

12 Human Health

12.1 Introduction

12.1.1 This chapter of the ES has been produced by Marrons to assess the potential human health effects that the Proposed Development could have upon existing population groups during the construction and operation phases of the scheme.

12.1.2 The chapter details the methodology followed, a review of the baseline conditions in the defined study area, and the results of the assessment.

12.2 Assessment methodology

Previous Assessment

12.2.1 There have been no previous assessments relative to this Site.

Legislative Context

12.2.2 The 2017 EIA regulations require EIA's to assess the direct and indirect significant effects of proposed developments on population and human health. There is no legislation specifically relevant to the population and health assessment.

Scoping Opinion

12.2.3 An EIA Scoping Report was submitted to WBC in December 2024 and a response received on the 28th February 2025. The Human Health Chapter is be based upon the scope set out and agreed within the Scoping Opinion (Further details are set out within Appendix 5.1)

Guidance/ Best Practice

12.2.4 There are a range of documents which are relevant to undertaking the human health assessment at the national, regional, and district level. In particular:

- National Planning Policy Framework (NPPF), December 2023;
- Planning Practice Guidance (PPG), live document;
- IEMA Guide to Effective Scoping of Human Health in EIA (IEMA, 2022); and
- IEMA Guide to Determining Significance for Human Health in EIA (IEMA, 2022).
- London Healthy Urban Development Unit (HUDU), Healthy Urban Planning Checklist 2017
- Wokingham Borough Local Development Framework (LDF) Adopted Core Strategy, 2010;
- Wokingham Borough Development Plan Managing Development Delivery (MDD) Local Plan, 2014 (Adopted Local Plan);
- Arborfield & Barkham Neighbourhood Plan 2019-2036, 2019;
- Infrastructure Delivery and Contributions Supplementary Planning Document (SPD), 2011;
- Wokingham Borough Community Infrastructure Levy (CIL) Charging Schedule, 2015;

- Wokingham Borough CIL Guidance Notes for Applicants, 2019.
- Play Space Design Guide Technical Note, 2019; and
- Open Space, Sport and Recreation Facilities Strategy, 2013; and
- Emerging Planning Policy and Guidance

Local Development Framework Adopted Core Strategy

12.2.5 Policy CP2 (Inclusive communities) states that to ensure that new development contributes to the provision of sustainable and inclusive communities (including the provision of community facilities) to meet long term needs, planning permission will be granted for proposals that address the requirements of (amongst other factors) the challenges associated with an ageing population, particularly in terms of housing, health and wellbeing. Health is a central pillar to the strategy, and presses the need to facilitate healthy independent living for longer, and foster healthy, vibrant and cohesive communities.

Local Plan Update: Revised Growth Strategy Consultation

12.2.6 Policy SS1 (Spatial Strategy) states that new growth will be balanced by ensuring that Wokingham Borough's identified development needs can be met with adequate provision of infrastructure, in a manner that enables improvements to quality of life, reduces the need to travel, adapts to and mitigates against the impacts of climate change to achieve a 'net zero carbon' future, and maintains and strengthens the sense of place, including the role and separate identity of settlements. Amongst other factors, promoting healthy lifestyles and wellbeing is again pressed as a core objective.

12.2.7 Policy SS13 (Loddon Valley Garden Village) states that the development will be delivered in accordance with a number of development, delivery and place shaping principles, including the delivery of three neighbourhood centres providing health facilities (amongst other community facilities). Furthermore, the delivery principles defined include beautifully and imaginatively designed homes with gardens, combining the best of town and country to create healthy communities and including opportunities to grow food. Place shaping principles include that each neighbourhood should be planned to be high quality, resilient, compact and safe, and include access for all to a range of local employment opportunities and community services and facilities, including health/wellbeing, education, retail, culture, civic spaces, multi-functional open space and sports and leisure facilities.

12.2.8 Policy C2 (Mitigation of Transport Impacts and Highways Safety and Design) states that with regards to highways safety and design, all development proposals must (amongst other factors) contribute towards a high quality public realm designed in accordance with Living Streets (or any successor document), user access hierarchy and demonstrate how the principles of Healthy Streets have been incorporated.

12.2.9 Policy C8 (Green and Blue Infrastructure and Public Rights of Way) states that the existing areas of green and blue infrastructure of Wokingham Borough will be protected and be enhanced for the biodiversity, recreational, amenity, health and townscape and landscape value, and contribution towards mitigating and adapting to climate change.

12.2.10 Policy H9 (Accommodation for Older People and Vulnerable Communities) states that development proposals for purpose built or specialist accommodation for vulnerable people and/or older people will be supported, provided that (amongst other factors) the accommodation is well located, close to an identified town, district or local centre with access to a good range

of services and facilities, including existing public transport routes, or incorporates essential community facilities and services, such as healthcare services or day care for older people.

12.2.11 Policy DH1 (Place Making and Quality Design) states that all development will contribute to a strong sense of place through high quality design which should endure over the lifetime of the development. Development is required to (amongst other factors) create places that foster active and healthy lifestyles.

12.2.12 Policy HC1 (Promoting Healthy Communities) states that:

- Strong, vibrant and healthy communities will be promoted through a high quality environment with local services to support health, social and cultural wellbeing and reduce inequalities.
- Development proposals should include measures to contribute to healthier communities and reduce health inequalities. This includes making a positive contribution to creating high quality, active, safe and accessible places.
- Development proposals will be supported which:
 - Contribute to the priorities of the Health and Wellbeing Board and partners to help reduce health inequalities;
 - Support the provision of new or improved health facilities, in consultation with Berkshire West Clinical Commissioning Group and NHS England;
- Protect existing health facilities in line with Policy HC2: Community Facilities.
- Proposals for all major development schemes will be required to include a HIA.

12.2.13 Policy HC5 (Environmental Protection) states that development proposals will only be supported where it can be demonstrated that individually, or cumulatively in combination with other schemes, they do not have an unacceptable impact, either during the construction phase, or when completed, on: human health, wellbeing or safety, residential amenity, environmental quality or landscapes, other sensitive receptors.

12.2.14 Policy HC9 (Contaminated Land and Water Development) states that proposals on or near sites which are known, or suspected to be potentially contaminated, or proposals for sensitive land uses will be supported where it can be demonstrated that the following receptors will not be exposed to levels of potential contamination which would give rise to unacceptable risks or harm to health (amongst other factors).

12.2.15 Policy NE5 (Landscape and Design) states that development proposals should promote landscape spaces, public realm and green infrastructure with associated planting to improve ecological connectivity, create a sense of place, mitigate and adapt to climate change and improve health and wellbeing.

***Determining Significance for Human Health in Environmental Impact Assessment
(IEMA, 2022)***

12.2.16 In November 2022, IEMA published guidance on assessing human health as part of EIA. Previously, there was no consolidated methodology or practice for the assessment of effects on human health. If a change in a wider determinant of health is likely due to a proposed development, it should be scoped into the human health assessment. The assessment must present the 'likely significant' human health effects of the applicable development.

Baseline Data Collection

12.2.17 Different communities have varying circumstance and sensitivity to population, health and socio-economic changes (both adverse and beneficial) as a result of social and demographic structure, behaviour and relative economic circumstances.

12.2.18 A desktop study has been undertaken to establish local population and health circumstance, priority and need. This involved the collection and interpretation of published demographic, socio-economic and existing public health and healthcare capacity data, contrasted against regional and national data. The following open source websites and datasets have been used in order to develop the population and health baseline:

- Office for Health Improvement and Disparities (OHID) Local Health tool (Office for Health Improvement and Disparities, n.d.);
- PHE Fingertips health baseline (Office for Health Improvement and Disparities, n.d.); and
- Office for National Statistics (ONS).

Assessment Methodology

12.2.19 This section presents the approach to the assessment of human health impacts of the Proposed Development, which are consistent with the requirements of the Town and Country Planning (Environmental Impact Assessment) Regulations 2017.

