VALLEY PARK, DIDCOT

Non-Technical Summary

December 2014

On behalf of Taylor Wimpey UK Limited, Persimmon Homes and Hallam Land Management Ltd.
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1 Introduction

1.1 Taylor Wimpey UK Limited, Persimmon Homes and Hallam Management Limited (‘the Applicants’) propose new residential development on land adjacent to Great Western Park, to the west of Didcot, Oxfordshire (Figure 1).

1.2 The development, known as Valley Park, comprises up to 4,450 new dwellings, together with community and educational facilities, landscape planting, open space and access.

1.3 A process of Environmental Impact Assessment (EIA) has been undertaken in accordance with UK legal requirements to identify the likely significant environmental effects of the proposed development. An Environmental Statement has been produced, setting out the findings of the assessment process. The Environmental Statement supports the planning application to the local planning authority, the Vale of White Horse District Council.

1.4 This document is the Non-Technical Summary of the Environmental Statement. This summary document provides an overview of the assessment findings. Details of how to view the full Environmental Statement or to obtain further copies of this Non-Technical Summary are provided at the end of this document.
Figure 1 - Location Plan
2 The Proposed Development

The Site and Surrounding Area

2.1 The Valley Park site is located to the west of Didcot, Oxfordshire and occupies an area of approximately 178.1 hectares. The site is bounded to the north by the A4130, beyond which lies the Milton Park employment area and industrial land, including the Didcot power station.

2.2 The A4130 connects to the A34 at the Milton Interchange to the north west of the Valley Park site. The A34 provides a north-south link through Oxfordshire, providing connections to Oxford and the M40 to the north of the site. The A34 forms the site’s southern/western boundary.

2.3 The site is dissected by the B4493, which crosses the A34 to the west of the site and connects the village of Harwell with Didcot. The southern section of the Valley Park site lies between the B4493 and the A417 to the south.

2.4 The eastern boundary of the site is formed by the Great Western Park residential development. Construction work at Great Western Park commenced in 2011 and remains ongoing. Parts of the Great Western Park site are now completed and occupied.

Description of Development

2.5 The Valley Park project comprises a residential development with associated means of access; educational and community facilities; landscape planting and public open space (Figure 2). The project includes the following key components:

- Residential development of up to 4,450 dwellings;
- Two new primary schools and an area of land for a special needs school;
- A local centre;
- Public open space, including sports pitches;
- Natural green space to include landscape buffer areas and semi-natural green space and allotments;
- New access from into the site from the A4130 and the B4493;
- Secondary accesses and routes within the site, including a network of car, bus and pedestrian and cycle routes connecting the local road network and to Great Western Park; and
- Sustainable drainage infrastructure.
Figure 2 – Masterplan
2.6 The development would include a mixture of accommodation. Building height would typically be between two and four storeys, with height reflecting the changes in land form and landscape sensitivity of the site (Figure 3). The average site density is anticipated to be approximately 40 dwellings per hectare (Figure 4).

2.7 It is proposed that the buildings would reflect the local architecture in form, scale and material, but with their own distinctive character and identity. It is proposed that the site would be developed to highlight particular character areas within the site.

**Local Centre**

2.8 The local centre would occupy an area of approximately 0.95 hectares in size

2.9 The centre would include the following:

- A neighbourhood centre to include local shops and community facilities to serve the development;

- A community centre.

**Schools**

2.10 Two primary schools (one ‘two form entry’ and one ‘three form entry’) would be provided. The two form entry school would occupy an area of approximately 2.2 hectares, while the three form entry school would occupy approximately 3 hectares.

2.11 In addition, 1.60 hectares of land is provided within the site for a special needs school.

**Access**

2.12 The project would be accessed from the existing highway. The main access would be from the A4130 to the north of the site. This access would take the form of a roundabout to the south of the A4130 (offline).

2.13 In addition, a second access from the A4130 would be provided in the north west of the site. This would provide a T-junction access to the western part of the site. The site would also be accessible to the north and south from the B4493.

2.14 A network of internal highway routes would provide connections throughout the site and to the Great Western Park development to the east.

2.15 Routes for pedestrians and cyclists would be provided throughout the site, including dedicated routes to promote sustainable travel.

2.16 A public transport strategy would be developed and agreed with the local planning authority to ensure adequate public transport provision. The strategy would provide links to key destinations, including Didcot town centre and the train station.
2.17 The project design also allows space for future highways improvements proposed by Oxfordshire County Council, including:

- Science Bridge – the proposed site layout at the main entrance allows for any future proposal by Oxfordshire County Council to connect the roundabout to their proposed Science Bridge (and for potential improvements to the A4130);

- Harwell Strategic Link Road: In the southern part of the site, the project design allows space for a connection between the B4493 and the A417 on the eastern side of the A34, which forms part of Oxfordshire County Council’s proposed strategic link road.

Public Open Space, Landscape and Planting Strategy

2.18 Public open space and recreational facilities would be provided as part of the project. Land allocated for playing fields and sports pitches occupies an area of 12.76 hectares. This would be split between an area of approximately 8 hectares in the northern part of the site and an area of approximately 4.76 hectares in the south. Sports provision has been developed in consultation with the local planning authority and Sport England.

2.19 Approximately 3.1 hectares of land would be provided for allotments. This is split between two areas; one located in the north western part of the site and the other in the southern part of the site.

2.20 In addition, 32.83 hectares of semi-natural open space and landscape planting are provided for informal recreation. As part of the landscape strategy, the project would include a number of green corridors. These would take the form of retained and new routes through the site. It is proposed that Cow Lane would remain in place with the existing hedgerows to be retained and reinforced with additional planting. The route would become an all-weather route suitable for horse riders, cyclists and pedestrians. The route would convey users through Valley Park to key locations, including the local centre. Corridors emanating from this route would provide access throughout the development, including access to Great Western Park. In the southern part of the site, ‘The Driftway’ would be retained on its current alignment, although it is likely that the road through the site would need to cross this route. The indicative masterplan allows for an open green setting to the north and enhanced with new tree and hedgerow planting.

