whittle Brook, Brightly Brook / Pilsworth Clough and parts of the un-named watercourse on the eastern border of **Assessment Plot E** will be retained in their existing alignments within the Application Boundary. Their retention is accommodated within the Wetland Habitat Corridors as defined on **Figure 5.1**.

5.94 It is likely that a section(s) of all Brook(s) may need to be culverted to allow primary and secondary access routes across. However, culverting will be kept to a minimum where required in the interests of flood management and biodiversity.

5.95 Key landscape/biodiversity features as defined on **Figure 5.1** are the Wetland Habitat Corridors/Landscape Mitigation.

- **Wetland Habitat Corridors/Landscape Mitigation** – corridors will follow the retained alignments of brooks and will be a landscape and biodiversity feature.

The Whittle Brook Wetland Habitat Corridor in particular will provide a key landscape and biodiversity feature. This will be connected the Peripheral Landscape Buffer and the Landscape Mitigation Area (North West).

The Wetland Habitat Corridor (the eastern side of which is within the Application Boundary) will be subject to limited development. This reflects the necessary flood risk mitigation. However, some works will be required within this Zone, albeit limited to structural interventions to enable access across brooks (bridges). This allows the retention of the majority of the ecological habitats within this Zone.

The Landscape Mitigation will not be subject to any buildings. However, changes in ground levels, parts of the overall drainage strategy, active travel, highways and new landscaping will be required in this area;

- **Peripheral Landscape Buffer** – providing a c.10-20m buffer around parts of the Application Boundary perimeter to the north and south. Buffers have also been included around retained buildings as defined on **Figure 5.1**. Existing trees and vegetation will remain in-situ within these areas and this is defined by areas which are not subject to excavation in **Figure 5.3**; and
- **Landscape Mitigation Area (North West)** – to the north west of the Application Boundary, east of Hollins Brook, where existing trees and vegetation will remain in-situ within these areas as defined by areas which are not subject to excavation in **Figure 5.3**.

5.96 The connections of the three key landscape/biodiversity features will allow movement of species across the Application Boundary.

5.97 Any new public realm will be implemented with a strong consideration of principles related to inclusive design, taking account of Planning Practice Guidance (PPG) which outlines best practice for ensuring that developments can be accessed and used by all in a way that effectively fosters social connections, recognising and accommodating

differences in the way people use the built environment as a result of factors such as age and disability¹¹.

5.98 Landscape and biodiversity measures will be implemented in accordance with 'must' codes stated within the **Design Code** including:

- CODE M4-1 (a) Developments visible from within the setting of Alkrington Hall must include variable rooflines where possible to ensure they limit their visual impact and better integrate into the existing horizon.
- CODE M4-1 (b) Building elevations must be designed to include materials which either reduce their visual impact on their surroundings, or are sensitive to, reflect or accord with the local vernacular to lessen their visual impact when viewed within the surrounding context.
- CODE M4-2 (Development adjacent to Lower Whittle Farm and Coal Pits Farm)
(a) The Landscape Buffers located along the setting of these properties must contain trees/vegetation including native deciduous and evergreen planting of a density and height to provide meaningful screening effect. Earthwork bunds will also be permissible where suitable.
- CODE O1-1(a) (a) Primary Open Spaces must include a combination of recreational and ecological areas, ensuring a multifunctional space for people and nature;
- CODE O1-3(c) (c) These spaces (tertiary open spaces) must include features to mitigate visual impacts from key receptors in line with the overarching LVIA mitigation measures;
- CODE O2-2(a) All planting, including trees and ground level features must prioritise the use of native and climate-resilient species to enhance biodiversity and reduce future maintenance requirements;
- CODE O2-3(a) Tree and woodland planting must create continual green infrastructure connections with the surrounding, existing environment to create corridors that connect habitats across the site, ensuring continuity for wildlife movement;
- CODE O3-2(b) Blue infrastructure must create or enhance habitats for aquatic and semi-aquatic species, supporting biodiversity net gain requirements;
- CODE O5-1(a) Existing PROWs must be maintained or diverted where necessary;
- CODE P2-5 (a) To reduce the visual impact of large parking areas, larger car parks must include suitable levels of soft landscaping including trees, hedgerow and shrub planting;

¹¹ Department for Levelling Up, Housing and Communities (2019) Planning Practice Guidance: Housing for older and disabled people – Inclusive Design (para 017)

- CODE P2-5 (b) The perimeter of car parking areas must feature low-level planting, with intermittent tree planting, to screen vehicles while maintaining clear sightlines above for access, egress, effective surveillance and safety;
- CODE S9-1 (a) Sufficient space must be provided within the designed layout of primary and secondary streets to deliver tree lined streets in accordance with National Planning Policy Framework paragraph 136;
- CODE S9-1 (b) Species suitability, growth potential and maintenance requirements must be considered in the specification and placement of street trees.

