
Link Park, West Drayton Health Impact Assessment

December 2020

Link Park, West Drayton

Health Impact Assessment

Prepared on behalf of Link Park LLP

Project Ref:	31810/A5/HIA	
Status:	Draft	Final
Issue/Rev:	01	02
Date:	December 2020	December 2020
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EXECUTIVE SUMMARY

The importance of healthy communities is a theme running through national, regional and local planning policy. This HIA has been prepared on behalf of Link Park LLP to determine the potential health impacts of the provision of data centre uses at land at Link Park, West Drayton.

The Site is located to the west of West Drayton on the boundary between Buckinghamshire and the London Borough of Hillingdon and predominantly within the administrative area of South Bucks District Council (SBDC). The Site covers a total area of 4.7 hectares (ha) and is to provide two data centre buildings (a Sui Generis Use Class) with a gross external area (GEA) of up to 55,000 sqm including ancillary offices, internal plant and equipment, sub-station, and associated car parking, access, landscaping and ancillary works.

This Health Impact Assessment has reviewed the potential health effects of the Development and provides recommendations to seek to maximise health gains and remove or mitigate potential adverse impacts on health. The assessment has used guidance which sets out key themes under which health impact should be assessed; for the purposes of this HIA, the topics of 'Housing quality and design' and 'Access to healthcare services' were excluded as they were deemed to be not applicable given the nature of the Development. Throughout the HIA, the Development was found to have a neutral or positive health effect in relation to the majority of the key health themes as a result of the proposed design measures.

1 INTRODUCTION

- 1.1 This Health Impact Assessment (HIA) has been prepared on behalf of Link Park LLP (the “Applicant”) in support of an outline planning application to South Bucks District Council (SBDC) and London Borough of Hillingdon (LBH) for the demolition of an existing warehouse and three smaller buildings within the Site to facilitate the erection of two data centre buildings (a Sui Generis Use Class) with a gross external area (GEA) of up to 55,000 sqm including ancillary offices, internal plant and equipment, sub-station, and associated car parking, access, landscaping and ancillary works (“the Development”), on land at Link Park, located west of West Drayton (“the Site”).
- 1.2 This HIA seeks to identify and assess the potential health effects of the Development and ensure that decision makers can fully consider the health implications of the scheme as part of the planning and decision-making process.
- 1.3 The structure of the HIA is set out in Table 1.1 below.

Table 1.1: Contents of this HIA.

Chapter	Content
Executive Summary	Summary of the HIA.
Chapter 1	Description of the Site and Development, the requirement for HIA and a summary of relevant planning policy.
Chapter 2	Outline of the assessment methodology.
Chapter 3	HIA
Chapter 4	HIA conclusions.

Site Context and Description

- 1.4 The Site (see Appendix 1) is irregular and elongated along a north-south alignment, approximately 4.7 ha in area and located to the west of West Drayton on the boundary between Buckinghamshire and the London Borough of Hillingdon. Set within the London Area Greenbelt, the Site is bounded to the: west by a railway line between West Drayton and Poyle, which is partially disused; south by Thorney Mill Road and Thorney Pool beyond; east by a drain (Bigley Ditch) and a woodland copse; and north by the woodland copse and beyond the River Colne. Beyond the railway line to the west lies recreational facilities at Thorney Park Golf Club. The Site is located approximately 1 km to the north of the M25/M4 junction and 2.7 km to the north of Heathrow Airport.
- 1.5 The Site comprises a large area of hardstanding currently used for a combination of open storage, storage and distribution associated with the rail line/railhead that forms part of the Site. In the centre of the Site is a 16m tall warehouse building enclosed on three sides with a footprint of 4,400 sqm. Furthermore, there is also a smaller former weighbridge office,

vacant bungalow and electricity substation in the south-east corner of the Site close to Thorney Mill Road. There are several lighting columns approximately 5m tall spaced alongside the internal estate road. At the northern end of the Site are rail sidings which are concealed by a shallow layer of road planings. The sidings have been historically used for importation of aggregates for the use in coated roadstone.

The Development

- 1.6 The Development comprises the demolition of the existing warehouse and three smaller buildings to facilitate the erection of two data centre buildings (a Sui Generis Use Class) with a gross external area (GEA) of up to 55,000 sqm including ancillary offices, internal plant and equipment, sub-station, and associated car parking, access, landscaping and ancillary works. Each building would be approximately 25m in height.
- 1.7 To facilitate the works the rail tracks/rail head would be realigned which will also improve their useability.
- 1.8 The proposed development will be accessed from Thorney Mill Road via a new junction. The existing access to the Site will be closed off however access to the Thorney Mill Sidings site will remain. Access to the proposed development and the Thorney Mill Sidings site will therefore be achieved via two separate accesses.
- 1.9 The data centres would operate 24 hours a day, 365 days a year.

Parking

- 1.6 The Development will provide 91 vehicle parking spaces and 6 cycle parking spaces.
- 1.7 The Development is at the outline stage, therefore the details of accessibility across the Site for people with mobility problems or a disability will be set out at the detailed design stage. However, it is envisaged that the Development will be designed to provide flexibility of access for all employees and visitors to the Site and will wholly encompass the access provisions of the Disability Discrimination Act¹ and the Building Regulations Part M². Designated disabled parking bays will be provided in line with current guidelines, close to main entrances where surfaces will incorporate appropriate dropped and transition kerb sections and areas of tactile paving.

¹ Disability Discrimination Act 1995 Section 50

² The Building Regulations: Access to and use of buildings (M). 2015 (as amended).

Green Infrastructure

- 1.8 An Arboricultural Impact Assessment has been undertaken for the Development and has identified that five arboricultural features (individual trees, groups of trees and/or woodlands) are required to be removed in order to facilitate the Development. The majority of these have been categorised as either low grade, or very low grade trees. The remaining 21 features will be retained as part of the Development and will be protected during construction in accordance with BS 5837:2012³.
- 1.9 To mitigate for the loss of existing trees, detailed landscaping proposals will be applied for through future reserved matters applications. The proposals will include the planting of new trees across the Site. As the majority of the trees being removed are poor quality trees, the new tree planting provides the opportunity to enhance the trees provision on the Site through improvements in tree quality, species diversity and planting environment.

Requirement for HIA

- 1.10 There is no statutory requirement to carry out HIA however, they are increasingly recognised as having an important contribution towards establishing the potential impacts and benefits of schemes and policies. The importance of healthy communities is a theme running through national, regional and local planning policy.
- 1.11 Building on best practice and national policy, the Applicant has considered the impact of the Development on health. With the relevant planning policy relating to health summarised hereafter.

National Planning Policy Framework (NPPF)⁴

- 1.12 The revised NPPF published in February 2019 identifies the key principles in relation to health that local planning authorities should consider. In particular Chapter 8 of the NPPF 'Promoting healthy and safe communities' states that decisions should aim to achieve the following key features to a healthy and safe community:

- a) "Promote social interaction, including opportunities for meetings between people who might not otherwise come into contact with each other – for example through mixed-use development, strong neighbourhood centre, street layouts that allow for easy pedestrian and cycle connections within and between neighbourhoods, and active street frontages;*

³ BSI (2012): BS 5837:2012 Trees in relation to design, demolition and construction – Recommendations.

⁴ CLG (February 2019) *National Planning Policy Framework*

- b) *Are safe and accessible, so that crime and disorder, and the fear of crime, do not undermine the quality of life or community cohesion – for example through the use of clear and legible pedestrian routes, and high quality public space, which encourage the active and continual use of public areas; and*
- c) *Enable and support healthy lifestyles, especially where this would address identified local health and well-being needs – for example through the provision of safe and accessible green infrastructure, sports facilities, local shops, access to healthier food, allotments and layouts that encourage walking and cycling.”*

NHS England Healthy New Towns⁵

- 2.1 NHS England launched the Healthy New Towns programme in 2015 to explore how the development of new places could provide an opportunity to create healthier and connected communities with integrated and high-quality services.
- 2.2 This resulted in the adoption of the following 10 principles for healthy places:
1. Plan Ahead Collectively;
 2. Assess Local Health and Care Needs and Assets;
 3. Connect, Involve and Empower People and Communities;
 4. Create Compact Neighbourhoods;
 5. Maximise Active Travel;
 6. Inspire and Enable Healthy Eating;
 7. Foster Health in Homes and Buildings;
 8. Enable Healthy Play and Leisure;
 9. Develop Health Services That Help People Stay Well; and
 10. Create Integrated Health.
- 2.3 These ten principles were developed and culminated in the publishing of four reports in 2019. The first, *"Putting Health into Place Principles 1-3: Plan, Assess and Involve"*⁶ is most appropriate to HIA. It advocates a thorough understanding of baseline health conditions and circumstances of an area so that design can incorporate and embed opportunities to improve health outcomes. It provides guidance for establishing the processes that lead to impact and how these can be measured.

IEMA Impact Assessment Outlook Journal: Health Impact Assessment in Planning, October

⁵ NHS England, 2015, <https://www.england.nhs.uk/ourwork/innovation/healthy-new-towns/>

⁶ NHS, Public Health England, TCPA, The Young Foundation, The Kings Fund (2019) Putting Health into Place Principles 1-3: Plan, Assess and Involve

2020⁷

- 2.4 This is a selection of thought pieces featuring case studies by practitioners working in health, planning and impact assessment. It includes ideas for best practice and shows the direction of travel for embedding health and wellbeing in placemaking and integrating health impact with other impact assessments including Environmental Impact Assessment. The discussions in this collection of papers have influenced the assessment within this report.

Public Health England, Health Impact Assessment in spatial planning, October 2020⁸

- 2.5 This guidance from Public Health England was created in collaboration with national, regional and local experts in planning, public and environmental health, and HIA. The guidance demonstrates HIAs as an essential tool to 'health-proof' spatial plans and to identify opportunities to deliver safer and healthier places and improve public health and wellbeing, and ultimately reduce inequalities.

The Adopted London Plan (2016)⁹

- 2.6 Policy 3.2 of the London Plan states that the impacts of major development proposals on the health and wellbeing of communities should be considered, for example through the use of HIA. For the purposes of HIA, a 'major development' comprises '10 or more residential units (or a site of 0.5 ha or more), or 1,000 square metres or more of non-residential floorspace (or a site area of 1.0 ha or more)'. The Development exceeds the threshold of over 1,000 sqm of non-residential floorspace.

The Draft London Plan (2019)¹⁰

- 2.7 Whilst not yet adopted, the draft London Plan is currently emerging and is anticipated to be adopted later this month/ early 2021. It forms a material consideration in any planning decision.. In December 2019, the Greater London Authority published the 'Intend to Publish London Plan 2019' following the examination in public that was held between January and May 2019. The Draft London Plan highlights the importance in assessing development proposals on all aspects of health and wellbeing to improve Londoners' health and reduce health inequalities through the use of HIA. The Draft London Plan states that the environment to which Londoners live in largely determines the mental and physical health of the public. There are areas within London that are more deprived than others, and this is reflected in

⁷ IEMA (October 2020) Impact Assessment Outlook Journal: Health Impact Assessment in Planning

⁸ Public Health England (October 2020), Health Impact Assessment in spatial planning, A guide for local authority public health and planning teams.

⁹ Greater London Authority (2016) *The London Plan; The Spatial Development Strategy for London Consolidated with Alterations Since 2011*.

¹⁰ Greater London Authority (2019) *The London Plan – Intend to Publish Version*

the life expectancies that differ across London which is acknowledged within the Draft London Plan. Each of the policy areas in the emerging London Plan are informed by six Good Growth objectives. Objective GG3 'Creating a healthy city' addresses how planning and development must promote healthy lifestyles and hence reduce health inequalities:

- A. "ensure that the wider determinants of health are addressed in an integrated and co-ordinated way, taking a systematic approach to improving the mental and physical health of all Londoners and reducing health inequalities.*
- B. promote more active and healthy lives for all Londoners and enable them to make healthy choices.*
- C. use the Healthy Streets Approach to prioritise health in all planning decisions.*
- D. assess the potential impacts of development proposals and development plans on the mental and physical health and wellbeing of communities, in order to mitigate any potential negative impacts, maximise potential positive impacts and help reduce health inequalities, for example through the use of Health Impact Assessments.*
- E. plan for appropriate health and care infrastructure to address the needs of London's changing and growing population.*
- F. seek to improve London's air quality, reduce public exposure to poor air quality and minimise inequalities in levels of exposure to air pollution.*
- G. plan for improved access to and quality of green spaces, the provision of new green infrastructure, and spaces for play, recreation and sports.*
- H. ensure that new buildings are well-insulated and sufficiently ventilated to avoid the health problems associated with damp, heat and cold.*
- I. seek to create a healthy food environment, increasing the availability of healthy food and restricting unhealthy options."*

South Bucks District Local Plan¹¹

1.13 The South Bucks District Local Plan was adopted on the 22nd March 1999 as a statutory plan for the District. The document contains a range of policies which are applied by Council

¹¹ South Bucks District Council. Adopted Local Plan (Consolidated February 2011). Available from: <https://www.southbucks.gov.uk/planning/localplan1999>

officers when assessing planning applications. This Local Plan should be read in conjunction with the Core Strategy, which is also outlined below.