12.2.20 The stages of this assessment include:

- Review of legislation, policy and guidance – Review relevant legislation, policy and guidance to establish the baseline of community expectations for the Proposed Development;
- Define human health baseline conditions – Including a review of the existing demographic and economic profile of the local population, and identify relevant primary health care infrastructure and any spare capacity;
- Impact assessment – Consider the nature, scale and performance of the potential impacts and effects on the relevant impact areas during both the construction and operational phase of the Proposed Development, and also consider proposed mitigation measures where there are any likely significant adverse effects;
- Cumulative impacts and effects and residual impacts and effects, first considering the Wider LGV Scheme, followed by an assessment of other cumulative schemes (as detailed in Chapter 5); and
- Summary of impacts and effects.

Predicting effects

Scoping Process

12.2.21 The scoping request of December 2024 confirmed that consideration of population and health will be scoped in, and that health determinants will be determined by the nature of what is proposed to ensure a proportionate assessment.

12.2.22 It considered that relevant health determinants to be assessed during the construction and operational phases of the Proposed Development include changes to air quality; changes to

noise exposure; changes in transport nature and flow rate; and changes in socio-economic factors (income and employment). The population and health topic within this chapter draws from and builds upon key outputs from the relevant technical disciplines within the ES in order to carry out the population and health assessment, and reach a conclusion regarding the significance of effect.

12.2.23 Additionally, the changes in local healthcare capacity has been assessed for the operational (occupation) phase of the Proposed Development, and the healthy urban design principles will be tested and communicated.

12.2.24 The Healthy Urban Development Unit (HUDU) Checklist comprises four key themes: Healthy housing; Active Travel; Healthy Environment; and Vibrant Neighbourhoods.

Methodology for Assessing Impacts

12.2.25 The approach to the assessment for individual topics is described below:

- Healthy Housing - the assessment has considered the extent to which the quantum and mix of housing contributes to local housing need informed by the Council's housing need requirement (with reference to ES Chapter 16 Socio-Economics)
- Active Travel – the assessment has considered the potential effects on health as a result of active travel provision, access to public transport and a review of existing active travel and public transport infrastructure, including Public Rights of Way (PROW), footpaths and cycle routes (with reference to ES Chapter 17 Transport and Access)
- Healthy Environment – the assessment has considered the potential effects on health as a result of changes in air quality, and noise (with reference to ES Chapters 7 Air Quality and Odour and ES Chapter 15 Noise and Vibration)
- Vibrant Neighbourhoods – the assessment has considered the potential effects on vibrant neighbourhoods as a result of changing demands on social infrastructure provision, and changes to employment provision (during the construction phase) (with reference to ES Chapter 16 Socio-Economics).

12.2.26 For each health determinant a summary assessment of the significance of effect for the construction and operation phase is provided with the exception of Healthy Housing (operation phase only).

12.2.27 The health assessment also identifies vulnerable groups; these include children, older people, people with disabilities and people from low income groups. Vulnerable people will experience differential impacts, but for ease of understanding in this assessment vulnerable populations are considered collectively using general risk factors and professional judgement.

12.2.28 Mitigation measures from other Chapters have been assumed in the main assessment table and therefore there is no discrete mitigation section in this Health Chapter.

Significance Criteria

12.2.29 The health sensitivity methodology criteria is shown in Table 12.1 below, and reflects that set out within the scoping request as drawn from 'Determining Significance for Human Health in Environmental Impact Assessment (IEEMA 2022). This has been used to inform the assessment of significance.

Table 12.1 Value/sensitivity assessment

Category/ Level	Definition
High	High levels of deprivation (including pockets of deprivation); reliance on resources shared (between the population and the project); existing wide inequalities between the most and least healthy; a community whose outlook is predominantly anxiety or concern; people who are prevented from undertaking daily activities; dependants; people with very poor health status; and/or people with a very low capacity to adapt.
Medium	Moderate levels of deprivation; few alternatives to shared resources; existing widening inequalities between the most and least healthy; a community whose outlook is predominantly uncertainty with some concern; people who are highly limited from undertaking daily activities; people providing or requiring a lot of care; people with poor health status; and/or people with a limited capacity to adapt.
Low	Low levels of deprivation; many alternatives to shared resources; existing narrowing inequalities between the most and least healthy; a community whose outlook is predominantly ambivalence with some concern; people who are slightly limited from undertaking daily activities; people providing or requiring some care; people with fair health status; and/or people with a high capacity to adapt.
Very Low	Very low levels of deprivation; no shared resources; existing narrow inequalities between the most and least healthy; a community whose outlook is predominantly support with some concern; people who are not limited from undertaking daily activities; people who are independent (not a carer or dependant); people with good health status; and/or people with a very high capacity to adapt.

12.2.30 Based upon the baseline analysis set out below it is considered that the local Study Area surrounding the Site, demonstrates a Low health sensitivity due to the very low levels of deprivation experienced in the locality.

Predicting effects

12.2.31 Impact magnitude as been assessed by consideration of the factors shown in Table 12.2.

Table 12.2 Magnitude of impact

Magnitude	Description
High	High exposure or scale; long-term duration; continuous frequency; severity predominantly related to mortality or changes in morbidity (physical or mental health) for very severe illness/injury outcomes; majority of population affected; permanent change; substantial service quality implications.
Medium	Low exposure or medium scale; medium-term duration; frequent events; severity predominantly related to moderate changes in morbidity or

Magnitude	Description
	major change in quality-of-life; large minority of population affected; gradual reversal; small service quality implications.
Low	Very low exposure or small scale; short-term duration; occasional events; severity predominantly related to minor change in morbidity or moderate change in quality-of-life; small minority of population affected; rapid reversal; slight service quality implications
Negligible	Negligible exposure or scale; very short-term duration; one-off frequency; severity predominantly relates to a minor change in quality-of-life; very few people affected; immediate reversal once activity complete; no service quality implication.

12.2.32 The predicted level of effect is based upon the consideration of magnitude of impact and sensitivity of the resource/receptor to come to a professional judgement of how important this effect is.

Table 12.3 Level of effect

Receptor Sensitivity	Magnitude of Impact			
	High	Medium	Low	Negligible
High	Substantial	Major	Moderate	Negligible
Medium	Major	Moderate	Minor	Negligible
Low	Moderate	Minor	Minor	Negligible
Very Low	Negligible	Negligible	Negligible	Negligible

12.2.33 All effects identified can either be classified as beneficial or adverse, the EIA must give appropriate weight to both types of effects.

12.2.34 In terms of describing the duration of an effect, short to medium-term effects are considered to be those associated with the site preparation and construction phase, and long-term impacts are those associated with the completed development and its operation.

12.2.35 The following Table describes each of the effects and their significance.

Table 12.4 Significance Conclusion (relating to Health)

Category/ Level	Criteria
Major (Significant)	<p>The narrative explains that this is significant for public health because:</p> <ul style="list-style-type: none"> - Changes, due to the project, have a substantial effect on the ability to deliver current health policy and/or the ability to narrow health inequalities, including as evidenced by referencing relevant policy and effect size (magnitude and sensitivity levels), and as informed by consultation themes among stakeholders, particularly public health stakeholders, that show consensus on the importance of the effect. - Change, due to the project, could result in a regulatory threshold or statutory standard being crossed (if applicable).