Flood Risk Management – Fluvial

- 5.99 The Application Boundary is largely within Flood Zone 1 and in an area classified as being at 'low' or 'very low' risk of flooding from surface water. This is with the exception of the immediate surrounding land of Whittle Brook, Hollins Brook and Brightly Brook (to the west of Pilsworth Fishery) which is within Flood Zone 3 and in an area classified as being at 'high' probability of flooding.
- 5.100 As outlined on **Figure 5.1**, development will be limited to within areas of low or very low flood risk within Flood Zone 1, with flood alleviation measures to reduce flood risk associated with Whittle/ Hollins/Brightly Brooks to be incorporated where appropriate. The flood alleviation measures will ensure there no increased risk from flooding downstream.

Flood Risk Management – Surface Water

- 5.101 The design of the surface water drainage system will be undertaken to suit the site phasing strategy, as such, as the design develops there may be a requirement to utilise temporary drainage features / outfalls to facilitate the required phasing arrangements. Appropriate assumptions on future site impermeability have been made based on the indicative development land uses and an understanding of topography. Plots, including; buildings, services yards, access roads and car parks are assumed to have a 95% impermeability ratio. Where large level differences are managed by landscaped slopes, these are assessed as having a lower coefficient of run off equivalent to a greenfield condition once vegetation and planting is matured. Attenuation requirements are considered based on the volume of water generated by the Q100 year storm with allocation of 45% climate change as advised for the Irwell Catchment.
- 5.102 Surface water is proposed to discharge at a rate equivalent to the existing greenfield runoff, with an ultimate outfall into the designated main rivers or tributaries within the Application Boundary: Whittle Brook and Brightly Brook. There will be multiple points of outfall for the surface water system throughout the Application Boundary due to scale of the Proposed Scheme and the complexity of the catchment analysis. The surface water strategy has, where possible, attempted to maintain the existing catchment regimes, however due to the scale and topography complexities, this hasn't been possible but changes to watersheds will be mitigated through Sustainable Drainage Design and water management.

- 5.103 As outlined on **Figure 5.1**, Wetland Habitat Corridors/Landscape Mitigation have been identified. The surface water drainage strategy provides space within the Outer Zones for some attenuation and for further attenuation within the Developable Areas.
- 5.104 The principle SuDS¹² attenuation features are likely to be located close to the brook corridors but outside the extent of the current and future flood zones (Wetland Habitat Corridors). Additional attenuation and SuDS treatment for water quality is likely to be required within the Plots and this has been considered during the development of the Plans. The likely sizing of some of the attenuation features are considered to be large but not classified as reservoirs.
- 5.105 The Plots will provide a suitable level of water quantity and quality management, the principles of which will be agreed with the contributing statutory undertakers. A strategy to control flood risk to and from the development will be agreed with the relevant stakeholders including the Environment Agency and the Bury and Rochdale Lead Local Flood Authorities. The surface water system will be designed to adoptable standards to allow maintenance responsibilities to transfer to United Utilities or other approved authority at an appropriate point in the development build out.

Foul Water Drainage Strategy

- 5.106 The design of the foul water drainage system will be undertaken to suit the site phasing strategy, as such, as the design develops there may be a requirement to utilise temporary drainage features / outfalls to facilitate the required phasing arrangements.
- 5.107 Outfalls for foul water have been identified during early consultations with United Utilities. Foul water is proposed to drain to either the Bury Wastewater treatment works (indirectly via an identified large diameter combined sewer) or to existing public sewers in Hareshill Road. Primary pumping stations will be required to achieve the connection points that are agreed in principle with United Utilities. Further pumping stations will be required throughout the development to accommodate the phasing strategy and to limit the maximum depth of the foul sewer system to an acceptable design standard for United Utilities. The foul water system will be designed to adoptable standards to allow maintenance responsibilities to transfer to United Utilities or other approved authority at an appropriate point in the development build out.

Operational Waste Strategy

- 5.108 Waste streams generated by the Proposed Scheme during operation will include industrial, commercial and green waste.
- 5.109 Waste arisings during the operation of the Proposed Scheme in isolation have not been calculated; however the total waste arising for the Project for Assessment are set out in **Table 5.5**.

¹² The Surface Water Drainage Strategy will incorporate Sustainable Drainage Systems (SuDS) and be developed in accordance with the CIRIA 753 – The SuDS Manual, UU S104 SuDS guidance and local Lead Local Flood Authorities (LLFA) guidance where practical.