2.21 The central stream corridor would be retained as a green spine through the centre of the development. The watercourse on the western site boundary would also be retained. Both would function as key wildlife corridors through the site.
Figure 3 – Building Heights Parameters Plan
Figure 4 – Density Parameters Plan
Non-Technical Summary

Construction Phase

2.22 Construction works would be undertaken in accordance with a Code of Construction Practice. The current programme indicates a total construction period of approximately 15 years (based on an indicative rate of 300 dwellings per year progressed in phases across the site), subject to market conditions. Working hours are likely to be 07:00 to 19:00 hours Monday to Friday, 07:00 to 13:00 hours on Saturday and at no time on Sundays or on public or bank holidays. These hours would be subject to agreement with the local planning authority. In the event that works are required outside of these hours in exceptional circumstances, this would be agreed with the local planning authority prior to commencement of the activity.

2.23 The broad sequence of construction activities is likely to be:

- Construction of main site access to allow access for construction vehicles;
- Setting up of working areas and earthworks/regrading of the site;
- Infrastructure works, including construction of internal roads, drainage works and sewage pumping station;
- Construction of substructures;
- Erection of superstructures and building finishes; and
- Planting in accordance with the landscape strategy.

2.24 A number of temporary facilities would be required during construction including:

- Temporary offices and welfare facilities;
- Storage area for materials, fuels, plant and equipment;
- Waste management areas; and
- Car parking facilities.

2.25 The development site would be fenced during construction. It is the intention of the applicants that the site would be registered under the Considerate Constructors Scheme or locally recognised certification scheme.

Summary of Key Parameters

2.26 The table below provides a summary of the key parameters that have formed the basis for the assessment of effects.
Table 1: Key Parameters for Environmental Assessment

<table>
<thead>
<tr>
<th>Element of Development</th>
<th>Key Parameter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total project site area (land use requirement)</td>
<td>178.1 hectares</td>
</tr>
<tr>
<td>Number of dwellings</td>
<td>4,450 (110.49 hectares)</td>
</tr>
<tr>
<td>Maximum building height</td>
<td>4 storeys</td>
</tr>
<tr>
<td>Local centre</td>
<td>0.95 hectares</td>
</tr>
<tr>
<td>Primary schools</td>
<td>1 x 2 form entry school</td>
</tr>
<tr>
<td></td>
<td>1 x 3 form entry primary school</td>
</tr>
<tr>
<td></td>
<td>Area: 5.2 hectares</td>
</tr>
<tr>
<td>Special needs school</td>
<td>Land for school provided (1.60 hectares)</td>
</tr>
<tr>
<td>Area of public open space</td>
<td>12.76 hectares</td>
</tr>
<tr>
<td>Area of landscape planting/semi-natural greenspace</td>
<td>32.83 hectares</td>
</tr>
<tr>
<td>Allotments</td>
<td>3.10 hectares</td>
</tr>
<tr>
<td>Surface drainage infrastructure (attenuation ponds)</td>
<td>2.82 hectares</td>
</tr>
<tr>
<td>Highways infrastructure (excluding roads within residential areas)</td>
<td>2.24 hectares</td>
</tr>
<tr>
<td>Allowance for Oxfordshire County Council strategic highways</td>
<td>5.68 hectares</td>
</tr>
</tbody>
</table>
3 Need and Alternatives Considered

Need for the Development

3.1 The National Planning Policy Framework sets out the need for new sustainable housing. Paragraph 47 states that in order to significantly boost the supply of housing, local planning authorities should identify and annually update a supply of specific deliverable sites sufficient to promote five years’ worth of housing against their housing requirements.

3.2 The Vale of White Horse Local Plan 2011 was adopted in July 2006 (Vale of White Horse District Council 2006) and covered the period to 2011. Its saved polices remain part of the development plan pending the adoption of the emerging Local Plan. The adopted Local Plan identified a significant need for new housing within the district, although it is recognised that the figures associated with the adopted Local Plan are now outdated.

3.3 With respect to the emerging Local Plan, the Vale of White Horse District Council produced a Local Plan consultation draft in February 2013 and a Housing Delivery Update in February 2014. A further draft of the Local Plan was produced in November 2014.

3.4 In line with the requirements of the National Planning Policy Framework, the Housing Delivery Update considered the five year housing supply within the district. The document identified a need for 20,560 homes in the period 2011 to 2031, which equates to 1,028 new homes per annum. This figure is consistent with the Oxfordshire Strategic Housing Market Assessment, which also identifies a need for 1,028 houses per year during the period 2011 to 2031.

3.5 In November 2014, the Vale of White Horse District Council published for consultation its pre-submission version of the Local Plan 2031. This allocated Valley Park for ‘at least 2,550 homes, subject to masterplanning’.

3.6 Core Policy 25 in the emerging Local Plan requires 35% of new housing to be affordable. The Valley Park project would provide 4,450 new homes, of which 35% would be affordable.

3.7 There is, therefore, a clear need for housing within the Vale of White Horse District. The emerging Local Plan documents assume that the Valley Park development would form part of the housing required to meet that demand.

Alternatives Considered

Site Area

3.8 The area of land that the project occupies has been updated in conjunction with the evolution of the Local Plan. Public consultation was undertaken in June 2014 based on a design that accommodated 3,975 houses.
3.9 Since the June 2014 consultation, the Valley Park site area has increased by extending the site boundary further towards the south up to the A417, and to the north west (remaining within the allocation areas). The total site area now makes provision for up to 4,450 dwellings, which is the approximate capacity of the site taking into account policy requirements and site constraints.