1.14 Paragraph 2.4 – The Council has devised the following aims for planning in the District:

1. To balance the need to protect the environment, especially the Green Belt, for current and future generations whilst meeting local needs over the plan period.
2. To enhance the quality of life for the District's residents.
3. To maintain a strong and healthy local economy as a source of jobs and prosperity.
4. To protect, care for and enhance the District's landscape, heritage and character.
5. To make the best use of land and other resources.

South Bucks Local Development Framework: Core Strategy¹²

- 1.15** The Core Strategy establishes a long-term strategy to manage development, provide services, deliver infrastructure and create sustainable communities. It comprises a Spatial Vision and Strategic Objectives, a Spatial Strategy, Core Policies and a section setting out how the strategy will be implemented and monitored.
- 1.16** With particular regards to health, Core Policy 6 states: "Encourage more sustainable forms of transport and increase travel choice to help reduce traffic congestion and facilitate healthier, lower carbon lifestyles".
- 1.17** With regards to the content of this HIA, Core Policy 9 states: "Ensure that new development is located and designed in such a way as to promote community safety".

London Borough of Hillingdon Local Plan: Strategic Policies¹³

- 1.18** The Hillingdon Local Plan: Part 1 – Strategic Policies is the key strategic planning document for Hillingdon, setting out the long-term vision and objectives for the Borough. The Strategy includes broad policies for steering and shaping development. Strategic Objectives (SO) which relate to health impacts are outlined below.
- 1.19 SO9:** Promote healthier and more active lifestyles through the provision of access to a range of sport, recreation, health and leisure facilities.

¹² South Bucks District Council. Core Strategy: Development Plan Document (2011). Available from: <https://www.southbucks.gov.uk/planning/corestrategy>

¹³ London Borough of Hillingdon. Local Plan. Strategic Policies 1. 2013. Available from: <https://www.hillingdon.gov.uk/local-plan>

- 1.20 **SO10:** Improve and protect air and water quality, reduce adverse impacts from noise including the safeguarding of quiet areas and reduce the impacts of contaminated land.
- 1.21 **SO11:** Address the impacts of climate change, and minimise emissions of carbon and local air quality pollutants from new development and transport.
- 1.22 **SO12:** Reduce the reliance on the use of the car by promoting safe and sustainable forms of transport, such as improved walking and cycling routes and encouraging travel plans.
- 1.23 **SO13:** Support the objectives of sustainable waste management.

London Borough of Hillingdon Local Plan Part 2: Development Management Policies¹⁴

- 1.24 The Development Management Policies provide detailed policies that inform the basis of the Council's decisions on individual planning applications. With particular regard to this Health Impact Assessment, detailed policies ensuring that new development coming forward in the Borough take account of:
- Sustainable design, reducing carbon emissions and sustainable energy;
 - Green Belt, Metropolitan Open Land and Green Chains;
 - Biodiversity, water management, water efficiency and flood risk;
 - Air Quality and contamination; and
 - Minerals and aggregates.

¹⁴ London Borough of Hillingdon. Local Plan. Development Management Policies. 2020. Available from: <https://www.hillingdon.gov.uk/local-plan>

2 ASSESSMENT METHODOLOGY

2.1 This assessment has applied the principles of the London Health Urban Development Unit (HUDU) Healthy Urban Planning Checklist¹⁵. The HUDU works on behalf of the NHS to create healthy, sustainable communities. The HUDU Checklist is nationally recognised as appropriate assessment tool, which is regularly updated to reflect advances in how health and well-being are measured. A copy of the HUDU guidance is provided in Appendix 2.

2.2 The objectives of this HIA are as follows:

- To identify the potential positive and negative health impacts associated with the construction and operation of the Development;
- To identify opportunities for improving health and promoting health equity; and
- To identify opportunities to mitigate negative impacts on health and reduce health inequalities.

HUDU Healthy Urban Planning Checklist

2.3 The latest version of the HUDU Healthy Urban Planning Checklist was updated in April 2017 (refer to Appendix 2). In this assessment, the checklist has been used as a desktop assessment to screen the health impacts of the Development. The HUDU checklist is divided into four main themes:

1. Healthy housing;
2. Active travel;
3. Healthy environment; and
4. Vibrant neighbourhoods.

2.4 Each theme contains several questions focused on a planning issue and a number of related health and wellbeing issues as set out in the table below.

Table 2.1: Themes within the HUDU Healthy Urban Planning Checklist

Theme	Planning Issue	Health and Wellbeing Issue
Healthy Housing	• Housing design • Accessible housing • Healthy living • Housing mix and affordability	• Lack of living space – overcrowding • Unhealthy living environment – daylight, ventilation, noise • Excess deaths due to cold / overheating • Injuries in the home • Mental illness from social isolation and fear of crime

¹⁵ London Health Urban Development Unit (April 2017): Healthy Urban Planning Checklist Third Edition

Theme	Planning Issue	Health and Wellbeing Issue
Active Travel	- Promoting walking and cycling - Safety - Connectivity - Minimising car use	- Physical inactivity, cardiovascular disease and obesity - Road and traffic injuries - Mental illness from social isolation - Noise and air pollution from traffic
Healthy Environment	- Construction - Air quality - Noise - Contaminated land - Open space - Play space - Biodiversity - Local food growing - Flood risk - Overheating	- Disturbance and stress caused by construction activity - Poor air quality - lung and heart disease - Disturbance from noisy activities and uses - Health risks from toxicity of contaminated land - Physical inactivity, cardiovascular disease and obesity - Mental health benefits from access to nature and green space and water - Opportunities for food growing – active lifestyles, healthy diet and tackling food poverty - Excess summer deaths due to overheating
Vibrant Neighbourhoods	- Healthcare services - Education - Access to social infrastructure - Local employment and healthy workplaces - Access to local food shops - Public buildings and spaces	- Access to services and health inequalities - Mental illness and poor self-esteem associated with unemployment and poverty - Limited access to healthy food linked to obesity and related diseases - Poor environment leading to physical inactivity - Ill health exacerbated through isolation, lack of social contact and fear of crime

The HUDU Rapid Health Impact Assessment Tool¹⁶

2.5 The rapid assessment tool is designed to assess the likely health impacts of development plans and proposals. The scope of assessment has been informed by the completed HUDU checklist at Appendix 2. The assessment matrix (see Chapter 3 of this HIA) identifies eleven topics of broad determinants:

1. Housing design and affordability;
2. Access to health and social care services and other social infrastructure;
3. Access to open space and nature;
4. Air quality, noise and neighbourhood amenity;
5. Accessibility and active travel;
6. Crime reduction and community safety;
7. Access to healthy food;
8. Access to work and training;

¹⁶ London HUDU Planning for Health. *Rapid Health Impact Assessment Tool*. 4th Edition, October 2019.

9. Social cohesion and inclusive design;
10. Minimising the use of resources; and
11. Climate change.

2.6 Under each topic, planning issues which are likely to influence health and wellbeing are identified. The Rapid Assessment Tool provides assessment criteria, and these have been tailored where possible to the Development. Where an impact has been identified recommendations to mitigate an adverse impact or enhance a beneficial impact are included where possible. Chapter 4 includes a high-level summary of effects and identified mitigation and enhancement measures.

Limitations and Constraints

2.7 For the purposes of this HIA, the following topics are excluded from the Rapid Assessment as they are deemed to be not applicable to the Development:

- **Housing quality and design** is omitted on the basis that the Development relates to the provision of commercial facilities and does not include residential dwellings; and
- **Access to healthcare services** is also omitted as it is assumed that employees involved in both construction and operation of the Development will continue to access health care services closer to their own residences where they are already registered and that this will not result in a material effect on the local community. It is expected that the developer and operator will implement suitable health safety protocols to limit the impact of emergency requirements. The associated 'Transport Statement' and 'Framework Travel Plan' consider and minimise impacts on emergency services.

Data Sources

2.8 The checklist (see Appendix 2) and the Rapid HIA have been completed using professional judgement and information from the documents supporting the planning application, in particular:

- Design and Access Statement (DAS);
- Statement of Community Involvement;
- Architectural Design Drawings;
- Landscape Design Drawings;
- Air Quality Assessment;
- Noise Impact Assessment;
- Economic Benefits Statement;

- Arboricultural Impact Assessment;
- Flood Risk Assessment and Drainage Strategy;
- Outline Site Waste Management Plan;
- Transport Statement; and
- Framework Travel Plan.

3. HIA ASSESSMENT MATRIX

3.1 The tables below set out the potential health and wellbeing impacts associated with the Development during the construction and operational phases. As set out in the Assessment Methodology section in Chapter 3, the tables have been adapted from the HUDU Rapid Health Impact Assessment Tool¹⁷.

3. Access to Open Space and Nature

Assessment criteria	Relevant?	Details/evidence	Potential health impact?	Recommended mitigation or enhancement actions
Does the proposal retain and enhance existing open and natural spaces?	Yes No N/A ✓	The Site is currently predominantly hardstanding with an existing warehouse building, former weighbridge office, former bungalow and electricity substation. There are currently no existing open and natural spaces. Within the blue line boundary plan for the Site, there is extensive woodland to the north and east. This includes a Poplar tree plantation extending to approximately 8.8 acres, and a natural woodland extending to 13.37 acres. The Development is at the outline stage; therefore, the detailed design of the proposed landscaping will be applied for through future reserved matters applications. An Arboricultural Impact Assessment has been undertaken for the Development and has identified that five arboricultural features (individual trees, groups of trees and/or woodlands) are required to be removed in order to facilitate the Development. The majority of these have been categorised as either low grade, or very low grade trees. The remaining 21 features will be retained as part of the Development and will be protected during construction in accordance with BS 5837:2012. To mitigate for the loss of existing trees, detailed planting proposals will be developed and will seek to include the planting of new trees across the Site. As the majority of the trees being removed are poor quality trees, the new tree planting provides the opportunity to enhance the trees provision on the Site through improvements in tree quality, species diversity and planting	Positive ✓ Negative Neutral Uncertain	<u>Enhancement Measure:</u> N/A

¹⁷ London HUDU Planning for Health. Rapid Health Impact Assessment Tool. 4th Edition, October 2019.

