

2 Site description

2.1 Land at West Hemel Hempstead - the application site

2.1.1 The extent of the Application Site is shown by the red line on Figure 2.1. It comprises 51.82 hectares of south-facing sloping farmland on the western edge of Hemel Hempstead, to the west of the established neighbourhoods of Chaulden and Warners End, to the north east of the hamlet of Winkwell/Bourne End, and to the north west of the A41 dual carriageway, the Grand Union Canal and the west coast mainline railway.

2.1.2 In terms of local features, the Site is to the north of Chaulden Lane, east of Pouchen End Lane, and to the west of the built up residential areas of Fields End, Warners End and Chaulden. A network of shelter belts and hedgerows border the c.13 fields which form the Site (see Figure 7.1 Habitats Plan and Figure 6.5 Site Landscape Features) and there is a telecommunications mast located to the south of the Site's centre, which is outside the planning application site boundary.

ACCESS

2.1.3 Access would be taken from two main points. A new junction will be created with Long Chaulden close to the centre of the Site's eastern boundary between Newlands Road and Middle Hill. Traffic using this junction can travel north, where Long Chaulden becomes Warners End Road, to the B487/A4146 roundabout which provides onward links to the industrial areas of Hemel Hempstead to the east and the town centre to the south. Long Chaulden also provides a link south and east through the neighbourhoods of Chaulden and Boxmoor via St John's Road to the A4251/A41 and railway station to the south and the town centre to the east, with onward connections possible via the A4146 and A414 St Albans Road/Breakspear Way through to the M1 motorway. Although the Site adjoins the minor roads of Chaulden Lane and Pouchen End Lane, no vehicular connections to these narrow country lanes are proposed other than for emergency access and the proposed self contained gypsy and traveller site.

2.1.4 Access would also be created from The Avenue to the north east of the Site, which connects through the neighbourhood of Fields End to Berkhamsted Road via an existing mini-roundabout. This junction provides onward links to Potten End and Berkhamsted to the north-west; and Warners End and Hemel Hempstead to the south east.

LANDSCAPE

2.1.5 The Site slopes from higher ground in the north down to lower ground in the south (see Figure 6.3 Landform). At its highest point, at its northern boundary with Pouchen End Lane, the site itself lies at 158m Above Ordnance Datum (AOD), sloping down to 126m AOD to the south-east at Long Chaulden and then from the centre of the site, directly down to the south at Chaulden End Lane, where it is 97m at its lowest point.

2.1.6 The Chilterns Area of Outstanding Natural Beauty lies approximately 0.8km to the west of the site and the Application Site and surrounding landscape, to the west of Hemel Hempstead, are within the Chilterns Character Area No 110 although it is dominated by its urban fringe landscape rather than wooded escarpments more typical of the majority of the Chilterns (see Figure 6.1 Landscape and Heritage Designations and Figure 6.2 Landscape Character).

KEY FEATURES

- 2.1.7 The Hemel Hempstead to Picketts End National Grid High Pressure Gas Pipeline runs across the Site, broadly from the northwest to southeast. It runs from a point just to the north of Pouchen End Farm on the central part of the western boundary, traversing firstly east-west across the Site along a corridor between the component fields that broadly follows the existing shelter belt (between field 3 and fields 4 and 7 as shown on Figure 6.5 Site Landscape Features) and nearby footpath 91 (See Figure 2.2 Public Rights of Way) to a point on the eastern boundary near the cul-de-sac of Musk Hill. It then turns due south and runs within the Site parallel to the eastern boundary (along the eastern edge of fields 1 and 3 as shown on Figure 6.5), before exiting in the south-eastern corner and continuing off-Site south towards Chaulden Lane.

PUBLIC RIGHTS OF WAY

- 2.1.8 There are four public rights of way which either adjoin or cross the Site (refer to Figure 2.2) as follows:
- footpath 91 crosses in an east-west direction to the south of the Site centre from Pouchen End Lane to Rowcroft, broadly coincident with the gas pipeline corridor and shelter belt described above.
 - footpath 20 (a part of the Chilterns Way Long Distance Footpath) originates to the north of the Site on Fields End Lane, and runs from the Site's north-eastern corner along part of the eastern boundary to Long Chaulden.
 - footpath 21 runs along part of the Site's northern boundary from Pouchen End Lane in the north west to the north-eastern corner of the Site where it meets footpath 20 and 22.
 - footpath 22 runs off-site from the point where footpaths 21 and 20 meet in the Site's north-east corner, routing east into the neighbourhood of Fields End just to the north of Squirrel Chase before then connecting with The Avenue.

