



South West Milton Keynes

Updated Environmental Statement Volume 2 - Appendices

Carter Jonas LLP

APPENDIX 13.1:

FACILITIES PLAN





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APPENDIX 13.2:

HEALTH IMPACT ASSESSMENT

CHAPTER 13 APPENDIX

Health Impact Assessment and Relevant Human Health

Chapter 1 Introduction

- 1.1. The aim of the report is to describe the potential consequences, both positive and negative, for health and wellbeing from the construction and operation of the Proposed Development at South West Milton Keynes. It involves a multidisciplinary approach combining qualitative and quantitative evidence from a range of technical experts.
- 1.2. The planning application includes for the construction of 1,855 new dwellings, 2.07ha of B1 employment, a neighbourhood centre, and both a primary and secondary school at Land at South West Milton Keynes (the 'Application Site').
- 1.3. Health Impact Assessments, as a formal submission within the Environmental Statement, are a direct consequence Regulation 4. (2) (a) of the Town and Country Planning (Environmental Impact Assessment) Regulations 2017. "The EIA must identify, describe and assess in an appropriate manner, in light of each individual case, the direct and indirect significant effects of the proposed development on the following factors (a) population and human health".
- 1.4. The broad purpose of an HIA is to understand the general wellbeing of the local population and help decision-makers make choices about alternatives and improvements to actively promote health. Within a HIA, Health and Wellbeing are linked terms. Health referring to general provision, individual ill-health and health services for individuals, as well as the overview of the state of the health of the community. Wellbeing covers the local population's state of contentment, not only in respect of health, but opportunities for healthy activities, both organised and personal, and the impacts of opportunities for education, training and employment, of access to facilities for healthy choices and the impact of local crime.
- 1.5. The site lies in Aylesbury Vale District but is an urban extension to Milton Keynes with access from Milton Keynes. Much of relevant data is sourced from Milton Keynes.
- 1.6. This HIA supplements the Environmental Impact Assessment requirement for planning applications.
- 1.7. This HIA is structured as follows:
 - Chapter 1 outlines the purpose of the assessment and defines HIAs.
 - Chapter 2 explains the assessment methodology.
 - Chapter 3 sets out the Proposed Development, the site and its relationship to surrounding areas and neighbouring schemes.
 - Chapter 4 summarises the relevant health and well-being policies and legislation at national, regional and local levels.
 - Chapter 5 presents a summary profile of public health of the local population.
 - Chapter 6 presents an assessment of the impacts using the NHS Healthy Urban Development Unit (HUDU) HIA Tool.
 - Chapter 7 provides the conclusions of the assessment and outlines potential measures that can be employed to reduce the potential negative impacts.
- 1.8. This forms part of the overall approach to delivering sustainable development at the proposed development and should be read in conjunction with the other documents accompanying the planning application.
- 1.9. The assessment approach identifies the scope of the assessment, relevant health impact criteria and sources of information.

- 1.10. There is no single guidance for defining the scope and method of HIA for the assessment of development projects. Instead a range of guidance documents have been published by a variety of public bodies and institutions, such as WHO.
- 1.11. The factors considered in this HIA are based on a consolidated list of those health determinants provided in the HUDU Rapid HIA Tool (2013).
- 1.12. Aylesbury Vale Council has not provided guidance on their HIA perspective which would identify a number of appropriate tools for determining the health impacts of a development.
- 1.13. This HIA, therefore, relies primarily on the HUDU Rapid HIA Tool updated guidance building on the "Watch out for Health. A Checklist for Assessing the Health Impact of Planning Proposals" guide.
- 1.14. In order to establish a baseline for the assessment, three geographies of impact are considered:
 - Neighbourhood impact area focused on the ward of Great Brickhill & Newton Longville
 - Local impact area covering the LPA area
 - Local impact area covering the adjacent area of Milton Keynes: Bletchley & Fenny Stratford
- 1.15. Within these impact areas the public health profile of the local population is analysed. The public health profile includes the consideration of population, economy, general health rates of population, healthcare provision, education provision, open spaces, wider community facilities and crime. This uses data from publicly available datasets and sites such as 2011 Census, Annual Population Survey (APS), Public Health England, NHS Choices and PLASC & SCAP (Department for Education). Where appropriate, data is also compared with national datasets.

Chapter 2 Screening & Scoping

- 2.1. The screening stage involved considering whether to undertake a HIA. Emerging policy across England and Wales indicates that where a development contains more than 100 dwellings, a HIA should be carried out and this should be required as part of the validation requirements for the planning application.
- 2.2. The scoping stage involved considering the type of HIA required and an initial review of appropriate health determinants to assess. Following a review of the HUDU health determinants, it was decided that all the health determinants identified were relevant to investigate in this assessment.
- 2.3. The proposed residential development will not require any complex or hazardous construction activity and is therefore unlikely to have a significant adverse impact on the health of the existing community or related services and infrastructure during construction. The affected population groups are anticipated to be limited to existing residents in the vicinity of the application site, construction workers, and future residents of the proposed development.
- 2.4. This HIA considers the proposals in relation to the following health impact criteria:
 - Housing quality and design
 - Access to healthcare services and other social infrastructure
 - Access to open space and nature
 - Air quality, noise and neighbourhood amenity
 - Accessibility and active travel
 - Crime reduction and community safety
 - Access to healthy food
 - Access to work and training
 - Social cohesion and lifetime neighbourhoods
 - Minimising the use of resources
 - Climate change.

Analysis Techniques

- 2.5. The HIA draws on qualitative and quantitative assessments carried out as part of this submission. These are outlined in detail in the other submitted technical documents and are referenced as such throughout this report. In addition, further information was obtained for the specific purpose of the HIA, for example with regards to healthcare services and social infrastructure; crime reduction and community safety; access to healthy food; access to work and training; and social cohesion and lifetime neighbourhoods.
- 2.6. The sources identified in Table 1 below are referenced in this HIA.

Table 1: Sources of Information					
Assessment Criteria	Technical & Data				
	Sources Referenced				
Housing quality & design	Design & Access Statement				
	Sustainability Statement				
Access to healthcare and	NHS Digital (online data				
other social infrastructure	files) Google Earth mapping				
Access to open space &	Design & Access Statement				
nature	Google Earth mapping &				
	MKC website				
Air quality, noise and	Design & Access Statement				
neighbourhood amenity					
Accessibility and active	Local and national transport				
travel	websites. Google Earth				
Crime reduction and	MHCLG 2019 data and				
community safety	Thames Valley Police crime				
	maps				
Access to healthy food	Environmental Statement				
	Google Earth mapping				
Access to education, work	DfE PLASC & SCAP data				
and training	Early Years & Pre-school				
	websites School catchment				
	heat maps. MHCLG 2019				
	data. Local & national				
	transport websites				
Social cohesion and	Sustainability Statement				
lifetime neighbourhoods					
Minimising the use of	Sustainability Statement				
resources					
Climate change	Sustainability Statement				
	Flood Risk Assessment				

Table 1: Sources of Information

2.7. This report should be read in conjunction with other technical studies submitted as part of the application.

Chapter 3 Proposed Development

3.1. This section describes the development proposals in the context of likely impacts on health and wellbeing.

Site and Surroundings

3.2. The Application Site straddles the boundary between the rural hinterland of Aylesbury Vale and the urban areas of Milton Keynes. To the north is the industrial area of Snelshall West and to the east is the established residential area of Far Bletchley. To the west and south of the Site is farmland and open countryside. The village of Newton Longville is located to the south of the Site.