3.10 The site area of the final proposed layout is 178.1 hectares.

Site Layout

3.11 In developing the site layout, consideration has been given to the desire to contribute to meeting the housing need, while maintaining good design principles and ensuring sufficient provision of open space. The final layout has taken into account the requirements of the Local Plan, scaled-up as necessary to accommodate 4,450 houses.

3.12 The selected layout aims to provide:

- Careful consideration of the scale and density of proposed new dwellings to meet the need for new housing at this allocated site, whilst minimising the impact on the surrounding landscape;
- Provision of education and community facilities to meet the requirements of the Local Plan;
- Provision of formal and informal public open space to sustain a pleasant and attractive environment and afford opportunities for amenity and recreation use;
- A network of green spaces and routes to provide amenity, landscape and ecological opportunities;
- Safe vehicular access;
- Allowance for potential future highways schemes proposed by others, where possible; and
- Development of cycle and footpath networks to provide permeability across the site and connection to the wider local access network, including Didcot and Great Western Park.

3.13 The current indicative layout plan is shown on Figure 2.

3.14 Further details are provided in the main Environmental Statement and in the Design and Access Statement submitted with the application.

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1 The figure of 2,550 quoted in the Plan is the Council’s estimate of the number of dwellings that are likely to be delivered within the Plan period (i.e. to 2031).
4 Consultation, Scope of Assessment and Methodology

Scoping and Consultation

4.1 Topic-specific advice was sought from the Vale of White Horse District Council and other relevant consultees, where appropriate, throughout the assessment process. In addition to the local planning authority, the applicant has engaged in pre-application consultation with The Commission for Architecture and the Built Environment (CABE), Sport England and NORTOFT on the project design between June 2014 and November 2014.

4.2 The approach to the assessment of traffic effects, and details of proposed highways improvements, have been discussed with Oxfordshire County Council.

4.3 As part of the public consultation process, the applicant has engaged with the local community to inform people about the project, to explain the project and its likely effects and to take into account concerns or issues raised. A public exhibition was held at Didcot Civic Hall 10th June 2014.

4.4 Comments received during the consultation process have been taken into account by the design team during the evolution of the project design and the preparation of the planning application.

4.5 Taking into account the nature, size and location of the proposed development and the expert professional judgement of the environmental topic specialist team, the following topics have been identified as requiring consideration within the Environmental Statement:

Table 2: Information Provided within the Environmental Statement

<table>
<thead>
<tr>
<th>Structure of the ES</th>
<th>Volume 1: Text</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-Technical Summary</td>
<td>Summary of the ES using non-technical terminology</td>
</tr>
<tr>
<td><strong>Glossary</strong></td>
<td></td>
</tr>
<tr>
<td>Chapter 1</td>
<td>Introduction</td>
</tr>
<tr>
<td>Chapter 2</td>
<td>Project Description</td>
</tr>
<tr>
<td>Chapter 3</td>
<td>Need and Alternatives Considered</td>
</tr>
<tr>
<td>Chapter 4</td>
<td>Environmental Assessment Methodology</td>
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<td>Chapter 5</td>
<td>Ecology</td>
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<td>Chapter 6</td>
<td>Landscape and Visual Impact Assessment</td>
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<td>Chapter 7</td>
<td>Historic Environment</td>
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<tr>
<td>Chapter 8</td>
<td>Hydrology and Flood Risk</td>
</tr>
<tr>
<td>Chapter 9</td>
<td>Traffic and Transport</td>
</tr>
<tr>
<td>Chapter 10</td>
<td>Air Quality and Climate</td>
</tr>
<tr>
<td>Chapter 11</td>
<td>Noise and Vibration</td>
</tr>
<tr>
<td>Chapter 12</td>
<td>Agriculture and Soils</td>
</tr>
<tr>
<td>Chapter 13</td>
<td>Community and Socio-economics</td>
</tr>
<tr>
<td><strong>Volume 2: Figures</strong></td>
<td>Including all figures and drawings to accompany the text.</td>
</tr>
<tr>
<td><strong>Volume 3: Appendices</strong></td>
<td>Including specialist report forming technical appendices to the main text.</td>
</tr>
</tbody>
</table>
Environmental Assessment Methodology

4.6 Environmental Impact Assessment is a means of identifying and collating information to inform an assessment of the likely significant environmental effects of a development. For each of the key environmental topics in the Environmental Statement, the following have been addressed:

- Methodology;
- Description of the existing environmental (baseline) conditions;
- Identification of and assessment of the significance of likely effects arising from the proposed development;
- Identification of any mitigation measures proposed to avoid, reduce and, if possible, remedy adverse effects; and
- Assessment of any cumulative effects with other proposed developments planned in the area.

4.7 In terms of significance, effects are described using the following scale:

- Substantial: Only adverse effects are normally assigned this level of significance. They represent key factors in the decision making process. These effects are generally, but not exclusively, associated with sites or features of international, national or regional importance that are likely to suffer a most damaging impact and loss of resource integrity;

- Major: These beneficial or adverse effects are considered to be very important considerations and are likely to be material in the decision making process;

- Moderate: These beneficial or adverse effects may be important, but are not likely to be key decision making factors. The cumulative effects of such factors may influence decision making if they lead to an increase in the overall adverse effect on a particular resource or receptor;

- Minor: These beneficial or adverse effects may be raised as local factors. They are unlikely to be critical in the decision making process, but are important in enhancing the subsequent design of the development; and

- Negligible: No effects or those that are beneath levels of perception, within normal bounds of variation or within the margin of forecasting error.
Cumulative Effects

4.8 The EIA Regulations require consideration of cumulative effects, which are effects on a receptor that may arise when the project is considered together with other proposed developments in the area.