Category/ Level	Criteria
	<ul style="list-style-type: none"> - There is likely to be a substantial change in the health baseline of the population, including as evidenced by the effect size and scientific literature showing there is a causal relationship between changes that would result from the project and changes to health outcomes. - In addition, health priorities for the relevant study area are of specific relevance to the determinant of health or population group affected by the project.
Moderate (significant)	<p>The narrative explains that this is significant for public health because:</p> <ul style="list-style-type: none"> - Changes, due to the project, have an influential effect on the ability to deliver current health policy and/or the ability to narrow health inequalities, including as evidenced by referencing relevant policy and effect size, and as informed by consultation themes among stakeholders, which may show mixed views. - Change, due to the project, could result in a regulatory threshold or statutory standard being approached (if applicable). - There is likely to be a small change in the health baseline of the population, including as evidenced by the effect size and scientific literature showing there is a clear relationship between changes that would result from the project and changes to health outcomes. - In addition, health priorities for the relevant study area are of general relevance to the determinant of health or population group affected by the project..
Minor (not significant)	<p>The narrative explains that this is not significant for public health because:</p> <ul style="list-style-type: none"> - Changes, due to the project, have a marginal effect on the ability to deliver current health policy and/or the ability to narrow health inequalities, including as evidenced by effect size of limited policy influence and/or that no relevant consultation themes emerge among stakeholders. - Change, due to the project, would be well within a regulatory threshold or statutory standard (if applicable); but could result in a guideline being crossed (if applicable). - There is likely to be a slight change in the health baseline of the population, including as evidenced by the effect size and/or scientific literature showing there is only a suggestive relationship between changes that would result from the project and changes to health outcomes. - In addition, health priorities for the relevant study area are of low relevance to the determinant of health or population group affected by the project.
Negligible (not significant)	<p>The narrative explains that this is not significant for public health because:</p> <ul style="list-style-type: none"> - Changes, due to the project, are not related to the ability to deliver current health policy and/or the ability to narrow health inequalities, including as evidenced by effect size or lack of relevant policy, and as informed by the project having no responses on this issue among stakeholders. - Change, due to the project, would not affect a regulatory threshold, statutory standard or guideline (if applicable). - There is likely to be a very limited change in the health baseline of the population, including as evidenced by the effect size and/or scientific

Category/ Level	Criteria
	<p>literature showing there is an unsupported relationship between changes that would result from the project and changes to health outcomes.</p> <ul style="list-style-type: none"> - In addition, health priorities for the relevant study area are not relevant to the determinant of health or population group affected by the project.

Geographic Scope

12.2.36 The Proposed Development would be within the Hawkedon, Winnersh, Shinfield South and Arborfield wards, located within the Unitary Authority of Wokingham.

12.2.37 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 population and health effects would focus on Hawkedon, Winnersh, Shinfield South and Arborfield wards, using the Unitary Authority (UA) of Wokingham, regional (South East) and national (England) averages as comparators. Where data is not available at the ward level, UA-level data is presented as a representative alternative.

12.2.38 Wider socio-economic health determinants (such as employment) 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 socio-economic baseline data would focus on Wokingham Borough, using regional and national averages as comparators.

12.2.39 However, importantly the study area defining the relevant sensitive receptors identified for assessment purposes would remain consistent with the inter-related technical disciplines assessed within the ES, which the human health topic relies upon.

12.2.40 In respect of GP Practices, since 2015, people can register with any GP of their choice. However, to limit assessment, provision within a 2km radius of the Site has been considered reflecting the Manual for Streets 2km walk catchment for community facilities.

Temporal Scope

12.2.41 The Human Health ES chapter has assessed the potential effects on a range of health determinants during both the construction and operational phases of the Proposed Development.

Consultation

12.2.42 No further consultation has been undertaken relating to the methodology in preparing the socio-economic impact assessment, beyond that set out within the scoping exercise.

Assumptions and Limitations

12.2.43 There are many determinants that can have an impact on an individual's health. It is possible for Proposed Development to create conditions that could lead to enhanced health outcomes, but there are other factors determining health that cannot be managed by Proposed Development (e.g. performance of the wider economy and genetic factors).

12.2.44 Census and other baseline health data characterises the study area at a single temporal point.

Data is often aggregated at different scales in different sources. Therefore, comparisons can be limited.

12.2.45 There is a significant amount of literature regarding the evidence base for pathways between aspects of development and health outcomes. In order to provide a proportional assessment, a full literature review is not provided and the aspects considered in HUDU provide the starting point for scoping of relevant determinants of health to be considered.

12.2.46 It should be noted that the focus of this assessment is public or population level health, associated with the wider determinants of health, and individual occupational health and safety issues or biomedical risk assessment are not within the remit of this assessment.

12.3 Baseline conditions

Current Baseline

Population

12.3.1 In 2021 (ONS 2021 Census) the total population of Wokingham Borough Council's (WBC) administrative area was estimated to be 177,499 people, or about 0.3% of England's population (56,489,800). WBC's population has increased by approximately 15% (47,800) between 2011 and 2021, which is about 8.5% higher than the national increase in population during the same period.

12.3.2 At the time of the 2021 Census, 24.3% (43,046) of the total population in WBC were children aged under 18, with 57.8% (103,905) being adults aged 19 to 64. A further 17.2% (30,458) are aged 65 and over; 2.4% (4,326) of the resident population were 85 and over.

12.3.3 The population of WBC was projected to increase from 172,104 in 2020, to 191,901 in 2043, by the most recent 2018-based ONS Sub National Population Projections (SNPP) published in March 2020. These are the most recent projections available. This would be an increase of 19,797 people or 12%. This compares to growth of 8% across the South East region and 9% across England over the same period.

Age Profile

12.3.4 The broad working age population of WBC (aged 16-64) was 110,268 people as of the 2021 Census, which represented 62.1% of the population. This figure was slightly below the working age population across England (63.0%).

12.3.5 The 65+ population in 2021 represented 17.2% of the overall population in Wokingham as of the 2021 Census. This was slightly lower than the national average (18.4%).

Changing Age Structure

12.3.6 Across England, the age bracket with the highest projected population growth over the period 2020 – 2043 the 65+ group (+40%). In WBC the projected population growth by broad age group is as follows: 0-14 year olds (-3%), 15-24 year olds (+11%), 25-49 year olds (0%), 50-64 year olds (+11%) and 65+ (+49%).

Employment

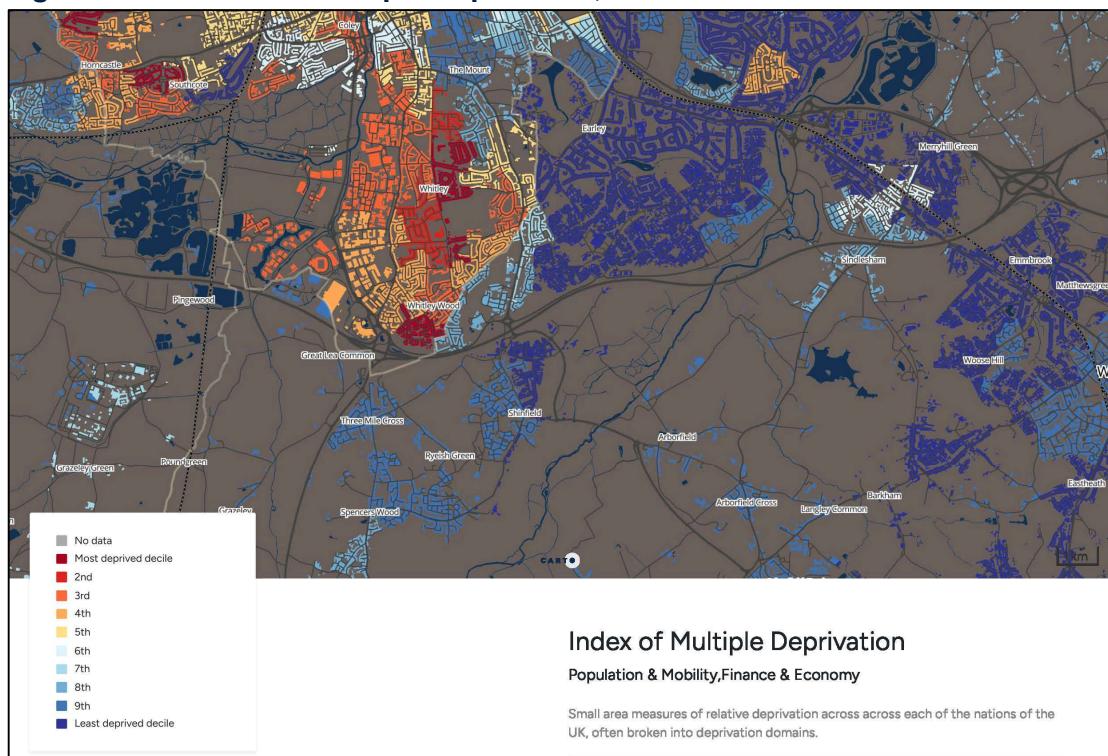
12.3.7 The unemployment rate (i.e., the unemployment count as a percentage of the economically active population aged 16+) within WBC in the year to December 2024 stood at 3.0%, which is

0.5% lower than the Southeast of England average (3.5%), and 0.9% lower than the average for England (3.9%).

