

Loddon Garden Village / Thames Valley Science Park Link Road (LGV / TVSP Link Road)

Sustainability Statement

Project reference

V3

10/03/2026

REPORT

Document status					
Version	Purpose of document	Authored by	Reviewed by	Approved by	Review date
1	Issue	LS	ED	ED	28/11/2023
2	Updated Scope	LS	DC	DC	03/09/2025
3	Updated Scope	LS	ED	ED	10/03/2025

Approval for issue		
Erieta Dimitriou	ED	10/03/2026

© Copyright RPS Group Limited. All rights reserved.

The report has been prepared for the exclusive use and benefit of our client, and for the sole and specific purpose for which it is provided. R P S Group Limited, any of its subsidiaries, or a related entity (collectively 'RPS') does not accept any liability if this report is used for an alternative purpose from which it is intended. The report does not account for any changes relating the subject matter of the report, or any legislative or regulatory changes that have occurred since the report was produced and that may affect the report.

RPS does not accept any responsibility for any documents or information supplied to RPS by others. It is expressly stated that no independent verification of any documents or information supplied by others has been made.

Unless otherwise agreed in writing by RPS no other party may use, make use of, or rely on the contents of this report. RPS does not accept any responsibility or liability for loss whatsoever to any third party caused by, related to, or arising out of any use or reliance on the report.

Prepared by:	Prepared for:
RPS	University of Reading
Liam Seamer	
Senior Sustainability Consultant	
20 Farringdon Street, London, EC4A 4AB	
T +447715 631334	
E liam.seamer@rps.tetrattech.com	

Executive summary

RPS Consulting Services Ltd. (RPS) have been commissioned by the University of Reading to produce a Sustainability Statement for the construction of a Spine Road between the Thames Valley Science Park (Application Ref: 232995) and Loddon Garden Village (Application Ref: 252498) to support delivery of Local Plan Update Policy SS13, landscaping, surface water attenuation and other associated works (hereafter referred to as the proposed development).

This sustainability statement supports the full planning application for the Wokingham Borough Council. The purpose of this report is to demonstrate that sustainable development principles have been considered during the design of the development and how these would be further embedded throughout the lifecycle of the development, in accordance with relevant national, regional, and local planning policies and guidance. The report is based on information received to date, detailed within the main body of the report.

As set out in this report, the proposed development has been designed to take account of a number of fundamental design concepts to create a sustainable development. As a result, the following key sustainability aspects have been incorporated into the design:

- A commitment that the main contractor on site will sign up to the Considerate Constructor's scheme (or equivalent).
- Enhancement of the site's ecological value through retention of existing features of ecological value, tree protection during development and planting scheme designed to enhance the number of species on site;
- Minimisation of noise, dust and vibration generation during construction and a negligible impact in noise levels during operation;
- Minimisation of construction waste stream quantities and targets for diversion of non-hazardous construction waste from landfill;
- Minimisation of the generation of construction waste and of the waste that is generated, ensuring a high percentage is diverted from landfill;
- Effective surface water management;
- Monitoring and implementation of air quality management strategies.

Overall, the principles of good sustainable design have been incorporated in the development and good sustainable practices would be followed during the construction phase.

Contents

1	INTRODUCTION.....	2
1.2	Scheme Overview	2
1.3	Purpose of the Sustainability Statement	2
2	SUSTAINABLE POLICIES AND OBJECTIVES	4
2.2	National Level Policies	4
2.3	Local Level Policies – Wokingham Borough Council	4
3	SUSTAINABLE ECONOMIC DEVELOPMENT	8
4	SUSTAINABLE HEALTHY COMMUNITIES	9
5	CONSERVING AND ENHANCING THE NATURAL AND HISTORIC ENVIRONMENT.....	11
6	LOW CARBON AND CLIMATE CHANGE	14
7	SUSTAINABLE TRANSPORT	16
8	USE OF NATURAL RESOURCES AND MINIMISING WASTE	17
9	MANAGEMENT	18
10	CONCLUSIONS	19

Figures

Figure 1: Proposed development	2
Figure 2: The ‘three pillars’ of Sustainability.....	3
Figure 3: Waste Hierarchy (most favourable option on top).....	17

1 Introduction

- 1.1.1 RPS Consulting Services Ltd. (RPS) have been commissioned by The University of Reading to produce a Sustainability Statement for the construction of a Spine Road between the Thames Valley Science Park (Application Ref: 232995) and Loddon Garden Village (Application Ref: 252498) to support delivery of Local Plan Update Policy SS13, landscaping, surface water attenuation and other associated works.

1.2 Scheme Overview

- 1.1.1 The proposal consists of the construction of a Spine Road between the Thames Valley Science Park (Application Ref: 232995) and Loddon Garden Village (Application Ref: 252498) to support delivery of Local Plan Update Policy SS13, landscaping, surface water attenuation and other associated works.