4.9 The cumulative effects of the project, in conjunction with other major schemes, are considered within each topic chapter of the ES. Other developments considered within the cumulative assessment include those that are:

- Under construction;
- Permitted, but not yet implemented;
- Submitted, but not yet determined; and
- Identified in the Development Plan (and emerging Development Plans - with appropriate weight being given as they move closer to adoption) recognising that much information on any relevant proposals will be limited.

4.10 A range of other proposed developments were identified through examination of the Vale of White Horse District Council website, the South Oxfordshire District Council website and the Oxfordshire County Council website. Such developments include Great Western Park, located immediately to the east of the Valley Park site. Great Western Park is currently under construction, with some dwellings completed and occupied.

4.11 Allocated sites from the emerging Local Plan have also been identified, including proposed future development at North West Valley Park, Milton Heights and near Harwell and Harwell Campus. In addition, a number of future road schemes are proposed by Oxfordshire County Council, such as the Science Bridge and Harwell Strategic Link Road.

4.12 The potential for significant cumulative effects has been identified for some topic areas and these are described within the topic sections below.
5 Summary of Environmental Effects

5.1 This section provides a summary of the findings of the environmental assessment process. For full details of the assessments, please refer to the Environmental Statement.

Ecology and Nature Conservation

5.2 The Environmental Dimension Partnership (EDP) has assessed the potential ecological effects which the project may have on the site and its surroundings. Avoidance, mitigation and compensation measures have been prepared as part of a holistic ecology strategy for the project to address any potential significant effects that may arise during construction and after completion of the project. Additional measures are recommended to enable the project to deliver positive ecological gain.

5.3 The site primarily comprises intensively farmed agricultural land dissected by poorly managed hedgerows, scrub, occasional mature trees and streams connected to a seasonally wet ditch network. Owing to the habitats present on site detailed surveys were undertaken of the grassland, in addition to protected species surveys for birds, bats, water voles, badgers and reptiles.

5.4 The site is not within or in close proximity to any designated wildlife sites that may be affected by the project and is considered to generally be of relatively low ecological value with only a small number of protected or notable species and habitats identified during the ecological investigations. These include:

- Unimproved neutral lowland meadow grassland;
- Network of hedgerows and linear trees/scrub;
- Streams;
- Bird assemblage;
- Bat assemblage; and
- Water voles.

5.5 The project has sought to retain and protect these habitat and species interests by:

- Retaining the valuable unimproved grassland habitat;
- Retaining the majority of the hedgerow and tree network (including trees with bat roosting potential) including key north-south and east west-links across the site, minimising infrastructure crossings and providing buffers to development; and
• Retaining and buffering the main stream corridors from development, minimising the number of crossings and locating them away from the core water vole colony.

5.6 Taking into account the proposed mitigation, only the loss of the farmland bird population is considered to be unavoidable and would be compensated for through the creation of habitats and nesting opportunities for other species of bird. The bird assemblage would experience a permanent minor adverse effect (not significant) resulting from arable habitat loss during the construction phase.

5.7 Restoration of areas of unimproved grassland, the creation of attenuation basins and other sustainable drainage features in addition to enhancement and long term management of the stream corridors as part of the project are likely to result in minor beneficial (permanent) effects on these habitats within the site/local context (not significant).

5.8 The mitigation measures outlined in the ecology chapter would safeguard species interest, ensuring that no significant adverse residual effects arise during residential occupation of the development.

5.9 In light of the above there is no evidence to suggest that the project, with the use of appropriate safeguards, mitigation and enhancements, would lead to any significant effects on any known protected species or ecological features of value. Furthermore, the development could potentially create and enhance opportunities for wildlife thereby contributing to the aims and objectives of the national and local Biodiversity Action Plans.

5.10 With respect to cumulative effects, such effects are considered to be restricted to the loss of unimproved grassland and farmland birds associated with the construction of the proposed Science Bridge (grassland) and the cumulative effect of large scale residential development of agricultural land in the vicinity (farmland birds). Such factors would need to be considered as part of the applications for any proposed future development.

Landscape and Visual Effects

5.11 A Landscape and Visual Impact Assessment (LVIA) has been undertaken by The Environmental Dimension Partnership (EDP) to identify the effects the project would have on landscape features, landscape character and views from the surrounding area. This work has involved a detailed site visit, the production of a zone of theoretical visibility model and a series of photos taken from viewpoints outside the site.

5.12 The site does not fall within a statutory designated landscape and consists of a mixture of arable and improved grassland fields with variable quantities of hedgerows and trees (Figure 5). The northern section of the site is dominated by the backdrop of Didcot Power Station and Milton Park with houses of the adjacent Great Western Park currently under construction. The southern site boundary lies adjacent to the North Wessex Downs Area of Outstanding
Natural Beauty (AONB). The A34 runs continuously along the site’s western boundary and provides a strong edge to the site.

5.13 The site has been assessed as having a low to medium sensitivity to change due to its relative visual enclosure, lack of higher value landscape features and the proximity to existing development.

5.14 The design of the development affords an opportunity to create a significant quantity and diversity of additional accessible open spaces through the provision of a landscape strategy. The location and character of these open spaces is summarised below:

- **Landscape Buffers** – to integrate built development with the surrounding landscape. This would be achieved by retaining existing field boundaries, the tree belt along the A34 which would be reinforced with additional woodland planting and the creation of a new landscaped edge south of the Driftway to reduce impact on the Area of Outstanding Natural Beauty;

- **Green Corridors** – formed from retained existing tree/hedgerows along Cow Lane and other internal field boundaries, the corridor of woodland edge planting and open space along the A34, stream valley corridor and chain of sustainable drainage ponds and grassland adjacent to the A4130;

- **Formal open spaces** – two areas of formal playing/sports pitches, the creation of a gateway landscape at the entrance to the site from the A4130 and areas of ornamental tree planting, shrub beds and amenity grassland along access routes and adjacent to gardens;