GROUND CONDITIONS

- 2.1.9 A phase 1 and phase 2 geo-environmental assessment report (Appendix 2.1) has been completed for the Site and the key findings are summarised below.
- 2.1.10 The geology of the Site comprises Clay-with Flints Formation overlying the Seaford Chalk formation and Lewes Nodular (Undifferentiated) Chalk Formation. In terms of hydrogeology the second of these is a principal aquifer.
- 2.1.11 Section 9.0 of the report (Appendix 2.1) includes a Tier 1 Qualitative Land Risk Assessment to determine if any potential contaminants are present within the underlying soils and groundwater, and/or if they pose an unacceptable level of risk to receptors. Historically the Site has been used as agricultural farmland, with residential development to the east and south east. The intrusive investigations completed at the Site confirmed no exceedances in guideline acceptance criteria for metals, PAH or TPH and no asbestos. In addition, pesticide and herbicide samples did not pose a risk to human health. Section 9.3 and Table 9.2 of the report (see Appendix 2.1, page 53) provide a conceptual site model revised in the light of the ground investigations, and concludes that no significant risks exist for any human health receptors or controlled waters. Contamination therefore does not pose a significant constraint to development.
- 2.1.12 In terms of building foundation options and floor slabs, the report concludes that a number of areas of the Site have a low to moderately high probability of chalk solution features. These

types of features can increase the risk of subsidence and have implications for the design of foundations and soakaways. These constraints have been taken into consideration in the design of the proposals as confirmed in ES Chapter 3) (also see Figure 3.17 Solution Feature Occurrence Assessment (Update Including Engineering Advice).

FLOOD RISK

- 2.1.13 The nearest surface water feature is the Grand Union Canal and parallel course of the River Bulbourne located approximately 156 metres south of the Site.
- 2.1.14 According to the Environment Agency's (EA) indicative Flood Map for land-use planning (Rivers and the Sea), the entire Site, where the proposed development would be located, lies within Flood Zone 1 (Appendix 12.1, Figure 11). This is classified as low risk land where flooding from rivers is very unlikely (having a less than 0.1% (1 in 1,000) chance of flooding occurring in any one year).
- 2.1.15 The EA Risk of Flooding from Surface Water Mapping (Appendix 12.1, Figure 12) identifies that the majority of the Site is at very low risk of flooding, but there are three distinct areas at higher risk which are broadly coincident with existing field boundary features. The first is a linear feature located within the north-eastern part of the site, running initially coincident with a north-west to south east field boundary before then emerging as a culvert in a sunken area, defined as being at high risk, adjacent to Long Chaulden. The second is in the southern part of the Site, and is primarily formed of a north-south linear feature along the eastern fringe of the Site from the field to the west of the residential road of Middle Hill in the north down to Chaulden Lane to the south, although it is also joined close to its midpoint by a separate feature which originates near Pouchen End Farm and traverses the site from north-west to south-east. The high risk areas have a chance of flooding each year, of greater than 1 in 30 (3.3%); medium risk areas of between 1 in 100 (1%) and 1 in 30 (3.3%); low risk areas of between 1 in 1000 (0.1%) and 1 in 100 (1%); and, very low of less than 1 in 1000 (0.1%).