3.3. The Application Site is located adjacent to Milton Keynes, which is a main centre in the region providing significant employment opportunities and containing a broad range of services and facilities. The Proposed Development includes walking, cycling and public transport infrastructure and facilities, which would connect to the existing networks in the surrounding area. and covers approximately 144.77 hectares.



Figure 1: Site and Administrative Boundaries

(Google Earth ©)

3.4. The site comprises agricultural land, bounded by agricultural land on 2 sides (south and west) with Snelshall West industrial/warehousing to the north and Milton Keynes to the east and beyond.

Proposed Development

- 3.5. The application seeks outline planning permission for a mixed use sustainable urban development to provide: up to 1,855 dwellings; an employment area (B1) on 2.07ha; a neighbourhood centre on 0.67ha accommodating retail (A1 A5), community (D1/D2) and residential (c3) uses; a primary school (D1) on 3ha; secondary school (D1) on 5.2ha; allotments on 1.22ha; green open space on 55.75ha; surface water attenuation on 5.05ha; and associated infrastructure including new junctions to the A421, a grid road reserve of 7.24ha, highway improvements, and undergrounding of 132Kv overhead power lines.
- 3.6. All matters (i.e. appearance, landscaping, layout and scale) will be determined as part of a reserved matters application.
- 3.7. Full details of the proposed development are provided within the Design and Access Statement and Planning Statement that accompany the application.

Connectivity

3.8. Whaddon Road runs along the southern boundary of the site, Buckingham Road to the eastern part of the northern boundary and the A421 to rest of the northern boundary. The Application

includes improvements to the existing highway network, comprising the following: new highways access points to Whaddon Road, Buckingham Road, and a left in/left out junction onto the A421; junction improvements to Tattenhoe Roundabout and Bottle Dump Roundabout close to Central Milton Keynes and on the A421.



Figure 2 Site boundary

- 3.9. Snelshall West is served by bus routes: 24 (The Point Milton Keynes); 25 (circular route from Bletchley); 28 Bletchley to Westcroft District Centre); 300 (from Tattenhoe Park to Magna Park).
- 3.10. Trains from Milton Keynes Central and Bletchley into London Euston.

Development Phases & Stages

- 3.11. The Proposed Development includes two distinct stages that may have an impact on health and wellbeing:
 - Construction the construction programme is anticipated to take place over a number of years.
 - Operation the 'lifetime' of the development is anticipated to be long-term, of circa 100 years plus.
- 3.12. This section of the report provides a summary of relevant national and local documents and policies which set out the framework for healthy development at Land at South West Milton Keynes.

Chapter 4 Planning Policy Context

4.1. This section provides an overview of relevant national and local sustainability policies which aim to ensure development proposals are sustainable, responding to local, national and global objectives.

National Health Policy

4.2. National health policy is set out in a wide range of sources including national planning guidance, White Papers and various vision and guidance documents. This section provides a summary of some of these relevant documents to provide a brief overview of national health policy relevant to the applications rapids health impact assessment.

National Planning Policy Framework (NPPF) Updated February & May 2019

4.3. National planning policy is now provided by the NPPF which sets out the government's planning policies for England and how these are expected to be applied. The government has made clear its expectation that the planning system is expected to play a social role as follows:

"Supporting strong, vibrant and healthy communities, by providing the supply of housing required to meet the needs of present and future generations; and by creating a high quality built environment, with accessible local services that reflect the community's needs and support its health, social and cultural well-being" (Para 8b, NPPF)

A core planning principle of the NPPF focuses on the health of local communities, stating that plan-making and decision-taking should:

"Take account of and support local strategies to improve health, social and cultural wellbeing for all, and deliver sufficient community and cultural facilities and services to meet local needs"

4.4. Section 8 of the NPPF relates to the contribution that the planning system can make to promoting healthy communities through provision of open space and facilities:

"Access to high quality open spaces and opportunities for sport and recreation can make an important contribution to the health and well-being of communities"

National Planning Policy Guidance

- 4.5. The government releases updated National Planning Policy Guidance (PPG). The Guidance provides information to local authorities on how to implement the policies of the NPPF and approach specific policy aims.
- 4.6. This includes guidance regarding what is the role of health and wellbeing in planning. It states that Local planning authorities should ensure that health and wellbeing, and health infrastructure are considered in local and neighbourhood plans and in planning decision making and that decision making should consider how:

"Development proposals can support strong, vibrant and healthy communities and help create healthy living environments which should, where possible, include making physical activity easy to do and create places and spaces to meet to support community engagement and social capital".

Policy Informatives

UK Chief Medical Officers' Physical Activity Guidelines (2019)

4.7. The Department of Health, Physical Activity, Health Improvement and Protection published a report on physical activity for health in July 2011. The report was updated in September 2019 and establishes a UK-wide consensus on the amount and type of physical activity that people of various ages should aim to undertake. The physical activity recommendations draw on global evidence of the health benefits that can be achieved by undertaking regular physical activity.

Healthy Lives, Healthy People: A Call to Action on Obesity in England (2011)

- 4..8 The Department of Health published Healthy Lives, Healthy People A Call to Action on Obesity in England in October 2011. The report sets out the scale of the obesity issue in England and the Government approach to tackling obesity by promoting healthier lifestyles. The report recognises that an important part of supporting healthier lifestyles is empowering people and communities to take action by providing opportunities for physical activity and sport.
- 4.9. The report not only highlights the physical health benefits of increased exercise and healthy living, but also the mental health benefits as it is recognised that being overweight or obese can reduce prospects in life, affecting individuals' ability to get and hold down work, their self-esteem and underlying mental health.
- 4.10. The significant impact of the quality of the surrounding environment on communities is also recognised in the report. Pollution, air quality, noise, the availability of green and open spaces, transport, housing, access to good-quality food and social isolation all influence the health and wellbeing of the local population. Further review of the policies relevant to these aspects can be found in the relevant technical reports accompanying the submission.