Deprivation

12.3.8 The ONS Indices of Multiple Deprivation, 2019, shows that the existing residential areas surrounding the Site demonstrate a low level of deprivation, ranging from the 8th to 10th decile (the lowest level of deprivation).

Figure 12.1 Indices of Multiple Deprivation, 2019



Source: Geographic Data Service

Health

12.3.9 The following table, sourced from Public Health England, summarises the local health profile of the Study Area, and provides comparison with Wokingham, the Region and England.

Table 12.5 Local Health Profile

Indicator	Date	Average across ward study area	Wokingham	South East	England
Deprivation and socio-economic circumstance					
Index of Multiple Deprivation (IMD) Score	2019	6.9	5.8	16.6	21.7
Income deprivation (%)	2019	4.5	4.4	9.1	12.9
Child poverty (%)	2019	5.9	5.6	12.4	17.1
Older people in poverty (%)	2019	5.3	5.6	10.2	14.2
Older people living alone (%)	2011	24.4	25.9	30.4	31.5
Overcrowded houses (%)	2011	4.1	3.7	7.5	8.7
Households in fuel poverty (%)	2020	5.3	5.2	8.6	13.2

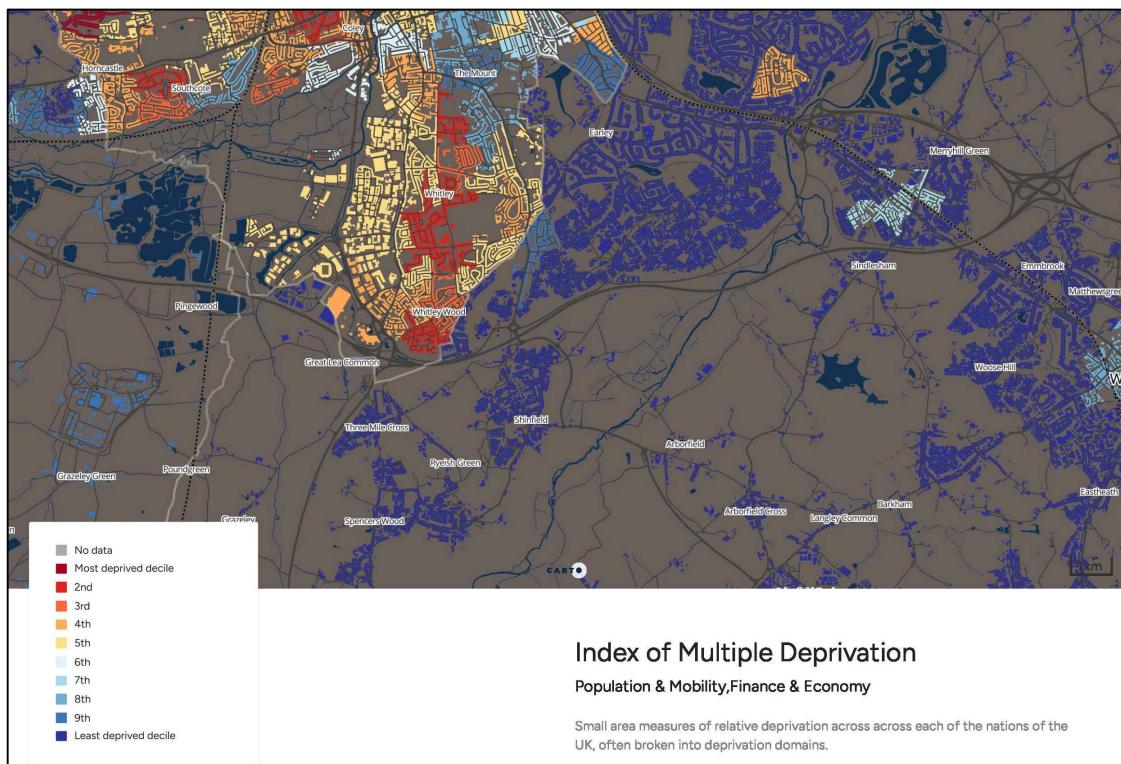
Unemployment (%)	2021-22	2.5	2.3	4.2	5
Long term unemployment (%)	2021-22	1.1	0.5	1.2	1.9
Physical health					
Life expectancy at birth for males (years)	2016-20	81	82.2	80.2	79.5
Life expectancy at birth for females (years)	2016-20	84.5	85.6	83.8	83.2
Healthy life expectancy at birth for males (years)	2018-20	n/a	70.9	65.5	63.1
Healthy life expectancy at birth for females (years)	2018-20	n/a	71.2	65.9	63.9
Emergency hospital admissions for all causes (SAR)	2015-16 to 2019-20	78	75.4	92	100
Emergency hospital admissions for coronary heart disease (SAR)	2015-16 to 2019-20	57.9	53.1	78	100
Emergency hospital admissions for stroke (SAR)	2015-16 to 2019-20	76.8	81.5	90.2	100
Emergency hospital admissions for Myocardial Infarction (heart attack) (SAR)	2015-16 to 2019-20	63.4	56.5	85.1	100
Emergency hospital admissions for Chronic Obstructive Pulmonary Disease (COPD) (SAR)	2015-16 to 2019-20	61.6	47.5	72.9	100
Incidence of all cancer (SIR per 100)	2015-19	85.6	93.1	100	100
Deaths from all causes all ages (SMR)	2016-20	90.2	79.9	92.1	100
Deaths from all cancer all ages (SMR)	2016-20	80	83.7	95.2	100
Deaths from circulatory disease all ages (SMR)	2016-20	84.4	75.9	91.9	100
Deaths from coronary heart disease all ages (SMR)	2016-20	84.1	71.1	83.5	100
Deaths from stroke all ages (SMR)	2016-20	83.7	81.8	92.8	100
Deaths from respiratory diseases all ages (SMR)	2016-20	81.5	75.1	89.7	100
Deaths from causes considered preventable under 75 years (SMR)	2016-20	68.5	60.8	84.5	100
Mental health and behavioural risk factors					
Emergency hospital admissions for intentional self-harm (SAR)	2016-17 to 2020-21	78.2	89.3	108.3	100
Suicide rate (per 100,000 population)	2022-22	n/a	6.4	10.4	10.4

Source: Public Health England, Fingertips (green better than national average; orange worse than national average)

12.3.10 Local communities living within the four wards are not considered to be disproportionately sensitive to environmental health determinants, expressing a relatively low burden of poor health, high life expectancy and a high proportion of life spent in good health.

12.3.11 The following map displays the indices of multiple deprivation health domain, and shows that all existing residential areas surrounding the Site fall within the lowest decile of deprivation (10th).