Assessment criteria	Relevant?	Details/evidence	Potential health impact?	Recommended mitigation or enhancement actions
		environment. The Development parameter plan, submitted with the outline planning application, comprises a no build zone in the south east of the Site, which will provide a buffer to the poplar trees plantation, woodland and Bigley Ditch adjacent to the east of the Site, and the vegetation and Thorney Pool adjacent to the south of the Site. The exact composition of the landscaping provision will be determined at the reserved matters application stage, however the no build zone could provide the opportunity to create a natural space.		
In areas of deficiency, does the proposal provide new open or natural space, or improve access to existing spaces?	Yes No N/A ✓	Given the nature of the Development there is no provision of new open or natural space. As mentioned above, the Development is at the outline stage; therefore, the detailed design of the proposed landscaping will be applied for through future reserved matters applications. The Development will provide a link to the existing footway on Thorney Mill Road, adjacent to the south of the Site, thereby providing an access from the Site to the local facilities in West Drayton, including areas of open and natural space, parks and opportunities for leisure and recreation.	Positive ✓ Negative Neutral Uncertain	N/A
Does the proposal provide a range of play spaces for children and young people?	Yes No N/A ✓	Owing to the nature of the Development it is not appropriate to provide spaces for recreational play for young people onsite.	Positive Negative Neutral ✓ Uncertain	N/A
Does the proposal provide links between open and natural spaces and the public realm?	Yes No ✓ N/A	Owing to the nature of the Development there are no proposals within the Development to provide open and natural spaces and public realm, and therefore no links between these within the Site itself. As above, a footway is present along the northern side of Thorney Mill Road, which is located adjacent to the south of the Site. The footway continues on the northern side of the carriageway towards the east (bordered by woodland to the north and also crossing the River Colne), providing access to the centre of West Drayton. The footway is of adequate width and street lighting is provided for the full length of this route. The Development will provide a link to the existing footway on Thorney Mill Road, thereby providing a safe and attractive walking route from the Site to the public	Positive Negative Neutral ✓ Uncertain	N/A

Assessment criteria	Relevant?	Details/evidence	Potential health impact?	Recommended mitigation or enhancement actions
		realm and local facilities in West Drayton. As above, the Development is at the outline stage; therefore, the detailed design of the proposed landscaping and access will be applied for through future reserved matters applications. The no build zone could provide the opportunity to create a natural space or soft landscaping for employees and visitors to the Site to appreciate, and this could link with the footpath mentioned above.		
Are the open and natural spaces welcoming and safe and accessible for all?	Yes ✓ No N/A	The Development is limited in its options to provide open and natural spaces that are welcoming for all persons given its commitment to onsite safety and security. The Pedestrian Level Wind Desk-Based Assessment submitted with the planning application confirms that wind conditions at and surrounding the Site in areas used by employees/visitors are expected to be suitable and safe for the intended use, and no mitigation measures relating to wind effects would be required at any specific area of the Site.	Positive Negative Neutral ✓ Uncertain	N/A
Does the proposal set out how new open space will be managed and maintained?	Yes No N/A ✓	As previously mentioned, no new open space will be provided owing to the scale and nature of the Development.	Positive Negative Neutral ✓ Uncertain	N/A

4. Air Quality, Noise and Neighbourhood Amenity

Assessment criteria	Relevant?	Details/evidence	Potential health impact?	Recommended mitigation or enhancement actions
Does the proposal minimise construction impacts such as dust, noise, vibration and odours?	Yes ✓ No N/A	The Site is located within the South Bucks Air Quality Management Area (AQMA), declared in 2004 for Nitrogen Dioxide which encompasses an area surrounding the M4, M25 and M40 and adjacent land. The Site is also located within the South Bucks District Council AQMA 2, designated in 2018 for exceedances in the annual mean of Nitrogen dioxide, which encompasses the Iver Parish Boundary.	Positive ✓ Negative Neutral Uncertain	<u>Mitigation Measure:</u> CEMP to be implemented throughout the construction phase.

Assessment criteria	Relevant?	Details/evidence	Potential health impact?	Recommended mitigation or enhancement actions
		The potential exists for dust, noise and vibration effects to result from the construction phase. Existing sensitive receptors in proximity to the Site include the Riverside Park mobile home park, located approximately 50m to the south of the Site, residential properties located approximately 120m to the west of the Site, and residential properties located approximately 200m to the east of the Site. During the construction phase, best practice mitigation measures will be implemented through a Construction Environmental Management Plan (CEMP) to mitigate adverse impacts of dust, noise and vibration. The CEMP will be agreed with SBDC prior to undertaking works but will broadly include: • A table showing the objectives, activities (mitigation/optimisation measures), and responsibilities for the implementation of those activities; • The broad plan of the work programme including working hours and delivery times; • Details of prohibited or restricted operations (location, hours etc.); • Institutional arrangements for its implementation and for environmental monitoring: responsibilities, role of the environmental authorities, participation of stakeholders; • Contact during normal working hours and emergency details outside working hours; • Provision for reporting, public liaison, and prior notification of particular construction related activities; • The mechanism for the public to register complaints and the procedures for responding to such complaints; and • The details of proposed routes for HGVs travelling to and from the Site. The significance of likely effects from such as dust, noise and vibration on local receptors following the implementation of the CEMP is considered negligible. The Air Quality Assessment seeks to examine the impact of traffic road emissions from the Development upon existing local sensitive receptors. Operational phase effects associated with operational traffic are likely to be negligible. Initial evaluation of the proposed diesel backup generators indicated that further detailed assessment using dispersion modelling will be		

Assessment criteria	Relevant?	Details/evidence	Potential health impact?	Recommended mitigation or enhancement actions
		required and will be addressed in a separate addendum alongside the planning application. The addendum report will also include an air quality neutral assessment. An outline Site Waste Management Plan (SWMP) has been submitted with the planning application and a detailed SWMP will be produced prior to the commencement of construction and implemented by the contractor(s) in accordance with best practice. The SWMP will ensure that waste is handled appropriately so that there will be no effects from odours resulting from waste.		
Does the proposal minimise air pollution caused by traffic and energy facilities?	Yes ✓ No N/A	The Air Quality Assessment seeks to examine the impact of traffic road emissions from the Development upon existing local sensitive receptors. Operational phase effects associated with operational traffic are likely to be negligible. Initial evaluation of the proposed diesel backup generators indicated that further detailed assessment using dispersion modelling will be required and will be addressed in a separate addendum alongside the planning application. The addendum report will also include an air quality neutral assessment. The primary function of the Development is to house computer equipment and the equipment used during the operation of the data centre will be stored within data halls and will not be moved once set-up. The Development includes ancillary office space to accommodate staff to manage the facility. The office use will generate regular daily vehicle trips to/from the Site as well as parking demand. The proposed development is anticipated to employ a total of approximately 46 staff. The Development will provide 91 vehicle parking spaces and 6 cycle parking spaces. A Transport Statement has been prepared for the Site and is submitted with the planning application. The Transport Statement outlines the existing traffic generation associated with the current use for aggregate storage and distribution and asphalt recycling land uses. Currently daily trip generation on the Site comprises 361 two-way movements (51 two-way movements during the morning peak hour and 9 two-way movements during the evening peak hour). 56% of vehicles travelling to/from the Site were classified as	Positive Negative Neutral ✓ Uncertain	<u>Recommended Enhancement Action:</u> Travel Plan to be implemented and monitored to check effectiveness.

Assessment criteria	Relevant?	Details/evidence	Potential health impact?	Recommended mitigation or enhancement actions
		Ordinary Goods Vehicle (OGV) 1 and OGV2 during the survey. The Development will generate approximately 26 two-way movements during the morning peak hour and 28 two-way movements during the evening peak hour. If spread evenly across the peak hour periods, which represents a daily trip generation of 156 two-way movements. The Development will generate negligible to no OGV1/ OGV2 traffic during operation. Therefore, the Development will result in a decrease of 25 two-way movements during the morning peak hour and an increase of 19 two-way movements during the evening peak hour. The traffic increase in evening peak hour is minimal and will be well within daily fluctuations on Thorney Mill Road. This will result in an overall decrease in daily trips of 205 two-way movements. The Development will therefore result in an overall net reduction in traffic generated by the Site across the day, resulting in a betterment to local highway network operation and limiting air quality effects caused by traffic. Therefore, the Development will have no adverse impact on the health of existing sensitive receptors. In addition, the Site is easily accessible and is within walking and cycling distance of amenities, and therefore provides a realistic opportunity for employee/visitor trips to be made using alternative, more sustainable modes of transport (less private car use). A Travel Plan has been submitted with the application and will encourage the use of the sustainable travel choices outlined below and will seek to ensure that effects from road traffic emissions are low. The Site is located within a 2km radius of facilities available within West Drayton, including bus stops and West Drayton Railway Station. As above, a footway is present along the northern side of Thorney Mill Road, which is located adjacent to the south of the Site and provides a safe and attractive walking route from the Site to the public realm and local facilities in West Drayton. Cycling also has the potential to substitute short car trips particularly, those under 5km. Whilst there are no designated cycle facilities in the immediate vicinity of the Site, it is considered the local highway network is of a suitable and safe standard to encourage cycle use. The nearest bus stops to the Site are located on Wise Lane and Mill Road, approximately 550m to the east of the Site and provide frequent services to Heathrow Airport, West Drayton and Uxbridge. West Drayton Railway Station		

Assessment criteria	Relevant?	Details/evidence	Potential health impact?	Recommended mitigation or enhancement actions
		is located approximately 1.8km to the northeast of the Site. Bus service U3 provides frequent direct services to/from bus stops within the vicinity of the Site and West Drayton Railway Station. Bus journeys between bus stops nearby to the Site and West Drayton Railway Station are approximately 5 minutes. The railway station is on the Great Western main line. Services at West Drayton Railway Station are provided by Great Western Railway and TfL Rail, where 6 services are provided an hour to London Paddington and Reading during peak hours and off-peak hours. A ticket office, as well as self-service ticket machines, and secure cycle storage can be found at this station. Measures have been set out in the Transport Statement and Travel Plan with the aim of minimising air pollution as a result of the Development and will reduce the impact from traffic. An Energy Statement has been submitted in support of the planning application and has identified that a wide range of efficiency measures have been incorporated within the design of the Development which will limit emissions.		
Does the proposal minimise noise pollution caused by traffic and commercial uses?	Yes ✓ No N/A	An assessment of the likely associated environmental impacts of transport related to the Development, particularly in relation to proximity to environmentally sensitive areas (such as noise sensitive areas) was undertaken in support of the application. As above, the Development will result in an overall net reduction in traffic generated by the Site, therefore limiting noise effects caused by traffic. The effects of noise from off-site road traffic are considered to be negligible and will have no adverse impact on the health of existing sensitive receptors. The Development is at the outline stage. The primary sources of noise pollution from the Development are likely to comprise: • Data hall cooling plant will be housed in external plant areas on either side of each data hall and on the roof; • Cooling plant for electrical rooms; • Cooling / heating plant serving administration spaces; • Multiple emergency generators which will provide power to the data centre in the event of a power cut; and	Positive Negative Neutral ✓ Uncertain	<u>N/A</u>

Assessment criteria	Relevant?	Details/evidence	Potential health impact?	Recommended mitigation or enhancement actions
		Load banks may also be included for use during regular generator testing. The main data hall cooling plant can be expected to run for 24 hours per day and is typically the primary noise source associated with data centre use. Generators will only all run all at once during an emergency power failure scenario which will be a rare occurrence. However, regular testing of the generators will need to be carried out (typically once per month per generator) although this can usually be carried out on one generator at a time during weekday business hours. It is anticipated that appropriate plant noise limits will be included in a planning condition attached to any planning permission granted to the Development, to be discharged at a later stage in the planning process once detailed plant selections are finalised. Operational noise effects are not anticipated.		

5. Accessibility and Active Travel

Assessment criteria	Relevant?	Details/evidence	Potential health impact?	Recommended mitigation or enhancement actions
Does the proposal address the Ten Healthy Streets indicators?	Yes ✓ No N/A	Given the nature and scale of the Development, a number of the Healthy Street Indicators are not applicable. However, the Development encourages the use of travel by foot and bicycle through promotion of key pedestrian routes, facilities to enable cycling (including cycle parking provision) and incentives to promote healthier modal choices with commuting to work.	Positive ✓ Negative Neutral Uncertain	
Does the proposal prioritise and encourage walking (such as through shared spaces?)	Yes ✓ No N/A	The Site is easily accessible and is within walking and cycling distance of amenities and residential areas, and therefore provides an opportunity to encourage employee/visitor to walk to and from the Site. As above, a footway is present along the northern side of Thorney Mill Road, which is located adjacent to the south of the Site and provides a safe and attractive walking route from the Site to the public realm and local facilities in West Drayton. The Travel Plan submitted with the planning application includes measures which will encourage active travel to and from the Site. A Travel	Positive ✓ Negative Neutral Uncertain	<u>Recommended Enhancement Action:</u> A travel information pack will be prepared by the end occupier as per the Travel Plan. The end occupier(s) will provide and update a

Assessment criteria	Relevant?	Details/evidence	Potential health impact?	Recommended mitigation or enhancement actions
		Plan Co-ordinator (TPC) will be appointed to provide ongoing management for the Travel Plan. Information and maps will be distributed to staff showing the pedestrian routes in proximity to the Site, including the location of local amenities and public transport facilities with routes and journey times by walking. Promotional events and literature on national and local cycling campaigns will be promoted to encourage walking, including Walk to Work Day.		sustainable travel notice board in a prominent and accessible location within their building. It will be updated when appropriate to provide details of changes to public transport (e.g. revised timetables) and in advance of national events such as Walk to Work Day.
Does the proposal prioritise and encourage cycling (for example by providing secure cycle parking, showers and cycle lanes)?	Yes ✓ No N/A	The Development includes measures to prioritise and encourage cycling. The Development includes 6 conveniently located covered and secure cycle parking spaces. As above, whilst there are no designated cycle facilities in the immediate vicinity of the Site, it is considered the local highway network is of a suitable and safe standard to encourage cycle use. Employees will be provided with shower and changing facilities, including facilities for storage of wet clothes, umbrellas etc. The Transport Plan provides measures to raise awareness of sustainable travel with the aim of reducing single occupancy private car use, promote the use of public transport and encourage and promote healthier lifestyles. A Travel Plan Co-ordinator (TPC) will be appointed to provide ongoing management for the Travel Plan. Information and maps will be distributed to staff showing the cycle routes in proximity to the Site, including the location of local amenities and public transport facilities with routes and journey times by cycling. Promotional events and literature on national and local cycling campaigns will be promoted to encourage cycling, including Cycle to Work Day.	Positive ✓ Negative Neutral Uncertain	<u>Recommended Enhancement Action:</u> A travel information pack will be prepared by the end occupier for inclusion within employee induction packs which will be issued to new employees to assist them in making informed travel decisions. Employees should be given their travel packs as part of their induction process in order to maximise the opportunity to bring about behavioural change at a lifestyle change i.e. a new/re-located job. The content of this information pack will include: The information packs will include: Information on the aims and objectives of the Travel Plan, for example the benefits to