Public Health England

- 4.11. Public Health England, established in April 2013, is an executive agency with an overall aim to protect and improve the nation's health and wellbeing, and reduce health inequalities.
- 4.12. In September 2019, Public Health England published its strategy 2020-2025, which highlights ten priorities:
 - Smoke-free society
 - Healthier diets, healthier weight
 - Cleaner air
 - Better mental heath
 - Best start in life
 - Effective response to major incidents
 - Reduced risk from antimicrobial resistance
 - Predictive prevention
 - Enhanced data and surveillance capabilities
 - New national science campus

Fair Society, Healthy Lives: The Marmot Review, 2010

- 4.13. In 2008, Professor Sir Michael Marmot was tasked with chairing an independent review to propose evidence-based strategies for reducing health inequalities in England from 2010. The strategy includes policies and interventions that address the social determinants of health inequalities. The report had a profound impact on the way health inequalities and social determinants of health were considered within policy.
- 4.14. The final report was published in 2010 and concluded that six policy objectives were required to reduce health inequalities:
 - 1. Give every child the best start in life.
 - 2. Enable all children, young people and adults to maximise their capabilities and have control over their lives.
 - 3. Create fair employment and good work for all.
 - 4. Ensure healthy standard of living for all.
 - 5. Create and develop healthy and sustainable places and communities.
 - 6. Strengthen the role and impact of ill-health prevention.

4.15. The report proposed that socio-economic characteristics of a local area, such as income, education, employment and neighbourhood circumstances, were central to understanding asymmetries in health and well-being across the UK. The central message of the report is that the social determinants of health should be addressed despite the economic cost. The report concludes that "health inequalities are unfair and putting them right is a matter of social justice".

Statutory Guidance on Joint Strategic Needs Assessments and Joint Health and Wellbeing Strategies

- 4.16. The Health and Social Care Act 2012 amends the Local Government and Public Involvement in Health Act 2007 to introduce duties and powers for health and Wellbeing boards in relation to Joint Strategic Neds Assessments and Joint Health and Wellbeing Strategies.
- 4.17. Local authorities and clinical commissioning groups have equal and joint duties to prepare the needs assessments and strategies through the health and wellbeing board.

Local Health and Planning Policy

- 4.18. A number of documents offer some insight into local health priorities for South West Milton Keynes including:
 - NHS The Bedfordshire, Luton & Milton Keynes Single Operating Plan
 - Milton Keynes CCG Board Strategic Plan
 - Buckinghamshire (county) Health & Equality Impact Assessment
 - Buckinghamshire Joint Strategic Needs Assessment 2016-2020
- 4.17. The Health and Equality Impact Assessment strategy identifies a number of headline issues that are crucial to planning for future health and wellbeing including:
 - The centralisation of acute services
 - Investment in more community care and provision of care closer to home
 - A commitment to delivering against key priorities

The Development Plan

- 4.18. The NPPF reiterates the status of the Development Plan as the starting point for decision making unless material considerations indicate otherwise.
- 4.19. Planning policies and proposals that guide the development and use of land in Aylesbury Vale District are set out in the Development Plan. All planning applications are assessed against the planning policies included in the Development Plan.
- 4.20. The Development Plan for Aylesbury Vale District (VALP) comprises of the documents of the Local Development Framework:
 - Aylesbury Vale District Local Plan 2004 (saved policies only) and the emerging Vale of Aylesbury Local Plan 2013 – 2033 (VALP). The public consultation of the modifications to the latter closed on 17th December 2019 following the Inspector's interim findings at the end of August 2018. Adoption was forecast to be during February 2020 with no update
 - Development Control Policies (Sport & Leisure Facilities August 2004 may be applicable until SPD 7 is adopted)
 - Core Strategy (proposed submission Core Strategy 2009 until VALP adopted)
 - Development Control Policies (None applicable)
- 4.21. Because of the proximity to Milton Keynes and that SWMK is essentially an extension to Milton Keynes, the following documents are relevant:

- Plan:MK (2019) Plan:MK sets out the vision and framework for the development of the Borough of Milton Keynes to 2031, addressing issues such as housing, the economy, infrastructure, the environment, adapting to climate change and securing good design. The spatial vision for Plan:MK expects Milton Keynes to grow by 26,500 new dwellings during the plan period (2016 and 2031). Plan:MK commits Milton Keynes Council to work with neighbouring authorities on the planning of any development located on the edge of Milton Keynes (but outside of the Borough boundary) so that these areas are integrated with the City.
- Milton Keynes CCG understanding the health of the population (2011)
- Milton Keynes Council Social Infrastructure Planning Obligations SPD (2005)
- 4.22. A review of the relevant adopted and emerging policies and supplementary documents has been carried out to determine the policies relevant to sustainability and the proposed development.

The Core Strategy

- 4.23. The adopted Core Strategy was introduced in 2004 and sets out the broad aims and objectives for development in the district. The Council's corporate mission is to make Aylesbury Vale the best possible place for people to live and work. It includes a requirement for development to enhance community safety. The 2009 proposed submission Core Strategy said that AVDC and its partners are committed to creating a vibrant Aylesbury Vale a sustainable, safe, active and healthy community.
- 4.24. The proposed submission Vale of Aylesbury Local Plan 2013 2033 says:
 - The total population of Aylesbury Vale was 174,100 at the 2011 Census. This is an increase of 5% compared to the 2001 Census.
 - The population is forecast by ONS to increase to around 214,000 by 2033 (this does not take account of the redistribution of housing for unmet needs).
 - The population is becoming increasingly elderly: 21% of the population were aged over 60 in 2011, compared to 17% in 2001. There was a corresponding decrease in the young working population (aged 25 to 39) from 23% of the population in 2011, to 19% in 2011.
 - The latest census shows that 14.8% of the population are in ethnic groups other than white British.
 - The quality of life in Aylesbury Vale is generally high, as demonstrated by the Government's indices of deprivation (2015) which show that the district falls within the 14% least deprived areas in England. However, there are pockets within Aylesbury town which rank among the 26% most deprived in the South East region.
 - Life expectancy of residents has been steadily increasing and is longer than the average for England.
- 4.25. The VALP will seek "to secure the economic, social and environmental wellbeing of the people and businesses in the area".

Development Control Policies

4.26. There are none applicable carried forward from the AVD Local Plan 2004. There are none applicable indicated in the Core Strategy proposed submission June 2009 There are none applicable indicated in the Local Development Scheme October 2019 There are none applicable indicated in the Proposed Submitted Local Plan 2013-33 (Nov 17)

Health Impact Assessment SPD

- 4.27. There is no Health Impact Assessment SPD for AVDC nor any mention in the emerging local plan: Submission VALP.
- 4.28. PlanMK (March 2019) Policy EH6: All Use Class C2 developments and Use Class C3 residential development in excess of 50 dwellings will be required to prepare a Health Impact Assessment, which will measure the wider impact on healthy living and the demands that are placed upon the

capacity of health services and facilities arising from the development. Further guidance on how this policy will be implemented will be provided in a Supplementary Planning Document, which will be published in due course. The Health Impact Assessment should not be required in advance of the Supplementary Planning Document being adopted.