Figure 12.2 Indices of Multiple Deprivation - Health, 2019

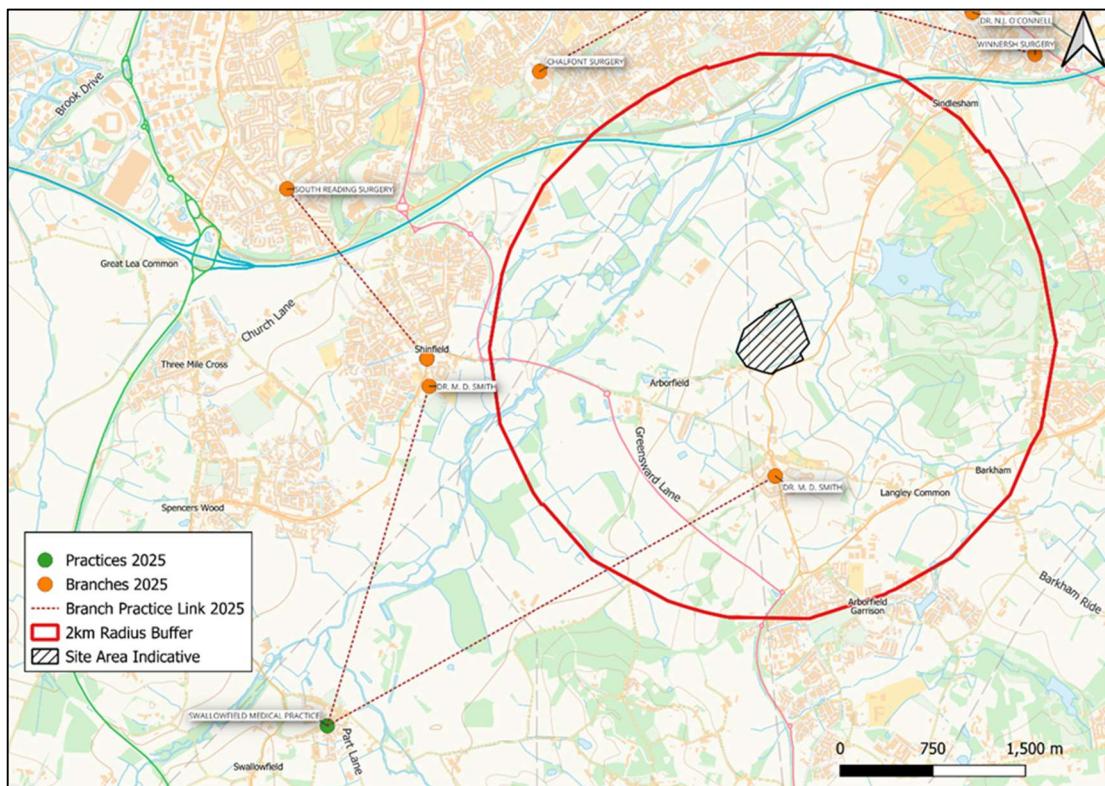


Source: Geographic Data Service

Primary Healthcare Provision

12.3.12 A review of NHS data indicates that there is currently 1 GP Surgery within a 2km radius of the Proposed Development.

Figure 12.3 GP Practices



Source: NHS GP Practice related data, 2025

12.3.13 There is presently one GP surgery operating within Arborfield – classed as a branch within NHS data. The branch is part of wider Practice (Swallowfield Medical Practice). Whilst the NHS do not publish data for individual branches, published data for the Practice as a whole indicates that there are total of 8.5 FTE GPs, with a total patient roll of 15,856. This indicates a GP patient ratio of 1:1,861. Compared to the national average benchmark (1 gp:1800 patients) there would appear to be a slight deficit of patient places totalling 556 at present.

Table 12.6 Primary Healthcare Providers

Surgery Name	GPs (FTE)	Patients	Ratio (Patients to 1 GP)	Surplus capacity/deficit (patients)
Dr. M.D Smith	8.5	15,856	1:1861	-556
Swallowfield Medical Practice, also associated with Dr.M.D Smith (Shinfield Branch) - both outside of buffer				

Source: NHS GP Practice related data, 2025

Future Baseline

12.3.14 The future baseline for Human Health will be influenced by the projected change in population within WBC, increasing from 172,104 in 2020, to 1919,901 in 2043 (based upon the 2018-based ONS Sub National Population Projections (SNPP)).

12.4 Inherent design mitigation

- 12.4.1 The overall strategy is to ensure that the Proposed Development responds to the surrounding area and produces a high quality, sustainable development by applying good design principles throughout.
- 12.4.2 For the purposes of this human health assessment, the provision of new housing, and new public open spaces, are considered as inherent design mitigation. Additionally, the associated access, and supporting amenity space, landscaping, blue and green infrastructure are considered as inherent design mitigation.

12.5 Potential effects prior to additional mitigation

- 12.5.1 This section provides a description of the potential human health effects that are anticipated to arise from the construction (temporary) and operation (permanent) phases of the proposals. This means for the social infrastructure assessment the Proposed Development (i.e. up to 430 residential dwellings) was used as the basis for analysis.
- 12.5.2 The potential impacts and the significance of the effects are characterised in the absence of mitigation measures, beyond those identified and described as inherent design mitigation. The significance of residual effects, post-mitigation, are also identified.
- 12.5.3 Impacts may be direct or indirect. The effects during construction are anticipated to be short to medium term duration (temporary), while effects during operation are anticipated to be of long-term duration (permanent), unless otherwise stated.

Construction Phase

Active Travel

- 12.5.4 The potential effects associated with transport during the construction phase have been assessed in Chapter 17 Transport and Access. This includes works related to the formation of the new site access, potential temporary changes to existing access arrangements (including Public Rights of Way), increased construction traffic, particularly Heavy Goods Vehicles (HGVs) and the potential for longer journey times for both drivers and pedestrians. In addition, potential amenity impacts and an increased risk of road traffic collisions or hazardous load incidents arising from the presence of large construction vehicles have been considered.
- 12.5.5 Prior to the granting of any planning permission for the Proposed Development, a Construction Environmental Management Plan (CEMP) and a Construction Traffic Management Plan (CTMP) will be prepared to ensure that appropriate measures are in place to mitigate the issues outlined above. The effects on sensitive receptors in relation to transport and access during construction are assessed to be temporary, direct, and negligible (not significant).

Healthy Environment

- 12.5.6 As outlined in Chapter 7: Air Quality, the potential effects associated with dust, demolition and construction traffic have been assessed. The assessment indicates that construction dust impacts and associated risks to human health are expected to range from low to medium. These impacts are likely to affect existing residents located adjacent to the site boundaries, those in the immediate surrounding area, and future residents of the Proposed Development (including early-phase occupiers). Accordingly, appropriate mitigation measures will be required. The effects on sensitive receptors in relation to air quality during construction are assessed to be temporary, direct, and negligible (not significant).

12.5.7 As identified in Chapter 15 Noise and Vibration, effects to sensitive receptors associated with construction noise and vibration have been assessed to be medium with reference to the magnitude of the impact varying from negligible to low and not significant.

Vibrant Neighbourhoods

12.5.8 As detailed in Chapter 16 Socio Economics, the Proposed Development will generate up to approximately 61 on-site construction jobs. Once the effects of leakage, displacement, and multiplier effects have been considered, this equates to around 106 net additional construction jobs, of which 43 will benefit the Wokingham labour force. The Proposed Development is estimated to have a low positive impact on the low sensitivity construction workers (in Wokingham), resulting in a Minor Beneficial effect, over the short term. The same effect results from an assessment of effect on human health (given that the health sensitivity is also considered low within the study area).

12.5.9 It is considered that these temporary levels of job creation, increasing employment opportunities within the construction sector to local residents will have a minor beneficial effect over the short term on human health.

Operational Phase

Healthy Housing

12.5.10 As detailed in Chapter 16 Socio Economics, the Proposed Development will facilitate the delivery of additional homes which would be a significant addition to Wokingham's housing pipeline. The magnitude of additional home provision is considered to be a medium positive impact. The sensitivity of people looking for new housing in Wokingham, as identified in the Chapter 16 is medium.

In the context of assessing Human Health effects, and given that the health sensitivity is determined to be low, the provision of additional housing would result in a minor beneficial effect on human health over the long term.

Active Travel

12.5.11 As identified in Chapter 17 Transport and Access, the Proposed Development will incorporate a comprehensive network of walking and cycling routes, providing connections for pedestrians, cyclists, and equestrians through the site and linking with the LGV Project area. During the interim phase, the development will also benefit from a new bus stop on Mole Road, enhancing accessibility by public transport. In addition, the scheme will include electric vehicle (EV) charging facilities, high-quality cycle parking, and an on-site car club, supporting sustainable travel choices and reducing reliance on private car use.