Assessment criteria	Relevant?	Details/evidence	Potential health impact?	Recommended mitigation or enhancement actions
				the environment of reduced car use and the health benefits of walking and cycling; • Information on personalised travel planning services; • Information on services and amenities provided locally; • Maps showing the pedestrian and cycle routes in proximity to the Site; • Rail and bus service information; and • Advice on measures to reduce the need to travel such as homeworking and details of existing car sharing databases in the area.
Does the proposal connect public realm and internal routes to local and strategic cycle and walking networks?	Yes No N/A ✓	Owing to the nature of the Development, it is not appropriate to provide internal routes to local and strategic networks as the Site must be secure.	Positive Negative Neutral ✓ Uncertain	<u>Recommended Enhancement Action:</u> N/A
Does the proposal include traffic management and calming measures to help reduce and minimise road injuries?	Yes ✓ No N/A	The Transport Statement submitted in support of the planning application details the measures taken to manage and calm traffic to reduce and minimise road injuries. It concludes that the Development would not exacerbate any existing safety issues. It demonstrates that the proposed access arrangement is safe and suitable to serve the Development. As above, the Development will result in an overall decrease in daily trips of 205 two-way movements. The Development will therefore result in an overall net reduction in traffic generated by the Site across the day, resulting in a	Positive Negative Neutral ✓ Uncertain	<u>Mitigation Measure:</u> N/A

Assessment criteria	Relevant?	Details/evidence	Potential health impact?	Recommended mitigation or enhancement actions
		betterment to local highway network operation and will help to reduce and minimise road injuries.		
Is the proposal well connected to public transport, local services and facilities?	Yes ✓ No N/A	The Site is approximately 200m to the east of the village of Thorney and 1km to the southwest of West Drayton town centre. Both of these settlements provide local services and facilities such as shops and can be accessed by foot or cycle. West Drayton also includes a medical centre, hotels and recreation and leisure facilities. As above, a footway is present along the northern side of Thorney Mill Road, which is located adjacent to the south of the Site and provides a safe and attractive walking route from the Site to the public realm and local facilities in West Drayton. The nearest bus stops to the Site are located on Wise Lane and Mill Road, approximately 550m to the east of the Site and provide frequent services to Heathrow Airport, West Drayton and Uxbridge. West Drayton Railway Station is located approximately 1.8km to the northeast of the Site. Bus service U3 provides frequent direct services to/from bus stops within the vicinity of the Site and West Drayton Railway Station. Bus journeys between bus stops nearby the Site and West Drayton Railway Station are approximately 5 minutes. The railway station is on the Great Western main line. Services at West Drayton Railway Station are provided by Great Western Railway and TfL Rail, where 6 services are provided an hour to London Paddington and Reading during peak hours and off-peak hours. A ticket office, as well as self-service ticket machines, and secure cycle storage can be found at this station. As per the Travel Plan, public transport service information, maps and advice will be distributed to staff, promoting existing local services. Notice boards will be located within the data centre buildings and will provide important travel information for staff and visitors. The TPC will be required to maintain the notice boards to ensure the information is up-to-date. The notice boards will be installed prior to operation. The TPC will liaise with local bus and rail service providers to explore potential staff discounts and special offers for season tickets.	Positive ✓ Negative Neutral Uncertain	<u>Recommended Enhancement Action:</u> The Travel Plan principles also extend to visitors. To encourage sustainable travel to the Site, information on these modes should be made available either on a company's website or by employees inviting visitors to the Site.
Does the proposal seek to reduce car use by reducing car parking provision, supported by the controlled parking	Yes No ✓ N/A	Total provision for car parking will not be increased significantly from what is currently provided. In total, 91 vehicular car parking spaces will be provided. As above, a comprehensive Travel Plan has been prepared which	Positive Negative Neutral Uncertain✓	<u>Recommended Enhancement Action:</u> Adhere to the principles of the Travel Plan that

Assessment criteria	Relevant?	Details/evidence	Potential health impact?	Recommended mitigation or enhancement actions
zones, car clubs and travel plans measures?		accompanies this the application and sets out how single occupancy car trips to and from the Site will be minimised. Notice boards will be located within the data centre buildings and will provide important travel information for staff and visitors, including promoting public transport and walking and cycling over car use. The TPC will be required to maintain the notice boards to ensure the information is up-to-date. The notice boards will be installed prior to operation. The TPC will promote car-sharing schemes for staff. The notice boards will carry literature promoting material and local lift-share databases such as www.liftshare.com, as well as matching people together on-site. In addition, policies to enable regular homeworking will be explored by the Site occupier, including the provision of laptops with remote access to IT and video-conferencing, which will reduce the need to travel.		accompanies the application.
Does the proposal allow people with mobility problems or a disability to access buildings and places?	Yes ✓ No N/A	The Design and Access Statement submitted with the planning application sets out the details of the design to ensure that the entirety of the Site is accessible to all. The Development is at the outline stage, therefore the details of accessibility across the Site for people with mobility problems or a disability will be set out at the detailed design stage. However, it is envisaged that the Development will be designed to provide flexibility of access for all employees and visitors to the Site and will wholly encompass the access provisions of the Disability Discrimination Act and the Building Regulations Part M. Designated disabled parking bays will be provided in line with current guidelines, close to main entrances where surfaces will incorporate appropriate dropped and transition kerb sections and areas of tactile paving.	Positive ✓ Negative Neutral Uncertain	

6. Crime Reduction and Community Safety

Assessment criteria	Relevant?	Details/evidence	Potential health impact?	Recommended mitigation or enhancement actions
Does the proposal incorporate elements to	Yes ✓ No	The Development will be built to Secure by Design standards which include: Security fence and gate to be a minimum of 2.4 metres in height with	Positive ✓ Negative	N/A

Assessment criteria	Relevant?	Details/evidence	Potential health impact?	Recommended mitigation or enhancement actions
help design out crime?	N/A	no climbing aids and top of vertical bars exposed around the perimeter; - External personnel doors are to be high-security doors. - All ground floor level windows/ curtain walling to be fitted with toughened/ laminated double-glazed sealed glass units incorporated into the aluminium framed system; and - All lighting to emanate from above 2.5 metres. All lighting will cover the rear service yards and loading areas. Furthermore, provision for CCTV cameras will be made, with a particular focus on the main vehicular entrance from Thorney Mill Road, the car park and data centre front doors. These measures are seen as pro-active design elements to prevent crime.	Neutral Uncertain	
Does the proposal incorporate design techniques to help people feel secure and avoid creating 'gated communities'?	Yes ✓ No N/A	As outlined above, measures have been included in the design to ensure that the Development is secure.	Positive ✓ Negative Neutral Uncertain	
Does the proposal include attractive, multi-use public spaces and buildings?	Yes No N/A ✓	Given the Development's intended use, it is not appropriate to provide multi-use spaces for the general public for reasons of safety and security on-site.	Positive Negative Neutral ✓ Uncertain	N/A
Has engagement and consultation been carried out with the local community?	Yes ✓ No N/A	The consultation process was carried out in conjunction with pre-application meetings with planning officers at Buckinghamshire Council and correspondence with Hillingdon Council and the Greater London Authority. Consultation with the local community included stakeholder meetings involving local political and community groups. Meetings were held with: - Buckinghamshire Local Enterprise Partnership, on the 10th June 2020 - Iver Parish Council Councillors, on the 6th July 2020 and the 15th September 2020. - Iver Ward Councillors, on the 13th July 2020 - West Drayton Ward Councillors, on the 22nd July 2020 - Joy Morrissey MP, on the 8th October 2020 - Richings Park Residents' Association, on the 15th October 2020	Positive ✓ Negative Neutral Uncertain	N/A

Assessment criteria	Relevant?	Details/evidence	Potential health impact?	Recommended mitigation or enhancement actions
		○ Bucks Business First, on the 23rd October 2020 A booklet outlining the proposals was delivered to 4392 addresses near to the site on the 3rd August 2020. This encouraged feedback on the development. A flyer advertising the second round of consultation was delivered to 4392 addresses near to the site on the 3rd December 2020. A newspaper advert was published, in both print and digitally, in the Bucks Free Press and the Slough and South Bucks Observer, beginning on the 11th December 2020. A further social media campaign directed residents to the consultation website for the first two weeks of December. Owing to the COVID-19 pandemic, all consultation was held virtually. However, the level of details in which the proposals were discussed was equivalent to what would have been displayed on boards at a public exhibition.		

7. Access to Healthy Food

Assessment criteria	Relevant?	Details/evidence	Potential health impact?	Recommended mitigation or enhancement actions
Does the proposal facilitate the supply of local food, i.e. allotments, community farms and farmers' markets?	Yes No N/A ✓	The Development does not include the provision of allotments on the Site. The proposal concerns two data centre developments; there is no retail provision included in the Development.	Positive Negative Neutral ✓ Uncertain	<u>Recommended Mitigation Action:</u> N/A
Is there a range of retail uses, including food stores and smaller affordable shops for social enterprises?	Yes No N/A ✓	The Development comprises data centre uses with no proposed commercial or retail floorspace.	Positive Negative Neutral ✓ Uncertain	N/A
Does the proposal avoid contributing towards an	Yes No	N/A	Positive Negative	N/A

Assessment criteria	Relevant?	Details/evidence	Potential health impact?	Recommended mitigation or enhancement actions
over-concentration of hot food takeaways in the local area?	N/A ✓		Neutral Uncertain	

8. Access to Work and Training

Assessment criteria	Relevant?	Details/evidence	Potential health impact?	Recommended mitigation or enhancement actions
Does the proposal provide access to local employment and training opportunities, including temporary construction and permanent 'end-use' jobs?	Yes ✓ No N/A	The construction phase of the Development will provide opportunities for temporary work for local people. The Development aims to offer permanent employment opportunities to new and existing residents of Drayton once operational. The Economic Benefits Statement submitted with the planning application concludes that the Development will support 90 direct jobs. In addition, the Development will indirectly support in the region of 130 jobs in the local data economy and will have a positive impact on local employment.	Positive ✓ Negative Neutral Uncertain	<u>Recommended Enhancement Action:</u> Commit to sourcing construction workforce from the local area where possible. Consider whether any apprenticeship positions could be provided.
Does the proposal provide childcare facilities?	Yes No ✓ N/A	The Development is for data centre uses and does not provide childcare facilities.	Positive Negative Neutral ✓ Uncertain	N/A
Does the proposal include managed and affordable workspace for local businesses?	Yes No ✓ N/A	The Development is to provide data centre uses and does not include managed or affordable workspace for local businesses. Owing to the nature of the Site, the Development must maintain a secure perimeter and therefore it is not appropriate to have a mixed-use facility with local businesses.	Positive Negative Neutral ✓ Uncertain	
Does the proposal include opportunities for work for local people via local procurement arrangements?	Yes ✓ No N/A	As above, the Development aims to offer employment opportunities to new and existing residents of Drayton. The construction phase of the Development will provide opportunities for work for local people. The Economic Benefits Statement submitted with the planning application concludes that the Development will support 90 direct jobs. In addition, the Development will indirectly support in the region of 130 jobs in the	Positive ✓ Negative Neutral Uncertain	N/A

Assessment criteria	Relevant?	Details/evidence	Potential health impact?	Recommended mitigation or enhancement actions
		local data economy and will have a positive impact on local employment.		