Table 5.5: Estimated Operational Waste Arisings

Use	Equation for weekly waste arisings	Project for Assessment	Waste arisings (litres/week)	Diversion from landfill (m ³ /year)	Residual waste (m ³ /year)
B2/B8	Volume per m ² of floor area (5l)	600,000	3,000,000	2,700,000	300,000
Other (retail)	Volume per m ² of sales area [100l] x sales area	5,000	500,000	450,000	50,000
Total		605,000	3,500,000	3,150,000	350,000

5.110 The Proposed Scheme will include appropriate facilities for the storage, handling and collection of these waste types in line with the Waste Management Strategy which will set out the principles, strategy and targets for the management and storage of waste and maximise recycling, in accordance with BC and RBC established policy.

5.111 Concrete hardstanding will be crushed and reused within the Assessment Boundary, and steel will be recycled. Diversion of non-hazardous demolition/site clearance waste from landfill by 80% by volume 90% by tonnage.

Energy and Sustainability Strategy

5.112 The Proposed Scheme will meet the requirements of the forthcoming Building Regulations 2025, including the Future Buildings Standard.

5.113 The Proposed Scheme will be all-electric, (although there may be certain processes that require gas or oil). The source of electricity will likely be from a mix of sources, predominantly provided by on-site solar energy utilising the expansive roof areas of B2/B8 development. There is potential for the Proposed Scheme to generate renewable energy through roof mounted wind power as well as potential for micro-hydrogen.

5.114 To ensure glint and glare is minimised, the implementation of photovoltaic panels will consider the type, location and orientation of buildings, and the angle at which solar photovoltaic panels are positioned on the roofs of proposed buildings.

Façade / Building Design

5.115 Façade materials will be considered during detailed design with regard to solar glare. It is assumed that façade materials such as large areas of glazing are unlikely to be used for the B2/B8 buildings.

5.116 All buildings will be constructed in line with current building regulations¹³.

Climate Resilience

5.117 The Proposed Scheme will include the following climate resilience measures:

¹³ <https://www.gov.uk/housing-local-and-community/building-regulation>

- Foundation design and potential for ground movement to include consideration to climate change in relation to ground movement as a result of future changes to temperature and precipitation;
- All green and blue infrastructure and compensatory habitat will enhance the biodiversity of the Application Boundary, mitigating the anticipated impacts of climate change in accordance with the England Biodiversity Strategy and Natural England Climate Change Adaptation Manual. This will include a wide diversity of species tolerant to a range of conditions;
- The Proposed Scheme will include flood attenuation measures and drainage discharge rates taking into account the appropriate climate change allowances (as described above);
- Buildings will be designed in accordance with an industry recognised holistic sustainability performance assessment method such as BREEAM (Design CODE: B8-4 Accreditation (a);
- Buildings of the Proposed Scheme will achieve the equivalent of 2 Wat01 water efficiency BREEAM credits, achieving a 25% reduction in water consumption;
- Embodied carbon will be assessed as part of each Plot/s with buildings including a Lifecycle Carbon Assessment to assess the upfront embodied carbon (Stages A1-A5) to demonstrate how upfront embodied carbon will be reduced in line with the following LETI 2020 Climate Emergency Design Guide targets : <600kgCO₂/m² for non-residential development;
- Where data centres come forward, they will be required, where feasible, to meet the water efficiency target set out by the Carbon Neutral Data Pact which requires new data centres at full capacity in cool climates to be designed to meet a maximum WUE of 0.4 L/kWh in areas with water stress;
- The requirements of the forthcoming Building Regulations 2025, including the Future Buildings Standard (FBS)(whereby non-residential development will achieve at least a 75% carbon reduction beyond Part L 2013) and the Future Buildings Standard;
- Provision of Electric Vehicle Charging Infrastructure in line with Part S of the Building Regulationsⁱ;
- Implementation of the Government's Net Zero Emissions HGV, van and car strategiesⁱⁱ; and
- Proposed buildings will undergo an overheating assessment, in line with the requirements of Part O of the Buildings Regulations¹⁴ utilising CIBSE TM52¹⁵ (or similar) to assess and reduce the risk of summer overheating, taking into

¹⁴ <https://www.gov.uk/government/publications/overheating-approved-document-o>

¹⁵ Chartered Institution of Building Services Engineers (2013) TM52: Comfort Analysis

account future climate scenarios. Where measures are provided to reduce the risk of overheating this will be done in accordance with the cooling hierarchy.

Utilities

Electricity

5.118 Electricity for the Proposed Scheme will be sourced from on-site renewable energy (see above) with the remainder being sourced from Rochdale Local Grid Supply Point which provides 200MVA of power and will provide a 132kva connection. Approximately 8km of cabling from the Assessment Boundary to the off-site supply point will be required. It is assumed that 4 primary sub stations (two 30 MVA and two 23 MVA) will be required. The cabling works will be the responsibility of a third party provider and therefore do not form part of the Project for Assessment.