12.5.12 The Proposed Development includes the requirement for a detailed CTMP to be secured by planning condition which will mitigate the impact of construction traffic. This will be developed/reviewed and monitored against over the construction period of the Proposed Development.

12.5.13 The CTMP measures are inherent in the assessment and therefore no additional mitigation is required.

Healthy Environment

12.5.14 As identified in Chapter 7 Air Quality the overall air quality effect is considered to be “not significant” for human receptors. On that basis, no mitigation measures are considered necessary.

12.5.15 As identified in Chapter 15 Noise and Vibration traffic noise has been assessed to determine the short-term and long-term change in Basic Noise Level (BNL) on existing traffic routes. This has concluded that road traffic noise levels would result in a negligible adverse impact after consideration of LOAEL and SOAEL.

Vibrant Neighbourhoods

12.5.16 The Proposed Development will placed increased demands on social infrastructure. Addressing primary healthcare provision specifically within this Human Health Chapter, as identified in the baseline analysis there would appear to be a slight deficit in GP provision locally (2km radius) to the Site.

12.5.17 As identified in Chapter 16 Socio Economics, the Proposed Development will likely provide for a population of approximately 1,000 people, further increasing demands on local GP provision.

12.5.18 Through proposing to provide financial contributions to meet additional primary health care needs arising from it, the Proposed Development is estimated to have a negligible impact on the low sensitivity users of primary healthcare providers within the 2km study area resulting in a neutral effect over the long-term.

12.6 Additional Mitigation

12.6.1 This section provides a description of any additional enhancement and mitigation measures proposed to minimise the potential adverse effects identified by the assessment as set out previously. The mitigation measures will reduce the severity of impacts, and their significance.

12.6.2 The Proposed Development would likely be liable for Infrastructure Delivery Plan payments as set out in the Wokingham Borough Council Infrastructure Delivery Plan (2025). IDP is designed to mitigate the impact of population growth and is intended to provide flexibility to a local authority to allocate funds received to areas of most need for infrastructure, and as such, the necessary mitigation can be secured. The collected monies are intended to be spent by the local authority on the provision of infrastructure to support development within the district. It is anticipated that these monies will be spent on social and community facilities

12.6.3 Beyond the IDP, no additional mitigation, compensation or enhancement measures are deemed to be required as no assessed effects are considered to be adverse.

12.7 Residual effects

12.7.1 The residual effects of the Proposed Development during the construction and the operational phase are summarised below.

Table 12.7 Summary of Residual Effects

Receptor	Effect
Construction	
Active travel (Transport and Access)	Negligible (not significant)
Healthy Environment (Air Quality and Noise)	Negligible (not significant)
Vibrant Neighbourhoods (Employment)	Minor beneficial (not significant)
Operation	
Healthy Housing	Minor beneficial (not significant)
Active travel (Transport and Access)	Negligible (not significant)
Healthy Environment (Air Quality and Noise)	Negligible (not significant)

12.8 Implications of Climate Change

12.8.1 A future climate change scenario has been developed using UK Climate Projections 18 (UKCP18) published by the Met Office. This is used to facilitate consideration as to how the environmental and socio-economic effects of a Proposed Development may change under a future climate scenario.

12.8.2 The projection with central UK mean has been used in this analysis. The timeframe considered most relevant for urban development projects covers 2070-2099. Several environmental factors are likely to vary in the future due to climate change. These include warmer air temperatures with warming being greater in the summer, significant increase in winter precipitation, and decrease of summer rainfall and sea level rise.

12.8.3 When considering climate change effects, it is necessary to firstly consider the vulnerability of specific receptors to climate change. High vulnerability receptors are those where the receptor is directly dependent on the existing or prevailing climate. Moderate vulnerability receptors are those where the receptors are dependent on some climatic factors, but able to tolerate a range of conditions. A receptor that is of low vulnerability is one where climate has little influence on the receptor.

12.8.4 In the context of human health, it is considered that climate factors have little influence on most receptors. Receptors which may experience some climate influence are limited to residents using or seeking GP services.

7.3.1 Under a future climate, the possible socio-economic considerations of relevance to the Proposed Development primarily relate to health risks, and are thought to be as follows:

- An increased risk of over overheating due to a forecast increase in mean average air temperatures;
- A reduction in cold-weather related illness in winter, particularly in vulnerable groups such as the elderly, due to forecast increases in mean average air temperatures;
- An increased risk of surface water flooding, and associated water borne disease resulting from an increase in average annual precipitation and sea level rise.

7.3.2 All of the above (in addition to an aging population) have the potential to place an extra burden on primary health care services, specifically the demand for GP services. As such, residents using or seeking GP services are considered to be of moderate vulnerability to climate change.

7.3.3 It is considered that whilst the impact of climate change could magnify the adverse impacts of the Proposed Development on the demand for GP services, the magnification, although uncertain, is assessed as being relatively low. This is on the basis that the demand arising because of the Proposed Development is being accounted for either through onsite provision or through CIL payments.

7.3.4 As such, under a future climate, the effects of the Proposed Development on residents using or seeking GP services are anticipated to remain as presented for the Proposed Development under the current climate conditions.

12.9 Cumulative effects

12.9.1 The potential for significant effects on the environment resulting from cumulative developments in the area coming forward at a similar time to the Proposed Development have been considered below. In the first instance the cumulative effects resulting from the delivery of the wider Loddon Valley Garden Village Strategic Development Location are considered. Separately, the effects of the wider cumulative schemes as outlined in Chapter 5 of the ES. These have been limited to residential schemes only given the scope of the Socio Economic Chapter on housing and social infrastructure components.

Loddon Valley Garden Village Strategic Development Location

12.9.2 The effects of the Proposed Development alongside the wider Loddon Valley Garden Village Strategic Development Location (SDL) are assessed below:

Loddon Valley Garden Village SDL –

Active Travel

12.9.3 As identified in Chapter 17 Transport and Access the Annual Average Daily Traffic (AADT) is expected to be below 10% on all links apart from Arborfield Road, Sindlesham Road and School Road which will require further assessment.

12.9.4 The cumulative impacts identified in Chapter 17: Transport and Access are divided into several subheadings, summarised below.

- Operational Transport Impacts – 2040 Future Baseline Plus Proposed Development (Three links require further assessment Arborfield Road, Sindlesham Road, and School Road). The forecasted change to all otherlinks requires no further investigation.
- Severance - the change in severance for the Proposed Development and LGV Project combined during the operational phases is assessed as a permanent, direct, minor adverse effect (Not Significant).

- Driver Stress and Delay - the change in driver stress and delay for the Proposed Development and LGV Project combined during the operational phases is assessed as a permanent, direct, minor adverse/negligible effect (Not Significant).
- Pedestrian Delay the change in pedestrian delay for the Proposed Development and LGV Project combined during the operational phases is assessed as a permanent, direct, negligible effect (Not Significant).
- Non-motorised User Amenity - The IEMA Guidelines set out that traffic flow would have to half or double for the effect to be noticeable. The increase in traffic flows on the majority of links is well below this threshold and has a negligible non significant effect at all links, apart from Arborfield Road 2040 which will result in a residual moderate beneficial significant effect.
- Fear and Intimidation the significance effect of fear and intimidation will be low or negligible on all links and all identified receptors.

The predicted transport-related impacts during operation are largely negligible to minor and not significant, with no expected adverse implications for human health. Arborfield may even see a positive effect on active travel and wellbeing.

Healthy Environment

12.9.5 As identified in Chapter 7 Air Quality it is concluded that the predicated annual mean NO₂ concentrations is concluded to be slight beneficial to negligible. Overall impact on the surrounding area from PM₁₀ and PM_{2.5} is considered to be 'negligible'.