ARCHAEOLOGICAL RESOURCE

- 2.1.16 The Site itself has been the subject of an archaeological Desk Based Assessment (DBA, Appendix 8.1); a geophysical survey to evaluate the potential of below ground archaeology to survive at the site (Appendix 8.2); and, an intrusive archaeological investigation comprising trial trenching across the site (Appendix 8.3).
- 2.1.17 Despite the overall low potential, the Local Planning Authority Archaeological Advisor considered that the geophysical anomalies identified in the survey should be further investigated, and required a programme of trial trenching. The results of this evaluation showed a concentration of Prehistoric activity in the northern part of the site, including ditches, pits and post-holes containing pottery of broadly Iron Age date, suggesting a dispersed settlement located along a ridge of higher ground.
- 2.1.18 The evaluation also revealed a concentration of Roman activity in the central part of the site, situated on a small headland. The artefactual evidence suggested small-scale occupation of agricultural activity surrounding a trapezoidal enclosure. No archaeological heritage assets have been identified to date that would be considered as of more than local importance. The final method of investigation will comprise a strip, map and sample exercise over the two areas identified in Figure 8.3 Proposed archaeological mitigation areas as a condition of planning

permission, as agreed with Dacorum Borough Council and its archaeological advisors at Hertfordshire County Council.

CULTURAL HERITAGE

- 2.1.19 There are no Conservation Areas, world heritage sites, scheduled monuments, registered parks and gardens or listed buildings within the Site (see Figure 8.2 Designated Areas).
- 2.1.20 The nearest designated assets are the buildings of Pouchen End to the west which are a grade II listed building and the Winkwell Conservation Area further to the south west, which includes the modest settlement centred on the road crossing over the Grand Union Canal. The Conservation Area includes three listed buildings and a limited number of additional buildings, the majority of which date from between the sixteenth and nineteenth centuries. The Canal is an important feature of the Conservation Area which strongly contributes to its character.
- 2.1.21 Also nearby are the non-designated assets including the Former Stables and Barns east of Pouchen End Lane, Fields End Farm, the Grand Union Canal and the West Coast Mainline Railway.

ECOLOGY

- 2.1.22 There are no statutory or non-statutory sites of nature conservation on the Site. The nearest internationally important designation, Chilterns Beechwoods Special Area of Conservation, is over 3.3km to the north west; and there are also two Sites of Special Scientific Interest (Little Heath Pit and Roughdown Common) which are between 1-2km from the Site. The locally important and non-statutory designations within close proximity of the Site include Shrubhill Common Local Nature Reserve and Local Wildlife Site (LWS) which are 0.02km to the east and Boxmoor Common LWS within 0.4km to the south. The location of these receptors is confirmed at Appendix 7.1 Desk Study Information.
- 2.1.23 The Site itself is formed of fields dominated by poor and neutral semi-improved grassland to the south and west, (used as horse paddocks, sheep grazing or hay meadows); with the remaining fields to the north and east in arable production or left fallow (see Figure 7.1 Habitats Plan). Existing data sets confirm the agricultural land within the Site to be predominately 3b (see Figure 2.3 Agricultural Land Quality).
- 2.1.24 The fields are divided by a network of some 27 hedgerows, the majority of which are dense, continuous and species-rich, and therefore considered to be in favourable condition, with the hedgerow network considered to be of ecological importance at the County Level, with particular interest associated with four hedgerows: H6, H8, H14 and H24. Elsewhere on the Site are broadleaved woodland (0.29 ha located in the east of the Site), small belts of young broadleaved plantation woodland, a small young coniferous plantation (c. 0.55ha in size), a dry attenuation basin, ditch, scattered trees and scrub. An arboricultural assessment is provided at Appendix 2.2 and is summarised at Figure 6.5 Site Landscape Features.
- 2.1.25 There are also a number of notable and protected species associated with these habitats: badgers, birds, bats, reptiles and invertebrates (see ES Chapter 7, Table 7.4).

2.2 The surroundings

- 2.2.1 Hemel Hempstead is a New Town established in the 1940s with development starting in the

1950s. It is the largest town in the administrative area of Dacorum Borough Council with a population of over 82,000. The town has continued to grow since its inception, with a main focus for employment at Maylands Business Park, which is located to the east of the town. The town has good accessibility to the A41, M1 and the west coast mainline railway. Residential development across the town takes the form of distinctive neighbourhoods.