(Emerging) Local Plan (VALP)

- 4.29. The emerging Local Plan sets out the policies to guide development over the period from 2013

 2033 and is expected to be adopted in February 2020. (LDS October 2019 Table 1). Once adopted it will supersede the current Core Strategy and Development Control Policies.
- 4.30. The emerging local plan has therefore reached an advanced stage of the plan-making process and accordingly it should be afforded substantial weight.
- 4.31. The emerging plan is accompanied by a Sustainability Report (September 2017). The VALP's objectives include a flexible and pro-active approach to sustainable development. Promote provision of, and support for, measures and initiatives that strengthen the quality of life for new and existing residents of the district and address pockets of deprivation and health inequalities especially within Aylesbury town.
- 4.32. Each allocated area for development will be assessed against 12 objectives: Biodiversity; Climate change mitigation; Climate change adaptation; Community; Economy; Heritage; Housing; Landscape; Natural resources; Pollution; Transport; Waste. In combination and to greater or lesser degree individually all contribute to the health and wellbeing of the community. In particular, the Community objective means 'safeguard and improve community, health, safety and wellbeing'.

Review of Policy Context

- 4.33. A central theme of national and local policy is the provision of sustainable development. The emerging Local Plan sets out policies which support sustainable development and respond to the Government's ambitions for sustainable new housing reflecting local environmental, social and economic values.
- 4.34. Development has the potential to create both positive and negative impacts on the health of wellbeing of both occupants and local communities; the production of a Health Impact Assessment (HIA) helps to identify potential health issues, shaping development plans to ensure positive health outcomes for all.
- 4.35. This HIA examines the local context, health issues and features of the development, demonstrating that the proposed scheme will have an overall positive impact on health in the local area.

Chapter 5 Local Health Profile

- 5.1. Because the development is an extension to Milton Keynes, this section of the report sets out the current characteristics relevant to health and wellbeing for both the rural location of the settlement, its adjacency to Milton Keynes and the wider local area.
- 5.2. This section provides information relating to the local context in terms of current demographics, health and education outcomes. The public health profile includes the consideration of demographics; economy; health; education; open spaces; wider community facilities; and crime.

Demographics

Population

5.3. The tables below include the Census 2001 and 2011 plus the ONS estimates for mid-2018.

Age

Table	2:	Ροι	oulation	numbers
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Area	Population		Increase	Latest	Overall	
	2001 2011 census census		2001-2011	Estimates (mid 2018)	Change	
AV District	165,748	174,137	5.1%	199,448	20.33%	
Gt Brickhill &c ward	3,020	3,042	0.73%	6,395	111.8%	
Milton Keynes	207,057	248,821	20.2%	268,607	29.73%	
Bletchley &c ward	11,177	13,581	21.5%	15,630	39.84%	
Buckinghamshire	479,026	505,283	5.5%	540,059	12.74%	
S E Region	8,000,645	8,634,750	7.9%	9,133,625	14.16%	

(Source: NOMIS and ONS)

Table 3: Age Profile as at June 2018

	Ward		District	/Borough	County	Region	
	Great Brickhill	Bletchley	Aylesbury Vale	Milton Keynes	Buckinghamshire	South East	
0-3	3.7%	6.3%	4.9%	5.6%	4.7%	4.6%	
4-10	9.1%	10.1%	9.6%	10.9%	9.5%	8.8%	
11-15	5.4%	5.2%	0.2%	6.5%	6.4%	5.8%	
16-19	4.0%	3.3%	4.4%	4.3%	4.4%	4.5%	
20-24	3.6%	5.1%	4.9%	4.8%	4.7%	5.9%	
25-29	3.5%	6.1%	6.0%	6.0%	5.4%	6.0%	
30-34	4.5%	8.3%	6.6%	7.5%	5.7%	6.0%	
35-39	5.1%	7.6%	7.0%	8.3%	6.5%	6.4%	
40-44	5.6%	6.4%	6.8%	7.6%	6.7%	6.3%	
45-49	7.5%	6.5%	7.3%	7.1%	7.4%	7.0%	
50-54	8.8%	6.2%	7.6%	6.6%	7.6%	7.3%	
55-59	8.8%	5.8%	6.6%	5.9%	6.7%	6.6%	
60-64	7.9%	4.8%	5.4%	5.1%	5.6%	5.5%	
65-69	7.1%	5.0%	4.8%	4.5%	5.0%	5.2%	
70-74	6.6%	4.6%	4.5%	3.7%	4.9%	5.2%	
75-79	3.8%	3.2%	3.0%	2.4%	3.5%	3.5%	
80-84	2.5%	2.8%	2.2%	1.6%	2.7%	2.7%	
85-89	1.8%	1.7%	1.3%	1.0%	1.7%	1.7%	
90+	0.6%	0.9%	0.8%	0.6%	1.0%	1.0%	

(Source: ONS)

Gender:

5.4. There are slightly more females than males across both wards, district and borough:

Table 4: Gender balance

	Great Brickhill	Bletchley	AVDC	MKB		
Male	48.04%	48.30%	49.10%	49.37%		
Female	51.96%	51.70%	50.90%	50.63%		
(Source: ONS)						

(Source: ONS)

Ethnicity and Family Household Composition

5.5. At the Census 2011 the ethnic mix and family household composition was as set out in Tables 5 and 6.

Table 5: Ethnic composition

	Gt Brickhill	Bletchley	AVDC	Milton Keynes	South East
White All	90.5%	83.0%	86.4%	82.0%	90.70%
Mixed Ethnicity	0.9%	3.9%	2.4%	3.4%	1.90%
Asian British Indian	2.1%	1.4%	2.2%	3.3%	1.80%
Asian British Pakistani	0.9%	0.7%	4.2%	1.6%	1.10%
Asian British Bangladeshi	0.6%	4.8%	0.2%	0.8%	0.30%
Asian British Chinese	1.5%	0.9%	0.5%	1.1%	0.60%
Black British All	1.7%	4.7%	2.1%	7.1%	1.60%
Other Ethnicity	1.7%	0.6%	0.5%	0.7%	0.60%
Other Asian			1.40%		1.40%

(Source: ONS)