9. Social Cohesion and Lifetime Neighbourhoods

Assessment criteria	Relevant?	Details/evidence	Potential health impact?	Recommended mitigation or enhancement actions
Does the proposal consider health inequalities by addressing local needs through community engagement?	Yes ✓ No N/A	Extensive community engagement has been undertaken. However, owing to the nature of the Development and the Site's existing use as industrial and commercial floorspace, there is not deemed to be a need to consider health inequalities as part of this Development.	Positive Negative Neutral ✓ Uncertain	N/A
Does the proposal connect with existing communities, i.e. layout and movement which avoids physical barriers and severance and land uses and spaces which encourage social interaction?	Yes No N/A ✓	As the Development includes data centre uses, it has not been designed with a layout to prevent severance.	Positive Negative Neutral ✓ Uncertain	N/A
Does the proposal include a mix of uses and a range of community facilities?	Yes No N/A ✓	The Development includes data centre uses. Given the nature and scale of the Site and development, no community facilities are proposed.	Positive Negative Neutral ✓ Uncertain	N/A
Does the proposal provide opportunities for the voluntary and community sectors?	Yes No ✓ N/A	There are no plans for opportunities for voluntary and community sectors.	Positive Negative Neutral ✓ Uncertain	N/A
Does the proposal take into account issues and principles of inclusive and age-friendly design?	Yes No N/A ✓	The Development will comprise data centre uses only and therefore does not account for age-friendly design. However, as detailed previously, the Development is at the outline stage, therefore the details of accessibility for people with mobility problems or a disability will be set out at the detailed design stage. However, it is envisaged that the Development will	Positive Negative Neutral ✓ Uncertain	N/A

Assessment criteria	Relevant?	Details/evidence	Potential health impact?	Recommended mitigation or enhancement actions
		be designed to provide flexibility of access for all employees and visitors to the Site and will provide designated disabled parking bays.		

10. Minimising the Use of Resources

Assessment criteria	Relevant?	Details/evidence	Potential health impact?	Recommended mitigation or enhancement actions
Does the proposal make best use of existing land?	Yes ✓ No N/A	The brownfield Site is located in a semi-urban area and is surrounded by a mix of industrial and commercial buildings, as well as woodland. As detailed in the Planning Statement and outlined in other reports accompanying the planning application, such as the Landscape Strategy, the Site is currently utilised for a combination of open storage, storage and distribution associated with the rail line/railhead that forms part of the Site. This railhead is to be re-aligned to maintain its use, whilst allowing for the Development. Therefore, the use of land is maximised.	Positive ✓ Negative Neutral Uncertain	N/A
Does the proposal encourage recycling (including building materials)?	Yes ✓ No N/A	Construction waste will be reused and recycled where possible. An outline SWMP has been submitted with the planning application and a detailed SWMP will be produced prior to the commencement of construction and implemented by the contractor(s) in accordance with best practice. Operational waste will be disposed of in line with SBDC's requirements and managed in accordance with all applicable legislation. The Development will provide appropriate opportunities for the efficient collection and recycling of waste and a site-specific plan will be prepared that will set out ways to minimise waste production from the completed Development during detailed design. Adequate space for refuse and recycling facilities will be provided within the Development as required by SBDC.	Positive ✓ Negative Neutral Uncertain	<u>Mitigation Measure:</u> A detailed Site Waste Management Plan for construction and operation are to be secured by a planning condition and implemented throughout the construction phase.
Does the proposal incorporate sustainable design and construction techniques?	Yes ✓ No N/A	A CEMP will set out how the demolition and construction phases of the Development will meet the planning policy requirements related to sustainable development. Data Centres are energy intensive facilities, however, the design and future measures presented in the Energy Statement for the Development	Positive ✓ Negative Neutral Uncertain	<u>Mitigation Measure:</u> CEMP will be implemented throughout the construction phase.

Assessment criteria	Relevant?	Details/evidence	Potential health impact?	Recommended mitigation or enhancement actions
		submitted with the planning application confirm that the most efficient operation can be achieved, and also that a high proportion of the heat produced by the Data Centre could be utilised whilst maintaining resiliency. Air handling units with low specific fan powers shall be selected to reduce the energy required to supply air to all rooms that require mechanical ventilation. Furthermore, heat recovery shall be used for all supply and extract systems with a summer by-pass to ensure that energy is recovered from exhausted/expelled sources where possible. Electrical lighting energy consumptions shall be minimised using LED lighting; which uses less energy and last longer than more traditional methods of lighting. Across the building, lighting systems shall be controlled by occupancy and daylighting sensors where suitable. Manual override shall be provided in occupied rooms such as offices and meeting rooms to enhance occupant comfort. Waste heat from the Data Centre shall be the primary source of heating to the office spaces. Air / water source heat pumps shall be used to provide cooling, hot water and any additional heating requirements for the office spaces. Cooling to the Data Centre shall be provided via Computer Room Air conditioning (CRAC) units with heat rejected through dry coolers, hybrid dry air coolers or adiabatic air handling units. The selection of cooling system should take account of the need to minimise water consumption. The office spaces shall be designed to have good air tightness throughout, in general, air leakage and infiltration shall be minimised to improve energy efficiency. The data centre will be highly sealed with mechanical ventilation provided to maintain safe working conditions via an air handling unit. All units will be built to achieve BREEAM 'Very Good' status. The development scored positively with regards to criteria relating to the sustainable construction of the development.		

11. Climate Change

Assessment criteria	Relevant?	Details/evidence	Potential health impact?	Recommended mitigation or enhancement actions
Does the proposal incorporate renewable energy?	Yes ✓ No N/A	An Energy Statement has been submitted in support of the planning application. As above, this Statement has identified that a wide range of efficiency measures have been incorporated within the design of the Development which will achieve reductions in emissions compared to the regulatory baseline.	Positive ✓ Negative Neutral Uncertain	<u>N/A</u>
Does the proposal ensure that buildings and public spaces are designed to respond to winter and summer temperatures, i.e. ventilation, shading and landscaping?	Yes No N/A ✓	The Development is at the outline planning stage, therefore full analysis with regards to Building Regulations Part L will be completed once detailed layouts for the Development have been produced. The building will be designed to be as energy efficient as possible. The fabric shall be specified to meet the requirements of Part L. The Development will be operated and maintained to ensure that the energy efficiency standards of the building at completion are upheld. The buildings will be designed in a way to reduce overheating in summer, whilst retaining heat in the winter.	Positive Negative Neutral ✓ Uncertain	N/A
Does the proposal maintain or enhance biodiversity?	Yes ✓ No N/A	The Development involves the redevelopment of brownfield land currently subject to industrial uses. As above, the Development is at the outline stage; therefore, the detailed design of the proposed landscaping will be applied for through future reserved matters applications. An Arboricultural Impact Assessment has been undertaken for the Development and has identified that five arboricultural features (individual trees, groups of trees and/or woodlands) are required to be removed in order to facilitate the Development. The majority of these have been categorised as either low grade, or very low grade trees. The remaining 21 features will be retained as part of the Development and will be protected during construction in accordance with BS 5837:2012. To mitigate for the loss of existing trees, detailed planting proposals will be developed and will seek to include the planting of new trees across the Site. As the majority of the trees being removed are poor quality trees, the new tree planting provides the opportunity to enhance the trees provision on the Site through improvements in tree quality, species diversity and planting environment. The Development parameter plan, submitted with the outline planning	Positive ✓ Negative Neutral Uncertain	<u>Mitigation Measure:</u> N/A

Assessment criteria	Relevant?	Details/evidence	Potential health impact?	Recommended mitigation or enhancement actions
		application, comprises a no build zone in the south east of the Site, which will provide a buffer to the poplar trees plantation, woodland and Bigley Ditch adjacent to the east of the Site, and the vegetation and Thorney Pool adjacent to the south of the Site. The exact composition of the landscaping provision will be determined at the reserved matters application stage, however the no build zone could provide the opportunity to create a natural space to enhance biodiversity.		
Does the proposal incorporate sustainable urban drainage techniques?	Yes No ✓ N/A	The Development has been supported by a Flood Risk Assessment and Drainage Strategy which has been submitted in support of the planning application. The Site is largely at low risk of fluvial flooding, very low risk of surface water flooding, moderate risk of groundwater flooding and low risk of sewer flooding. The Development is at the outline stage; therefore, the detailed design of the drainage proposals will be applied for through future reserved matters applications. The Site has existing surface water run off areas from the Site's previous uses and it is anticipated that these existing water connections to the drainage network will be utilised.	Positive Negative Neutral ✓ Uncertain	<u>Mitigation Measure:</u> N/A

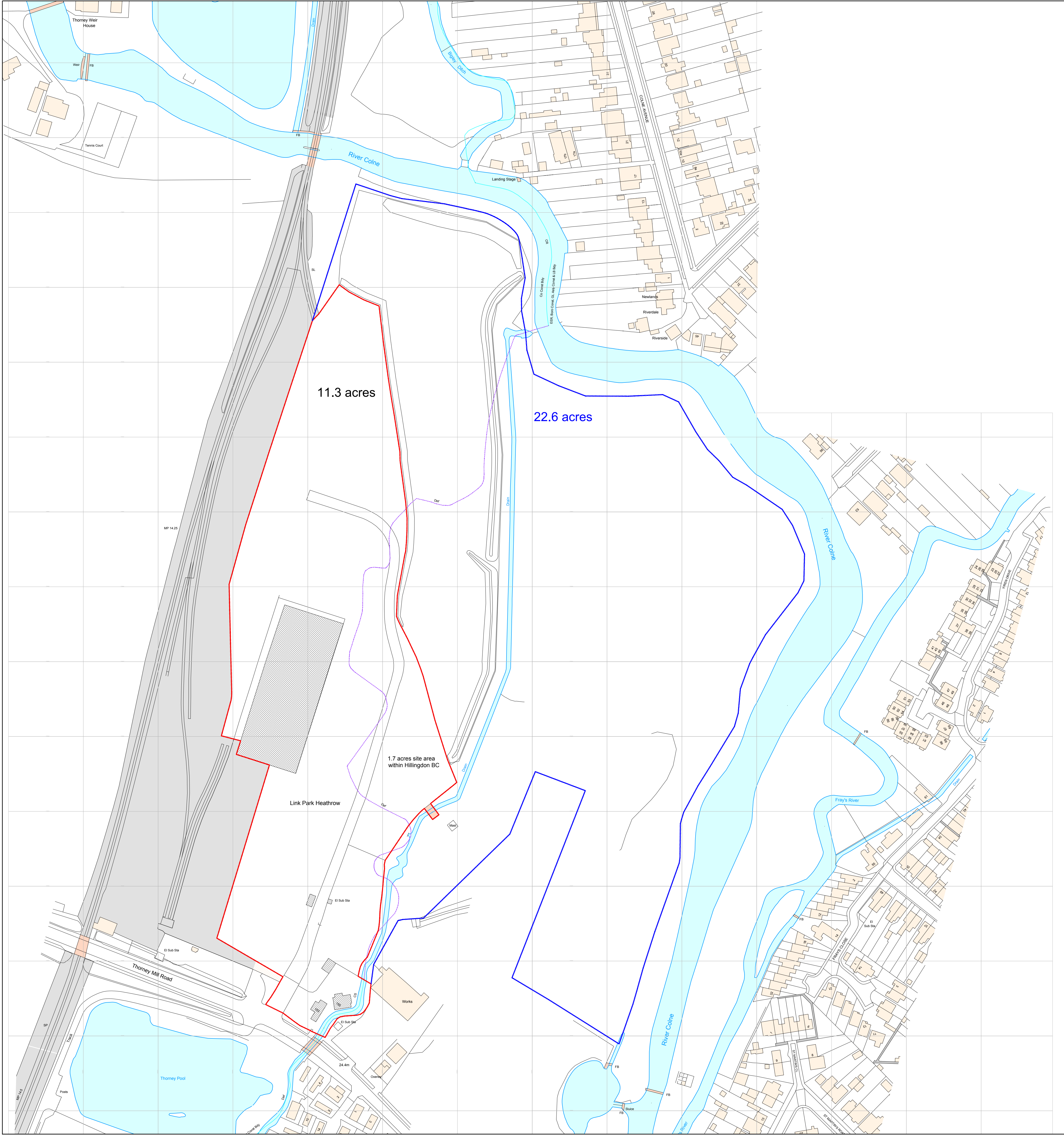
4 CONCLUSION

- 4.1 An assessment of the potential health effects of the Development has been undertaken. The HUDU Healthy Urban Planning Matrix and Checklist have been completed (see Appendix 3 for the Checklist) to determine whether a HIA is required.
- 4.2 The performance of the Development has been assessed against three key health themes:
1. Active travel;
 2. Healthy environment; and
 3. Vibrant neighbourhoods.
- 4.3 As shown in the assessment in Chapter 3, the Development was found to have a neutral or positive health effect in relation to the majority of key health themes. The Development has been designed to provide a high quality and healthy environment for future users.
- 4.4 Overall, the Development provides a safe and healthy environment for employees and visitors that will integrate with local pedestrian and cycling routes, public transport and promote sustainable alternatives without negative impacts to existing health in the local area. The Development will result in an overall net reduction in traffic generated by the Site, resulting in a betterment to local highway network operation and limiting air quality and noise effects, and subsequent health effects, caused by traffic. As such, the nature and scale of the Development would not be likely to result in significant impacts on health and wellbeing.
- 4.5 The table below sets out potential mitigation and enhancement measures that have been identified.