- **Informal open spaces** – 32.83 hectares of semi-natural open space and landscape planting including rough grassland/wildflower meadows strips along watercourses, around sustainable drainage ponds and along rows of tree/hedgerows. Woodland edge planting along A34 corridor and south of the Driftway;

- **Community allotments and orchards** – approximately 3.1 ha of allotments split between two areas and potential space for community orchards. These would provide opportunities for community involvement in food production; and

- **Wetland and sustainable drainage** – the retained stream and chain of balancing ponds along the northern boundary with associated grassland. Opportunities for small-scale sustainable drainage features elsewhere including swales and filter strips.
Figure 5 – Site and Local Landscape Context
5.15 In terms of its visibility, close-range and open views would be restricted to the north by the large buildings around Didcot Power Station and Milton Park, to the east by newly constructed houses within Great Western Park and to the west by the A34. The section of the site south of the B4493 is more open and views of the development would extend over a slightly larger area, including a small section of the North Wessex Downs Area of Outstanding Natural Beauty around Hagbourne Hill.

5.16 Significant visual effects would be experienced from the three public rights of way within the site, several residential properties either side of the B4493, a section of the A417 and a public bridleway around Hagbourne Hill inside the Area of Outstanding Natural Beauty to the south. The magnitude of these changes would be reduced over time by the establishment of considerable quantities of new tree/hedgerow planting.

5.17 Although the development would require selective removal of trees/hedgerows, the majority of the existing landscape features would be retained, including green corridors along Cow Lane and the stream on the eastern boundary. These would be used as the framework into which a new green infrastructure would be created, resulting in a net gain in the quantity and diversity of trees and hedgerows.

5.18 There would be some significant adverse effects on landscape character created by the change in land use from agricultural to residential and a consequent reduction in the scale and openness of the landscape; this would be sufficient to result in significant indirect effects on the character and setting of a very localised section of the Area of Outstanding Natural Beauty around Hagbourne Hill. However, there would be no significant effects to the wider Area of Outstanding Natural Beauty from where the development would appear far-removed and seen alongside existing industrial/residential/road development on the edge of Didcot.

5.19 There is potential for cumulative landscape effects from the westward extension of residential development from Didcot at Great Western Park, Valley Park, North West Valley Park and Milton Heights. However, the Vale of White Horse Landscape Capacity Study has found that all of the sites to the west of Didcot have a high to medium landscape capacity to accommodate residential development due to their pre-existing urban edge landscape character and the presence of landscape detractors including busy trunk roads and industrial development. In this context, the overall consideration is that the local landscape is able to accept large scale change of this type.

5.20 Cumulative visual effects could arise over a localised area, including local rights of way and residential properties directly adjacent to the site. This would be as a result of the combination of the Valley Park project with other proposed development, such as the proposed Harwell Strategic Link Road.

5.21 The potential for cumulative effects arising from the Valley Park project in combination with the proposed housing around Harwell Campus has been considered. The proposed
development around Harwell Campus is located inside the Area of Outstanding Natural Beauty (while Valley Park is located outside this designated area). Housing around Harwell Campus is therefore likely to result, by itself, in significant effects on the landscape character, setting and views from the Area of Outstanding Natural Beauty. With respect to the potential for cumulative effects with Valley Park, this is likely to be restricted to a small section of Hagbourne Hill in combination with the southern edge of Valley Park and Harwell Strategic Link Road. However, the geographical distance between Valley Park and the proposed development around Harwell Campus means that there would be visual separation, which would prevent the appearance of conjoined development on the lower northern slopes of the downs.

5.22 In summary, the LVIA has found that there are no over-riding landscape constraints and it is concluded that the site has the ability to accommodate proposed residential development without unacceptable landscape and visual effects.

**Historic Environment**

5.23 An assessment of the likely significant effects of the project in terms of archaeology and cultural heritage was undertaken by The Environmental Dimension Partnership (EDP). A baseline archaeological and heritage assessment was undertaken which involved a review of readily available archaeological and historical information from documentary and cartographic sources, checked and augmented through the completion of site visits. To augment this desk-based investigative work, a detailed geophysical survey was commissioned from GSB Prospection Ltd. This field-based investigation was undertaken between May and October 2014.

5.24 There are no designated assets (e.g. listed buildings) within the site. There are a number of designated assets, mostly listed buildings, within the study area, but only two of these were identified as potentially sensitive receptors; the Grade II listed Olde Kingswell Inn and the Harwell Conservation Area. The farmland within the site does not contribute to the heritage significance of either of these assets and therefore, the project would not impact on them in a direct sense.

5.25 During the construction phase, the use of a Code of Construction Practice would keep traffic, noise and dust impacts on these designated assets to a minimum. As such, impacts on both the Olde Kingswell Inn and the Harwell Conservation Area, would result in only negligible/minor adverse effects.

5.26 Once completed, the impact on Olde Kingswell Inn and the Harwell Conservation Area would derive from an expected increase in vehicular traffic on the local road network. For the conservation area, this would result in a minor adverse effect. However, for Olde Kingswell Inn, which is a public house, the increase in traffic would be balanced against the increased
use by members of the public, which would in turn ensure continued maintenance of the structure. As such, there would be a minor beneficial effect on the Olde Kingswell Inn overall.

5.27 There are a number of known archaeological receptors identified within the site through a combination of geophysical survey, limited field walking and limited archaeological trial trenching. In addition, the archaeological investigations within the site and the adjoining Great Western Park, suggest there is a low potential for other hitherto unrecorded archaeological features to be present.

5.28 All impacts on known and potential archaeological receptors within the site would occur during the construction process. This would likely result in the removal of all archaeological remains on site. However, these assets would most likely have been negatively impacted by modern ploughing, in some cases proven by intrusive fieldwork, and therefore it is unlikely that any would be of higher than medium sensitivity. These impacts would result in an effect of no greater than moderate adverse significance.