- 2.2.2 The Site is on the western built up edge of Hemel Hempstead, with the immediate surroundings including Fields End Farm to the north, the residential neighbourhoods of Warners End and Chaulden to the east, the transport corridor of the Grand Union Canal, A41 dual carriageway and west coast mainline railway line to the south, and the hamlet of Winkwell to the southwest.
- 2.2.3 The specific site boundaries include Chaulden Lane to the south, numerous residential properties along the built up edge of Warners End and Chaulden to the east, with Pouchen End Lane marking the boundaries to the west and north.
- 2.2.4 Residential homes with gardens border the Site along its eastern boundary, which are a network of 'cul-de-sacs' located off the main roads of Long Chaulden and Boxted Road, including: Champion Road, Furse Road, Lindlings, Honeycross Road, Musk Hill, Rowcroft, Middle Hill, Newlands Road, The Meadows, The Avenue and Poppy Close. To the north and east, beyond Pouchen End Lane, are agricultural fields. To the south of Chaulden Lane is a single field, beyond which are the mainline railway, canal and A41, with the mainline railway set on an elevated embankment.
- 2.2.5 Other notable nearby uses include John F. Kennedy Catholic School, which is located a short distance to the north east; and, Shrub Hill Common which is close to the midpoint of the Site's eastern boundary, on the opposite side of Long Chaulden, which includes the Chaulden Adventure Playground.

2.3 Changes coming in the Hemel Hempstead area

- 2.3.1 The Dacorum Core Strategy was adopted in September 2013 and covers the period to 2031. The strategic objectives of the Core Strategy include promoting Hemel Hempstead as the focus of the Borough for homes, jobs and strategic services thus reinforcing the role of neighbourhoods in the town (Policy CS1). Within the Borough's settlement hierarchy, Hemel Hempstead is specifically identified as the main centre for development and change. In keeping with this spatial strategy, the Core Strategy makes provision for 10,750 dwellings between 2006 and 2031, with 8,800 of these being provided within Hemel Hempstead. Although the proposals map indicates that the Site is currently deemed to be a part of the Green Belt, this is now superseded by the complementary Site Allocations DPD.
- 2.3.2 The Site Allocations DPD adds further detail to the allocation of the Site, and other Local Allocations, including setting the exact boundaries, updating the housing numbers to be accommodated and setting out when the site will be the subject of development. This was formally adopted by the Council in July 2017 and Policy LA3 states that the site should be brought forward immediately in order to contribute towards the housing and traveller site supply within the Borough.

2.4 Sensitive receptors identified

- 2.4.1 The following aspects have been identified that need to be considered in the design of the

scheme:

- Public rights of way across the land (Figure 2.2 Public Rights of Way).
- Landscape (Figure 6.1 Landscape and heritage designations and 6.5 Site landscape features).
- Trees/hedges and other habitat features on the Site (Figure 7.1 Habitats plan and Figure 6.5 Site landscape features).
- Surface water courses, aquifers/groundwater and drainage (Appendix 12.1- Figures 7-15; Appendix 12.2- Appendix D; Appendix 12.3).
- Underground gas pipeline (Figure 6.5 Site landscape features).
- Potential noise from nearby sources such as roads, the mainline railway and surrounding development (Figure 6.5 Site landscape features).
- Below ground archaeological assets (Figure 8.3 Proposed archaeological mitigation).
- The Winkwell Conservation Area and associated listed buildings and features, and other listed buildings near the Site including Pouchen End (Figure 8.2 Designated heritage areas).
- Residential receptors within the nearest streets including: Campion Road, Furse Road, Lindlings, Honeycross Road, Musk Hill, Rowcroft, Middle Hill, Newlands Road, The Meadows, The Avenue, Poppy Close, Pouchen End Lane and Chaulden Lane (Figure 6.6 Visual analysis and 6.7 Photographic viewpoints - site).
- Local roads - where new access points would be required, i.e. Long Chaulden, The Avenue, Chaulden Lane (restricted access only) (Figure 3.8 Proposed J1 Long Chaulden Access, Figure 3.9 The Avenue Extension Plan and Figure 3.10 Chaulden Lane Access onto Park Homes Site).

2.4.2 Potential sensitive receptors to be considered in the assessment of environmental effects have been identified to include:

- Occupiers of existing dwellings adjacent to the site.
- The local population in respect of local services, schools etc.
- Users of local roads and public rights of way.
- Existing landscape including trees and hedges on-site.
- Wildlife habitat and protected species.
- Conservation Area and Listed Buildings.
- Principal aquifer in underlying bedrock.
- Receiving roads and utilities infrastructure.
- Future occupiers of the development proposed.