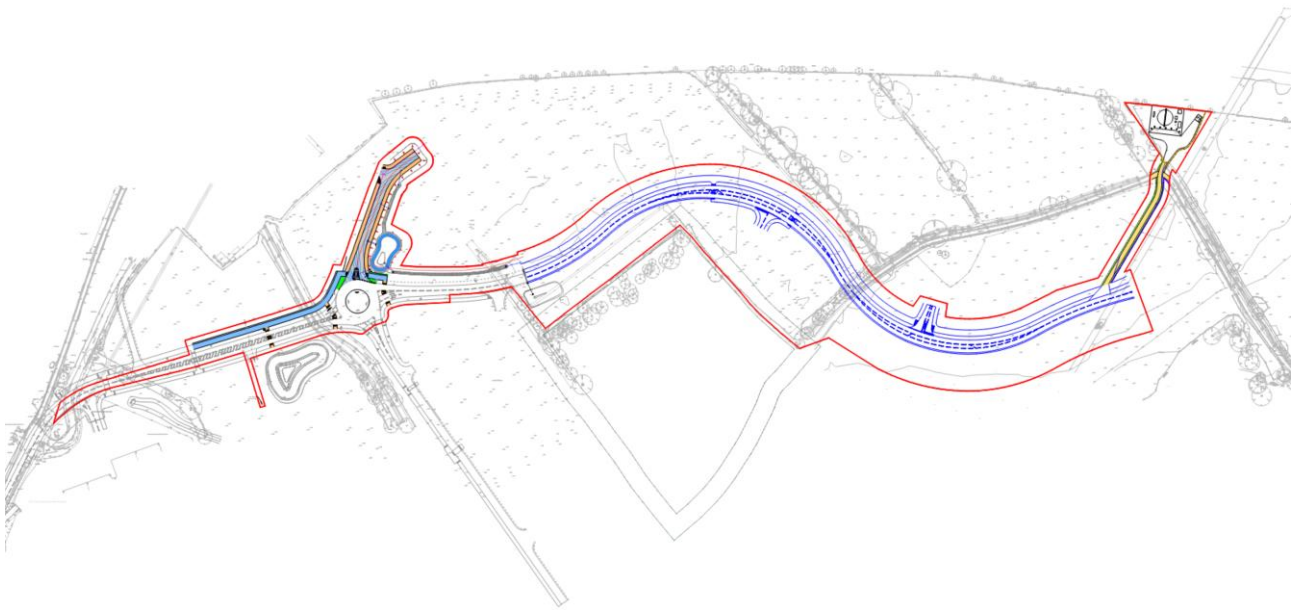


Figure 1: Proposed development

- 1.1.2 This sustainability statement supports the full planning application for the Wokingham Borough Council.

1.3 Purpose of the Sustainability Statement

- 1.1.3 The purpose of this report is to demonstrate that sustainable development principles have been considered during the design of the development and how these would be further embedded throughout the lifecycle of the development, in accordance with relevant national, regional, and local planning policies and guidance.



Figure 2: The 'three pillars' of Sustainability

- 1.1.4 The statement provides an account of how the design team have considered and integrated sustainability during the design process. Based on this planning policy review, this sustainability statement has been structured to address the following aspects of sustainability:
- Sustainable Economic Development.
 - Conserving and Enhancing the Natural and Historic Environment.
 - Low Carbon Future and Climate Change.
 - Sustainable Transport.
 - Use of Natural Resources and Minimising Waste.
 - Management.
- 1.1.5 These aspects are then drawn together in the concluding Chapter 10, summarising the sustainable design and construction principles incorporated in the development.

2 Sustainable Policies and Objectives

- 2.1.1 Various national, regional and local planning and dedicated sustainability policy documents promote the themes of sustainable development which are summarised below. This section details the relevant policies applicable to the proposed site and which form the basis of our sustainability statement.

2.2 National Level Policies

2.2.1 National Sustainability Policy

- 2.2.1 The National Planning Policy Framework (NPPF) was published in December 2024, and replaced the first NPPF published in March 2012 and subsequent revisions. The NPPF set out the Government's planning policies for England and how these are expected to be applied. The NPPF is designed to make the planning system less complex and more accessible; to protect the environment and promote sustainable growth. It provides a framework within which local people and their respective councils can produce their own distinctive local and neighbourhood plans, which reflect the needs and priorities of their communities.
- 2.2.2 At the heart of the NPPF is a presumption in favour of sustainable development (paragraph 11). The three dimensions of sustainable development can be defined as the economic, social and environmental.
- 2.2.3 Plans should provide a framework for addressing housing needs and other economic, social and environmental priorities; and a platform for local people to shape their surroundings. Strategic policies should set out an overall strategy for the pattern, scale and quality of development, and make sufficient provision for:
- housing (including affordable housing), employment, retail, leisure and other commercial development;
 - infrastructure for transport, telecommunications, security, waste management, water supply, wastewater, flood risk and coastal change management, and the provision of minerals and energy (including heat);
 - community facilities (such as health, education and cultural infrastructure); and
 - conservation and enhancement of the natural, built and historic environment, including landscapes and green infrastructure, and planning measures to address climate change mitigation and adaptation.
- 2.2.4 The NPPF aims to strengthen local decision making, with the use of decision-taking in a positive way, as a means of fostering the delivery of sustainable development.
- 2.2.5 Finally, the NPPF (paragraph 16) also highlights that plans should be prepared with the objective of contributing to the achievement of sustainable development and in a way that is aspirational but deliverable.