5.29 A phased programme of archaeological work would ensure that these receptors are recorded prior to removal and, although they would not be retained as physical remains, this would have the beneficial effect of improving the understanding of the archaeological record.

5.30 The historic landscape character of the site is considered to be of low/negligible sensitivity. This is due to the substantial modern impacts, which have removed historic barns and field boundaries, and created modern field divisions.

5.31 The historic landscape character would be affected by the change in land use from agricultural to construction site to residential. This would result in a minor adverse effect.

5.32 Therefore, there are no significant effects arising from this project.

**Hydrology and Flood Risk**

5.33 An assessment has been undertaken by Brookbanks Consulting Limited to assess the potential environmental effects of the project on flood risk, drainage and surface and groundwater resources.

5.34 The Environment Agency Flood Zone Plan shows much of the site lies in Flood Zone 1, with only a small area to the north of the land, adjacent to the A4130 being shown as Flood Zones 2 and 3. Initial inspections suggest that the flooding at this location is a result of a surface water mechanism, rather than fluvial flooding. This is due to the inability of storm water to enter the drain on the northern site boundary.

5.35 Therefore, to accurately identify the flood risk associated with the watercourses at the site in more detail, a computational hydraulic model of the watercourses has been developed. The detailed hydraulic modelling showed that for both the 1 in 100 year and the 1 in 1,000 year events the water level would not exceed the bank levels. It is therefore considered that, supported by the more recently produced Environment Agency surface water mapping and
the results of the modelling completed, the site should be recognised as being located within Flood Zone 1 and as such an area of low probability of flooding. The Flood Risk Assessment also finds the land to lie in an area that has a low probability of flooding from other sources from mechanisms such as groundwater, sewer and artificial water bodies.

5.36 During the construction phase, effects would be controlled through a Code of Construction Practice, which would protect existing watercourses and include measures to control the rate and quality of run off from the site.

5.37 The project has been designed to incorporate Sustainable Urban Drainage measures (SuDS) to avoid significant hydrological effects resulting from changes in the catchment drainage characteristics and provides for site run off controlled to the baseline rate. By introducing SuDS measures, the design takes account of the potential accelerated run off associated with hard paved areas to avoid increasing peak storm water discharge and consequential flood risk. Given the proposed drainage strategy for the site, the Flood Risk Assessment indicates that the runoff rate can be controlled to a level below the existing conditions.

5.38 Thames Water are currently carrying out hydraulic modelling with regards to the potential for their network to accommodate foul flows along with a suitable point of connection for the project to discharge its site wide foul flows. A feasibility study of the Didcot Waste Water Treatment Works is also being carried out to establish whether there is capacity to receive the proposed foul discharges from the development.

5.39 It is understood that modelling works are being completed and new infrastructure implemented as part of the Great Western Park development to the east of the site that will provide capacity for the Valley Park project without detrimentally impacting upon the drainage network.

5.40 In summary, no significant environmental effects on flood risk or surface and groundwater resources have been identified.

Traffic and Transport

5.41 A Transport Assessment and an assessment of the likely environmental effects of traffic has been undertaken by Brookbanks Consulting Limited.

5.42 The site is bounded to the north by the A4130, which connects to the A34 at the Milton Interchange to the north west of the Valley Park site. The A34 forms the site’s southern/western boundary and forms part of the strategic road network. The project site is dissected by the B4493, which crosses the A34 to the west of the site and connects the village of Harwell with Didcot. The B4493 Didcot Road caters for local east-west trips, has a rural character and carries a relatively moderate level of traffic. There are only a limited number of properties served from the road and there is no footway provision westwards beyond the Great Western Park development. The southern section of the Valley Park site
lies between the B4493 and the A417 to the south. The A417 also crosses the A34 to the west of the site and provides access to Cirencester to the west and Streatley to the east.

5.43 There are walking / cycling facilities close to the proposed site, together with some existing public transport coverage. There are no overriding safety issues in the area.

5.44 The project would be accessed from the existing highway. The main access would be from the A4130 to the north of the site. This access would take the form of a roundabout to the south of the A4130 (offline). In addition, a second access from the A4130 would be provided in the north west corner of the site. This would provide a T-junction access to the western part of the site. The site would also be accessible to the north and south from the B4493.

5.45 A network of internal highway routes would provide connections throughout the site and to the Great Western Park development to the east.

5.46 The strategy for Valley Park would be to provide a sustainable development served by public transport. A strategy will be developed and agreed with the local planning authority to ensure adequate public transport provision. The strategy would be based on the most likely destinations including Didcot town centre and the train station.

5.47 During the construction phase, a Code of Construction Practice will be adopted to reduce the risk of adverse effects of construction on sensitive environmental resources and to minimise disturbance to local residents.

5.48 To mitigate any increase in trips, a Framework Travel Plan has been produced. The Framework Travel Plan establishes mode share targets to reduce traffic effect on the road network and encourage a modal shift towards sustainable modes of travel. These targets are based on challenging, but achievable non-car and Single Occupancy Vehicle mode share targets. The targets are based upon current practice in the area and have regard to the location of the site. The targets take account of the local geography and existing transport provision.

5.49 It has been assumed that all construction traffic would route via the A34 and A4130 to access the north with the B4493 used to access the south of the site, with all other routes prohibited to construction traffic. The assessment of the effects of construction traffic concluded that the increase in traffic during the construction phase would have a minor adverse effect on the road network.

5.50 The overall predicted operational traffic levels along the A4130 and the B4493 are within the theoretical highway capacity of these links and therefore it is considered that this would not create significant driver delay. The results of the junction capacity assessments demonstrate that the new junctions from the A4130 and the B4493 would operate within the normally accepted thresholds of highway capacity.

5.51 It is recommended that footways and a pedestrian crossing are provided on the B4493 to provide further mitigation for the increased traffic flow arising from the development. With this
mitigation in place, in addition to the measures stated above, the operational effects from the project are likely to be minor adverse. Therefore, no significant effects have been identified.