12.9.6 As identified in Chapter 15 Noise and Vibration should the construction programmes for the Loddon Valley Garden Village Development coincide with the Proposed Development, the cumulative effects should be 'not significant', particularly if earthworks do not coincide, provided that the appropriate mitigation measures, such as those recommended by the respective CEMPs, are implemented by the developers.

Vibrant Neighbourhoods

12.9.7 As detailed in Chapter 16 Socio Economics, construction of the 3,930 and supporting infrastructure across the SDL will generate employment across all construction disciplines. It is assumed there may be partial overlap in the construction phase of both the Proposed Development and wider SDL providing greater temporary employment opportunities. As such it is considered that the wider SDL combined with the Proposed Development will provide a temporary minor beneficial effect on employment during the construction phase across the local authority area over the short term and in respect of human health.

12.9.8 The Proposed Development and SDL will place increased demands on social infrastructure. Addressing primary healthcare provision specifically within this Human Health Chapter, as identified in the baseline analysis there would appear to be a slight deficit in GP provision locally (2km radius) to the Site.

12.9.9 Through proposing to provide financial contributions to meet additional primary health care needs arising from it, the Proposed Development and SDL is therefore estimated to have a negligible impact on the low sensitivity users of primary healthcare providers within the 2km study area resulting in a neutral effect over the long-term.

12.9.10 The wider delivery of homes across the SDL (including the Proposed Development) will benefit the housing market creating a moderate benefit over the long term (significant).

12.9.11 In terms of social infrastructure the SDL will include 2 x three form entry primary schools (including appropriate onsite early years provision); a 8 form entry secondary school, with additional land reserved to enable expansion to 12 form entry with sixth form; as well as space across each education setting for integrated teaching of pupils with special educational needs and disabilities. In addition the SDL will include a district centre, and two local centres providing day to day retail and other community uses, whilst in respect of open space the SDL will incorporate a multi-functional country park which is accessible to settlements beyond the garden village itself.

Healthy Housing

12.9.12 As detailed in Chapter 16 Socio Economics, the Proposed Development will facilitate the delivery of additional homes which would be a significant addition to Wokingham's housing pipeline. The magnitude of additional home provision is considered to be a medium positive impact. The sensitivity of people looking for new housing in Wokingham, as identified in the Chapter 16 is medium.

In the context of assessing Human Health effects, and given that the health sensitivity is determined to be low, the provision of additional housing would result in a minor beneficial effect on human health over the long term.

Vibrant Neighbourhoods

Wider Committed Development

12.9.13 The full list of cumulative schemes is set out in Chapter 5. Each of the respective technical chapters will detail the cumulative sites which have been assessed in respect of each of the technical disciplines. For the purposes of this Human Health chapter, information is drawn from each of the respective technical chapters in respect of the effects for wider committed development.

Cumulative Development

Healthy Housing

12.9.14 As detailed in Chapter 16 Socio Economics, the cumulative schemes, SDL and Proposed Development will result in a minor beneficial effect on human health.

Active Travel

12.9.15 As identified in Chapter 17: Transport and Access, the wider committed developments are expected to have a varying magnitude of effect on the Proposed Development through different transport links. These include effects such as severance, driver stress and delay, pedestrian delay, non-motorised user amenity, fear and intimidation, and road safety. In relation to human health, the impact is considered to be negligible with the wider mitigation measures in place and is therefore not significant in EIA terms. Further information is provided in Chapter 17, Table 17.22.

Healthy Environment

12.9.16 During operation, cumulative effects have been assessed by incorporating traffic from other nearby developments into the modelling data. These developments are detailed in Chapter 17 (Transport and Access).

12.9.17 The resulting change in air pollutant concentrations at existing sensitive receptors ranges from a slight benefit to negligible, and pollutant levels at proposed receptors remain below air quality standards. Overall, the residual air quality effects are judged to be not significant for human health.

12.9.18 As identified in Chapter 15 Noise and Vibration Best Practicable Means (BPM) will be applied to minimise noise and vibration impacts. Measures will be set out in the Construction Environmental Management Plan (CEMP) and will ensure that noise limits at sensitive receptors are not exceeded. Contractors from overlapping projects will coordinate early to align work programmes and reduce cumulative noise effects.

Vibrant Neighbourhoods

12.9.19 As detailed in Chapter 16 Socio Economics, construction of the cumulative schemes will generate employment across all construction disciplines. It is assumed there may be partial overlap in the construction phase of the committed developments and Proposed Development providing greater temporary employment opportunities, albeit over a broad geography – noting many of the sites falls within Reading Borough. As such it is considered that the committed developments combined with the Proposed Development will provide a temporary minor beneficial effect on employment during the construction phase within Wokingham Borough in respect of human health.

12.9.20 As detailed in Chapter 16 Socio Economics, the Proposed Development, SDL and cumulative schemes will place increased demands on social infrastructure. Addressing primary healthcare provision specifically within this Human Health Chapter, as identified in the baseline analysis there would appear to be a slight deficit in GP provision locally (2km radius) to the Site.

12.9.21 It is assumed that each of the cumulative scheme will provide financial contributions to meet additional primary health care needs arising from it, the Proposed Development, SDL and cumulative schemes are therefore estimated to have a negligible impact on the low sensitivity users of primary healthcare providers within the 2km study area.

12.10 Summary

12.10.1 In 2021 (ONS 2021 Census) the total population of Wokingham Borough Council's (WBC) administrative area was estimated to be 177,499 people, or about 0.3% of England's population (56,489,800). WBC's population has increased by approximately 15% (47,800) between 2011 and 2021, which is about 8.5% higher than the national increase in population during the same period.

12.10.2 The population of WBC was projected to increase from 172,104 in 2020, to 191,901 in 2043, by the most recent 2018-based ONS Sub National Population Projections (SNPP) published in March 2020. These are the most recent projections available. This would be an increase of 19,797 people or 12%. This compares to growth of 8% across the South East region and 9% across England over the same period.

12.10.3 The ratio of median house price to median gross annual workplace-based earnings in Buckinghamshire is 10.6 as of 2023 meaning a resident with a median salary would need 10.6 times this salary to buy a median-priced home. This exceeds the south east (9.61) and national (7.71) averages.

12.10.4 The standard method for calculating minimum housing need introduced by the December 2024 National Planning Policy Framework (NPPF) shows minimum need of 1,317 dwellings per annum (dpa) for WBC. This is an increase of 569 dpa from the previous standard method which showed a need for 748 dpa.

12.10.5 A review of the health profile of residents living within the local study area shows that they are not disproportionately sensitive to environmental health determinants, as evidenced by a relatively low burden of poor health, high life expectancy and a high proportion of life spent in good health. This is further evidenced by the fact that the area falls within the least deprived decile in respect of the indices of multiple deprivation.

12.10.6 Within a 2km catchment area there is one doctors surgery which demonstrates slight under provision of GPs relative to its number of patients.

12.10.7 Based upon the baseline analysis it is considered that the local Study Area surrounding the Site, demonstrates a Low health sensitivity due to the very low levels of deprivation experienced in the locality.

12.10.8 Key human health receptors that are going to be affected by the Proposed Development are:

- Local Residents

12.10.9 The Effects on the human health receptor is defined as either:

- Beneficial – An advantageous effect on the impact area;
- Negligible – An imperceptible effect on the impact area; and
- Adverse – Detrimental effect on the impact area.

12.10.10 The significance of an effect is described as either Substantial, Major, Moderate, Minor, or, Neutral. Only effects that are moderate or greater are determined to be significant in EIA terms

12.10.11 The impacts of the Proposed Development are as follows:

Construction Phase

Active Travel

12.10.12 As identified in Chapter 17 Transport and Access, a Construction Environmental Management Plan (CEMP) and a Construction Traffic Management Plan (CTMP) will be prepared to ensure that appropriate measures are in place to mitigate the issues outlined above.....

Healthy Environment

12.10.13 As identified in Chapter 7 Air Quality, the potential effects associated with dust, demolition and construction traffic have been assessed. The assessment indicates that construction dust impacts and associated risks to human health are expected to range from low to medium.