Table 6: Family Household Composition

	Living in a	Living in a	Not living in a	Not living in a	Not living in a	Not living in a	Not living in a
	couple:	couple:	couple: Single	couple:	couple:	couple:	couple:
	Married or in a	Cohabiting	(never married	Married or in a	Separated (but	Divorced or	Widowed or
	registered same		or never	registered same	still legally	formerly in a	surviving
	sex civil		registered a	sex civil	married or still	same-sex civil	partner from a
	partnership		same-sex civil	partnership	legally in a	partnership	same-sex civil
			partnership)		same-sex civil	which is now	partnership
					partnership)	legally	
						dissolved	
Great Brickhill	58.6%	9.7%	17.9%	0.7%	1.6%	5.7%	5.8%
Bletchley	45.5%	12.9%	23.0%	1.8%	2.8%	6.5%	7.5%
Milton Keynes UA	46.7%	13.7%	24.0%	1.6%	2.6%	6.7%	4.7%
Aylesbury Vale	52.6%	12.0%	20.7%	1.2%	2.0%	6.1%	5.5%
South East	49.1%	12.0%	23.1%	1.0%	2.0%	6.6%	6.2%

(Source: ONS)

Deprivation

5.6. The MHCLG Indices of deprivation 2019 indicate that the Bletchley area suffers from more deprivation when compared with other local areas. On a scale of 1-10, where 1 is the most deprived Bletchley scores 4 whereas Brickhill scores 8. Bletchley is ranked 10,421 and Brickhill is ranked 18,065 where 1 is the most deprived.

	Index of Multiple Deprivation (IMD) Rank where 1 is the most deprived	Index of Multiple Deprivation (IMD) Decile where 1 is the most deprived	Comment
Brickhill	23,569	8	Brickhill is broadly similar to AVDC
Bletchley	10,421	4	Bletchley is a more deprived area of MK
AVDC	24,070	8	AVDC has some deprived pockets
MKUA	18,065	6	MK has areas has areas of deprivation

Table 7: Deprivation

(Source: MHCLG 2019)

Economy

5.7. The economic data for the AVDC area is positive with the Brickhill area scoring still higher. The more urban Milton Keynes has pockets that depress the overall picture. Bletchley scores relatively poorly.

Economic Activity and Unemployment

Table 8 Employment Ranking

	Employment Rank where 1 is the most deprived	Employment Rank Decile where 1 is the most deprived	Comment
Brickhill	26391	9	Brickhill is broadly similar to AVDC
Bletchley	9,984	3	Bletchley is a more deprived area of MK
AVDC	24,586	8	AVDC has some deprived pockets
MKUA	18,587	6	MK area has areas of more unemployment

(Source: MHCLG 2019)

Qualifications and Skills

Table 9 Education and Training Ranking

	Education, Skills and Training Rank where 1 is the most deprived	Education, Skills and Training Decile where 1 is the most deprived	Comment
Brickhill	25,905	9	Brickhill above average for AVDC
Bletchley	7,853	3	Bletchley is a more deprived area of MK
AVDC	20,768	7	AVDC has some deprived pockets
MKUA	16,298	6	MK area has areas of more unemployment

(Source: MHCLG 2019)

Health and Health Care Provision

5.8. The Brickhill ward area scores higher than the average for the AVDC area and significantly higher than the Milton Keynes area and particularly in comparison with the Bletchley ward area.

	Health Deprivation and Disability where 1 is the most deprived	Health Deprivation and Disability Decile where 1 is the most deprived	Comment				
Brickhill	27,776	9	Brickhill above average for AVDC				
Bletchley	12,440	4	Bletchley is a more deprived area of MK				
AVDC	25,662	8	AVDC has some deprived pockets				
MKUA	18,066	6	MK area has areas of more unemployment				

Table 10 General Health Rate of Population

(Source: MHCLG 2019)

GP Primary Healthcare

- 5.9. The NHS Constitution says that everybody has the right to choose their GP practice, and be accepted by that practice unless there are reasonable reasons grounds to refuse.
- 5.10. As at October 2018 there were 4,008 patients, resident in the Great Brickhill ward registered with a GP. Of the total, 3,934 are registered at sixteen different practices. The balance is registered in very low numbers at a further eight practices.

Table '	11	GP	Surd	eries	servina	Great	Brickhill	Ward	Residents
TUDIC	••	U I	ouis	j en 165	Serving	orcut	DITORTIN	T u u	Residents

		Patient Numbers		
Practice Code	Practice Name	Gt Brickhill Ward	Practice Size	
K82070	Stewkley Road Surgery	606	5469	
K82013	The Red House Surgery	586	13487	
E81044	Leighton Road Surgery	546	21893	
E81003	DR J L Henderson & Partners	508	15217	
K82061	Ashcroft Surgery	406	3958	
K82026	Whaddon House Surgery	239	13392	
K82043	Norden House Surgery	217	9587	
K82039	Bedford Street Surgery	147	12757	
K82059	Westfield Road Health Centre	126	6140	
K82062	Drayton Road Surgery	113	3118	
E81072	Grovebury Road Surgery	110	7243	
K82050	Water Eaton Health Centre	96	6260	
E81004	Salisbury House Surgery	84	11244	
K82015	Parkside Medical Centre	80	10684	
E81050	Asplands Medical Centre	55	11847	
K82042	Whitchurch Surgery	15	4056	
		3934		

(Source: NHS Digital October 2018 & March 2020)

5.11. As at October 2018 there were 17,190 patients, resident in the Bletchley and Fenny Stratford ward registered with a GP. Of the total, 16,993 are registered at eleven different practices. The balance is registered in very low numbers at a further twenty-two practices.

		Patient Numbers	
Practice Code	Practice Name	Gt Brickhill Ward	Practice Size
K82013	The Red House Surgery	6159	13487
K82039	Bedford Street Surgery	2630	12757
K82015	Parkside Medical Centre	2326	10684
K82059	Westfield Road Health Centre	2205	6140
K82026	Whaddon House Surgery	1662	13392
K82054	Ashfield Medical Centre	698	11391
K82050	Water Eaton Health Centre	458	6260
K82062	Drayton Road Surgery	362	3118
K82610	The Grove Surgery	318	7685
Y02900	Broughton Gate Health Centre	100	12484
K82631	Milton Keynes Village Surgery	75	14820
		16993	

Table 12 GP Surgeries serving Bletchley & Fenny Stratford Ward Residents

(Source: NHS Digital October 2018 & March 2020)

Dentists

5.12. There is a wide choice of dentists across Milton Keynes.



Figure 3. The Location of Local Dentists and the Development

(Source: Google Search ©)

Hospitals

5.13. The local acute hospital is Milton Keynes University Hospital NHS Trust (Milton Keynes Hospital 4 miles). The next nearest acute hospital is Luton and Dunstable University Hospital (15 miles).