2.3 Local Level Policies – Wokingham Borough Council

2.3.1 Local Sustainability Policy

Core Strategy

Wokingham Borough Core Strategy (January 2010)

- 2.3.1 The Core Strategy includes a number of high level policies in order to achieve the objectives and visions set out within the local plan. The local plan policies are arranged into broad themes applying to the whole borough before more specific issues are considered, as such not all of the items listed below are applicable to all developments but act as a guide as to what should be considered during a development.

Policy CP1 – Sustainable Development

1. Maintain or enhance the high quality of the environment.
2. Minimise the emission of pollutants into the wider environment.
3. Limit any adverse effects on water quality (including ground water)
4. Ensure the provision of adequate drainage.
5. Minimise the consumption and use of resources and provide for recycling.
6. Incorporate facilities for recycling of water and waste to help reduce per capita water consumption.
7. Avoid areas of best and most versatile agricultural land
8. Avoid areas where pollution (including noise) may impact upon the amenity of future occupiers.
9. Avoid increasing (and where possible reduce) risks of or from all forms of flooding (including from groundwater)
10. Provide attractive, functional, accessible, safe, secure and adaptable schemes.
11. Demonstrate how they support opportunities for reducing the need to travel, particularly by private car in line with CP6.
12. Contribute towards the goal of reaching zero-carbon developments⁴¹ as soon as possible by:
 - a. Including appropriate on-site renewable energy features; and
 - b. Minimising energy and water consumption by measures including the use of appropriate layout and orientation, building form, design and construction, and design to take account of microclimate so as to minimise carbon dioxide emissions through giving careful consideration to how all aspects of development form.
 - c. consideration to how all aspects of development form.

Policy CP4 – Infrastructure Requirements

Planning permission will not be granted unless appropriate arrangements for the improvement or provision of infrastructure, services, community and other facilities required for the development taking account of the cumulative impact of schemes are agreed.

Arrangements for provision or improvement to the required standard will be secured by planning obligations or condition if appropriate.

Policy CP6 – Managing Travel Demand

Planning permission will be granted for schemes that:

- a) Provide for sustainable form of transport to allow choice.
- b) Are located where there are or will be at the time of development choices in the mode of transport available and which minimise the distance people need to travel;

- c) Improve the existing infrastructure network, including road, rail and public transport, enhance facilities for pedestrians and cyclists, including provision for those with reduced mobility, and other users;
- d) Provide appropriate vehicular parking, having regard to car ownership;
- e) Mitigate any adverse effects upon the local and strategic transport network that arise from the development proposed;
- f) Enhance road safety; and
- g) Do not cause highway problems or lead to traffic related environmental problems.

Policy CP9 – Scale and location of development proposals

The scale of development proposals in Wokingham borough must reflect the existing or proposed levels of facilities and services at or in the location, together with their accessibility. Development proposals (in addition to the Strategic Development Locations in policies CP18-21) within development limits will be acceptable in:

1. The major development locations of Earley, Green Park, Shinfield (North of M4), Twyford, Winnersh, Wokingham and Woodley;
2. The modest development locations of Arborfield Garrison, Pinewood (Crowthorne), Finchampstead North, Ruscombe, Shinfield, Spencers Wood, Three Mile Cross and Wargrave.
3. The limited development locations of Arborfield Cross, Barkham Hill, Charvil, Finchampstead, Hurst, Riseley, Sindlesham, Sonning and Swallowfield.
4. The boundary of the Science Park proposed under policy CP16 as defined in the Managing Development Delivery DPD.

Affordable housing on rural exception sites will be permitted adjoining the Development Limits of Modest or Limited Development Locations, if a need is demonstrated for residents, workers or other people with family connections within the Parish Council's area.

Policy CP11 – Proposals outside Development Limits (including countryside)

In order to protect the separate identity of settlements and maintain the quality of the environment, proposals outside of development limits will not normally be permitted except where:

1. It contributes to diverse and sustainable rural enterprises within the borough, or in the case of other countryside based enterprises and activities, it contributes and/or promotes recreation in, and enjoyment of, the countryside; and
2. It does not lead to excessive encroachment or expansion of development away from the original buildings; and
3. It is contained within suitably located buildings which are appropriate for conversion, or in the case of replacement buildings would bring about environmental improvement; or
4. In the case of residential extensions, does not result in inappropriate increases in the scale, form or footprint of the original building;
5. In the case of replacement dwellings the proposal must:
 - a. Bring about environmental improvements; or

- b. Not result in inappropriate increases in the scale, form or footprint of the original building.
6. Essential community facilities cannot be accommodated within development limits or through the re-use/replacement of an existing building;
7. Affordable housing on rural exception sites in line with CP9

Supplementary Planning Document

Sustainable Design and Construction: Supplementary Planning Document (May 2010)

- 2.1.1 The Sustainable Design and Construction Supplementary Planning Document (SPD) is a key document in support of Wokingham Borough Councils Core Strategy (Jan 2010). The SPD is primarily focused towards development involving buildings with many of its initiatives focused around policies such as BREEAM or the now defunct Code for Sustainable Homes. However it provides a useful baseline and guide as to what topics need to be covered within a sustainability statement.
- 2.1.2 This SPD aims to ensure that new development within the Borough is in line with the Council's Vision in that the good quality of life is maintained and that the Borough is a sustainable place to live and work. This SPD is also in line with the Council's identified priorities, in particular 'a cleaner and greener local environment' and 'sustainable, quality development'. Delivering on sustainable design and construction and energy efficiency can bring significant social, environmental and economic benefits to Wokingham Borough.
- 2.1.3 In achieving this aim, the SPD has the following objectives:
 - To make the Borough a more attractive, well designed and sustainable place;
 - To help deliver Policy CP1 (Sustainable Development) of the Core Strategy;
 - To complement the Borough's Design Guide SPD;
 - To promote the sustainable use of resources;
 - To raise awareness of sustainable design, construction and renewable energy technologies;
 - To mitigate against the causes and adapt to the consequences of climate change;
 - To promote the consideration of sustainability early within the design process;
 - To expand upon or provide further guidance on national, regional and local requirements.

3 Sustainable Economic Development

- 3.1.1 The first of the 'three pillars' of sustainable development is economic development. This is recognised within the NPPF, identifying the 'economic role' of the planning system to *"contribute to building a strong, responsive and competitive economy"*.
- 3.1.2 New developments, if located and designed appropriately, can contribute to the economic prosperity of the region / locality.

3.1.1 Short Term Employment Benefits

- 3.1.3 In the short term, the construction activities will generate employment opportunities for local skilled tradesmen and there is potential for building companies to develop the local skills base through apprenticeships and links with local construction training providers.
- 3.1.4 Where possible, the developer would recruit local contractors. There are also opportunities further down the construction supply chain, with the use of local suppliers for materials and equipment. Training and employment opportunities will be secured as part of the planning obligations.

4 Sustainable Healthy Communities

- 4.1.1 The second of the 'three pillars' of sustainable development is social development. This is recognised in the NPPF, identifying the 'social role' of the planning system as *"supporting strong, vibrant and healthy communities, by providing the supply of housing required to meet the needs of present and future generations; and by creating a high quality built environment, with accessible local services that reflect the community's needs and support its health, social and cultural well-being"*.

4.1.2 Noise

- 4.1.1 A report undertaken by Tetra Tech RPS has been submitted as part of this planning application. This provides further details into noise modelling undertaken to ascertain whether there are any changes to noise levels associated with the development.
- 4.1.2 Existing environmental sound levels were determined via a desktop study using publicly available sources, including Google Maps and DEFRA Strategic Noise Mapping. Significant existing sources of noise include: traffic on the local road network, including the M4 motorway, A-roads and B-roads; industrial/commercial land uses; and agricultural land uses. Of these existing sources of noise the M4 Motorway is considered to be primary source of noise in the area.
- 4.1.3 A simple noise change assessment has been carried out to predict the noise change on the local road network. The assessment indicates that the proposed LGV/TVSP link road will not significantly increase noise levels on the local road network. In accordance with DMRB LA 111, this is considered to be 'negligible'.
- 4.1.4 A noise model has been undertaken using SoundPLAN© to predict the absolute noise level and the noise change at the nearest NSR. The assessment indicates that the proposed Access Road will not increase noise levels at the nearest NSR. In accordance with the DMRB LA 111, this is 'negligible'.
- 4.1.5 The conclusion of the Road Traffic Noise impact assessment is that the proposed LGV/TVSP link road will have a negligible impact on the nearest NSRs and noise should not be a key determining factor when determining the application.
- 4.1.6 A number of noise mitigation measures will be used on site to help further mitigate possible impacts on local residents during construction, these include:
- A restriction of working hours on site with work only being completed 08:00-18:00 Monday to Friday and 08:00-13:00 Saturdays with no work happening on Sundays or Bank Holidays.
 - The use of quieter alternative methods or mechanical plant, where reasonably practicable.
 - Locating plant, equipment, site offices, storage areas and worksites away from neighbouring properties, where reasonable practicable.
 - The use of site hoardings within the construction compound or portable acoustic enclosures / screens around noisy plant or processes, where reasonably practicable.
 - Maintaining and operating all vehicles, plant and equipment in an appropriate manner, to ensure that extraneous noise from mechanical vibration, creaking and squeaking is kept to a minimum.
 - Shutting down equipment when not in use.
- 4.1.7 Pumps and generators to be acoustically screened if required to operate outside of normal working hours.

4.1.3 Air Quality

- 4.1.1 An Air Quality Assessment has been undertaken by RPS Planning and Environment (RPS) for the proposed development and submitted as part of the planning application. The report details the existing air quality at the proposed location and the impacts of the construction and operational activities on the local air quality.
- 4.1.2 Impacts during construction, such as dust generation and plant vehicle emissions, are predicted to be of short duration and only relevant during the construction phase. The results of the risk assessment of construction dust impacts undertaken using the IAQM dust guidance, indicates that before the implementation of mitigation and controls, the risk of dust impacts will be medium. Implementation of the highly recommended mitigation measures described in the IAQM construction dust guidance should reduce the residual dust effects to a level categorised as “not significant”.
- 4.1.3 The pumping station will be situated at a distance well over 20 from the nearest habitable building. This accords with Thames Water guidance, Local Practices to Support Code for Adoption Sewerage Pumping Stations (December 2023).
- 4.1.4 The NPPG advises that in considering planning permission, the relevant question for air quality is *“will the proposed development (including mitigation) lead to an unacceptable risk from air pollution, prevent sustained compliance with limit values or national objectives for pollutants or fail to comply with the requirements of the Habitats Regulations or other environmental policies and duties, taking into account the presence of Air Quality Management Areas and Clean Air Zones, and the cumulative impacts from individual sites in local areas?”* The proposed development will not.
- 4.1.5 The proposed development, in air quality terms, conflict with national or local policies, or with measures set out in Wokingham Borough Council's Air Quality Action Plan. There are no constraints to the development in the context of air quality.

5 Conserving and Enhancing the Natural and Historic Environment

- 5.1.1 The third of the 'three pillars' of sustainable development is the protection of the environment and sustainable use of existing resources. This is recognised within the twelve core principles of the NPPF, which includes conservation and enhancement of the natural environment.
- 5.1.2 Biodiversity encompasses all living things and plays an important function within urban areas; providing pleasant areas of amenity, whilst maintaining the ecological function of natural systems. The objectives outlined in the NPPF and the government's Biodiversity 2020 strategy reflect the government's commitment to halt the overall decline in biodiversity and recognise the wider benefit of ecosystem services.

5.1.2 Conserving and enhancing the natural environment and landscape

- 5.1.1 An Ecological Impact Assessment has been undertaken by Ecological Planning & Research Ltd to provide ecological advice for the link road between Thames Valley Science Park and the proposed Lodden Valley Garden Village.
- 5.1.2 This EclA predicts that, subject to the implementation of the impact avoidance, mitigation and compensation measures set out within the report, the proposed Works will not have a significant negative residual effect on Important ecological features and will conform to all applicable nature conservation related legislation and policy.
- 5.1.3 For a full summary of the potential impacts of the proposed development can be seen in Table 4.1 on the main report, these cover, IEFs, opportunities for impact avoidance and mitigation, or compensation where significant residual effects have the potential to remain.
- 5.1.4 An Arboricultural Impact Assessment has been completed by Tetra Tech RPS and completed in accordance with BS5837:2012.
- 5.1.5 In order to protect retained trees from damage, all works shall be carried out in accordance with tree protection measures and construction techniques outlined within the Tree Survey Report and Arboricultural Impact Assessment and Preliminary Method Statement.
- 5.1.6 Wokingham Borough Council require that the link road deliver a biodiversity net gain of 20%, however part of the proposed road has already been consented (app 232995) and only requires a biodiversity net gain of 10%. Wokingham Borough Council confirmed that the 20% will only apply to the road not already consented.
- 5.1.7 A biodiversity net gain assessment has been completed by Ecological Planning and Research Ltd. The technical report completed outlines the methodology and results of the Statutory Biodiversity Metric calculations completed for the Proposals, which predict a net gain in +5.17 habitat units (27.41%) and 0.43 hedgerow units (22.09%). Once trading rules have been met, this increases to a net gain of +16.61 units (87.99%), +2.08 hedgerow units (+107.11%) and +0.04 watercourse units (+72.97%).
- 5.1.8 Net gains will be delivered through a combination of on-site habitat creation and the delivery of off-site habitat enhancements.
- 5.1.9 It is therefore concluded that the Proposals as envisaged would comply with the statutory minimum requirements for 10% biodiversity net gain as a condition of planning permission in England under the Environment Act 2021 and Town and Country Planning (Development Management Procedure) (England) Order 2015 (as amended), as well as with the NPPF and local planning policy.

5.1.3 Ground Contamination

- 5.1.1 Tetra Tech RPS produced a desktop study and preliminary study to provide an assessment of potential sources of contamination at the site, review the environmental setting to assess the sensitivity of the surrounding area to contamination/pollution, produce an outline Conceptual Site Model (CSM) detailing how any contamination may impact the identified receptors via pollutant

REPORT

linkages and provide recommendations for further investigation of potential pollutant linkages, where considered necessary.

- 5.1.2 The majority of source-pathway-receptor linkages within the outline CSM are demonstrated to be inactive with limited low risk identified to underlying groundwater.
- 5.1.3 On completion, the development is expected to be compliant with NPPF and will no longer be able to be captured under the Part 2A regime.
- 5.1.4 If any visual or olfactory evidence of contamination is encountered during construction, works in the affected area will cease until further investigations are completed by a qualified consultant. Any necessary mitigation measures will then be put in place.

5.1.4 Built Heritage

- 5.1.1 This Built Heritage Statement has been undertaken by Tetra Tech RPS on behalf of the University of Reading to assess the potential impacts to the built heritage assets arising from the proposed access road to the site on the land at Upperwood Farm.
- 5.1.2 The report demonstrates that the proposed development has the capacity to potentially impact upon one built heritage asset: the Former Upperwood Farmhouse and two associated barns which have been identified in this report as being of very low local interest, at most and therefore meriting non-designated heritage asset status, though is not identified by the LPA or Berkshire Historic Environment Record.
- 5.1.3 The road will further urbanise the once rural surrounds to Upperwood Farm and this, in turn, will give rise to a negligible degree of harm, at most, to the significance of the heritage assets. This harm reflects the harm already seen to their significance, including marked changes already to their setting, not least the M4 motorway and recently completed nearby commercial development. This harm will engage paragraph 215 of the NPPF which requires that harm be weighed against the significance of the heritage assets in question.
- 5.1.4 Were the wider landscape to be built out, this would affect the degree of impact seen to several heritage assets; in some cases, reducing the impact that development on the Site would subsequently have.

5.1.5 Archaeological Assessment

- 5.1.1 A desk based archaeological assessment was completed by Tetra Tech RPS to determine the below ground archaeological potential of the development.
- 5.1.2 A low potential has been identified for the presence of significant Prehistoric, Anglo-Saxon and Medieval activity on the study site. The remnants of a Romano-British field system of local significance may extend into the eastern part of the study site. Post Medieval agricultural activity may be present, but this would be of very limited archaeological interest.
- 5.1.3 Based on current evidence, it is considered that any archaeology present within the study site is likely to be of only local significance and should not preclude development.

6 Low Carbon And Climate Change

- 6.1.1 Climate change is widely regarded as the most pressing challenge for sustainable development. The UK Sustainable Development Strategy, 'Securing the Future' recognises climate change and energy as a priority area for UK's sustainable development. The Government has created a legally binding framework for reducing CO₂ emissions through to 2050 via provisions made within 'the Climate Change Act' (2008). This establishes a specific duty on the Secretary of State to ensure that greenhouse gas emissions are reduced by at least 80% by that date.
- 6.1.2 However, not only is it important to consider how a proposed development can mitigate climate change by reducing greenhouse gas emissions, it is also fundamental to ensure that the development is resilient to potential future changes in climatic conditions.

6.1.2 Carbon Dioxide Emissions during Construction

- 6.1.1 To comply with the planning policy, during construction, best working practices should be followed and will be set out in the Construction Environment Plan (CEMP) for the proposed development. This would ensure that where possible, construction activities with the potential to generate carbon emissions would be appropriately managed and undertaken to minimise the production of carbon dioxide emissions and ensure the efficient use of fuel could be set out through the following ways:
- Vehicles used in road deliveries of materials, equipment, and waste arisings on and off-site would be loaded to full capacity to minimise the number of vehicle journeys associated with the transport of these items.
 - When not in use vehicles and plant machinery involved in site operations would be switched off to further reduce fuel consumption.
 - All construction staff will be appropriately trained to operate plant and machinery effectively. Plant which is operated efficiently will ultimately burn less fuel and produce less carbon emissions.
 - Where possible, local waste management facilities would be used to dispose of all waste arisings; and
 - To minimise the use of electricity, equipment and machinery requiring electricity will only be switched on when required for use. During construction, procedures would also be implemented to ensure that staff adheres to good energy management practices when in staff areas, through turning off all lights, any computers and heating/air conditioning units when leaving buildings.
 - The workforce will be encouraged to attend site via sustainable methods of transport with the site well placed to facilitate non car methods of transport, there are bus stops within a reasonable walking distance and designated cycle routes leading to the site.

6.1.3 Carbon Dioxide Emissions During Operation

- 6.1.1 There is not expected to be any form or regulated energy consumption during operation for this access track. As the proposed development is a road the only form of energy consumption may be from the installation of street lighting. In order to minimise any potential energy usage from the street lighting all bulbs will be high performance LEDs and fitted with daylight sensors to ensure that energy consumption is kept to a minimum.

6.1.4 Drainage and Flood Risk

- 6.1.1 A flood risk assessment and drainage strategy has been completed by Abley Letchford. This FRA demonstrates that the proposed development complies with national and local planning policy with respect to flood risk and drainage. The risk of flooding is adequately managed, and, with the implementation of a suitable surface water drainage strategy, the offsite flood risk is not increased.

REPORT

- 6.1.2 Most of the site is located within EA Flood Zone 1 'Low Probability' (land at less than 1 in 1000 (0.1%) annual probability of river or sea flooding'). With an area in the east of the site located in Flood Zone 2.
- 6.1.3 A surface water flow route is present within the western part of the site, associated with St John's Copse Drain. The watercourse is culverted under the existing access road. The culvert was designed to convey the flow of St John's Copse Ditch and will be retained. There is an area of surface water ponding in the centre of the site associated with localised low lying areas in the topography.
- 6.1.4 Groundwater emergence mapping presented within the WBC Level 1 SFRA show that the site is generally not at risk of flooding from groundwater. The EA risk of groundwater emergence mapping shows that the western and central parts of the site are located in a 1km² grid square of which <25% is susceptible to groundwater flooding and that the eastern part of the site is located within a 1km² grid square of which ≥75% of the grid square is susceptible to groundwater flooding. Based on the information provided within the groundwater mapping, alongside the underlying geology of the site, groundwater flood risk at the site is medium.
- 6.1.5 Whilst the DG5 sewer records included within the WBC Level 1 SFRA identify 18 recorded instances of sewer flooding within the site's postcode, there are no records of these sewer flooding incidents impacting the site. Therefore, the flood risk from sewers is considered to be low.
- 6.1.6 The EA Risk of Flooding from Reservoirs mapping shows that the entire site is located outside of the reservoir breach 'dry day' scenario. The eastern part of the site is at risk of flooding in the event of a reservoir breach in a 'wet day' scenario. The risk of a reservoir breach occurring is low therefore the risk of flooding from reservoirs is considered to be low.
- 6.1.7 The WBC Level 1 and Level 2 SFRA, alongside the WBC PFRA do not indicate that the site is at risk of flooding from other sources
- 6.1.8 The proposed surface water drainage strategy will manage the flood risk posed by uncontrolled surface water runoff from the site. Any increase in surface water run-off can be managed using SuDS source control techniques as well as attenuation features to provide storage in extreme storm events. This provides the minimum of two treatment storage stages which is in accordance with the recommendations of CIRIA C753. All surface water drainage systems will be designed to restrict drainage discharge rates to QBAR runoff rates and store the balance of water for all events up to and including the 1 in 100 year event including an allowance for a 40% increase in rainfall intensities as a result of climate change and urban creep.
- 6.1.9 Discussions are ongoing with Thames Water in respect to the final form of connection and works beyond the NMH Access Road application boundary, however, such sewers will be designed in collaboration with Thames Water as approving body in accordance with the new Sewerage Sector Guidance (SSG) and will be offered to Thames Water for adoption under S104 Agreement of the Water Industry Act.

7 Sustainable Transport

- 7.1.1 In order to integrate sustainable travel within the proposed development, the NPPF encourages local authorities to support “a pattern of development which, where reasonable to do so, facilitates the use of sustainable modes of transport” and “gives priority to pedestrian and cycle movements with access to high quality public transport facilities”. The framework recognises that transport policies have an important role to play in facilitating wider sustainability and health objectives.

7.1.2 Encouraging Sustainable Transport Services

- 7.1.1 A Transport Statement has been undertaken for the development by *Abley Letchford Partnership (ALP)* and submitted as part of this planning application.
- 7.1.2 The proposed development comprises a full planning application for the construction of the following items:
- Formation of a fourth northern arm off the roundabout at the TVSP Spine Road.
 - Provision of access road at the new northern arm with a shared use cycleway on each side to serve future development parcels to the north.
 - A continuation of the 7.3m carriageway c600m to the east of the TVSP Spine Road.
 - A continuation of the 4m wide footway/cycleway along the northern perimeter of the TVSP Spine Road to the 4-arm roundabout, then along the northern side of the new Link Road, separated from the carriageway by a 3m wide verge.
 - The introduction of new pedestrian crossing points at the 4-arm roundabout, a crossing west of the roundabout at the existing TVSP Spine Road and two new crossings further east on the new Link Road.
 - Provision of a SuDS basin to the north east of the existing roundabout and additional SuDS at the southern side of the proposed Link Road to cater for highway drainage.
 - Two ghost island priority junctions serving two separate future parcels of development to the north and southern side of the Link Road.
 - A 3.65m wide foul lifting station access track to the east of the Link Road formed of a granular material with 1m wide grass verges at either side.
 - A hardstanding area around the pumping facility at the Foul Pumping Station compound to allow for maintenance vehicles to park as well as a turning area suitable for accommodating large HGV movements
- 7.1.3 The carriageway width of 7.3m safeguards the provision of two-way buses along the link, in line with the emerging Public Transport Strategy associated with the planned residential development at Loddon Garden Village located to the east.
- 7.1.4 The Link Road has been designed in accordance with a design speed of 30mph. Accordingly, visibility splays measuring 2.4m x 43m can be achieved at the junctions along the Link Road.
- 7.1.5 Swept path analysis has been undertaken for a variety of vehicles including HGVs to demonstrate that the layout has been designed to ensure that movements of such vehicles can be accommodated in a safe and satisfactory manner.
- 7.1.6 Whilst the proposed Link Road itself will not generate new vehicle trips, the route is being delivered to provide access to adjacent future development parcels and connect to the Loddon Garden Village site to the east. Capacity assessments of the junctions proposed along the Link Road demonstrate that the priority junctions and roundabouts are able to accommodate the anticipated level of traffic that would utilise the Link Road as a result of the full Loddon Garden Village development, including the employment proposals at Thames Valley Science Park.
- 7.1.7 Accordingly, the development proposals are considered to be acceptable in terms of highways and transport matters.

8 Use of Natural Resources and Minimising Waste

- 8.1.1 Activities undertaken onsite from the concept stage through to final completion can have an impact on the use of natural resources and production of waste associated with the development. This section highlights how the development will attempt to reduce the use of natural resources through material procurement, potential re-use or recycling of materials, water use and waste minimisation.

8.1.2 Minimising Waste

- 8.1.1 Where possible excavated materials will be retained in the development scheme and secondary recycled materials will be used as part of construction. This will have an additional benefit of reducing the number of trips needed by HGVs to remove or bring in site materials.

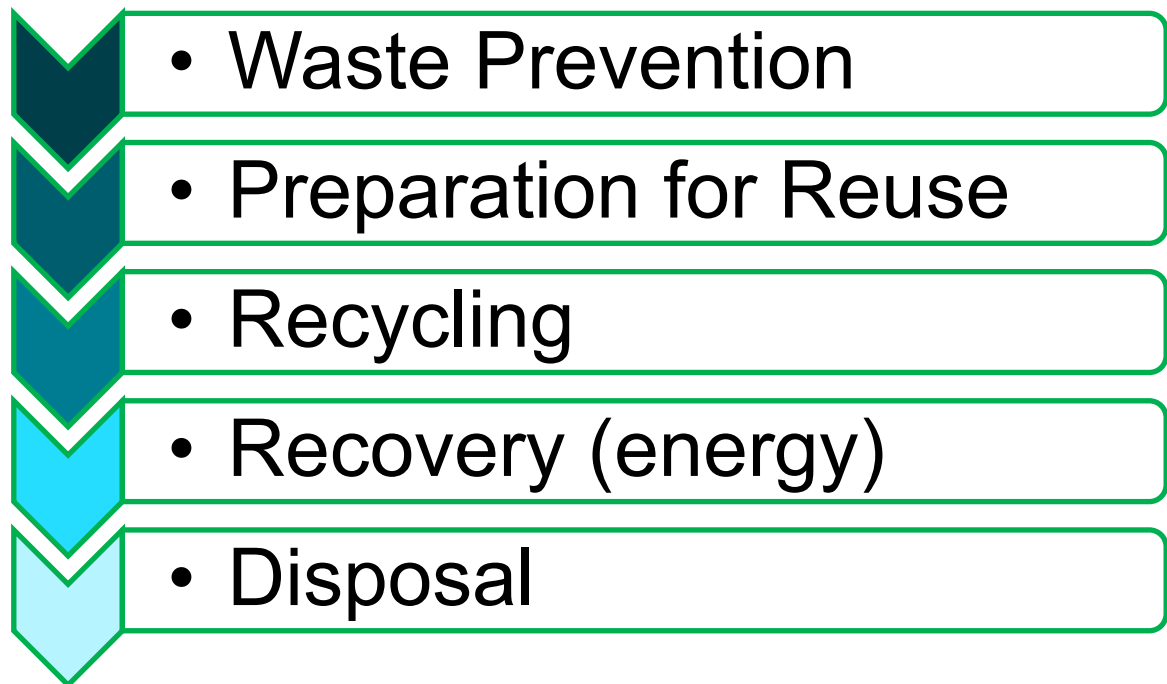


Figure 3: Waste Hierarchy (most favourable option on top)

- 8.1.2 The construction compound will also include a waste management area which will house colour-coded skips for various waste streams as well as separate receptacles for the disposal of residual general site waste that cannot be recycled or re-used

8.1.3 Water Use

- 8.1.1 Where possible, water is to be prevented from entering excavations through the use of cut-off ditches as appropriate. Any silty water that is caused by excavation work, and other activities such as wheel washing facilities or run off from exposed ground, is not to be pumped directly into watercourses. Culverts will be constructed during dry periods wherever possible with the existing watercourse temporary diverted or pumped downstream to avoid the works. Silt control measures will be employed as appropriate.

9 Management

9.1.1 Responsible Construction Management

- 9.1.1 Through effective management of the construction activities, any short-term disruption to the existing community, including local residents would be minimised. The lead contractor for the construction of the scheme would subscribe to the Considerate Constructors Scheme (CCS).
- 9.1.2 The lead contractor will also introduce measures for reducing the social and environmental impact of their activities. Measure could include:
- Construction operations restricted to core working hours of the industry to minimise the potential disturbance impacts upon the public through associated noise, vibration and dust emissions and increased traffic;
 - Best practice measures to protect the water quality and all natural water sources on and close to the site. Monitoring of water quality would also be undertaken;
 - Appropriate storage of construction materials and chemicals alongside a spillage response plan to minimise potential pollution incidents;
 - Deliveries of construction materials and equipment would access the site along routes as agreed with the Local Highway's Agency to minimise disruption upon road users; and Traffic management measures implemented by the contractor to ensure traffic is appropriately managed during construction and that where possible potential impacts on other users of the local highway network and the local community are minimised.

10 Conclusions

- 10.1.1 Sustainability is a broad concept, covering a wide range of environmental, social and economic considerations (known as the three pillars of sustainable development or the triple bottom line). Sustainable design and construction principles have been considered for this scheme from its conception and many of the issues referenced within this report have been considered separately and in greater depth, within further technical reports.
- 10.1.2 This Sustainability Statement has been prepared to describe the key sustainability principles incorporated in the design and those principles that will be undertaken during construction. Consideration has been given to the three pillars of sustainable development, relevant national and local planning policies demonstrating how the proposals contribute to the delivery of sustainable development.
- 10.1.3 As set out in this report, the proposed development has been designed to take account of a number of fundamental design concepts to create a sustainable development. This report demonstrates that the principles of good sustainable design have been incorporated in the development and good sustainable practices would be followed during the construction phase. These include among others:
- A commitment that the main contractor on site will sign up to the Considerate Constructor's scheme (or equivalent).
 - Enhancement of the site's ecological value through retention of existing features of ecological value and planting scheme designed to enhance the number of species on site;
 - Minimisation of construction waste stream quantities and targets for diversion of non-hazardous construction waste from landfill;
 - Effective surface water management;
 - Incorporation of energy efficient external lighting.
 - Monitoring of air quality and implementation of mitigation measures to minimise potential effects of dust.
 - Monitoring of noise levels and implementation of mitigation measures to minimise potential impacts on surrounding communities.
- 10.1.4 It can therefore be concluded that the proposed sustainability measures meet the Wokingham Borough Council planning policy requirements at national, regional and local levels. These have been considered at an early stage of the development process, which will enhance the effectiveness of the measures proposed.
- 10.1.5 The sustainability principles detailed within this statement cover aspects from design to construction and operation of the site and ensure that best practice procedures have been incorporated.