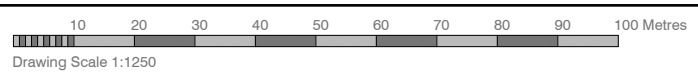
Health Theme	Recommended Mitigation or Enhancement Action
Access to open space and nature	N/A
Air quality, noise and neighbourhood amenity	• CEMP to be implemented throughout the construction phase. • Travel Plan to be implemented and monitored to check effectiveness.
Accessibility and active travel	• A Welcome Travel Information Pack. • Travel Plan to be implemented and monitored to check effectiveness.
Crime reduction and community safety	N/A
Access to healthy food	N/A

Health Theme	Recommended Mitigation or Enhancement Action
Access to work and training	• Commit to sourcing construction workforce from the local area where possible. • Consider whether any apprenticeship positions could be provided.
Social cohesion and lifetime neighbourhoods	N/A
Minimising the use of resources and	• A SWMP to be implemented.
Climate change.	N/A

APPENDIX 1:
SITE LOCATION PLAN



KEY:	
—	Site Boundary
—	Other land in the same ownership
—	Council boundary



Revision	Notes	Date	Checked by	Project	Client
P01	Draft issue	22.10.2020	AN	Link Park Heathrow - Iver	LINK PARK LLP
P02	Drawing generally revised.	05.11.2020	AN	Date: 07.04.2020	
				Drawn: AN	OS Site Plan - Red Line Boundary
				Checked: NW	Status: OUTLINE PLANNING
				Scale: 1:1250 (@ A1)	Drawing: 0485-A02-100 Rev: P02

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APPENDIX 2:
HUDU HEALTHY URBAN PLANNING CHECKLIST

HUDU Planning for Health

Healthy Urban Planning Checklist



Third Edition
April 2017

Purpose of the checklist

The checklist aims to promote healthy urban planning by ensuring that the health and wellbeing implications of local plans and major planning applications are consistently taken into account. By bringing together planning policy requirements and standards that influence health and wellbeing the checklist seeks to mainstream health into the planning system.

The checklist was originally developed in 2012 by representatives from the six London Olympic and Paralympic Host Boroughs, the local NHS, the NHS London Healthy Urban Development Unit, Greater London Authority and Groundwork London. This third edition has been fully updated to be consistent with [The London Plan](#), the Spatial Development Strategy for London consolidated with alterations since 2011, published in March 2016. This will be referred to simply as the London Plan 2016. From this date, the formal alterations to the London Plan form part of the statutory development plans for London Boroughs.

Who is the checklist for?

The [National Planning Policy Framework \(March 2012\)](#) promotes a collaborative approach to health and planning whereby local planning authorities should work with public health leads and health organisations to understand and take account of the health status and needs of the local population and the barriers to improving health and well-being (paragraph 171). The supporting online [Planning Practice Guidance](#) refers to the use of health impact assessment as a useful tool to assess the impacts of development proposals.

The checklist supports this collaborative approach and encourages different stakeholders to work together to address the health impacts of plans and development proposals. As such, the checklist could be used by:

- Developers, to screen and scope the health impacts of development proposals;
- Planning officers, to help identify and address the health impacts of plans and development proposals;
- Public health and environmental health professionals, to comment and scrutinise plans and development proposals;
- Neighbourhood forums, community groups and housing associations to comment on major planning applications to help foster community engagement

To create and develop healthy and sustainable places and communities, the Marmot Review of Health Inequalities in England '[Fair Society Healthy Lives](#)' recommends that the planning system should be fully integrated with transport, housing, environmental and health policy.

Therefore, the checklist will also be of interest to environmental health officers concerned with environmental impacts and risks, transport planners concerned with promoting active travel and housing officers seeking to ensure that new housing is affordable and accessible.

What is healthy urban planning?

Healthy urban planning aims to promote healthy, successful places for people to live and work in. This can be achieved by providing the homes, jobs and services that people need, reducing environmental risks and delivering well designed buildings and urban spaces which will create the conditions for healthy, active lifestyles. In addition to access to healthcare services, a number of other factors are known to influence a person's health status and lifestyle, including economic, environmental and social conditions. These factors are referred to as the wider or social determinants of health.

Healthy urban planning seeks to highlight and promote the role of planning to influence these social determinants of health. In many ways, planners already 'do' health, by promoting sustainable development and travel, enhancing green spaces, reducing pollution and protecting residential amenity. However, healthy urban planning goes further by explicitly recognising the role of planning and by using health issues as a way to promote good planning and design and raise standards. Poorly planned and designed buildings and spaces could deter healthy lifestyles and exacerbate poor physical and mental health. The principles of healthy urban planning apply to both new development and urban regeneration programmes such as housing estate renewal schemes.

Local authorities are responsible for a number of regulatory functions, which are separate from planning controls, such as building regulations, traffic regulations, environmental protection and a range of licensing regimes. The checklist refers only to planning controls, although other regulatory controls, particularly environmental protection, food premises licensing and traffic regulations are closely related and required in order to achieve a 'healthy' development.

Urban design and healthy urban planning

Healthy urban planning means good planning and high quality urban design. Good design and good planning can help reduce health care costs over time by preventing ill-health from risks attributed to urban planning, including air pollution, road injuries, worklessness and poor housing. Good design also generates financial, social and environmental value. A well designed 'healthy' development will add economic value by increasing sales and lettings of residential units and producing higher returns on investment.

'Active Design' is a key element of healthy urban planning. Design has a crucial role to support activity in buildings and places in response to rising levels of obesity and related chronic diseases. New York City has produced [Active Design Guidelines](#), which provides guidance on creating healthier buildings, streets, and urban spaces. The Guidelines demonstrate that active design will help to reduce energy consumption, increase sustainability, and be cost effective. It is recognised that active design can also address mental health and wellbeing.

Bringing together policy requirements, standards and assessments

The checklist aims to bring together key policy requirements and standards, which influence health and wellbeing to assist the decision-making process. A ‘healthy’ development can be achieved when these requirements and standards are met and exceeded.

The [London Plan 2016](#) provides a strong policy framework for integrating health and spatial planning. It seeks to improve health and address health inequalities by requiring new developments to be designed, constructed and managed in ways that improve health and promote healthy lifestyles to help to reduce health inequalities ([Policy 3.2](#)).

The checklist refers to London Plan policies and standards set out in Mayoral supplementary planning guidance, notably the quality and design standards in the [Housing Supplementary Planning Guidance \(2016\)](#). This guidance updates London housing standards to reflect the implementation of the Government’s new national technical standards. In addition to these standards the checklist also includes good practice standards which seek to ‘raise the bar’ and demonstrate that a development has fully considered health and wellbeing issues.

There are a range of national standards and assessments which when used together constitute healthy urban planning, such as the [Housing - Optional Technical Standards](#), [Lifetime Homes](#) and [Lifetime Neighbourhoods](#), [Building for Life](#) and [Secured by Design](#). These assessments are illustrated in Figure 1.

Figure 1 – Assessments and standards



Much of the information needed to complete the checklist will be contained in documents submitted with a planning application required to validate the application (see Table 1 below). The checklist seeks to bring together existing information and assessments to demonstrate that health, as a material planning consideration, has been addressed.

Table 1 - Planning application information requirements

	Air Quality assessment	Biodiversity and ecology report	Housing Optional Technical Stand's	Design and Access Statement	Flood risk assessment	Landscaping Strategy	Noise impact assessment	Open space assessment	Planning Statement	Regeneration statement	Retail impact assessment	Sustainability statement	Transport Assessment and Travel Plan
Healthy homes			✓	✓					✓	✓		✓	
Active Travel				✓					✓				✓
Healthy environment	✓	✓	✓		✓	✓	✓	✓	✓			✓	
Vibrant neighbourhoods				✓		✓			✓	✓	✓		

The Growth and Infrastructure Act 2013 introduced measures to speed up the planning application process. The amount of information submitted with a planning application has been reduced to a 'reasonable' level and design and access statements are now only required for major applications.

When to use the checklist?

The [Mayor of London's Social Infrastructure Supplementary Planning Guidance \(May 2015\)](#) describes three types of health impact assessment (HIA): a 'full' HIA involves comprehensive analysis of all potential health and wellbeing impacts; a 'rapid' HIA is a less resource intensive process, involving a more focused investigation of health impacts; and a 'desktop' assessment which draws on existing knowledge and evidence, often using published checklists. It suggests that the Healthy Urban Planning Checklist could be used as a 'desktop' assessment tool.

The checklist can be used to ensure that health and wellbeing issues are embedded into local plans, masterplans and major planning applications.

The checklist should be customised for local use to reflect local circumstances and priorities and could be used:

- as part of a Local Plan review to ensure that health and wellbeing issues are identified and addressed
- to screen possible health impacts as part of Health Impact Assessment, Integrated Impact Assessment or Environmental Impact Assessment processes
- to accompany a planning application, subject to local policy guidance and validation requirements
- by internal and external consultees to comment on and scrutinise major development proposals
- to help develop a neighbourhood plan and neighbourhood 'health' projects.

It is important that the use of the tool is monitored and evaluated. The checklist could be periodically reviewed by local health and wellbeing boards and recommendations could outline where further evidence is needed, using the Joint Strategic Needs Assessment or action supported by wider public health initiatives. The [Public Health Outcomes Framework](#) could be used to measure impacts and assess the effectiveness of the checklist. At a local level, the checklist should be updated by local authority planning departments to ensure that the national, regional and local policy and guidance references are up to date.

Neighbourhood planning

Neighbourhood planning was introduced as part of the Localism Act 2011. In London, neighbourhood forums can draw up a neighbourhood development plan. A proportion of Community Infrastructure Levy (CIL) funding can be spent on local community priorities. Therefore, local communities have a greater opportunity to shape local policy and infrastructure priorities and influence development proposals. This checklist could be used to help develop a neighbourhood plan, including identifying possible neighbourhood CIL 'health' projects and as a resource to help community groups comment on a planning application.

The planning application process

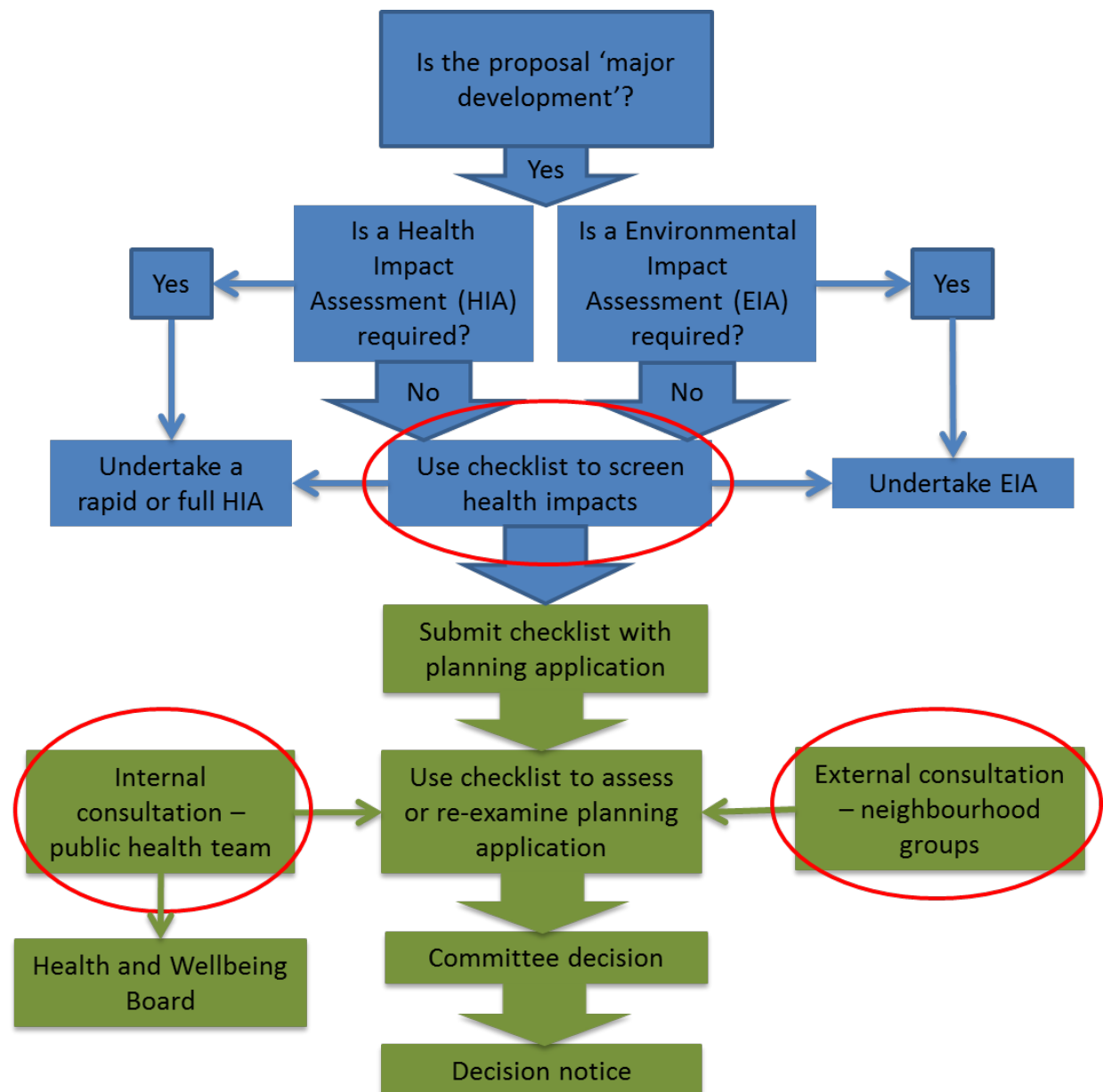
It is intended that the checklist should be applied to major development proposals comprising 10 or more residential units (or a site area of 0.5 hectares or more), or 1,000 square metres or more of non-residential floorspace (or a site area of 1.0 hectares or more). The checklist is most effective when used throughout the lifecycle of a development proposal from pre-application discussions to the determination of a planning application. At the pre-application stage, there is more scope to influence the design, layout and composition of a development proposal.