Figure 4 Location of Local Hospitals

(Source Google Map ©)

 5.14. There is also within the 15 mile radius: Stoke Mandeville Hospital (and spinal injuries unit) The Royal Buckinghamshire Hospital for Rehabilitation and Specialist Nursing Buckingham Hospital (private)

Education

- 5.15. The relevant Education and Children's Services Authority is Buckinghamshire County Council whilst the bulk of the existing local provision is in the Milton Keynes Unitary Authority area for which MKUA is the Education and Children's Services Authority.
- 5.16. Pre-school, nursery and early years provision is a mixed economy, with, in the area, some provision in state funded primary schools. But, much of the provision is in a mix of private, voluntary, not for profit, charitable, and commercial provision and which together with child-minders makes up the bulk of provision. The service is largely funded in part by public funds through various mechanisms as free provision for those in work, training for, or seeking work.
- 5.17. At the primary school phase, a small number of pupils cross the boundary each day to their chosen primary school. At January 2019, it was 325/119 children¹.
- 5.18. Buckinghamshire has a selective secondary school system (Grammar Schools). A larger number of pupils cross the boundary each day to their chosen secondary school. At January 2019, it was 942/75 children¹.

 $^{^1\,\}text{DfE}$ Schools_Pupils_ and_their_Characteritics_2019_CBM (cross boundary movement)_UD

Pre-school & Playgroups etc

5.19. There is a good geographic spread of existing provision across the area. The development will meet its own needs both with a pre-school nursery in the Primary School and an early years facility in the Neighbourhood Centre within the development.





(Source: Google Map Search ©)

Primary Schools



Figure 6. State-funded Primary Schools (2 mile radius)

⁽Source: Google Maps ©)

5.20. There are 11 state-funded primary schools within 2 miles (statutory walking distance) of somewhere within the development of which 6 schools are within 2km. These are:

> Newton Longville Primary School **Chestnuts Primary School** St. Thomas Aquinas Catholic Primary School in Bletchley, Giles Brook Primary School in Tattenhoe, Howe Park School in Emerson Valley, and Priory Rise Primary School in Tattenhoe Park



Chestnuts Primary School



St Thomas Aquinas RC Primary School



AS

Bletchley

Water Ea

Estat

A5

[A4144]

A4146

Giles Brook Primary School



Howe Park Primary School

Priory Rise Primary School

(Source: All Heat Maps ©SchoolGuide © MapBox © OpenStreetMap)

5.21. All of the primary schools listed are rated Good or Outstanding by Ofsted

School	Ofsted Rating	Date		
Newton Longville Primary	Good	December 2016		
Chestnuts Primary	Good	March 2019		
St Thomas Aquinas RC Primary	Outstanding	February 2010		
Giles Brook Primary	Good	February 2020		
Howe Park Primary	Outstanding	March 2011		
Priory Rise Primary	Outstanding	February 2015		

Table 13 Primary School Ofsted Rating

5.22. The development provides an additional primary school.

Secondary Schools



Figure 13. State-funded Secondary Schools (3 mile radius)

(Source: Google Maps ©)

5.23. There are five secondary schools within 3 miles (statutory walking distance). All are within Milton Keynes.

Shenley Brook End School Lord Grey Academy The Hazeley Academy Denbigh School Sir Herbert Leon Academy

Figures 14 - 18: Existing Secondary School Enrolment Patterns



Shenley Brook End School



Lord Grey Academy



The Hazeley Academy



Denbigh School



Sir Herbert Leon Academy

(Source: All Heat Maps © SchoolGuide © MapBox © OpenStreetMap)

5.24. All but one of the secondary schools listed are rated Good.

School	Ofsted Rating	Date		
Shenley Brook End School	Good	October 2018		
Lord Grey Academy	Not yet inspected Opened	April 18		
	Prior school Good	July 14		
The Hazeley Academy	Good	November 2018		
Denbigh School	Good	February 2019		
Sir Herbert Academy	Requires Improvement	October 2018		
(Source: Ofsted)				

Table 13 Secondary School Ofsted Rating

5.25. <u>The development provides an additional secondary school.</u>

Open Space

- 5.26. Public open space within the city of Milton Keynes currently covers approximately 7,150 acres (2,895ha) over 30% of the total city area, placing it amongst the highest local authorities in terms of open space per resident.
- 5.27. Open Space in Figures whole Borough (January 2012):
 - 1,040ha of open space and 114,000 trees [MKC]
 - 565 play areas, ranging in size but including skate facilities and ball courts
 - 2,000ha of open space [Parks Trust] and 5 play areas
 - 500km of public rights of way and 225m of redways (cycle networks)
 - 250ha of accessible woodland
 - 60km of rivers and streams
 - 200km of grid road corridors and 21km of canal and towpaths
- 5.28. Almost 65% of the Borough remains typically rural with villages, farmland and woodland, available for use through an extensive network of public footpaths, bridleways and roads.²
- 5.29. The development, being adjacent to but outside of the MKC area effectively adds to the Open Space provision.

Figure 19: Milton Keynes Open Space Maps



(Source: Milton Keynes Website)

² MKC Open Space Strategy Section 5

Wider Community Facilities Summary (see ES Chapter 13 Table 13.4)

- 5.30. Within the 2.5km radius of the centre of the development (outer ring on map below) there are:
 - 6 places of worship
 - 3 Petrol stations
 - 5 Public houses
 - 6 Hairdressers
 - 3 GP Health Centres
 - 2 Pharmacies
 - 8 Grocery Stores
 - 12 Hot Food/Restaurants
 - Newsagent
 - Post Office
 - 2 Community Centres
 - Vet
 - Variety of other Retail
 - Allotments

Figure 20: Indicative Area Map





5.31. <u>The Scheme provides a further allotment.</u>

Crime

Table 14: Crime Rank Based on Deprivation Index

	Crime Rank where 1 is the most deprived	Crime Decile where 1 is the most deprived	Comment
Brickhill	20,184	7	Brickhill is marginally below average for AVDC
Bletchley	12,707	4	Bletchley is a more deprived area of MK
AVDC	23,384	8	AVDC has some deprived pockets
MKUA	18,751	6	MK area has areas of greater incidence

(MHCLG 2019)



5.32. The areas around the development site experience low levels of crime.







(Source: Thames Valley Website)

Summary of Public Health Profile

5.34. Based on the assessment carried out in this section, there are few population groups that are identified as vulnerable with the community in generally good health with good access to local health services and a well-served community infrastructure.

Chapter 6 Assessment of Impacts

6.1. This chapter sets out the assessment of the likely impact of the proposed development on health and the specific measures proposed to support health and wellbeing.

6.2. Key health issues and direct and indirect impacts of the proposal are described in Table 1, along with proposed measures to mitigate against possible negative health impacts and maximise positive health effects.

6.3. We conclude that overall the scheme should have a number of positive health benefits for both occupiers and local residents. The potential adverse health impacts and risks arising from the construction phase will be minimised through the proposed measures set out and the development is not anticipated to adversely impact on existing health services or related services and amenities in south Milton Keynes or the surrounding area. Direct impacts can be mitigated.

