

Richmond Upon Thames:

Regulation 18 Draft Local Plan

Habitat Regulations Assessment

Richmond Upon Thames Council

Final report

Prepared by LUC

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Richmond Upon Thames: Regulation 18 Draft Local Plan

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Chapter 1

Introduction

1.1 LUC has been commissioned by the London Borough of Richmond upon Thames to carry out a Habitats Regulations Assessment in relation to the London Borough of Richmond upon Thames emerging Local Plan. This iteration of the Habitats Regulations Assessment report assesses the impacts of the Regulation 18 Draft Local Plan.

1.2 The purpose of assessment is to identify which European sites have the potential to be affected by the Local Plan, collate information about these sites, outline the pathways by which they could be affected and to establish if there will be an adverse effect on the integrity of any European sites, or where insufficient certainty regarding this remains. If the integrity of a European site is to be impacted as a result of the Local Plan, then an assessment of alternative solutions, mitigation measures, or recommendations for any amendments to the Local Plan policies will be included to help conclude no adverse effects on the integrity of the European sites.

Background to the Local Plan

1.3 The new Local Plan is being prepared to update the existing Local Plan (adopted in 2018) to reflect changes to national planning policy (such as the National Planning Policy Framework (2021), the London Plan 2021, and the 'Direction of Travel' public consultation which was undertaken in spring 2020). The climate emergency and growing population were also influential factors in determining the need for an updated Local Plan.

1.4 The draft Plan is currently still developing and is at the Regulation 18 stage. The Plan will set out the Council's proposed visions, objectives, spatial strategy, and will form part of the development plan for the borough. Following this round of consultation, any necessary changes to the Plan will be made and then a

Regulation 19 version of the Plan will be publicly consulted on before it will be submitted to the Secretary of State for Examination.

1.5 The new Local Plan is anticipated to be adopted in 2024 and will replace the existing Local Plan (2018) and the Twickenham Area Action Plan (2013). For clarification, the West London Waste Plan (2015) and the Ham & Petersham Neighbourhood Plan (2019) will remain as existing.

The requirement to undertake Habitats Regulations Assessment of Development Plans

1.6 The requirement to undertake Habitats Regulations Assessment of development plans was confirmed by the amendments to the Habitats Regulations published for England and Wales in 2007 [\[See reference 1\]](#). The currently applicable version is the Conservation of Habitats and Species Regulations 2017 [\[See reference 2\]](#) (as amended). When preparing the Local Plan, the London Borough of Richmond upon Thames is therefore required by law to carry out a Habitats Regulations Assessment. The London Borough of Richmond upon Thames can commission consultants to undertake Habitats Regulations Assessment work on its behalf and this (the work documented in this report) is then reported to and considered by the London Borough of Richmond upon Thames as the 'competent authority'. London Borough of Richmond upon Thames will consider this work and would usually [\[See reference 3\]](#) only progress the Local Plan if it considers that the Plan will not adversely affect the integrity [\[See reference 4\]](#) of any 'European site', as defined below. The requirement for authorities to comply with the Habitats Regulations when preparing a Plan is also noted in the Government's online Planning Practice Guidance [\[See reference 5\]](#).

1.7 Habitats Regulations Assessment refers to the assessment of the potential effects of a development plan on one or more sites afforded the highest level of protection in the UK: Special Protection Area and Special Area of Conservation.

These were classified under European Union (EU) legislation but, since 1 January 2021, are protected in the UK by the Habitats Regulations 2017 (as amended). Although the EU Directives from which the UK's Habitats Regulations originally derived are no longer binding, the Regulations still make reference to the lists of habitats and species that the sites were designated for, which are listed in annexes to the EU Directives:

- Special Areas of Conservation are designated for particular habitat types (specified in Annex 1 of the EU Habitats Directive [\[See reference 6\]](#)) and species (Annex II).
- Special Protection Areas are classified for rare and vulnerable birds (Annex I of the EU Birds Directive [\[See reference 7\]](#)), and for regularly occurring migratory species not listed in Annex I.

1.8 The term 'European sites' was previously commonly used in Habitats Regulations Assessment to refer to 'Natura 2000' sites [\[See reference 8\]](#) and Ramsar sites (international designated under the Ramsar Convention). However, a Government Policy Paper [\[See reference 9\]](#) on changes to the Habitats Regulations 2017 post-Brexit states that:

- Any references to Natura 2000 in the 2017 Regulations and in guidance now refers to the new 'national site network'.
- The national site network includes existing Special Areas of Conservation and Special Protection Areas; and new Special Areas of Conservation and Special Protection Areas designated under these Regulations.
- Designated Wetlands of International Importance (known as Ramsar sites) do not form part of the national site network. Many Ramsar sites overlap with Special Areas of Conservation and Special Protection Areas and may be designated for the same or different species and habitats.

1.9 Although Ramsar sites do not form part of the new national site network, the Government Policy Paper [\[See reference 10\]](#) confirms that all Ramsar sites remain protected in the same way as Special Areas of Conservation and Special Protection Areas. In LUC's view and unless the Government provides any guidance to the contrary, potential effects on Ramsar sites should continue to form part of the Habitats Regulations Assessment of plans and projects since

the requirement for Habitats Regulations Assessment of plans and projects that might adversely affect Ramsar sites forms an essential part of the protection confirmed by the Government Policy Paper. Furthermore, the NPPF [\[See reference 11\]](#) and practice guidance [\[See reference 12\]](#) currently still state that competent authorities responsible for carrying out Habitats Regulations Assessment should treat Ramsar sites in the same way as Special Areas of Conservation and Special Protection Areas.

1.10 The requirement for Habitats Regulations Assessment does not apply to other nationally designated wildlife sites such as Sites of Special Scientific Interest or National Nature Reserves; therefore, for clarity, this report uses the term 'European sites' rather than 'national site network'.

1.11 The overall purpose of a Habitats Regulations Assessment is to conclude whether or not a proposal or policy, or whole development plan would adversely affect the integrity of the site in question. This is judged in terms of the implications of the plan for a site's 'qualifying features' (the Annex I habitats, Annex II species, and Annex I bird populations for which it has been designated). Significantly, Habitats Regulations Assessment is based on the precautionary principle. Where uncertainty or doubt remains, an adverse effect should be assumed.

Structure of this report

1.12 This chapter (Chapter 1) has described the background to the preparation of the London Borough of Richmond upon Thames Local Plan and the requirement to undertake Habitats Regulations Assessment. The remainder of the report is structured into the following sections:

- **Chapter 2: Vision of the Local Plan** summarises the content of the draft Plan, which is the subject of this report.
- **Chapter 3: Methods** sets out the approach used, and the specific tasks undertaken during the screening and Appropriate Assessment stages of the Habitats Regulations Assessment.

- **Chapter 4: Screening Assessment** describes the findings of the screening stage of the Habitats Regulations Assessment.
- **Chapter 5: Appropriate Assessment** describes the findings of the Appropriate Assessment stage of the Habitats Regulations Assessment.
- **Chapter 6: Conclusions and Next Steps** summarises the Habitats Regulations Assessment conclusions for the draft Local Plan and describes the next steps to be undertaken.

Chapter 2

Vision of the Local Plan

2.1 The Local Plan sets out the vision, objectives, spatial strategy, draft place-based strategies, Site Allocations and policies to guide future development.

2.2 The borough is part of the South London Partnership, whom alongside Croydon, Kingston, Merton and Sutton, are focusing on shaping sustainable growth across the sub-region. The London Borough of Richmond upon Thames borough's values are focussed around the unique, natural and historic environment, as well as in providing opportunities for recreation, sport, culture and tourism for residents within London Borough of Richmond upon Thames, the neighbouring boroughs and other London boroughs.

2.3 The Local Plan is based around ten themes to inform the new vision for growth in the borough, which have been developed since the Direction of Travel consultation in 2020. It will set out a strategic vision for how the borough will develop within the next 15 – 20 years, whilst ensuring that sustainable growth is also promoted.

Vision

2.4 The vision for the borough is to “*achieve growth ... across the borough, making use of the borough's much valued assets, and our centres have become adaptable and vibrant places for successful local communities*”. This vision is supported by a number of aims, as follows:

- Implementing the 20-minute neighbourhood concept, which promotes sustainable/alternative transport modes throughout the borough, resulting in a borough with complete, compacted and connected neighbourhoods.
- Responding to the climate emergency and taking action

- Delivering new homes and an affordable borough for all
- Shaping and supporting the town and local centres as they adapt to changes in the way we shop and respond to the pandemic
- Increasing jobs and helping business to grow and bounce back following the pandemic
- Protecting what is special and improving our areas (heritage and culture)
- Tackling biodiversity loss by retaining and improving existing as well as creating new biodiverse areas, increasing the quality of our green spaces, and greening the borough
- Improving design, delivering beautiful buildings and high-quality places
- Reducing the need to travel and improving the choices for more sustainable travel
- Securing new social and community infrastructure to support a growing population
- Creating safe, healthy and inclusive communities

Strategic Objectives

2.5 The Local Plan sets out 40 strategic objectives that will need to be achieved to deliver the plan's strategic vision.

2.6 Responding to the climate emergency and taking action:

- Provide a clear pathway to zero-carbon for all types of new development, to minimise and mitigate the effects of climate change by requiring high levels of sustainable design and construction including reductions in carbon dioxide emissions by minimising energy consumption, promoting decentralised energy and the use of renewable energy as well as requiring high standards of water efficiency.
- Promote and encourage development to be fully resilient to the future impacts of climate change in order to minimise vulnerability of people and

property; this includes by risk of flooding, water shortages, subsidence and the effects of overheating.

- Optimise the use of land and resources by ensuring new development takes place on previously developed land and in sustainable locations in line with the place based strategies, with a focus on reusing existing buildings and encouraging remediation and reuse of contaminated land.
- Reduce or mitigate environmental impacts and pollution levels (such as air, noise, light, odour, fumes water and soil) and secure improvements in air quality, particularly along major roads and areas that already exceed acceptable air quality standards.
- Encourage the incorporation of circular economy principles into all aspects of the design, construction and operation process in order to eliminate waste, conserve resources, and manage waste sustainably retaining its use at its highest value for as long as possible.
- Promote sustainable waste management through minimising waste and providing sufficient land for the reuse, recycling and treatment of waste, and minimise the amount of waste going to landfill in line with the West London Waste Plan.

2.7 Delivering new homes and an affordable borough for all:

- Enable opportunities to deliver new homes across the borough, diversifying the sources, locations, type and mix of housing supply and the type of sites, through a positive approach to incremental intensification and recognising the contribution of small sites, housing in our centres and optimising delivery from large sites to meeting local housing needs.
- Maximise delivery of genuinely affordable housing across the borough through a range of measures, recognising the significant community benefits of affordable housing as a priority, and taking innovative and flexible approaches to delivery more affordable housing to meet the needs of Richmond residents.
- Promote inclusive and sustainable communities, through ensuring high standards in new housing and opportunities to build social interaction, to create cohesive, healthy and dementia-friendly communities - enabling the

older population to remain independent and active for longer, as well as providing supported housing options to meet the needs of vulnerable residents.

2.8 Shaping and supporting our town and local centres as they adapt to changes in the way we shop and respond to the pandemic:

- Create places where businesses can thrive and communities and visitors can access local shops, and a wide range of services as well as providing a leisure and cultural offer to meet the changing needs of our communities, to ensure vital viable, attractive and locally relevant town and local centres.
- Reinforce the role of Richmond, Twickenham, Teddington, Whitton and East Sheen centres, where major new development should be focused in these most sustainable locations, while supporting local centres and parades which provide a focus for local communities to meet, shop, work and spend leisure time, as reflected in the place based strategies.
- Encourage change in our centres which will be key meeting places where social interaction and sense of community is fostered. They will act as hubs with clusters of uses, including providing opportunities for leisure and culture, to ensure they are destinations for living and working locally, proving an opportunity for linked trips, to support the post pandemic recovery.
- Require measures in new developments that contribute to active travel and improve the public realm which in turn will support the centres' attractiveness and enable people to 'live locally'.
- Create 20-minute neighbourhoods that make it easier to be physically active, enhance opportunities for walking and cycling safely, create high quality public spaces and public realm, improve connectivity and accessibility for all, and focus on supporting the high streets, centres and parades as destinations that people want to go to and use to 'live locally'.

2.9 Increasing jobs and helping business to grow and bounce back following the pandemic:

- Protect and encourage a range of land and floorspace for employment use, enabling intensification of uses where appropriate, and digital connectivity infrastructure, to support a cohesive, diverse and enterprising business community.
- Provide a variety of opportunities for affordable and adaptable workspaces, encouraging opportunities to work locally, enabling a post pandemic recovery (link to 15/20 minute neighbourhood concept)
- Ensure a range of local employment and training opportunities available to residents and to support growing businesses.

2.10 Protecting what is special and improving our areas (heritage and culture):

- Protect and enhance the environment including the heritage assets, recognising their value to the borough's residents and visitors.
- Support the borough's diverse acts and cultural facilities, recognising their importance to enriching our local communities, while also providing a destination and reason to visit the borough and post pandemic an opportunity to sustainably grow the visitor economy.

2.11 Increasing biodiversity and the quality of our green spaces, and greening the borough:

- Protect and enhance the borough's multi-functional green and blue infrastructure networks, improving accessibility from small spaces to corridors and larger expanses, post pandemic recognising the benefits for residents and visitors and the value to the local economy.
- Create developments which enhance the natural environment and contribute to the comprehensive blue and green infrastructure network to enhance biodiversity.
- Plan for walkable environments which offers opportunities to improve biodiversity, particularly when considering street connectivity as well as wildlife corridors and the movement of flora and fauna across sites and networks.

- Protect and enhance the borough's biodiversity, including trees and landscapes, requiring from new development a genuine net gain that leaves biodiversity in a better state than before.
- Require new major development to provide on-site green spaces with multi-functional benefits for biodiversity, climate change as well as health and wellbeing, including providing formal and informal education opportunities to enable people to learn about and connect with nature and biodiversity.
- Ensure new development wherever possible makes a positive contribution to greening of the borough's streets, buildings and public spaces, recognising its important role in tackling climate change.
- Protect and improve the borough's parks and open spaces, providing a balance between areas for wildlife and creating opportunities for relaxation, play, and exercise, recognising their post pandemic appreciation by local communities and importance in providing for healthy active lifestyles.
- Protect and improve the unique environment of the borough's rivers, especially the River Thames and its tributaries as wildlife corridors, as opportunities for recreation and river transport, increasing access to and alongside the rivers where appropriate, and gain wider local community benefits and habitat improvements when sites are redeveloped.

2.12 Improving design, delivering beautiful buildings and high-quality places:

- Create places that strengthen the connection between people and the physical places they share, that can adapt over time, contributing positively to compact and walkable 20-minute neighbourhoods.
- Provide a positive approach to accommodate growth across the borough, enabling tall buildings and higher density development in appropriate locations, where all development is of high design quality to create well-designed, meaningful, practical and well-connected places.
- Ensure the design of new development draws on the special values of the boroughs unique and distinctive character and responds to areas for

enhancement and opportunities for growth, following the Plan's design principles and place based guidance.

2.13 Reducing the need to travel and improving the choices for more sustainable travel:

- Provide choice for how people can make their journeys through high quality connections between places, encouraging them to choose walking or cycling for short day to day journeys – shopping, study, community and healthcare facilities, places of work, green spaces, and more – without having to use a car, and maintaining increases seen post pandemic in active travel.
- Encourage improvements to connectivity and access to public transport – particularly enabling safe, inclusive access, taking opportunities for car-free development and supporting new technologies to enable smarter travel, to minimise the impacts of development in relation to congestion and air pollution.

2.14 Securing new social and community infrastructure to support a growing population:

- Support a range of social and community infrastructure uses, which provide social value to residents and cater for a growing population.
- Provide a community offer in the borough's centres and well-connected places, predominantly accessed by active travel.
- Ensure flexible spaces are provided as part of multi-purpose assets, which can adapt to changes, and are well supported by the communities they serve.
- Ensure sufficient provision of facilities and services for education and training for all age groups to help reduce inequalities and support the local economy; this includes school places and promoting local employment opportunities and training programmes.
- Encourage opportunities for leisure, entertainment, sport, and cultural activities, which enable active and inclusive lifestyles.

2.15 Creating safe, healthy and inclusive communities:

- Create environments that enable active, resilient and inclusive communities and enable residents to lead healthy lives, including recognising post pandemic the importance of opportunities for place-based connections that put people first.
- Recognise the importance of health as a cross cutting priority, from the role of streets and public spaces to providing for medical, wellness and fitness uses, ensuring inclusive access across all types of development and places, based on an inclusive neighbourhood approach, and supporting the Healthy Streets approach.
- Ensure local environmental impacts of development are not detrimental to the health, safety and the amenity of existing and new users or occupiers of a development or the surrounding area

Spatial Strategy, Place-Based Strategies and Site Allocations

2.16 The Spatial Strategy has been set out within two strategic policies within the Local Plan:

- Policy 1: Living Locally and the 20-minute neighbourhood – This policy focusses on the ‘living locally’ concept, in which residents can reach high quality public spaces and public realm, social infrastructure, commercial high streets and city centres through the provision of sustainably-led transport links/pathways such as cycling or walking. The aim is to improve the quality of life for local residents through healthier lifestyles, clear air, stronger local economies and being resilient to climate change,
- Policy 2: Spatial Strategy: Managing change in the borough – This aim of this policy is “*to ensure that growth is delivered in a sustainable way, with supporting infrastructure, while tackling the climate emergency and biodiversity crisis*”. This is proposed to be achieved through ensuring development within the borough prioritises previously developed land near to town centres as in line with the aims of Policy 1, and will promote the

provision of green infrastructure to target climate change issues, and enhance the local environment, character and heritage assets.

2.17 For housing requirements, the Local Plan sets a target for an additional 4,110 homes within the borough over the next 10 year period (2019/20 – 2028/29).

2.18 For employment, the Plan focuses on protecting existing employment floorspace, with particular attention given to existing employment spaces across the borough and town centres. Development is expected to be employment-led, with new major new developments having to consider opportunities for commercial use, given local employment needs and the uncertainty caused by the pandemic.

2.19 The provision of these housing and employment spaces have been outlined within 9 place-based strategies associated with settlements/places within the borough. These comprise:

- Hampton & Hampton Hill;
- Teddington & Hampton Wick;
- Twickenham, Strawberry & St Margaret's;
- Whitton & Heathfield;
- Ham, Petersham & Richmond Park;
- Richmond & Richmond Hill;
- Kew;
- Mortlake and East Sheen; and,
- Barnes

2.20 The 37 site allocations within the 9 place-based strategies will contribute meeting the housing and employment targets outlined above, which in turn will assist with the delivery of the borough's Spatial Strategy. The development types proposed include employment, retail, residential and social infrastructure.

Chapter 3

Methods

Approach to the Habitats Regulations Assessment

3.1 This chapter describes the method that will be taken in the Habitats Regulations Assessment of the Local Plan throughout its development, including any assumptions that will be used in carrying out the Habitats Regulations Assessment screening.

Stages of Habitats Regulations Assessment

3.2 The Habitats Regulations Assessment of development plans is undertaken in stages (as described below) and should conclude whether or not a proposal would adversely affect the integrity of the European site in question.

3.3 In assessing the effects of a Plan in accordance with Regulation 63 of the Conservation of Habitats and Species Regulations 2017 (as amended), there are potentially two tests to be applied by the competent authority: a 'Significance Test', followed if necessary, by an Appropriate Assessment which would inform the 'Integrity Test'. The relevant sequence of questions is as follows:

- Step 1: Under Reg. 105(1)(b), consider whether the plan is directly connected with or necessary to the management of the sites. If not, then the considerations proceed to Step 2.

- Step 2: Under Reg. 105(1)(a) consider whether the plan is likely to have a significant effect on a European site, either alone or in combination with other plans or projects (the 'Significance Test'). If yes, proceed to Step 3.

[Steps 1 and 2 are undertaken as part of Stage 1: Habitats Regulations Assessment Screening in Table 1.1.]

Step 3: Under Reg. 105(1), make an Appropriate Assessment of the implications for the European Site in view of its current conservation objectives (the 'Integrity Test'). In so doing, it is mandatory under Reg. 105(2) to consult Natural England, and optional under Reg. 105(3) to take the opinion of the general public. [This step is undertaken during Stage 2: Appropriate Assessment shown in Table 2.1]

- Step 4: In accordance with Reg. 105(4), but subject to Reg. 107, give effect to the land use plan only after having ascertained that the plan would not adversely affect the integrity of a European site.
- Step 5: Under Reg. 107, if Step 4 is unable to rule out adverse effects on the integrity of a European site and no alternative solutions exist then the competent authority may nevertheless agree to the plan or project if it must be carried out for 'imperative reasons of overriding public interest' (IROPI).

3.4 It is normally anticipated that an emphasis on Stages 1 and 2 of this process will, through a series of iterations, help ensure that potential adverse effects are identified and eliminated through the inclusion of mitigation measures designed to avoid, reduce or abate effects. The need to consider alternatives could imply more onerous changes to a plan document. It is generally understood that so called 'imperative reasons of overriding public interest' (IROPI) are likely to be justified only very occasionally and would involve engagement with the Government.

3.5 The section below summarises the stages and associated tasks and outcomes typically involved in carrying out a full Habitats Regulations

Assessment, based on various guidance documents [\[See reference 13\]](#), [\[See reference 14\]](#).

Stage 1: Habitats Regulations Assessment Screening

Tasks

- Description of the development plan and confirmation that it is not directly connected with or necessary to the management of European sites.
- Identification of potentially affected European sites and their conservation objectives. Conservation objectives are published by Natural England for Special Areas of Conservation and Special Protection Areas.
- Review of other plans and projects.
- Assessment of Likely Significant Effects of the development plan alone or in combination with other plans and projects, prior to consideration of avoidance or reduction ('mitigation') measures. In line with the CJEU judgment in Case C-323/17 People Over Wind v Coillte Teoranta, mitigation must only be taken into consideration at this stage and not during Stage 1: Habitats Regulations Assessment Screening.

Outcome

3.6 Where effects are unlikely, prepare a 'finding of no significant effect report'.

3.7 Where effects judged likely, or lack of information to prove otherwise, proceed to Stage 2.

Stage 2: Appropriate Assessment (where Stage 1 does not rule out likely significant effects)

Tasks

- Information gathering (development plan and European sites). In addition to European site citations and conservation objectives, key information sources for understanding factors contributing to the integrity of European sites include (where available) conservation objectives supplementary advice and Site Improvement Plans prepared by Natural England.
- Impact prediction.
- Evaluation of development plan impacts in view of conservation objectives of European sites.
- Where impacts are considered to directly or indirectly affect qualifying features of European sites, identify how these effects will be avoided or reduced ('mitigation').

Outcome

3.8 Appropriate Assessment report describing the plan, European site baseline conditions, the adverse effects of the plan on the European site, how these effects will be avoided or reduced, including the mechanisms and timescale for these mitigation measures.

3.9 If effects remain after all alternatives and mitigation measures have been considered proceed to Stage 3.

Stage 3: Assessment where no alternatives exist and adverse impacts remain taking into account mitigation

Tasks

- Identify 'imperative reasons of overriding public interest' (IROPI).
- Demonstrate no alternatives exist.
- Identify potential compensatory measures.

Outcome

3.10 This stage should be avoided if at all possible. The test of IROPI and the requirements for compensation are extremely onerous.

Relevant case law

3.11 This Habitats Regulations Assessment has been prepared in accordance with relevant case law findings, including most notably the 'People over Wind' and 'Holohan' rulings from the Court of Justice for the European Union (CJEU).

3.12 The People over Wind, Peter Sweetman v Coillte Teoranta (April 2018) judgment ruled that Article 6(3) of the Habitats Directive should be interpreted as meaning that mitigation measures should be assessed as part of an Appropriate Assessment and should not be taken into account at the screening stage. The precise wording of the ruling is as follows:

"Article 6(3)must be interpreted as meaning that, in order to determine whether it is necessary to carry out, subsequently, an appropriate assessment of the implications, for a site concerned, of a plan or project, it is not appropriate, at the screening stage, to take account of measures intended to avoid or reduce the harmful effects of the plan or project on that site."

3.13 In light of the above, the Habitats Regulations Assessment Screening stage will not rely upon avoidance or mitigation measures to draw conclusions as to whether the Local Plan could result in 'likely significant effects' on European sites, with any such measures being considered at the Appropriate Assessment stage as relevant.

3.14 The Habitats Regulations Assessment will also fully consider the *Holohan v An Bord Pleanala* (November 2018) judgement which stated that:

"Article 6(3) of Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora must be interpreted as meaning that an 'appropriate assessment' must, on the one hand, catalogue the entirety of habitat types and species for which a site is protected, and, on the other, identify and examine both the implications of the proposed project for the species present on that site, and for which that site has not been listed, and the implications for habitat types and species to be found outside the boundaries of that site, provided that those implications are liable to affect the conservation objectives of the site.

Article 6(3) of Directive 92/43 must be interpreted as meaning that the competent authority is permitted to grant to a plan or project consent which leaves the developer free to determine subsequently certain parameters relating to the construction phase, such as the location of the construction compound and haul routes, only if that authority is certain that the

development consent granted establishes conditions that are strict enough to guarantee that those parameters will not adversely affect the integrity of the site.

Article 6(3) of Directive 92/43 must be interpreted as meaning that, where the competent authority rejects the findings in a scientific expert opinion recommending that additional information be obtained, the 'appropriate assessment' must include an explicit and detailed statement of reasons capable of dispelling all reasonable scientific doubt concerning the effects of the work envisaged on the site concerned."

3.15 LUC will fully consider the potential for effects on species and habitats, including those not listed as qualifying features, to result in secondary effects upon the qualifying features of European sites, including the potential for complex interactions and dependencies. In addition, the potential for offsite impacts, such as through impacts to functionally linked land, and or species and habitats located beyond the boundaries of European site, but which may be important in supporting the ecological processes of the qualifying features, will also be fully considered in the Habitats Regulations Assessment.

3.16 In addition to this, the Habitats Regulations Assessment will take into consideration the 'Wealden' judgement and the 'Dutch Nitrogen Case' judgements from the Court of Justice for the European Union.

3.17 Wealden District Council v Secretary of State for Communities and Local Government, Lewes District Council and South Downs National Park Authority (2017) ruled that it was not appropriate to scope out the need for a detailed assessment for an individual plan or project based on the annual average daily traffic (AADT) figures detailed in the Design Manual for Roads and Bridges or the critical loads used by DEFRA or Environmental Agency without considering the in-combination impacts with other plans and projects.

3.18 In light of this judgement, the Habitats Regulations Assessment will therefore consider traffic growth based on the effects of development provided for by the Local Plan in combination with other drivers of growth such as development proposed in neighbouring districts and demographic change.

3.19 The 2018 ‘Coöperatie Mobilisation for the Environment and Vereniging Leefmilieu (Dutch Nitrogen)’ judgement stated that:

“... the positive effects of the autonomous decrease in the nitrogen deposition ... be taken into account in the appropriate assessment..., it is important that the autonomous decrease in the nitrogen deposition be monitored and, if it transpires that the decrease is less favourable than had been assumed in the appropriate assessment, that adjustments, if required, be made.”

3.20 The Dutch Nitrogen judgement also states that according to previous case law:

“...it is only when it is sufficiently certain that a measure will make an effective contribution to avoiding harm to the integrity of the site concerned, by guaranteeing beyond all reasonable doubt that the plan or project at issue will not adversely affect the integrity of that site, that such a measure may be taken into consideration in the ‘appropriate assessment’ within the meaning of Article 6(3) of the Habitats Directive”.

3.21 The Habitats Regulations Assessment of the London Borough of Richmond upon Thames Local Plan will therefore only consider the existence of conservation and/or preventative measures if the expected benefits of those measures are certain at the time of the assessment. The Habitats Regulations Assessment will also ensure that if a threshold approach is applied it will consider the risk of significant effects being produced even if below the

threshold values to ensure that there is no adverse effect on integrity of the European sites.

Screening Assessment

3.22 Habitats Regulations Assessment Screening of the Local Plan will be undertaken in line with current available guidance and seek to meet the requirements of the Habitats Regulations. The tasks that were undertaken during the screening stage of the Habitats Regulations Assessment and the conclusions reached are described in detail below. This section of the Habitats Regulations Assessment report sets out policies and impact types for which likely significant effects are predicted or cannot be ruled out prior to mitigation and avoidance measures.

3.23 The purpose of the screening stage is to:

- Identify all aspects of the plan which would have no effect on a European site, so that they can be eliminated from further consideration in respect of this and other plans;
- Identify all aspects of the plan which would not be likely to have a significant effect on a European site (would have some effect, because of links/connectivity, but which are not significant), either alone or in combination with other aspects of the same plan or other plans or projects, which therefore do not require ‘appropriate assessment’; and
- Identify those aspects of the plan where it is not possible to rule out the risk of significant effects on a European site, either alone or in combination with other plans or projects. This provides a clear scope for the parts of the plan that will require appropriate assessment.

Identification of European sites which may be affected by the Local Plan

3.24 In order to initiate the search of European sites that could potentially be affected by the London Borough of Richmond upon Thames Local Plan, it is established practice in Habitats Regulations Assessments to consider European sites within the local planning authority area covered by a Plan, and also within a buffer distance from the boundary of the Plan area.

3.25 A distance of 15km from the outer boundary around the London Borough of Richmond upon Thames was used as a starting point to identify European sites that could be affected by impacts relating to the Local Plan. In addition to this, consideration was also given to European sites potentially connected to the plan area beyond this distance, for example through hydrological pathways or recreational visits by residents of the London Borough of Richmond upon Thames. **Table 3.1** considers which European sites should be scoped into the Habitats Regulations Assessment.

3.26 The assessment also takes into account areas that may be functionally linked to the European sites. The term ‘functional linkage’ is used to refer to the role or ‘function’ that land beyond the boundary of a European site might fulfil in terms of supporting the species populations for which the site was designated or classified. Such an area is therefore ‘linked’ to the site in question because it provides a (potentially important) role in maintaining or restoring a protected population at favourable conservation status.

3.27 While the boundary of a European site will usually be drawn to include key supporting habitat for a qualifying species, this cannot always be the case where the population for which a site is designated or classified is particularly mobile. Individuals of the population will not necessarily remain in the site all the time. Sometimes, the mobility of qualifying species is considerable and may extend so far from the key habitat that forms the Special Area of Conservation or Special Protection Area that it would be entirely impractical to attempt to designate or classify all of the land or sea that may conceivably be used by the

species [See reference 15]. Habitats Regulations Assessment therefore considers whether any European sites make use of functionally linked habitats, and the impacts that could affect those habitats.

3.28 European sites identified for inclusion in the Habitats Regulations Assessment are listed below in Table 3.1 and Figure 2 in Appendix A. Detailed information about each European site is provided in Appendix B, described with reference to Standard Data Forms for the Special Protection Areas and Special Areas of Conservation, and Natural England's Site Improvement Plans [See reference 16]. Natural England's conservation objectives [See reference 17] for the Special Protection Areas and Special Areas of Conservation have also been reviewed. These state that site integrity must be maintained or restored by maintaining or restoring the habitats of qualifying features, the supporting processes on which they rely, and populations of qualifying species.

Table 3.1: European sites within 15km of London Borough of Richmond upon Thames borough boundary

European Site	Closest Distance / Location from the London Borough of Richmond upon Thames Area
Richmond Park Special Area of Conservation	Located within the London Borough of Richmond upon Thames
South West London Waterbodies Special Protection Area/RAMSAR	c. 0.03km West
Wimbledon Common Special Area of Conservation	c. 0.11km South-East
Thames Basin Heath Special Protection Area	c. 10.73km West
Mole Gap to Reigate Escarpment Special Area of Conservation	c. 12.45km South
Windsor Forest & Great Park Special Areas of Conservation	c. 13.53km West

European Site	Closest Distance / Location from the London Borough of Richmond upon Thames Area
Thursley, Ash, Pirbright & Chobham Special Areas of Conservation	c. 13.57km South-West

Assessment of 'likely significant effects' of the Local Plan on European sites

3.29 As required under Regulation 63 of the Conservation of Habitats and Species Regulations 2017 [\[See reference 18\]](#) (as amended), an assessment has been undertaken of the 'likely significant effects' of the draft Plan. The assessment has been prepared in order to identify which policies or site allocations would be likely to have a significant effect on European sites. The screening assessment has been conducted without taking mitigation into account, in accordance with the 'People over Wind' judgement.

3.30 Consideration was given to the potential for the development proposed to result in significant effects associated with:

- Physical loss of or damage to habitats e.g. from development or activities within the European sites themselves or at functionally-linked sites.
- Fragmentation or severance of habitats e.g. from development between a European site and functionally-linked sites.
- Non-physical disturbance e.g. noise, vibration or light from construction or development in close proximity to sensitive species.
- Recreation pressure and urban edge effects e.g. dog walking, cycling, trampling, littering, fire, or predation by pets.
- Air pollution from changes in traffic volumes on roads close to sensitive habitats.

- Changes in water quality or quantity e.g. changes in flow caused by abstraction/discharge, accidental pollution, or increase nutrient loading from sewage treatment.

3.31 This thematic/impact category approach also allowed for consideration to be given to the cumulative effects of the site allocations rather than focussing exclusively on individual developments provided for by the plan.

3.32 A risk-based approach involving the application of the precautionary principle was adopted in the assessment, such that a conclusion of 'no significant effect' was only reached where it was considered unlikely, based on current knowledge and the information available, that a development plan policy or site allocation would have a significant effect on the integrity of a European site.

3.33 A screening assessment matrix was prepared (Appendix D), to document consideration of the potential for likely significant effects resulting from each policy and site allocation in the plan.

3.34 Further consideration of the types of impact that could be relevant to the Local Plan and possible impact pathways to European sites is provided in **Chapter 4**. For some types of impacts, the potential for likely significant effects was determined on a proximity basis.

Interpretation of 'likely significant effect'

3.35 Relevant case law helps to interpret when effects should be considered as being likely to result in a significant effect, when carrying out Habitats Regulations Assessment of a land use plan.

3.36 In the Waddenzee case (European Court of Justice in Case C-127/02 Landelijke Vereniging tot Behoud van de Waddenzee), the European Court of

Justice ruled on the interpretation of Article 6(3) of the Habitats Directive (translated into Reg. 102 in the Habitats Regulations), including that:

- An effect should be considered 'likely', "if it cannot be excluded, on the basis of objective information, that it will have a significant effect on the site" (para 44).
- An effect should be considered 'significant', "if it undermines the conservation objectives" (para 48).
- Where a plan or project has an effect on a site "but is not likely to undermine its conservation objectives, it cannot be considered likely to have a significant effect on the site concerned" (para 47).

3.37 An opinion delivered to the Court of Justice of the European Union (Advocate General's Opinion to CJEU in Case C-258/11 Sweetman and others v An Bord Pleanala 22nd Nov 2012), commented that:

"The requirement that an effect in question be 'significant' exists in order to lay down a de minimis threshold. Plans or projects that have no appreciable effect on the site are thereby excluded. If all plans or projects capable of having any effect whatsoever on the site were to be caught by Article 6(3), activities on or near the site would risk being impossible by reason of legislative overkill."

3.38 This opinion (the 'Sweetman' case) therefore allows for the authorisation of plans and projects whose possible effects, alone or in combination, can be considered 'trivial' or de minimis; referring to such cases as those "which have no appreciable effect on the site". In practice such effects could be screened out as having no likely significant effect; they would be 'insignificant'.

3.39 The Habitats Regulations Assessment screening assessment will therefore consider whether the draft Local Plan policies and/or site allocations could have likely significant effects either alone or in combination.

Mitigation provided by the draft Plan

3.40 Some of the potential effects of the draft Plan could be mitigated through the implementation of other policies in the Plan itself, such as the provision of green infrastructure within new developments (which could help mitigate increased pressure from recreation activities at European sites). Nevertheless, in accordance with the ‘People over Wind’ judgment, avoidance and mitigation measures cannot be relied upon at the Screening Stage, and therefore, where such measures exist, they were considered at the Appropriate Assessment stage for impacts and policies where likely significant effects, either alone or in-combination, could not be ruled out.

In-combination effects

3.41 Regulation 63 of the Habitats Regulations 2017 requires an Appropriate Assessment where “a land use plan is likely to have a significant effect on a European site (either alone or in combination with other plans or projects) and is not directly connected with or necessary to the management of the site”. Therefore, it will be necessary to consider whether any impacts identified from the draft Local Plan may combine with other plans or projects to give rise to significant effects in-combination.

3.42 Where the Local Plan is likely to have an effect on its own e.g. due to water pollution (due to impact pathways being present), but it is not likely to be significant, the in-combination assessment at Screening stage will need to determine whether there may also be the same types of effect from other plans or projects that could combine with the Local Plan to produce a significant effect. If so, this likely significant effect (e.g. water pollution) arising from the Local Plan in combination with other plans or projects, would then need to be considered through the Appropriate Assessment stage to determine if water pollution would have an adverse effect on integrity of the relevant European site. Where the screening assessment has concluded that there is no impact pathway between development proposed in the Local Plan and the conditions necessary to maintain qualifying features of a European site, then there will be

no in-combination effects to assess at the Screening or Appropriate Assessment stage. This approach accords with recent guidance on Habitats Regulations Assessment [\[See reference 19\]](#).

3.43 If impact pathways are found to exist for a particular effect but it is not likely to be significant from the Local Plan alone, the in-combination assessment will identify which other plans and programmes could result in the same impact on the same European site. This will focus on planned growth (including housing, employment, transport and waste) around the affected site, or along the impact corridor, for example, if impacts could arise as a result of changes to a waterway, then planned growth in local authorities along that waterway will be considered.

3.44 The potential for in-combination impacts will therefore focus on plans prepared by local authorities that overlap with European sites that are within the scope of this Habitats Regulations Assessment. The findings of any associated Habitats Regulations Assessment work for those plans will be reviewed where available. Where relevant, any strategic projects in the area that could have in-combination effects with the Local Plan will also be identified and reviewed.

3.45 The online Habitats Regulations Assessment Handbook suggests the following plans and projects may be relevant to consider as part of the in-combination assessment:

- Applications lodged but not yet determined, including refusals subject to an outstanding appeal or legal challenge.
- Projects subject to periodic review e.g. annual licences, during the time that their renewal is under consideration.
- Projects authorised but not yet started’.
- Projects started but not yet completed.
- Known projects that do not require external authorisation.
- Proposals in adopted plans.

- Proposals in draft plans formally published or submitted for final consultation, examination or adoption.

3.46 The need for in-combination assessment also arises at the Appropriate Assessment stage, as discussed in the Appropriate Assessment section below.

Appropriate Assessment

3.47 Following the screening stage, if likely significant effects on European sites are unable to be ruled out, the plan-making authority is required under Regulation 63 of the Habitats Regulations 2017 to make an 'Appropriate Assessment' of the implications of the plan for European sites, in view of their conservation objectives. EC Guidance [\[See reference 20\]](#) states that the Appropriate Assessment should consider the impacts of the plan (either alone or in combination with other projects or plans) on the integrity of European sites with respect to their conservation objectives and to their structure and function.

3.48 Unlike the Screening stage, Appropriate Assessment can take into account mitigation, for example as proposed within emerging Local Plan policies.

Assessing the effects on site integrity

3.49 A site's integrity depends on it being able to sustain its 'qualifying features' (the habitats and species for which it has been designated) and to ensure their continued viability. The Holohan judgement also clarifies that the effects on species and habitats not listed as qualifying features, but which could result in secondary effects upon the qualifying features of European sites also need to be considered. The Appropriate Assessment, if required, will refer the information set out in Appendix B of this report, to consider the characteristics of supporting habitats and species that could be affected by impacts identified at the screening stage.