For large scale development proposals a Health Impact Assessment (HIA) may be required, with a full assessment providing information on health needs and priorities, including

community engagement, and setting out a detailed assessment of health impacts and proposed mitigation and enhancement measures. For large scale development proposals such as strategic planning applications referred to the Mayor of London, it is recommended that other assessment tools, such as the [HUDU Rapid HIA Tool](#) is used.

Figure 2 below illustrates how the checklist could be used as part of the planning application process. Three key areas where the checklist could be used are highlighted.

Figure 2 - the planning application process



How to use the checklist

The checklist is divided into four themes. Each theme contains a number of questions focused on a planning issue. Under each theme there are a number of related health and wellbeing issues many of which are identified in local joint strategic needs assessments and health and wellbeing strategies, such as those related to:

- Obesity and diseases related to physical inactivity and poor diet
- Excess winter deaths
- Air and noise pollution
- Road safety
- Social isolation

Theme	Planning issue	Health and wellbeing issue
1. Healthy housing	• Housing design • Accessible housing • Healthy living • Housing mix and affordability	• Lack of living space - overcrowding • Unhealthy living environment – daylight, ventilation, noise • Excess deaths due to cold / overheating • Injuries in the home • Mental illness from social isolation and fear of crime
2. Active travel	• Promoting walking and cycling • Safety • Connectivity • Minimising car use	• Physical inactivity, cardiovascular disease and obesity • Road and traffic injuries • Mental illness from social isolation • Noise and air pollution from traffic
3. Healthy environment	• Construction • Air quality • Noise • Contaminated land • Open space • Play space • Biodiversity • Local food growing • Flood risk • Overheating	• Disturbance and stress caused by construction activity • Poor air quality - lung and heart disease • Disturbance from noisy activities and uses • Health risks from toxicity of contaminated land • Physical inactivity, cardiovascular disease and obesity • Mental health benefits from access to nature and green space and water • Opportunities for food growing – active lifestyles, healthy diet and tackling food poverty • Excess summer deaths due to overheating
4. Vibrant neighbourhoods	• Healthcare services • Education • Access to social infrastructure • Local employment and healthy	• Access to services and health inequalities • Mental illness and poor self-esteem associated with unemployment and poverty • Limited access to healthy food linked to obesity and related diseases • Poor environment leading to physical

Theme	Planning issue	Health and wellbeing issue
	workplaces • Access to local food shops • Public buildings and spaces	inactivity • Ill health exacerbated through isolation, lack of social contact and fear of crime

It may be the case that not all the issues and questions will be relevant to a specific plan or development proposal and the user should select and prioritise the issues accordingly. Some issues may be directly related to an individual development, others may be relevant at a neighbourhood level where the cumulative impact of development can contribute to a healthy neighbourhood.

Each section summarises the impact on health. Under each theme, key questions are asked linked to policy requirements and standards. The checklist identifies why each issue is important to health and wellbeing. An appendix providing general policy references and sources of evidence is provided. This should be supplemented with local information.

The checklist aims to ensure a development proposal is as 'healthy' as possible, by achieving as many 'Yes' ticks and avoiding 'No's. A 'No' gives a warning that an aspect of a development may need to be reconsidered. Local circumstances may justify why a scheme cannot meet the expected standard.

Where the response to a question is unclear or not known, more information may be required. The checklist can stimulate discussions and negotiations on planning applications, supported by internal and external consultation and supporting information, for example from public health officers.

Note on Code for Sustainable Homes and Lifetime Homes Standards

Following the technical housing standards review, the Government has withdrawn the Code for Sustainable Homes, aside from the management of legacy cases.

Legacy cases are those where residential developments are legally contracted to apply a code policy (e.g. affordable housing funded through the national Affordable Housing Programme 2015 to 2018, or earlier programme), or where planning permission has been granted subject to a condition stipulating discharge of a code level, and developers are not appealing the condition or seeking to have it removed or varied. In these instances, it is possible to continue to conduct code assessments.

Details of the new approach to the setting of technical housing standards in England were announced on 27 March 2015 and a new set of streamlined national technical standards were published. The Code for Sustainable Homes is now no longer Government policy and has been archived.

The Government has also withdrawn the Lifetime Homes concept. However, many local planning policies will continue to require Lifetime Homes standards in new developments. However, as of October 2015, the London Plan will no longer be linked to Lifetime Homes standards. In particular, the requirement in London Plan Policy 3.8 B(c) that ‘all new housing is built to The Lifetime Homes standard’ is replaced by ‘ninety percent of new housing meets Building Regulation requirement M4 (2) “accessible and adaptable dwellings”’. The Healthy Urban Planning Checklist has been updated to include the modified London Plan requirements.

Theme 1: Healthy Housing				
Issue	Key questions	Yes /No / Not relevant Comment	Policy requirements and standards	Why is it important
a. Healthy design	Does the proposal meet all the standards for daylight, sound insulation, private space and accessible and adaptable dwellings?		London Plan Policy 5.2 Minimising carbon dioxide emissions and Housing SPG Standard 35: zero carbon residential buildings from 2016 and non-domestic buildings from 2019. Housing SPG Standard 29 on dual aspect and Standard 32 on daylight and sunlight. Housing SPG Standard 4 on communal open space, supported by London Plan Policy 2.18, Standards 1 and 2 on defining good places, and Standard 3 on public open space. Housing SPG Standards 26 and 27 on minimum provision of private (amenity) open space. London Plan Policy 3.8 Housing choice and Housing SPG Standard 11 on access require 90% of new homes meet Building Regulation M4(2) 'accessible and adaptable dwellings'. Sound insulation and noise - London Plan Policy 7.15 and Housing SPG Standard 30 on noise. Housing SPG Standards 8 and 9 on entrance and approach.	Satisfying these standards can help meet carbon dioxide emissions targets. Good daylight can improve the quality of life and reduce the need for energy to light the home. The provision of an inclusive outdoor space, which is at least partially private, can improve the quality of life. Improved sound insulation can reduce noise disturbance and complaints from neighbours.

Theme 1: Healthy Housing				
Issue	Key questions	Yes /No / Not relevant Comment	Policy requirements and standards	Why is it important
b. Accessible housing	Does the proposal provide accessible homes for older or disabled people? Does the proposal ensure that every non-ground floor dwelling is accessible by a lift that can accommodate an ambulance trolley?		London Plan Policy 3.8 and Housing SPG Standard 11 on access require 10 per cent all new housing to be designed to be wheelchair accessible or easily adaptable such that they meet Building Regulation M4(3) 'wheelchair user dwellings'. Housing SPG Standards 15 and 16 relate to the provision of lifts. Good practice standard - the provision of an ISO standard 13 person lift in a configuration which can accommodate a trolley bed (see Department of Health Technical Memorandum 08-02: Lifts).	Accessible and easily adaptable homes can meet the changing needs of current and future occupants. One of the main methods of transportation of immobile patients is by trolley bed. Non-ground floor dwellings should be accessible by a lift that can accommodate an ambulance trolley.
c. Healthy living	Does the proposal provide dwellings with adequate internal space, including sufficient storage space and separate kitchen and living spaces? Does the proposal encourage the use of stairs by ensuring that they are well located, attractive and welcoming?		London Plan Policy 3.5 (Table 3.3 - minimum space standards for new dwellings) and Housing SPG Standard 24 on dwelling space standards. Housing SPG Standard 25 - dwellings should accommodate the furniture, access and activity space requirements relating to the declared level of occupancy. Also, Housing SPG Standard 28 on privacy and Standard 31 on ceiling heights. Housing SPG Standards 12 to 16 relate to shared internal circulation, cores and lifts.	Sufficient space is needed to allow for the preparation and consumption of food away from the living room to avoid the 'TV dinner' effect. Rather than having lifts at the front and staircases at the back of buildings, it is preferable to have them located at the front to encourage people that can to use them.

Theme 1: Healthy Housing				
Issue	Key questions	Yes /No / Not relevant Comment	Policy requirements and standards	Why is it important
d. Housing mix and affordability	Does the proposal provide affordable family sized homes?		London Plan Policy 3.8 Housing choice. London Plan Policy 3.11 Affordable housing targets seeks to maximise affordable housing provision and to ensure an average of at least 17,000 more affordable homes per year in London over the term of the London Plan. 60% of the affordable housing provision should be for social and affordable rent and 40% for intermediate rent or sale. The Mayor's Homes for Londoners: Affordable Homes Programme 2016-21 is a £3bn fund to help start building at least 90,000 affordable homes by 2021.	The provision of affordable housing can create mixed and socially inclusive communities. The provision of affordable family sized homes can have a positive impact on the physical and mental health of those living in overcrowded, unsuitable or temporary accommodation. Both affordable and private housing should be designed to a high standard ('tenure blind').

Theme 2: Active Travel				
Issue	Key questions	Yes / No / Not relevant Comment	Policy requirements and standards	Why is it important
a. Promoting walking and cycling	Does the proposal promote cycling and walking through measures in a travel plan, including adequate cycle parking and cycle storage?		London Plan Policy 6.3 (C) Travel plans London Plan Policy 6.9 Cycling. London Plan Policy 6.10 Walking. London Plan - Parking Addendum to Chapter 6 on cycle parking : Table 6.3 Cycle parking minimum standards. Housing SPG Standards 20 and 21 on cycle storage.	A travel plan can address the environmental and health impacts of development by promoting sustainable transport, including walking and cycling. Cycle parking and storage in residential dwellings can encourage cycle participation.
b. Safety	Does the proposal include traffic management and calming measures and safe and well lit pedestrian and cycle crossings and routes?		London Plan Policy 6.9 Cycling. London Plan Policy 6.10 Walking.	Traffic management and calming measures and safe crossings can reduce road accidents involving cyclists and pedestrians and increase levels of walking and cycling.
c. Connectivity	Does the proposal connect public realm and internal routes to local and strategic cycle and walking networks and public transport?		London Plan Policy 6.9 Cycling - Map 6.2 Cycle superhighways . London Plan Policy 6.10 Walking - Map 6.3 Walk London Network . Green Infrastructure: The All London Green Grid SPG (March 2012). Transport for London Legible London . Transport for London Bus Service Planning Guidelines .	Developments should prioritise the access needs of cyclists and pedestrians. Routes should be safe, direct and convenient and barriers and gated communities should be avoided. Developments should be accessible by public transport.

Theme 2: Active Travel				
Issue	Key questions	Yes / No / Not relevant Comment	Policy requirements and standards	Why is it important
d. Minimising car use	Does the proposal seek to minimise car use by reducing car parking provision, supported by the controlled parking zones, car free development and car clubs?		London Plan Policy 6.13 Parking - Table 6.2 Car parking standards (Parking addendum to chapter 6). Housing SPG Standards 17 to 19 on car parking provision.	Space for pedestrians and cyclists should be given priority over commercial and private vehicles. Maximum car parking levels allows for provision to be reduced as far as practicable. Car clubs can be effective in reducing car use and parking demand at new residential developments.