Possible Health Impacts/Issues	Assessment Mitigation
Healthy Lifestyles	
Access to outdoor space for sport, exercise and recreation in supporting healthy lifestyles could have a number of potential effects on health including Obesity and diabetes, cardiovascular disease, mental illnesses. The provision of external open space and connections or accessibility to recreation areas and facilities in tandem with measures to promote walking and cycling can support more healthy lifestyles.	The development site offers good accessibility to the surrounding area and connection to a range of facilities and services enabling physical activity. The development is within walking and/ or cycling distance of a full range of sports centres and facilities, recreation grounds, and a golf course. Sports available include: athletics, badminton, basketball, bowls, cricket, cycling, fencing, fishing, floorball, soccer, 5-a-side & 6-a-side teams, golf, handball, hockey, korfball, martial arts (aikido, ju jitsu, judo, karate, tae kwon do, t'ai chi), karting, parkour (freerunning), pool, rowing, rugby, indoor skiing, indoor sky diving, swimming, table tennis, t'ai chi, and volleyball, Facilities include Sport Central MK, Cottesloe Sports Hall, Bletchley Leisure Centre, Brook End Sports Centre, Shenley Leisure Centre, Tattenhoe Pavilion, several sports centres at the secondary schools, and Xscape. In addition, there are village hall/ sports pavilion, bowls pavilion, pitches and artificial floodlit pitches, both full size (hockey and a 5-a-side centre). A number of fitness classes are also on offer. For children under five at Willen Lake football pitch and under 10s pitches at a number of locations
Housing Quality	
The delivery of low housing quality and ineffective internal and external environments could have a number of potential effects on health including: mental illnesses, respiratory diseases and personal injuries. The provision of good design and a suitable mix of unit size and types, affordable housing, suitable space standards within the dwellings and good access to daylighting can all help support social integration, health and wellbeing	The proposals aim to deliver a mix of high quality housing to support health and wellbeing of occupants and contribute positively to the local community. The development includes 30% affordable housing to meet local needs and this will be fully integrated with the market housing. A suitable proportion of three and four bedroom family homes are to be provided. All homes will provide good internal space with suitable provision of storage space for waste and cycles. High standards of internal sound insulation are proposed and natural daylighting

Appage To Work	will be optimised to ensure a healthy internal environment. All homes have private gardens or access to open space and the developments external and communal areas includes suitable landscaping and green infrastructure to provide visual interest, shade and prevent overlooking and protect privacy. Full details of the proposed design are provided in the in the Design and Access Statement accompanying the planning application in response to the AVDC design guidance (New Houses in Towns and Villages October 1992) and mindful of the Milton Keynes Residential Development Design Guide SPG (SPD) (April 2012).
Access to Work Sufficient and easy access to employment and training opportunities can be a vital contributor to health and wellbeing. Lack of access to employment can lead to a number of potential health impacts including mental illness and mobility and a reduced recovery from chronic illnesses can undermine work and social opportunities where access to work is difficult.	The site is in close proximity to Milton Keynes employment opportunities. The site is located within walking distance of bus stops that link to the whole of Milton Keynes and Bletchley. Both have railway stations with good links to London Euston and the wide range of employment opportunities that exist there. The site will link to the many foot cycleways, offering a direct link to Milton Keynes. The construction of the development itself will also create a number of employment opportunities for the local community.
Accessibility	
within the site and to and from surrounding areas could impact on the level of road and traffic injuries, personal injuries and mental illnesses. The permeability of the site, demarcation and connection to existing routes and settlements beyond the site boundary will all contribute to the development's accessibility related health impacts.	 A modern city and where accessibility is built into the infrastructure. There are local bus services through the City and to Bletchley. Bletchley railway station can be reached on foot in approximately 30 minutes. The station has a large car park with over 500 spaces and cycle parking with 29 sheffield stands and double tier racking for more than 80 bikes. Existing education facilities up to the age of 18 are easily accessible by foot or cycle which should minimise travel by private car for commuting and the school run. The development provides for a new primary and secondary school. The design of the site aims to promote and enable walking and cycling, with appropriate and clearly defined car parking provision.
Access to healthy and wholesome locally	The provision of private gardens provides space
produced and affordable food can make a positive contribution to health and wellbeing. Lack of food access can have a number of potential effects on health including obesity and diabetes, mental illness and wellbeing.	for new residents to grow food within the development. A new allotment is provided. There are existing allotments sites at Manor Fields to the east and six sites in the Shenley Brook Parish (see Figure 8). The site is located approximately 1,500m from the Bestway Food & Wine Store on St Mary's Avenue, providing general grocery products including fruit and vegetables. A Tesco Express

	and a convenience store are located slightly further down on Buckingham Road. Whilst the site is not in the immediate vicinity of a larger supermarket, this could encourage more local food production and kitchen gardening with positive health and wider sustainability benefits. A number of the major supermarkets are close to Milton Keynes Station and just beyond Bletchley Station many of which also offer a grocery delivery service to the area. A neighbourhood convenience store will be provided within the development
Crime Reduction and Community Safety	
Effective design to promote security and surveillance can contribute to community safety and reduce the fear of crime and anti-social behaviour which can lead to a number of health impacts including mental illness and personal injuries.	The development design and layout are configured to ensure that the development provides effective security and street surveillance. The design has considered 'Secured by Design' principles in order to provide a safe and attractive environment for all residents and visitors. The development will be an enjoyable and pleasant place to live and importantly the safety of future residents has been carefully considered in the design.
Air Quality and Neighbourhood Amenity	
Preventing adverse air quality and noise impacts can protect the existing population and new residents from excessive noise and disturbance and minimise the risk of health impacts such as Respiratory and cardiovascular disease. Air and noise quality may be affected by a number of factors including road traffic movements, during construction and occupation, Air quality may also be affected by emissions from heating systems such as gas boilers.	The development is not anticipated to have any long-term adverse impacts on air quality or noise within the local area. During construction the development will minimise dust and noise and associated health impacts through suitable controls and environmental management systems. All homes will include high efficiency and low NOX heating systems. Traffic noise and any associated air quality impacts will be minimised through a number of measures encouraging more sustainable travel.
Social Cohesion and Social Capital	
Development can contribute to increasing opportunities for social interaction and cohesion, leisure activities and local empowerment. A lack of cohesion and social capital can have a number of potential effects on health including mental illness and wellbeing which can undermine work and social opportunities.	The proposal is mainly for residential development which is considered appropriate to the location. A small area will be for employment uses providing small scale starter business units for which there is a local need. The scheme proposes a suitable proportion of affordable housing and a range of dwelling sizes and types, including a greater proportion of family sized homes. A high proportion of affordable housing is proposed, which will help to improve the key deprivation issue in the area – barriers to housing. The affordable housing is 'tenure-blind' and is designed to be fully integrated with the market housing. The development is of an appropriate scale and design to the existing residential area south of the site and would integrate with its surroundings and connect to the existing village community. The existing community is active and has strong levels of local participation; facilities and activities