12.10.14 As identified in Chapter 15 Noise and Vibration, effects to sensitive receptors associated with construction noise and vibration have been assessed to be medium with reference to the magnitude of the impact varying from negligible to low.

Vibrant Neighbourhoods

12.10.15 As detailed in Chapter 16 Socio Economics, the Proposed Development will generate up to approximately 61 on-site construction jobs. Once the effects of leakage, displacement, and multiplier effects have been considered, this equates to around 106 net additional

construction jobs, of which 43 will benefit the Wokingham labour force. The Proposed Development is estimated to have a low positive impact on the low sensitivity construction workers (in Wokingham), resulting in a Minor Beneficial effect, over the short term. The same effect results from an assessment of effect on human health (given that the health sensitivity is also considered low within the study area)

12.10.16 It is considered that these temporary levels of job creation, increasing employment opportunities within the construction sector to local residents will have a minor beneficial effect over the short term on human health.

Operational Phase

Healthy Housing

12.10.17 As detailed in Chapter 16 Socio Economics, the Proposed Development will facilitate the delivery of additional homes which would be a significant addition to Wokingham's housing pipeline. The magnitude of additional home provision is considered to be a medium positive impact. The sensitivity of people looking for new housing in Wokingham, as identified in the Chapter 16 is medium.

In the context of assessing Human Health effects, and given that the health sensitivity is determined to be low, the provision of additional housing would result in a minor beneficial effect on human health over the long term.

Active Travel

12.10.18 As identified in Chapter 17: Transport and Access, the Proposed Development will incorporate a comprehensive network of walking and cycling routes, providing connections for pedestrians, cyclists, and equestrians through the site and linking with the LGV Project area. During the interim phase, the development will also benefit from a new bus stop on Mole Road, enhancing accessibility by public transport. In addition, the scheme will include electric vehicle (EV) charging facilities, high-quality cycle parking, and an on-site car club, supporting sustainable travel choices and reducing reliance on private car use.

12.10.19 In accordance with IEMA Guidelines, the Proposed Development is predicted to result in negligible effects across all assessed links, with the exception of Arborfield Road, where non-motorised user amenity and fear and intimidation are anticipated to experience a moderate beneficial effect. On Sindlesham Road (2040 scenario), driver stress and delay is assessed as a minor adverse effect. None of these effects are considered significant in EIA terms.

Healthy Environment

12.10.20 As identified in Chapter 7 Air Quality it is concluded that during operational phase the Proposed Development is considered to be "not significant" for human receptors..

12.10.21 As identified in Chapter 15 Noise and Vibration noise from operational traffic will result in a negligible adverse effect. There is no required mitigation and this is not deemed significant in EIA terms.

Vibrant Neighbourhoods

12.10.22 The Proposed Development will placed increased demands on social infrastructure. Addressing primary healthcare provision specifically within this Human Health Chapter, as identified in the baseline analysis there would appear to be a slight deficit in GP provision locally (2km radius) to the Site.

12.10.23 As identified in Chapter 16 Socio Economics, the Proposed Development will likely provide for a population of approximately 1,000 people, further increasing demands on local GP provision.

12.10.24 Through proposing to provide financial contributions to meet additional primary health care needs arising from it, the Proposed Development is estimated to have a negligible impact on the low sensitivity users of primary healthcare providers within the 2km study area resulting in a neutral effect over the long-term.

12.10.25 A summary of the assessment is set out in Table 16.12 overleaf.

12.11 References

- List references used in the assessment
- National Planning Policy Framework (NPPF), December 2023;
- Planning Practice Guidance (PPG), live document;
- IEMA Guide to Effective Scoping of Human Health in EIA (IEMA, 2022); and
- IEMA Guide to Determining Significance for Human Health in EIA (IEMA, 2022).
- London Healthy Urban Development Unit (HUDU), Healthy Urban Planning Checklist 2017
- Wokingham Borough Local Development Framework (LDF) Adopted Core Strategy, 2010;
- Wokingham Borough Development Plan Managing Development Delivery (MDD) Local Plan, 2014 (Adopted Local Plan);
- Arborfield & Barkham Neighbourhood Plan 2019-2036, 2019;
- Shinfield Parish Neighbourhood Plan, 2017;
- Infrastructure Delivery and Contributions Supplementary Planning Document (SPD), 2011;
- Wokingham Borough Council Infrastructure Delivery Plan (IDP). 2025.
- Wokingham Borough Community Infrastructure Levy (CIL) Charging Schedule, 2015;
- Wokingham Borough CIL Guidance Notes for Applicants, 2019.
- Play Space Design Guide Technical Note, 2019;
- Open Space, Sport and Recreation Facilities Strategy, 2013
- Office for Health Improvement and Disparities (OHID) Local Health tool (Office for Health Improvement and Disparities, n.d.);
- PHE Fingertips health baseline (Office for Health Improvement and Disparities, n.d.); and
- Office for National Statistics (ONS).

12.12 Assessor information

Table 12.8 Assessor Information

Chapter	Responsibility	Name	Qualifications	Assessor information
12. Human Health	Marrons	Simon Macklen (Partner)	BSc Hons, MA, MRTPI	Simon Macklen, Head of Socio-Economics and Partner at Marrons, brings 18 years of experience in conducting socio-economic and human health assessments.
		Isabelle Woodville-Hill (Socio Economic Planner)	BA Hons, MSc, RTPI Licentiate.	This chapter of the ES was prepared by Isabelle Woodville-Hill, at Planner level, under the supervision of Simon Macklen. Isabelle brings two years of experience in socio-economic and human health assessments.

12.13 Summary of effects

Table 12.9 Summary of Effects

Receptor	Health Receptor sensitivity	Description of potential impact	Proposed mitigation	Residual effect	Significant / not significant
Construction Phase					
Active travel					
Formation of Access Junction to Mole Road	Medium	Driver delay Moderate Adverse	CEMP	Moderate Adverse	Not Significant
Formation of Crossing of Mole Road	Medium	Non-motorised user amenity - Minor Adverse	CEMP	Minor Adverse	Not Significant
Adjacent Road Network	Various	Driver delay - Minor Adverse	CEMP	Minor Adverse	Not Significant
Adjacent Road Network	Various	Non-motorised user amenity - Minor Adverse	CEMP	Minor Adverse	Not Significant
Healthy Environment (Air Quality)	High	Increase in suspended particulate matter and deposited dust generated by construction activities.	Mitigation measures related to communications, site management, monitoring, preparing and maintaining the site, operating vehicles/ machinery, construction operation, waste management, earthworks, construction and trackout.	Negligible	Not Significant
Healthy Environment (Noise)	Medium	Noise from construction traffic	CEMP	Negligible – Minor Adverse	Not Significant
Vibrant Neighbourhoods (Employment)	Low	Positive	None Required	Minor Beneficial	Not significant

Receptor	Health Receptor sensitivity	Description of potential impact	Proposed mitigation	Residual effect	Significant / not significant
Operation Phase					
Housing	Low	Positive	None required	Moderate beneficial	Significant
Healthy Housing	Low	Positive	None required	Minor beneficial	Not Significant
Active travel (Transport and Access)	Low	Transport impacts on Human Health during the operational phase of the development	None required	Negligible	Not Significant
Healthy Environment (Air Quality and Noise)	Low	Impacts of operational traffic	None required	Negligible	Not Significant
Healthy Environment (Noise)	Medium	Noise from operational traffic	None required	Negligible Adverse	Not Significant
Vibrant Neighbourhoods (Primary healthcare)	Low	-	None required	Neutral	Not Significant

12.14 Mitigation commitments Summary

Table 12.10 Summary for Securing Mitigation

Identified receptor	Type and purpose of additional mitigation measure (prevent, reduce, offset, enhance)	Means by which mitigation may be secured (e.g. planning condition / legal agreement)	Delivered by	Auditable by
Construction Phase				
N/A	N/A	N/A	N/A	N/A
Operation Phase				
N/A	N/A	N/A	N/A	N/A