3.50 A high degree of integrity at a site is considered to exist where the potential to meet a site's conservation objectives is realised and where the site is capable of self-repair and renewal with a minimum of external management support.

3.51 A conclusion needs to be reached as to whether or not the Local Plan would adversely affect the integrity of a European site. Assessing the effects on the site(s) integrity involves considering whether the predicted impacts of the Local Plan policies and/or sites (either alone or in combination) have the potential to:

- Cause delays to the achievement of conservation objectives for the site.
- Interrupt progress towards the achievement of conservation objectives for the site;
- Disrupt those factors that help to maintain the favourable conditions of the site.
- Interfere with the balance, distribution and density of key species that are the indicators of the favourable condition of the site.
- Cause changes to the vital defining aspects (e.g. nutrient balance) that determine how the site functions as a habitat or ecosystem.
- Change the dynamics of relationships that define the structure or function of the site (e.g. relationships between soil and water, or animals and plants).
- Interfere with anticipated natural changes to the site.
- Reduce the extent of key habitats or the population of key species.
- Reduce the diversity of the site.
- Result in disturbance that could affect the population, density or balance between key species.
- Result in fragmentation.
- Result in the loss of key features.

3.52 The conservation objectives for each Special Area of Conservation and Special Protection Area (Appendix B) are generally to maintain the qualifying features in favourable condition. Natural England does not define conservation objectives for Ramsar sites but these can often be inferred from those for co-located Special Area of Conservation or Special Protection Area features. The Site Improvement Plans for each site provide a high level overview of the issues (both current and predicted) affecting the condition of the designated features on the site(s) and outline the priority measures required to improve the condition of the features. An Appropriate Assessment draws on these to help to understand what is needed to maintain the integrity of the European sites.

3.53 For each European site where an uncertain or likely significant effect is identified in relation to the Local Plan, the potential impacts will be set out and judgements made (based on the information available) regarding whether the impact will have an adverse effect on the integrity of the site. A further in-combination assessment will need to be carried out for any likely significant effects identified where following Appropriate Assessment it is considered that the Local Plan will not on its own adversely affect the integrity of the European site. This will be undertaken in the same way as described above under the Screening stage drawing on information regarding the same types of relevant plans or projects referred to above. Consideration will be given to the potential for mitigation measures to be implemented that could reduce the likelihood or severity of the potential impacts such that there would not be an adverse effect on the integrity of the site.

Identification of other plans and projects which may have ‘in-combination’ effects

3.54 Regulation 102 of the Amended Habitats Regulations 2010 requires an Appropriate Assessment where “a land use plan is likely to have a significant effect on a European site (either alone or in combination with other plans or

projects) and is not directly connected with or necessary to the management of the site”.

3.55 The first stage in identifying ‘in-combination’ effects involves identifying which other plans and projects in addition to the London Borough of Richmond upon Thames Local Plan may affect the European sites that were the focus of this assessment. There are a large number of potentially relevant plans and projects which could be considered; therefore the review at this stage focused on planned spatial growth within the authorities adjacent to or near the London Borough of Richmond upon Thames. Appendix 2 lists the plans that were reviewed, outlining the components of each plan that could have an impact on nearby European sites and considering the findings of the accompanying Habitats Regulations Assessment work (where available).

3.56 The purpose of the review of other plans was to identify any components that could have an impact on the European sites within and around London Borough of Richmond upon Thames that could also be significantly affected by the Publication Local Plan, e.g. proposals for development near to these sites which could have implications in terms of increased traffic, water use and recreation pressures and infrastructure development. The potential for the effects of these plans to combine with the effects of the Local Plan has been considered in the next chapter and will continue to be assessed where necessary during further iterations of the Habitats Regulations Assessment.

Chapter 4

The Screening Assessment

4.1 As described in the Method chapter, a screening assessment was carried out in order to identify the likely significant effects of the London Borough of Richmond upon Thames draft Local Plan on the scoped-in European sites. The full screening matrix, which sets out the decision-making process used for this assessment can be found in **Appendix D** and the findings are summarised below.

Habitats Regulations Assessment Screening of Policies

No ‘likely significant effect’ predicted

4.2 The following policies are not expected to result in development and therefore will not result in significant effects on European sites:

- Policy 3: Tackling the climate emergency
- Policy 4: Minimising greenhouse gas emissions and energy efficiency
- Policy 5: Energy Infrastructure
- Policy 6: Sustainable construction standards
- Policy 7: Waste and the Circular Economy
- Policy 8: Flood risk and sustainable drainage
- Policy 11: Affordable Housing
- Policy 12: Housing needs of different groups
- Policy 13: Housing Mix and Standards

- Policy 15: Infill and Backland Development
- Policy 17: Supporting our centres and promoting culture
- Policy 18: Development in centres
- Policy 19: Managing impacts
- Policy 20: Local shops and services
- Policy 23: Offices
- Policy 25: Affordable/flexible/managed workspace
- Policy 27: Telecommunications and digital infrastructure
- Policy 28: Local character and design quality
- Policy 29: Designated heritage assets
- Policy 30: Non-designated heritage assets
- Policy 31: Views and Vistas
- Policy 32: Royal Botanic Gardens, Kew World Heritage Site
- Policy 33: Archaeology
- Policy 34: Green and Blue Infrastructure
- Policy 35: Green Belt, Metropolitan Open Land and Local Green Space
- Policy 36: Other Open Land of Townscape Importance (OOLTI)
- Policy 37: Public open space, play, sport and recreation
- Policy 38: Urban Greening
- Policy 39: Biodiversity and Geodiversity
- Policy 41: Moorings and floating structures
- Policy 42: Trees, Woodland and Landscape
- Policy 43: Floodlighting and other external artificial lighting
- Policy 44: Design process
- Policy 45: Tall and Mid-Rise Building Zones

- Policy 46: Amenity and living conditions
- Policy 48: Vehicular Parking, Cycle Parking, Servicing and Construction Logistics Management
- Policy 50: Delivery and Monitoring
- Policy 51: Health and Wellbeing
- Policy 52: Allotments and food growing spaces
- Policy 53: Local Environmental impacts
- Policy 54: Basements and subterranean developments

4.3 The following policies will not result in development and will contribute to ensuring the safeguarding of European sites:

- Policy 9: Water resources and infrastructure
- Policy 32: Royal Botanic Gardens, Kew World Heritage Site:
- Policy 34: Green and Blue Infrastructure
- Policy 35: Green Belt, Metropolitan Open Land and Local Green Space
- Policy 36: Other Open Land of Townscape Importance (OOLTI)
- Policy 37: Public open space, play, sport and recreation
- Policy 38: Urban Greening
- Policy 39: Biodiversity and Geodiversity
- Policy 40: Rivers and river corridors
- Policy 42: Trees, Woodland and Landscape
- Policy 47: Sustainable travel choices
- Policy 52: Allotments and food growing spaces

Likely significant effects predicted

4.4 The following policies are highlighted as having potential impact pathways to European sites and likely significant effects cannot be ruled out:

- Policy 10: New Housing
- Policy 14: Loss of Housing
- Policy 16: Small Sites
- Policy 21: Protecting the local economy
- Policy 22: Promoting jobs and our local economy
- Policy 24: Industrial land
- Policy 26: Visitor economy
- Policy 49: Social and Community Infrastructure
- Policy 50: Education and Training

Habitats Regulations Assessment Screening of Impacts

4.5 For many of the broad impacts that could arise from the Local Plan (see **paragraph 2.24**), the potential for significant effects will be determined on a proximity basis, using GIS data to determine the proximity of potential development locations to the European sites that are the subject of the assessment.

4.6 However, there are many uncertainties associated with using set distances as there are very few standards available as a guide to how far impacts will travel. Therefore, a number of assumptions will be applied in relation to assessing the potential effects on European sites that may result from the Local Plan, as described below.

4.7 Other types of potential effect may be identified during the Habitats Regulations Assessment process. If so, any assumptions that the assessment of those effects is based on will be set out in the Habitats Regulations Assessment report.

Physical loss of habitat

4.8 Any development resulting from the London Borough of Richmond upon Thames Local Plan will be located within the London Borough of Richmond upon Thames boundary, therefore only European sites within the boundary could be affected directly by physical damage or loss of habitat within the site boundaries. Richmond Park Special Area of Conservation is the only European site, which lies within the borough boundary and therefore has potential to be affected by physical damage and/or loss from proposed development in the plan.

4.9 No development is proposed within the boundaries of Richmond Park Special Area of Conservation, and therefore no likely significant effects is predicted as a result of direct physical damage and loss, either alone or in-combination with other plans and projects.

4.10 The remaining European sites within 15km of the borough were ruled out in relation to loss of habitat as they lie entirely outside of the London Borough of Richmond upon Thames borough. **Therefore, all European sites can be screened out from further assessment in relation to physical habitat loss.**

Physical loss of functionally linked habitat

4.11 Habitat loss from development in areas outside of the European site boundaries may also result in effects where that habitat contributes towards maintaining the interest feature for which the European site is designated. This includes land which may provide offsite movement corridors or feeding and sheltering habitat for mobile species such as bats, birds and fish.

4.12 Consideration of functionally linked habitat has been given to the following European Sites within 15km that are designated for qualifying species that are mobile:

- Richmond Park Special Area of Conservation (stag beetle).
- Wimbledon Common Special Area of Conservation (stag beetle).
- Thames Basin Heath Special Protection Area (birds).
- South West London Waterbodies Special Protection Area/Ramsar (birds).

Functionally linked habitat – stag beetle

4.13 . This species is mobile and as such has the potential to disperse outside of the Special Area of Conservation boundary. Research [\[See reference 21\]](#) indicates that male stag beetles typically fly up to 2km during the breeding over the summer months to travel to females whilst the female stag beetles rarely fly [\[See reference 22\]](#). As such and in line with a precautionary approach a 2km buffer has been applied in this assessment.

4.14 A review of site allocations (SA) within 2km of the Special Area of Conservation identified the following site allocations:

- SA 15: Station Yard, Twickenham
- SA 16: Twickenham Telephone Exchange
- SA 17: Twickenham Police Station
- SA 18: Twickenham Riverside and Water Lane/King Street
- SA 19: Telephone Exchange, Whitton (1.25km north-west).
- SA 21: Whitton Community Centre and Car Park, Percy Road, Whitton
- SA 22: Ham Close, Ham
- SA 23: Cassel Hospital, Ham Common, Ham
- SA 24: Richmond Station, Richmond

- SA 25: Former House of Fraser, 16 Paved Court 20 King Street 4 to 8 and 10 Paved Court and 75 – 81 George Street Richmond
- SA 26: Richmond Telephone Exchange, Spring Terrace, Richmond
- SA 27: American University, Queens Road, Richmond
- SA 28: Homebase, Manor Road, East Sheen
- SA 29: Sainsbury's, Lower Richmond Road, Richmond
- SA 32: Pools on the Park and surroundings, Old Deer Park, Richmond
- SA 33: Richmond Athletic Association Ground, Old Deer Park, Richmond
- SA 34 Stag Brewery, Lower Richmond Road, Mortlake
- SA 35: Mortlake and Barnes Delivery Office, Mortlake
- SA 36: Telephone Exchange and 172 – 176 Upper Richmond Road West, East Sheen
- SA 37: Barnes Hospital, East Sheen

4.15 In addition to this, data obtained previously from Greenspace Information for Greater London [See reference 23] for the Habitats Regulations Assessment of the 2018 Local Plan identified the locations of recorded sightings of stag beetles throughout the borough [See reference 24]. This data identified SA 24 Richmond Station, and SA 36 Telephone Exchange East Sheen to have historic records of stag beetles either within or near to these sites.

4.16 A further three site allocations were also identified to support stag beetle either within or near to these sites and have therefore been considered as part of this assessment. This included SA2 Platts Eyot, SA10 St Mary's University Strawberry Hill and SA11 Richmond College. However these sites were beyond 2km of Richmond Park, and therefore were not considered to be contributing towards the stag beetle population at the Special Area of Conservation, and were screened out of the assessment.

4.17 The preferred habitat for stag beetles is old, established woodland, and the larvae feed on rotting tree matter. As the beetle larvae take years to develop,

they are vulnerable to tree clearance and the 'tidying up' of wood in parks and especially private gardens [See reference 25]. The site allocations were largely comprised of developed surfaces or amenity grassland which are unsuitable habitat for stag beetle. Scattered trees were recorded within some of the allocations (such as SA 22 and SA 27), but they are considered to be managed for recreational or aesthetic purposes, and would not offer deadwood features which the designated species rely on.

4.18 Given the niche habitat requirements for this species, it is considered that any individuals frequenting the listed site allocations would be transitory, and that the removal of these habitats through the proposed allocations would not result in a significant impact on the Special Area of Conservation population.

4.19 No Likely Significant Effects are predicted in relation to Richmond Park Special Area of Conservation or Wimbledon Common Special Area of Conservation as a result of impacts on functionally linked habitats for stag beetles, from proposed development in the plan, either alone or in-combination with other plan and policies. **Therefore, this can be screened out from further assessment.**

Functionally linked habitat – birds

4.20 Two European sites were recorded within 15km of the borough, which supported qualifying bird species. This included Thames Basin Heath Special Protection Area, which is designated for European nightjar, woodlark, and Dartford warbler, and South West London Waterbodies Special Protection Area/Ramsar, which is designated for supporting internationally important populations of Gadwall *Anas strepera* and Shoveler *Anas clypeata*.

4.21 Natural England have advised that their recognised distance for the consideration of offsite functionally linked land is generally 2km, but for certain bird species, including most notably, golden plover and lapwing *Vanellus vanellus*, a greater distance of 15km may be appropriate. As the Thames Basin Heath Special Protection Area and South West London Waterbodies Special

Protection Area/Ramsar do not support either golden plover or lapwing, a distance of 2km has been applied in this assessment. Due to the distance of the Thames Basin Heath Special Protection Area at c. 14km from the borough boundary, no likely significant effect was predicted from physical damage and loss of functionally linked land, either alone or in-combination with other plans and projects. The South West London Waterbodies Special Protection Area/Ramsar was located 0.03km from the borough boundary and was therefore considered in more detail.

4.22 The qualifying species of South West London Waterbodies Special Protection Area/Ramsar, which include northern shoveler and gadwall, predominantly use open water and wetland habitats, although they occasionally breed away from the water if there is no suitable habitat nearby. As the Special Protection Area provides a range of habitats, it is assumed that only sites with significant wetland habitats or those very close to the Special Protection Area site could support offsite habitats used by South West London Waterbodies Special Protection Area species. Historic records of gadwall and northern shoveler within the London Borough of Richmond upon Thames are largely associated with ponds and reservoirs throughout the borough but particularly within Richmond Park Special Area of Conservation and Bushy Park.

4.23 A review of site allocations within 2km of the South West London Waterbodies Special Protection Area/Ramsar identified five site allocations, which comprised SA 5 Sainsbury's Car Park Hampton, SA 1 Hampton Square, SA 2 Platts Eyot, SA 3 Hampton Traffic Uni 60 – 68, and SA 4 Hampton Delivery Office. These sites did not support open waterbodies or wetland habitats that the qualifying features rely on. It was noted that SA2 Platts Eyot is situated on an island along the River Thames. The site is predominantly of industrial use, with moored boats present along the banks of the island suggesting recreational and residential use. Therefore, it is considered that the site will generate a baseline level of noise and disturbance associated with its use, which would deter the qualifying species from using this section of the River Thames. Within close proximity of the site are a range of open water reservoirs that are likely to be more suitable for these species, given the associated lack of access/disturbance/noise with these infrastructures. Therefore it is expected that northern shoveler and gadwall populations would

be more likely to utilise these waterbodies in place of the River Thames within close proximity to SA 2. Therefore, given the habitat requirements of these qualifying bird species, and the more suitable alternative habitats within the wider area, none of these site allocations were considered suitable to provide off-site habitats for the qualifying species. **Therefore, no likely significant effect is predicted as a result of physical damage to functionally-linked habitats for birds of the South West London Waterbodies, either alone or in-combination with other plans and projects, and can be screened out from further assessment.**

Noise, vibration and light pollution

4.24 Noise and vibration effects, e.g. during the construction of new housing or other development, are most likely to disturb bird species and are thus a key consideration with respect to European sites where birds are the qualifying features, although such effects may also impact upon some mammals and fish species. Artificial lighting at night (e.g. from street lamps, flood lighting and security lights) is most likely to affect bat populations and some nocturnal bird species, and therefore have an adverse effect on the integrity of European sites where bats or nocturnal birds are a qualifying feature.

4.25 It has been assumed (on a precautionary basis and based on our experience of previous Habitats Regulations Assessments and consultation with Natural England) that the effects of noise, vibration and light pollution are capable of causing an adverse effect if development takes place within 500 metres of a European site (or functionally linked habitat) with qualifying features sensitive to these disturbances.

4.26 Consideration of noise, vibration and light has been given to the following European Sites within 15km that are designated for qualifying species that are sensitive to these factors:

- South West London Waterbodies Special Protection Area/Ramsar (birds)

4.27 There are no site allocations proposed within 500m of the South West London Waterbodies Special Protection Area/Ramsar. Furthermore, site allocations further afield within 2km of the Special Protection Area/Ramsar do not support suitable habitats for which these species rely on (as aforementioned within the section detailing likely impacts on functionally-linked habitats for birds). These locations are not known to be important off-site breeding, foraging or roosting areas that could affect the integrity of the European sites. Gadwall and northern shoveler have been recorded sparsely across the full extent of the borough.

4.28 The effects of the proposed site allocations and any other development outside of the allocations (either individually or cumulatively) on gadwall and northern shoveler populations as a result of increased noise are unlikely to be significant even where development occurs within 500m, as the urban nature of the London Borough of Richmond upon Thames means that a significant amount of noise and vibration from urban activities, industrial use and vehicle traffic already exists.

4.29 Artificial lighting at night (e.g. from street lamps, flood lighting and security lights) is most likely to affect nocturnal species e.g. bats, and therefore have an adverse effect on the integrity of European sites where nocturnal species are a qualifying feature. The qualifying bird species of South West London Waterbodies are not nocturnal and are not vulnerable to increases in light pollution. The urban nature of the London Borough of Richmond upon Thames also means that a significant amount of light pollution from buildings and street lighting already exists in the borough.

4.30 All other European sites are located over 500m from the London Borough of Richmond upon Thames boundary at the closest point and/or do not support mobile species likely to be significantly affected as a result of non-physical disturbance.

4.31 No Likely Significant Effects are predicted in relation to the South West London Waterbodies Special Protection Area/Ramsar as a result of non-physical disturbance from noise, vibration and light pollution from the proposed

development in the plan, either alone or in-combination with other plan and policies. **Therefore this can be screened out of further assessment in relation to all of the European sites.**

Air pollution

4.32 Air pollution is most likely to affect European sites where plant, soil and water habitats are the qualifying features, but some qualifying animal species may also be affected, either directly or indirectly, by any deterioration in habitat as a result of air pollution. Deposition of pollutants to the ground and vegetation can alter the characteristics of the soil, affecting the pH and nitrogen (N) availability that can then affect plant health, productivity and species composition. All of the sites have plant and/or water habitats or species as their qualifying feature.

4.33 In terms of vehicle traffic, nitrogen oxides (NO_x, i.e. NO and NO₂) are considered to be the key pollutants. Deposition of nitrogen compounds may lead to both soil and freshwater acidification, and NO_x can cause eutrophication of soils and water. The Habitats Regulations Assessment will refer to the UK Air Pollution Information System [\[See reference 26\]](#) to determine whether concentrations of NO_x at the European sites are currently exceeding critical loads or not.

4.34 Based on the Highways Agency Design Manual for Road and Bridges (DMRB) Document LA105: Air Quality [\[See reference 27\]](#) (which was produced to provide advice regarding the design, assessment and operation of trunk roads (including motorways)), it is assumed that air pollution from roads is unlikely to be significant beyond 200m from the road itself. Where increases in traffic volumes are forecast, this 200m buffer needs to be applied to the relevant roads in order to make a judgement about the likely geographical extent of air pollution impacts.

4.35 The DMRB Guidance for the assessment of local air quality in relation to highways developments provides criteria that should be applied to ascertain

whether there are likely to be significant impacts associated with routes or corridors. Based on the DMRB guidance, affected roads which should be assessed are those where:

- Daily traffic flows will change by 1,000 AADT (Annual Average Daily Traffic) or more; or
- Heavy duty vehicle (HDV) flows will change by 200 AADT or more; or
- Daily average speed will change by 10 km/hr or more; or
- Peak hour speed will change by 20 km/hr or more; or
- Road alignment will change by 5 m or more.

4.36 In line with the Wealden judgment (Wealden District Council v. (1) Secretary of State for Communities and Local Government; (2) Lewes District Council; (3) South Downs National Park Authority and Natural England), Natural England now expects to see in-combination air pollution effects assessed. The implication of the judgement is that, where the road traffic effects of other plans or projects are known or can be reasonably estimated (including those of adopted plans or consented projects), then these should be included in road traffic modelling by the local authority whose local plan or project is being assessed. The screening criteria of 1,000 AADT and 200 AADT for heavy duty vehicles should then be applied to the traffic flows of the plans in combination.

4.37 It has been assumed that only those roads forming part of the primary road network (motorways and 'A' roads) might be likely to experience any significant increases in vehicle traffic as a result of development (such as greater than 1,000 AADT etc.). As such, where a site is within 200m of only minor roads, no significant effect from traffic-related air pollution is considered to be the likely outcome.

4.38 Traffic forecast data (based on the planned level of growth) will therefore be needed to determine if increases in vehicle traffic in and around London Borough of Richmond upon Thames are likely to be significant as a result of the draft Local Plan, either alone or in combination with other plans or projects. An

assessment will also be undertaken to identify which European sites lie within 200m of the strategic road network.

4.39 For each of the European sites identified as being sensitive to air pollution, GIS will be used to assess whether they (or their functionally-linked habitats, if relevant) are within 200m of a major road. In some cases, it may be possible to screen out sites if it is obvious that significant volumes of traffic from the Local Plan area are unlikely to pass the site (for example using data [\[See reference 28\]](#) on commuting patterns).

4.40 If significant effects due to air pollution, either alone or in-combination, cannot be ruled out, the Appropriate Assessment will assess the effects of the Local Plan on European sites with reference to traffic data and site relevant critical loads [\[See reference 29\]](#).

4.41 Potential effects will also be considered if there is any significant development identified in the plan that would cause aerial emissions (e.g. airports, power stations, energy from waste facilities). This will take into consideration the location, scale and geography of both the source of the emission and the receptor (the qualifying feature of the European site). No traffic forecast data is currently available for the London Borough of Richmond upon Thames or therefore for the above roads specifically. Therefore, information collected from APIS [\[See reference 30\]](#) will be reviewed to estimate if future traffic flows along them would increase the nitrogen deposition, and thus result in potential impacts on the designated features of the European sites

4.42 The following European sites were considered as they support qualifying features, or habitats which support these qualifying features, which are sensitive to air pollution, and may be impacted by increased traffic flow on adjacent strategic roads that are within 200m of the Site:

- Wimbledon Common Special Area of Conservation (A219, A3, A306)
- Richmond Park Special Area of Conservation (A307, A308)

4.43 Although Richmond Special Area of Conservation and South West London Waterbodies Special Protection Area/Ramsar support qualifying features that are not directly vulnerable to air pollution, it is possible that they may be indirectly affected as a result of changes to their supporting habitats associated with increased pollution.

4.44 The listed European sites below support qualifying features which are sensitive to air pollution and are situated within 200m of strategic roads. However given the distance of these sites from the borough, it was determined that any increased traffic flow associated with the borough would not result in likely significant effects on these sites or qualifying features, and therefore further assessment is not required. The sites include the following:

- Mole Gap to Reigate Escarpment (A24)
- Windsor Forest & Great Park Special Area of Conservation (A329)
- Thursley, Ash, Pirbright & Chobham Special Area of Conservation (M3)
- South West London Waterbodies Special Protection Area/Ramsar (A30, A3044, A3050, A320, M25, M3)
- Thames Basin Heath Special Protection Area (A245, A3, A3046, A320, M25, M3)

Wimbledon Common Special Area of Conservation

4.45 The Special Area of Conservation lies adjacent to three strategic A-roads: A306 to the north, A3 to the north and west, and A219 to the east of the European site. A total proportion of 14.59% of the Special Area of Conservation was situated within 200m of the A219, 9.99% within 200m of the A3, and 2.02% within 200m of the A306.

4.46 Habitats present within 200m of the strategic roads were comprised predominantly of broadleaved mixed and yew woodland, with dwarf shrub heath recorded within the north and east. The Special Area of Conservation is

designated for heathland and stag beetle population, of which both habitat types are either qualifying features, or support qualifying features within the Site respectively. The habitat has been identified from the corresponding Site of Special Scientific Interest units to be in unfavourable-recovering condition.

4.47 A review of APIS data identified that the stag beetle have a critical level load between 10-20kg N/ha/yr which has been exceeded, as the minimum nitrogen deposition has been recorded at 30.3kg N/ha/yr within the Special Area of Conservation. The critical level load was not exceeded for the North Atlantic wet heaths or European dry heaths which has a minimum nitrogen deposition of 17kg N/ha.yr. It can therefore be concluded that existing levels exceed critical levels within the Special Area of Conservation in relation to stag beetles.

4.48 The modelled annual mean NO₂ deposition based on estimates for 2020, for the strategic roads surrounding the Special Area of Conservation indicate that the A3 fails the annual mean objective (<49ug/m³), whereas the A219 and A306 do not, although there is potential for them to also fail should traffic flow increase significantly.

4.49 As advised by Natural England “for the purpose of assessing air quality impacts to designated sites the lower critical load limit of the APIS range should be applied.” There is potential that these air pollutants will modify the chemical status of the habitat’s substrate, accelerating or damaging plant growth, altering vegetation structure and composition and causing the loss of qualifying species associated with it.

4.50 Therefore, in the absence of future traffic data and based on the evidence accrued, it is assumed that development within the borough has the potential to increase air pollution which could have likely significant effect on the integrity of the Wimbledon Commons Special Area of Conservation.

4.51 A Likely Significant Effect is predicted in relation to Wimbledon Common Special Area of Conservation as a result of increased air pollution from proposed development in the plan, both alone or in-combination with other plan and policies given the nature of this pressure (traffic can travel from

neighbouring boroughs and add additional contribution which may result in Likely Significant Effects). **Therefore this will remain screened in for further assessment.**

Richmond Park Special Area of Conservation

4.52 The Special Area of Conservation lies adjacent to two strategic A-roads: A307 to the west, and A308 to the south of the European site. A total proportion of 0.93% of the Special Area of Conservation lies within 200m of the A307, and 2.99% lies within 200m of the A308.

4.53 Habitats present within 200m of the strategic roads were comprised solely of lowland acidic grassland, which is neither a qualifying feature nor supports the qualifying feature within the Site. These habitat units were identified as being in an unfavourable-recovering condition.

4.54 Therefore, despite recent traffic data having not been attained, it is considered that increased traffic flow along these routes would not significantly impact the qualifying or support features of which the Special Area of Conservation is designated for, as the habitats situated within 200m of the road are not suitable for stag beetle. Therefore **air pollution impacts are screened out in regard to the Richmond Special Area of Conservation.**

Recreation and urban impacts

4.55 Recreation activities and general human presence can have a likely significant effect on a European site as a result of physical disturbance, e.g. through erosion and trampling or disturbance to qualifying species. Residential and leisure-related development is particularly likely to result in an increase in recreation pressure. Employment development is less likely to result in such effects although some increases in recreation pressure may still occur, for example if European sites are visited by employees during lunchtimes. Retail-

related development and the development of transport infrastructure are not considered likely to result in increased recreational pressure at European sites. The London Borough of Richmond upon Thames Local Plan will result in housing growth, and associated population increase within Richmond. Where increases in population are likely to result in significant increases in recreation at a European site, either alone or in-combination, the potential for likely significant effects will require assessment. At this stage, there is no definitive figure of the number and location of dwellings the Local Plan will make provision for over the plan period. The London Plan housing target set as of March 2015, for the London Borough of Richmond upon Thames, is 3150 homes for 2015 – 2025, which is the equivalent to 315 additional homes per year.

4.56 European sites with qualifying bird species are likely to be particularly susceptible to recreational disturbances from walking, dog walking, angling, illegal use of off-road vehicles and motorbikes, and wildfowling. An increase in recreational pressure from development therefore has the potential to disturb bird populations of Special Protection Area and Ramsar sites as a result of both terrestrial and water-based recreation.

4.57 In addition, recreation can physically damage habitat as a result of trampling and also through erosion associated with terrestrial activities such as use of vehicles.

4.58 Each European site will typically have a 'Zone of Influence' (ZOI) within which increases in population would be expected to result in likely significant effects. ZOIs are usually established following targeted visitor surveys and the findings are therefore typically specific to each European site (and often to specific areas within a European site). The findings are likely to be influenced by a number of complex and interacting factors and therefore it is not always appropriate to apply a generic or non-specific ZOI to a European Site. Particularly in relation to uniquely attractive coastal sites which have the potential to draw large number of visitors from areas much further afield.

4.59 ZOI's for non-coastal European sites are typically less variable with visitors travelling from areas more local to the site. Although, these sites are unique in their own right, recreational activities are more easily managed and can be directed to alternative greenspace in the area. Using a precautionary approach and based on the established approach for the Thames Basin Heath Delivery

Framework, Epping Forest Special Area of Conservation and Burnham Beeches Special Area of Conservation, a ZOI of 7km is proposed for European sites considered within the Habitats Regulations Assessment of the London Borough of Richmond upon Thames. Given the sensitivities of the Thames Basin Heath Special Protection Area to recreational pressure, this distance was deemed appropriate to use the same ZOI in this assessment.

4.60 The following sites have been considered in the Habitats Regulations Assessment, in relation to recreation pressure:

- Richmond Park Special Area of Conservation
- Wimbledon Common Special Area of Conservation
- South West London Waterbodies Special Protection Area/Ramsar
- Thames Basin Heath Special Protection Area
- Thursley, Ash, Pirbright & Chobham Special Areas of Conservation
- Mole Gap to Reigate Escarpment Special Area of Conservation

4.61 Richmond Park Special Area of Conservation is designated for stag beetles, which are not susceptible to recreational impacts at this location because the site is managed to ensure that the deadwood habitats which they depend upon is maintained. Therefore, it is considered that the proposed site allocations will not result in a Likely Significant Effect, either alone or in combination with other plans or policies, on the qualifying features of the Special Area of Conservation.

4.62 Wimbledon Common Special Area of Conservation is also a popular destination for recreation activities – the closest is SA 37 Barnes Hospital, East Sheen which is proposed for a mix of uses including a health centre, special education needs school and residential development. The Special Area of Conservation also includes the stag beetle as a qualifying feature along with heathland habitats that are also vulnerable to increases in visitor numbers. However, the distance of the Wimbledon Common SAC from the London Borough of Richmond upon Thames and the fact that the A3 acts as a barrier between the Special Area of Conservation and the borough means that it is less

easily accessible for London Borough of Richmond upon Thames residents. Despite this, it is still considered that the site will draw in recreational visitors given its size, qualifying features of interest and the majority of the proposed site allocations are located within the 7km ZOI. Given the sensitivity of the qualifying habitats within the site, it is recommended that in-built mitigation will be required for this site to ensure no Likely Significant Effects occur on the integrity of the Special Area of Conservation.

4.63 The qualifying bird species of the South West London Waterbodies Special Protection Area could be vulnerable to disturbance as a result of increased recreational pressure. The two fragments of the Special Protection Area that are closest to the London Borough of Richmond upon Thames comprise the Kempton Reservoirs Site of Special Scientific Interest, and Knight & Bessborough Reservoirs Site of Special Scientific Interest. The remaining fragments of the Special Protection Area lie beyond 7km of the nearest site allocation within the London Borough of Richmond upon Thames and so are unlikely to experience a significant increase in recreation-related visits, and have been ruled out for likely significant effects on the Special Protection Area.

4.64 The Knight & Bessborough Reservoir is a privately owned site by Thames Water and public access is prohibited given its associated use with the Walton water treatment works facility. Therefore Likely Significant Effects on the Site of Special Scientific Interest associated with recreational disturbance are not considered likely, and can be ruled out from further assessment.

4.65 The Kempton Reservoirs Site of Special Scientific Interest is a decommissioned reservoir which has been transformed into the Kempton Nature Reserve, comprising wetland, woodland and grassland habitats, with a particular focus on wildfowl [\[See reference 31\]](#). The site is owned and managed by the Thames Water Utilities. Access to the site is permitted for members only, open between dawn to dusk, and allows for guide and assistance dogs only. The site provides bird hides, reedbed walkways and woodland pathways to allow the members to view the wildlife utilising the Site whilst reducing the likelihood of causing disturbance. Therefore given the restricted access to the site for members only and guide/assistance dogs, it is considered that these measures and the current management plan of the Site

would ensure that any additional recreational use of the Reserve would not be detrimental to the qualifying species for which the site is designated for. Therefore, it is considered that Likely Significant Effects on the integrity of the Special Protection Area are not likely, and can be ruled out from further assessment.

4.66 The following sites did not have any proposed site allocations within their respective 7km ZOI, therefore it is considered that the proposed Local Plan will not result in adverse effects on their respective qualifying features:

- Thames Basin Heath Special Protection Area
- Thursley, Ash, Pirbright & Chobham Special Areas of Conservation
- Mole Gap to Reigate Escarpment Special Area of Conservation

4.67 Therefore, it could not be ruled out at the screening assessment whether Likely Significant Effects would occur on qualifying features of Wimbledon Common Special Area of Conservation. This includes the consideration of in-combination effects, as although these effects alone may be small in contribution, any additional contribution in-combination with other proposed development within neighbouring boroughs could combine to result in Likely Significant Effects. Therefore, Likely Significant Effects may occur as a result of the proposed Local Plan, either alone or in-combination with neighbouring plans, and further information is required to determine how increased recreational pressure may impact qualifying features of the Special Area of Conservation.

Water quantity and quality

4.68 An increase in demand for water abstraction and treatment resulting from the growth proposed in the Strategic Plan could result in changes in hydrology at European sites. Depending on the qualifying features and particular vulnerabilities of the European sites, this could result in likely significant effects; for example due to changes in environmental or biotic conditions, water chemistry and the extent and distribution of preferred habitat conditions. To fully

understand the potential impacts of proposed development on European sites a review of relevant Water Cycle Studies (WCS) and liaison with the Environment Agency and relevant water companies will be required where necessary.

4.69 The development that will be delivered through the Local Plan could combine to increase demand for water abstraction and treatment, which could affect the integrity of European sites as a result of changes to hydrological regimes. Residential development is likely to result in the most significant increases in demand for water abstraction and treatment, although employment development is also likely to contribute to increases.

4.70 The European sites within and around London Borough of Richmond upon Thames are unlikely to be significantly affected in this way as the provision of housing in London Borough of Richmond upon Thames will largely be achieved through the redevelopment of existing urban areas and will therefore utilise existing infrastructure, including foul water and surface drainage facilities.

4.71 In addition, Thames Water's extensive sewer upgrading project, the Thames Tideway Tunnel, will also help to accommodate population growth across London, including in the London Borough of Richmond upon Thames, by tackling the problems caused by overflow from the city's Victorian system of sewers.

4.72 There are also established regulatory mechanisms over the treatment of waste water (regulated by the Environment Agency) that take into account environmental impacts including likely significant effects on European sites, which should provide safeguards to ensure no adverse effects on integrity arise.

4.73 While Thames Water forecasts that demand for water will increase significantly over its water resources planning period, and that water deficiencies may be an issue across London, its Water Resources Management Plan [\[See reference 32\]](#) includes a number of measures to increase water supply such as wastewater re-use and some minor groundwater development.

4.74 The Plan states that London's water demand currently exceeded supply at the start of the 2020-25 period, due to a significant increase in population, exacerbated by the impacts of the climate change, and increases in exports to neighbouring water companies from their current water trading agreements.

4.75 However, in Thames Waters Water Resources Management Plan Annual Review 2020-21 (June 2021) [\[See reference 33\]](#) it was outlined that sufficient and secure water supply in London has and can be provided, and objectives set out in the Water Resource Management Plan (2019) were being met, although it is acknowledged that in the long term more water resources will be required, and as part of this are exploring a range of options to facilitate this, including catchment solutions, third party options, and securing resilience for the public water supply and other sectors.

4.76 None of the European sites within close proximity of the borough's boundary were identified as being vulnerable to water quality or quantity. The South West London Waterbodies Special Protection Area/Ramsar supports qualifying features that are reliant on hydrology within the site. The Kempton Park Reservoirs Site of Special Scientific Interest and Knight & Bessborough Reservoirs Site of Special Scientific Interest, which form part of the Special Protection Area/Ramsar site and are located within close proximity to the borough's boundary, support gadwall and northern shoveler populations. However the only key vulnerabilities associated with these Sites of Special Scientific Interest were recreational pressures.

4.77 As the Kempton Park Reservoir Site of Special Scientific Interest is a decommissioned reservoir, it is considered that the proposed increase in demand for water supply will not directly affect the reservoir given its current use as a nature reserve for wetland species. Therefore it is expected that no water abstraction will occur from this site, and Likely Significant Effects associated with the increased demand for water supply can be ruled out for this site.

4.78 Given the uncertainty of long term water resources, it is expected that in-built mitigation measures will be required within related policies within the Local

Plan, to ensure that a sufficient water supply is provided to meet the increased demand as a result of the proposed site allocations. As without this, water supply, and in term water quantity may become a threat on the supporting habitats of which the qualifying features rely on, such as through periods of drought. Therefore it cannot be determined in the screening assessment with certainty whether no Likely Significant Effects will occur in relation to the Knight & Bessborough Reservoirs Site of Special Scientific Interest, which forms part of the South West London Waterbodies Special Protection Area/Ramsar, either alone or in-combination with adjacent Local Plans. **Therefore this is screened in for further assessment in relation to water quantity.**

4.79 The remaining European sites are either not hydrologically connected to the London Borough of Richmond upon Thames area or do not have qualifying features that are susceptible to changes in water quality or quantity.

Summary

4.80 Table 4.1 summarises the Likely Significant Effects that may occur and where further assessment at the Appropriate Assessment stage is required.

Table 4.1: Summary of HRA Screening

European Site	Physical Loss / Damage	Non-physical disturbance	Air pollution^	Recreation pressure / Urban effects	Water quantity	Water quality
Richmond Park Special Area of Conservation	No Likely Significant Effect	No Likely Significant Effect	No Likely Significant Effect	No Likely Significant Effect	No Likely Significant Effect	No Likely Significant Effect
Wimbledon Common Special Area of Conservation	No Likely Significant Effect	No Likely Significant Effect	Potential Likely Significant Effect	Potential Likely Significant Effect	No Likely Significant Effect	No Likely Significant Effect
South West London Waterbodies Special Protection Area/RAMSAR	No Likely Significant Effect	No Likely Significant Effect	No Likely Significant Effect	No Likely Significant Effect	Potential Likely Significant Effect	No Likely Significant Effect
Thames Basin Heath Special Protection Area	No Likely Significant Effect	No Likely Significant Effect	No Likely Significant Effect	No Likely Significant Effect	No Likely Significant Effect	No Likely Significant Effect
Thursley, Ash, Pirbright & Chobham Special Areas of Conservation	No Likely Significant Effect	No Likely Significant Effect	No Likely Significant Effect	No Likely Significant Effect	No Likely Significant Effect	No Likely Significant Effect
Mole Gap to Reigate Escarpment Special Area of Conservation	No Likely Significant Effect	No Likely Significant Effect	No Likely Significant Effect	No Likely Significant Effect	No Likely Significant Effect	No Likely Significant Effect
Windsor Forest and Great Park Special Area of Conservation	No Likely Significant Effect	No Likely Significant Effect	No Likely Significant Effect	No Likely Significant Effect	No Likely Significant Effect	No Likely Significant Effect

Chapter 5

Appropriate Assessment

5.1 Following the screening stage, the plan-making authority is required under Regulation 63 of the Habitats Regulations 2017 (as amended) to make an ‘Appropriate Assessment’ of the implications of the plan for European sites, in view of their conservation objectives.