Gas

5.119 The existing gas mains will be utilised to serve the Proposed Scheme and allow for future connections to this supply should they be necessary. There is capacity within the current gas supply to supply the Proposed Scheme. No further works outside the Application Boundary are anticipated.

Clean Water

5.120 The existing clean water network (operated by United Utilities [UU]) will be upgraded along Pilsworth Road to the new main that UU installed at the corner of Pilsworth Rd / QEII Way. These upgrades, although required for the Proposed Scheme are not part of the Application.

Foul Water

5.121 The foul water network (again operated by UU) will be extended along Pilsworth Road to the M66 and onwards to Pilsworth Way in the west. It is assumed that this will be delivered by UU and therefore is not considered as part of the Application.

Telecoms

5.122 Ultra-fast broadband, up to 1 gigabyte per second (GBPS), will be delivered. The installation will be fully compliant with BT Openreach specification, the industry standard. Any diversion or reinforcement of utilities will happen as part of the preparation works. Any works outside of the Application Boundary will be the responsibility of a third party and do not form part of the Application (or Project for Assessment).

Lighting Strategy

5.123 In accordance with Design Code: P6-1 (b) and (e), Code: P6-3(a) and Code: B6-1(e), vehicle, cycle, pedestrian routes and car parks must have appropriate lighting levels and have good light control and cut off angles to reduce light spillage, control glare and limit sky glow whilst also recognising ecological constraints.

- 5.124 All external lighting installations will meet Institute of Lighting Professionals (ILP) Guidance Notes for the Reduction of Obtrusive Light 2021¹⁶.
- 5.125 External lighting, where provided on commercial/industrial and or sensitive ecological receptors will be undertaken in line with measures set out by ILP Guidance Note 9¹⁷, ILP Guidance Note GN08¹⁸, CIE 150, CIE 126¹⁹, CIBSE LG6²⁰, CIBSE LG21,²¹ BS EN 12464 Part 2²², NPPSA²³, Statutory Nuisance from Insects and Artificial Light²⁴ and Artificial Lighting and Wildlife Interim Guidance²⁵.
- 5.126 Operational lighting for highways will be provided based upon an identified need and risk assessment. Where highways lighting is required, lighting installations will be provided in accordance with BS EN 13201-4²⁶; and BS 5489²⁷.

Site Security

- 5.127 The design of the Proposed Scheme will be informed by 'Secure by Design' principles and appropriate design and site management measures (including appropriate lighting and passive surveillance of public spaces) will be implemented to ensure that the potential for crime and anti-social behaviour is minimised.

Operational Hours

- 5.128 The Proposed Scheme will be operational 24 hours a day/7 days a week.

¹⁶ Institute for Lighting Professionals (2021). Guidance Note 01/21 for the Reduction of Obtrusive Light.

¹⁷ Institution of Lighting Professionals (2019), Guidance Note 9 Domestic exterior lighting: getting it right. Available at: <https://theilp.org.uk/publication/guidance-note-9-domestic-exterior-lighting-getting-it-right>

¹⁸ ILP Guidance Note GN08 (2023): Bats and artificial lighting in the UK; Bats and the Built Environment series

¹⁹ CIE 126: Guidelines for Minimising Sky Glow (1997)

²⁰ Chartered Institute of Building Services Engineers (CIBSE) LG6: The Exterior Environment (2016)

²¹ Chartered Institute of Building Services Engineers (CIBSE) LG21: Protecting the night-time environment (2021)

²² BS EN 12464 Part 2: Outdoor Lighting (2014)

²³ National Protective Security Authority (NPSA), Security Lighting

²⁴ DEFRA (2006) Statutory Nuisance from Insects and Artificial Light, Guidance on Sections 101 to 103 of the Clean Neighbourhoods and Environment Act 2005,

²⁵ Bat Conservation Trust (2014) Artificial Lighting and Wildlife Interim Guidance: Recommendations to Help Minimise the Impact of Artificial Lighting.

²⁶ BS EN 13201-4: Road Lighting – Methods of Measuring Lighting Performance, 2003

²⁷ BS 5489-1 (2020), Design of road lighting Part 1: Lighting of roads and public amenity areas.

References

ⁱ Building Regulations Part S. Available at:

<https://www.gov.uk/government/publications/infrastructure-for-charging-electric-vehicles-approved-document-s> [Accessed 10/02/25]

ⁱⁱ Department for Transport (2023), Infrastructure for zero emissions heavy goods vehicles and coaches and DfT (2024), Pathway for zero emission vehicle transition.