**Air Quality and Climate**

5.52 The site is located within the district of the Vale of White Horse District Council, but lies on the border with South Oxfordshire District Council. Both authorities have undertaken comprehensive review and assessment of air quality within the district and have declared a number of Air Quality Management Areas. However, none of these are within the vicinity of the Valley Park site. Air quality within Didcot has not been found to exceed the relevant air quality objectives and no issues relating to air quality have been identified in the vicinity of the site.

5.53 An assessment of the potential impacts during the construction phase has been carried out by Brookbanks Consulting Limited. This has shown that during this phase of the project releases of dust and particulate matter (PM$_{10}$) are likely to occur during site activities. Mitigation measures, which have been identified following guidance produced by the Institute of Air Quality Management (IAQM), will be set out within the Code of Construction Practice and agreed with Vale of White Horse District Council. Through good site practice and the implementation of the Code of Construction Practice, the impact of dust and PM$_{10}$ releases would be effectively mitigated and the resultant effects are considered to be negligible.

5.54 Dispersion modelling has been carried out to assess the impact of traffic generated by the project on local air quality and to assess the suitability of the site for residential development.

5.55 The project would result in a medium change in nitrogen dioxide (NO$_2$) concentrations at two residential receptors by 2019. The overall significance of this effect would be moderate adverse, although concentrations would remain over 20% below the objective limit. By 2030, the predicted impacts would reduce to negligible.

5.56 At all other locations, the effect of traffic generated by the project is predicted to be negligible in respect of NO$_2$ and particulate matter (PM$_{10}$ and PM$_{2.5}$) concentrations.

5.57 The model predicted annual mean NO$_2$, PM$_{10}$ and PM$_{2.5}$ concentrations below the relevant air quality objectives across the project site. Future occupants of the site would not be exposed to elevated pollutant concentrations therefore the impact of the project with regards to exposure to local air quality would be negligible.

5.58 Overall, no significant effects are predicted to arise during construction and the site is considered to be suitable for residential development. A temporary significant effect has been identified on air quality from traffic, although concentrations would remain over 20% below the objective. In the long term, no significant effects are predicted.
5.59 Discussions were held with the Environmental Health Officer to discuss and agree the scope of the noise and vibration assessment. It was agreed that a noise survey is required for the site due to sensitive receptors being identified.

5.60 Therefore daytime and night time noise levels were monitored over a 24 hour period on adjacent roads forming the site boundary to establish the baseline noise conditions and a noise model was used to predict the likely noise impact arising from the project. The assessment was undertaken by Brookbanks Consulting Limited.

5.61 The assessment has taken into account appropriate guidance, including the National Planning Policy Framework, the former Planning Policy Guidance Note 24 and British Standards.

5.62 There are very few existing receptors in the vicinity of the site. These include properties on the B4493, on the A4130 and at the Great Western Park.

5.63 For the delivery of the project, it is envisaged that limited demolition, earthworks, installation of necessary services and building construction would form the main noise impacts upon the existing residential properties. The temporary increase in traffic due to construction is likely to be undiscernible from daily variations in traffic flow, therefore the noise impact of construction traffic would be negligible.

5.64 The assessment indicates that construction noise impacts could be observed by sensitive receptors within 200 metres of the site. Very few receptors are located within 200 metres of the site and those receptors are generally located close to existing roads, such as the A4130, A34 and B4493. A small number of receptors within Great Western Park may also fall within 200 metres of the Valley Park site boundary. Where necessary, for the small number of dwellings affected, construction plant would be located, as far as is reasonably practicable, away from adjacent occupied buildings or as close as possible to noise barriers or site hoardings located between the plant and the buildings. Such measures to control construction noise would be implemented through the Code of Construction Practice, which would also minimise operations during sensitive time periods.

5.65 Given the nature of the construction activities, it is considered that the significance of effect at the closest receptors would be minor adverse at most.

5.66 Traffic noise predictions have been made. This assessment demonstrates that the predicted magnitude of impact on noise levels from any changes on the wider road network would be negligible to low. The significance of effect would be negligible to minor adverse (not significant).

5.67 In order to assess the suitability of the site, noise level prediction of the existing situation has taken place through computer modelling. The daytime and night time boundaries for the completed project were modelled. These were considered against noise exposure categories
described using the A, B, C system, where A is the most suitable for residential development. The resultant daytime and night-time noise contours indicate that the site mainly falls into noise exposure categories A/B, with boundaries fronting onto the main roads falling into category C.

5.68 The project proposes the following mitigation measures:

- Passive ventilation systems and double glazing for only those residential properties falling within noise exposure category C and fronting onto the highways bordering the site;

- The provision of noise screening on the western boundary of the site;

- Internal layout of properties to consider the location of lounge and bedroom areas for those properties fronting onto the highways bordering the site; and

- Site layout to consider the orientation of residential buildings to reduce sight lines onto the highways bordering the site.

5.69 The assessment and review of British Standards indicate that an appropriate noise environment can be achieved with such measures in place and that no significant effects are predicted.

Agriculture and Soils

5.70 An assessment of the potential effects of development on the agricultural land resource and soil resource within the site area was undertaken by The Environmental Dimension Partnership (EDP). The assessment also considers the potential effects on farm businesses, both those occupying land within the site area and those in the surrounding area that could experience effects from the construction phase and from the completed development itself.

5.71 The majority of the site has been subject to an Agricultural Land Classification (ALC) assessment undertaken by the former Land Use Planning Unit of the Ministry of Agriculture Fisheries and Food (MAFF). This was used to inform the baseline information on soils. A small area of the site was not covered by the MAFF survey work. This area was subject to a detailed ALC assessment in 2014. The farming circumstances baseline information for the site was obtained by interviewing managers of each of the farm businesses occupying the site.

5.72 Site assessment work found the site area to contain a significant area of very good (ALC Grade 2) and good (ALC Grade 3a) agricultural land (Figure 6). Such land is considered to be among the best and most versatile agricultural land in England and Wales. National planning policy seeks to conserve this resource by offering protection from loss to unnecessary development. There is no effective mitigation for the loss of best and most versatile land and therefore there would be a significant effect on agriculture and soils from the loss of this resource.
Figure 6 - Agricultural Land Classification Map
5.73 Soil is associated with farm land and a key factor in the assessment of agricultural land quality. But unlike land, the soil resource can be translocated. It is however vulnerable to loss during handling and storage, both in quantity and functional capacity of the resource. The soil resource however can be conserved for beneficial reuse through a soil management plan, ensuring the separation of materials with differing functional capacity and the avoidance of disturbance when the soil is in a moist and plastic condition. Consequently the effect on soil resources during construction would not be significant.

5.74 Farm businesses can be affected by development, both directly through loss of land and indirectly by impacts stemming from construction works and the completed development. Farm businesses can be compensated for direct loss of land enabling the unit to invest in modernisation and/or expansion of the business. For a residential development indirect impacts can include an increase in trespass, fly tipping and the worrying of livestock by dogs. These are commonly referred to as urban fringe effects. However, the site design incorporates buffer zones along its eastern boundary with adjoining agricultural land with the aim of minimising the export of urban fringe effects. Effects on farm business are not considered to be significant.

5.75 Assessed cumulatively, there are considered to be no significant adverse effects on soil resources or farming circumstances from the combination of the Great Western Park and Valley Park development sites. There is, however, likely to be a cumulative effect from the loss of agricultural land between the Valley Park project and the Great Western Park development.

Community Effects

5.76 An assessment has been made of the potential effects on community resources and the socio-economic effects arising from the construction and operation of the proposed Valley Park residential development project.

5.77 A desk top baseline study was undertaken to identify those community resources within the project site and within the study area. A review of relevant policy and guidance and a site visit were carried out to inform the assessment.

5.78 The assessment has looked at the potential effects on the following community resources:

- Doctor’s surgeries and hospitals;
- Schools;
- Shops and post offices;
- Places of worship;
- Land used by the community; and
• Public rights of way.

5.79 Of the above assets, none are currently present on the site, other than three rights of way. The public bridleways along Cow Lane and The Driftway would remain open during the construction phase and the diversion of part of public footpath (243/3) would be undertaken during construction to maintain public access to these routes. Therefore, there would be a negligible effect on public rights of way during the construction phase of the project.

5.80 The existing public rights of way that run through Valley Park would be retained and/or diverted and additional on-site footpath links would be provided as part of the project enhancing non-vehicular connectivity. This is assessed to have a minor beneficial effect on public rights of way and other non-vehicular routes in the local area in the long term.

5.81 There would be no environmental effects on doctor’s surgeries and hospitals; post offices and places of worship; and existing land used by the community during the operational phase of the project. Two primary schools and a special needs school would be provided as part of the Valley Park development, together with shops in the neighbourhood centres in the northern and southern parts of the project. In addition, secondary school places would be available in the new school for 11-16 year olds at Great Western Park and at the existing schools in Didcot and places at the proposed University Technical College would be available for pupils living at Valley Park.

5.82 The Valley Park site would provide semi-natural greenspace, together with allotments and sports pitches. In addition agreed financial contributions would be made towards swimming pools, sports hall provision and health and fitness stations. The provision of these resources exceeds required standards and is assessed to have a beneficial effect on land used by the community within the local area in the long term.

5.83 The construction of the development would have direct beneficial employment impacts through the employment of construction workers from the local area and throughout the region. It would also have indirect beneficial employment impacts arising from construction firms and workers using local suppliers, services and facilities.

5.84 Whilst there may be some disruption locally during the construction period as a result of building activity giving rise to potential out-migration, this would be off-set by in-migration as the new dwellings are occupied and would not be significant.

5.85 Drawing on the current economic profile of the area within which Valley Park would be located, it is estimated that the development would have a final population of around 10,725. Significant beneficial effects are predicted as a result of employment during construction and the provision of shops, schools, community and recreation facilities alongside the residential development would create a balanced and mixed community.

5.86 A significant proportion of the development (up to 35%) would comprise affordable housing. This is likely to benefit both existing residents of Didcot and its environs, and those wishing to
move to the area and would be of particular benefit to key workers and those with specific local needs. The effect of the provision of affordable housing is considered to be significant.

5.87 The increased population would provide a labour supply for Milton Park, Harwell Campus, a redeveloped Didcot Power Station, Southmead Industrial Estate and Didcot town centre, as part of the District's wider strategy of balanced and sustainable growth within Science Vale UK. The project would bring with it improvements to public transport, as well as making a significant contribution to the stock of affordable housing units. The layout has been designed to have a significant beneficial effect on the creation of a viable, integrated and balanced community.

5.88 No significant adverse effects on community resources or the socio-economic baseline conditions are anticipated as a result of the Valley Park project.
6 Further Information

6.1 This Non-Technical Summary provides a summary of the Environmental Statement accompanying the planning application for the Valley Park residential development.

6.2 Copies of the full Environmental Statement, including this Non-Technical Summary can be viewed at:

Vale of White Horse District Council
Abbey House
Abbey Close
Abingdon
OX14 3JE

6.3 Copies of the ES and planning application documents can be viewed on the local planning authority website:

http://www.whitehorsedc.gov.uk

6.4 Further copies of the ES can be obtained from the following address (ref. OXF8106):

RPS
20 Western Avenue
Milton Park
Abingdon
Oxfordshire
OX14 4SH

6.5 A paper copy of the full ES can be obtained for a cost of £300 plus VAT or an electronic copy (CD ROM) for a cost of £10.