Theme 3: Healthy Environment				
Issue	Key questions	Yes / No / Not relevant Comment	Policy requirements and standards	Why is it important
a. Construction	Does the proposal minimise construction impacts such as dust, noise, vibration and odours?		London Plan Policy 5.3 Sustainable design and construction. London Plan Policy 5.18 Construction, excavation and demolition waste. The Control of Dust and Emissions During Construction and Demolition SPG (July 2014). Housing SPG Standard 34 on environmental performance.	Construction sites can have a negative impact on an area and can be perceived to be unsafe. Construction activity can cause disturbance and stress, which can have an adverse effect on physical and mental health. Mechanisms should be put in place to control hours of construction, vehicle movements and pollution. Community engagement before and during construction can help alleviate fears and concerns.
b. Air quality	Does the proposal minimise air pollution caused by traffic and energy facilities?		London Plan Policy 7.14 Improving air quality. At least 'air quality neutral' - Housing SPG Standard 33 on air quality. London Plan Policy 5.10 Urban greening. London Plan Policy 5.3 Sustainable design and construction.	The long-term impact of poor air quality has been linked to life-shortening lung and heart conditions, cancer and diabetes.

Theme 3: Healthy Environment				
Issue	Key questions	Yes / No / Not relevant Comment	Policy requirements and standards	Why is it important
c. Noise	Does the proposal minimise the impact of noise caused by traffic and commercial uses through insulation, site layout and landscaping?		London Plan Policy 7.15 Reducing and managing noise, improving and enhancing the acoustic environment and promoting appropriate soundscapes. Limit the transmission of noise to sound sensitive rooms - Housing SPG Standard 30 on noise.	Reducing noise pollution helps improve the quality of urban life.
d. Open space	Does the proposal retain or replace existing open space and in areas of deficiency, provide new open or natural space, or improve access to existing spaces? Does the proposal set out how new open space will be managed and maintained?		London Plan Policy 7.1 Lifetime neighbourhoods. London Plan Policy 7.18 Protecting open space and addressing deficiency, Table 7.2 Public open space categorisation. London Plan Policy 7.19 Biodiversity and access to nature. Housing SPG Standards 3 and 4 on communal and public open space.	Access to open space has a positive impact on health and wellbeing. Living close to areas of green space, parks, woodland and other open space can improve physical and mental health regardless of social background. To maintain the quality and usability of open spaces an effective management and maintenance regime should be put in place.

Theme 3: Healthy Environment				
Issue	Key questions	Yes / No / Not relevant Comment	Policy requirements and standards	Why is it important
e. Play space	Does the proposal provide a range of play spaces for children and young people?		London Plan Policy 3.6 Children and young people's play and informal recreation facilities. Shaping Neighbourhoods: Play and Informal Recreation SPG (Sept 2012) - quantity Benchmark Standard of a minimum of 10 square metres per child regardless of age (4.24) and accessibility to play space Benchmark Standard (Table 4.4). Housing SPG Standard 5 on play space.	Regular participation in physical activity among children and young people is vital for healthy growth and development. The location of play spaces should be accessible by walking and cycling routes that are suitable for children to use.
f. Biodiversity	Does the proposal contribute to nature conservation and biodiversity?		London Plan Policy 7.19 Biodiversity and access to nature. Table 7.3 - London regional Biodiversity Action Plan habitat targets for 2020. Housing SPG Standard 40 on ecology.	Access to nature and biodiversity contributes to mental health and wellbeing. New development can improve existing, or create new, habitats or use design solutions (green roofs, living walls) to enhance biodiversity.
g. Local food growing	Does the proposal provide opportunities for food growing, for example by providing allotments, private and community gardens and green roofs?		London Plan Policy 5.10 Urban greening. London Plan Policy 7.22 Land for food. London Plan Policy 5.11 Green roofs and development site environs.	Providing space for local food growing helps promote more active lifestyles, better diets and social benefits.

Theme 3: Healthy Environment				
Issue	Key questions	Yes / No / Not relevant Comment	Policy requirements and standards	Why is it important
h. Flood risk	Does the proposal reduce surface water flood risk through sustainable urban drainage techniques, including storing rainwater, use of permeable surfaces and green roofs?		London Plan Policy 5.3 Sustainable design and construction. London Plan Policy 5.11 Green roofs and development site environs. London Plan Policy 5.13 Sustainable drainage. Flooding and drainage - Housing SPG Standards 38 and 39.	Flooding can result in risks to physical and mental health. The stress of being flooded and cleaning up can have a significant impact on mental health and wellbeing. It is likely that increasing development densities and building coverage coupled with more frequent extreme weather events will increase urban flood risk.
i. Overheating	Does the design of buildings and spaces avoid internal and external overheating, through use of passive cooling techniques and urban greening?		London Plan Policy 5.3 Sustainable design and construction. London Plan Policy 5.9 Overheating and cooling. London Plan Policy 5.10 Urban greening. London Plan Policy 5.11 Green roofs and development site environs. Overheating - Housing SPG Standards 36.	Climate change with higher average summer temperatures is likely to intensify the urban heat island effect and result in discomfort and excess summer deaths amongst vulnerable people. Urban greening - tree planting, green roofs and walls and soft landscaping can help prevent summer overheating.

Theme 4: Vibrant Neighbourhoods				
Issue	Key questions	Yes / No / Not relevant Comment	Policy requirements and standards	Why is it important
a. Health services	Has the impact on healthcare services been addressed?		London Plan Policy 3.17 Health and social care facilities. NHS London Healthy Urban Development Unit Planning Contributions Tool (the HUDU Model). Social Infrastructure SPG (2015).	Poor access and quality of healthcare services exacerbates ill health, making effective treatment more difficult. The provision of support services and advice on healthy living can prevent ill health.
b. Education	Has the impact on primary, secondary and post-19 education been addressed?		London Plan Policy 3.18 Education facilities.	Access to a range of primary, secondary and post-19 education improves self-esteem, job opportunities and earning capacity.
c. Access to social infrastructure	Does the proposal contribute to new social infrastructure provision that is accessible, affordable and timely? Have opportunities for multi-use and the co-location of services been explored?		London Plan Policy 3.16 Protection and enhancement of social infrastructure. London Plan Policy 7.1 Lifetime neighbourhoods. Social Infrastructure SPG (2015).	Good access to local services is a key element of a lifetime neighbourhood and additional services will be required to support new development. Not doing so will place pressure on existing services. Future social infrastructure requirements are set out in Borough infrastructure plans and developments will be expected to contribute towards additional services and facilities.

Theme 4: Vibrant Neighbourhoods				
Issue	Key questions	Yes / No / Not relevant Comment	Policy requirements and standards	Why is it important
d. Local employment and healthy workplaces	Does the proposal include commercial uses and provide opportunities for local employment and training, including temporary construction and permanent 'end-use' jobs? Does the proposal promote the health and wellbeing of future employees by achieving BREEAM health and wellbeing credits?		London Plan Policy 4.12 Improving opportunities for all and London Plan Policy 8.2 Planning obligations. London Plan Policy 7.1 Lifetime neighbourhoods. Workplace environment - BREEAM health and wellbeing credits.	Unemployment generally leads to poverty, illness and a reduction in personal and social esteem. Employment can aid recovery from physical and mental illnesses. Creating healthier workplaces can reduce ill health and employee sickness absence.
e. Access to local food shops	Does the proposal provide opportunities for local food shops? Does the proposal avoid an over concentration or clustering of hot food takeaways in the local area?		London Plan Policy 4.7 Retail and town centre development. London Plan Policy 4.8 Supporting a successful and diverse retail sector. London Plan Policy 4.9 Small shops. London Plan Policy 7.1 Lifetime neighbourhoods.	A proliferation of hot food takeaways and other outlets selling fast food can harm the vitality and viability of local centres and undermine attempts to promote the consumption of healthy food, particularly in areas close to schools.

Theme 4: Vibrant Neighbourhoods				
Issue	Key questions	Yes / No / Not relevant Comment	Policy requirements and standards	Why is it important
f. Public realm	Does the design of the public realm maximise opportunities for social interaction and connect the proposal with neighbouring communities? Does the proposal allow people with mobility problems or a disability to access buildings and places?		London Plan Policy 7.1 Lifetime neighbourhoods. London Plan Policy 7.2 An inclusive environment. London Plan Policy 7.5 Public realm. Shaping Neighbourhoods. Accessible London: Achieving and Inclusive Environment SPG (Oct 2014). Housing SPG Standard 10 on active frontages.	The public realm has an important role to play in promoting walking and cycling, activity and social interaction. It also affects people's sense of place, security and belonging. It is a key component of a lifetime neighbourhood. Shelter, landscaping, street lighting and seating can make spaces attractive and inviting. Implementing inclusive design principles effectively creates an accessible environment, in particular for disabled and older people.

Appendix - References and sources of evidence

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Glossary

Amenity (or residential amenity) – is physical external space which is part of the private home and enjoyed by occupiers of the dwelling. The level of enjoyment is also dependent on a number of factors, including daylight/sunlight, air quality, noise and light pollution and visual quality.

Biodiversity – refers to a diverse variety of life (species) in a habitat or ecosystem.

BREEAM - Building Research Establishment Environmental Assessment Methodology is a method of assessing, rating and certifying the sustainability of buildings developed by the Building Research Establishment.

Building Regulations – are standards that apply to most building work with approval required from Building Control Bodies - either the Local Authority or the private sector as an Approved Inspector.

Community Infrastructure Levy (CIL) – is a charge levied on development under the Planning Act 2008 by charging authorities (in London, the boroughs and the Mayor of London) to contribute towards a range of infrastructure, including physical, green and social infrastructure.

Car club - is a service that allows its members to hire a car for short-term use enabling members to have the option of using a car from time to time without having to own one.

Environmental protection - Unitary and district local authorities are responsible for inspections and enforcement duties under the Environmental Protection Act 1990 regarding pollution prevention and control, noise disturbance and contaminated land.

Gated developments - developments that are totally secured from non-residents through the use of controlled access gates.

Green roof or wall - a roof or wall that is intentionally covered with vegetation which can help reduce the causes and effects of climate change locally whilst promoting enhanced biodiversity.

Licensing - Unitary or district local authorities are responsible for a range of licensing regimes, including alcohol, entertainment and food premises under the Licensing Act 2003, gambling premises under the Gambling Act 2005 and houses in multiple occupation under the Housing Act 2004.

Lifetime Neighbourhoods – Lifetime neighbourhoods are places where people are able to live and work in safe, healthy, supportive and inclusive environments with which they are proud to identify. There are numerous design standards and checklists that cover elements of the lifetime neighbourhoods process, including WHO Age Friendly Cities checklist, BREEAM for Communities, and Building for Life.

Pedestrian - refers to a person walking on foot, but also includes those using wheelchairs and mobility scooters.

Planning Obligations (also known as 'Developer Contributions' or 'Section 106 Agreements') are private agreements made between local authorities and developers under section 106 of the Town and Country Planning Act 1990 (as amended). They can be attached to a planning permission to make development acceptable which would otherwise be unacceptable in planning terms. The land itself, rather than the person or organisation that develops the land, is bound by the agreement. Since the introduction of the Community Infrastructure Levy, agreements are focused on site-specific mitigation.

Public realm - the space between and within buildings that is publicly accessible, including streets, squares, forecourts, parks and open spaces.

Social exclusion/isolation - is a term to describe the effect whereby individuals or entire communities of people are excluded or disadvantaged from access to housing, employment, healthcare and civic engagement.

Sustainable Urban Drainage System (SUDS) - used to describe the various approaches that can be used to manage surface water drainage in a way that mimics the natural environment.

Tenure blind residential development - used to promote integration of different tenures in a single development by designing houses for sale and houses built for affordable or social rent so that they are similar in design and appearance so as to mask the tenures. The conviction is that tenure blind design helps social integration without affecting property prices.

Traffic calming - self-enforcing measures designed to encourage driving at speeds appropriate to local conditions, improve the environment and reduce accidents.

Traffic regulations and highway powers - Unitary and county authorities are responsible for traffic regulations regarding parking, speed limits and crossings under the Road Traffic Regulation Act 1984 and powers under the Highways Act 1980 to maintain and ensure safe public use of local highways. Developer contributions towards highway improvements can be secured under section 278 of the Highways Act.

Travel plan - a plan to manage travel to and from a development site or occupied building, to reduce transport impacts and deliver sustainable transport on an on-going basis.

NHS London Healthy Urban Development Unit

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