5.2 European Commission Guidance [\[See reference 34\]](#) states that the Appropriate Assessment should consider the impacts of the plan (either alone or in combination with other projects or plans) on the integrity of European sites with respect to their conservation objectives and to their structure and function.

5.3 This stage seeks to determine whether implementation of the draft Local Plan will result in an adverse effect on the integrity of the whole European site in question (many European sites are made up of a number of fragments of habitat). It also considers the potential for in-combination effects from development proposed in neighbouring authorities’ Local Plans or from major infrastructure projects. Consideration was given to mitigation measures that may be included in the Local Plan to reduce the likelihood and significance of effects on European sites.

5.4 A European site’s integrity depends on it being able to sustain its ‘qualifying features’ (the Annex 1 habitats, Annex II species, and Annex 1 bird populations for which it has been designated) and to ensure their continued viability. A high degree of integrity is considered to exist where the potential to meet a European site’s conservation objectives is realised and where the European site is capable of self-repair and renewal with a minimum of external management support.

5.5 Likely significant effects arising from the plan, either alone or in-combination, were identified for the following sites and impact types:

- **Air pollution** – Wimbledon Common Special Area of Conservation.

- **Recreation** – Wimbledon Common Special Area of Conservation
- **Water Quantity** – South West London Waterbodies Special Protection Area/Ramsar (Knight & Bessborough Reservoirs Site of Special Scientific Interest)

5.6 An Appropriate Assessment has been undertaken for these European sites to determine whether the plan will result in adverse effects on their integrity.

5.7 The Appropriate Assessment focuses on those impacts that are judged likely to have a significant effect on the qualifying features of a European site, or where insufficient certainty regarding this remained at the screening stage. As described in **Chapter 1**, a conclusion needs to be reached as to whether or not a policy or site allocation in the plan would adversely affect the integrity of a European site. To reach a conclusion, consideration was given to whether the predicted impacts of the proposals (either alone or in combination) have the potential to:

- Delay the achievement of conservation objectives for the site.
- Interrupt progress towards the achievement of conservation objectives for the site.
- Disrupt factors that help to maintain the favourable conditions of the site.
- Interfere with the balance, distribution and density of key species that are the indicators of the favourable condition of the site.

5.8 The conservation objectives for the above European sites are to ensure that the integrity of the site is maintained or restored as appropriate, and to ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring:

- The extent and distribution of qualifying natural habitats.
- The structure and function (including typical species) of qualifying natural habitats.
- The supporting processes on which qualifying natural habitats rely.
- The structure and function of the habitats of qualifying species.

- The populations of qualifying species.
- The distribution of qualifying species within the site.

Air Pollution

5.9 The overall scale of residential, employment and other types of development proposed through the Local Plan is likely to result in an increase in traffic flow on the strategic road network throughout the London Borough of Richmond upon Thames and neighbouring boroughs and districts. The potential impacts of increased air pollution as a result of this has been considered for Wimbledon Common Special Area of Conservation.

5.10 The following policies were identified during the screening stage as they could result in new development and contribute to an increase in traffic on the strategic road network, therefore increasing air pollution which in turn could have a likely significant effect on European sites:

- Policy 10: New Housing
- Policy 12: Housing needs of different groups
- Policy 14: Loss of Housing
- Policy 16: Small Sites
- Policy 21: Protecting the local economy
- Policy 22: Promoting jobs and our local economy
- Policy 24: Industrial land
- Policy 26: Visitor economy
- Policy 49: Social and Community Infrastructure
- Policy 50: Education and Training

5.11 The following policies proposed within the draft local Plan will provide a degree of mitigation for any increase in traffic flow throughout the London Borough of Richmond upon Thames:

- Policy 7: Waste and the circular economy – This policy encourages developments to make use of the rail and waterway network to transport waste and could therefore contribute to mitigation for air pollution associated with vehicle emissions.
- Policy 47: Sustainable travel choices – Updates existing policy (LP44) to reflect the London Plan, Mayor’s Transport Strategy and the Council’s Active Travel Strategy. Increases emphasis on walking and cycling for short journeys, inclusive mobility and assessing the impact of developments on the road network – using a threshold approach linked to development size as to whether a separate Transport Statement or Transport Assessment is required for different types of uses.
- Policy 48: Vehicular Parking, Cycle Parking, Servicing and Construction Logistics Management – Updates existing policy (LP45) to reflect London Plan vehicle and cycle parking standards. Adopts a threshold approach linked to development size for whether future occupants will be excluded from a CPZ, for when an on-street vehicular parking stress survey is needed, and for when a construction management plan is required. Includes private vehicular crossovers to a former front garden, car-free development, and car clubs.

5.12 In addition to this, Site Allocation 24 Richmond Station will result in improvements to the station, which could further encourage sustainable transport use and provide mitigation for air pollution impacts. Site Allocation 30 Kew Retail Park, Bessant Drive, Kew will require the applicant to submit a full transport assessment completed in accordance with local and London-wide guidance. This will include a detailed assessment of its impact on the local and strategic road network. They will also be advised to seek pre-application transport and highway safety advice from Borough and Transport For London Officers before writing their traffic assessment.

5.13 The Air Quality Strategy for London [\[See reference 35\]](#) also sets out a wide range of mitigation measures and proposals that will be implemented

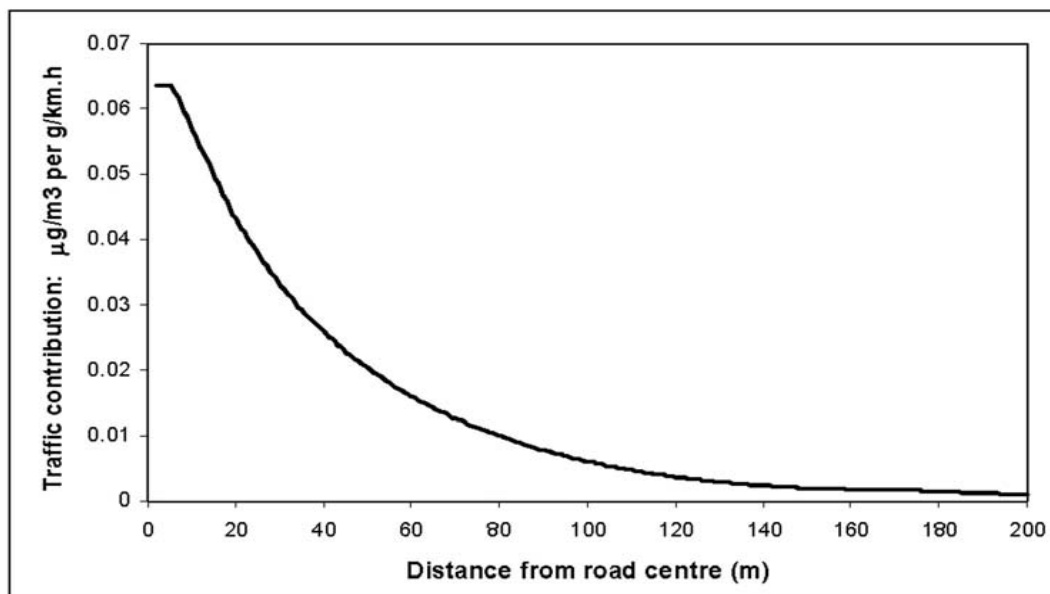
across the city, including in the London Borough of Richmond upon Thames, to improve air quality across the city. These measures include targeted policies to reduce emissions from public transport, promote the use of “cleaner” vehicles, reducing carbon footprints in existing/new developments, and encourage sustainable travel options such as cycling and walking.

5.14 In addition to this, the London Borough of Richmond upon Thames has produced a new Air Quality Action Plan (2020 - 2025) [See reference 36] which outlines how the borough will reduce emissions and monitor air pollutants to ensure they comply with air quality objectives. This will be achieved through monitoring schemes; promoting sustainable and active modes of transport such as cycling, walking and public transport; through public engagement; installing direct legislative and regulatory controls to tackle poor air quality; and, with particular focus on improving air quality around schools within the borough.

5.15 These mitigation measures will help reduce air pollution associated with traffic, however in the absence of traffic data, a precautionary approach must be undertaken. Therefore there is potential for new development associated with the Local Plan, either alone or in-combination with development in neighbouring boroughs, to increase traffic flow on the roads adjacent to the European sites by greater than 1000 AADT (the point at which the DMRB considers that significant air pollution impacts could occur).

5.16 The effects of nitrogen deposition from traffic reduce dramatically with distance (see Figure 5.1), such that the 200 metre threshold is at the limit of where significant effects might occur. In practice, therefore, even if traffic flows increase significantly over the plan period, provided very small proportions of the European sites are within 200m of the strategic road, then the effect on the qualifying features of European sites is likely to be significantly reduced and unlikely to result in an adverse effect on the integrity of the European sites. Albeit this very much depends on the feature’s sensitivity to air pollution.

Figure 5.1: Traffic Contribution to Pollutant Concentration at Different Distances from the Road Centre [See reference 37]



Wimbledon Common Special Area of Conservation

5.17 The Special Area of Conservation lies adjacent to three strategic A-roads: A306 to the north, A3 to the north and west, and A219 to the east of the European site. A total proportion of 14.59% of the Special Area of Conservation was situated within 200m of the A219, 9.99% within 200m of the A3, and 2.02% within 200m of the A306.

5.18 The Special Area of Conservation is situated to the south-east of the borough and is comprised of broadleaved woodland (with decaying timber) which are known to support stag beetle, and heathland for which the site is designated for.

5.19 Heathland features typically depend upon lower levels of nutrients within the soils. Increased nutrient enrichment from air pollution could leave to increased competition by scrub and non-heathland plant communities thereby

degrading the condition and integrity of the heathland. Therefore changes in the structure and composition of this habitat as a result of increases in air pollution has the potential to result in an adverse effect on the qualifying species of the Special Area of Conservation through habitat loss.

5.20 As detailed within the Screening Assessment, significant increases in traffic-related air pollution are typically within 200m of a European site. This is supported by data provided within the DMRB, which shows that the effects of nitrogen deposition from traffic is reduced dramatically with distance from the road as illustrated by Figure 5.1.

5.21 The total proportion of the Site which lies within 200m of the strategic roads is 14.59%, and comprises broadleaved woodland and heathland which is currently in unfavourable but recovering condition. Broadleaved woodland habitat is of considerable value for stag beetles, and therefore any significant impacts on this habitat type, could have an subsequent effect on available habitat for stag beetle, for which the Site is designated for.

5.22 The provision of in-built mitigation provided within the Plan, alongside the Air Quality Action Plan will provide some level of mitigation. However, in line with a precautionary approach, **a conclusion of no adverse effects on the integrity of the Special Area of Conservation cannot be reached in relation to the effect of air pollution on Wimbledon Common Special Area of Conservation either alone or in-combination until further traffic modelling is required to inform the assessment.** The survey data will need to demonstrate whether the proposed development will exceed a threshold of 1000 AADT for non-HGV's and 200 AADT for HGV. This data will be required for the A219, A3 and A306 in the vicinity of 200m of the SAC.

5.23 Therefore, in the absence of traffic modelling data, the potential for adverse effects on the integrity of the Special Area of Conservation, as a result of the proposed Plan, either alone or in-combination, cannot be ruled out.

Recreation

5.24 The overall scale of residential, employment and other types of development proposed through the Local Plan is likely to result in an increase in users and visitors to greenspaces within the London Borough of Richmond upon Thames and neighbouring boroughs and districts. These activities could range from dog-walkers, cyclists to wildlife watching and photography, all of which have the potential to adversely affect qualifying habitats or species of the European site which are fragile and susceptible to damage and disturbance, such as trampling and illegal activities including bonfires and vandalism, to contamination from litter and dog-fouling.

5.25 The following policies were identified during the screening stage as they could result in new development and contribute to an increase in recreational pressure which in turn could have a likely significant effect on European sites:

- Policy 10: New Housing
- Policy 12: Housing needs of different groups
- Policy 14: Loss of Housing
- Policy 16: Small Sites
- Policy 26: Visitor Economy

5.26 The following policies proposed within the plan will provide a degree of mitigation for any increase in recreational pressure throughout the London Borough of Richmond upon Thames:

- Policy 37: Public open space, play, sport and recreation – This policy continues the existing approach (LP31) recognising importance of open spaces for biodiversity and climate change, and to refer to the GLA's child yield calculator; updated policy to also refer to relocation of playing fields. Policies Map changes proposed in light of new Public Open Space deficiency mapping to be undertaken.
- Policy 39: Biodiversity and Geodiversity - This policy continues protecting the borough's biodiversity (LP15), with updated mitigation hierarchies and

increased emphasis on including the connection between habitats and importance of wildlife / ecological corridors, with a specific policy requirement for at least 20% contribution to delivering measurable biodiversity net gain. Policies Map changes suggested in light of evidence base, such as changing existing Other Site of Nature Importance (OSNI) to Site of Importance for Nature Conservation (SINC), amending and adding to existing sites as well as identifying new sites for protection.

Wimbledon Common Special Area of Conservation

5.27 As detailed within the screening assessment, the site is situated just to the south-east of the borough boundary, and is designated for stag beetles and heathland, of which the latter is sensitive to physical damage and disturbance from recreational pressures. It has been flagged within the Site Improvement Plan that Natural England, and by the Wimbledon and Putney Common Conservators that measures should be implemented to reduce visitor impact on the qualifying features.

5.28 The distance of the site from the London Borough of Richmond upon Thames and the fact that the A3 acts as a barrier between the Special Area of Conservation and the borough means that it is less easily accessible for London Borough of Richmond upon Thames residents. Despite this, it is still considered that the site will draw in recreational visitors given its size, qualifying features of interest and the majority of the proposed site allocations are located within the 7km ZOI.

5.29 On review of the condition assessment of the Site of Special Scientific Interest habitat units within the Special Area of Conservation, the Site of Special Scientific Interest habitat units 1 and 9 relate to the heathland of which the Special Area of Conservation is partially designated for. Unit 9 was recorded as being in an unfavourable no change condition, whilst the remaining habitat units are in favourable condition.

5.30 Site of Special Scientific Interest habitat unit 9 comprises lowland dwarf shrub/heathland which is in unfavourable no change due to inappropriate cutting/mowing measures. No signs of trampling/recreational pressure were documented as the cause to why the qualifying habitat was in an unfavourable no change condition, and it was acknowledged within the conservation objectives supplementary advice, that a more sympathetic management plan is required to maintain/restore the qualifying habitat, [\[See reference 38\]](#). The heathland present within the Special Area of Conservation was assessed as being in the building/mature growth stage, and that conditions to promote the establishment of new generations of heather are currently poor. It was recommended within the condition assessment that the provision of bare ground should be increased and current scrub cover is reduced in order to restore the heathland habitat associated with unit 9 to a favourable condition.

5.31 The Wimbledon and Putney Commons Conservators, who are responsible for the management of the Special Area of Conservation, produced a management strategy in 2017 to ensure the site is protected and preserved, whilst made available to the public for purposes of exercise and recreation [\[See reference 39\]](#). As part of the strategy, it was proposed that a land management plan would be prepared to conserve and enhance the specific habitats of which the site is designated for, including heathland. To avoid impacts on the heathland through recreation and public access, it was proposed that these areas are protected through management techniques such as dead hedging and judicious planting which will create a physical barrier between these habitats and any nearby associated walkways, and thus reduce the likelihood of damage occurring from trampling etc.

5.32 Furthermore, a progress report on the key initiatives of the management strategy were provided in June 2020 [\[See reference 40\]](#), which outlined that the preparation of the land management plan was still on-going. An annual Ecological and Environmental Monitoring Report for the Site in 2019 was provided [\[See reference 41\]](#) highlighting the on-going management works being undertaken to restore the heathland, which included gorse and heather cutting, bracken, scrub and non-native species control, maintenance of fire breaks, and tree thinning works around the heathland edges as in line with a Countryside Stewardship agreement with Natural England to restore the heathland. Although it was highlighted that given the urban setting of the site,

recreational pressures including arson, dog fouling, recreational disturbance and air pollution were impacting the habitat.

5.33 Provided that the proposed landscape management plan associated with the strategy, acknowledges and outlines mitigation measures to tackle the recreational pressures (such as through specific actions like dead hedging), then it is expected that these in-built mitigation measures would enable the continuing recovery of the existing heathland. However, frequent monitoring of the heathland should form part of the plan in order to be wary of any changes to the habitat that might require alterations to the management actions.

5.34 In addition to the above, it is recommended that stronger wording is provided within Policy 37: Public open space, play, sport and recreation, which would include the provision of open spaces to focus visitors towards these alternative greenspaces rather than the Special Area of Conservation (such as for walkers, runners and dog walkers). By incorporating selective open spaces to mitigate for anticipated visitor increases to the Special Area of Conservation, then this is considered likely to provide an effective contribution in mitigating any significant effects on the integrity of the Special Area of Conservation associated with recreation. It is recommended that the plan includes changes to the above policy by providing additional wording to ensure that there is no adverse effect on the integrity of the Special Area of Conservation.

5.35 It is considered that provided the above recommendations are incorporated and implemented successfully, adverse effects on the integrity of Wimbledon Common Special Area of Conservation, as a result on recreational impacts will be avoided, both alone or in-combination with other Local Plans and policies.

Water Quantity

5.36 The overall scale of residential, employment and other types of development proposed through the Local Plan is likely to result in an increase in demand for water supply throughout the London Borough of Richmond upon

Thames. The potential impacts associated with increased demand for water supply as a result of this has been considered for the South West London Waterbodies Special Protection Area/Ramsar, more specifically, the Knight & Bessborough Reservoirs Site of Special Scientific Interest.

5.37 The following policies were identified during the screening stage as they could result in new development and contribute to an increase in traffic on the strategic road network, therefore increasing air pollution which in turn could have a likely significant effect on European sites:

- Policy 10: New Housing
- Policy 12: Housing needs of different groups
- Policy 14: Loss of Housing
- Policy 16: Small Sites
- Policy 21: Protecting the local economy
- Policy 22: Promoting jobs and our local economy
- Policy 24: Industrial land
- Policy 26: Visitor economy

5.38 The following policies proposed within the plan will provide a degree of mitigation for any increase in demand for water supply throughout the London Borough of Richmond upon Thames:

- Policy 8: Flood risk and sustainable drainage – This policy encourages the use of sustainable drainage systems and therefore could contribute to mitigation for impacts on water quality and quantity. To enable development, proposals must provide mitigation and resilience against flood risk, taking advice from the Lead Local Flood Authority (LLFA) as appropriate, and provide appropriate compensation to existing flood risk levels and volumes, addressing the predicted 1 in 100 year Risk of Flooding from Surface Water (RoFSW) mapped depths as a minimum. Where possible, land within major development sites should be safeguarded for potential flood mitigation use through the active consideration of predicted flood mapping from all sources. Applicants will

have to demonstrate their proposal complies with a list of criteria for flood defences.

- **Policy 9: Water resources and infrastructure** – This policy largely retains existing approaches from the 2018 Local Plan Policy 23 (Water Resources and Infrastructure) which protects the boroughs water resources and supplies by resisting development proposals that would pose an unacceptable threat to the boroughs rivers, surface water, groundwater quantity and quality. The council also encourages proposals that seek to increase water availability or protect and improve the quality of the river or groundwater. Therefore, development or expansion of water supply or waste water facilities will normally be permitted, provided that the need for such facilities outweighs an adverse land use or environmental impact. New major developments will also need to ensure adequate water supply, drainage and sewage capacity.

South West London Waterbodies Special Protection Area/Ramsar

5.39 The Knight & Bessborough Reservoirs Site of Special Scientific Interest (a component of the SPA/Ramsar site) is located just to the south-west of the borough boundary, and is designated for supporting wintering northern shoveler populations.

5.40 The Site Improvement Plan for the Special Protection Area does not include water quantity as a threat to the qualifying features of which the site is designated for, however given that the Thames Waters Water Resources Management Plan Annual Review 2020-2021 state that although current water demands are being met, there is a requirement for more long term water resources to be obtained so as to continue supplying water to residents within the borough. Therefore, should dry periods occur, and water abstraction levels are maintained to meet the water supply demand, then the supporting habitat of which the qualifying features rely on, could be impacted and result in an adverse effect on the integrity of the Special Protection Area.

5.41 Policy 9 (Water resources and infrastructure) within the proposed Local Plan provides strong wording in relation to avoiding impacts on water quantity as a result of the proposed development within the borough.

5.42 It states that no development will take place where the new water supply demand upon existing infrastructure is not taken into account. Additionally, it outlines that where capacity for the predicted supply demand does not exist or is an issue, then the developer needs to contact Thames Water Utilities to agree on what improvements on the existing infrastructure are needed, and how they will be funded for. If improvements on off-site infrastructure are not programmed to facilitate the new demands associated with the developments, then **planning permission will only be granted once this has been determined**. Furthermore, in regard to wastewater and surface run-off, *“where capacity does not exist and to avoid overloading of existing infrastructure, a drainage strategy should be provided to show the required infrastructure and its funding”*.

5.43 It is considered that the proposed mitigation in relation to meeting increased demands for water supply, will suitably avoid potential overloading of the existing infrastructure and water supply available, and therefore would protect the supporting habitat of which the northern shoveler relies on within the Knight & Bessborough Reservoirs Site of Special Scientific Interest, and avoid any adverse effects on the integrity of the Special Protection Area.

5.44 Furthermore, it is also expected that the likelihood of water quantity issues will be further reduced by increased winter rainfall, which will result in the reservoir holding greater quantities of water.

5.45 Therefore, provided that the policy wording incorporated into the plan is implemented successfully, potential future adverse effects on the integrity of the South West London Waterbodies Special Protection Area, as a result of impacts from water quantity on supporting habitat, both alone or in-combination will be avoided.

Summary of Appropriate Assessment

5.46 The conclusions of the Appropriate Assessment are summarised in Table 5.1.

5.47 The European sites that are shown as screened out in green indicate sites that were considered to have no likely significant effect at the screening stage, or of which no adverse effects on the integrity of the Site were predicted at the Appropriate Assessment stage.

5.48 The European sites highlighted in orange indicate where there may be adverse effects on their integrity as a result of the plan in relation to the site, of which cannot be ruled out for air quality on Wimbledon SAC. Further traffic analysis is required to inform the assessment.

Table 5.1: Summary of Appropriate Assessment

European Site	Physical Damage and Loss	Non-Physical Disturbance	Air Pollution	Recreation	Water Quantity and Quality
Richmond Park Special Area of Conservation	Screened out	Screened out	Screened out	No adverse effects	Screened out
Wimbledon Common Special Area of Conservation	Screened out	Screened out	Potential for adverse effects on integrity	Screened out	Screened out
South West London Waterbodies Special Protection Area/RAMSAR	Screened out	Screened out	Screened out	Screened out	Screened out
Thames Basin Heath Special Protection Area	Screened out	Screened out	Screened out	Screened out	Screened out
Thursley, Ash, Pirbright & Chobham Special Areas of Conservation	Screened out	Screened out	Screened out	Screened out	Screened out
Mole Gap to Reigate Escarpment Special Area of Conservation	Screened out	Screened out	Screened out	Screened out	Screened out
Windsor Forest and Great Park Special Area of Conservation	Screened out	Screened out	Screened out	Screened out	Screened out

Conclusion and Next Steps

5.49 At the Screening stage, likely significant effects on European sites, either alone or in combination with other policies and proposals, were identified for plan policies:

- Policy 10: New Housing
- Policy 14: Loss of Housing
- Policy 16: Small Sites
- Policy 21: Protecting the local economy
- Policy 22: Promoting jobs and our local economy
- Policy 24: Industrial land
- Policy 26: Visitor economy
- Policy 49: Social and Community Infrastructure
- Policy 50: Education and Training

5.50 The findings of the Habitats Regulations Assessment screening determined that impacts from air pollution, recreation and water could result in a likely significant effect, as a result of in-combination effects, in relation to:

- Air pollution – Wimbledon Common Special Area of Conservation.
- Recreation – Wimbledon Common Special Area of Conservation
- Water Quantity – South West London Waterbodies Special Protection Area/Ramsar (Knight & Bessborough Reservoirs Site of Special Scientific Interest)

5.51 The Appropriate Assessment stage identified whether the above likely significant effects will, in light of mitigation and avoidance measures, result in adverse effects on integrity of the European sites either alone or in-combination with other plans or projects. The findings of the Appropriate Assessment are detailed below.

5.52 It can be concluded that no adverse effect on integrity will occur for the following European sites subject to the provision of safeguarding and mitigation measures as detailed in Chapter 5:

- Recreation – Wimbledon Common Special Area of Conservation

5.53 This is due to the targeted, on-going management works of the qualifying features within the Site, which is being undertaken by volunteers who are following guidance provided by Natural England as part of a Countryside Stewardship agreement. The aim is to restore these qualifying features to a favourable condition, maintain them, and protect them from threats such as recreational disturbance. Therefore these actions will ensure that no adverse effects on the integrity of the qualifying features will occur as a result of the Local Plan.

- Water Quantity – South West London Waterbodies Special Protection Area/Ramsar.

5.54 The Appropriate Assessment concluded no adverse effect on integrity as a result of water quantity in relation to the South West London Waterbodies Special Protection Area/Ramsar providing the following safeguards and mitigation measures are implemented:

- There is a commitment to the wording outlined within Policy 9: Water Resources and Infrastructure within the Plan that protects the existing water supply and infrastructure, and will ensure that development will not go ahead unless they can outline how any additional infrastructure/services required will be upgraded and funded for, to accommodate the proposed development. If this is not demonstrated, then planning permission will not be granted.

5.55 It could not be concluded that no adverse effect on integrity will occur for the following European site without the provision of additional information, safeguarding or mitigation measures as detailed in Chapter 5.

- Air Pollution – Wimbledon Common Special Area of Conservation

- The Appropriate Assessment determined that a conclusion of no adverse effects on the integrity of the Wimbledon Common Special Area of Conservation, either alone or in-combination could not be reached.
- To reach this conclusion, it is recommend that further traffic modelling is attained to inform the assessment. The survey data will need to demonstrate whether the proposed development will exceed a threshold of 1000 AADT and 200 AADT for HGV. This data will be required for the A219, A3 and A306.
- If the AADT thresholds are exceeded, then there will need to be further modelling and assessment to determine the actual effect on the qualifying features. If the AADT figures are not exceeded, then we can be confident that there would be no adverse effects on the qualifying features of the site.

5.56 The Habitats Regulations Assessment of the London Borough of Richmond upon Thames Publication Local Plan has been undertaken in accordance with currently available guidance and based on a precautionary approach as required under the Habitats Regulations. The findings of the screening stage have been explained in detail in Chapter 4 of this report. The majority of the potential impacts associated with development were able to be screened out at this stage; with the exception of air pollution.

5.57 Policies within the Local Plan which will result in new development are considered likely to contribute to an increase in traffic flow, and subsequently air pollution, either alone or in combination with development in neighbouring boroughs. However, an Appropriate Assessment has been carried out and has concluded that the London Borough of Richmond upon Thames Pre-Publication/Regulation 18 Local Plan may result in an adverse effect on the integrity of Wimbledon Common Special Area of Conservation in relation to increased air pollution from vehicle traffic. To determine the conclusion, further traffic survey information will be required to determine if the increase in traffic flow as a result of the Plan, will cause an adverse effect on the integrity of the European site. This survey information can be used to update the Regulation 19

Habitats Regulations Assessment of the London Borough of Richmond upon Thames Local Plan

5.58 Habitats Regulations Assessment is an iterative process and as such is expected to be updated in light of newly available evidence and comments from key consultees. This report needs to be shared with Natural England as the statutory consultee, and it is recommended that the report is shared with the Environment Agency as the regulatory authority in terms of water quantity and quality. They will be able to confirm whether the conclusions of the assessment are considered appropriate at this stage of plan-making.

LUC

November 2021

Appendix A

Map of the European Sites within 15km of the London Borough of Richmond Upon Thames

Figure A.1: Site Allocations within 15km of London Borough of Richmond upon Thames

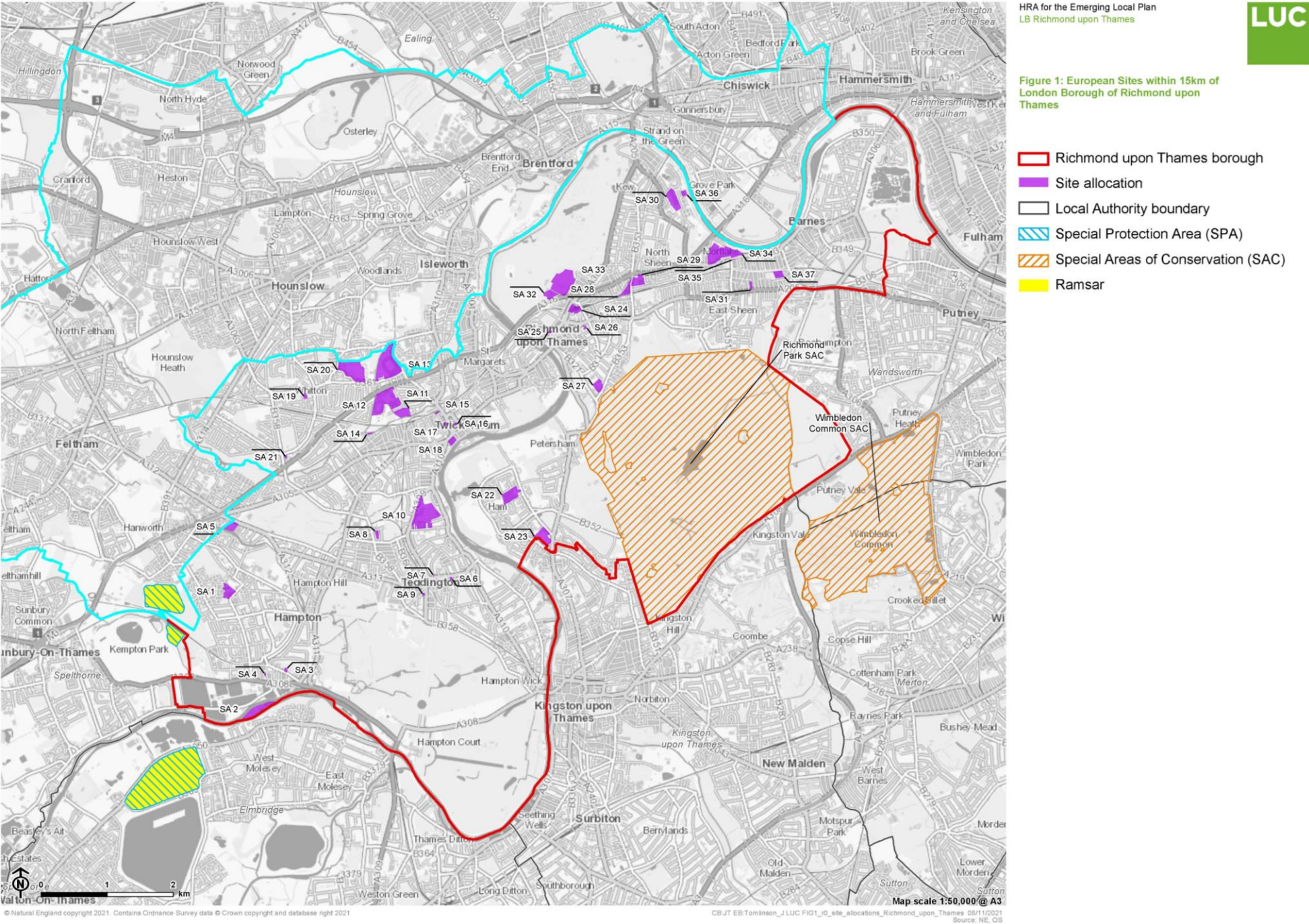
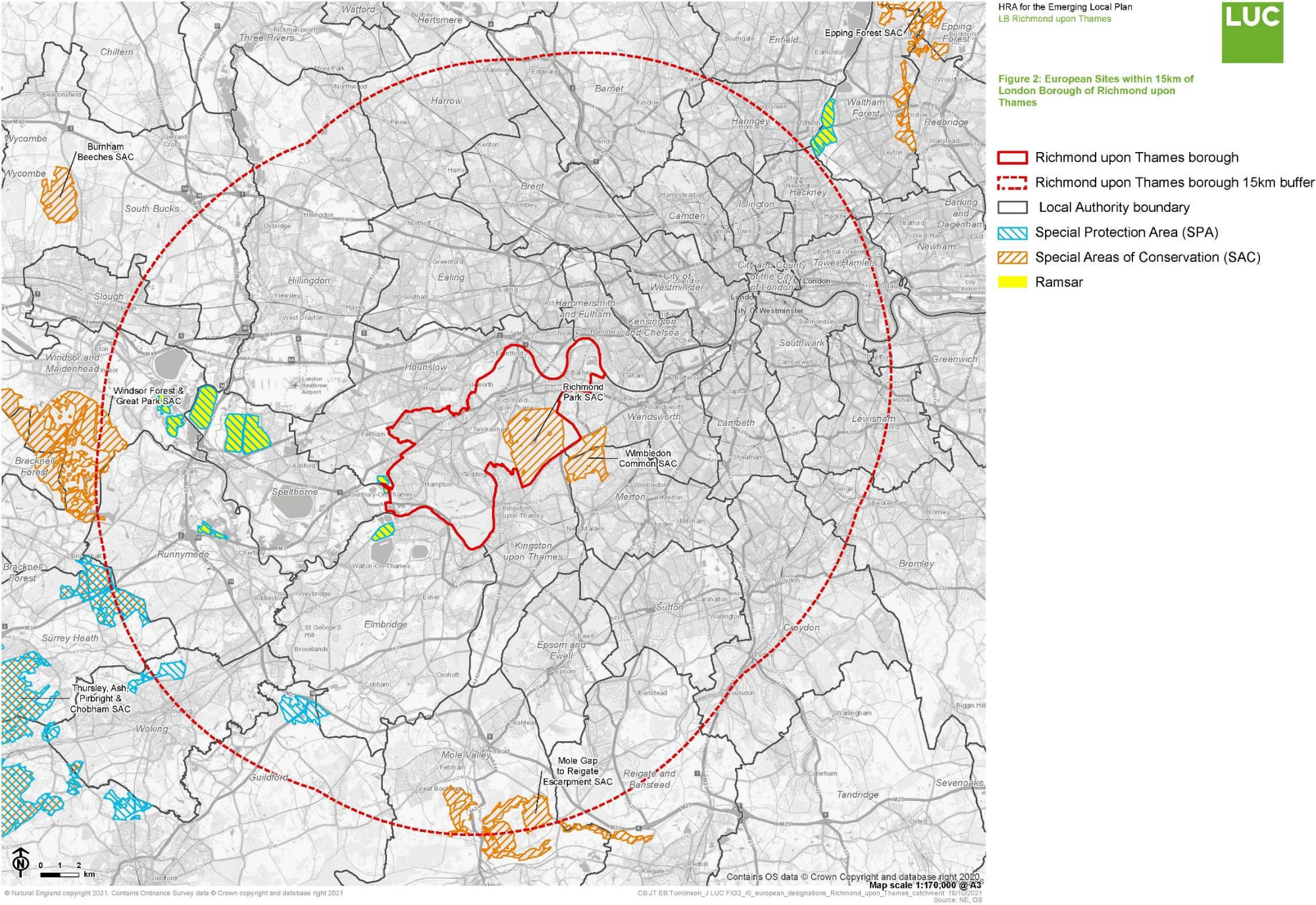


Figure A.2: European Designations within 15km of the London Borough of Richmond upon Thames

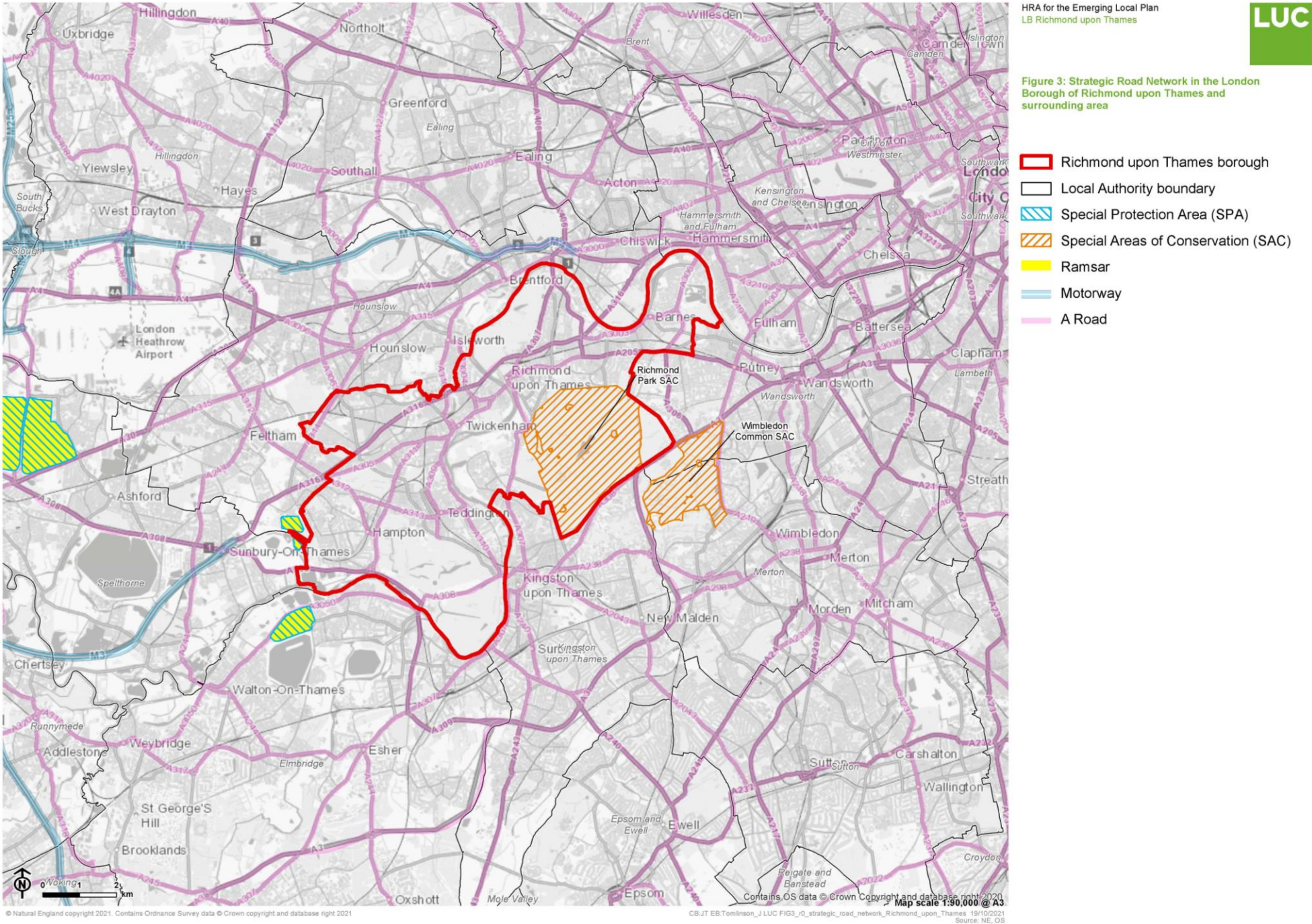


HRA for the Emerging Local Plan
LB Richmond upon Thames



Figure 2: European Sites within 15km of London Borough of Richmond upon Thames

Figure A.3: Strategic Road Network in the London Borough of Richmond upon Thames and surrounding area



Appendix B

Attributes of European Sites

This appendix contains information about the European sites scoped into the Habitats Regulations Assessment. Information about each site's area, the site descriptions, qualifying features and pressures and threats are drawn from Natural England's Site Improvement Plans (SIPs) and the Standard Data Forms or Ramsar Information Sheets available from the JNCC website. Site conservation objectives are drawn from Natural England's website and are only available for Special Areas of Conservations and Special Protection Areas.

Richmond Park Special Area of Conservation (846.68ha)

Qualifying Features **[See reference 42]**

Richmond Park has a large number of ancient trees with decaying timber. It is at the heart of the south London centre of distribution for stag beetle (*Lucanus cervus*), and is a Site of national importance for the conservation of the fauna of invertebrates associated with the decaying timber of ancient trees.

Annex II species that are a primary reason for selection of this Site:

- 1083 Stag beetle (*Lucanus cervus*)

Key vulnerabilities [See reference 43]

No current issues affecting the Natura 2000 feature have been identified. Despite this, the Richmond Park Management Plan should continue to be periodically reviewed to ensure the continuing availability of decaying wood habitat.

Conservation Objectives

Ensure that the integrity of the Site is maintained or restored as appropriate, and ensure that the Site contributes to achieving the Favourable Conservation Status of Stag beetle, by maintaining or restoring:

- The extent and distribution of the habitats of qualifying species.
- The structure and function of the habitats of qualifying species.
- The supporting processes on which the habitats of qualifying species rely.
- The populations of qualifying species, and,
- The distribution of qualifying species within the Site

Non-qualifying habitats and species upon which the Qualifying Habitats and/or species depend

1083 Stag beetle (*Lucanus cervus*)

Supporting habitats

- Decaying-wood habitat: Maintain an abundance and constant supply of ancient trees, standing dead trees, fallen trees, stumps and roots in a state of decay. In urban areas ensure larger native trees and man-made timber structures persist as a larval resource.

- Woodland habitat structure: Maintain a well-structured broadleaved woodland habitat, with sheltered, sunlit glades and rides containing stumps and other suitable decaying wood.

Supporting Processes

- Natural processes: Ensure the continuity of timber decay and nutrient recycling processes, in particular the continued provision of plentiful decaying stumps and roots.
- Conservation measures: Maintain the management measures (either within and/or outside the Site boundary as appropriate) which are necessary to maintain or restore the structure, functions and supporting processes associated with the stag beetle feature and/or its supporting habitats.

Wimbledon Common Special Area of Conservation (348.31ha)

Qualifying Features **[See reference 44]**

Wimbledon Common has a large number of old trees and much fallen decaying timber. It is at the heart of the south London centre of distribution for stag beetle (*Lucanus cervus*). The Site supports a number of other scarce invertebrate species associated with decaying timber.

Annex I habitats present as a qualifying feature, but not a primary reason for selection of this Site

- 4010 Northern Atlantic wet heaths with *Erica tetralix*
- 4030 European dry heaths

Annex II species that are a primary reason for selection of this Site:

- 1083 Stag beetle (*Lucanus cervus*)

Key vulnerabilities [See reference 45]

The Site is located in an urban area and therefore experiences air pollution and heavy recreational pressure. According to Natural England's Site Improvement Plans, measures should be implemented by Natural England to establish a Site Nitrogen Action Plan. Furthermore, Natural England and Wimbledon and Putney Common Conservators should implement measures to reduce visitor impact. Issues associated with habitat fragmentation and invasive species have also been identified. The Species Recovery Programme should address this, while an invasives response plan should be developed.

Conservation Objectives

Ensure that the integrity of the Site is maintained or restored as appropriate, and ensure that the Site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring:

- The extent and distribution of qualifying natural habitats (4010 Northern Atlantic wet heaths with *Erica tetralix* & 4030 European dry heaths) and habitats of qualifying species (Stag beetle).
- The structure and function (including typical species) of qualifying natural habitats.
- The structure and function of the habitats of qualifying species.
- The supporting processes on which qualifying natural habitats and the habitats of qualifying species rely.
- The populations of qualifying species, and
- The distribution of qualifying species within the Site.

Non-qualifying habitats and species upon which the Qualifying Habitats and/or species depend

For Stag beetle see Richmond Park Special Area of Conservation above.

H4030 European Dry Heaths Supporting habitats

Vegetation Composition

- Bracken cover: Maintain or restore a cover of dense bracken which is low, typically at <5%, across the H4030 feature.
- Vegetation community composition: Ensure the component vegetation communities of the H4030 feature are referable to and characterised by the following National Vegetation Classification type (s):
 - H1 *Calluna vulgaris* – *Festuca ovina* Heathland;
 - H2 *Calluna vulgaris* – *Ulex minor* heath (and as mosaics with acid grassland vegetation).
- Vegetation community transitions: Maintain or restore any areas of transition between the H4030 feature and other heathland associated habitats, such as humid heath, mires, acid grassland, scrub and woodland.
- Key structural, influential and distinctive species: Maintain or restore the abundance of the species listed below to enable each of them to be a viable component of the Annex 1 habitat: Heather (*Calluna vulgaris*), Bell heather (*Erica cinerea*), dwarf gorse (*Ulex minor*), pill sedge (*Carex pilulifera*), heath bedstraw (*Galium saxatile*), petty whin (*Genista anglica*), Hypochaeris radicata, tormentil *Potentilla erecta*), sheep's sorrel (*Rumex acetosella*, Mosses *Hypnum jutlandicum*, *Dicranum scoparium*, *Polytrichum juniperinum*).

Vegetation Structure

- Cover of gorse: Maintain or restore a cover of common gorse *Ulex europaeus* at <1-5% and a combined cover of *U.europaeus* and dwarf gorse *U.minor* at <20%, across the H4030 feature.

Appendix B Attributes of European Sites

- Tree and scrub cover: Maintain or restore the open character of the H4030 feature, with a typically scattered and low cover of trees and scrub <10% cover (excluding common gorse).
- Heather age structure: Maintain or restore a diverse age structure amongst the ericaceous shrubs typically found as part of the H4030 feature.
- Cover of dwarf shrubs: Maintain or restore an overall cover of dwarf shrub species which is typically between 75- 90% of the H4030 feature.

Extent and Distribution

- Extent of the feature within the Site: Restore the combined total extent of the H4030 and H4010 feature to 48.6 hectares, including its component habitat types and transitions to adjacent habitats.
- Spatial distribution within the Site: Maintain or restore the distribution and configuration of the H4030 feature, including where applicable its component vegetation types, across the Site.

Structure and Function

- Vegetation: undesirable species. Maintain or restore the frequency/cover of the following undesirable species to within acceptable levels and prevent changes to surface condition, soils, nutrient levels or hydrology which may encourage their spread: *Acaena* spp., *Rhododendron ponticum*, *Gaultheria shallon*, *Fallopia japonica*, *Cirsium arvense*, *Digitalis purpurea*, *Epilobium* spp. (excl. *E. palustre*), *Ranunculus repens*, *Senecio jacobaea*, *Rumex obtusifolius*, *Urtica dioica*.
- Functional connectivity with the wider landscape: Maintain or restore the overall extent, quality and function of any supporting features within the local landscape which provide a critical functional connection with the Site.
- Adaptation and resilience: Maintain or restore the H4030 feature's ability, and that of its supporting processes, to adapt or evolve to wider environmental change, either within or external to the Site.
- Soils, substrate and nutrient cycling: Maintain or restore the properties of the underlying soil types, including structure, bulk density, total carbon,

pH, soil nutrient status and fungal/bacterial ratio, to within typical values for the H4030 feature.

Supporting Processes

- Conservation measures: Maintain or restore the management measures (either within and/or outside the Site boundary as appropriate) which are necessary to maintain or restore the structure, functions and supporting processes associated with the H4030 feature.
- Air quality: Restore the concentrations and deposition of air pollutants to at or below the Site-relevant Critical Load or Level values given for this feature of the Site on the [Air Pollution Information System](#).

H4010 Northern Atlantic Wet Heaths with *Erica tetralix*

Extent and Distribution

- Extent of the feature within the Site: Restore the total extent of the H4010 and H4030 features to 48.6 hectares.
- Spatial distribution of the feature within the Site: Maintain the distribution and configuration of the H4010 feature, including where applicable its component vegetation types, across the Site.

Structure and Function (including its typical species)

- Vegetation community transitions: Maintain or restore any areas of transition between this and communities which form other heathland-associated habitats, such as dry and humid heaths, mires, acid grasslands, scrub and woodland.
- Vegetation community composition: Ensure the component vegetation communities of the H4010 feature are referable to and characterised by the following National Vegetation Classification type (s):
 - M16 *Erica tetralix* – *Sphagnum compactum* heathland
 - Mosaics with M25 *Molinia caerulea* – *Potentilla erecta* mire.

Appendix B Attributes of European Sites

- Vegetation structure: cover of dwarf shrubs. Maintain an overall cover of dwarf shrub species which is typically between 75-90%.
- Vegetation structure: heather age structure. Maintain a diverse age structure amongst the ericaceous shrubs typically found on the Site.
- Vegetation structure: cover of gorse: Maintain cover of common gorse at <10%.
- Vegetation structure: tree and shrub cover. Maintain the open character of the H4010 feature, with a typically scattered and low cover of trees and scrub (<10% cover).
- Vegetation composition: bracken cover. Restore a cover of dense bracken which is low, typically at <5%.
- Key structural, influential and Site distinctive species: Restore the abundance of the species listed below to enable each of them to be a viable component of the H4010 Annex 1 habitat: *Calluna vulgaris*, *Erica tetralix*, *Myrica gale*, *Salix repens*, *Ulex minor*, *Eleocharis spp.*, *Eriophorum angustifolium*, *Molinia caerulea*, *Trichophorum cespitosum*, *Anagallis tenella*, *Drosera spp.*, *Narthecium ossifragum*.
- Vegetation: undesirable species. Restore the frequency/cover of the following undesirable species to within acceptable levels and prevent changes in surface condition, soils, nutrient levels or hydrology which may encourage their spread: *Acaena spp.*, *Rhododendron ponticum*, *Gaultheria shallon*, *Fallopia japonica*, *Cirsium arvense*, *Digitalis purpurea*, *Epilobium spp. (excl. E. palustre)*, *Ranunculus repens*, *Senecio jacobaea*, *Rumex obtusifolius*, *Urtica dioica*.
- Functional connectivity with the wider landscape: Maintain the overall extent, quality and function of any supporting features within the local landscape which provide a critical functional connection with the Site.
- Adaptation and resilience: Maintain or restore the H4010 feature's ability, and that of its supporting processes, to adapt or evolve to wider environmental change, either within or external to the Site.

Supporting Processes

- Conservation measures: Maintain the management measures (either within and/or outside the Site boundary as appropriate) which are necessary to maintain or restore the structure, functions and supporting processes associated with the H4010 feature.
- Soils, substrate and nutrient cycling: Maintain the properties of the underlying soil types, including structure, bulk density, total carbon, pH, soil nutrient status and fungal:bacterial ratio, at within typical values for the H4010 habitat.
- Air quality: Restore the concentrations and deposition of air pollutants to at or below the Site-relevant Critical Load or Level values given for the H4010 feature of the Site on the [Air Pollution Information System](#).
- Hydrology: At a Site, unit and/or catchment level as necessary, maintain or restore the natural hydrological regime to provide the conditions necessary to sustain the H4010 feature within the Site.

South West London Waterbodies Special Protection Area (825.1ha)

Qualifying Features [See reference 46]

This Special Protection Area comprises several gravel pits reservoirs located in Staines, Greater London, where hundreds of migratory wintering Gadwall (*Anas strepera*) and Shoveler (*A.clypeata*) spend the winter on and around these waterbodies.

Designated for two bird species which the Site regularly supports over winter:

- A051(NB) Gadwall (*Anas strepera*)
- A056(NB) Northern shoveler (*Anas clypeata*)

Key vulnerabilities [See reference 47]

The qualifying features of this Site are vulnerable to disturbance from recreation and there is also an issue surrounding the potential future decommissioning of reservoirs once they are no longer required for the purposes of water supply, as well as the potential impacts of maintenance works [See reference 48]. There is a threat to distributions of the bird species, which should be monitored using data gained from bird recorders/watchers. Other threats/pressures include invasive species, specifically *Crassula helmsii* and Egyptian geese, fish stocking levels which should be secured appropriately and inappropriate weed control which should be clarified with owners and tenants.

Conservation Objectives

Ensure that the integrity of the Site is maintained or restored as appropriate, and ensure that the Site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring:

- The extent and distribution of the habitats of the qualifying features.
- The structure and function of the habitats of the qualifying features.
- The supporting processes on which the habitats of the qualifying features rely.
- The population of each of the qualifying features, and,
- The distribution of the qualifying features within the Site.

Non-qualifying habitats and species upon which the Qualifying Habitats and/or species depend

A051(NB) Gadwall (*Anas strepera*)

Supporting Habitat (both within and outside the Special Protection Area)

Extent and distribution

- Extent and distribution of supporting non-breeding habitat: Maintain the extent and distribution of suitable habitat (either within or outside the Site boundary) which supports Gadwall for all necessary stages of the non-breeding/wintering period (moulting, roosting, loafing, feeding) Estimated baseline habitat extents for the Special Protection Area as a whole are: open water: 699.2 ha grassland: 41 ha (although not all of this will be suitable for Gadwall).

Function/Supporting Process

- Water quality/quantity: Ensure water quality and quantity is maintained to a standard which provides the necessary conditions to support Gadwall during the non-breeding season.
- Conservation measures: Maintain management or other measures (whether within and/or outside the Site boundary as appropriate) necessary to maintain the structure, function and/or the supporting processes associated with non-breeding Gadwall and its supporting habitats.
- Air quality: Maintain the concentrations and deposition of air pollutants at or below the Site-relevant Critical Load or Level values given for the supporting habitats of this feature on the [Air Pollution Information System](#).
- Water depth: Maintain the current extent of available littoral zone (the shallow standing water capable of supporting submerged plant growth).
- Food availability within supporting habitat: Maintain a high cover/abundance of food plants preferred by Gadwall. Gadwall frequently forage on common and abundant macrophytes such as Elodea and Ceratophyllum, as well as filamentous green algae. A key aspect of the food source is that sufficient plant material persists in the water and is thus available to Gadwall through the winter. Gadwall will feed on charophytes (Chara, Tolypella, Nitella spp); these aquatic plants have been found in surveys at some Sites within the South-west London waterbodies, but they require good water quality with high clarity and low nutrient levels and are not thought to be as frequent in the diet at this Site as the commoner macrophytes.

Minimising disturbance

- Disturbance caused by human activity: Restrict the frequency, duration and/or intensity of disturbance affecting roosting, foraging, feeding, moulting and/or loafing birds so that the Gadwall feature is not significantly disturbed.

A056 Northern Shoveler (*Anas clypeata*)

Supporting Habitat (both within and outside the Special Protection Area)

Extent and Distribution

- Extent and distribution of non-breeding habitat: Maintain the extent and distribution of suitable habitat (either within or outside the Site boundary) which support Shoveler for all necessary stages of the non-breeding/wintering period (moulting, roosting, loafing and feeding). Estimated baseline habitat extents for the Special Protection Area as a whole are: Open water 699.2 ha Grassland: 41 ha (although not all of this will be suitable for Shoveler).

Function/Supporting Process

- Water quality/quantity: Ensure water quality and quantity is maintained to a standard which provides the necessary conditions to support nonbreeding Shoveler.
- Conservation measures: Maintain management or other measures (whether within and/or outside the Site boundary as appropriate) necessary to maintain the structure, function and/or the supporting processes associated with non-breeding Shoveler feature and its supporting habitats.
- Air quality: Maintain concentrations and deposition of air pollutants to at or below the Site-relevant Critical Load or Level values given for the supporting habitats of this feature on the [Air Pollution Information System](#).

- Water depth: Maintain the extent and availability of standing water at optimal depth, typically <0.3m deep [not applicable to the water supply reservoirs in the Special Protection Area].
- Connectivity with supporting habitats: Maintain the safe passage of Shoveler moving between roosting and feeding areas.
- Food availability within supporting habitat: Maintain a high cover/abundance of those food plants and invertebrate fauna preferred by Shoveler.

Disturbance

- Disturbance caused by human activity: Restrict the frequency, duration and/or intensity of disturbance affecting roosting, foraging, feeding, moulting and/or loafing birds so that the Shoveler feature is not significantly disturbed.

South West London Waterbodies RAMSAR (828ha)

Qualifying Features **[See reference 49]**

The waterbodies support internationally important populations of Gadwall (*Anas strepera*) and Shoveler (*A.clypeata*).

Key vulnerabilities **[See reference 50]**

- See South West London Waterbodies Special Protection Area.

Conservation Objectives

- See South West London Waterbodies Special Protection Area.

Non-qualifying habitats and species upon which the Qualifying Habitats and/or species depend

- See South West London Waterbodies Special Protection Area.

Thames Basin Heaths Special Protection Area (8274.72ha)

Qualifying Features [See reference 51]

This is an extensive complex made up of lowland heathland, acid grassland, mire and commercial conifer plantations.

Thames Basin Heaths Special Protection Area qualifying features include:

- A224(B) European nightjar (*Caprimulgus europaeus*),
- A246(B) Woodlark (*Lullula arborea*), and,
- A302(B) Dartford warbler (*Sylvia undata*).

Key vulnerabilities [See reference 52]

Threats exist from increased public access/ disturbance and air pollution. A management strategy including for public access and atmospheric nitrogen deposition should be agreed and implemented. Other pressures/threats include undergrazing which threatens habitats and the bird species that depend on them, hydrological changes to the heathland and depression peat, forestry and woodland management, inappropriate scrub control, encroachment of invasive species and wildfire arson. An abundance of habitat mitigation and management strategies will need to be agreed and implemented as well as hydrological investigations.

Conservation Objectives

Ensure that the integrity of the Site is maintained or restored as appropriate, and ensure that the Site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring:

- The extent and distribution of the habitats of the qualifying features.
- The structure and function of the habitats of the qualifying features.
- The supporting processes on which the habitats of the qualifying features rely.
- The population of each of the qualifying features, and,
- The distribution of the qualifying features within the Site

Non-qualifying habitats and species upon which the Qualifying Habitats and/or species depend

A224(B) European Nightjar (*Caprimulgus europaeus*)

Supporting Habitat (both within and outside the Special Protection Area)

Function/Supporting Process

- Conservation measures: Maintain management or other measures (whether within and/or outside the Site boundary as appropriate) necessary to maintain or restore the structure, function and/or the supporting processes associated with Nightjar and its supporting habitats.
- Air quality: Restore as necessary the concentrations and deposition of air pollutants to at or below the Site-relevant Critical Load or Level values given for this feature of the Site on the [Air Pollution Information System](#).
- Food availability: Maintain or restore the distribution, abundance and availability of key prey items (e.g. moths, beetles) at prey sizes preferred by Nightjar.

Appendix B Attributes of European Sites

- Connectivity with supporting habitats: Maintain or restore the safe passage of birds moving between nesting and feeding areas

Extent and Distribution

- Extent and distribution of supporting habitat for the breeding season: Maintain the extent, distribution and availability of suitable breeding habitat which supports nightjar for all necessary stages of its breeding cycle (courtship, nesting, feeding and roosting).

Disturbance

- Disturbance caused by human activity: Restrict and reduce the frequency, duration and/or intensity of disturbance affecting nesting, roosting and/or foraging birds so that the nightjar feature is not significantly disturbed

Structure

- Landscape: Maintain or restore the amount and continuity of open and unobstructed patches within nesting and foraging areas, including areas of clear-fell, windfall, wide tracks, open spaces within forests and heath
- Predation: Reduce or restrict predation and disturbance caused by native and non-native predators.

Supporting Habitat (within the Special Protection Area)

Structure

- Vegetation characteristics: Maintain or restore the mix of vegetation (optimal conditions normally with vegetation mostly of 20-60 cm with frequent bare patches of >2 m², 10-20% bare ground and <50% tree/scrub cover overall; trees <2m in height) throughout nesting areas.

A246(B) Woodlark (*Lullula aborea*)

Supporting Habitat (both within and outside the Special Protection Area)

Function/Supporting Process

- Conservation measures: Maintain or restore management or other measures (whether within and/or outside the Site boundary as appropriate) necessary to maintain or restore the structure, function and/or the supporting processes associated with woodlark and its supporting habitats.
- Air quality: Maintain or restore as necessary concentrations and deposition of air pollutants to at or below the Site-relevant Critical Load or Level values given for this feature of the Site on the [Air Pollution Information System](#).
- Food availability: Maintain or restore the distribution, abundance and availability of key prey items (e.g. spiders, weevils, caterpillars) at prey sizes preferred by Woodlark.

Extent and Distribution

- Extent and distribution of supporting habitat for the breeding season: Maintain or restore the extent, distribution and availability of suitable breeding habitat which supports woodlark for all necessary stages of its breeding cycle (courtship, nesting, feeding).

Disturbance

- Disturbance caused by human activity: Restrict and reduce the frequency, duration and/or intensity of disturbance affecting nesting, foraging or feeding birds so that the Woodlark feature is not significantly disturbed.

Predation

- Reduce or restrict predation and disturbance caused by native and non-native predators.

Structure

- Landscape: Maintain or restore open and unobstructed terrain, typically within at least 0.2 km of nesting areas, with no increases in tall (>0.2 m) vegetation cover to >50% of the Site overall.

- Vegetation characteristics: Within nesting and feeding areas, maintain or restore ground vegetation which is predominantly short (<5cm) or medium (10-20cm) in height, with frequent patches of bare or sparsely-vegetated ground and scattered clumps of shrubs and trees.

A302(B) Dartford Warbler (*Sylvia undata*)

Supporting Habitat (both within and outside the Special Protection Area)

Function/Supporting Process

- Conservation measures: Maintain or restore management or other measures (whether within and/or outside the Site boundary as appropriate) necessary to maintain or restore the structure, function and/or the supporting processes associated with the Dartford warbler population and its supporting habitats.
- Air quality: Maintain or restore as necessary concentrations and deposition of air pollutants to at or below the Site-relevant Critical Load or Level values given for this feature of the Site on the [Air Pollution Information System](#).
- Food availability: Maintain or restore the distribution, abundance and availability of key prey items (e.g. beetles, spiders, caterpillars, bugs) at prey sizes preferred by Dartford Warbler.

Predation

- Predation: Reduce or restrict predation and disturbance caused by native and non-native predators.

Extent and Distribution

- Extent and distribution of supporting habitat for the breeding season: Maintain or restore the extent, distribution and availability of suitable habitat which supports Dartford warbler for all necessary stages of its breeding cycle (courtship, nesting, feeding).

Structure

- Vegetation characteristics: Maintain or restore an optimal mix of vegetation (>50% cover of heather and/or gorse, <25 trees/ha and of 0.5-3 m height) in nesting areas with areas of structurally diverse vegetation.
- Landscape: Maintain or restore the connectivity of structurally diverse heath and patches of dense gorse across the network of Sites which comprise the Special Protection Area.

Disturbance

- Disturbance caused by human activity: Restrict or reduce the frequency, duration and/or intensity of disturbance affecting nesting, foraging or feeding birds so that the Dartford Warbler feature is not significantly disturbed.

Thursley, Ash, Pirbright & Chobham Special Area of Conservation (5138ha)

Qualifying Features **[See reference 53]**

Thursley, Ash, Pirbright and Chobham Special Area of Conservation is an extensive complex of heaths in the south east of England with extensive areas of wet and dry heath, acid mire and bog pools.

Annex I habitats that are primary reason for section of this Site include:

- H7150 Depressions on peat substrates of the Rhynchosporion,
- H4030 European dry heaths,
- H4010 Northern Atlantic wet heaths with *Erica tetralix*, and,
- Wet heathland with cross-leaved heath.

Key vulnerabilities [See reference 54]

Threats exist from increased public access/ disturbance and air pollution. A management strategy including for public access and atmospheric nitrogen deposition should be agreed and implemented. Other pressures/threats include undergrazing which threatens habitats and the bird species that depend on them, hydrological changes to the heathland and depression peat, forestry and woodland management, inappropriate scrub control, encroachment of invasive species and wildfire arson. An abundance of habitat mitigation and management strategies will need to be agreed and implemented as well as hydrological investigations.

Conservation Objectives

Ensure that the integrity of the Site is maintained or restored as appropriate, and ensure that the Site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring;

- The extent and distribution of qualifying natural habitats.
- The structure and function (including typical species) of qualifying natural habitats, and,
- The supporting processes on which qualifying natural habitats rely.

Non-qualifying habitats and species upon which the Qualifying Habitats and/or species depend

H7150 Depressions of peat substrates of the Rhynchosporion

Extent and Distribution of the Feature

- Extent of the feature within the Site: Maintain the total extent of the H7150 feature at approximately 35.3 hectares.

Appendix B Attributes of European Sites

- Spatial distribution of the feature within the Site: Maintain the distribution and configuration of the H7150 feature, including where applicable its component vegetation types, across the Site.

Structure and Function (including its typical species)

- Vegetation community composition: Ensure the component vegetation communities of the H7150 feature are referable to and characterised by the following National Vegetation Classification types:
 - M21 *Narthecium ossifragum*- *Sphagnum papillosum* valley mire
 - M14 *Schoenus nigricans*- *Narthecium ossifragum* mire
 - M1 *Sphagnum auriculatum* bog pool
 - M2 *Sphagnum cuspidatum* bog pool
 - M6 *Carex echinata* – *Sphagnum recurvum* mire
- Key structural, influential and distinctive species: Maintain the abundance of the species listed below to enable each of them to be a viable component of the H7150 habitat:
 - Flora; Heather (*Calluna vulgaris*), crossleaved heath (*Erica tetralix*), purple moor-grass (*Molinia caerulea*), common cotton-grass (*Eriophorum angustifolium*), bog asphodel (*Narthecium ossifragum*), white beak-sedge (*Rhynchospora alba*), meadow thistle (*Cirsium dissectum*), roundleaved sundew (*Drosera rotundifolia*), intermediate sundew (*D. intermedia*), bog myrtle (*Myrica gale*), cranberry (*Vaccinium oxycoccos*), royal fern (*Osmunda regalis*), black bog-rush (*Schoenus nigricans*), lesser bladderwort (*Utricularia minor*).
 - Assemblage of mosses: *Calypogeia sphagnicola*, *Cephalozia macrostachya*, *Sphagnum auriculatum*, *S. cuspidatum*, *S. capillifolium*, *S. papillosum*, *S. magellanicum*, *S. tenellum*.
 - Fauna; Raft spider (*Dolomedes fimbriatus*), small red damselfly (*Ceragrion tenellum*), curlew (*Numenius arquata*).
 - Assemblage of reptiles including smooth snake (*Coronella austriaca*).

Appendix B Attributes of European Sites

- Invasive, non-native and/or introduced species: Ensure invasive, non-native and introduced non-native species are either rare or absent, but if present are causing minimal damage to the H7150 feature.
- Presence/cover of woody species: Maintain (or restore where habitats are degraded or neglected) a very low cover of scrub or trees (<1% of the area of any single stand).
- Exposed substrate: Maintain (or restore where habitats are degraded or suffering excessive disturbance) a low cover of exposed substrate of between 1-10% across the H7150 feature.
- Hydrology
 - At a Site, unit and/or catchment level, maintain (or restore where habitats are suffering from effects of drainage) natural hydrological processes to provide the conditions necessary to sustain the H7150 feature within the Site.
 - Maintain (or restore where water supply has been modified) a high piezometric head and permanently high water table (allowing for natural seasonal fluctuations).
- Water chemistry: Maintain (or restore where habitats are suffering from changes in water flow or chemistry) the surface water and groundwater supporting the hydrology of the bog at a low nutrient status and within natural variation of pH levels.
- Adaptation and resilience: Maintain (or restore where the resilience of the feature is degraded) the H7150 feature's ability, and that of its supporting processes, to adapt or evolve to wider environmental change, either within or external to the Site.
- Supporting off-Site habitat: Maintain the extent, quality and spatial configuration of land or habitat surrounding or adjacent to the Site which is known to support the H7150 feature.

Supporting Processes (on which the feature relies)

- Air quality: Restore the concentrations and deposition of air pollutants to below the Site-relevant Critical Load or Level values given for this feature of the Site on the [Air Pollution Information System](#)).
- Conservation measures: Maintain (or restore where appropriate) the management measures (either within and/or outside the Site boundary as appropriate) which are necessary to maintain or restore the structure, functions and supporting processes associated with the H7150 feature.

H4030 European Dry Heaths

Extent and Distribution of the Feature

- Extent of the feature within the Site: Maintain the total extent of the H4030 feature to baseline value of approximately 1830 hectares.
- Spatial distribution of the feature within the Site: Maintain the distribution and configuration of the H4030 feature, including where applicable its component vegetation types, across the Site.

Structure and Function (including its typical species)

- Vegetation community composition: Ensure the component vegetation communities of the H4030 feature are referable to and characterised by the following National Vegetation Classification type(s):
 - *Calluna vulgaris*-*Ulex minor* heath H2,
 - *Ulex minor*-*Agrostis curtisii* heath H3, with transitions to acid grasslands including *Festuca ovina*-*Agrostis capillaris*-*Rumex acetosella* grassland U1,
 - *Deschampsia flexuosa* grassland U2, *Agrostis curitsii* grassland U3 and *Festuca ovina*-*Agrostis capillaris*-*Galium saxatile* grassland U4.
- Vegetation community transitions: Maintain (or restore where habitats are degraded) areas of transition between this and communities which form other heathland-associated habitats, such as 'humid' heath, wet heath, mire, acid grassland, scrub and woodland.

Appendix B Attributes of European Sites

- Vegetation structure: cover of dwarf shrubs. Maintain (or restore where habitats are degraded or neglected) an overall cover of dwarf shrub species which is typically between 25-90% (except in areas of acid grassland where grasses are naturally dominant).
- Vegetation composition: bracken cover. Maintain (or restore where habitats are degraded or neglected) a cover of dense bracken which is low, typically at <5%.
- Vegetation: undesirable species. Maintain the frequency/cover of the following undesirable species to within acceptable levels and prevent changes in surface condition, soils, nutrient levels or hydrology which may encourage their spread: Piri-pir bur (*Acaena* spp.), Rhododendron (*Rhododendron ponticum*), Gaultheria (*Gaultheria shallon*), Japanese knotweed (*Fallopia japonica*), creeping thistle (*Cirsium arvense*), foxglove (*Digitalis purpurea*), willowherb (*Epilobium* spp.), creeping buttercup (*Ranunculus repens*), ragwort (*Senecio jacobaea*), dock (*Rumex obtusifolius*), nettle (*Urtica dioica*).
- Key structural, influential and distinctive species: Maintain (or restore where habitats are degraded) the abundance of the 'typical' species listed below to enable each of them to be a viable component of the H4030 Annex 1 habitat:
 - Higher plants: Heather (*Calluna vulgaris*), bell heather (*Erica cinerea*), dwarf gorse (*Ulex minor*), bilberry (*Vaccinium myrtillus*), petty whin (*Genista anglica*), sand sedge (*Carex arenaria*).
 - Assemblage of mosses; *Hypnum jutlandicum*, *Dicranum scoparium*, *Polytrichum juniperinum*.
 - Assemblage of lichens; *Cladonia floerkeana*, *C. fimbriata*, *C. furcata*, *C. portentosa*,
 - Fauna: Assemblage of native reptiles including smooth snake (*Coronella austriaca*), and sand lizard (*L. agilis*), Silver-studded blue (*Plebejus argus*), heath tiger-beetle (*Cicindela sylvatica*), mottled bee fly (*Thyridanthrax fenestratus*), heath grasper (*Haplodrassus dalmatensis*).

Appendix B Attributes of European Sites

- Functional connectivity with the wider landscape: Maintain (or restore where habitats are fragmented or isolated) the overall extent, quality and function of any supporting features within the local landscape which provide a critical functional connection with the Site, such as critical habitat 'corridors' and habitat patches.
- Adaptation and resilience: Maintain (or restore where the resilience of the feature is degraded) the H4030 feature's ability, and that of its supporting processes, to adapt or evolve to wider environmental change, either within or external to the Site.
- Soils, substrate and nutrient cycling. Maintain the properties of the underlying soil types, including structure, bulk density, total carbon, pH, soil nutrient status and fungal:bacterial ratio, to within typical values for the h4030 feature.

Vegetation structure

- Cover of gorse: Maintain cover of all gorse species at or below 25%, in each continuous block of dry heath.
- Tree cover: Maintain (or restore where habitats are neglected) the open character of the H4030 feature, with a scattered cover of trees and scrub at or below 10% cover in each continuous block of dry heath.
- Heather age structure: Maintain (or restore where habitats are degraded or neglected) a diverse age structure amongst the ericaceous shrubs typically found on the Site.

Supporting Processes (on which the feature relies)

- Conservation measures: Maintain (or restore where Sites are neglected) the management measures (either within and/or outside the Site boundary as appropriate) which are necessary to maintain or restore the structure, functions and supporting processes associated with the H4030 feature.
- Air quality: Maintain the concentrations and deposition of air pollutants to at or below the Site-relevant Critical Load or Level values given for this feature of the Site on the [Air Pollution Information System](#).

H4010 Northern Atlantic Wet Heaths with *Erica Tetralix*

Extent and Distribution of the Feature

- Extent of the feature within the Site: Maintain the total extent of the H4010 feature to baseline extent of approximately 321 hectares.
- Spatial distribution of the feature within the Site: Maintain (or restore where habitats are degraded) the distribution and configuration of H4010 wet heath feature, including where applicable its component vegetation types, across the Site.

Structure and Function (including its typical species)

- Vegetation community transitions: Maintain (or restore where habitats are degraded) any areas of transition between this and communities which form other heathland-associated habitats, such as dry and humid heath, mire, acid grassland, scrub and woodland.
- Vegetation community composition: Ensure the component vegetation communities of the H4010 feature are referable to and characterised by the following National Vegetation Classification type (s):
 - M16 *Erica tetralix* wet heath and/or as mosaics with wet grassland types such as M25 *Molinia caerulea*-*Potentilla erecta* mire.
- Vegetation: undesirable species: Maintain or restore where habitats are degraded) the frequency/cover of the following undesirable species to within acceptable levels and prevent changes in surface condition, soils, nutrient levels or hydrology which may encourage their spread:
Rhododendron (*Rhododendron ponticum*), gaultheria (*Gaultheria shallon*), Japanese knotweed (*Fallopia japonica*), creeping thistle (*Cirsium arvense*), foxglove (*Digitalis purpurea*), willowherb (*Epilobium* spp.) (excl. *E. palustre*), floating sweet-grass (*Glyceria fluitans*), reed (*Phragmites australis*), creeping buttercup (*Ranunculus repens*), ragwort (*Senecio jacobaea*), dock (*Rumex obtusifolius*), nettle (*Urtica dioica*), soft rush (*Juncus effusus*).
- Functional connectivity with wider landscape: Maintain (or restore where habitats are fragmented or isolated) the overall extent, quality and function

of any supporting features within the local landscape which provide a critical functional connection with the Site.

- Adaptation and resilience: Maintain or restore the H4010 feature's ability, and that of its supporting processes, to adapt or evolve to wider environmental change, either within or external to the Site.
- Key structural, influential and Site-distinctive species: Maintain (or restore where habitats are degraded) the abundance of the 'typical' species listed below to enable each of them to be a viable component of the H4010 Annex 1 habitat:
 - Higher plants; Heather (*Calluna vulgaris*), bell heather (*Erica tetralix*), creeping willow (*Salix repens*), dwarf gorse (*Ulex minor*), sedges (*Carex* spp.) common cotton-grass (*Eriophorum angustifolium*), purple moor-grass (*Molinia caerulea*), marsh clubmoss (*Lycopodiella inundatum*), brown beak-sedge (*Rhynchospora fusca*), deer grass (*Trichophorum cespitosum*), round-leaved sundew (*Drosera rotundifolia*), intermediate sundew (*D. intermedia*), marsh gentian (*Gentiana pneumonanthe*).
 - Assemblage of mosses: *Aulacomnium palustre*, *Sphagnum capillifolium*, *S. compactum*.
 - Fauna; assemblage of native reptiles including smooth snake (*Coronella austriaca*).
- Vegetation structure
 - Cover of dwarf shrubs: Maintain (or restore where habitats are degraded) an overall cover of dwarf shrub species which is typically between 25- 75%
 - Cover of gorse: Maintain a low cover of common gorse across the H4010 feature, typically at <10%.
 - Tree cover: Maintain (or restore where habitats are neglected) the open character of the feature, with a scattered cover of trees and scrub at or below 10% cover in each continuous block of wet heath.

Supporting Processes (on which the feature relies)

- Conservation measures: Maintain or restore the management measures (either within and/or outside the Site boundary as appropriate) which are necessary to maintain or restore the structure, functions and supporting processes associated with the H4010 feature.
- Soils, substrate and nutrient cycling: Maintain or restore the properties of the underlying soil types, including structure, bulk density, total carbon, pH, soil nutrient status and fungal:bacterial ratio, to within typical values for the H4010 habitat.
- Air quality: Maintain or restore as necessary, the concentrations and deposition of air pollutants to at or below the Site-relevant Critical Load or Level values given for the H4010 feature of the Site on the [Air Pollution Information System](#).
- Water quality: Where the H4010 feature is dependent on surface water and/or groundwater, maintain or restore water quality and quantity to a standard which provides the necessary conditions to support the feature, such as the permanently high water table, very low nutrient status, low base-status and low pH.
- Hydrology: At a Site unit and/or catchment level as necessary, maintain or restore the natural hydrological regime to provide the conditions necessary to sustain the H4010 feature.

Mole Gap to Reigate Escarpment Special Area of Conservation (887.68ha)

Qualifying Features **[See reference 55]**

This Site contains the largest part of the North Downs in Surrey, which includes a range of outstanding wildlife habitats such as broad-leaved woodland, chalk grassland, chalk scrub and heathland. These form a landscape scale mosaic which support a wide diversity of characteristic plants and animals, of which many are local or rare; especially orchid species, great crested newts, insect species and Bechsteins bats.

Annex I habitats that are primary reason for section of this Site include:

- H4030. European dry heaths,
- H5110. Stable xerothermophilous formations with *Buxus sempervirens* on rock slopes (*Berberidion* p.p.); Natural box scrub,
- H6210. Semi-natural dry grasslands and scrubland facies: on calcareous substrates (*FestucoBrometalia*) (important orchid Sites); Dry grasslands and scrublands on chalk or limestone (important orchid Sites).
 - This is considered a priority natural habitat for conservation at a European Scale and subject to special provisions in the Habitat Regulations.
- H9130. *Asperulo-Fagetum* beech forests; Beech forests on neutral to rich soils.
- H91J0. *Taxus baccata* woods of the British Isles; Yew-dominated woodland.
 - This is considered a priority natural habitat for conservation at a European Scale and subject to special provisions in the Habitat Regulations.

Annex II species present as a qualifying feature, but not a primary reason for Site selection include:

- S1166. *Triturus cristatus*; Great crested newt.
- S1323. *Myotis bechsteinii*; Bechstein's bat.

Key vulnerabilities [See reference 56]

Threats include disease from natural box scrub, change in land management resulting in potential mismanagement of qualifying habitat features, increased public disturbance and air pollution from atmospheric nitrogen deposition. Pressures also exist from inappropriate scrub control affecting the habitats.

Conservation Objectives

Ensure that the integrity of the Site is maintained or restored as appropriate, and ensure that the Site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring:

- The extent and distribution of qualifying natural habitats and habitats of qualifying species.
- The structure and function (including typical species) of qualifying natural habitats.
- The structure and function of the habitats of qualifying species.
- The supporting processes on which qualifying natural habitats and the habitats of qualifying species rely.
- The populations of qualifying species, and
- The distribution of qualifying species within the Site.

Non-qualifying habitats and species upon which the Qualifying Habitats and/or species depend

H4030 European Dry Heaths

Extent and Distribution of the Feature

- Extent of the feature within the Site: Maintain the total extent of the H4030 feature to baseline value of approximately 83 hectares.
- Spatial distribution of the feature within the Site: Maintain the distribution and configuration of the H4030 feature, including where applicable its component vegetation types, across the Site.

Structure and Function (including its typical species)

Appendix B Attributes of European Sites

- Vegetation community composition: Ensure the component vegetation communities of the H4030 feature are referable to and characterised by the following National Vegetation Classification type(s):
 - H2 *Calluna vulgaris*-*Ulex minor* heath
 - Mosaics of H2 and acid grassland of type U1 *Festuca ovina*-*Agrostis capillaris*-*Rumex acetosella* grassland
- Vegetation community transitions: Maintain (or restore where habitats are degraded) areas of transition between this and communities which form other heathland-associated habitats, such as acid grassland, scrub and woodland.
- Vegetation structure: cover of dwarf shrubs. Maintain (or restore where habitats are degraded or neglected) an overall cover of dwarf shrub species which is typically between 25-90%.
- Vegetation composition: bracken cover. Maintain (or restore where habitats are degraded or neglected) a cover of dense bracken which is low, typically at <10%.
- Vegetation: undesirable species. Restore the frequency/cover of the following undesirable species to <1% and prevent changes in surface condition, soils, nutrient levels or hydrology which may encourage their spread: Birch (*Betula* spp), Oak (*Quercus* spp), Sweet chestnut (*Castanea sativa*), Bramble (*Rubus fruticosus*), Rhododendron ponticum, Gaultheria shallon, ragwort, nettle, thistles and other injurious weeds, negative indicators such as foxglove (*Digitalis purpurea*), rosebay willowherb (*Chamerion angustifolium*) and coarse grasses such as cocksfoot (*Dactylis glomerata*).
- Key structural, influential and distinctive species: Maintain (or restore where habitats are degraded) the abundance of the 'typical' species listed below to enable each of them to be a viable component of the H4030 Annex 1 habitat:
 - Constant and preferential plant species of the H2 *Calluna vulgaris* – *Ulex minor* heath and U1 *Festuca ovina*-*Agrostis capillaris*-*Rumex acetosella* grassland NVC vegetation types at this Special Area of Conservation.

Appendix B Attributes of European Sites

- Functional connectivity with the wider landscape: Maintain (or restore where habitats are fragmented or isolated) the overall extent, quality and function of any supporting features within the local landscape which provide a critical functional connection with the Site, such as critical habitat 'corridors' and habitat patches.
- Adaptation and resilience: Maintain (or restore where the resilience of the feature is degraded) the H4030 feature's ability, and that of its supporting processes, to adapt or evolve to wider environmental change, either within or external to the Site.
- Soils, substrate and nutrient cycling. Maintain the properties of the underlying soil types, including structure, bulk density, total carbon, pH, soil nutrient status and fungal:bacterial ratio, to within typical values for the h4030 feature.
- Vegetation structure
 - Cover of gorse: Maintain or restore as necessary cover of common gorse (*Ulex europaeus*) at <10%.
 - Tree cover: Maintain (or restore where habitats are neglected) the open character of the H4030 feature, with a typically scattered and low cover of trees and scrub (<20% cover).
 - Heather age structure: Maintain (or restore where habitats are degraded or neglected) a diverse age structure of heather and dwarf gorse.

Supporting Processes (on which the feature relies)

- Conservation measures: Maintain (or restore where Sites are neglected) the management measures (either within and/or outside the Site boundary as appropriate) which are necessary to maintain or restore the structure, functions and supporting processes associated with the H4030 feature.
- Air quality: Maintain or restore as necessary the concentrations and deposition of air pollutants to at or below the Site-relevant Critical Load or Level values given for this feature of the Site on the [Air Pollution Information System](#).

- Water quality and quantity: Where the feature is dependent on surface water and/or groundwater flow, maintain water quality and quantity to a standard which provides the necessary conditions to support the feature, i.e. low nutrient status, pH <7.

H5110. Stable xerothermophilous formations with *Buxus sempervirens* on rock slopes (Berberidion p.p.); Natural box scrub

Extent and Distribution of the Feature

- Extent of the feature within the Site: Maintain the total extent of the feature to at least a baseline value of 8.4 hectares.
- Spatial distribution of the feature within the Site: Maintain the distribution and configuration of the feature, including where applicable its component vegetation types, across the Site.

Structure and Function (including its typical species)

- Vegetation structure - age class: Maintain a population of Box (*Buxus sempervirens*) comprising plants at different life stages from seedlings to mature shrubs.
- Vegetation community composition: Ensure the component vegetation communities of the feature are typical of the habitat type.
- Resilience of the feature to plant disease: Maintain the resilience of the feature to resist diseases such as box blight.
- Regeneration potential: Maintain the Site's capacity for natural tree and shrub regeneration.
- Key structural, influential and/or distinctive species: Maintain the abundance of the typical species listed below to enable each of them to be a viable component of the Annex 1 habitat: Box (*Buxus sempervirens*), Hawthorn (*Crataegus monogyna*), Wild privet (*Ligustrum vulgare*), Yew (*Taxus baccata*), Beech (*Fagus sylvatica*), Common whitebeam (*Sorbus aria*).

Appendix B Attributes of European Sites

- Soils, substrate and nutrient cycling: Maintain the properties of the underlying soil types, including structure, bulk density, total carbon, pH, soil nutrient status and fungal: bacterial ratio, to within typical values for the habitat.

Supporting Processes (on which the features relies)

- Functional connectivity with wider landscape: Maintain the overall extent, quality and function of any supporting features within the local landscape which provide a critical functional connection with the Site.
- Air quality: Restore as necessary the concentrations and deposition of air pollutants to at or below the Site-relevant Critical Load or Level values given for this feature of the Site on the [Air Pollution Information System](#).
- Illumination: Ensure artificial light is maintained to a level which is unlikely to affect natural phenological cycles and processes to the detriment of the feature and its typical species at this Site.

H6210. Semi-natural dry grasslands and scrubland facies: on calcareous substrates (Festuco-Brometalia) (important orchid Sites); Dry grasslands and scrublands on chalk or limestone (important orchid Sites)

This is considered a priority natural habitat for conservation at a European Scale and subject to special provisions in the Habitat Regulations.

Extent and Distribution of the Feature

- Extent of the feature within the Site: Maintain or restore as necessary the total extent of the feature to at least a baseline value of 114.7 hectares.
- Spatial distribution of the feature within the Site: Maintain or restore as necessary the distribution and configuration of the feature, including where applicable its component vegetation types, across the Site.

Structure and Function (including its typical species)

Appendix B Attributes of European Sites

- Vegetation community composition: Ensure the component vegetation communities of the feature are referable to and characterised by the following National Vegetation Classification types:
 - CG2 *Festuca ovina* – *Avenula pratensis* grassland
 - CG3 *Bromus erectus* grassland
 - CG4 *Brachypodium pinnatum* grassland
 - CG7 *Festuca ovina*-*Hieracium pilosella*-*Thymus* spp grassland.
- Vegetation: proportion of herbs (including *Carex* spp). Maintain or restore where necessary the proportion of herbaceous species to grasses within the range 40%-90%.
- Key structural, influential and/or distinctive species: Maintain or restore where necessary the abundance of the typical species listed below to enable each of them to be a viable component of the Annex 1 habitat:
 - Constant and preferential plant species of the CG2 *Festuca ovina* – *Avenula pratensis* grassland, CG3 *Bromus erectus* grassland, CG4 *Brachypodium pinnatum* grassland and CG7 *Festuca ovina*-*Hieracium pilosella*-*Thymus* spp grassland NVC vegetation types at this Special Area of Conservation.
 - Juniper (*Juniperus communis*).
 - Vascular plant assemblage including Man orchid (*Orchis anthropophora*), Musk orchid (*Herminium monorchis*), Early gentian (*Gentianella anglica*), Cut-leaved germander (*Teucrium botrys*), Wild liquorice (*Astragalus glycyphyllos*), Wild candytuft (*Iberis amara*), Round-headed rampion (*Phyteuma tenerum*), Meadow clary (*Salvia pratensis*), Glandular eyebright (*Euphrasia anglica*).
 - Invertebrate assemblage including Adonis blue (*Lysandra belargus*), Silver-spotted skipper (*Hesperia comma*), Straw-bell moth (*Aspitates gilvaria*), Hornet robberfly (*Asilus crabroniformis*), Hazel leafbeetle (*Cryptocephalus coryli*).
- Vegetation: undesirable species. Maintain or restore as necessary the frequency and cover of the following undesirable species to within

acceptable levels and prevent changes in surface condition, soils, nutrient levels or hydrology which may encourage their spread: *Cotoneaster* spp, Butterfly bush (*Buddleja davidii*), Tor grass (*Brachypodium pinnatum*).

- Vegetation community transitions: Maintain or restore as necessary the pattern of natural vegetation zonations/transitions, particularly the 'scrub edge' transition between grassland and woodland.
- Soils, substrate and nutrient cycling: Maintain the properties of the underlying soil types, including structure, bulk density, total carbon, pH, soil nutrient status and fungal: bacterial ratio, to within typical values for the habitat.
- Supporting off-Site habitat: Maintain or restore where necessary the extent, quality and spatial configuration of land or habitat surrounding or adjacent to the Site which is known to support the feature, particularly adjacent areas of permanent grassland.
- Functional connectivity with wider landscape: Maintain or restore as necessary the overall extent, quality and function of any supporting features within the local landscape which provide a critical functional connection with the Site.
- Adaptation and resilience: Maintain or restore as necessary the feature's ability, and that of its supporting processes, to adapt or evolve to wider environmental change, either within or external to the Site.

Supporting processes (on which the feature relies)

- Air quality: Maintain or restore as necessary, the concentrations and deposition of air pollutants to at or below the Site-relevant Critical Load or Level values given for this feature of the Site on the [Air Pollution Information System](#).
- Conservation measures: Maintain or restore as necessary the management measures (either within and/or outside the Site boundary as appropriate) which are necessary to maintain the structure, functions and supporting processes associated with the feature.

H9130. Asperulo-Fagetum beech forests; Beech forests on neutral to rich soils

- Extent of the feature within the Site: Maintain the total extent of the feature to at least a baseline value of 973.6 hectares (but note that this is the combined total area of woodland cover including yew woodland).
- Spatial distribution of the feature within the Site: Maintain the distribution and configuration of the feature, including where applicable its component vegetation types, across the Site.

Structure and function (including its typical species)

- Adaptation and resilience: Maintain the H9130 feature's ability, and that of its supporting processes, to adapt or evolve to wider environmental change, either within or external to the Site.
- Key structural, influential and/or distinctive species: Maintain the abundance of the typical species listed below to enable each of them to be a viable component of the Annex 1 habitat: The constant and preferential plants of the W12 woodland type.
- Regeneration potential: Maintain the potential for sufficient natural regeneration of desirable trees and shrubs; typically tree seedlings of desirable species (measured by seedlings and sufficient numbers in gaps, at the wood edge and/or as re-growth as appropriate).
- Root zones of trees: Maintain the soil structure within and around the root zones of the mature and ancient tree cohort in an un-compacted condition.
- Soils, substrate and nutrient cycling: Maintain the properties of the underlying soil types, including structure, bulk density, total carbon, pH, soil nutrient status and fungal: bacterial ratio, to within typical values for the habitat.
- Tree and shrub species composition: Maintain a canopy and understorey of which 95% is composed of Site native trees and shrubs. Maintain a diversity (at least 3 species) of Site-native trees (e.g. beech, ash, oak, cherry, rowan, yew, hazel, holly, elder) across the Site.

Appendix B Attributes of European Sites

- Vegetation community composition: Ensure the component vegetation communities of the feature are referable to and characterised by the following National Vegetation Classification types:
 - W8 *Fraxinus excelsior* – *Acer campestre* - *Mercurialis perennis* woodland
 - W12 *Fagus sylvatica* – *Rubus fruticosus* woodland
- Vegetation structure
 - Age class distribution: Maintain at least 3 age classes (pole stage/ medium/ mature) spread across the average life expectancy of the commonest trees.
 - Canopy cover: Maintain an appropriate tree canopy cover across the feature, which will typically be between 75-90% of each woodland block.
 - Dead wood: Maintain the continuity and abundance of standing or fallen dead and decaying wood, typically between 30 - 50 m3 per hectare of standing or fallen timber or 3-5 fallen trees >30cm per hectare, and >10 standing dead trees per hectare.
 - Woodland edge (graduated edge; buffered mosaics with other habitats): Maintain a graduated woodland edge into adjacent semi-natural open habitats, other woodland/wood-pasture types or scrub.

Supporting Processes (on which the feature relies)

- Air quality: Maintain or restore as necessary, the concentrations and deposition of air pollutants to at or below the Site-relevant Critical Load or Level values given for this feature of the Site on the [Air Pollution Information System](#).
- Conservation measures: Maintain the management measures (either within and/or outside the Site boundary as appropriate) which are necessary to restore the structure, functions and supporting processes associated with the H9130 feature.

- **Illumination:** Ensure artificial light is maintained/ to a level which is unlikely to affect natural phenological cycles and processes to the detriment of the feature and its typical species at this Site.

H91J0. *Taxus baccata* woods of the British Isles; Yew-dominated woodland

This is considered a priority natural habitat for conservation at a European Scale and subject to special provisions in the Habitat Regulations.

Extent and Distribution of the feature

- **Extent of the feature within the Site:** Maintain the total extent of the feature to at least a baseline value of 973.6 hectares (but note that this is the combined total area of woodland cover including beech – ash woodland).
- **Spatial distribution of the feature within the Site:** Maintain the distribution and configuration of the feature, including where applicable its component vegetation types, across the Site.

Structure and Function (including its typical species)

- **Adaptation and resilience:** Maintain the resilience of the feature by ensuring a diversity of Site-native tree species; although yew may be overwhelmingly dominant.
- **Invasive, non-native and/or introduced species:** Ensure invasive and introduced non-native species are either rare or absent, but if present are causing minimal damage to the feature.
- **Regeneration potential:** Maintain the potential for sufficient natural regeneration of desirable trees and shrubs; typically tree seedlings of desirable species (measured by seedlings and <1.3m saplings - above grazing and browsing height) should be visible sufficient numbers in gaps, at the wood edge and/or as re-growth as appropriate.
- **Soils, substrate and nutrient cycling:** Maintain the properties of the underlying soil types, including structure, bulk density, total carbon, pH,

soil nutrient status and fungal: bacterial ratio, to within typical values for the habitat.

- Tree and shrub species composition: Maintain a canopy and understorey of which 95% is composed of Site native trees and shrubs, such as yew, whitebeam, box, beech, ash and hawthorn.
- Key structural, influential and/or distinctive species: Maintain the abundance of the typical species listed below to enable each of them to be a viable component of the Annex 1 habitat:
 - Constant and preferential plant species of the W13 *Taxus baccata* woodland NVC vegetation types at this Special Area of Conservation.
- Vegetation community composition: Ensure the component vegetation communities of the feature are referable to and characterised by the following National Vegetation Classification type: W13 *Taxus baccata*.
- Vegetation Structure
 - Age class distribution: Maintain at least 2 age classes (e.g. sapling stage, mature, veteran) spread across the average life expectancy of the trees - which in the case of yew can be hundreds of years.
 - Canopy cover: Maintain an appropriate tree canopy cover across the feature, which will typically be between 75-90% of each stand.
 - Dead wood: Maintain the continuity and abundance of standing or fallen dead and decaying wood, typically between 30 - 50 m³ per hectare of standing or fallen timber or 3-5 fallen trees >30cm per hectare.
 - Old growth: Maintain the extent and continuity of undisturbed, mature/old growth stands (typically comprising at least 50% of the feature at any one time) and the assemblages of veteran and ancient trees.
 - Open space: Maintain areas of permanent/ temporary open space within the woodland feature, typically to cover approximately 5% of area each stand.

Appendix B Attributes of European Sites

- Shrub layer: Maintain a sparse understorey of bushes or young trees of characteristic species e.g. holly, hawthorn, elder and box.
- Woodland edge (graduated edge; buffered; mosaics with other habitats): Maintain a graduated woodland edge into adjacent semi-natural open habitats, other woodland/ wood-pasture types or scrub.

Supporting Processes (on which the feature relies)

- Air quality: Maintain or restore as necessary, the concentrations and deposition of air pollutants to at or below the Site-relevant Critical Load or Level values given for this feature of the Site on the [Air Pollution Information System](#).
- Functional connectivity with wider landscape: Maintain or restore where necessary the overall extent, quality and function of any supporting features within the local landscape which provide a critical functional connection with the Site.
- Illumination: Ensure artificial light is maintained to a level which is unlikely to affect natural phenological cycles and processes to the detriment of the feature and its typical species at this Site.

S1166. *Triturus cristatus*; Great crested newt

Population (of the feature)

- Supporting meta-populations: Maintain or restore as necessary the connectivity of the Special Area of Conservation population to any associated meta-populations (either within or outside of the Site boundary).

Supporting Habitat: Extent and Distribution

- Distribution of supporting habitat: Maintain or restore as necessary the distribution and continuity of the feature and its supporting habitat, including where applicable its component vegetation types and associated transitional vegetation types, across the Site.

Appendix B Attributes of European Sites

- Extent of supporting habitat: Maintain or restore as necessary the total extent of the habitat(s) which support the feature.

Supporting Habitat: Structure/ Function

- Cover of macrophytes: Maintain or restore where necessary a high cover of macrophytes, typically between 50-80%, in ponds.
- Overall Habitat Suitability Index score: Maintain an overall Great Crested Newt Habitat Suitability Index score of no less than 0.8.
- Permanence of ponds: Maintain the natural water regime of ponds.
- Presence of fish: Ensure fish are absent in all breeding ponds.
- Presence of ponds: Maintain or restore where necessary the number of ponds present within the Site.
- Shading of ponds: Ensure pond margins are generally free of shade (typically no more than 60% cover of the shoreline).
- Soils, substrate and nutrient cycling: Maintain the properties of the underlying soil types, including structure, bulk density, total carbon, pH, soil nutrient status and fungal: bacterial ratio, within typical values for the supporting habitat.
- Supporting terrestrial habitat: Maintain or restore where necessary the quality of terrestrial habitat likely to be utilised by Great Crested Newts, with no fragmentation of habitat by significant barriers to newt dispersal.

Supporting Processes (on which the feature and/or its supporting habitat relies)

- Adaptation and resilience: Maintain or restore as necessary the feature's ability, and that of its supporting habitat, to adapt or evolve to wider environmental change, either within or external to the Site.
- Air quality: Maintain or, where necessary, restore concentrations and deposition of air pollutants to at or below the Site-relevant Critical Load or Level values given for this feature of the Site on the [Air Pollution Information System](#).

- Conservation measures: Maintain or restore as necessary the management measures (either within and/or outside the Site boundary as appropriate) which are necessary to maintain the structure, functions and supporting processes associated with the feature and/or its supporting habitats.
- Water quantity/ quality: Where the feature or its supporting habitat is dependent on surface water and/or groundwater maintain water quality and quantity to a standard which provides the necessary conditions to support the feature.
- Water quality: Maintain high water quality in all ponds in the core area supporting the meta-population.

S1323. Bechstein`s bat (*Myotis bechsteinii*)

Supporting Habitat: Extent and Distribution

- Distribution of supporting habitat: Maintain the distribution and continuity of the feature and its supporting habitat, including where applicable its component vegetation types and associated transitional vegetation types, across the Site.
- Extent of supporting habitat: Maintain the total extent of the habitat(s) which support the feature at the baseline level of 25 hectares.
- Commuting routes from roost into surrounding habitat and foraging areas: Maintain the presence, structure and quality of any linear landscape features which function as habitually used routes along which bats navigate to foraging and swarming areas. Routes should remain unlit, functioning as dark corridors.
- External condition of hibernation Site: Maintain the structural integrity and weatherproofing of the known hibernation Sites, with no significant shading of the main roost area by trees/vegetation or man-made structures.
- Internal condition of hibernation roost Sites: Maintain appropriate light levels, humidity, temperature and ventilation in the known hibernation roost Sites.

- Roost access: Maintain the number of access points to the roost at an optimal size and in an unlit and unobstructed state, with surrounding vegetation providing sheltered flyways without obstructing access.
- Soils, substrate and nutrient cycling: Maintain the properties of the underlying soil types, including structure, bulk density, total carbon, pH, soil nutrient status and fungal: bacterial ratio, within typical values for the supporting habitat.

Supporting Processes (on which the feature and/or its supporting habitat relies)

- Adaptation and resilience: Maintain the feature's ability, and that of its supporting habitat, to adapt or evolve to wider environmental change, either within or external to the Site.
- Air quality: Maintain or, where necessary, restore concentrations and deposition of air pollutants to at or below the Site-relevant Critical Load or Level values given for this feature of the Site on the [Air Pollution Information System](#).
- Conservation measures: Maintain the management measures (either within and/or outside the Site boundary as appropriate) which are necessary to maintain the structure, functions and supporting processes associated with the feature and/or its supporting habitats.
- Disturbance from human activity: Control and minimise human access to roost Sites.

Windsor Forest & Great Park Special Area of Conservation

Qualifying Features **[See reference 57]**

Windsor has the largest number of veteran oaks *Quercus spp.* in Britain (and possibly Europe) and Windsor Forest is listed as the most important Site in the UK for fauna associated with decaying timber on ancient trees (oak spp, beech,

and other species of tree). It is of importance for its range and diversity of saproxylic invertebrates, including many rare species (e.g. the beetle *Lacon querceus*). The Special Area of Conservation is thought to support the largest of the known populations in the UK of European important Violet click beetle (*Limoniscus violaceus*). It is also recognised as having rich fungal assemblages.

Annex I habitats that are primary reason for section of this Site include:

- H9190 Old acidophilous oak woods with *Quercus robur* on sandy plains.

Annex I habitats present as a qualifying feature, but not a primary reason for selection of this Site include:

- H9120 Atlantic acidophilous beech forests with *Ilex* and sometimes also *Taxus* in the shrublayer (*Quercion roburipetraeae* or *Ilici-Fagenion*).

Annex II species present as a qualifying feature, but not a primary reason for Site selection include:

- S1079 *Limoniscus violaceus*: Violet click beetle.

Key vulnerabilities [See reference 58]

The important habitats and species at Windsor Forest & Great Park Special Area of Conservation at risk from a variety of threats/pressures including tree diseases, invasive species and forest and woodland management which if not managed appropriately threaten the dry-oak dominated woodland. Air pollution from atmospheric nitrogen deposition also threatens the dry-oak dominated woodland as well the beech forests if a Site nitrogen action plan isn't established.

Conservation Objectives

Ensure that the integrity of the Site is maintained or restored as appropriate, and ensure that the Site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring:

- The extent and distribution of qualifying natural habitats and habitats of qualifying species.
- The structure and function (including typical species) of qualifying natural habitats.
- The structure and function of the habitats of qualifying species.
- The supporting processes on which qualifying natural habitats and the habitats of qualifying species rely.
- The populations of qualifying species, and,
- The distribution of qualifying species within the Site.

Non-qualifying habitats and species upon which the Qualifying Habitats and/or species depend

H9190. Old acidophilous oak woods with *Quercus robur* on sandy plains; Dry oak-dominated woodland

Extent and Distribution of the Feature

- Extent of the feature within the Site Maintain the total extent of the H9190 feature at 621.67 hectares.
- Spatial distribution of the feature within the Site Maintain the distribution and configuration of the H9190 feature, including where applicable its component vegetation types, across the Site.

Structure and Function (including its typical species)

Appendix B Attributes of European Sites

- Vegetation community composition: Ensure the component vegetation communities of the H9190 feature are referable to and characterised by the following National Vegetation Classification type: NVC type W10 *Quercus robur*, *Pteridium aquilinum* – *Rubus fruticosus* woodland.
- Old growth: Maintain the extent and continuity of undisturbed, mature/old growth stands (typically comprising at least 20% of the feature at any one time). Maintain the extent and continuity of the assemblage of veteran and ancient trees.
- Open space: Maintain or restore where necessary areas of permanent/ temporary open space within the H9190 woodland feature, typically to cover between 10- 30% of area.
- Vegetation Structure -Dead wood: Maintain the continuity and abundance of standing or fallen dead and decaying wood, typically between 30 - 50 m³ per hectare of standing or fallen timber or 3-5 fallen trees >30cm per hectare, and >10 standing dead trees per hectare.
- Open space for ancient/ veteran tree trees: Maintain or restore where necessary a canopy of open grown native trees with free crowns over between 20-80% of each stand.
- Tree age class distribution: Maintain at least 4 age classes (well-established saplings with space to develop an open crown/ middle age/ mature/over-mature) spread across the average life expectancy of the commonest trees.
- Shrub layer: Maintain or restore where necessary an understorey of scrub or young growth covering 15 - 30% of the semi-natural woodland areas of the Site.
- Woodland edge: Maintain a graduated woodland edge into adjacent semi-natural open habitats, other woodland/ wood-pasture types or scrub.
- Adaptation and resilience: Maintain the resilience of the feature to climate change
- Browsing and grazing by herbivores: Maintain browsing/grazing to sufficient levels to allow tree seedlings and saplings the opportunity to

exceed browse height, and which maintain the characteristic structure of the woodland feature in the areas of semi-natural woodland.

- Regeneration potential: Maintain the potential for sufficient natural regeneration of desirable trees and shrubs.
- Tree and shrub species composition: Maintain or restore where necessary a canopy and understorey of which 95% is composed of Site-native trees and shrubs in the areas of semi-natural and plantation woodland.
- Key structural, influential and/or distinctive species: Maintain the abundance of the species listed to enable each of them to be a viable component of the Annex I habitat feature (referring to the areas of semi natural woodland):
 - Trees and shrubs Beech (*Fagus sylvatica*), Pedunculate oak (*Quercus robur*), Hornbeam (*Carpinus betulus*), Silver birch (*Betula pendula*), Rowan (*Sorbus aucuparia*), Cherry (*Prunus avium*), Holly (*Ilex aquifolium*), Hawthorn (*Crataegus monogyna*), Bramble (*Rubus fruticosus*).
 - Other plants Honeysuckle (*Lonicera periclymenum*), Male fern (*Dryopteris filix-mas*), Broad buckler-fern (*Dryopteris dilatata*), Pignut (*Conopodium majus*), Wood sorrel (*Oxalis acetosella*), Wood anemone (*Anemone nemoralis*), Bluebell (*Endymion non-scriptus*), Wood speedwell (*Veronica montana*), Primrose (*Primula vulgaris*), Hairy wood-rush (*Luzula Pilosa*), Black bryony (*Tamus communis*), Broad-leaved helleborine (*Epipactis helleborine*).
 - Assemblages of specialised fungi.
 - Assemblages of saproxylic invertebrates.
 - Assemblages of epiphytic lichens.
 - Assemblage of bats
- Invasive, non-native and/or introduced species: Ensure invasive and introduced non-native species are either rare or absent, but if present are causing minimal damage to the H9190 feature.

- Soils, substrate and nutrient cycling: Maintain the properties of the underlying soil types, including structure, bulk density, total carbon, pH, soil nutrient status and fungal:bacterial ratio, to within typical values for the H9190 habitat.
- Root zones of ancient trees: Maintain the soil structure within and around the root zones of the mature and ancient tree cohort in an un-compacted condition.

Supporting Processes (on which the feature relies)

- Functional connectivity with wider landscape: Maintain the overall extent, quality and function of any supporting features within the local landscape which provide a critical functional connection with the Site.
- Air quality: Restore as necessary the concentrations and deposition of air pollutants to at or below the Site-relevant Critical Load or Level values given for this feature of the Site on the [Air Pollution Information System](#).
- Hydrology: At a Site, unit and/or catchment level as necessary, maintain natural hydrological processes to provide the conditions necessary to sustain the H9190 feature within the Site.
- Illumination: Ensure artificial light is maintained to a level which is unlikely to affect natural phenological cycles and processes to the detriment of the feature and its typical species at this Site.

H9120. Atlantic acidophilous beech forests with *Ilex* and sometimes also *Taxus* in the shrub layer (*Quercion robur-petraeae* or *Ilici-Fagenion*); ‘Beech forests on acid soils’

Extent and Distribution of the Feature

- Extent of the feature within the Site: Maintain the total extent of the H9120 feature at or above 272.69 hectares.
- Spatial distribution of the feature within the Site: Maintain the distribution and configuration of the H9120 feature, including where applicable its component vegetation types, across the Site.

Structure and Function (including its typical species)

- Vegetation community composition: Ensure the component vegetation communities of the H9120 feature are referable to and characterised by the following National Vegetation Classification types: NVC W14 & NVC W15.
- Canopy cover: Maintain or restore where necessary a canopy of open grown native trees with free crowns over between 20-80% of each stand.
- Open space: Maintain or restore where necessary areas of permanent/ temporary open space within the woodland feature, typically to cover between 10-30% of woodland area.
- Old growth: Maintain the extent and the continuity of the assemblages of veteran and ancient trees.
- Dead and decaying wood: Maintain the continuity and abundance of standing and fallen dead and decaying wood, typically between 30 - 50 m³ per hectare of standing or fallen decaying wood or 3-5 fallen trees >30cm diameter per hectare, and >10 standing dead trees per hectare.
- Ancient/ veteran trees: Restore the open space around at least 75% of ancient/veteran trees so that they are growing in open locations or with open halo around them.
- Tree age class distribution: Maintain at least 4 age classes (well-established saplings with space to develop an open crown/ middle age/ mature/over-mature) spread across the average life expectancy of the commonest trees.
- Shrub layer: Maintain or restore where necessary an understorey of shrubs and trees covering 15 - 30% of the semi-natural woodland areas of the Site.
- Woodland edge: Maintain or restore where practically achievable a graduated woodland edge into adjacent semi-natural open habitats, other woodland/ wood-pasture types or scrub.
- Adaptation and resilience: Maintain the resilience of the feature to climate change.

Appendix B Attributes of European Sites

- Tree and shrub species composition: Maintain or restore where necessary a canopy and understorey of which 95% is composed of Site native trees and shrubs in the areas of semi-natural woodland and plantation on ancient woodland.
- Browsing and grazing by herbivores: Maintain browsing/grazing to sufficient levels to allow tree seedlings and saplings the opportunity to exceed browse height, and which maintain the characteristic structure of the woodland feature in the areas of semi-natural woodland.
- Regeneration potential: Maintain the potential for sufficient natural regeneration of desirable trees and shrubs.
- Key structural, influential and/or distinctive species: Maintain the abundance of the species listed to enable each of them to be a viable component of the Annex I habitat feature (referring to the areas of seminatural woodland).
 - Trees and shrubs: Beech (*Fagus sylvatica*), Pedunculate oak (*Quercus robur*), Silver birch (*Betula pendula*), Hornbeam (*Carpinus betulus*), Rowan (*Sorbus aucuparia*), Cherry (*Prunus avium*), Holly (*Ilex aquifolium*), Hawthorn (*Crataegus monogyna*), Bramble (*Rubus fruticosus*).
 - Other plants: Honeysuckle (*Lonicera periclymenum*), Male fern (*Dryopteris filix-mas*), Broad buckler-fern (*Dryopteris dilatata*), Pignut (*Conopodium majus*), Wood sorrel (*Oxalis acetosella*), Wood anemone (*Anemone nemoralis*), Bluebell (*Endymion non-scriptus*), Wood speedwell (*Veronica montana*), Primrose (*Primula vulgaris*), Hairy wood-rush (*Luzula Pilosa*), Black bryony (*Tamus communis*), Broad-leaved helleborine (*Epipactis helleborine*).
 - Assemblages of specialised fungi
 - Assemblages of saproxylic invertebrates
 - Assemblages of epiphytic lichens
 - Assemblage of bats

Appendix B Attributes of European Sites

- Invasive, non-native and/or introduced species: Ensure invasive and introduced non-native species are either rare or absent, but if present are causing minimal damage to the feature.
- Soils, substrate and nutrient cycling Maintain the properties of the underlying soil types, including structure, bulk density, total carbon, pH, soil nutrient status and fungal:bacterial ratio, to within typical values for the habitat in the areas of seminatural woodland.
- Root zones of ancient trees Maintain the soil structure within and around the root zones of the mature and ancient tree cohort in an un-compacted condition.

Supporting Processes (on which the features relies)

- Functional connectivity with wider landscape: Maintain the overall extent, quality and function of any supporting features within the local landscape which provide a critical functional connection with the Site.
- Hydrology: At a Site, unit and/or catchment level as necessary, maintain natural hydrological processes to provide the conditions necessary to sustain the semi-natural woodland feature within the Site.
- Air quality: Restore as necessary the concentrations and deposition of air pollutants to at or below the Site-relevant Critical Load or Level values given for this feature of the Site on the [Air Pollution Information System](#).
- Illumination: Ensure artificial light is maintained to a level which is unlikely to affect natural phenological cycles and processes to the detriment of the feature and its typical species at this Site.

S1079. Violet click beetle (*Limoniscus violaceus*)

Supporting Processes (on which the feature and/or its supporting habitat relies)

- Conservation measures: Maintain the management measures (either within and/or outside the Site boundary as appropriate) which are necessary to maintain the structure, functions and supporting processes associated with the Violet click beetle and/or its supporting habitats.

Appendix B Attributes of European Sites

- Adaptation and resilience: Maintain the feature's ability, and that of its supporting habitat, to adapt or evolve to wider environmental change, either within or external to the Site.
- Air quality: Maintain or, where necessary, restore concentrations and deposition of air pollutants to at or below the Site-relevant Critical Load or Level values given for this feature of the Site on the [Air Pollution Information System](#).
- Continuity of natural processes: Maintain continuity of natural processes through timber decay and nutrient recycling.

Supporting Habitat: extent and distribution

- Extent of supporting habitat: Maintain the total extent of the habitat(s) which support the feature, which, as a precautionary approach, is the extent of woodland present at time of Special Area of Conservation classification.
- Distribution of supporting habitat: Maintain the distribution and continuity of the Violet click beetle's supporting habitat, including where applicable its component vegetation types and associated transitional vegetation types, across the Site.

Supporting Habitat: Structure/Function

- Soils, substrate and nutrient cycling: Maintain the properties of the underlying soil types, including structure, bulk density, total carbon, pH, soil nutrient status and fungal:bacterial ratio, within typical values for the supporting habitat.
- Abundance of standing decaying-wood: Maintain all large-diameter veteran and ancient trees where they do not pose a significant health and safety risk.
- Continuity of decaying-wood habitat: Ensure the continuous presence of future ancient tree cohorts for long-term survival of the species.

Appendix C

Review of Potential for In-Combination Effects with other Local Authority Plans

Plans, Policies and Programmes with the Potential for In-Combination Effects

Local Plans and Strategies

Wandsworth Local Plan Core Strategy (Adopted March 2016)

Housing

- The Core Strategy makes provision for at least 25,850 net additional homes from conventional supply and 1,320 from non-self-contained accommodation between 2015/16 and 2029/30 (Core Policy PL 5).

Employment Land Provision

- The Employment and Industry document (2018) sets out the future demand and supply for employment and industry in the borough and includes the results of AECOM's Employment Land and Premises Study (ELPS) (July 2016), forecasting demand between 2016 and 2030. This includes a forecast demand of between 31,700 sqms and 65,800 sqms of additional floor space. In terms of supply, the amount of additional office floorspace likely to come forward to 2031 includes 198, 400 sqms, within

Nine Elms and between 59,600 and 71,000 in the rest of the borough. Nine Elms was separated from the rest of the borough due to the different specification and rental costs of offices that are likely to come forward in this area.

Habitats Regulations Assessment Findings

- The April 2015 Habitats Regulations Assessment Report for the Wandsworth Local Plan concluded that the policies in the Plan are not likely to have a significant effect on any European sites, and therefore there are no likely in-combination effects with the London Borough of Richmond upon Thames Publication Local Plan.

Wandsworth 'Pre-Publication' Draft Local Plan 2020

Housing

- The 'Pre-Publication' Draft Local Plan (2020) will provide for the delivery of a minimum of 1,950 new homes per year by 2028/2029. This target will be rolled forward until it is replaced by a revised London Plan target (LP24). There is potential for 13,817 of these to be delivered over the five-year period 2023/24 – 2027/28 and 20,702 net new homes over the 10-year period. An assessment was also done to consider the capacity of land and sites available for development in years 11 -15. This identified a potential capacity for 5,189 net new homes resulting in a total of 25, 891 new homes in the 15-year period up until 2037/38.

Employment Land Provision

- The borough's Employment Land and Premises Study 2020 (ELPS), prepared by AECOM, forecasted that there will be a net requirement of 8.6 hectares of industrial land up to 2034, and for an additional 22,5000 sqm of office floorspace in the local / sub-regional office market in that same timeframe.

Habitats Regulations Assessment Findings

- The initial stage 1 of the Habitats Regulations Assessment process on the draft Wandsworth local plan (DWLP) concluded that the screening assessment of the DWLP did not identify any likely significant effects or impacts on the integrity of any European Sites and therefore there are no likely in-combination effects with the London Borough of Richmond upon Thames Publication Local Plan. Only Wimbledon Common Special Area of Conservation and Richmond Park Special Area of Conservation were considered in the Habitats Regulations Assessment screening exercise as all other European sites within 15km were descoped. This is because the April 2015 Habitats Regulations Assessment did not identify any impact pathways between activities resulting from the current Wandsworth Local Plan (as adopted in 2016) and the European Sites.

London Borough of Hounslow Local Plan 2015-2030 (Adopted September 2015) (Currently under examination)

- The council are currently conducting two area reviews of the plan, in the Great West Corridor (eastern half of the Borough) and West of the Borough

Housing

- The current Local Plan (Policy SC1) proposes the delivery of 12,330 homes between 2015 and 2030. Most of these new homes will be located in Brentford and Hounslow.
- The West of Borough Plan Local Plan Review (Volume 3 Submission, clean version) (2020) aims to deliver a baseline of 8,600 new homes (10,600 with Heathrow Gateway) between 2020 and 2035 in the West of the Borough.

Appendix C Review of Potential for In-Combination Effects with other Local Authority Plans

- The Great West Corridor Local Plan Review (Volume 4 Submission, clean version) (2020) aims to facilitate at least 7,500 new homes between 2020 and 2035 in the Great West Corridor.

Employment Land Provision

- The West of Borough Plan Review (Volume 3 submission, clean version) (2020) aims to allocate land for at least 229,100 sqm of industrial floorspace (4,320 FTE jobs) and 9,600 sqm of office workspaces (800 FTE Jobs) (124,11 sqm with Heathrow Gateway, 7950 FTE jobs) and 23,100 sqm of retail restaurant, café and bar uses (1230 FTE jobs) between 2020 and 2035.
- The Great West Corridor Local Plan Review (Volume 4 Submission, clean version) supports proposals for the intensification of designated and undesignated employment sites to provide at least 189,100 sqm of uses suitable for broad industrial type activities as defined in the draft new London Plan policy and/or guidance providing 2,680 new jobs and 185,800 sqm of office uses in that area, providing at least 11, 610 new jobs in the plan period. It also will provide at least 23,700 sqm of active ground floor retail and food outlets.

Habitats Regulations Assessment Findings

- The March 2014 Habitats Regulations Assessment Report concludes that the development set out in the Hounslow Local Plan would not result in a likely significant effect on any European sites, and therefore there are no likely in-combination effects with the London Borough of Richmond upon Thames Publication Local Plan.
- The Hounslow Local Plan Reviews (Update to reflect minor modifications to Submission version of the Local Plan Reviews) Habitat Regulations Assessment (2020) concluded that the development set out in the London Borough of Hounslow Great West Corridor and West of Borough Local Plans would not result in a likely significant effect, alone or in combination with other plans on any European sites.

Hammersmith and Fulham Local Plan (Adopted February 2018)

Housing

- The Local Plan makes provision for at least 22,200 homes between 2015 and 2035, in accordance with the London Plan (2016). Most of these homes will be located in the Regeneration Areas of White City and Fulham.

Employment Land Provision

- The Local Plan supports the delivery of employment sites through mixed-use schemes, specifically those that utilise existing strengths in the borough including creative industries, health services, bio-medical and other research based industries (Policy E1). No overall target for the provision of employment sites is identified however the London Office Policy Review 2014 projected a likely requirement of an additional 290,000m² (gross) of office floorspace within the borough to 2036. However, the council's employment Study predicts a higher need of between 383,000 and 511,000m² based on 1 person per 9m².

Habitats Regulations Assessment Findings

- The Proposed Submission Local Plan Environmental Report (Sustainability Appraisal) refers to the requirements of the Habitats Directive and concluded that there would be no significant effects on Richmond Park Special Area of Conservation (the only European site within fairly close proximity of the borough) as a result of the Local Plan being implemented. Therefore, there are no likely in-combination effects with the London Borough of Richmond upon Thames Publication Local Plan.

Royal Borough of Kingston upon Thames Core Strategy (Adopted April 2012)

The council is currently in the process of building a new Local Plan however the pandemic has resulted in a need to re-programme the timetable for preparing the new plan. An additional consultation at Regulation 18 was held between June and September 2021, rather than processing to the first draft of the Local Plan as originally intended.

Housing

- The Council will seek to meet and exceed the borough's annual housing target as set out in the London Plan (5,625 dwellings) for the period 2012/13 to 2026/27. The current target is to achieve 375 new units a year.

Employment Land Provision

- The Core Strategy supports the delivery of employment land, but no overall target for the provision of employment sites is identified.

Habitats Regulations Assessment Findings

- The Habitats Regulations Assessment report for the Core Strategy (December 2010) set out the findings of the screening stage of the Habitats Regulations Assessment. It was concluded that the Core Strategy DPD would not have any significant effects on European sites either alone or in combination with other plans and programmes. As a result, Appropriate Assessment was not required. Therefore, there are no likely in-combination effects with the London Borough of Richmond upon Thames Publication Local Plan.

Spelthorne Borough Council Core Strategy and Policies (Adopted February 2009)

Note that the Council is currently working on an emerging Local Plan (2020-2035), with the next stage set to be a consultation on the publication Local Plan (Reg 19) in February to March 2022. Below includes details of the current core strategy and policies (adopted February 2009) and details of the Emerging Local Plan from a review of the evidence base and supporting documents to the emerging plan.

Housing

- Policy SP2 states that the Council will ensure that provision is made for sufficient numbers of dwellings to meet the draft Regional Spatial Strategy for the South East requirement for Spelthorne (2,706 homes from 2009 to 2026) although the RSS has since been revoked.

Employment Land Provision

- Policy SP3 states that the Council will maintain the employment capacity of the Spelthorne economy by maintaining well sited larger Employment Areas and supporting the renewal and improvement of employment floorspace to meet needs. No overall target for the provision of employment sites is identified.

Habitats Regulations Assessment Findings

- The Appropriate Assessment screening opinion concludes that the Spelthorne Development Plan–Core Strategy and Policies DPD and the Allocations DPD will have no significant effect on any European site and that any further appraisal to consider adverse impacts is not required. Therefore, there are not likely to be in-combination effects with the London Borough of Richmond upon Thames Publication Local Plan.

Spelthorne Borough Council Emerging Local Plan (2020-2035)

Housing

- The Statement of Five-Year Housing Supply (2021) measured the five-year housing land supply against the areas local housing need calculated using the Government standard method. This identified Spelthorne as having a need of 611 dwellings per annum. This was used to calculate a total five-year requirement of 3666 dwellings.

Employment Land Provision

- The Spelthorne Employment Land Needs Assessment (ELNA) (2018) assessed the future demand and need for different types of employment land in the borough up until 2035. It is anticipated that 15,270 sqm of Office and Research & Development and 13,720 sqm of warehousing and storage will be required, however that 20,826 sqm of industrial floorspace will no longer be required although it is unlikely all the former floorspace will be used for the required areas.

No Habitats Regulations Assessment for the emerging plan yet

Elmbridge Borough Council Local Plan Core Strategy (Adopted July 2011)

Housing

- Policy CS2 states that the Council will plan for approximately 3,375 net additional dwellings (225 net dwellings annual average) within the borough between 2011 and 2026.

Employment Land Provision

- The spatial strategy stated that economic growth will be focused within the borough's town centres, strategic employment sites and in close proximity to the variety of visitor attractions the borough has to offer. The Core Strategy protects existing employment sites and supports the delivery of new employment provision, but no overall target for the provision of employment sites is identified.

Habitats Regulations Assessment Findings

- The Habitats Regulations Assessment report for the Core Strategy (March 2010) concluded that there would be no likely significant effects on most European sites as a result of the implementation of the Core Strategy, although in the case of the Thames Basin Heaths Special Protection Area mitigation would be necessary to avoid disturbance from recreation and urbanisation. The report details the mitigation that will be implemented (e.g. the provision of SANGS and the avoidance of residential development within 400m of the heaths) and taking this mitigation into account, it is concluded that likely significant effects on the Special Protection Area would be avoided. Therefore, there are no likely in-

combination effects with the London Borough of Richmond upon Thames Publication Local Plan.

Elmbridge Borough Council Emerging Local Plan

Housing

- The assessment of local housing needs (2020) used the standard assessment methodology for housing together with the applicable capping arrangements, and produced a minimum household need of 626 dwellings per annum and a net annual need of 269 affordable homes.

Employment land Provision

- The Economic Strategy 2019 – 2013 aims to deliver 16,000 sqm of new a-grad office space by 2026, 11,500 sqm of refurbished commercial floorspace by 2026 and 150 additional hotel bedrooms by 2026.

No Habitats Regulations Assessment for the emerging plan yet.

Appendix D

Screening Matrix for Proposed Policies within the Local Plan

The screening matrix below shows which types of impacts on European sites could potentially result from each of the policies and sites allocated in the Publication Local Plan.

Theme 1: Responding to the climate emergency and taking action

Policy 3: Tacking the climate emergency

Likely activities (operation) to result as a consequence of the proposal

- None. This policy will bring all the different climate change strands and strengthened requirements together as well as setting out the high level aims and expectations, including net-zero carbon by 2050 and what contribution developments need to make to achieve this.

Potential effects of proposal implemented

- N/A

Potential mitigation measures – if implemented would avoid likely significant effect

- N/A

Is the policy likely to have significant effects and therefore need to be scoped into the appropriate Assessment?

- No. This policy will promote net-zero carbon development, with the aim that all buildings and infrastructure projects in the borough will be net-zero carbon by 2050.

Policy 4: Minimising greenhouse gas emissions and energy efficiency

Likely activities (operation) to result as a consequence of the proposal

- None. This is an updated approach of existing adopted 2018 Local Plan policies (LP20 and LP22) and will significantly strengthen the requirements for net-zero carbon, setting out how all developments resulting in 1 or more dwellings have to achieve net-zero, with specific on-site carbon emission reduction requirements. No more gas boilers in new dwellings or new non-domestic development from 2024. To set out a new carbon offset rate of £300/t (as opposed to current price of £95/t).

Potential effects of proposal implemented

- N/A

Potential mitigation measures – if implemented would avoid likely significant effect

- N/A

Is the policy likely to have significant effects and therefore need to be scoped into the appropriate Assessment?

- No. This policy includes specific requirements for net-zero carbon in new developments.

Policy 5: Energy Infrastructure

Likely activities (operation) to result as a consequence of the proposal

- None. This policy will maximise opportunities for on-site electricity and heat production from renewable energy sources, with emphasis on non-combustible / non-fossil fuel energy for decentralised energy networks.

Potential effects of proposal implemented

- N/A

Potential mitigation measures – if implemented would avoid likely significant effect

- N/A

Is the policy likely to have significant effects and therefore need to be scoped into the appropriate Assessment?

- No. This policy requires all proposed major residential developments of 10 or more dwellings, and non-residential development of 500 sqm to fully explore and utilise decentralised energy.

Policy 6: Sustainable construction standards

Likely activities (operation) to result as a consequence of the proposal

- No - This policy is an updated and strengthened approach in relation to requirements for BREEAM ratings from current 'excellent' to 'outstanding', together with requirement for BRE Home Quality Mark for new-build residential developments and specific fabric efficiency standards. The existing approach to Sustainable Construction Checklist and maximum water consumption levels will be retained.

Potential effects of proposal implemented

- N/A

Potential mitigation measures – if implemented would avoid likely significant effect

- N/A

Is the policy likely to have significant effects and therefore need to be scoped into the appropriate Assessment?

- No. This policy will strengthen sustainable construction standards through requirements for 'Outstanding' BREEAM ratings and four-star BRE Home Quality Mark for new-build residential developments as well as specific fabric efficiency standards.

Policy 7: Waste and the Circular Economy

Likely activities (operation) to result as a consequence of the proposal

- No. This policy provides an updated approach in relation to waste and adopting principles of the circular economy, including new specific requirements for Circular Economy Statement and Whole Life-Cycle Carbon assessment.

Potential effects of proposal implemented

- N/A

Potential mitigation measures – if implemented would avoid likely significant effect

- This policy encourages developments to make use of the rail and waterway network to transport waste and could therefore contribute to mitigation for air pollution associated with vehicle emissions.

Is the policy likely to have significant effects and therefore need to be scoped into the appropriate Assessment?

- No.

Policy 8: Flood risk and sustainable drainage

Likely activities (operation) to result as a consequence of the proposal

- No. This policy will retain existing approaches of the adopted 2018 Local Plan (LP21) in relation to fluvial and tidal flood risk, with strengthened requirements for managing surface water flood risks and sustainable drainage as well as groundwater flood risks, including updated guidance and requirements for basement developments in flood affected areas. Incorporating recommendations from 2020 Strategic Flood Risk Assessment, including climate change allowances (use of 'upper end' scenarios) and approach to Sequential Test.

Potential effects of proposal implemented

- N/A

Potential mitigation measures – if implemented would avoid likely significant effect

- This policy encourages the use of sustainable drainage systems and therefore could contribute to mitigating impacts on water quality and quantity. To enable development, proposals must provide mitigation and resilience against flood risk, taking advice from the Lead Local Flood Authority (LLFA) as appropriate, and provide appropriate compensation to existing flood risk levels and volumes, addressing the predicted 1 in 100

year Risk of Flooding from Surface Water (RoFSW) mapped depths as a minimum.

- Where possible, land within major development sites should be safeguarded for potential flood mitigation use through the active consideration of predicted flood mapping from all sources.
- Applicants will have to demonstrate their proposal complies with a list of criteria for flood defences.

Is the policy likely to have significant effects and therefore need to be scoped into the appropriate Assessment?

- No.

Policy 9: Water resources and infrastructure

Likely activities (operation) to result as a consequence of the proposal

- Yes. This policy largely retains existing approaches of the adopted 2018 Local Plan (LP23) which protects the boroughs water resources and supplies by resisting development proposals that would pose an unacceptable threat to the boroughs rivers, surface water, groundwater quantity and quality. The Council also encourages proposals that seek to increase water availability or protect and improve the quality of the river or groundwater. Therefore, development or expansion of water supply or waste water facilities will normally be permitted, provided that the need for such facilities outweighs an adverse land use or environmental impact. New major developments will also need to ensure adequate water supply, drainage and sewage capacity.

Potential effects of proposal implemented

- Loss of off-site functional habitat
- Non-physical disturbance (lighting and noise)
- Water quantity and quality

Potential mitigation measures – if implemented would avoid likely significant effect

- This policy provides mitigation for water quantity and quality impacts. It seeks to protect the borough's water resources and supplies from threats to water quantity and quality. New water supply or water facilities will only be permitted if their need outweighs any adverse environmental impacts. New major developments will need to ensure adequate water supply, drainage and sewage capacity.
- The Council expects development proposals to protect the water quality of rivers and groundwater, seek to improve the water environment and ensure that adequate wastewater infrastructure capacity is provided.

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- No – although this policy permits some new development associated with water supply and treatment, it is of a type that would not affect the qualifying features of the European sites. Overall its effect on water quantity and quality is positive.

Theme 2: Delivering new homes and an affordable borough for all.

Policy 10: New Housing

Likely activities (operation) to result as a consequence of the proposal

- Yes. This is an updated approach of the adopted 2018 Local Plan (LP34) to reflect the London Plan housing target, with updated broad locations for future housing and sets a stepped housing trajectory. Thus will therefore result in the building of more residential homes (ten year housing target of 4110 homes), increase in vehicle traffic, increase in recreational pressure and increase in demand for water supply and treatment.

Potential effects of proposal implemented

- Air pollution
- Physical loss of or damage to habitat
- Non-physical disturbance (lighting and noise)
- Impacts on water quality and quantity
- Impacts of recreation

Potential mitigation measures – if implemented would avoid likely significant effect

- Air pollution impacts are mitigated by the following policies within the emerging new Local Plan which discourage car use and encourage sustainable transport: LP 47 Sustainable travel choices; LP 48 Vehicular

Parking; Cycle Parking; Servicing and Construction Logistics Management and LP 7 Waste and the circular economy.

- Policy LP 39 Biodiversity & geodiversity provides mitigation by protecting Sites of Special Scientific Interest and therefore the Special Protection Areas and Special Areas of Conservation, with some additional protection provided by LP 34 Green and blue infrastructure.
- Policies LP 43 Floodlighting and other external artificial lighting; LP 53 Local environmental impacts; LP 4 Minimising greenhouse gas emissions and energy efficiency; LP 6 Sustainable construction standards and LP 5 Energy infrastructure seek to minimise the environmental impacts of development and therefore provide mitigation for physical loss of or damage to habitat and non-physical disturbance.
- Mitigation for water quality and quantity impacts is provided mainly by Policy LP 9 Water resources and infrastructure, but also LP 8 Flood risk and sustainable drainage.
- Mitigation for impacts associated with recreation is provided by Policy LP 37 Public open space, play space, sport and recreation.

Is the policy likely to have significant effects and therefore need to be scoped into the appropriate Assessment?

- Significant effects from air pollution cannot be ruled out. Air pollution may occur as a result of this policy, due to increases in trips from the overall quantum of development, either from the Richmond Local Plan alone or in combination with plans from neighbouring boroughs/districts.
- European sites are protected from development within their boundaries. Development could have an impact on habitats functionally connected to the European sites, however the areas primarily used by Special Protection Area bird species (gadwall and northern shoveler) are protected from development and none of the proposed development sites support significant wetland habitat. There are sufficient records of stag beetle within 2km of Richmond Park Special Area of Conservation that the loss of

some areas for development will not significantly affect the Special Area of Conservation population.

- The urban nature of London Borough of Richmond upon Thames means that background levels of noise, vibration and light are already relatively high, such that the small amount of development that may occur within 500m of the European sites is unlikely to have a significant effect. Mitigation incorporated into the Local Plan further reduces this impact.
- Housing will largely occur within existing urban areas and utilise existing infrastructure. Planned upgrades, regulatory mechanisms and Policy 9 provide sufficient safeguards against significant water quantity and quality effects.
- Accessibility to Wimbledon Common Special Area of Conservation and the South West London Waterbodies Special Protection Area mean that they are unlikely to experience significant increases in dog walking or runners, etc. Richmond Park Special Area of Conservation may experience an increase in visitor numbers, but this is unlikely to be significant in the context of existing visitor numbers.
- Physical loss of or damage to onsite or offsite habitat, non-physical disturbance, recreation impacts and water quality and quantity can therefore be screened out of further assessment.

Policy 11: Affordable Housing

Likely activities (operation) to result as a consequence of the proposal

- None – This policy will not result in new development. This policy is an updated approach of the adopted 2018 Local Plan (LP36) to reflect the London Plan and changes to national policy, including in regard to viability, and the Local Housing Needs Assessment. Sets out that First Homes and a fast track viability threshold approach are not appropriate in the borough context.

Potential effects of proposal implemented

- N/A

Potential mitigation measures – if implemented would avoid likely significant effect

- N/A

Is the policy likely to have significant effects and therefore need to be scoped into the appropriate Assessment?

- N/A

Policy 12: Housing needs of different groups

Likely activities (operation) to result as a consequence of the proposal

- This policy is an updated approach of the adopted 2018 Local Plan (LP37) expanded to address specific types of housing for different groups, with emphasis on priority affordable housing needs, and to ensure local needs will be met through the design of proposals and securing details around eligibility and affordability, to accord with strategies for housing, commissioning, health and social care.
- The policy supports residential development including temporary or permanent sites for Gypsies and Travellers, increase in vehicle traffic, increase in recreation pressure and increase in demand for water supply and treatment.

Potential effects of proposal implemented

- Impacts of recreation
- Water quality and quantity
- Air pollution
- Physical loss of or damage to habitat
- Non-physical disturbance

Potential mitigation measures – if implemented would avoid likely significant effect

- Air pollution impacts are mitigated by the following policies which discourage car use and encourage sustainable transport: LP 47 Sustainable travel choices; LP 48 Vehicular Parking; Cycle Parking; Servicing and Construction Logistics Management and LP 7 Waste and the circular economy.
- Mitigation is also provided by Policies LP 39 Biodiversity & geodiversity; LP 34 Green and blue infrastructure; LP 43 Floodlighting and other external artificial lighting; LP 53 Local environmental impacts; LP 4 Minimising greenhouse gas emissions and energy efficiency; LP 5 Energy infrastructure and LP 6 Sustainable construction methods.
- Mitigation for water quality and quantity impacts is provided mainly by Policy LP 9 Water resources and infrastructure, but also LP 8 Flood risk and sustainable drainage.
- Mitigation for impacts associated with recreation is provided by Policy LP 37 Public open space, play space, sport and recreation.

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- No – the scale of development coming forward through this policy is likely to be small and of a type that would not affect the qualifying features of the European sites.
- While air pollution impacts could result in combination with other housing development in the borough, this is considered within the assessment of the overarching ‘new housing’ policy; this policy will not change the overall quantum of development in the borough.

Policy 13: Housing Mix and Standards

Likely activities (operation) to result as a consequence of the proposal

- None. This policy is an updated approach of the adopted 2018 Local Plan (LP34) to accord with the London Plan including in terms of unit sizes and making efficient use of land.

Potential effects of proposal implemented

- N/A

Potential mitigation measures – if implemented would avoid likely significant effect

- N/A

Is the policy likely to have significant effects and therefore need to be scoped into the appropriate Assessment?

- N/A

Policy 14: Loss of Housing

Likely activities (operation) to result as a consequence of the proposal

- None. This policy is an updated approach of the adopted 2018 Local Plan (LP38) to reflect the London Plan including in terms of optimising use of land and expecting replacement housing at existing or higher densities.

Potential effects of proposal implemented

- Air pollution
- Physical loss of or damage to habitat
- Non-physical disturbance (lighting and noise)
- Impacts on water quality and quantity
- Impacts of recreation

Potential mitigation measures – if implemented would avoid likely significant effect

- Air pollution impacts are mitigated by the following policies which discourage car use and encourage sustainable transport: LP 47 Sustainable travel choices; LP 48 Vehicular Parking; Cycle Parking; Servicing and Construction Logistics Management and LP 7 Waste and the circular economy.

Appendix D Screening Matrix for Proposed Policies within the Local Plan

- Policy LP 39 Biodiversity & geodiversity provides mitigation by protecting Sites of Special Scientific Interest and therefore the Special Protection Area and Special Areas of Conservation, with some additional protection provided by LP 34 Green and blue infrastructure.
- Policies LP 43 Floodlighting and other external artificial lighting; LP 53 Local environmental impacts; LP 4 Minimising greenhouse gas emissions and energy efficiency; LP 6 Sustainable construction standards and LP 5 Energy infrastructure seek to minimise the environmental impacts of development and therefore provide mitigation for physical loss of or damage to habitat and non-physical disturbance.
- Mitigation for water quality and quantity impacts is provided mainly by Policy LP 9 Water resources and infrastructure, but also LP 8 Flood risk and sustainable drainage.
- Mitigation for impacts associated with recreation is provided by Policy LP 37 Public open space, play space, sport and recreation.

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- Significant effects from air pollution cannot be ruled out. Air pollution may occur as a result of this policy, due to increases in trips from the overall quantum of development, either from the Richmond Local Plan alone or in combination with plans from neighbouring boroughs/districts.
- European sites are protected from development within their boundaries. Development could have an impact on habitats functionally connected to the European sites, however the areas primarily used by Special Protection Area bird species (gadwall and northern shoveler) are protected from development and none of the proposed development sites support significant wetland habitat. There are sufficient records of stag beetle within 2km of Richmond Park Special Area of Conservation that the loss of some areas for development will not significantly affect the Special Area of Conservation population.

Appendix D Screening Matrix for Proposed Policies within the Local Plan

- The urban nature of the London Borough of Richmond upon Thames means that background levels of noise, vibration and light are already relatively high, such that the small amount of development that may occur within 500m of the European sites is unlikely to have a significant effect. Mitigation incorporated into the Local Plan further reduces this impact.
- Housing will largely occur within existing urban areas and utilise existing infrastructure. Planned upgrades, regulatory mechanisms and Policy 9 provide sufficient safeguards against significant water quantity and quality effects.
- Accessibility to Wimbledon Common Special Area of Conservation and the South West London Waterbodies Special Protection Area mean that they are unlikely to experience significant increases in dog walking or runners, etc. Richmond Park Special Area of Conservation may experience an increase in visitor numbers, but this is unlikely to be significant in the context of existing visitor numbers.
- Physical loss of or damage to onsite or offsite habitat, non-physical disturbance, recreation impacts and water quality and quantity can therefore be screened out of further assessment.

Policy 15: Infill and Backland Development

Likely activities (operation) to result as a consequence of the proposal

- This policy is an updated approach of the adopted 2018 Local Plan (LP39) to take account of types of brownfield sites where the London Plan expects optimisation for housing delivery, and a balanced approach to protecting garden land through assessing the harm of proposals.

Potential effects of proposal implemented

- Physical loss of or damage to off-site habitats

- Non-physical disturbance to off-site habitats (lighting and noise)

Potential mitigation measures – if implemented would avoid likely significant effect

- The policy itself provides mitigation in that features important to wildlife and rear garden land that provides wildlife habitat must be retained.
- Mitigation is also provided by policies LP 39 Biodiversity & geodiversity; LP 34 Green and blue infrastructure; LP 43 Floodlighting and other external artificial lighting; LP 53 Local environmental impacts, LP 4 Minimising greenhouse gas emissions and energy efficiency and LP 5 Energy infrastructure.

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- No – the scale of development coming forward through this policy is likely to be small and of a type that would not affect the qualifying features of the European sites.

Policy 16: Small Sites

Likely activities (operation) to result as a consequence of the proposal

- This is a new policy, to reflect London Plan emphasis and links with the boroughwide Urban Design Study. In accordance with the London Plan, intensification is encouraged on small sites with good public transport accessibility (PTAL 3-6) and on sites within 800m of a tube, rail station or Major or District town centre boundary (as defined in the London Plan).
- This policy will result in the building of more residential homes (small sites target of 234 new homes per annum), increase in vehicle traffic, increase

in recreational pressure and increase in demand for water supply and treatment.

Potential effects of proposal implemented

- Air pollution
- Physical loss of or damage to habitat
- Non-physical disturbance (lighting and noise)
- Impacts on water quality and quantity
- Impacts of recreation

Potential mitigation measures – if implemented would avoid likely significant effect

- Air pollution impacts are mitigated by the following policies which discourage car use and encourage sustainable transport: LP 47 Sustainable travel choices; LP 48 Vehicular Parking; Cycle Parking; Servicing and Construction Logistics Management and LP 7 Waste and the circular economy.
- Policy LP 39 Biodiversity & geodiversity provides mitigation by protecting Sites of Special Scientific Interest and therefore the Special Protection Area and Special Areas of Conservation, with some additional protection provided by LP 34 Green and blue infrastructure.
- Policies LP 43 Floodlighting and other external artificial lighting; LP 53 Local environmental impacts; LP 4 Minimising greenhouse gas emissions and energy efficiency; LP 6 Sustainable construction standards and LP 5 Energy infrastructure seek to minimise the environmental impacts of development and therefore provide mitigation for physical loss of or damage to habitat and non-physical disturbance.
- Mitigation for water quality and quantity impacts is provided mainly by Policy LP 9 Water resources and infrastructure, but also LP 8 Flood risk and sustainable drainage.

- Mitigation for impacts associated with recreation is provided by Policy LP 37 Public open space, play space, sport and recreation.

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- Significant effects from air pollution cannot be ruled out. Air pollution may occur as a result of this policy, due to increases in trips from the overall quantum of development, either from the Richmond Local Plan alone or in combination with plans from neighbouring boroughs/districts.
- European sites are protected from development within their boundaries. Development could have an impact on habitats functionally connected to the European sites, however the areas primarily used by Special Protection Area bird species (gadwall and northern shoveler) are protected from development and none of the proposed development sites support significant wetland habitat. There are sufficient records of stag beetle within 2km of Richmond Park Special Area of Conservation that the loss of some areas for development will not significantly affect the Special Area of Conservation population.
- The urban nature of the London Borough of Richmond upon Thames means that background levels of noise, vibration and light are already relatively high, such that the small amount of development that may occur within 500m of the European sites is unlikely to have a significant effect. Mitigation incorporated into the Local Plan further reduces this impact.
- Housing will largely occur within existing urban areas and utilise existing infrastructure. Planned upgrades, regulatory mechanisms and Policy 9 provide sufficient safeguards against significant water quantity and quality effects.
- Accessibility to Wimbledon Common Special Area of Conservation and the South West London Waterbodies Special Protection Area mean that they are unlikely to experience significant increases in dog walking or runners, etc. Richmond Park Special Area of Conservation may experience an increase in visitor numbers, but this is unlikely to be significant in the context of existing visitor numbers.

- Physical loss of or damage to onsite or offsite habitat, non-physical disturbance, recreation impacts and water quality and quantity can therefore be screened out of further assessment.

Theme 3: Shaping and supporting our town and local centres as they adapt to changes in the way we shop and respond to the pandemic

Policy 17: Supporting our centres and promoting culture

- This policy continues the existing hierarchy of the centre network (LP25), recognising the importance of smaller centres to Living Locally, and sets a positive approach to repurposing High Streets through adaptation and diversification including leisure and community uses. Acknowledges the significant impact of changes to the use classes. This overall strategic policy seeks to protect existing commercial space and promotes enhancement of the public realm for connecting places.

Likely activities (operation) to result as a consequence of the proposal

- None. This policy relates to criteria that would apply to proposals for development in the borough's (urban) centres.

Potential effects if proposal implemented

- N/A

Potential mitigation measures – if implemented would avoid likely significant effect

- N/A

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- N/A

Policy 18: Development in centres

- This policy continues a town centre first approach (LP25, LP26) directing new major development to within the town centre boundaries, with a focus on the primary shopping area, and appropriate scale development in local centres and Areas of Mixed Use. Support for uses that add to vitality and viability, and that residential can be appropriate on upper floors and peripheries of centres. Links to the vision for each of the centres. Designates Cultural Quarters in Richmond and Twickenham, and recognises cultural clusters in other smaller centres. Seeks inclusive development, flexible provision, adequate servicing/delivery. Acknowledges the significant impact of changes to the use classes.

Likely activities (operation) to result as a consequence of the proposal

- None. This policy relates to criteria that would apply to proposals for development in the borough's (urban) centres.

Potential effects if proposal implemented

- N/A

Potential mitigation measures – if implemented would avoid likely significant effect

- N/A

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- N/A

Policy 19: Managing impacts

- This policy updates the previous approach of the existing adopted Local Plan (LP26) on over-concentration in light of the impact of changes to the use classes, with emphasis on supporting vibrant uses while managing the impacts, including the mitigation that may be sought.

Likely activities (operation) to result as a consequence of the proposal

- None – this policy relates to criteria that would apply to proposals for retail development in the borough's (urban) centres. Potential likely significant effects if the proposal is implemented

Potential mitigation measures – if implemented would avoid likely significant effect

- Proposals for evening and food and drink uses should be accompanied by a management plan, including mitigation measures for any negative impacts of these uses. Impacts such as noise and light pollution on local wildlife and biodiversity should be considered through appropriate location, design and scheduling.

- The use of outdoor areas including garden areas, rooftops, forecourts and pavements in association with food and drink uses will only be supported where it won't cause unacceptable harm to the adjoining residential property and the area generally.

Is the policy likely to have significant effects and therefore need to be scoped into the appropriate Assessment?

- N/A

Policy 20: Local shops and services

- This policy updates the previous approach of existing adopted 2018 Local Plan (LP26 and LP27) supporting local shops and services, important for Living Locally, and resists the loss of public houses. Acknowledges the significant impact of changes to the use classes.

Likely activities (operation) to result as a consequence of the proposal

- None. This policy likely relates to criteria that would apply to proposals for development in the borough's (urban) centres.

Potential effects if proposal implemented

- N/A

Potential mitigation measures – if implemented would avoid likely significant effect

- N/A

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- N/A

Theme 4: Increasing jobs and helping business to grow and bounce back following the pandemic.

Policy 21: Protecting the local economy

- This policy provides the continued protection of existing employment floorspace with a focus on the importance of existing designated employment sites across the borough and our town centres. Acknowledgement of impact of changes to the use classes, and reference to recent Article 4 Direction as this is the policy tool that will be applied. Expects employment-led intensification and all major new development to consider opportunity to include commercial use, given local employment needs and the uncertainty caused by the pandemic. As a strategic policy, mention of the importance of affordable, adaptable workspaces and the Agent of Change principle.

Likely activities (operation) to result as a consequence of the proposal

- Employment development
- Increase in vehicle traffic
- Increased demand for water supply and treatment

Potential effects if proposal implemented

- Water quality and quantity
- Air pollution
- Physical loss of or damage to habitat
- Non-physical disturbance

Potential mitigation measures – if implemented would avoid likely significant effect

- Air pollution impacts are mitigated by the following policies which discourage car use and encourage sustainable transport: LP 47 Sustainable travel choices; LP 48 Vehicular Parking; Cycle Parking; Servicing and Construction Logistics Management
- Policy LP 23 directs office employment towards borough centres and key office areas.
- Mitigation is also provided by Policies LP 39 Biodiversity & geodiversity; LP 34 Green and blue infrastructure; LP 43 Floodlighting and other external artificial lighting; LP 53 Local environmental impacts; LP 6 Sustainable construction methods; LP 9 Water resources and infrastructure; LP 8 Flood risk and sustainable drainage.

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- Uncertain – significant effects from air pollution cannot be ruled out.
- Air pollution may occur as a result of this policy, due to increases in trips from the overall quantum of development, either from the Richmond Local Plan alone or in combination with plans from neighbouring boroughs/districts.
- Policy LP 39 protects the European sites from development within their boundaries. Development could have an impact on habitats functionally

connected to the European sites, however the areas primarily used by Special Protection Area bird species (gadwall and northern shoveler) are protected from development and none of the proposed development sites support significant wetland habitat. There are sufficient records of stag beetle within 2km of Richmond Park Special Area of Conservation that the loss of some areas for development will not significantly affect the Special Area of Conservation population.

- The urban nature of the London Borough of Richmond upon Thames means that background levels of noise, vibration and light are already relatively high, such that the small amount of development that may occur within 500m of the European sites is unlikely to have a significant effect. Mitigation incorporated into the Local Plan further reduces this impact.
- Housing will largely occur within existing urban areas and utilise existing infrastructure. Planned upgrades, regulatory mechanisms and Policy LP 9 provide sufficient safeguards against significant water quantity and quality effects.
- Physical loss of or damage to onsite or offsite habitat, non-physical disturbance and water quality and quantity can therefore be screened out of further assessment.

Policy 22: Promoting jobs and our local economy

- This new policy recognises the valued local economy and existing clusters/sectors, and promotes local employment opportunities, drawing out criteria for suitable spaces. Include support for technology, low carbon and the circular economy linking with climate change.

Likely activities (operation) to result as a consequence of the proposal

- Employment development
- Increase in vehicle traffic
- Increased demand for water supply and treatment

Potential effects if proposal implemented

- Water quality and quantity
- Air pollution
- Physical loss of or damage to habitat
- Non-physical disturbance

Potential mitigation measures – if implemented would avoid likely significant effect

- Air pollution impacts are mitigated by the following policies which discourage car use and encourage sustainable transport: LP 47 Sustainable travel choices, LP 48 Vehicular Parking, Cycle Parking, Servicing and Construction Logistics Management
- Policy LP 23 directs office employment towards borough centres and key office areas.
- Mitigation is also provided by Policies LP 39 Biodiversity & geodiversity; LP 34 Green and blue infrastructure; LP 43 Floodlighting and other external artificial lighting; LP 53 Local environmental impacts; LP 6 Sustainable construction methods; LP 9 Water resources and infrastructure; LP 8 Flood risk and sustainable drainage.

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- Uncertain – significant effects from air pollution cannot be ruled out.
- Air pollution may occur as a result of this policy, due to increases in trips from the overall quantum of development, either from the Richmond Local Plan alone or in combination with plans from neighbouring boroughs/districts.
- Policy LP 39 protects the European sites from development within their boundaries. Development could have an impact on habitats functionally

connected to the European sites, however the areas primarily used by Special Protection Area bird species (gadwall and northern shoveler) are protected from development and none of the proposed development sites support significant wetland habitat. There are sufficient records of stag beetle within 2km of Richmond Park Special Area of Conservation that the loss of some areas for development will not significantly affect the Special Area of Conservation population.

- The urban nature of the London Borough of Richmond upon Thames means that background levels of noise, vibration and light are already relatively high, such that the small amount of development that may occur within 500m of the European sites is unlikely to have a significant effect. Mitigation incorporated into the Local Plan further reduces this impact.
- Housing will largely occur within existing urban areas and utilise existing infrastructure. Planned upgrades, regulatory mechanisms and Policy LP 9 provide sufficient safeguards against significant water quantity and quality effects.
- Physical loss of or damage to onsite or offsite habitat, non-physical disturbance and water quality and quantity can therefore be screened out of further assessment.

Policy 23: Offices

- This policy strengthens the existing approach of adopted 2018 Local Plan (LP41) to expect no net loss of office floorspace, while continuing to direct new major office development to the town centres. Acknowledgement of impact of changes to the use classes, renaming Key Office Areas as Key Business Areas (as there is a link with the town and local centres policies above).

Likely activities (operation) to result as a consequence of the proposal

- None – this policy relates to criteria that would apply to proposals for employment development.

Potential effects if proposal implemented

- N/A

Potential mitigation measures – if implemented would avoid likely significant effect

- This policy encourages most employment development to be within borough centres, which provides some mitigation for the potential physical loss of or damage to habitat and non-physical disturbance effects of general employment development.

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- N/A

Policy 24: Industrial land

- This policy strengthens the existing approach of the adopted 2018 Local Plan (LP 42) to expect no net loss, expecting industrial re-provision to provide suitable space. No longer allowing for mixed use of just residential and replacing industrial loss with office floorspace as part of redevelopment proposals as this does not address the need. Acknowledgement of impact of changes to the use classes.

Likely activities (operation) to result as a consequence of the proposal

- This policy strengthens the existing approach and is likely to result in development of industrial land.
- Potential effects if proposal implemented
- Water quality and quantity

Appendix D Screening Matrix for Proposed Policies within the Local Plan

- Air pollution
- Physical loss of or damage to habitat
- Non-physical disturbance

Potential mitigation measures – if implemented would avoid likely significant effect

- Air pollution impacts are mitigated by the following policies which discourage car use and encourage sustainable transport: LP 47 Sustainable travel choices; LP 48 Vehicular Parking; Cycle Parking; Servicing and Construction Logistics Management and LP 7 Waste and the circular economy.
- Mitigation is also provided by Policies LP 39 Biodiversity & geodiversity; LP 34 Green and blue infrastructure; LP 43 Floodlighting and other external artificial lighting; LP 53 Local environmental impacts; LP 6 Sustainable construction methods; LP 9 Water resources and infrastructure; LP 8 Flood risk and sustainable drainage.

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- Uncertain – significant effects from air pollution cannot be ruled out.
- Air pollution may occur as a result of this policy, due to increases in trips from the overall quantum of development, either from the Richmond Local Plan alone or in combination with plans from neighbouring boroughs/districts.
- European sites are protected from development within their boundaries (LP39). Development could have an impact on habitats functionally connected to the European sites, however the areas primarily used by Special Protection Area bird species (gadwall and northern shoveler) are protected from development. There are sufficient records of stag beetle within 2km of Richmond Park Special Area of Conservation that the loss of

some areas for development will not significantly affect the Special Area of Conservation population.

- The urban nature of the London Borough of Richmond upon Thames means that background levels of noise, vibration and light are already relatively high, such that the small amount of development that may occur within 500m of the European sites is unlikely to have a significant effect. Mitigation incorporated into the Local Plan further reduces this impact.
- Development will largely occur within existing urban areas and utilise existing infrastructure. Planned upgrades, regulatory mechanisms and Policy LP 9 provide sufficient safeguards against significant water quantity and quality effects.
- Physical loss of or damage to onsite or offsite habitat, non-physical disturbance and water quality and quantity can therefore be screened out of further assessment.

Policy 25: Affordable/flexible/managed workspace

- This policy expands on the existing approach of the adopted 2018 Local Plan (LP41) protecting existing affordable workspace and requiring on all sites providing more than 1,000sqm employment floorspace. Details modern, adaptable affordable workspace that is needed and how this will be secured.

Likely activities (operation) to result as a consequence of the proposal

- None – this policy relates to criteria that would apply to proposals for employment development.

Potential effects if proposal implemented

- N/A

Potential mitigation measures – if implemented would avoid likely significant effect

- This policy encourages most employment development to be within borough centres, which provides some mitigation for the potential physical loss of or damage to habitat and non-physical disturbance effects of general employment development.

Is the policy likely to have significant effects and therefore need to be scoped into the appropriate Assessment?

- N/A

Policy 26: Visitor economy

Likely activities (operation) to result as a consequence of the proposal

- This policy is an updated approach of the adopted 2018 Local Plan (LP43) to reflect London Plan requirements for accessible hotel bedrooms and approach to cultural clusters in the borough.
- Activities include Increased tourism, increased visitor accommodation, increase in vehicle traffic, increase in recreational pressure and increased demand for water supply and treatment,

Potential effects if proposal implemented

- Impacts of recreation
- Water quality and quantity
- Air pollution

Potential mitigation measures – if implemented would avoid likely significant effect

- Air pollution impacts are mitigated by the following policies which discourage car use and encourage sustainable transport: LP 47 Sustainable travel choices; LP 48 Vehicular Parking; Cycle Parking; Servicing and Construction Logistics Management and LP 7 Waste and the circular economy.
- Mitigation is also provided by policies LP 39 Biodiversity & geodiversity; LP 34 Green and blue infrastructure; LP 43 Floodlighting and other external artificial lighting; LP 9 water resources and infrastructure; LP 8 Flood risk and sustainable drainage and LP 37 Public open space, play space, sport and recreation.

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- No – the scale of development coming forward through this policy is likely to be small and of a type that would not affect the qualifying features of the European sites.

Policy 27: Telecommunications and digital infrastructure

- This is an updated approach of the adopted 2018 Local Plan (LP33) recognising the need for enhancing digital infrastructure (reflecting London Plan requirements for new development) while also assessing the potential impacts.

Likely activities (operation) to result as a consequence of the proposal

- None – this policy relates to criteria that would apply to proposals for telecommunications development.

Potential effects if proposal implemented

- N/A

Potential mitigation measures – if implemented would avoid likely significant effect

- Applications for telecommunications development will be considered in accordance with national policy, and the applicant will need to submit evidence to demonstrate that all options for sharing of existing equipment, including with other operators, and erecting masts on existing tall buildings or structures, have been fully explored before considering the erection of new structures or facilities.
- No specific mitigation measures relating to the construction or operation of the infrastructure is detailed.

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- N/A

Theme 5: Protecting what is special and improving our areas (heritage, culture and open land)

Policy 28: Local character and design quality

Likely activities (operation) to result as a consequence of the proposal

- None – this policy will not result in new development. This policy takes forward existing approach of the adopted 2018 Local Plan (LP1) into broader strategic policy, linked to the boroughwide Urban Design Study and achieving design quality and various aspects to place-making.

Potential effects if proposal implemented

- N/A

Potential mitigation measures – if implemented would avoid likely significant effect

- N/A

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- N/A

Policy 29: Designated heritage assets

Likely activities (operation) to result as a consequence of the proposal

- None – this policy will not result in new development. This policy includes minor updates to existing approach of the adopted 2018 Local Plan (LP3) including in response to climate change and latest on updating Conservation Area Appraisals.

Potential effects if proposal implemented

- N/A

Potential mitigation measures – if implemented would avoid likely significant effect

- N/A

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- N/A

Policy 30: Non-designated heritage assets

Likely activities (operation) to result as a consequence of the proposal

- None – this policy will not result in new development. This policy includes minor updates to existing approach of the adopted 2018 Local Plan (LP4) including reference to locally listed historic parks and gardens.

Potential effects if proposal implemented

- N/A

Potential mitigation measures – if implemented would avoid likely significant effect

- N/A

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- N/A

Policy 31: Views and Vistas

Likely activities (operation) to result as a consequence of the proposal

- None – this policy will not result in new development. This policy includes minor updates to existing approach of the adopted 2018 Local Plan (LP5)

including links with the boroughwide Urban Design Study and forthcoming additional local views to be identified (for the Policies Map).

Potential effects if proposal implemented

- N/A

Potential mitigation measures – if implemented would avoid likely significant effect

- N/A

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- N/A

Policy 32: Royal Botanic Gardens, Kew World Heritage Site:

Likely activities (operation) to result as a consequence of the proposal

- None – this policy will not result in new development. This policy includes minor updates to existing approach of the adopted 2018 Local Plan (LP6).

Potential effects if proposal implemented

- N/A

Potential mitigation measures – if implemented would avoid likely significant effect

- N/A

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- N/A

Policy 33: Archaeology

Likely activities (operation) to result as a consequence of the proposal

- None – this policy will not result in new development. This policy includes minor updates to existing approach of the adopted 2018 Local Plan (LP7) to reflect forthcoming updated ‘tiered’ APAs.

Potential effects if proposal implemented

- N/A

Potential mitigation measures – if implemented would avoid likely significant effect

- N/A

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- N/A

Theme 6: Increasing biodiversity and the quality of our green spaces, and greening the borough

Policy 34: Green and Blue Infrastructure

Likely activities (operation) to result as a consequence of the proposal

- None – this policy will not result in new development. This policy updates the existing policy approach of the adopted 2018 Local Plan (LP12) to protect and enhance the multi-functional green infrastructure, as well as the blue infrastructure network, ensuring it is maintained and sets the strategic links with its role related to biodiversity, urban greening and climate change as well as outreach and education.

Potential effects if proposal implemented

- N/A

Potential mitigation measures – if implemented would avoid likely significant effect

- This policy puts in place measures to protect the borough's existing green infrastructure network and where possible enhance it. As such, it provides general mitigation from harm to all European sites. Although new or enhanced green infrastructure elsewhere in the borough could reduce recreational pressure on the European sites, the policy is unlikely to provide significant mitigation for this impact as the European sites in the borough are established important sites for recreation.

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- N/A

Policy 35: Green Belt, Metropolitan Open Land and Local Green Space

Likely activities (operation) to result as a consequence of the proposal

- This policy continues the strong protection of the Borough's designated open spaces of the adopted 2018 Local Plan (LP13) and adds into policy the encouragement for improvements or enhancements to landscape quality (including visual amenity), biodiversity (including delivering biodiversity net gain) or accessibility. Policies Map changes suggested in light of evidence base (i.e. removal of one site from MOL, with two other minor changes to MOL boundaries; and 6 proposed new Local Green Space designations).
- It will include small scale appropriate development (public and private open spaces and playing fields, open recreation and sport, biodiversity including rivers and bodies of water and open community uses including allotments and cemeteries). There also may be cases where inappropriate development, such as small-scale structures for essential utility infrastructure, may be acceptable.

Potential effects if proposal implemented

- Physical loss of or damage to habitat
- Non-physical disturbance

Potential mitigation measures – if implemented would avoid likely significant effect

- The policy itself provides some mitigation in that development will only be permitted in ‘very special circumstances’, in line with national policy and guidance. The borough’s Green Belt and Metropolitan Open Land will be protected and retained in predominantly open use and improvement and enhancement will be encouraged.
- Local Green Space (LGS) will be protected from inappropriate development that could cause harm to its qualities.
- Policy LP 39 Biodiversity & geodiversity provides mitigation by protecting Sites of Special Scientific Interest and therefore the Special Protection Areas and Special Areas of Conservation, with some additional protection provided by LP 30 Green and blue infrastructure.
- Policies LP 43 Floodlighting and other external artificial lighting; LP 53 Local environmental impacts; LP 4 Minimising greenhouse gas emissions and energy efficiency; LP 5 Energy infrastructure and LP 6 Sustainable construction standards seek to minimise the environmental impacts of development and therefore provide mitigation for physical loss of or damage to habitat and non-physical disturbance.

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- No – the scale of development coming forward through this policy is likely to be small and of a type that would not affect the qualifying features of the European sites.
- Policy LP 39 protects the European sites from development within their boundaries. Development could have an impact on habitats functionally connected to the European sites, however the areas primarily used by Special Protection Area bird species (gadwall and northern shoveler) are protected from development by Policy LP 39. There are sufficient records of stag beetle within 2km of Richmond Park Special Area of Conservation

that the loss of some areas for development will not significantly affect the Special Area of Conservation population.

- The urban nature of the London Borough of Richmond upon Thames means that background levels of noise, vibration and light are already relatively high, such that the small amount of development that may occur within 500m of the European sites is unlikely to have a significant effect. Mitigation incorporated into the Local Plan further reduces this impact.
- Physical loss of or damage to onsite or offsite habitat and non-physical disturbance can therefore be screened out of further assessment.

Policy 36: Other Open Land of Townscape Importance (OOLTI)

Likely activities (operation) to result as a consequence of the proposal

- This policy continues the protection of designated OOLTI of the adopted 2018 Local Plan (LP14) and while recognising the changes to PD rights, provides opportunity to encourage measures to restore spaces in terms of their quality, character and biodiversity net gain. Policies Map changes suggested in light of evidence base (i.e. adding one new site and removing duplication of OOLTI designation on one site).
- This policy will result in Small scale development (linked to the functional use of open land, or replacement of, or minor extension to, existing built facilities), in 'exceptional' circumstances.

Potential effects if proposal implemented

- Physical loss of or damage to habitat (offsite habitats only)
- Non-physical disturbance

Potential mitigation measures – if implemented would avoid likely significant effect

- The policy itself provides some mitigation as its aim is to safeguard and enhance where possible open land and that development will only be permitted in 'exceptional' circumstances.
- Policy LP 39 Biodiversity & geodiversity provides mitigation by protecting Sites of Special Scientific Interest and therefore the Special Protection Areas and Special Area of Conservation, with some additional protection provided by LP 34 Green and blue infrastructure.
- Policies LP 43 Floodlighting and other external artificial lighting; LP 53 Local environmental impacts, LP 4 Minimising greenhouse gas emissions and energy efficiency; LP 5 Energy infrastructure and LP 6 sustainable construction methods seek to minimise the environmental impacts of development and therefore provide mitigation for physical loss of or damage to habitat and non-physical disturbance.

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- No – the scale of development coming forward through this policy is likely to be small and of a type that would not affect the qualifying features of the European sites.
- Policy LP 39 protects the European sites from development within their boundaries. Development could have an impact on habitats functionally connected to the European sites, however the areas primarily used by Special Protection Area bird species (gadwall and northern shoveler) are protected from development by Policy LP 39. There are sufficient records of stag beetle within 2km of Richmond Park Special Area of Conservation that the loss of some areas for development will not significantly affect the Special Area of Conservation population.
- The urban nature of the London Borough of Richmond upon Thames means that background levels of noise, vibration and light are already relatively high, such that the small amount of development that may occur

within 500m of the European sites is unlikely to have a significant effect. Mitigation incorporated into the Local Plan further reduces this impact.

- Physical loss of or damage to on-site or off-site habitat and non-physical disturbance can therefore be screened out of further assessment.

Policy 37: Public open space, play, sport and recreation

Likely activities (operation) to result as a consequence of the proposal

- None – this policy will not result in new development. This policy continues the existing approach of the adopted 2018 Local Plan (LP31) recognising importance of open spaces for biodiversity and climate change, and to refer to the GLA's child yield calculator; updated policy to also refer to relocation of playing fields. Policies Map changes proposed in light of new Public Open Space deficiency mapping to be undertaken.

Potential effects if proposal implemented

- N/A

Potential mitigation measures – if implemented would avoid likely significant effect

- This policy encourages new development to provide public open space and space for play, sport and recreation. The policy could therefore provide mitigation for recreational pressure impacts. New open spaces, play facilities and formal and informal land for support and recreation should be linked to the wider green infrastructure network.

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- N/A

Policy 38: Urban Greening

Likely activities (operation) to result as a consequence of the proposal

- None – this policy will not result in new development. This is a new policy to set approach to reflect London Plan Urban Greening Factor on major developments, incorporating the existing policy approach to green roofs and walls from the adopted 2018 Local Plan (LP17), and expecting incorporation of urban greening on all small sites, recognising wider links to biodiversity and climate change.

Potential effects if proposal implemented

- N/A

Potential mitigation measures – if implemented would avoid likely significant effect

- This policy states that all development proposals should integrate green infrastructure and provide for urban greening and could therefore contribute to mitigation for physical loss or damage to offsite habitats.

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- N/A

Policy 39: Biodiversity and Geodiversity

Likely activities (operation) to result as a consequence of the proposal

- None – this policy will not result in new development. This policy continues the existing approach of the adopted 2018 Local Plan (LP15) protecting the borough's biodiversity with updated mitigation hierarchies and increased emphasis on including the connection between habitats and importance of wildlife / ecological corridors, with a specific policy requirement for at least 20% contribution to delivering measurable biodiversity net gain. Policies Map changes suggested in light of evidence base, i.e. changing existing Other Site of Nature Importance (OSNI) to Site of Importance for Nature Conservation (SINC), amending and adding to existing sites as well as identifying new sites for protection.

Potential effects if proposal implemented

- N/A

Potential mitigation measures – if implemented would avoid likely significant effect

- This policy seeks to protect biodiversity in the borough, including biodiversity in and adjacent to designated sites, as well as elsewhere, and supporting biodiversity enhancement. This includes for Special Areas of Conservation, Sites of Special Scientific Interest, National Nature Reserves, Local Nature Reserves and Sites of Importance for Nature Conservation.

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- N/A

Policy 40: Rivers and river corridors

Likely activities (operation) to result as a consequence of the proposal

- None – this policy relates to criteria that would apply to proposals for development along the river corridors. This policy maintains the protection of the historic, environmental and natural qualities of the borough's water bodies similar to the adopted 2018 Local Plan (LP18). Promotes public access and protects river related industry and water dependent uses.

Potential effects if proposal implemented

- N/A

Potential mitigation measures – if implemented would avoid likely significant effect

- N/A

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- N/A

Policy 41: Moorings and floating structures

Likely activities (operation) to result as a consequence of the proposal

- None – this policy relates to criteria that would apply to proposals for moorings and floating structures. This policy is a continuation of existing policy of the adopted 2018 Local Plan (LP19) to improve and protect the open character, views and heritage of the waterways, and emphasise that new moored vessels would only be supported for river-related uses.

Potential effects if proposal implemented

- N/A

Potential mitigation measures – if implemented would avoid likely significant effect

- N/A

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- N/A

Policy 42: Trees, Woodland and Landscape

Likely activities (operation) to result as a consequence of the proposal

- None – this policy will not result in new development. This policy continues the protection of existing trees and requirements for new trees in development as set out in the adopted 2018 Local Plan (LP16), with increased emphasis on the broader value of trees and links with biodiversity, air quality and climate change mitigation and adaptation.

Potential effects if proposal implemented

- N/A

Potential mitigation measures – if implemented would avoid likely significant effect

- N/A

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- N/A

Policy 43: Floodlighting and other external artificial lighting

Likely activities (operation) to result as a consequence of the proposal

- None – this policy will not result in new development. This is a continued policy approach of the adopted 2018 Local Plan (LP9) considering the demonstrable harm of floodlighting and the need to balance with positive benefits, including recognising potential for positive benefits around safety/security.

Potential effects if proposal implemented

- N/A

Potential mitigation measures – if implemented would avoid likely significant effect

- This policy requires that impacts on biodiversity and wildlife are taken into consideration when assessing planning applications for floodlighting. The policy could therefore provide some mitigation for the effects of non-physical disturbance (lighting).

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- N/A

Theme 7: Improving design, delivering beautiful buildings and high-quality places

Policy 44: Design process

Likely activities (operation) to result as a consequence of the proposal

- None – this policy will not result in new development. This is a new policy reflect the Government and London Plan emphasis on design-led approach, setting out the tools to assess good design through the planning process including the role of design review.

Potential effects if proposal implemented

- N/A

Potential mitigation measures – if implemented would avoid likely significant effect

- N/A

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- N/A

Policy 45: Tall and Mid-Rise Building Zones

Likely activities (operation) to result as a consequence of the proposal

- None – this policy will not result in new development. This is an updated policy approach of the adopted 2018 Local Plan (LP2) to respond to the London Plan requirements and links with the Urban Design Study identifying tall and mid-rise zones. Tall buildings will only be appropriate in tall building zones, where the development would not result in any adverse visual, functional, environmental or cumulative impacts.

Potential effects if proposal implemented

- N/A

Potential mitigation measures – if implemented would avoid likely significant effect

- N/A

Is the policy likely to have significant effects and therefore need to be scoped into the appropriate Assessment?

- N/A

Policy 46: Amenity and living conditions

Likely activities (operation) to result as a consequence of the proposal

- None – this policy will not result in new development. This is an updated policy approach of the adopted 2018 Local Plan (LP8) particularly recognising London Plan approach to mitigating design features to ensure privacy.

Potential effects if proposal implemented

- N/A

Potential mitigation measures – if implemented would avoid likely significant effect

- While it includes some measures to minimise non-physical disturbance associated with new development, this is with the aim of protecting amenity rather than ecological receptors.

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- N/A

Theme 8: Reducing the need to travel and improving the choices for more sustainable travel

Policy 47: Sustainable travel choices

Likely activities (operation) to result as a consequence of the proposal

- None – this policy will not result in new development. This policy updates existing policy of the adopted 2018 Local Plan (LP44) to reflect the London Plan, Mayor's Transport Strategy and the Council's Active Travel Strategy. Increases emphasis on walking and cycling for short journeys, inclusive mobility and assessing the impact of developments on the road network - using a threshold approach linked to development size as to whether a separate Transport Statement or Transport Assessment is required for different types of uses.

Potential effects if proposal implemented

- N/A

Potential mitigation measures – if implemented would avoid likely significant effect

- This policy seeks to reduce the impact of development including in relation to congestion and air pollution. As such, it may contribute to mitigation for air pollution effects.

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- N/A

Policy 48: Vehicular Parking, Cycle Parking, Servicing and Construction Logistics Management

Likely activities (operation) to result as a consequence of the proposal

- None – this policy will not result in new development. This policy updates existing policy of the adopted 2018 Local Plan (LP45) to reflect London Plan vehicle and cycle parking standards. Adopts a threshold approach linked to development size for whether future occupants will be excluded from a CPZ, for when an on-street vehicular parking stress survey is needed, and for when a construction management plan is required. Includes private vehicular crossovers to a former front garden, car-free development, and car clubs.

Potential effects if proposal implemented

- N/A

Potential mitigation measures – if implemented would avoid likely significant effect

- This policy requires that new developments make provision for the accommodation of vehicles to provide for the needs of the development while minimising the impacts of car-based travel including on the operation of the road network and local environmental and ensuring making the best use of the land.

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- N/A

Theme 9: Securing new social and community infrastructure to support a growing population

Policy 49: Social and Community Infrastructure

Likely activities (operation) to result as a consequence of the proposal

- This policy continues the existing approach of the adopted 2018 Local Plan (LP29) to ensure adequate provision of community services and facilities, protecting existing sites and requiring new provision to be inclusive and adaptable, to accord with Living Locally. A new criterion allows for a change of use to wholly affordable housing without the need to explore and market for alternative social infrastructure use. Acknowledgement of impact of changes to the use classes. There is likely to be an increase in vehicle traffic associated with this policy.

Potential effects if proposal implemented

- Physical loss of or damage to habitat
- Non-physical disturbance
- Air pollution

Potential mitigation measures – if implemented would avoid likely significant effect

- Air pollution impacts are mitigated by the following policies which discourage car use and encourage sustainable transport: LP 47 Sustainable travel choices; LP 48 Vehicular Parking; Cycle Parking; Servicing and Construction Logistics Management and LP 7 Waste and the circular economy.
- Policy LP 39 Biodiversity & geodiversity provides mitigation by protecting Sites of Special Scientific Interest and therefore the Special Protection Areas and Special Areas of Conservation, with some additional protection provided by LP 34 Green and blue infrastructure.
- Policies LP 43 Floodlighting and other external artificial lighting; LP 53 Local environmental impacts; LP 4 Minimising greenhouse gas emissions and energy efficiency; LP 6 Sustainable construction standards and LP 5 Energy infrastructure seek to minimise the environmental impacts of development and therefore provide mitigation for physical loss of or damage to habitat and non-physical disturbance.

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- Uncertain – significant effects from air pollution cannot be ruled out.
- Air pollution may occur as a result of this policy, due to increases in trips from the overall quantum of development, either from the Richmond Local Plan alone or in combination with plans from neighbouring boroughs/districts.
- Policy LP 39 protects the European sites from development within their boundaries. Development could have an impact on habitats functionally connected to the European sites, however the areas primarily used by Special Protection Area bird species (gadwall and northern shoveler) are protected from development by Policy LP 39. There are sufficient records of stag beetle within 2km of Richmond Park Special Area of Conservation

that the loss of some areas for development will not significantly affect the Special Area of Conservation population.

- The urban nature of the London Borough of Richmond upon Thames means that background levels of noise, vibration and light are already relatively high, such that the small amount of development that may occur within 500m of the European sites is unlikely to have a significant effect. Mitigation incorporated into the Local Plan further reduces this impact.
- Physical loss of or damage to on-site or off-site habitat and non-physical disturbance can therefore be screened out of further assessment.

Policy 50: Education and Training

Likely activities (operation) to result as a consequence of the proposal

- This policy is an updated approach (LP29) with additional detail regarding provision of childcare places, and to involve AfC in discussions. The council will work with partners to encourage the provision of facilities and services for education and training of all age groups to help reduce inequalities and support the local economy. For promoting local employment opportunities, details updated to reflect adopted Planning Obligations SPD and circumstances when a financial contribution e.g. to Work Match may be accepted. Acknowledgement of impact of changes to the use classes.
- Therefore, there will be an increase in social and community infrastructure and increase in vehicle traffic.

Potential effects if proposal implemented

- Physical loss of or damage to habitat
- Non-physical disturbance
- Air pollution

Potential mitigation measures – if implemented would avoid likely significant effect

- Air pollution impacts are mitigated by the following policies which discourage car use and encourage sustainable transport: LP 47 Sustainable travel choices; LP 48 Vehicular Parking; Cycle Parking; Servicing and Construction Logistics Management and LP 7 Waste and the circular economy.
- Policy LP 39 Biodiversity & geodiversity provides mitigation by protecting Sites of Special Scientific Interest and therefore the Special Protection Area and Special Areas of Conservation, with some additional protection provided by LP 34 Green and blue infrastructure.
- Policies LP 43 Floodlighting and other external artificial lighting; LP 53 Local environmental impacts; LP 4 Minimising greenhouse gas emissions and energy efficiency; LP 6 Sustainable construction standards and LP 5 Energy infrastructure seek to minimise the environmental impacts of development and therefore provide mitigation for physical loss of or damage to habitat and non-physical disturbance.

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- Uncertain – significant effects from air pollution cannot be ruled out.
- Air pollution may occur as a result of this policy, due to increases in trips from the overall quantum of development, either from the Richmond Local Plan alone or in combination with plans from neighbouring boroughs/districts.
- Policy LP 39 protects the European sites from development within their boundaries. Development could have an impact on habitats functionally connected to the European sites, however the areas primarily used by Special Protection Area bird species (gadwall and northern shoveler) are protected from development by Policy LP 39. There are sufficient records of stag beetle within 2km of Richmond Park Special Area of Conservation

that the loss of some areas for development will not significantly affect the Special Area of Conservation population.

- The urban nature of the London Borough of Richmond upon Thames means that background levels of noise, vibration and light are already relatively high, such that the small amount of development that may occur within 500m of the European sites is unlikely to have a significant effect. Mitigation incorporated into the Local Plan further reduces this impact.
- Physical loss of or damage to onsite or offsite habitat and non-physical disturbance can therefore be screened out of further assessment.

Theme 10: Creating safe, healthy and inclusive communities

Policy 51: Health and Wellbeing

Likely activities (operation) to result as a consequence of the proposal

- This policy is an updated approach of existing 2018 Local Plan (LP30) to reflect health priorities and future infrastructure needs, such as space for social prescribing, emphasis on inclusive access, dementia-friendly environments, and public toilets and drinking water. Links with related health plans and strategies, move to integrated care systems. Acknowledgement of impact of changes to the use classes.

Potential effects if proposal implemented

- N/A

Potential mitigation measures – if implemented would avoid likely significant effect

- N/A

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- None – this policy will not result in new development.

Policy 52: Allotments and food growing spaces

Likely activities (operation) to result as a consequence of the proposal

- None – this policy will not result in new development. This policy continues the existing approach of the adopted 2018 Local Plan (LP32), protecting existing allotments and supporting space for food growing.

Potential effects if proposal implemented

- N/A

Potential mitigation measures – if implemented would avoid likely significant effect

- N/A

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- N/A

Policy 53: Local Environmental impacts

Likely activities (operation) to result as a consequence of the proposal

- None – this policy will not result in new development. This policy continues to seek to minimise adverse effects of development of the adopted 2018 Local Plan (LP10) and protect amenity of exiting occupiers. Now includes agent of change principles.

Potential effects if proposal implemented

- N/A

Potential mitigation measures – if implemented would avoid likely significant effect

- This policy seeks to reduce air pollution, noise and vibration, light pollution and land contamination associated with development. Although designated ecological assets are not identified explicitly as receptors, the policy refers to environmental impacts generally and provides mitigation for non-physical disturbance. The addition of the London Plan Policy D13 Agent of Change places the responsibility for mitigating impacts from existing noise and other nuisance-generating activities or uses firmly on the proposed new noise-sensitive development.

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- N/A

Policy 54: Basements and subterranean developments

Likely activities (operation) to result as a consequence of the proposal

- None – this policy will not result in new development. This policy is an update of an existing approach of the 2018 Local Plan (LP11). Proposals for subterranean and basement developments now have to demonstrate that the proposal does not cause loss, damage or adverse impact to biodiversity, including trees, and amenity value.

Potential effects if proposal implemented

- N/A

Potential mitigation measures – if implemented would avoid likely significant effect

- N/A

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- N/A

Theme 11: Delivery and Monitoring

Policy 55: Delivery and Monitoring

Likely activities (operation) to result as a consequence of the proposal

- None – this policy will not result in new development. This policy is a new policy, to outline approach to delivery through partnership working, securing planning obligations, and enforcement and monitoring.

Potential effects if proposal implemented

- N/A

Potential mitigation measures – if implemented would avoid likely significant effect

- N/A

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- N/A

Spatial Approach

Policy 1. Living Locally and the 20-minute neighbourhood

Likely activities (operation) to result as a consequence of the proposal

- None – A new policy setting out overarching approach to achieve living locally, creating environments that focus on ease of active travel and access to public services, taking into account changing high streets and workplaces, and making it clear all development should contribute to the concept.

Potential effects if proposal implemented

- N/A

Potential mitigation measures – if implemented would avoid likely significant effect

- This policy requires all developments (except household applications for alterations) to support the 'living locally' concept, which will help mitigate for effects in cities including increased congestion and air pollution.

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- No.

Policy 2. Spatial Strategy Managing change in the borough

- This is a new policy setting out the continued spatial strategy directing higher density development to sites in the town centres or well-connected places, prioritising previously developed land. Emphasis is on promoting green infrastructure and mitigating the impacts of climate change and protecting the borough's environment, local character and heritage assets. Supporting text details the evidence base around future needs and the borough's constraints and capacity for growth.

Likely activities (operation) to result as a consequence of the proposal

- Employment development
- Increase in vehicle traffic
- Increased demand for water supply and treatment

Potential effects if proposal implemented

- Water quality and quantity
- Air pollution
- Physical loss of or damage to habitat
- Non-physical disturbance

Potential mitigation measures – if implemented would avoid likely significant effect

- The overarching aim is to ensure that growth is delivered in a sustainable way, with supporting infrastructure, while tackling the climate emergency and biodiversity crisis.

Appendix D Screening Matrix for Proposed Policies within the Local Plan

- Development in the borough will prioritise the use of previously developed land and promote the provision of green infrastructure that creates resilience and helps mitigate the impacts of climate change, and protect and, where possible, enhance the environment, local character and heritage assets.
- Air pollution impacts are mitigated by the following policies which discourage car use and encourage sustainable transport: LP 47 Sustainable travel choices, LP 48 Vehicular Parking, Cycle Parking, Servicing and Construction Logistics Management
- Policy LP 23 directs office employment towards borough centres and key office areas.
- Mitigation is also provided by Policies LP 39 Biodiversity & geodiversity; LP 34 Green and blue infrastructure; LP 43 Floodlighting and other external artificial lighting; LP 53 Local environmental impacts; LP 6 Sustainable construction methods; LP 9 Water resources and infrastructure; LP 8 Flood risk and sustainable drainage.

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- Uncertain – significant effects from air pollution cannot be ruled out.
- Air pollution may occur as a result of this policy, due to increases in trips from the overall quantum of development, either from the Richmond Local Plan alone or in combination with plans from neighbouring boroughs/districts.
- Policy LP 39 protects the European sites from development within their boundaries. Development could have an impact on habitats functionally connected to the European sites, however the areas primarily used by Special Protection Area bird species (gadwall and northern shoveler) are protected from development and none of the proposed development sites support significant wetland habitat. There are sufficient records of stag beetle within 2km of Richmond Park Special Area of Conservation that the

loss of some areas for development will not significantly affect the Special Area of Conservation population.

- The urban nature of London Borough of Richmond upon Thames means that background levels of noise, vibration and light are already relatively high, such that the small amount of development that may occur within 500m of the European sites is unlikely to have a significant effect. Mitigation incorporated into the Local Plan further reduces this impact.
- Housing will largely occur within existing urban areas and utilise existing infrastructure. Planned upgrades, regulatory mechanisms and Policy LP 9 provide sufficient safeguards against significant water quantity and quality effects.
- Physical loss of or damage to onsite or offsite habitat, non-physical disturbance and water quality and quantity can therefore be screened out of further assessment.

Place-based Strategies

Place-based Strategy for Hampton & Hampton Hill

Site Allocation 1: Hampton Square, Hampton

- Updated allocation (2018 Local Plan SA 1), for partial redevelopment / improvement for community, retail and local services, employment and residential uses.

Likely activities (operation) to result as a consequence of the proposal

- Residential development

Appendix D Screening Matrix for Proposed Policies within the Local Plan

- Employment development
- Community and social infrastructure development
- Increase in vehicle traffic
- Increase in recreational pressure
- Increased demand for water treatment

Potential effects if proposal implemented

- Impacts of recreation
- Water quality and quantity
- Air pollution
- Physical loss of or damage to habitat

Potential mitigation measures – if implemented would avoid likely significant effect

- Mitigation is provided by Policies LP 39 Biodiversity & geodiversity; LP 34 Green and blue infrastructure; LP 43 Floodlighting and other external artificial lighting; LP 53 Local environmental impacts; LP 4 Minimising greenhouse gas emissions, energy efficiency; LP 5 Energy infrastructure; LP 6 Sustainable construction methods; LP 9 water resources and infrastructure; LP 8 Flood risk and sustainable drainage; LP37 Public open space, play space, sport and recreation; LP 47 Sustainable travel choices; Policy 48: Vehicular Parking, Cycle Parking, Servicing and Construction Logistics Management and LP 7 Waste and the circular economy.

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- No – This site alone will not contribute to a significant increase in air pollution or recreation impacts. The potential for air pollution or recreation

impacts in combination with other developments is considered within the assessment of overall development (Policies LP 49 Social and community infrastructure, LP 50 Education and training, LP 10 New Housing, LP 22 Promoting jobs and our local economy, LP 24 Industrial land).

- This site is not within a European site and lies more than 500m from a European site. Non-physical disturbance can therefore be screened out.
- This site does not support significant wetland habitat (and therefore Special Protection Area bird species) and based on historical records (2016), stag beetles have not been recorded in or near this site. Development of this site will therefore not cause physical loss of or damage to habitats functionally linked to the European sites.
- Planned upgrades, regulatory mechanisms and Policy LP 7 provide sufficient safeguards against significant water quantity and quality effects.

Site Allocation 2: Platts Eyot, Hampton

- Updated allocation (2018 Local Plan SA 2), for regeneration enhancing existing river-dependent and river-related uses or new business and industrial uses. Notes recent fire on Conservation Area.

Likely activities (operation) to result as a consequence of the proposal

- Residential development
- Employment development
- Increase in vehicle traffic
- Increase in recreational pressure
- Increased demand for water treatment

Potential effects if proposal implemented

- Impacts of recreation
- Water quality and quantity
- Air pollution
- Physical loss of or damage to habitat

Potential mitigation measures – if implemented would avoid likely significant effect

- Mitigation is provided by Policies LP 39 Biodiversity & geodiversity; LP 34 Green and blue infrastructure; LP 43 Floodlighting and other external artificial lighting; LP 53 Local environmental impacts; LP 4 Minimising greenhouse gas emissions, energy efficiency; LP 5 Energy infrastructure; LP 6 Sustainable construction methods ;LP 9 water resources and infrastructure; LP 8 Flood risk and sustainable drainage; LP37 Public open space, play space, sport and recreation; LP 47 Sustainable travel choices; Policy 48: Vehicular Parking, Cycle Parking, Servicing and Construction Logistics Management and LP 7 Waste and the circular economy.

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- No – This site alone will not contribute to a significant increase in air pollution or recreation impacts. The potential for air pollution or recreation impacts in combination with other developments is considered within the assessment of overall development (Policies LP 10 New Housing, LP 22 Promoting jobs and our local economy).
- This site is not within a European site and lies more than 500m from a European site. Non-physical disturbance can therefore be screened out.
- This site does not support significant wetland habitat (and therefore Special Protection Area bird species) but based on historical records (2016), stag beetles have been recorded in or near this site. However, it

lies more than 2km from Richmond Park Special Area of Conservation
Development of this site will therefore not cause physical loss of or
damage to habitats functionally linked to the European sites.

- Planned upgrades, regulatory mechanisms and Policy LP 9 provide sufficient safeguards against significant water quantity and quality effects.

Site Allocation 3: Hampton Traffic Unit, 60-68 Station Road, Hampton

- Updated allocation (2018 Local Plan SA 3), for business, employment generating and other commercial or social infrastructure uses, retaining BTM. (A new permission has been granted subject to a S106).

Likely activities (operation) to result as a consequence of the proposal

- Employment development
- Community and social infrastructure development
- Increase in vehicle traffic
- Increase in recreational pressure
- Increased demand for water treatment

Potential effects if proposal implemented

- Impacts of recreation
- Water quality and quantity
- Air pollution

Potential mitigation measures – if implemented would avoid likely significant effect

- Mitigation is provided by Policies LP 39 Biodiversity & geodiversity; LP 34 Green and blue infrastructure; LP 9 water resources and infrastructure; LP 8 Flood risk and sustainable drainage; LP37 Public open space, play space, sport and recreation; LP 47 Sustainable travel choices; Policy 48: Vehicular Parking, Cycle Parking, Servicing and Construction Logistics Management and LP 7 Waste and the circular economy.

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- No – This site alone will not contribute to a significant increase in air pollution or recreation impacts. The potential for air pollution or recreation impacts in combination with other developments is considered within the assessment of overall development (Policies LP 49 Social and community infrastructure, LP 50 Education and training, LP 22 Promoting jobs and our local economy).
- This site is not within a European site and lies more than 500m from a European site. Non-physical disturbance can therefore be screened out.
- This site does not support significant wetland habitat (and therefore Special Protection Area bird species) and based on historical records (2016), stag beetles have not been recorded in or near this site. Development of this site will therefore not cause physical loss of or damage to habitats functionally linked to the European sites.
- Planned upgrades, regulatory mechanisms and Policy LP 9 provide sufficient safeguards against significant water quantity and quality effects.

Site Allocation 4: Hampton Delivery Office, Rosehill, Hampton

- Updated allocation (2018 Local Plan SA 4), for employment generating or social and community infrastructure uses. A permission has been granted.

Likely activities (operation) to result as a consequence of the proposal

- Employment development
- Community and social infrastructure development
- Increase in vehicle traffic
- Increase in recreational pressure
- Increased demand for water treatment

Potential effects if proposal implemented

- Impacts of recreation
- Water quality and quantity
- Air pollution

Potential mitigation measures – if implemented would avoid likely significant effect

- Mitigation is provided by Policies LP 39 Biodiversity & geodiversity; LP 34 Green and blue infrastructure; LP 9 water resources and infrastructure; LP 8 Flood risk and sustainable drainage; LP37 Public open space, play space, sport and recreation; LP 47 Sustainable travel choices; Policy 48: Vehicular Parking, Cycle Parking, Servicing and Construction Logistics Management and LP 7 Waste and the circular economy.

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- No – This site alone will not contribute to a significant increase in air pollution or recreation impacts. The potential for air pollution or recreation impacts in combination with other developments is considered within the assessment of overall development (Policies LP 49 Social and community infrastructure, LP 50 Education and training, LP 22 Promoting jobs and our local economy).
- This site is not within a European site and lies more than 500m from a European site. Non-physical disturbance can therefore be screened out.
- This site does not support significant wetland habitat (and therefore Special Protection Area bird species) and based on historical records (2016), stag beetles have not been recorded in or near this site. Development of this site will therefore not cause physical loss of or damage to habitats functionally linked to the European sites.
- Planned upgrades, regulatory mechanisms and Policy LP 9 provide sufficient safeguards against significant water quantity and quality effects.

Site Allocation 5: Carpark for Sainsburys, Uxbridge Road, Hampton

- New site allocation proposed for MOL release for 100% on-site affordable housing.

Likely activities (operation) to result as a consequence of the proposal

- Residential Development
- Increase in vehicle traffic
- Increase in recreational pressure
- Increased demand for water treatment

Potential effects if proposal implemented

- Impacts of recreation
- Water quality and quantity
- Air pollution

Potential mitigation measures – if implemented would avoid likely significant effect

- Mitigation is provided by Policies LP 39 Biodiversity & geodiversity; LP 34 Green and blue infrastructure; LP 43 Floodlighting and other external artificial lighting; LP 53 Local environmental impacts; LP 4 Minimising greenhouse gas emissions, energy efficiency; LP 5 Energy infrastructure; LP 6 Sustainable construction methods ;LP 9 water resources and infrastructure; LP 8 Flood risk and sustainable drainage; LP37 Public open space, play space, sport and recreation; LP 47 Sustainable travel choices; Policy 48: Vehicular Parking, Cycle Parking, Servicing and Construction Logistics Management and LP 7 Waste and the circular economy.

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- No – This site alone will not contribute to a significant increase in air pollution or recreation impacts. The potential for air pollution or recreation impacts in combination with other developments is considered within the assessment of overall development (Policies LP 10 New Housing).
- This site does not support significant wetland habitat (and therefore Special Protection Area bird species) however a review of aerial photography shows a strip of woodland around the perimeter of the car park. If dead/rotting hardwood is present within this woodland strip, then there exists the possibility of stag beetles on Site. However, it lies more than 2km from Richmond Park Special Area of Conservation Development of this site will therefore not cause physical loss of or damage to habitats functionally linked to the European sites.

Appendix D Screening Matrix for Proposed Policies within the Local Plan

- This site is not within a European site and lies more than 500m from a European site. Non-physical disturbance can therefore be screened out.
- The site does border the Longford River which falls within a designated 'Other Sites of Nature Importance'. However, this river is not functionally connected to any European sites.
- Planned upgrades, regulatory mechanisms and Policy LP 9 provide sufficient safeguards against significant water quantity and quality effects.

Site Allocation 6: Telephone Exchange, Teddington

- This is an updated allocation (2018 Local Plan SA 5), for commercial/retail at ground floor and employment floorspace such as offices; mixed-use with residential above could be considered.

Likely activities (operation) to result as a consequence of the proposal

- Employment development
- Residential development
- Increase in vehicle traffic
- Increase in recreational pressure
- Increased demand for water treatment

Potential effects if proposal implemented

- Impacts of recreation
- Water quality and quantity
- Air pollution

Potential mitigation measures – if implemented would avoid likely significant effect

- Mitigation is provided by Policies LP 39 Biodiversity & geodiversity; LP 34 Green and blue infrastructure; LP 9 water resources and infrastructure; LP 8 Flood risk and sustainable drainage; LP37 Public open space, play space, sport and recreation; LP 47 Sustainable travel choices; Policy 48: Vehicular Parking, Cycle Parking, Servicing and Construction Logistics Management and LP 7 Waste and the circular economy.

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- No - This site alone will not contribute to a significant increase in air pollution or recreation impacts. The potential for air pollution or recreation impacts in combination with other developments is considered within the assessment of overall development (LP 10 New Housing, LP 22 Promoting jobs and our local economy).
- This site is not within a European site and lies more than 500m from a European site. Non-physical disturbance can therefore be screened out.
- This site does not support significant wetland habitat (and therefore Special Protection Area bird species) and based on historical records (2016), stag beetles have not been recorded in or near this site. Development of this site will therefore not cause physical loss of or damage to habitats functionally linked to the European sites.
- Planned upgrades, regulatory mechanisms and Policy LP 9 provide sufficient safeguards against significant water quantity and quality effects.

Site Allocation 7: Teddington Delivery Office, Teddington

- This is an updated allocation (2018 Local Plan SA 6), for commercial/retail at ground floor and employment floorspace such as offices, mixed-use with residential above could be considered.

Likely activities (operation) to result as a consequence of the proposal

- Employment development
- Residential development
- Increase in vehicle traffic
- Increase in recreational pressure
- Increased demand for water treatment

Potential effects if proposal implemented

- Impacts of recreation
- Water quality and quantity
- Air pollution

Potential mitigation measures – if implemented would avoid likely significant effect

- Mitigation is provided by Policies LP 39 Biodiversity & geodiversity; LP 34 Green and blue infrastructure; LP 43 Floodlighting and other external artificial lighting; LP 53 Local environmental impacts; LP 4 Minimising greenhouse gas emissions, energy efficiency; LP 5 Energy infrastructure; LP 6 Sustainable construction methods ;LP 9 water resources and infrastructure; LP 8 Flood risk and sustainable drainage; LP37 Public open

space, play space, sport and recreation; LP 47 Sustainable travel choices; Policy 48: Vehicular Parking, Cycle Parking, Servicing and Construction Logistics Management and LP 7 Waste and the circular economy.

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- No - This site alone will not contribute to a significant increase in air pollution or recreation impacts. The potential for air pollution or recreation impacts in combination with other developments is considered within the assessment of overall development (LP 10 New Housing, LP 22 Promoting jobs and our local economy).
- This site is not within a European site and lies more than 500m from a European site. Non-physical disturbance can therefore be screened out.
- This site does not support significant wetland habitat (and therefore Special Protection Area bird species) and based on historical records (2016), stag beetles have not been recorded in or near this site. Development of this site will therefore not cause physical loss of or damage to habitats functionally linked to the European sites.
- Planned upgrades, regulatory mechanisms and Policy LP 9 provide sufficient safeguards against significant water quantity and quality effects.

Site Allocation 8: Strathmore centre, Strathmore Road, Teddington

- This is an updated allocation (2018 Local Plan SA 7), for reprovision of childcare/nursery with affordable housing. (A permission has been granted subject to a S106).

Likely activities (operation) to result as a consequence of the proposal

- Community and social infrastructure development
- Increase in vehicle traffic
- Increase in recreational pressure
- Increased demand for water treatment

Potential effects if proposal implemented

- Impacts of recreation
- Water quality and quantity
- Air pollution

Potential mitigation measures – if implemented would avoid likely significant effect

- Mitigation is provided by Policies LP 39 Biodiversity & geodiversity; LP 34 Green and blue infrastructure; LP 9 water resources and infrastructure; LP 8 Flood risk and sustainable drainage; LP37 Public open space, play space, sport and recreation; LP 47 Sustainable travel choices; Policy 48: Vehicular Parking, Cycle Parking, Servicing and Construction Logistics Management and LP 7 Waste and the circular economy.

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- No - This site alone will not contribute to a significant increase in air pollution or recreation impacts. The potential for air pollution or recreation impacts in combination with other developments is considered within the assessment of overall development (Policies LP 49 Social and community infrastructure, LP 50 Education and training).

Appendix D Screening Matrix for Proposed Policies within the Local Plan

- This site is not within a European site and lies more than 500m from a European site. Non-physical disturbance can therefore be screened out.
- This site does not support significant wetland habitat (and therefore Special Protection Area bird species) and based on historical records (2016), stag beetles have not been recorded in or near this site. Development of this site will therefore not cause physical loss of or damage to habitats functionally linked to the European sites.
- Planned upgrades, regulatory mechanisms and Policy LP 9 provide sufficient safeguards against significant water quantity and quality effects.

Site Allocation 9: Teddington Police Station, Park Road, Teddington

- This is a new site allocation, for community/social infrastructure-led mixed-use development with residential.

Likely activities (operation) to result as a consequence of the proposal

- Community and social infrastructure development
- Residential development
- Increase in vehicle traffic
- Increase in recreational pressure
- Increased demand for water treatment

Potential effects if proposal implemented

- Impacts of recreation
- Water quality and quantity
- Air pollution

Potential mitigation measures – if implemented would avoid likely significant effect

- Mitigation is provided by Policies LP 39 Biodiversity & geodiversity; LP 34 Green and blue infrastructure; LP 43 Floodlighting and other external artificial lighting; LP 53 Local environmental impacts; LP 4 Minimising greenhouse gas emissions, energy efficiency; LP 5 Energy infrastructure; LP 6 Sustainable construction methods ;LP 9 water resources and infrastructure; LP 8 Flood risk and sustainable drainage; LP37 Public open space, play space, sport and recreation; LP 47 Sustainable travel choices; Policy 48: Vehicular Parking, Cycle Parking, Servicing and Construction Logistics Management and LP 7 Waste and the circular economy.

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- No - This site alone will not contribute to a significant increase in air pollution or recreation impacts. The potential for air pollution or recreation impacts in combination with other developments is considered within the assessment of overall development (Policies LP 49 Social and community infrastructure, LP 50 Education and training, LP 10 New Housing).
- This site is not within a European site and lies more than 500m from a European site. Non-physical disturbance can therefore be screened out.
- This site does not support significant wetland habitat (and therefore Special Protection Area bird species) and based on a review of aerial photography, the site does not appear suitable for stag beetle, with a building, hardstanding, amenity grassland and a minimal number of scattered trees present. Development of this site will therefore not cause physical loss of or damage to habitats functionally linked to the European sites.
- Planned upgrades, regulatory mechanisms and Policy LP 9 provide sufficient safeguards against significant water quantity and quality effects.

Place-based Strategy for Twickenham, Strawberry Hill & St Margaret's

Site Allocation 10: St Mary's University, Strawberry Hill

- This is an updated allocation (2018 Local Plan SA 8), for retention and upgrading for university and associated teaching, sport and student residential accommodation.

Likely activities (operation) to result as a consequence of the proposal

- Community and social infrastructure development
- Residential development
- Increase in vehicle traffic
- Increase in recreational pressure
- Increased demand for water treatment

Potential effects if proposal implemented

- Impacts of recreation
- Water quality and quantity
- Air pollution
- Physical loss of or damage to habitat

Potential mitigation measures – if implemented would avoid likely significant effect

- Mitigation is provided by Policies LP 39 Biodiversity & geodiversity; LP 34 Green and blue infrastructure; LP 43 Floodlighting and other external artificial lighting; LP 53 Local environmental impacts; LP 4 Minimising greenhouse gas emissions, energy efficiency; LP 5 Energy infrastructure; LP 6 Sustainable construction methods ;LP 9 water resources and infrastructure; LP 8 Flood risk and sustainable drainage; LP37 Public open space, play space, sport and recreation; LP 47 Sustainable travel choices; Policy 48: Vehicular Parking, Cycle Parking, Servicing and Construction Logistics Management and LP 7 Waste and the circular economy.

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- No - This site alone will not contribute to a significant increase in air pollution or recreation impacts. The potential for air pollution or recreation impacts in combination with other developments is considered within the assessment of overall development (Policies LP 49 Social and community infrastructure, LP 50 Education and training, LP 10 New Housing).
- This site is not within a European site and lies more than 500m from a European site. Non-physical disturbance can therefore be screened out.
- This site does not support significant wetland habitat (and therefore Special Protection Area bird species) but based on historical records (2016), stag beetles have been recorded in or near this site. However, it lies more than 2km from Richmond Park Special Area of Conservation Development of this site will therefore not cause physical loss of or damage to habitats functionally linked to the European sites.
- Planned upgrades, regulatory mechanisms and Policy LP 9 provide sufficient safeguards against significant water quantity and quality effects.

Site Allocation 11: Richmond upon Thames College, Twickenham

- This is an updated allocation (2018 Local Plan SA 9), for redevelopment to provide a new replacement college, science / technology / engineering / maths centre, technical hub, new secondary and special education needs school, sports centre and residential, with protection and upgrading of playing pitch facilities. An outline consent and reserved matters have been granted permission; part implemented the phased scheme.

Likely activities (operation) to result as a consequence of the proposal

- Community and social infrastructure development
- Residential development
- Increase in vehicle traffic
- Increase in recreational pressure
- Increased demand for water treatment

Potential effects if proposal implemented

- Impacts of recreation
- Water quality and quantity
- Air pollution

Potential mitigation measures – if implemented would avoid likely significant effect

- Mitigation is provided by Policies LP 39 Biodiversity & geodiversity; LP 34 Green and blue infrastructure; LP 9 water resources and infrastructure; LP 8 Flood risk and sustainable drainage; LP37 Public open space, play

space, sport and recreation; LP 47 Sustainable travel choices; Policy 48: Vehicular Parking, Cycle Parking, Servicing and Construction Logistics Management and LP 7 Waste and the circular economy.

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- No - This site alone will not contribute to a significant increase in air pollution or recreation impacts. The potential for air pollution or recreation impacts in combination with other developments is considered within the assessment of overall development (Policies LP 49 Social and community infrastructure, LP 50 Education and training, LP 10 New Housing).
- This site is not within a European site and lies more than 500m from a European site. Non-physical disturbance can therefore be screened out.
- This site does not support significant wetland habitat (and therefore Special Protection Area bird species) but based on historical records (2016), stag beetles have been recorded in or near this site. However, it lies more than 2km from Richmond Park Special Area of Conservation Development of this site will therefore not cause physical loss of or damage to habitats functionally linked to the European sites.
- Planned upgrades, regulatory mechanisms and Policy LP 9 provide sufficient safeguards against significant water quantity and quality effects.

Site Allocation 12: The Stoop (Harlequins Rugby Football Club), Twickenham

- This is an updated allocation (2018 Local Plan SA10), for continued sports use, with additional facilities including indoor leisure, hotel or business uses provided they are complementary to the main use of the site as a sports ground.

Likely activities (operation) to result as a consequence of the proposal

- Recreation / leisure development
- Hotel / employment development
- Increase in vehicle traffic
- Increase in recreational pressure
- Increased demand for water treatment

Potential effects if proposal implemented

- Impacts of recreation
- Water quality and quantity
- Air pollution

Potential mitigation measures – if implemented would avoid likely significant effect

- Mitigation is provided by Policies LP 39 Biodiversity & geodiversity; LP 34 Green and blue infrastructure; LP 9 water resources and infrastructure; LP 8 Flood risk and sustainable drainage; LP 37 Public open space, play space, sport and recreation; LP 47 Sustainable travel choices; LP 44 Vehicular Parking, Cycle Parking, Servicing and Construction Logistics Management and LP 7 Waste and the circular economy.

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- No - This site alone will not contribute to a significant increase in air pollution or recreation impacts. The potential for air pollution or recreation impacts in combination with other developments is considered within the

assessment of overall development (Policies LP 49 Social and community infrastructure, LP 22 Promoting jobs and our local economy).

- This site is not within a European site and lies more than 500m from a European site. Non-physical disturbance can therefore be screened out.
- This site does not support significant wetland habitat (and therefore Special Protection Area bird species) and based on historical records (2016), stag beetles have not been recorded in or near this site. Development of this site will therefore not cause physical loss of or damage to habitats functionally linked to the European sites.
- Planned upgrades, regulatory mechanisms and Policy LP 9 provide sufficient safeguards against significant water quantity and quality effects.

Site Allocation 13: Twickenham Stadium, Twickenham

- This is an updated allocation (2018 Local Plan SA 11), for continued use and improvement for sports use, with additional facilities including indoor leisure, hotel or business uses provided they are complementary to the main use of the site as a sports ground.
- Likely activities (operation) to result as a consequence of the proposal
- Recreation / leisure development
- Hotel / employment development
- Increase in vehicle traffic
- Increase in recreational pressure
- Increased demand for water treatment

Potential effects if proposal implemented

- Impacts of recreation
- Water quality and quantity

■ Air pollution

Potential mitigation measures – if implemented would avoid likely significant effect

- Mitigation is provided by Policies LP 39 Biodiversity & geodiversity; LP 34 Green and blue infrastructure; LP 9 water resources and infrastructure; LP 8 Flood risk and sustainable drainage; LP 37 Public open space, play space, sport and recreation; LP 47 Sustainable travel choices; LP 44 Vehicular Parking, Cycle Parking, Servicing and Construction Logistics Management and LP 7 Waste and the circular economy.

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- No - This site alone will not contribute to a significant increase in air pollution or recreation impacts. The potential for air pollution or recreation impacts in combination with other developments is considered within the assessment of overall development (Policies LP 49 Social and community infrastructure, LP 22 Promoting jobs and our local economy).
- This site is not within a European site and lies more than 500m from a European site. Non-physical disturbance can therefore be screened out.
- This site does not support significant wetland habitat (and therefore Special Protection Area bird species) and based on historical records (2016), stag beetles have not been recorded in or near this site. Development of this site will therefore not cause physical loss of or damage to habitats functionally linked to the European sites.
- Planned upgrades, regulatory mechanisms and Policy LP 9 provide sufficient safeguards against significant water quantity and quality effects.

Site Allocation 14: Mereway Day Centre, Mereway Road, Twickenham

- This is an updated allocation (2018 Local Plan SA12) for social and community infrastructure uses.

Likely activities (operation) to result as a consequence of the proposal

- Social and community infrastructure development
- Increase in vehicle traffic
- Increase in recreational pressure
- Increased demand for water treatment

Potential effects if proposal implemented

- Impacts of recreation
- Water quality and quantity
- Air pollution

Potential mitigation measures – if implemented would avoid likely significant effect

- Mitigation is provided by Policies LP 39 Biodiversity & geodiversity; LP 34 Green and blue infrastructure; LP 9 water resources and infrastructure; LP 8 Flood risk and sustainable drainage; LP37 Public open space, play space, sport and recreation; LP 47 Sustainable travel choices; Policy 48: Vehicular Parking, Cycle Parking, Servicing and Construction Logistics Management and LP 7 Waste and the circular economy.

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- No - This site alone will not contribute to a significant increase in air pollution or recreation impacts. The potential for air pollution or recreation impacts in combination with other developments is considered within the assessment of overall development (Policies LP 49 Social and community infrastructure, LP 50 Education and training).
- This site is not within a European site and lies more than 500m from a European site. Non-physical disturbance can therefore be screened out.
- This site does not support significant wetland habitat (and therefore Special Protection Area bird species) and based on historical records (2016), stag beetles have not been recorded in or near this site. Development of this site will therefore not cause physical loss of or damage to habitats functionally linked to the European sites.
- Planned upgrades, regulatory mechanisms and Policy LP 9 provide sufficient safeguards against significant water quantity and quality effects.

Site Allocation 15: Station yard, Twickenham

- This is an updated allocation (2013 Twickenham Area Action Plan TW 2), for residential, subject to re-provision of the bus stands. (A permission for residential has been granted on half of the site).

Likely activities (operation) to result as a consequence of the proposal

- Residential development
- Increase in vehicle traffic
- Increase in recreational pressure
- Increased demand for water treatment

Potential effects if proposal implemented

- Impacts of recreation
- Water quality and quantity
- Air pollution

Potential mitigation measures – if implemented would avoid likely significant effect

- Mitigation is provided by Policies LP 39 Biodiversity & geodiversity; LP 34 Green and blue infrastructure; LP 43 Floodlighting and other external artificial lighting; LP 53 Local environmental impacts; LP 4 Minimising greenhouse gas emissions, energy efficiency; LP 5 Energy infrastructure; LP 6 Sustainable construction methods ;LP 9 water resources and infrastructure; LP 8 Flood risk and sustainable drainage; LP37 Public open space, play space, sport and recreation; LP 47 Sustainable travel choices; Policy 48: Vehicular Parking, Cycle Parking, Servicing and Construction Logistics Management and LP 7 Waste and the circular economy.

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- No - This site alone will not contribute to a significant increase in air pollution or recreation impacts. The potential for air pollution or recreation impacts in combination with other developments is considered within the assessment of overall development (LP 10 New Housing).
- This site is not within a European site and lies more than 500m from a European site. Non-physical disturbance can therefore be screened out.
- This site does not support significant wetland habitat (and therefore Special Protection Area bird species) and based on a review of aerial photography, the site does not appear suitable for stag beetle, consisting of predominantly hard standing. Development of this site will therefore not

cause physical loss of or damage to habitats functionally linked to the European sites.

- Planned upgrades, regulatory mechanisms and Policy LP 9 provide sufficient safeguards against significant water quantity and quality effects.

Site Allocation 16: Twickenham Telephone Exchange

- This is an updated allocation (2013 Twickenham Area Action Plan TW 5), for mixed use comprising employment, commercial or retail uses to enhance the cultural offering, with residential above.

Likely activities (operation) to result as a consequence of the proposal

- Community and social infrastructure development
- Residential development
- Increase in vehicle traffic
- Increase in recreational pressure
- Increased demand for water treatment

Potential effects if proposal implemented

- Impacts of recreation
- Water quality and quantity
- Air pollution

Potential mitigation measures – if implemented would avoid likely significant effect

- Mitigation is provided by Policies LP 39 Biodiversity & geodiversity; LP 34 Green and blue infrastructure; LP 43 Floodlighting and other external artificial lighting; LP 53 Local environmental impacts; LP 4 Minimising greenhouse gas emissions, energy efficiency; LP 5 Energy infrastructure; LP 6 Sustainable construction methods ;LP 9 water resources and infrastructure; LP 8 Flood risk and sustainable drainage; LP37 Public open space, play space, sport and recreation; LP 47 Sustainable travel choices; Policy 48: Vehicular Parking, Cycle Parking, Servicing and Construction Logistics Management and LP 7 Waste and the circular economy.

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- No - This site alone will not contribute to a significant increase in air pollution or recreation impacts. The potential for air pollution or recreation impacts in combination with other developments is considered within the assessment of overall development (Policies LP 49 Social and community infrastructure, LP 50 Education and training, LP 10 New Housing).
- This site is not within a European site and lies more than 500m from a European site. Non-physical disturbance can therefore be screened out.
- This site does not support significant wetland habitat (and therefore Special Protection Area bird species) and based on a review of aerial photography, the site does not appear suitable for stag beetle, consisting of predominantly hard standing and a building. Development of this site will therefore not cause physical loss of or damage to habitats functionally linked to the European sites.
- Planned upgrades, regulatory mechanisms and Policy LP 9 provide sufficient safeguards against significant water quantity and quality effects.

Site Allocation 17: Twickenham Police Station

- This is an updated allocation (2013 Twickenham Area Action Plan TW 6), for mixed use including retail or other active frontage and residential to rear.

Likely activities (operation) to result as a consequence of the proposal

- Community and social infrastructure development
- Residential development
- Increase in vehicle traffic
- Increase in recreational pressure
- Increased demand for water treatment

Potential effects if proposal implemented

- Impacts of recreation
- Water quality and quantity
- Air pollution

Potential mitigation measures – if implemented would avoid likely significant effect

- Mitigation is provided by Policies LP 39 Biodiversity & geodiversity; LP 34 Green and blue infrastructure; LP 43 Floodlighting and other external artificial lighting; LP 53 Local environmental impacts; LP 4 Minimising greenhouse gas emissions, energy efficiency; LP 5 Energy infrastructure; LP 6 Sustainable construction methods ;LP 9 water resources and infrastructure; LP 8 Flood risk and sustainable drainage; LP37 Public open space, play space, sport and recreation; LP 47 Sustainable travel choices;

Policy 48: Vehicular Parking, Cycle Parking, Servicing and Construction Logistics Management and LP 7 Waste and the circular economy.

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- No - This site alone will not contribute to a significant increase in air pollution or recreation impacts. The potential for air pollution or recreation impacts in combination with other developments is considered within the assessment of overall development (Policies LP 49 Social and community infrastructure, LP 50 Education and training, LP 10 New Housing).
- This site is not within a European site and lies more than 500m from a European site. Non-physical disturbance can therefore be screened out.
- This site does not support significant wetland habitat (and therefore Special Protection Area bird species) and based on a review of aerial photography, the site does not appear suitable for stag beetle, consisting of predominantly hard standing. Development of this site will therefore not cause physical loss of or damage to habitats functionally linked to the European sites.
- Planned upgrades, regulatory mechanisms and Policy LP 9 provide sufficient safeguards against significant water quantity and quality effects.

Site Allocation 18: Twickenham Riverside and Water Lane/King Street

- This is an updated allocation (2013 Twickenham Area Action Plan TW 7), for redevelopment/refurbishment of former pool site to include civic and open space, active frontages at ground floor, leisure/community use with residential, to create a destination and upgrade the Embankment.

Likely activities (operation) to result as a consequence of the proposal

- Community and social infrastructure development
- Residential development
- Increase in vehicle traffic
- Increase in recreational pressure
- Increased demand for water treatment

Potential effects if proposal implemented

- Impacts of recreation
- Water quality and quantity
- Air pollution

Potential mitigation measures – if implemented would avoid likely significant effect

- Mitigation is provided by Policies LP 39 Biodiversity & geodiversity; LP 34 Green and blue infrastructure; LP 43 Floodlighting and other external artificial lighting; LP 53 Local environmental impacts; LP 4 Minimising greenhouse gas emissions, energy efficiency; LP 5 Energy infrastructure; LP 6 Sustainable construction methods ;LP 9 water resources and infrastructure; LP 8 Flood risk and sustainable drainage; LP37 Public open space, play space, sport and recreation; LP 47 Sustainable travel choices; Policy 48: Vehicular Parking, Cycle Parking, Servicing and Construction Logistics Management and LP 7 Waste and the circular economy.

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- A review of aerial photography reveals a very small strip of scattered broadleaved trees, fenced off, within the area of proposed development. If dead/rotting hardwood is present within this strip, then there exists the possibility of stag beetles on Site. This site is within 2km of Richmond Park Special Area of Conservation and therefore there will need to be consideration of stag beetles in any future development to ensure no physical loss or damage to habitats functionally connected to the European sites, however loss of this site alone would not have a significant impact on the Special Area of Conservation. The potential in-combination effect of developing this site has been considered within the assessment of overall development, as above.
- This site alone will not contribute to a significant increase in air pollution or recreation impacts. The potential for air pollution or recreation impacts in combination with other developments is considered within the assessment of overall development (Policies LP 49 Social and community infrastructure, LP 50 Education and training, LP 10 New Housing).
- This site is not within a European site and lies more than 500m from a European site. Non-physical disturbance can therefore be screened out.
- This site does not support significant wetland habitat (and therefore Special Protection Area bird species).
- Planned upgrades, regulatory mechanisms and Policy LP 9 provide sufficient safeguards against significant water quantity and quality effects.

Place-based Strategy for Whitton & Heathfield

- Focus on reinforcing established character, ensuring provision of community facilities and transport links.

Site Allocation 19: Telephone Exchange, Whitton

- This is an updated allocation (2018 Local Plan SA 13), for employment and social infrastructure use, increasing permeability to the High Street.

Likely activities (operation) to result as a consequence of the proposal

- Employment development
- Residential development
- Social and community infrastructure development
- Increase in vehicle traffic
- Increase in recreational pressure
- Increased demand for water treatment

Potential effects if proposal implemented

- Impacts of recreation
- Water quality and quantity
- Air pollution

Potential mitigation measures – if implemented would avoid likely significant effect

- Mitigation is provided by Policies LP 39 Biodiversity & geodiversity; LP 34 Green and blue infrastructure; LP 9 water resources and infrastructure; LP 8 Flood risk and sustainable drainage; LP37 Public open space, play space, sport and recreation; LP 47 Sustainable travel choices; Policy 48: Vehicular Parking, Cycle Parking, Servicing and Construction Logistics Management and LP 7 Waste and the circular economy.

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- No - This site alone will not contribute to a significant increase in air pollution or recreation impacts. The potential for air pollution or recreation impacts in combination with other developments is considered within the assessment of overall development (Policies LP 49 Social and community infrastructure, LP 50 Education and training, LP 10 New Housing; LP 22 Promoting jobs and our local economy).
- This site is not within a European site and lies more than 500m from a European site. Non-physical disturbance can therefore be screened out.
- This site does not support significant wetland habitat (and therefore Special Protection Area bird species) and based on historical records (2016), stag beetles have not been recorded in or near this site. Development of this site will therefore not cause physical loss of or damage to habitats functionally linked to the European sites.
- Planned upgrades, regulatory mechanisms and Policy LP 9 provide sufficient safeguards against significant water quantity and quality effects.

Site Allocation 20: Kneller Hall, Whitton

- This is an updated allocation (2018 Local Plan SA 14), for mixed use quarter within protected landscape and heritage significance, opportunity to open up for community access. Links to Kneller Hall Masterplan SPD.

Likely activities (operation) to result as a consequence of the proposal

- Employment development
- Residential development
- Social and community infrastructure development
- Increase in vehicle traffic

- Increase in recreational pressure
- Increased demand for water treatment

Potential effects if proposal implemented

- Impacts of recreation
- Water quality and quantity
- Air pollution

Potential mitigation measures – if implemented would avoid likely significant effect

- Mitigation is provided by Policies LP 39 Biodiversity & geodiversity; LP 34 Green and blue infrastructure; LP 9 water resources and infrastructure; LP 8 Flood risk and sustainable drainage; LP37 Public open space, play space, sport and recreation; LP 47 Sustainable travel choices; Policy 48: Vehicular Parking, Cycle Parking, Servicing and Construction Logistics Management and LP 7 Waste and the circular economy.

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- No - This site alone will not contribute to a significant increase in air pollution or recreation impacts. The potential for air pollution or recreation impacts in combination with other developments is considered within the assessment of overall development (Policies LP 49 Social and community infrastructure, LP 50 Education and training, LP 10 New Housing; LP 22 Promoting jobs and our local economy).
- This site is not within a European site and lies more than 500m from a European site. Non-physical disturbance can therefore be screened out.
- This site does not support significant wetland habitat (and therefore Special Protection Area bird species) and based on historical records

(2016), stag beetles have not been recorded in or near this site. Development of this site will therefore not cause physical loss of or damage to habitats functionally linked to the European sites.

- Planned upgrades, regulatory mechanisms and Policy LP 9 provide sufficient safeguards against significant water quantity and quality effects.

Site Allocation 21: Whitton Community Centre and Car Park, Percy Road, Whitton

- This is a new site allocation, opportunity to re-provide community facilities with affordable housing.

Likely activities (operation) to result as a consequence of the proposal

- Residential development
- Social and community infrastructure development
- Employment development
- Increase in vehicle traffic
- Increase in recreational pressure
- Increased demand for water treatment

Potential effects if proposal implemented

- Impacts of recreation
- Water quality and quantity
- Air pollution

Potential mitigation measures – if implemented would avoid likely significant effect

- Mitigation is provided by Policies LP 39 Biodiversity & geodiversity; LP 34 Green and blue infrastructure; LP 9 water resources and infrastructure; LP 8 Flood risk and sustainable drainage; LP37 Public open space, play space, sport and recreation; LP 47 Sustainable travel choices; Policy 48: Vehicular Parking, Cycle Parking, Servicing and Construction Logistics Management and LP 7 Waste and the circular economy.

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- No - This site alone will not contribute to a significant increase in air pollution or recreation impacts. The potential for air pollution or recreation impacts in combination with other developments is considered within the assessment of overall development (Policies LP 49 Social and community infrastructure, LP 50 Education and training, LP 10 New Housing; LP 22 Promoting jobs and our local economy).
- This site is not within a European site and lies more than 500m from a European site. Non-physical disturbance can therefore be screened out.
- This site does not support significant wetland habitat (and therefore Special Protection Area bird species) and based on a review of aerial photography, the site does not appear suitable for stag beetle, consisting of predominantly hard standing and buildings. Development of this site will therefore not cause physical loss of or damage to habitats functionally linked to the European sites.
- Planned upgrades, regulatory mechanisms and Policy LP 9 provide sufficient safeguards against significant water quantity and quality effects.

Place-based Strategy for Ham, Petersham & Richmond Park

- Focus on building on identity as a distinct and mixed community, recognising the semi-rural landscape setting, to provide access to opportunities and improve active travel. Reflects the adopted Ham & Petersham Neighbourhood Plan.

Site Allocation 22: Ham Close, Ham

- Updated allocation (2018 Local Plan SA 15), supporting regeneration – comprehensive redevelopment with additional residential (including affordable housing).

Likely activities (operation) to result as a consequence of the proposal

- Residential development
- Increase in vehicle traffic
- Increase in recreational pressure
- Increased demand for water treatment

Potential effects if proposal implemented

- Impacts of recreation
- Water quality and quantity
- Air pollution

Potential mitigation measures – if implemented would avoid likely significant effect

- Mitigation is provided by Policies LP 39 Biodiversity & geodiversity; LP 34 Green and blue infrastructure; LP 9 water resources and infrastructure; LP 8 Flood risk and sustainable drainage; LP37 Public open space, play space, sport and recreation; LP 47 Sustainable travel choices; Policy 48: Vehicular Parking, Cycle Parking, Servicing and Construction Logistics Management and LP 7 Waste and the circular economy.

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- No - This site alone will not contribute to a significant increase in air pollution or recreation impacts. The potential for air pollution or recreation impacts in combination with other developments is considered within the assessment of overall development (LP 10 New Housing).
- This site is not within a European site and lies more than 500m from a European site. Non-physical disturbance can therefore be screened out.
- This site does not support significant wetland habitat (and therefore Special Protection Area bird species) and based on historical records (2016), stag beetles have not been recorded in or near this site. Development of this site will therefore not cause physical loss of or damage to habitats functionally linked to the European sites.
- Planned upgrades, regulatory mechanisms and Policy LP 9 provide sufficient safeguards against significant water quantity and quality effects.

Site Allocation 23: Cassel Hospital, Ham Common, Ham

- This is an updated allocation (2018 Local Plan SA 16), for social and community infrastructure, or potential for residential.

Likely activities (operation) to result as a consequence of the proposal

- Social and community infrastructure
- Increase in vehicle traffic
- Increase in recreational pressure
- Increased demand for water treatment

Potential effects if proposal implemented

- Impacts of recreation
- Water quality and quantity
- Air pollution

Potential mitigation measures – if implemented would avoid likely significant effect

- Mitigation is provided by Policies LP 39 Biodiversity & geodiversity; LP 34 Green and blue infrastructure; LP 9 water resources and infrastructure; LP 8 Flood risk and sustainable drainage; LP37 Public open space, play space, sport and recreation; LP 47 Sustainable travel choices; Policy 48: Vehicular Parking, Cycle Parking, Servicing and Construction Logistics Management and LP 7 Waste and the circular economy.

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- No - This site alone will not contribute to a significant increase in air pollution or recreation impacts. The potential for air pollution or recreation impacts in combination with other developments is considered within the assessment of overall development (Policies LP 49 Social and community infrastructure, LP 50 Education and training).

Appendix D Screening Matrix for Proposed Policies within the Local Plan

- This site is not within a European site and lies more than 500m from a European site. Non-physical disturbance can therefore be screened out.
- This site does not support significant wetland habitat (and therefore Special Protection Area bird species) and based on historical records (2016), stag beetles have not been recorded in or near this site. Development of this site will therefore not cause physical loss of or damage to habitats functionally linked to the European sites.
- Planned upgrades, regulatory mechanisms and Policy LP 9 provide sufficient safeguards against significant water quantity and quality effects.

Place-based Strategy for Richmond & Richmond Hill

Site Allocation: 24 Richmond Station, Richmond

- This is an updated allocation (2018 Local Plan SA 19), for improved transport interchange, public realm and mix of town centre uses, including commercial, community and residential above.

Likely activities (operation) to result as a consequence of the proposal

- Employment development
- Social and community infrastructure development
- Retail development
- Sustainable transport infrastructure
- Increase in vehicle traffic
- Increase in recreational pressure
- Increased demand for water treatment

Potential effects if proposal implemented

- Impacts of recreation
- Water quality and quantity
- Air pollution
- Physical loss of or damage to habitat

Potential mitigation measures – if implemented would avoid likely significant effect

- The policy will result in improvements to station, which may encourage sustainable transport use and provide mitigation for air pollution impacts.
- Mitigation is provided by Policies LP 39 Biodiversity & geodiversity; LP 34 Green and blue infrastructure; LP 43 Floodlighting and other external artificial lighting; LP 53 Local environmental impacts; LP 4 Minimising greenhouse gas emissions, energy efficiency; LP 5 Energy infrastructure; LP 6 Sustainable construction methods ;LP 9 water resources and infrastructure; LP 8 Flood risk and sustainable drainage; LP37 Public open space, play space, sport and recreation; LP 47 Sustainable travel choices; Policy 48: Vehicular Parking, Cycle Parking, Servicing and Construction Logistics Management and LP 7 Waste and the circular economy.

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- No - This site alone will not contribute to a significant increase in air pollution or recreation impacts. The potential for air pollution or recreation impacts in combination with other developments is considered within the assessment of overall development (Policies LP 49 Social and community infrastructure, LP 50 Education and training, LP 22 Promoting jobs and our local economy).
- This site is not within a European site and lies more than 500m from a European site. Non-physical disturbance can therefore be screened out.

- This site does not support significant wetland habitat (and therefore Special Protection Area bird species) but based on historical records (2016), stag beetles have been recorded in or near this site and the site is within 2km of Richmond Park Special Area of Conservation. Loss of this site alone would not have a significant impact on the Special Area of Conservation. The potential in-combination effect of developing this site has been considered within the assessment of overall development, as above.
- Planned upgrades, regulatory mechanisms and Policy LP 9 provide sufficient safeguards against significant water quantity and quality effects.

Site Allocation: 25 Former House of Fraser, 16 Paved Court 20 King Street 4 To 8 And 10 Paved Court And 75 - 81 George Street Richmond

- This is a new site allocation, for retail, office/workspace, and leisure/community use, with active ground floor frontages. Reflects extant permission.

Likely activities (operation) to result as a consequence of the proposal

- Employment development
- Recreation / Leisure development
- Social and community infrastructure development
- Retail development
- Increase in vehicle traffic
- Increase in recreational pressure
- Increased demand for water treatment

Potential effects if proposal implemented

- Impacts of recreation
- Water quality and quantity
- Air pollution
- Physical loss of or damage to habitat

Potential mitigation measures – if implemented would avoid likely significant effect

- Mitigation is provided by Policies LP 39 Biodiversity & geodiversity; LP 34 Green and blue infrastructure; LP 43 Floodlighting and other external artificial lighting; LP 53 Local environmental impacts; LP 4 Minimising greenhouse gas emissions, energy efficiency; LP 5 Energy infrastructure; LP 6 Sustainable construction methods ;LP 9 water resources and infrastructure; LP 8 Flood risk and sustainable drainage; LP37 Public open space, play space, sport and recreation; LP 47 Sustainable travel choices; Policy 48: Vehicular Parking, Cycle Parking, Servicing and Construction Logistics Management and LP 7 Waste and the circular economy.

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- No - This site alone will not contribute to a significant increase in air pollution or recreation impacts. The potential for air pollution or recreation impacts in combination with other developments is considered within the assessment of overall development (Policies LP 49 Social and community infrastructure, LP 22 Promoting jobs and our local economy).
- This site is not within a European site and lies more than 500m from a European site. Non-physical disturbance can therefore be screened out.
- This site does not support significant wetland habitat (and therefore Special Protection Area bird species) and based on a review of aerial photography, the site does not appear suitable for stag beetle, consisting

of predominantly hard standing and buildings. Development of this site will therefore not cause physical loss of or damage to habitats functionally linked to the European sites.

- Planned upgrades, regulatory mechanisms and Policy LP 9 provide sufficient safeguards against significant water quantity and quality effects.

Site Allocation: 26 Richmond Telephone Exchange, Spring Terrace, Richmond

- This is a new site allocation, for residential use maximising affordable housing.

Likely activities (operation) to result as a consequence of the proposal

- Residential development
- Increase in vehicle traffic
- Increase in recreational pressure
- Increased demand for water treatment

Potential effects if proposal implemented

- Impacts of recreation
- Water quality and quantity
- Air pollution

Potential mitigation measures – if implemented would avoid likely significant effect

- Mitigation is provided by Policies LP 39 Biodiversity & geodiversity; LP 34 Green and blue infrastructure; LP 9 water resources and infrastructure; LP 8 Flood risk and sustainable drainage; LP37 Public open space, play space, sport and recreation; LP 47 Sustainable travel choices; Policy 48: Vehicular Parking, Cycle Parking, Servicing and Construction Logistics Management and LP 7 Waste and the circular economy.

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- No - This site alone will not contribute to a significant increase in air pollution or recreation impacts. The potential for air pollution or recreation impacts in combination with other developments is considered within the assessment of overall development (LP 10 New Housing).
- This site is not within a European site and lies more than 500m from a European site. Non-physical disturbance can therefore be screened out.
- This site does not support significant wetland habitat (and therefore Special Protection Area bird species) and based on a review of aerial photography, the site does not appear suitable for stag beetle, consisting of predominantly hard standing. Development of this site will therefore not cause physical loss of or damage to habitats functionally linked to the European sites.
- Planned upgrades, regulatory mechanisms and Policy LP 9 provide sufficient safeguards against significant water quantity and quality effects.

Site Allocation: 27 American University, Queens Road, Richmond

- This is a new site allocation, for education-led use as priority, followed by community use.

Likely activities (operation) to result as a consequence of the proposal

- Community and social infrastructure development
- Increase in vehicle traffic
- Increase in recreational pressure
- Increased demand for water treatment

Potential effects if proposal implemented

- Impacts of recreation
- Water quality and quantity
- Air pollution

Potential mitigation measures – if implemented would avoid likely significant effect

- Mitigation is provided by Policies LP 39 Biodiversity & geodiversity; LP 34 Green and blue infrastructure; LP 43 Floodlighting and other external artificial lighting; LP 53 Local environmental impacts; LP 4 Minimising greenhouse gas emissions, energy efficiency; LP 5 Energy infrastructure; LP 6 Sustainable construction methods ;LP 9 water resources and infrastructure; LP 8 Flood risk and sustainable drainage; LP37 Public open space, play space, sport and recreation; LP 47 Sustainable travel choices; Policy 48: Vehicular Parking, Cycle Parking, Servicing and Construction Logistics Management and LP 7 Waste and the circular economy.

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- This site is not within a European site and however it does lie within 500m of Richmond Park Special Area of Conservation and therefore non-

physical disturbance cannot be screened out, nor can the possible physical loss or damage to habitats functionally connected.

- This site alone will not contribute to a significant increase in air pollution or recreation impacts. The potential for air pollution or recreation impacts in combination with other developments is considered within the assessment of overall development (Policies LP 49 Social and community infrastructure, LP 50 Education and training).
- This site does not support significant wetland habitat (and therefore Special Protection Area bird species) and based on a review of aerial photography, the site does not appear suitable for stag beetle, due to the nature of the site as a university and accompanying regular disturbance as well as the well-manicured appearance of the soft landscaping areas. Development of this site will therefore not cause physical loss of or damage to habitats functionally linked to the European sites.
- Planned upgrades, regulatory mechanisms and Policy LP 9 provide sufficient safeguards against significant water quantity and quality effects.

Site Allocation: 28 Homebase, Manor Road, East Sheen

- A new site allocation, for residential-led redevelopment with a flexible range of other uses including retail, office and community/social. Reflects extant permission.

Likely activities (operation) to result as a consequence of the proposal

- