Water Eaton PR6a: Land East of Oxford Road

Health Impact Assessment







CHRIST CHURCH UNIVERSITY OF OXFORD

WE/HIA/P02



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1 Introduction

1.1 Background

- 1.1.1 This Health Impact Assessment (HIA) has been prepared by the Savills Health and Social Impact Assessment team within the Environment & Infrastructure department, on behalf of Bellway Homes and Christ Church, Oxford (hereafter collectively referred to as 'the Applicant'), regarding land at Water Eaton (Site PR6a, as allocated in the Cherwell Local Plan Partial Review) (hereafter referred to collectively as 'the proposed development').
- 1.1.2 HIA is designed to identify and assess the potential health outcomes (both adverse and beneficial) of a proposed project, plan or programme and to deliver evidence-based recommendations that maximise health gains and reduce or remove potential negative impacts on health and wellbeing.
- 1.1.3 In this instance, the purpose of this HIA is to investigate, address and assess potential health risks to the host community directly attributable to what is proposed, and to test healthy urban design features intended to support the delivery of a new healthy, vibrant and cohesive community.

1.2 Report structure

- 1.2.1 The remainder of this HIA is structured as follows:
 - Section 2: Policy and Legislative Context;
 - Section 3: Approach and Methodology;
 - Section 4: Health Evidence Base;
 - Section 5: Project Profile;
 - Section 6: Health and Wellbeing Baseline;
 - Section 7: Consultation;
 - Section 8: Assessment;
 - Section 9: Mitigation and Monitoring; and
 - Section 10: Conclusions and Actions.



2 Policy and Legislative Context

2.1 Introduction

2.1.1 This section presents the national and local legislative and policy requirements pertinent to the assessment of health. On the basis that a wide range of environmental, social and economic factors have the potential to influence health, many local policies which relate to these determinants are also relevant to health. However, to ensure a focussed list of relevant policies and to avoid duplication of policies pertinent to the inter-related technical disciplines that inform the HIA, the policies referenced in this section have been selected only if they explicitly mention health and/or wellbeing.

2.2 National policy

- 2.2.1 The National Planning Policy Framework (NPPF) (Department for Levelling Up, Housing and Communities, 2023) sets out the planning policies for England.
- 2.2.2 Promoting healthy and safe communities is a central theme, whereby the NPPF states that planning policies and decisions should aim to achieve healthy, inclusive and safe places and beautiful buildings which promote social interaction (including opportunities for meetings between people who might not otherwise come into contact with each other), are safe and accessible, and enable and support healthy lifestyles (paragraph 96).
- 2.2.3 Furthermore, the NPPF (paragraph 97) states that to provide the social, recreational and cultural facilities and services that communities need, planning policies and decisions should:
 - plan positively for the provision and use of shared spaces, community facilities and other local services;
 - take into account and support the delivery of local strategies to improve health, social and cultural wellbeing;
 - guard against the unnecessary loss of valued facilities and services;
 - ensure that established shops, facilities and services are able to develop and modernise, and are retained for the benefit of the community; and
 - ensure an integrated approach to considering the location of housing, economic uses and community facilities and services.
- 2.2.4 The National Planning Practice Guidance (NPPG) (DLUHC & MHCLG, 2022) supports the NPPF and provides guidance across a range of topic areas, including 'healthy and safe communities'. It is recognised in the NPPG that the design and use of the built and natural environments, including green infrastructure are major determinants of health and wellbeing, whereby a "healthy place" is one which:
 - supports and promotes healthy behaviours and environments and a reduction in health inequalities for people of all ages;
 - will provide the community with opportunities to improve their physical and mental health, and support community engagement and wellbeing;



- is inclusive and promotes social interaction; and
- meets the needs of children and young people to grow and develop, as well as being adaptable to the needs of an increasingly elderly population and those with dementia and other sensory or mobility impairments.
- 2.2.5 As stated in the NPPG, planning and health need to be considered firstly in terms of creating environments that support and encourage healthy lifestyles, and secondly in terms of healthcare capacity. In addition, engagement with individuals and/or organisations, such as the relevant Director(s) of Public Health, will help ensure local public health strategies and any inequalities are considered appropriately.

2.3 Local policy and guidance

2.3.1 Relevant local policy documents comprise the Cherwell Local Plan 2011-2031 (Cherwell District Council, 2015), Cherwell Local Plan 2011-2031 (Part 1) Partial Review (Cherwell District Council, 2020), and the Oxfordshire Health Impact Assessments Toolkit and Briefing Note for Local Planning Authorities (Future Oxfordshire Partnership, 2021). Following the approach outlined within Section 2.1, local policies pertinent to health and wellbeing are outlined in more detail below.

Cherwell Local Plan 2011-2031

- 2.3.2 Policy BSC 8 (Securing Health and Well-Being) states that the Council will support the provision of health facilities in sustainable locations which contribute towards health and well-being.
- 2.3.3 Policy ESD 15 (The Character of the Built and Historic Environment) states that new development proposals should be designed to deliver high quality safe, attractive, durable and healthy places to live and work in. Furthermore, it is stated that well designed landscape schemes should be an integral part of development proposals to support improvements to biodiversity, the micro climate, and air pollution, and provide attractive places that improve people's health and sense of vitality (amongst other factors).
- 2.3.4 Policy INF 1 (Infrastructure) states that development proposals will be required to demonstrate that infrastructure requirements can be met including the provision of transport, education, health, social and community facilities.

Cherwell Local Plan 2011-2031 (Part 1) Partial Review

- 2.3.5 Policy PR6a (Land East of Oxford Road) states that an urban extension to Oxford city will be developed on 48 ha of land to the east of Oxford Road. Development proposals will be permitted if they meet a range of requirements. Of particular relevance to health and wellbeing:
 - Construction of 690 dwellings (net) on approximately 25 hectares of land.
 - Provision of 50% of the homes as affordable housing.
 - Provision of a primary school with two forms of entry on 2.2 hectares of land in the location shown.



- Provision of a local centre on 0.5 ha of land in which includes provision for local convenience retailing (use class A1 no more than 500 sqm net floorspace and no less than 350 sqm), ancillary business development (use class B1(a) only) and/or financial and professional uses (use class A2); a café or restaurant (use class A3); the provision of a community building to required standards providing the opportunity for social and childcare facilities, the opportunity for required health facilities to be provided and provision for required emergency services infrastructure.
- The provision of facilities for formal sports, play areas and allotments to adopted standards within the developable area.
- The provision of public open green space as an extension to Cutteslowe Park on 11 ha of land in the location shown and including land set aside for the creation of wildlife habitats and for nature trail/circular walks accessible from the new primary school.
- Creation of a green infrastructure corridor on 8 hectares of land incorporating a pedestrian, wheelchair and all-weather cycle route along the site's eastern boundary. The route will connect Cutteslowe Park with Oxford Parkway Railway Station/Water Eaton Park and Ride and provide connection with the public rights of way network.

Oxfordshire HIA Toolkit

- 2.3.6 Oxfordshire's strategic vision states that: "We want Oxfordshire to thrive so that the lives of current and future generations are improved. To achieve this will require bold, innovative, collaborative and inclusive thinking with decisions and actions that deliver real and lasting change in ways that build resilience and enhance well-being."
- 2.3.7 The Oxfordshire HIA toolkit (Oxfordshire County Council, 2021) was approved by the Future Oxfordshire Partnership for use by all six Oxfordshire Local Authorities in January 2021, and issued with a "Briefing Note for Local Planners" on its objective and application.
- 2.3.8 The toolkit is being implemented when Oxfordshire's district council planning departments are determining any 'major development' within their district, and the requirement is filtering down to form both a distinct Policy and Validation requirement on major and area specific developments within the individual District Local Plans, including the emerging Cherwell Local Plan.
- 2.3.9 The Oxfordshire HIA toolkit (Oxfordshire County Council, 2021) states that the HIA methodology consists of the following five stages, which are described in more detail below:
 - description of the proposed development;
 - identification of population groups affected by the development;
 - identification of geographical area and associated health needs and priorities;
 - assessment of health and recommendations; and
 - monitoring.

Description of the proposed development

2.3.10 The HIA should describe the physical characteristics of the site of the proposed development and surrounding area, including the current use. The aims and objectives of the project should be stated, and the final operational characteristics of the project should be described. The report



should also include the policy context, particularly if there are any relevant polices that protect and promote health and wellbeing.

Identification of population groups affected by the development

- 2.3.11 The HIA should consider which groups of the existing population would be affected by the proposed development as most proposals will not affect all individuals or groups across a community in the same way. By understanding the composition of a local population, groups most vulnerable to impacts and opportunities resulting from a proposed development can be identified, addressed and further considered in the decision making process.
- 2.3.12 The following groups for consideration include:
 - sex/gender related groups;
 - age related groups (e.g. children and elderly people);
 - groups at higher risk of discrimination, or other social disadvantage (e.g. people with mental health conditions);
 - income related groups (e.g. those who are unemployed or on low incomes); and
 - geographical groups and/or settings (e.g. people in key settings such as schools and care homes).

Identification of geographical area and associated health needs and priorities

2.3.13 The HIA should consider the geographical areas affected by a proposed development, and link these to the health priorities identified by the Local Planning Authority. Identifying localised health priorities will enable a HIA to focus on the key issues for a particular location of a development, ensuring the HIA is targeted and appropriately scoped to best support the delivery of local health priorities and objectives, and afford the most benefit.

Assessment

- 2.3.14 As detailed in the Oxfordshire HIA Toolkit, the typical health priorities with the potential to be influenced by a proposed development, and expected to be assessed, include:
 - housing;
 - physical activity;
 - healthy food environments;
 - air quality;
 - noise;
 - traffic and transportation;
 - crime and anti-social behaviour;
 - economy and employment;
 - education and skills;
 - local natural environment and access to green spaces; and
 - access to services.
- 2.3.15 A series of assessment tables, as outlined in Table 2.1, should be completed for each of the health priorities identified as relevant to a proposed development to guide the user through a process of establishing a baseline of the existing situation, building an evidence base around



health impacts associated with a health priority, and identification of likely effects (positive and negative), as well as the population groups likely to experience these effects.

Step	Activity to undertake					
Baseline	Include a description of the baseline as applicable to the priority theme.					
Evidence	Build an evidence base as applicable to the priority theme.					
Stakeholder engagement	Include evidence or feedback relevant to the priority theme, derived from stakeholder engagement activities.					
Health effects	Describe potential health effects due to the proposed development to arise; identify beneficial and adverse effects; identify population groups likely to experience these effects.					
Summary	Summarise the identified impacts and recommendations for minimising adverse effects, or maximising opportunities for benefits.					

Table 2.1: Assessment table format

Source: The Oxfordshire HIA toolkit (Oxfordshire County Council, 2021)

<u>Monitoring</u>

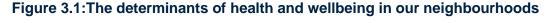
2.3.16 The HIA should include a set of recommendations that are linked to the impacts identified by the assessment. The implementation of these recommendations should be monitored by the Local Planning Authority and the extent to which the HIA has influenced the decision making process evaluated.



3 Approach and Methodology

3.1 Approach

3.1.1 The assessment of health and wellbeing impacts applies a broad socio-economic model of health (see Figure 3.1) that encompasses conventional health impacts such as disease, accidents and risk, along with wider health determinants vital to achieving good health and wellbeing such as employment and local amenity. It addresses both physical and mental health outcomes, and also considers equality and social impacts where possible.





Source: A health map for the local human habitat (Barton & Grant, 2006)

3.1.2 The assessment methodology follows a source-pathway-receptor model to identify and assess population and health effects that are plausible and directly attributable to the proposed development. As shown in Table 3.1 below, a hazard source itself does not constitute a health risk: it is only when there is a hazard source, a sensitive receptor and a pathway of exposure that there is a potential risk to human health. The same is true for potential health benefits where a positive influence must be present alongside a pathway of exposure and a receptor for there to be a potential health improvement.



3.1.3 Where a source-pathway-receptor linkage exists, it is then the nature of the specific hazard source or positive influence; the magnitude of impact via the pathway of exposure; and the sensitivity of the receptor that will determine what level of health risk or benefit is predicted, if any.

Source	Pathway	Receptor	Impact					
x	\checkmark	\checkmark	No	There is not a clear source from where a potential health impact could originate.				
\checkmark	х	\checkmark	The source of a potential health impact lacks a means of transmission to a population.					
\checkmark	\checkmark	x	No	Receptors that would be sensitive or vulnerable to the health outcome are not present.				
\checkmark	\checkmark	\checkmark	Yes	Identifying a source, pathway and receptor does not mean a health outcome is a likely significant effect; health impacts should be assessed (describing what effect will occur and its likelihood) and likely health effects are then evaluated for significance.				

Table 3.1: Source-pathway-receptor model
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Source: Health in Environmental Impact Assessment – A Primer for a Proportionate Approach (IEMA, 2017)

3.1.4 When defining potential population and health determinants associated with a project, it is also useful to consider three broad domains of public health: health protection (i.e. environmental objective thresholds set to be protective of health); health promotion (i.e. ways in which to support healthy lifestyles, improve socio-economic status and address inequality); and health care (i.e. provision, effectiveness and equity of access to healthcare services).

3.2 HIA methodology

3.2.1 As referenced in Section 2.3 (Local policy and guidance), the Oxfordshire HIA toolkit (Oxfordshire County Council, 2021) has been used to inform the methodology of this report.



4 Health Evidence Base

- 4.1.1 As detailed in the Oxfordshire HIA toolkit (Oxfordshire County Council, 2021), the following health evidence base documents are considered to be relevant and have informed the HIA:
 - Transport, health and wellbeing: An evidence review for the Department for Transport (NatCen Social Research, 2019);
 - Spatial Planning for Health: An evidence resource for planning and designing healthier places (Public Health England, 2017);
 - Local action on health inequalities: Increasing employment opportunities and improving workplace health (Public Health England, 2014);
 - Is work good for your health and wellbeing? (Waddell & Burton, 2006);
 - What makes us healthy? An introduction to the social determinants of health (The Health Foundation, 2018);
 - Review of Interventions to Improve Outdoor Air Quality and Public Health (Public Health England, 2020);
 - Health Matters: Air Pollution (Public Health England, 2018);
 - Mortality effects of long-term exposure to air pollution in the UK (COMEAP, 2010);
 - Understanding the health impacts of air pollution in London (King's College London, 2015);
 - Commission on pollution and health (The Lancet, 2017);
 - National Planning Policy Framework (Ministry of Housing, Communities & Local Government, 2021);
 - Professional Practice Guidance on Planning & Noise (Institute of Acoustics, 2017);
 - Noise Policy Statement for England (NPSE) (Defra, 2010);
 - Good practice guide on noise exposure and potential health effects (European Environment Agency, 2010);
 - Environmental Noise Directive, Directive 2002/49/EC (European Commission, 2002);
 - Strategies for Encouraging Healthier 'Out of Home' Food Provision (Public Health England, 2017);
 - Healthy High Streets: Good place-making in an urban setting (Public Health England, 2018);
 - A Green Future: Our 25 Year Plan to Improve the Environment (HM Government, 2018);
 - Sporting Future: A New Strategy for an Active Nation (HM Government, 2015);
 - Health and the natural environment: A review of evidence, policy, practice and opportunities for the future (European Centre for Environment and Human Health, 2018);
 - Safer Oxfordshire Partnership Strategic Intelligence Assessment (Insight Oxfordshire, 2020);
 - Secured by Design: Homes (Secured by Design, 2019);
 - The nature of violent crime in England and Wales: Year ending March 2020 (ONS, 2021);
 - Modern Crime Prevention Strategy (Home Office, 2016);
 - Social disadvantage, crime, and punishment (Newburn, 2016);
 - Fair Society, Healthy Lives, The Marmot Review, A Strategic review of health inequalities in England post-2010 (Marmot, 2010);
 - An overview of lifestyles and wider characteristics linked to Healthy Life Expectancy in England: June 2017 (ONS, 2017);



- Health at a Glance 2019: OECD Indicators (OECD , 2019);
- Local action on health inequalities: Improving access to green spaces (Public Health England, 2014);
- Links between natural environments and mental health: Evidence briefing (Natural England, 2016);
- Fuel poverty statistics (Department for Business, Energy & Industrial Strategy, 2022);
- Improving access for all: Reducing inequalities in access to general practice services (NHS England, 2018)
- Planning for Sport Guidance (Sport England, 2019); and
- Reimagining community services: Making the most of our assets (The King's Fund, 2018).



5 **Project Profile**

5.1 Site description, setting and context

- 5.1.1 The site is located to the east of the A4165, Oxford Road to the north of Oxford. The northern boundary adjoins Oxford Parkway Park and Ride site. To the east, the site boundary crosses an open field, then follows field boundaries around St. Frideswide's Farm to the south, where the southern boundary adjoins Cutteslowe Park, Banbury Road North Sports Ground, and an adjacent field. The land to the south of the site boundary is within the administrative area of OCC.
- 5.1.2 The site is one of six sites which have been allocated in the adopted Cherwell Local Plan 2011-2031 Partial Review (September 2020) for residential development.
- 5.1.3 The site extends in total to 48.5 hectares, is irregular in shape, and mainly consists of agricultural land, used as arable fields. Pipal Barns are also located within the site and are accessed from, and with a frontage onto, the A4165 in the north-west of the site. Pipal Cottage is located just outside the site boundary adjacent to Pipal Barns and the A4165, and St. Frideswide's Farmhouse and farm buildings are located just outside the eastern site boundary.
- 5.1.4 The area surrounding the site includes the Oxford Parkway Park & Ride site (including the Oxford Parkway railway station) to the north. Immediately to the south is a parcel of land within Oxford City which is the subject of full planning permission for 134 dwellings (OCC Ref. 21/01449/FUL) and also land which is in sports and recreation use (including land at Oxford Hawks Hockey Club and land at Cuttleslowe Park). To the west of the site is land currently occupied by North Oxford Golf Club and which is allocated for residential development in the adopted Local Plan (Site PR6b). To the east is open countryside and which is in agricultural use.

5.2 **Project description summary**

5.2.1 The proposed development is for the demolition of existing buildings. The erection of up to 800 dwellings (Class C3); a two form entry primary school; a local centre comprising: convenience retailing up to 500sqm (Class E(a)), business uses (Class E(g)(i)) and/or financial and professional uses (Class E(c)) up to 500sqm, a café or restaurant (Class E(b)) up to 200sqm; community building (Class E and F2); associated car and cycle parking; associated play areas, allotments, public open green space and landscaping; new vehicular, pedestrian and cycle access points; internal roads, paths and communal parking infrastructure; associated works, infrastructure (including Sustainable Urban Drainage, services and utilities) and ancillary development.

5.3 Study area

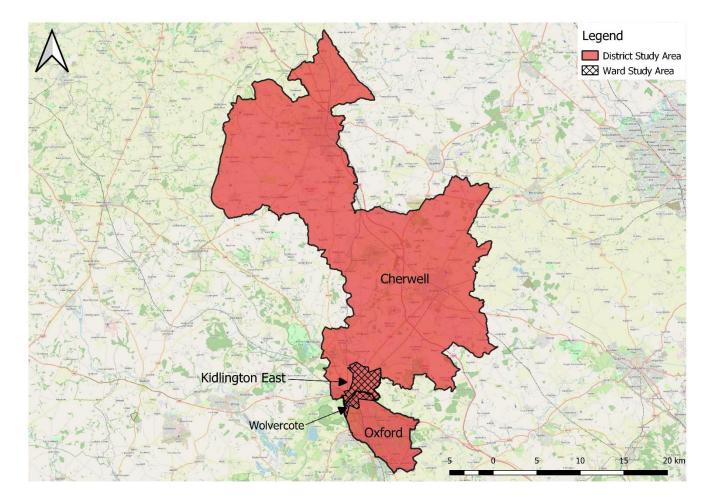
5.3.1 Environmental health determinants (such as changes to air quality and noise exposure) are likely to have a local impact where the potential change in hazard exposure is limited by physical dispersion characteristics. As a result, the local study area for health-specific baseline statistics relating to human health effects focuses on Kidlington East and Wolvercote wards, using district



(Cherwell and Oxford city), regional (South East) and national (England) averages as comparators. Where data is not available at ward-level, district-level data is presented as a representative alternative.

- 5.3.2 Socio-economic health determinants (such as employment and related income generation) have a wider geographic scope of influence than environmental health determinants due to the willingness to commute significant distances to work. On this basis, the wider study area for socioeconomic baseline data focuses on district-level statistics (Cherwell and Oxford city), using regional and national averages as comparators.
- 5.3.3 Figure 5.1 shows the environmental (ward-level) and socio-economic (district-level) study areas, as described above.

Figure 5.1: Study area plan



5.3.4 The study area defining the relevant sensitive receptors identified for assessment purposes remains consistent with the inter-related technical disciplines assessed within the planning application, which the HIA relies upon.



5.4 Local health priorities

- 5.4.1 The Oxfordshire Joint Health and Wellbeing Strategy (2018-2023) (Oxfordshire Health and Wellbeing Board, 2019) outlines the following relevant strategic objectives across various life stages and categories:
 - A good start in life
 - Ensure children have access to high quality education, employment and motivational training.
 - Have access to services to improve overall wellbeing, and easy ways to get active.
 - Ensure children have a place to feel safe and a sense of belonging and have access to appropriate housing.
 - Living well
 - Prevent the development of long term conditions by helping people to live healthy lives, live in healthy places and avoid the need to go to hospital.
 - \circ $\;$ Identify ill health early, through good access to services.
 - Value mental health equally with physical health.
 - Ensure services are effective, efficient, joined up and available when needed.
 - Nurture healthy communities that enable people to participate, be active, give and receive support.
 - Ageing well
 - Increase independence, mobility and years of active life for those aged 75+ through healthy lifestyles as well as using equipment, adaptations and making tools for selfmanagement available and easily accessible.
 - o Ensure services are effective, efficient, joined up and available when needed.
 - Deliver preventative services in the community to reduce or delay the need for health and care services.
 - Improving health by tackling wider issues
 - Ensuring the physical environment, housing and social networks can nurture and encourage health and wellbeing.
 - Preventing homelessness and reducing rough sleeping.
 - Protect vulnerable people from the impact of domestic abuse, cold homes and other factors.
- 5.4.2 The priorities are geared to address existing health circumstance and address looming public health challenges through health promotion, improving resilience and preventing, delaying and reducing the need for clinical intervention and care.

5.5 Healthy placemaking

- 5.5.1 As detailed in the Design and Access Statement (DAS), health and wellbeing has been considered from the outset, including the mental and physical health of future residents. The criteria from Building for Healthy Life have been used to inform the design process for the proposed development. In summary:
 - compact and walkable neighbourhood:



- every home is within 5-10 minutes walk of the local centre, enabling residents to carry out day-to-day tasks without the need of a car;
- the location of the primary school promotes access on foot or by bicycle and discourages people to drive their children to/from school by providing a school street which will be temporarily closed off for traffic during the mornings and afternoons during school days (except emergency vehicles) (managing potential risk, removing barriers to physical activity and facilitating a modal transport shift away from private car use);
- permeable street networks provide a choice of routes, prioritising walking and cycling;
- delivery of a local centre that provides a community focal point and will be delivered early during construction to begin community building:
 - as part of this, local healthcare has been discussed with the Integrated Care Board (formerly Clinical Commissioning Group (CCG)) as part of the local centre provision, whereby the CCG is looking for a flexible community building to be used to support this location as a health 'spoke' with financial contributions towards additional services at local 'hubs';
- designed as a place for inclusive living:
 - a housing mix that caters for all types of residents from all backgrounds and age ranges;
 - streets and amenities that enable access for all, including accessible signposting and wayfinding (dementia and neurodiversity friendly design);
- multi-functional green spaces integrated within the structure of the development:
 - o local, smaller green spaces within a short walk (2-5 minutes) for all residents;
 - o green corridors associated with direct routes to destinations;
 - strategic green spaces providing for activities and play;
- healthy eating encouraged:
 - o provision of allotments, community gardens and orchards;
 - o consideration of a community market;
 - incorporation of 'edible streets' that will provide fruit trees and herbs that are available to all residents from public areas;
- green network that maximises opportunities for healthy play and leisure:
 - local green spaces for children's play;
 - strategic green space at the south-east of the site for informal and formal play and sports activities;
 - o routes designed for 5km and 10km running and walking;
 - recreational routes for dog walking;
 - \circ $\;$ streets with low traffic levels designed for informal play; and
 - o information available to residents on opportunities for activities and clubs.



6 Health and Wellbeing Baseline

6.1 Introduction

- 6.1.1 Different communities have varying susceptibility to health and wellbeing effects (both adverse and beneficial) as a result of social and demographic structure, behaviour and relative economic circumstance.
- 6.1.2 The aim of the following information is to outline the local health and socio-economic circumstance of the communities living within the ward study area (Kidlington East and Wolvercote) and district study area (Cherwell and Oxford city). It should be noted that the description of the whole population, and of the populations within the study area, do not exclude the probability that there will be some individuals or groups of people who do not conform to the overall profile.

6.2 Demography, deprivation and socio-economic circumstance

6.2.1 As shown in Figure 6.1, a higher proportion of the ward study area population are aged 55 to 85+ when compared to the England average. Similarly, there is a higher proportion of those aged 5-9 and 35-39 years living within the ward study area compared to the England average.

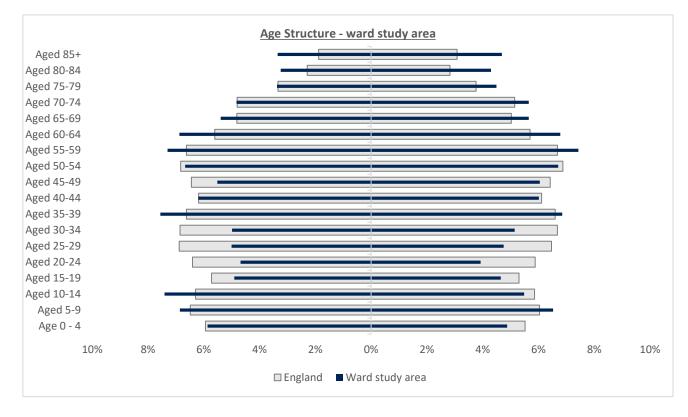


Figure 6.1: Age structure – ward study area

Source: NOMIS (NOMIS, 2020)



- 6.2.2 As shown in Table 6.1, the percentage of the population experiencing income deprivation, child poverty and older people experiencing deprivation within the ward study area is lower than all relevant comparators (i.e. district study area, made up of Cherwell and Oxford city; Oxfordshire; South East; and England). Specifically, deprivation levels across all three of these indicators within the ward study area are approximately half the England average. It should be noted that the description of the whole population, and of the populations within the study area, do not exclude the probability that there will be some individuals or groups of people who do not conform to the overall profile.
- 6.2.3 The proportion of the population within the study area living in overcrowded houses, or who are in fuel poverty is lower than all relevant comparators.
- 6.2.4 Unemployment and long-term unemployment rates in the ward study area are lower than all relevant comparators. Most notably, both long-term unemployment rates in the ward study area are four times less than the England average.
- 6.2.5 Attainment 8 is a measure published annually showing the average academic performance of a secondary school. It is calculated by adding together pupils' highest scores across eight government approved school subjects. No data is available at the ward level; as such, data at the district level has been collected as a representative proxy. The average attainment 8 score in the district study area is marginally worse than all relevant comparators.

Indicator	Date	Ward study area (Kidlington East and Wolvercote)	District study area (Cherwell and Oxford city)	Oxfordshire	South East	England average	
Deprivation and socio-eco	nomic circ	umstance					
Income deprivation, English Indices of Deprivation (%)	2019	6.4	8.5 6.9		9.1	12.9	
Child poverty, English Indices of Deprivation (%)	2019	9	13.2	10.1	12.3	17.1	
Older people in deprivation, English Indices of Deprivation (%)	2019	6.7	10.8 8.1		10.2	14.2	
Overcrowded houses (%)	2011	6	10	6.9	7.5	8.7	
Households in fuel poverty (%)	2020	7.4	9.4	8.1	8.6	13.2	
Unemployment (%)	2019-20	1.3	1.7	1.4	2.1	2.8	
Long term unemployment (%)	2019-20	0.8	0.8	0.7	2	3.2	
Average attainment 8 score	2020/21	n/a	49.9	51.3	52.1	50.9	
Key:							
Better than the England	average						
Worse than the England	average						
Source: OHID Local Health (OHID, n	.d.)						

Table 6.1: Deprivation and socio-economic circumstance statistics

Source: OHID Local Health (OHID, n.d.)



6.3 Life expectancy and physical health

- 6.3.1 As shown in Table 6.2, life expectancy at birth for both males and females in the ward study area is higher than all relevant comparators. District-level is the lowest geography that statistics for healthy life expectancy (i.e. the number of years spent in good health) are available. Healthy life expectancy for both males and females in the district study area is also higher than all relevant comparators.
- 6.3.2 Within the ward study area, emergency hospital admissions for all causes are lower than the England average. The same remains true when breaking this down into the specific underlying causes analysed (i.e. coronary heart disease, stroke, myocardial infarction and chronic obstructive pulmonary disease). In the absence of emergency hospital admissions data for cancer, statistics relating to incidence have been collected and shows that cancer incidence in the ward study area is marginally higher than the England average.
- 6.3.3 Mortality from all causes within the ward study area is lower than all relevant comparators. The same remains true when breaking this down into the specific underlying causes analysed (coronary heart disease, cancer, circulatory disease, stroke, respiratory disease and causes considered preventable <75 years).

Indicator	Date	Ward study area (Kidlington East and Wolvercote)	District study area (Cherwell and Oxford city)	Oxfordshire	South East	Englan d average
Life expectancy						
Life expectancy at birth for males	2015-19	83.2	80.7	81.6	80.3	79.7
Life expectancy at birth for females	2015-19	86.9	84.2	84.8	83.9	83.2
Healthy life expectancy for males	2012-14	n/a	n/a	68.3	65.6	63.4
Healthy life expectancy for females	2012-14	n/a	n/a	71.7	66.9	63.9
Hospital admissions/disease in	cidence					
Emergency hospital admissions for all causes (SAR)	2015-16 to 2019- 20	94.1	104.1	91.9	90.7	100
Emergency hospital admissions for coronary heart disease (SAR)	2015-16 to 2019- 20	82.2	86.1	73.6	75.8	100
Emergency hospital admissions for stroke (SAR)	2015-16 to 2019- 20	71.7	87.6	83.3	89.4	100

Table 6.2: Life expectancy and physical health statistics



Indicator	Date	Ward study area (Kidlington East and Wolvercote)	District study area (Cherwell and Oxford city)	Oxfordshire	South East	Englan d average			
Emergency hospital admissions for myocardial infarction (SAR)	2015-16 to 2019- 20	82.2	92.2	81.6	82.6	100			
Emergency hospital admissions for chronic obstructive pulmonary disease (SAR)	2015-16 to 2019- 20	63.8	93.7	63.6	71.3	100			
Emergency hospital admissions for hip fracture in 65+ (SAR)	2015-16 to 2019- 20	82	103.7	100	99.6	100			
Incidence of all cancer (SIR)	2012-16	100.7	99.4	97.8	100.4	100			
Mortality									
Deaths from all causes (SMR)	2015-19	68.9	92.1	87.6	92.4	100			
Deaths from cancer (SMR)	2015-19	83.4	93.1	88.9	95	100			
Deaths from circulatory disease (SMR)	2015-19	59.1	84.2	81.2	92	100			
Deaths from coronary heart disease (SMR)	2015-19	56.9	78.1	75.3	84.1	100			
Deaths from stroke (SMR)	2015-19	41.8	92.6	91.8	93.2	100			
Deaths from respiratory diseases (SMR)	2015-19	56.4	88.9	81.5	89.4	100			
Deaths from causes considered preventable, under 75 years (SMR)	2015-19	72	87.6	73.3	84.9	100			
Key:									
Better than the England aver	age								
Worse than the England ave	rage								

Source: OHID Local Health (OHID, n.d.), Office for National Statistics (Office for National Statistics, 2016; Office for National Statistics, 2016)

6.4 Mental health, lifestyle and behavioural risk factors

- 6.4.1 As shown in Table 6.3, hospital stays for self-harm within the local ward study area are higher than all relevant comparators. District-level is the lowest geography that statistics for suicide rate are available for. The rate of suicide in the district study area is lower than all relevant comparators.
- 6.4.2 In terms of lifestyle and behavioural risk factors, the prevalence of overweight and obese children in the ward study area is lower than all relevant comparators. Regarding the adult population, the percentage of adults who are classified as overweight or obese in the district study area is lower than both the regional and national averages. While this is the case, the percentage of adults in the district study area who are physically active is lower for all relevant comparators. Within the



ward study area, regular smoking at 15 years old is higher than all relevant comparators. The opposite is true for adults, whereby a lower proportion of the adult population living within the district study area smoke compared to the national average.

6.4.3 Data relating to the number of people who are killed or seriously injured is only available at the county level. This data indicates that the number of people killed or seriously injured per billion vehicle miles in Oxfordshire is lower than all relevant comparators.

Indicator	Date	Ward study area (Kidlington East and Wolvercot e)	District study area (Cherwell and Oxford city)	Oxfordshir e	South East	Englan d average
Mental health	-			•	-	
Hospital stays for self-harm (SAR)	2015-16 to 2019-20	121	104.6	102	108.8	100
Suicide rate (per 100,000 population)	2017-19	n/a	8.5	8.7	10.1	10.4
Lifestyle and behavioural risk fac	tors			-		
Smoking prevalence at 15 years (regular)	2014	6.9	5.7	5.7	5.7	5.4
Smoking prevalence in adults (18+) - current smokers	2019	n/a	12.7	12	12.2	13.9
Percentage of physically active adults	2019/20	n/a	63.1	73	69.5	66.4
Percentage of adults (aged 18+) classified as overweight or obese	2019/20	n/a	56.7	56.3	61.5	62.8
Reception: Prevalence of obesity (including severe obesity) (%)	2017-18, to 2019- 20	7.2	8.3	7.4	8.7	9.7
Year 6: Prevalence of obesity (including severe obesity) (%)	2017-18, to 2019- 20	15.2	17.6	16	17.9	20.4
Killed and seriously injured casualties on England's roads (per billion vehicle miles)	2020	n/a	n/a	72.8	95.4	86.1
Key:						
Better than the England average	ge					
Worse than the England avera	ge					

Table 6.3: Mental health, lifestyle and behavioural risk factor baseline statistics

Source: OHID Local Health (OHID, n.d.), OHID Fingertips (OHID, n.d.)



6.5 Local healthcare capacity

- 6.5.1 The proposed development is located within Buckinghamshire, Oxfordshire and Berkshire West Integrated Care Board (BOB ICB). The BOB ICB comprises 166 GP practices, covering three CCGs and a population of 1.8 million (NHS Oxfordshire, 2022). The sub-ICB location of Oxfordshire comprises 67 GP practices with a total of 50.12 FTE GPs (per 100,000 population), covering a population of 797,550 (NHS Digital, 2022). This equates to an average list size of 1,995 patients per GP, which exceeds the target of 1,800 patients per GP outlined by the HUDU Planning Contribution Model (NHS London Healthy Urban Development Unit, 2009), based on guidance from the Royal College of GPs.
- 6.5.2 Table 6.4 lists all GP practices within 1.2 miles (or 2 km) of the proposed development¹, the number of FTE GPs and patients at each practice, and the resultant calculated patient per GP ratio. The patient per GP ratio across the one GP practice listed equates to 2,375 patients per FTE GP. This is higher than the target list size of 1,800 patients per GP based on guidance from the Royal College of GPs. While this is the case, the surgery is still accepting new patients, which suggests some level of capacity is available.

Table 6.4: Local healthcare facilities within 1.2 miles (or 2 km) of the proposed development

Name	Distance from site (miles)	FTE GPs	Number of patients	Patients per GP	Accepting new patients?	Additional capacity
Wolvercote Surgery	1.1	7.68	18,241	2,375	Yes	0

Source: (NHS Digital, 2022; NHS, n.d.)

6.5.3 Table 6.5 extends the search to include GP practices within 5 miles of the proposed development. While the average patient per GP ratio across this set of 32 GP surgeries (of 2,194 patients per FTE GP) is also higher than the target list size of 1,800 patients per GP, a total of seven GP surgeries are below this target list size and have collective capacity for an additional 10,469 patients. As previously, all surgeries that exceed the target list size are accepting new patients, which suggests some level of capacity is available.

Table 6.5: Further local healthcare facilities within 5 miles of the proposed development

Name	Distance from site (miles)	FTE GPs	Number of patients	Patients per GP	Accepting new patients?	Additional capacity
Gosford Hill Medical Centre	1.4	4.12	7,299	1,772	Yes	117
Banbury Road Medical Centre	1.5	3.89	9,786	2,516	Yes	0
Summertown Health Centre	1.5	7.68	18,241	2,375	Yes	0
Cutteslowe Surgery	1.8	7.68	18,241	2,375	Yes	0

¹ 1.2 miles is equivalent to 2 km (i.e. the upper limit of what is considered a walkable distance between primary facilities and residential areas, with the greatest potential to replace short car trips)



Name	Distance from site (miles)	FTE GPs	Number of patients	Patients per GP	Accepting new patients?	Additional capacity
The Key Medical Practice	1.9	5.41	13,154	2,431	Yes	0
Yarnton Medical Practice	2	5.41	13,154	2,431	Yes	0
Dr Leaver & Partners	2.4	5.5	9,462	1,720	Yes	438
Observatory Medical Practice	2.5	5.02	12,106	2,412	Yes	0
Islip Surgery	2.5	3.59	6,397	1,782	Yes	65
Hedena Health Ltd at Marston Pharmacy	2.6	9.09	28,792	3,167	Yes	0
19 Beaumont Street Surgery	2.8	9.62	16,344	1,699	Yes	972
Dr Williamson	3	5.37	13,585	2,530	Yes	0
28 Beaumont Street	3	3.1	5,733	1,849	Yes	0
KES@Northgate	3	2.27	5,912	2,604	Yes	0
27 @ Northgate	3	3.8	7,245	1,907	Yes	0
Botley Medical Centre	3.1	5.37	13,585	2,530	Yes	0
Luther Street Medical Centre	3.4	2.27	453	200	Yes	3,633
Manor Surgery	3.4	10.27	19,146	1,864	Yes	0
St Clements Surgery	3.5	2.67	5,507	2,063	Yes	0
Oxford Brookes Medical Centre	3.5	9.72	21,326	2,194	Yes	0
St Bartholomew's Medical Centre	3.7	9.79	20,585	2,103	Yes	0
Hedena Health Ltd at Bury Knowle Health Centre	3.7	9.09	28,792	3,167	Yes	0
Cowley Road Medical Practice	3.8	5.28	10,789	2,043	Yes	0
Bartlemas Surgery	3.8	5.38	9,541	1,773	Yes	143
Hedena Health Ltd at Barton Surgery	3.8	9.09	28,792	3,167	Yes	0
South Oxford Health Centre	3.9	9.72	21,326	2,194	Yes	0
Donnington Medical Partnership	4.5	6.28	12,889	2,052	Yes	0
Eynsham Medical Group	4.5	6.87	15,442	2,248	Yes	0
Hedena Health Ltd at Wood Farm Health Centre	4.6	9.09	28,792	3,167	Yes	0
Temple Cowley Medical Group	4.9	3.47	8,323	2,399	Yes	0
Hollow Way Medical Centre	5	7.8	8,939	1,146	Yes	5,101
Dr Turner and Partners	5	3.99	9,335	2,340	Yes	0
					Total	10,469

Source: (NHS Digital, 2022; NHS, n.d.)



6.6 Conclusion

- 6.6.1 Overall, the population living within the study area is more elderly than average. Socio-economic statistics show that deprivation levels are low across all age groups, however, educational achievement falls below the relevant comparators.
- 6.6.2 The physical health of the population living within the study area is very good, whereby incidence of cancer is the only indicator to show levels which are higher than the relevant comparators, albeit only marginally so. Mental health indicators show higher than average levels of self-harm but lower than average levels of suicide. In terms of lifestyle factors, the prevalence of obesity in the child and adult populations is low; despite this, the percentage of physically active adults is also lower than average. Smoking prevalence is higher than average in children but lower than average in adults. Generally across the county, road safety is considered good (albeit, this is not to say that there are exceptions locally).
- 6.6.3 Analysis of local healthcare capacity shows that all GP surgeries are accepting new patients, which suggests some level of capacity is available. Furthermore, and a total of seven nearby GP surgeries are below this target list size and have collective capacity for an additional 10,469 patients.



7 Consultation

7.1 Introduction

7.1.1 The design process for PR6a has been subject to various stages of community engagement, discussions with various stakeholders and the general public which includes workshops, site visits and consultations with the Parish, Oxford City Council (OCC), Cherwell District Council (CDC), Oxfordshire County Council (OXCC), and CDC's advisors on the development brief.

7.2 Enquiry by Design

- 7.2.1 A virtual 'Enquiry by Design' (EbyD) was held in July 2021 over a period of five days. This workshop involved participants representing residents and local stakeholder groups involved with the project. Officers from OXCC and Local Authorities (CDC) were also present in a listening capacity.
- 7.2.2 A team of facilitators and advisors set out the initial thoughts and ideas for the site in relation to the key principles of design, including: vision and principles, community and character; uses and connectivity; minimising carbon impacts, and living healthily with nature. Discussions were held during the workshop regarding stewardship, character and identity, mix and location of land uses, green infrastructure, heritage, connectivity and sustainable travel to major hubs, health and wellbeing, energy, climate mitigation and minimising carbon impacts.
- 7.2.3 The facilitators engaged in productive dialogue with the participants, identifying key issues and concerns and working on potential solutions where appropriate, noting these on virtual post-it notes using an online 'Mural'. The final session drew together the responses with the production of a draft masterplan that was subject to critique from the participating stakeholders.
- 7.2.4 Several concerns and comments were captured during EbyD, which eventually led to the draft of the first masterplan. The following suggestions were considered in the design
 - agreement in principle that the primary school and the local centre should be centrally located, close together;
 - the need to create a strong community through shared use of facilities and amenities on site;
 - a pedestrian bridge to be considered for crossing Oxford Road into PR6b and beyond;
 - the need to conserve, protect and enhance wildlife habitats on site; and
 - using the multi-functional green open spaces for wildlife, health and wellbeing.

7.3 Design Review Panel

7.3.1 The first draft of masterplan from the EbyD was used for the Design Review Panel in September 2021 for further consideration and feedback. A second design review was carried out in March 2022. The significant amount of work undertaken since the previous session was acknowledged, with the main conclusions being:



- an additional pedestrian crossing along Oxford Road to the north of the site may be beneficial;
- further consideration is needed regarding the relationship between the highway, cycle route & pedestrian footway along the Oxford Road; and
- it was felt the local centre should be located in a commercially viable location that is positioned within walking distance of the largest number of residents.

7.4 Public consultation

- 7.4.1 The first stage of public consultation was held in October 2021, introducing the site to the public and presenting information on the emerging masterplan and the site's vision. Following this, design development public consultation was held in June and July 2022 to invite views on certain fundamental aspects of the emerging masterplan, access arrangements and designs for the Oxford Road corridor. The final stage of public consultation was held in December 2022/January 2023 to invite views on the updated masterplan following feedback received in the design development consultation.
- 7.4.2 Each stage was designed to create opportunities to develop and refine the proposed masterplan and key elements of the site. Between each stage, the applicants and their consultant team held additional meetings to help understand issues and gather feedback.
- 7.4.3 Of particular relevance to health and wellbeing, the following comments were made:
 - The school should be located away from main roads because of pollution and related health concerns.
 - Consideration should be given to healthcare services, with suggestions to include a dentist and GP within the proposed development.

7.5 Health specific consultation

7.5.1 With regards to consultation relating to the HIA specifically, Rosie Rowe (Head of Healthy Place Shaping at OXCC was engaged with on 8 August 2022 via email regarding the use of the methodology outlined in the Oxfordshire HIA toolkit and HIA TAN for the planning application relating to the proposed development. A response was provided on 9 August 2022, with the methodology proposed being agreed.



8 Assessment

- 8.1.1 The assessment provided in Table 8.1 to Table 8.11 appraises the potential health and wellbeing impacts following the requirements set out in the Oxfordshire HIA toolkit (Oxfordshire County Council, 2021).
- 8.1.2 As previously stated, the assessment criteria themes comprise:
 - housing;
 - physical activity;
 - healthy food environments;
 - air quality;
 - noise;
 - traffic and transportation;
 - crime and anti-social behaviour;
 - economy and employment;
 - education and skills;
 - local natural environment and access to green spaces; and
 - access to services.
- 8.1.3 Each theme comprises several criteria and guide the user through a process of establishing a baseline of the existing situation, building an evidence base around health impacts associated with a health priority, and identification of likely effects (positive and negative), as well as the population groups likely to experience these effects.

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Section	Response
Baseline	The baseline traffic flow environment is as described in full within Chapter 5 of the Environmental Statement (ES): Transport. In terms of walking/cycling connectivity, a network of footpath and bridleways are located within and around the PR6a site leading to surrounding areas. The public rights of way include Bridleway 229/9/30 running east from Oxford Road along the Water Eaton access track and Public Footpath 229/10/30 routes west from Oxford Road along the Water Eaton access track and Public Footpath 229/10/30 routes west from Oxford Road across the North Oxford golf club (PR6b site) and across the railway line to the west. There are two national cycle routes in close proximity to the site: Sustrans Varsity Way - Route 51 Oxford to Cambridge runs across the site's western frontage, along the A4165 Oxford Road/ Banbury Road; and Sustrans Shakespeare Cycleway – Route 5 Stratford-upon-Avon to London runs east of the site are located approximately 200m northwest of the site boundary at Oxford Parkway and in the immediate vicinity of the southwestern boundary of the site at the junction of Jordan Hill on Oxford Road. Additional bus stops are also located further south on Oxford Road / Banbury Road. In summary, Oxford Road cirrs a high frequency bus corridor with bus services throughout the day linking the Site with a number of key destinations including Oxford city centre, Churchill Hospital, John Radcliffe Hospital and Kidlington. The nearest railway station to the site is Oxford Parkway situated immediately to the north of the site. It is on the line between Oxford and Bicester. Chapter 5 of the ES: Transport provides a summary of Personal Injury Accident Data obtained from OXCC for the latest five-year period between 1 January to 30 June. A total of 12 recorded injury accidents cocurred along the Oxford Road / Banbury Road corridor between the Kidlington and Cutteslowe Roundabouts within the vicinity of the Site. One of these accidents was fatal and occurred at the Oxford Parkway junction when a HGV was turn
Evidence	 The following evidence base, as referenced in Section 4, is applicable to the assessment of traffic and transportation: Transport, Health & Wellbeing: An evidence review for the Department for Transport PHE, Spatial planning for health: An evidence resource for planning and designing healthier places

Table 8.1: Assessment of traffic and transportation



Section	Response
Stakeholder engagement	A full account of stakeholder engagement is provided in the Statement of Community Involvement. No specific comments were made with regards to health and wellbeing impacts associated with changes in traffic nature/flow rate.
Health effects	 As detailed in Chapter 5 of the ES: Transport, during the construction phase, appropriate management of any demolition and construction traffic will be undertaken, including: The use of appropriate and approved routes for construction vehicles including approved routing plans; The management of working hours and delivery times to minimise disturbance caused by traffic (e.g. avoiding deliveries during peak hours); Covering loads coming to and leaving the development; Provision of wheel washing / vehicle cleaning facilities on site; and Inspection of local highway network and cleaning as necessary. The above measures will be secured by a suitably worded planning condition for a Construction Environment Management Plan (CEMP) and Construction Traffic Management Plan (CTMP) should it be required. The proposed development site is one of the most sustainable locations for new development in Oxfordshire connected by public transport. While this is the case, it is proposed to add a new bus stop on the Oxford Road to serve the site, and there are opportunities to provide permeability in the site to allow easy pedestrian access to a new bus stop, centrally located. The strategy is to create a walkable neighbourhood, reducing resident dependency on cars. Specifically, the proposed development would provide a local centre (which could include local convenience retail, business space for professional uses; a cafe or restaurant, and floorspace for community uses such as healthcare and community/social use) that is strategically in a central location close to the new primary school so that the two facilities are easily accessible by walking and cycling from residential areas. In addition, a dedicated cycle route through the centre of the site will provide an alternative cycling route to Oxford Parkway Station and Park and Ride. Furthermore, a walking/cycling super highway along the eastern side of A4165 Oxford Road; the existing Oxford Ro



Section	Response
	Externally, to encourage walking, cycling and to increase the use of public transportation to wider areas such as Summertown, Kidlington, Oxford and beyond, it is essential to improve the existing infrastructure at Kidlington roundabout and Oxford Road. It is also proposed to revamp the existing Oxford Road to incorporate a widened pavement for walking and to provide a segregated cycling lane on either side of the carriageway, The revamp is to also include a bus lane to ensure that public transport services run efficiently from Park and Ride to Oxford, and from Kidlington to Oxford.
Vulnerable groups affected	No vulnerable groups anticipated to be adversely affected, however the development has opportunities to improve the circumstance of a wide array of protected characteristics through new and improved public realm and housing stock quality, affordability, adaptability and accessibility, facilitating social connectivity and healthy independent living for longer.
Summary	Overall, the proposed development seeks to prioritise walking, cycling and travel by public transport, with associated health and wellbeing benefits.
	Should it be deemed necessary, mitigation measures during the construction would be secured by a suitably worded planning condition for a Construction Environment Management Plan (CEMP) and Construction Traffic Management Plan (CTMP), which is protective of health and wellbeing.
Mitigation/enhancement	During operation, several enhancement measures are proposed to address barriers to active transport improving physical, mental and social health opportunities.
	Based on the conclusion that no material adverse health and wellbeing impacts are likely, and health promotion is driven through the healthy urban design principles proposed, no health specific mitigation or enhancement measures are necessary.



Section	Response
Baseline	The baseline economic environment is as described in full within Chapter 13 of the ES: Population and Economic Effects. Furthermore, as detailed in Table 6.1, unemployment and long-term unemployment rates in the ward study area are lower than all relevant comparators (1.3% and 0.8%, respectively, compared to the national average of 2.8% and 3.2%). Most notably, both long-term unemployment rates in the ward study area are four times less than the England average.
Evidence	 The following evidence base, as referenced in Section 4, is applicable to the assessment of economy and employment: PHE, Local action on health inequalities: Increasing employment opportunities and improving workplace health Department for Work and Pensions, Is work good for your health and well-being? The Health Foundation, What makes us healthy? An introduction to the social determinants of health
Stakeholder engagement	A full account of stakeholder engagement is provided in the Statement of Community Involvement. No specific comments were made with regards to health and wellbeing impacts associated with changes in economic and employment factors.
Health effects	 Access to good quality and long term employment is a key wider determinant of good health and wellbeing and can contribute to delivering a sustainable and vibrant community. As detailed in Chapter 13 of the ES: Population and Economic Effects, a survey for the House Builders Federation (HBF) and the Construction Industry Training Board indicates that, on average, the construction of a new dwelling requires the input of 1.5 people in the construction workforce each year. If it is assumed that an average of 100 new dwellings at Water Eaton are completed each year, then the housing development would directly support 150 full time equivalent jobs in construction over the delivery period. For construction of the local centre and Primary school, an estimate of the number of construction workers required can be made using information published by Homes England, formerly The Homes & Communities Agency (HCA). For private commercial development, a coefficient of 13 jobs per £1 million are estimated to be generated. A total construction cost of £15 million could therefore support c.195 'worker years'. Assuming a construction period of 2 years for the local centre and the school, the development would therefore support a further c.100 jobs in the construction industry alongside the housing delivery. Once occupied, residents will have access to a local centre, which could include local convenience retail (food store, pharmacy, post office), business space for professional uses; a café or restaurant, and floorspace for community uses such as healthcare and community/social use. While the exact magnitude is not known, the infrastructure provided within the local centre would generate a number of direct long-term

Table 8.2: Assessment of economy and employment



Section	Response
	located approximately 3.3 miles from the site, and provides an existing hub of employment which can be accessed by public and active transport. Oxford Parkway Station also provides frequent services to destinations including Oxford, London Marylebone and Bicester.
Vulnerable groups affected	No vulnerable groups anticipated to be adversely affected, however the development has opportunities to improve the circumstance of a wide array of vulnerable groups and protected characteristics through direct, indirect and induced income and employment opportunities.
Summary	Overall, the construction phase would provide a number of temporary employment opportunities. Furthermore, once occupied a range of long-term employment opportunities would be generated, particularly as part of the local centre and primary school. As a key wider determinant of health and wellbeing, the employment opportunities provided during the construction and operational phases of the proposed development would be beneficial to health and wellbeing.
Mitigation/enhancement	Based on the conclusion that no material adverse health and wellbeing impacts are considered likely, and health promotion is driven through the healthy urban design principles proposed, no health specific mitigation or enhancement measures are necessary.



Section	Response
Baseline	The baseline air quality environment is as described in Chapter 6 of the ES: Air Quality. In summary, background pollutant concentrations of NO ₂ , PM ₁₀ and PM _{2.5} are below the relevant air quality objective thresholds, set to be protective of the environment and human health. The local air quality environment primarily affects respiratory health, whereby as detailed in Table 6.2, emergency mortality rates associated with respiratory disease in the ward study area (56.4 SMR) is lower than all relevant comparators. Furthermore, hospital admission rates for COPD in the ward study area (63.8 SAR) is also lower than all relevant comparators.
Evidence	 The following evidence base, as referenced in Section 4 of this report, is applicable to the assessment of air quality: PHE, Review of interventions to improve outdoor air quality and public health PHE, Health Matters: Air Pollution Committee on the Medical Effects of Air Pollutants (COMEAP) Understanding the health impacts of air pollution in London, King's College London The Lancet Commission on pollution and health National Planning Policy Framework (NPPF) (Chapters 4, 9, 13 and 15)
Stakeholder engagement	A full account of stakeholder engagement is provided in the Statement of Community Involvement. It was raised that the school should be located away from main roads because of pollution and health related concerns; it should be noted that this has been incorporated into the Illustrative Masterplan.
	As detailed in Chapter 6 of the ES: Air Quality, there is potential for temporary dust emissions associated with earthwork activities, on-site construction and through trackout. However, following the implementation of appropriate mitigation measures (anticipated to be secured through a CEMP), the residual effect from all dust generation activities is predicted to be negligible. The associated impact on health and wellbeing is therefore also considered to be negligible, and not of a magnitude, nature, exposure or duration to quantify any change in local health.
Health effects	In terms of site suitability, annual mean concentrations of NO ₂ , PM ₁₀ and PM _{2.5} concentrations were predicted across the proposed development for the 2025 do-something scenario. Results indicate that there would be no exceedance of the relevant air quality objective thresholds set to be protective of the environment and human health for any pollutant of concern. As such, the local air quality environment at the site is considered to be suitable for the proposed end use to protect the health and wellbeing of future site users.
	As previously detailed in Table 8.1, the strategy is to create a walkable neighbourhood, reducing resident dependency on cars and encouraging active travel. While this is the case, as detailed in Chapter 6 of the ES: Air Quality, there will be some additional vehicle

Table 8.3: Assessment of air quality



Section	Response
	movements associated with the operation of the proposed development which will generate exhaust emissions, such as NO ₂ , PM ₁₀ and PM _{2.5} on the local and regional road networks. Overall, it is expected that there will be 1,123 Annual Average Daily Traffic (AADT) trips generated by the Proposed Development. Results show that the maximum change in NO ₂ , PM ₁₀ and PM _{2.5} concentrations are predicted to be 0.33 µg/m ³ , 0.1 µg/m ³ and 0.06 µg/m ³ , respectively, which in air quality terms is considered to be negligible. This predicted negligible increase in air quality is not anticipated to have any measurable adverse impact on population health outcomes locally.
Vulnerable groups affected	While children, the elderly and individuals with existing health conditions are more susceptible to changes in local air quality, air quality objective thresholds would not be exceeded either on-site or at nearby sensitive receptors that have been assessed, and therefore these more vulnerable groups are not considered to be disproportionately affected.
Summary	Overall, potential air quality impacts during construction would be mitigated to a level which is negligible and would not adversely impact health and wellbeing. Furthermore, during operation, the proposed development seeks to reduce dependency on cars and air quality on-site and at nearby sensitive receptors would remain within objective thresholds set to be protective of the environment and human health. On this basis, no material adverse health and wellbeing impacts are considered likely.
Mitigation/enhancement	Mitigation measures are proposed to control the release of dust during the construction phase (anticipated to be secured through a CEMP), which is protective of health and wellbeing.
	Based on the conclusion that no material adverse health and wellbeing impacts are considered likely, no health specific mitigation or enhancement measures are necessary.



Table 8.4: Assessment of noise			
Section	Response		
Baseline	The baseline noise environment is as described in Chapter 7 of the ES: Noise and Vibration. In summary, during the day time period (07:00-23:00), the typical background level A90 is between 51 and 52 dB. During the night time period (23:00-07:00), the typical background level A90 is between 42 dB and 43 dB. Chronic noise health impacts are largely associated with cardiovascular health, as detailed in Table 6.2, the relevant health baseline indicators includes emergency mortality rates associated with circulatory disease, coronary heart disease and stroke in the ward study area (59.1, 56.9 and 41.8 SMR, respectively). These are lower than all relevant comparators. Furthermore, hospital admission rates for coronary heart disease, stroke and myocardial infarction in the ward study area (82.2, 71.7 and 82.2 SAR) are also lower than all relevant comparators.		
Evidence	 The following evidence base, as referenced in Section 4, is applicable to the assessment of noise: Institute of Acoustics, Professional Practice Guidance on Planning and Noise Defra, Noise Policy Statement for England (NPSE) European Environment Agency, Good practice guide on noise exposure and potential health effects NPPF (Chapter 15) European Commission, Environmental Noise Directive 		
Stakeholder engagement	A full account of stakeholder engagement is provided in the Statement of Community Involvement. It was raised that the school should be located away from main roads because of pollution and health related concerns.		
Health effects	Construction noise limits, which are protective of the environment and human health, have been established for the day, evening and night time periods at 65 dB, 65 dB and 55 dB, respectively. During the construction phase, noise mitigation measures, detailed within a CEMP, would be implemented in order to adhere to these limits and protect noise sensitive receptors. On this basis, and due to the temporary nature of the construction phase (where any noise generated would be intermittent and transient in nature) no adverse health and wellbeing impacts are anticipated. In order to reduce internal noise levels during operation, proposed design measures include use of double glazing and careful consideration of internal room layout (e.g. within school buildings). In addition, garden fences would be installed to protect external amenity. It is anticipated that the noise criteria set out in the WHO Guidelines for Community Noise will be met within bedrooms and living areas. Regarding external amenity, the predicted noise levels in the gardens of the new properties will be up to LAeq, 16h 50 dB for the majority of properties at the site		

Table 8.4: Assessment of noise



Section	Response
	without any mitigation measures in place; and all properties will experience external amenity area noise levels below the upper noise level target of LAeq,16h 55 dB (i.e. for properties facing onto Oxford Road).
	Changes in noise levels associated with traffic flows generated by the proposed development would be negligible in all instances, i.e. an increase of <1 dB which is an imperceptible change.
Vulnerable groups affected	No vulnerable groups anticipated to be disproportionately affected on the basis that construction noise limits would be adhered to following the implementation of mitigation measures; design measures would limit internal noise during operation; and external amenity space would remain below the upper noise level target in all instances, and lower in the majority of external spaces.
Summary	Overall the proposed development is considered to be located in a suitable noise environment which is protective of health and wellbeing. Furthermore, the noise generated by the proposed development at existing receptors would be imperceptible.
	Mitigation measures as part of the design are proposed to reduce exposure to noise, which is protective of health and wellbeing.
Mitigation/enhancement	Based on the conclusion that no material adverse health and wellbeing impacts are considered likely, no health specific mitigation or enhancement measures are necessary.



Section	Response
Baseline	There are a total of five fast food outlets within the ward study area, four being located in Kidlington East ward and one being located in Wolvercote ward (Public Health England, 2018).
	As detailed in Table 6.3, the prevalence of obesity in those who are in Reception and Year 6 (7.2% and 15.2%, respectively) is lower than all relevant comparators. Regarding the adult population, the percentage of adults who are classified as overweight or obese in the district study area is lower than both the regional and national averages.
Evidence	 The following evidence base, as referenced in Section 4, is applicable to the assessment of healthy food environments: PHE, Strategies for Encouraging Healthier 'Out of Home' Food Provision PHE, Healthy High Streets Good place-making in an urban setting NPPF (Chapters 7, 8 and 12) <u>https://www.rsph.org.uk/our-work/campaigns/health-on-the-high-street/2015.html</u> <u>https://www.foodforlife.org.uk/~/media/files/evaluation%20reports/impactreportfinalpdf7716.pdf</u>
Stakeholder engagement	A full account of stakeholder engagement is provided in the Statement of Community Involvement. No specific comments were made with regards to health and wellbeing impacts associated with healthy food environments.
Health effects	The proposed development includes opportunities to grow local and healthy food through provision of community gardens, orchards and allotments. Furthermore, the community at Water Eaton can be enabled to take ownership and maintenance of these spaces by forming a long-term stewardship body. The allotments will be placed within the development rather than along the periphery to provide 'hubs' of activity. In addition, the proposed development would incorporate 'edible streets' that will provide fruit trees and herbs that are available to all residents from public areas.
	Furthermore, the proposed development will provide a local centre to ensure services and amenities are accessible locally. The local centre could include two or three local shops (which could include a food store). While beyond the influence of this application, it is possible that fast food outlets/hot food takeaways could be provided within the local centre. However, it is not anticipated that this would result in any overconcentration which would result in adverse health and wellbeing outcomes.
Vulnerable groups affected	No vulnerable groups anticipated to be adversely affected.

Table 8.5: Assessment of healthy food environments



Section	Response
Summary	On the basis that the proposed development provides opportunities for access to healthy foods and is not anticipated to contribute to an overconcentration of fast food outlets, no adverse health and wellbeing impacts are anticipated.
Mitigation/enhancement	None proposed.



Section	Response
	As detailed in Chapter 5 of the ES: Transport, in terms of walking/cycling connectivity, a network of footpath and bridleways are located within and around the PR6a site leading to surrounding areas. The public rights of way include Bridleway 229/9/30 running east from Oxford Road along the Water Eaton access track and Public Footpath 229/8/10 running to the south of St. Frideswide's Farm. In addition, Public Footpath 229/10/30 routes west from Oxford Road across the North Oxford golf club (PR6b site) and across the railway line to the west.
Baseline	There are two national cycle routes in close proximity to the site: Sustrans Varsity Way - Route 51 Oxford to Cambridge runs across the site's western frontage, along the A4165 Oxford Road/ Banbury Road; and Sustrans Shakespeare Cycleway – Route 5 Stratford-upon-Avon to London runs east of the site, accessible via the A40 or A4165 Banbury Road.
	As detailed in Table 6.3, the percentage of adults in the district study area who are physically active is lower than all relevant comparators.
	The proposed development is located near to areas of open space. Most notably, to the south of the site is Cutteslowe Park and north-west of the site is Stratfield Brake Sports Ground.
	The following evidence base, as referenced in Section 4, is applicable to the assessment of physical activity:
Evidence	 The Government's 25 Year Environment Plan (Chapter 3) Sporting Future: A New Strategy for an Active Nation
	 Health and the natural environment: A review of evidence, policy, practice and opportunities for the future Spatial planning for health: An evidence resource for planning and designing healthier places
Stakeholder engagement	A full account of stakeholder engagement is provided in the Statement of Community Involvement. No specific comments were made with regards to health and wellbeing impacts associated with opportunities for physical activity.
Health effects	The strategy is to create a walkable neighbourhood, reducing resident dependency on cars. Every home is within 5-10 minutes walk of the local centre, enabling residents to carry out day-to-day tasks without the need of a car. In addition, the location of the primary school promotes access on foot or by bicycle and a permeable street network provide a choice of routes across the site, prioritising walking and cycling. Externally, improvements will be made to existing off-site infrastructure at Kidlington roundabout and Oxford Road to encourage walking and cycling (e.g. through widening pavements, providing a segregated cycle lane).
	A green network will be created that maximises opportunities for healthy play and leisure. While smaller green spaces will be located within a short walk (2-5 minutes) for all residents, a green infrastructure corridor will be delivered to the east of the development area and green

Table 8.6: Assessment of physical activity



Section	Response
	'fingers' within the housing/development area are proposed to link the development to the larger green spaces on the eastern edge of the scheme. There will be routes designed for 5km and 10km running and walking and recreational routes for dog walking.
	 More formally, a range of different types of play space are to be provided within the site in safe, and accessible locations. Specifically, these include: two Local Area for Play (LAP), for 2 to 6-year old children; a Local Equipped Area for Play (LEAP), for children aged 4 to 8; a combined LAP and LEAP; and a Neighbourhood Equipped Area of Play; and a Multi-Use Games Area (MUGA).
	Furthermore, community gardens, orchards and allotments will all be provided as part of the proposed development. The allotments specifically will be placed within the development rather than along the periphery to provide 'hubs' of physical activity and social interaction.
Vulnerable groups affected	Through encouraging use of active modes of transport and providing formal and informal opportunities for physical activity, there is potential for young people and individuals with existing mental health conditions to benefit from the proposed development.
Summary	Overall, the proposed development provides a range of formal and informal opportunities for physical activity and recreation for individuals across a range of ages to enjoy. By encouraging these healthy behaviours, the proposed development facilitates good health and wellbeing.
Mitigation/enhancement	None proposed.

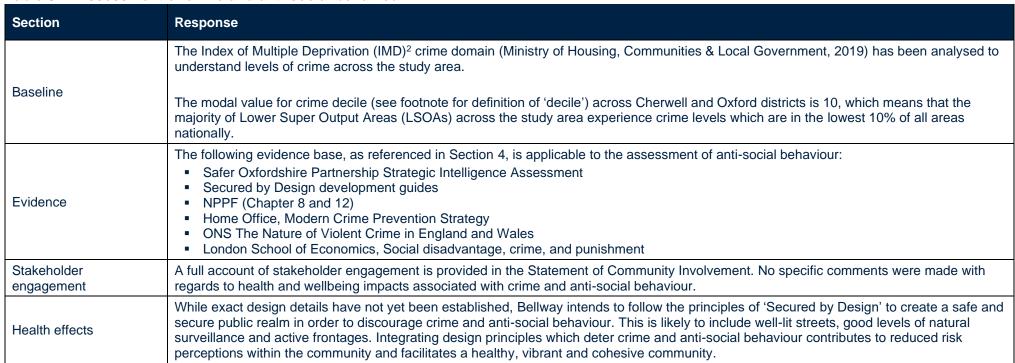


Table 8.7: Assessment of crime and anti-social behaviour

² The Index of Multiple Deprivation (IMD) is a measure of relative deprivation for small areas (Lower Super Output Areas (LSOAs). It is a combined measure of deprivation based on a total of 37 separate indicators that have been grouped into seven domains, each of which reflects a different aspect of deprivation experienced by individuals living in an area. Every Lower Super Output Area (LSOA) in England is given a score for each of the domains and a combined score for the overall index. This score is used to rank all the LSOAs in England from the most deprived to the least deprived, allowing users to identify how deprived areas are relative to others. The list of LSOAs in England (or Herefordshire) is placed in order and divided into ten equal parts, called deciles. An LSOA is in the top 10% nationally if it falls within the 10% least deprived areas in England.



Section	Response
Vulnerable groups affected	Creating a secure and safe neighbourhood would encourage social interaction in public places, which is particularly important for the elderly.
Summary	Overall, the proposed development intends to create a safe and secure public realm which would discourage crime and anti-social behaviour.
Mitigation/enhancement	Consider secured by design principles during detailed design.



Section	Response	
	As detailed in Chapter 13 of the ES: Population and Economic Effects, there is potential capacity for pupils at Edward Feild Primary school and Gosford Hill Secondary school which include the Water Eaton location within their catchment area, as well as capacity within other schools in the Oxford area such as Cutteslowe Primary school which can be accessed from the site via footpaths. There are four schools catering for Special Education Needs within 5 km of the site, and also 11 independent schools in the area.	
Baseline	As detailed in Table 6.1 of this report, the average attainment 8 score in the district study area is worse than all relevant comparators, but marginally so. In addition, the IMD education and skills domain (Ministry of Housing, Communities & Local Government, 2019) has been analysed to understand levels of education and skills across the study area. The modal value for education and skills decile across Cherwell and Oxford districts is 9, which means that the majority of LSOAs across the study area have education attainment and/or skill levels which are in the least 20% deprived of all areas nationally.	
Evidence	 The following evidence base, as referenced in Section 4, is applicable to the assessment of education and skills: Fair Society, Healthy Lives, The Marmot Review ONS, An overview of lifestyles and wider characteristics linked to Healthy Life Expectancy OECD (2019), Health at a Glance 2019: OECD Indicators The Wellbeing Effect of Education NPPF (Chapters 6 and 7) https://www.foodforlife.org.uk/~/media/files/policyreports/state-of-the-nation-soil-association-report.pdf 	
Stakeholder engagement	A full account of stakeholder engagement is provided in the Statement of Community Involvement. No specific comments were made with regards to health and wellbeing impacts associated with education and skills.	
Health effects	Land is included in the layout for the provision of a two-from entry primary school on a 2.2 ha site. This could include early-years provision, and/or space for childcare could also be accommodated in a community centre part of the local centre building. Secondary education and Special Educational Needs and Disability (SEND) provision would be provided off-site. The detail would be confirmed by OXCC, taking into account the wider situation of population growth in and around the area. The Partial Review identifies the provision of a new Secondary school as part of the PR8 Begbroke scheme to meet the needs of the Cherwell Local Plan sites. The scale of this school will be defined as the timescales of the different developments become clearer, and whether any of the need generated can be met on existing school sites. Financial contribution would be contributed in a proportionate amount for the Water Eaton scheme for Secondary school places and for SEND.	

Table 8.8: Assessment of education and skills



Section	Response
	The resultant impact on education would be negligible on the basis that infrastructure and/or financial contributions provided would result in meeting any potential additional demand for school places.
Vulnerable groups affected	No vulnerable groups anticipated to be adversely affected.
Summary	In summary, the proposed development would include a two-form entry primary school. Overall, the provision of any education infrastructure and/or financial contributions towards off-site provision would result in meeting any potential additional demand for school places.
Mitigation/enhancement	None proposed.



Section	Response
Baseline	The Water Eaton land is almost entirely arable farmland, with some existing hedgerows and trees along the Oxford Road frontage, on the site boundaries and within the site's boundary. The southern boundary of the site adjoins Cutteslowe Park; in addition, two public rights of way/bridleways cross the site east-west. The IMD living environment domain (Ministry of Housing, Communities & Local Government, 2019) has been analysed to understand levels of education and skills across the study area. There are two sub-domains comprising the indoor and outdoor living environment; the 'indoors'
	living environment measures the quality of housing, while the 'outdoors' living environment contains measures of air quality and road traffic accidents. The modal value for living environment decile across Cherwell and Oxford districts is 5, which means that the majority of LSOAs across the study area have a living environment which is similar to the national average.
Evidence	 The following evidence base, as referenced in Section 4, is applicable to the assessment of natural environment: PHE, Spatial Planning for Health: An evidence resource for planning and designing healthier places PHE, Local action on health inequalities: Improving access to green spaces NPPF (Chapters 8, 13 and 15) The Government's 25 Year Environment Plan (Chapter 3) Natural England, Links between natural environments and mental health
Stakeholder engagement	A full account of stakeholder engagement is provided in the Statement of Community Involvement. No specific comments were made with regards to health and wellbeing impacts associated with changes in the natural environment.
Health effects	As detailed in the Design and Access Statement, a green infrastructure corridor will be delivered to the east of the development area together with an extension to Cutteslowe Park to the south-east of the site. The eastern side of the site is lower lying land, and therefore suitable for rain-water retention during storm events. This allows the creation of ponds and natural features that will serve multiple purposes for storm water attenuation and wildlife habitat creation. On this eastern side of the site, a route will be provided for leisure use that will meander through wildlife zones, ponds and copses, linking to play areas, pocket parks and exercise areas. A more formal, wheelchair accessible route will link through the length of the site, with informal mown footpaths being established in the parkland adjacent to Cutteslowe Park.
	In addition, green 'fingers' within the housing/development area are proposed that link the development to the larger green spaces on the eastern edge of the scheme. The green 'fingers' follow existing natural locations for overland rainwater flow.

Table 8.9: Assessment of natural environment



Section	Response
Vulnerable groups affected	The proposed development has been designed to enable access for all, including accessible signposting and wayfinding (dementia and neurodiversity friendly design). On this basis, individuals with mobility issues will be beneficially impacted as a result, and the site will be inclusive, supporting healthy independent living for longer.
Summary	Overall, the natural environment is a key consideration of the proposed development design, whereby an interconnected network of green space is integrated throughout the proposed development. This provides opportunities for physical activity and recreation for people of all ages.
Mitigation/enhancement	None necessary.



able 8.10: Assessment of housing		
Section	Response	
Baseline	As detailed in Table 6.1, the proportion of the population within the study area living in overcrowded houses or who are in fuel poverty is lower than all relevant comparators. In addition, the IMD barriers to housing domain (Ministry of Housing, Communities & Local Government, 2019) has been analysed to understand levels of education and skills across the study area. The modal value for barriers to housing decile across Cherwell and Oxford districts is 5, which means that the majority of LSOAs across the study area have a living environment which is similar to the national average.	
Evidence	 The following evidence base, as referenced in Section 4, is applicable to the assessment of housing: PHE, Spatial Planning for Health: An evidence resource for planning and designing healthier places Department for Business, Energy and Industrial Strategy, Fuel Poverty Statistics NPPF (Chapters 5, 8 and 12) The Health Foundation, What makes us healthy? An introduction to the social determinants of health 	
Stakeholder engagement	A full account of stakeholder engagement is provided in the Statement of Community Involvement. No specific comments were made with regards to health and wellbeing impacts associated with the housing being provided.	
Health effects	The site is allocated for development in the Cherwell Local Plan 2031 (Part 1) Partial Review. Consistent with this policy, the proposed development would provide up to 800 new homes, 50% of which would be affordable in nature. There would be a range of densities provided across the site; specifically, high density buildings (three to five storey apartments) would be located adjacent to the Oxford Road, receding in density towards the eastern edge of the site.	
	The identification of the precise mix of housing to be delivered will take into consideration the housing mix requirements of the Strategic Housing Market Assessment (SHMA). Consideration will also be given to the significant changes which have been experienced in the housing market since the SHMA was published. This change in mix is due to the strong demand for larger properties to allow for home working and space in response to changing life/work patterns with more people now regularly working from home. There is also a demand for family accommodation in the local area and a lack of family housing within Oxford. The mix of housing which needs to be delivered also addresses the requirement to include First Homes.	
	As detailed in the Sustainability and Energy Statement, housing will be energy efficient; while the exact specification will be developed during detailed design, buildings will have high fabric standards, all-electric heat pumps and solar generation. These measures will reduce energy demand and bills significantly and place the dwellings on the path to a net zero future. Furthermore, water efficient fixtures and fittings will be installed to meet the 110l/p/d target within the Cherwell Local Plan.	

Table 8.10: Assessment of housing



Section	Response
	In addition, the design process has followed the Design Council 'Principles of inclusive design' and this will extend to the detailed design of the proposals, which includes inclusive access to places and buildings, and adaptability of design.
Vulnerable groups affected	The elderly and those with mobility issues (including those with physical disabilities) would be beneficially affected by provision of housing that is accessible and adaptable. In addition, individuals within lower income groups would benefit from the provision of 50% affordable housing.
Summary	Overall, the proposed development is designed as a place for inclusive living, whereby the housing mix that caters for all types of residents from all backgrounds and age ranges.
Mitigation/enhancement	Provide details on accessibility and adaptability of internal housing environments.



Section	Response
Baseline	A description of existing local facilities and services is provided in the Planning Statement and Transport Assessment. Complementary to this, a more extensive summary of local healthcare capacity is provided in Section 6.5 of this report. To summarise, there is only one GP surgery (Wolvercote Surgery) located within 2km of the proposed development, which is what is considered to be the upper limit of a walkable distance between primary facilities and residential areas. The patient per GP ratio at the Wolvercote Surgery exceeds the target of 1,800 patients per GP outlined by the HUDU Planning Contribution Model. While the average patient per GP ratio across surgeries located further afield also exceeds the target of 1,800 patients per GP, a total of seven GP surgeries are below this target list size and have collective capacity for an additional 10,469 patients. Furthermore, all surgeries are still accepting new patients, which suggests some level of capacity is available.
Evidence	 The following evidence base, as referenced in Section 4, is applicable to the assessment of access to services: PHE, Spatial Planning for Health: An evidence resource for planning and designing healthier places NHS England, Improving access for all: Reducing inequalities in access to general practice services Sport England, Planning for sport guidance The King's Fund, Reimagining community services Making the most of our assets
Stakeholder engagement	A full account of stakeholder engagement is provided in the Statement of Community Involvement. The potential impact on healthcare services, and potential provision of healthcare facilities was raised during the consultation process.
Health effects	Good accessibility to facilities and services are important to delivering sustainable neighbourhoods and can reduce dependency on private cars, which has health and wellbeing benefits associated with uptake of modes of active transport and protection of air quality. Access to good quality healthcare facilities also has a direct impact on health. The proposed development is one of six strategic development sites allocated in the adopted Cherwell Local Plan Partial Review for new housing development to meet the growing needs for new homes in Oxford in the Cherwell Local Plan Partial Review. The Oxford North development (18/02065/OUTFUL) and 'Croudace' scheme (21/ 01449/ FUL) are two other permitted developments in proximity to the proposed development. The majority of these sites are within 3km of the proposed development and are well connected through the existing bus routes that run from Oxford city to Kidlington. The provision of infrastructure and services across these sites has been co-ordinated through provisions in the Local Plan, including wider educational provision (for primary and secondary schools) and improvements to roads, junctions and public transport. Provision of new infrastructure, facilities and services to be provided as part of the new development

Table 8.11: Assessment of access to services



Section	Response
	allocations supplements existing facilities, and balances the need for new services with business concerns that existing shops or leisure facilities are not impacted negatively by new provision.
	Overall, the proposed development is estimated to support a total of 2,000 residents. A local centre will be provided to support the daily needs of this population. This would include shops, cafe/restaurant land uses, potential services, community uses and office space; this could (for example) deliver at least 2 or 3 local shops (which could include a food store, pharmacy or post office), a 100-seat cafe, with a further 1,000sqm for community/outreach healthcare, and business uses.
	With regards to access to healthcare services specifically, it has been noted that the proposed development would support a total of 2,000 residents. This figure represents the gross redistribution of population. In reality, the net additional population (i.e. those moving to the proposed development from outside of the local area and therefore not considered within the existing NHS budget allocation) would be much lower. As a result, and considering the capacity at existing GP facilities noted in Section 6.5 of this report, there would be no material adverse impact on demand for and access to healthcare services.
	It is proposed that the streets and amenities provided throughout the site will enable access for all, including accessible signposting and wayfinding.
Vulnerable groups affected	No vulnerable groups anticipated to be adversely affected.
	Overall, the local centre provided as part of the proposed development would meet the daily needs of residents. Furthermore, the services and facilities provided as part of the proposed development (and other surrounding developments) have been strategically thought out to complement each other.
Summary	Access to healthcare services has been specifically considered, whereby based on the capacity of nearby GP facilities, and the likelihood that some of the residents occupying the proposed development would already be considered within the existing NHS budget allocation, there would be no material adverse impact on demand for and access to healthcare services. Despite this, the Applicant continues to engage with the ICB regarding a financial contribution to off-site healthcare provision via a S.106 agreement which is proportionate to the scale and nature of the proposed development.
Mitigation/enhancement	None proposed.



9 Mitigation and Monitoring

- 9.1.1 As outlined in the Section 7 (Assessment), due to an array of overlapping embedded healthy urban design features set to protect and promote health, no material adverse health and wellbeing impacts associated with environmental or socio-economic changes directly attributable to the proposed development during construction or operation are anticipated.
- 9.1.2 Public health is by definition preventative in nature. Therefore, mitigation measures adopted as part of the construction and operation of the project focus on precursors to health and wellbeing outcomes, thereby providing an opportunity for intervention to prevent any adverse impacts.
- 9.1.3 A CEMP would be prepared prior to any construction commencing. The CEMP would provide details of best practice construction measure which when implemented, would control the release of any pollutants (e.g. dust and noise). In addition, CTMP would provide details on routes to be used for construction vehicles and any other traffic management measures (such as management of working hours and delivery times to minimise disturbance by avoiding deliveries during peak hours).
- 9.1.4 During operation, the proposed development has been designed to facilitate a healthy, vibrant and cohesive community. The proposed development aims to achieve at least 9 out of the 12 'green lights' which make up the Building for a Healthy Life (BHL) design code by integrating a range of healthy placemaking principles to facilitate a healthy, vibrant and cohesive community.
- 9.1.5 On the basis that no material adverse impacts are anticipated, and embedded mitigation measures are designed to be protective of health and supportive of wellbeing by targeting precursors to health outcomes, no further health-specific mitigation is considered necessary. Similarly, should any monitoring be required, this should target the determinants of health so as to preclude adverse health and wellbeing impacts. On this basis, no health-specific monitoring is necessary.



10 Conclusions and Actions

10.1 Conclusions

- 10.1.1 The assessment criteria show that the proposed development is highly conscious of and conducive to facilitating a healthy, vibrant and cohesive community, and does not present any material health risk to existing residents or vulnerable groups.
- 10.1.2 In particular, the proposed development seeks to create a walkable neighbourhood, reducing resident dependency on cars. Specifically, the proposed development would provide a local centre, which could include local convenience retail (food store, pharmacy, post office), business space for professional uses; a café or restaurant, and floorspace for community uses such as healthcare and community/social use. Furthermore, the services and facilities provided as part of the proposed development (and other surrounding developments) have been strategically planned to complement each other.
- 10.1.3 The proposed development also encourages use of active transport modes through prioritising walking and cycling and deterring use of private vehicles through various means. In addition, existing public transport links are good should this be needed to access community facilities and/or employment further afield (e.g. in Oxford city centre, Bicester or London).
- 10.1.4 There are also plenty of opportunities for physical activity and recreation through the carful integration of green spaces of varying sizes throughout the site. This would also include 5km and 10km running and walking and recreational routes for dog walking.
- 10.1.5 The application further considers looming public health challenges associated with the social and health care capacity to manage an increasing aged population, by fully imbedding dementia and neurodiversity friendly design features into the design of urban areas and public realm that will facilitate healthy independent living for longer, and remove, reduce and delay the need for clinical intervention and care.
- 10.1.6 Overall, no adverse health and wellbeing impacts associated with the proposed development have been identified within the assessment.

10.2 Actions

- 10.2.1 While no material adverse health impacts are anticipated, the actions that remain relate to confirming specific design details which would further contribute to enhancing and maximising health and wellbeing outcomes. For example:
 - confirm the integration of secured by design principles to contribute to reducing risk of crime and anti-social behaviour;
 - confirm accessibility and adaptability of residential units, making accommodation more able to cater to an ageing demographic and facilitating healthy independent living for longer; and





 continue to engage with the ICB regarding a financial contribution to off-site healthcare provision via a S.106 agreement which is proportionate to the scale and nature of the proposed development.



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