	are available for all age groups, improving social inclusion and cohesion and benefitting mental health.
Access to Public Services	
Poor access to public services could have a number of potential effects on health including Health inequalities, mental illnesses, chronic conditions and economic inactivity. An increased population could lead to an increase in pressure on local public health services. This could also impact on other public services such as education and leisure.	The development is located within easy access to the whole range of public services within Milton Keynes and Bletchley The local GP practice surgery Whaddon Medical Centre located on Standing Way approximately 2km from the site and is approximately 20 minutes from the development site on foot. The area currently has a wide range of other services including hairdressers, additional food outlets, a veterinary surgery, dental practice, pharmacy, and public houses. The application site is accessible to all these local services by walking or cycling. It is anticipated that there will be a shortage of primary and secondary school spaces as a result of the development. This will be addressed by making provision on site. The scale of development is not anticipated to lead to any other unmanageable burdens on these existing public services and the development will make appropriate committed financial contributions to support local infrastructure needs. It will also contribute positively to the enhanced viability and vitality of aviding appriate
Descent Ministration	existing services.
Kesource Minimisation	All homes will be designed to minimize
during construction and occupation of new homes can lead to waste, depletion of finite resources and related environmental impacts which could in turn lead to a range of direct and indirect health impacts including mental illness and wellbeing, respiratory disease and chronic illnesses from exposure to hazardous waste.	An nomes will be designed to minimise environmental impact of construction through the use of sustainable materials. This includes use of FSC certified or equivalent timber and avoiding the use of hazardous or polluting substances. Water use of the homes will be minimised through the installation of individual water meters and specification of low flow fittings targeting water consumption of 110 litres per person per day. During construction suitable resource minimisation and pollution control measures will be implemented to limit any health risks to the construction work force and wider community. A Site Waste Management Plan will be implemented to manage and minimise waste
	impact of the development in construction in accordance with the waste hierarchy. This will ensure any risks of pollution and hazardous waste and any associated risks to public health are minimised. Further details are provided on waste management in the waste toolkit accompanying the planning application. All homes will be provided with suitable internal and external space and facilities to enable recycling in accordance with the Council's established kerb side collection service.
Climate Change	impact of the development in construction in accordance with the waste hierarchy. This will ensure any risks of pollution and hazardous waste and any associated risks to public health are minimised. Further details are provided on waste management in the waste toolkit accompanying the planning application. All homes will be provided with suitable internal and external space and facilities to enable recycling in accordance with the Council's established kerb side collection service.
Climate Change The impacts of future climate change could have	impact of the development in construction in accordance with the waste hierarchy. This will ensure any risks of pollution and hazardous waste and any associated risks to public health are minimised. Further details are provided on waste management in the waste toolkit accompanying the planning application. All homes will be provided with suitable internal and external space and facilities to enable recycling in accordance with the Council's established kerb side collection service. A fabric first approach to energy and carbon

the existing population and new residents of the	greenhouse gas (GHG) emissions impacts and
development including cardiovascular and	contribute to mitigating climate change.
respiratory disease, winter and summer mortality	This will lock in the energy and GHG savings for
due to extreme weather events.	the life of the homes as well as optimising the
Minimising energy and resource use can reduce	resilience of the development to future climate
greenhouse gas emissions and help mitigate	change risks.
risks of future climate change. Designing in	Natural ventilation and improved thermal
resilience and adaptability including use of green	efficiency will also deliver adaptive and
infrastructure and consideration of key climate	comfortable internal environments within all of
risks as part of new development can also enable	the homes.
effective adaptation to a changing climate and	This site is located in an area of low flood risk and
minimise potential health impacts.	proposes a combination of sustainable drainage
	techniques to minimise the risk of flooding on site
	or elsewhere in the community to minimise health
	risks.
	New tree planting and green infrastructure will
	also contribute to carbon sequestration and
	localised shading of pedestrian routes and
	communal areas providing additional climate
	change mitigation and resilience benefits.

Chapter 7 Conclusions

- 7.1. This Health Impact Assessment has established the likely health impacts directly related to the proposals, as well as potential indirect influences on the health and wellbeing of the wider community.
- 7.2. It has identified a range of health and planning policies supporting the delivery of healthy communities and key health issues related to the proposed development.
- 7.3. The appraisal has identified the following key issues that support or impact on local health and wellbeing objectives or policy:
 - Overwhelmingly residential development with provision of a range and suitable mix of housing including much needed affordable new homes and family sized housing.
 - Access to established healthcare services including a GP and dental practice, plus space available for additional provision
 - Appropriate density with provision of open space including private gardens and close proximity to existing allotments located near The Moor, providing opportunities to grow food.
 - Appropriate measures to limit any health risks or impacts of noise, vibration and visual impacts from development in construction and operation to safeguard existing community and new residents.
 - No long-term adverse impacts on air quality as a result of traffic generation or new homes heating systems.
 - Pedestrian and cycling connectivity to existing routes including existing public rights of way promoting physical exercise and sustainable travel.
 - Close proximity to a very large range of facilities for sport and fitness for all ages plus the new secondary school having facilities for the community. All enabling physical activity.
 - New education infrastructure pre-school; primary; and secondary school to minimise the need to travel to off-site facilities
 - Development in an active local community, with strong levels of participation and support for all ages.

- Development in an area of low flood risk with suitable measures to reduce risk of flooding at the site and elsewhere in the local community combined with resilient and adaptive design of new homes to minimise health risks posed by climate change.
- 7.4. In summary the proposals are anticipated to result in a range of positive impacts upon local health and well-being within the development and beyond.
- 7.5. This Health Impact Assessment is one of a suite of documents accompanying the planning application and forms part of the development's sustainability strategy and commitment by its promoters to the delivery of sustainable development on the edge of Milton Keynes.

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APPENDIX 14.1:

UTILITIES PLAN



APPENDIX 17.1:

UKCP USER INTERFACE (UKCP UI) TOOL

APPENDIX 17.1

UKCP User Interface (UKCP UI) Tool

• Site Selection-boundary box

• Summer temperature change

• Winter temperature change

Season / Time slice		Temperature Change (ºC)		
		10 ^{тн}	50 TH	90 TH
Summer	2060-2079	1.26	3.67	6.28
Winter	2060-2079	0.73	2.46	4.22

• Summer Rainfall Change

• Winter precipitation change

Season / Time slice		Percentage Change (%)		
		10 ^{тн}	50 [™]	90 TH
Summer	2060-2079	-58.15	-27.58	3.80
Winter	2060-2079	0.79	19	41.23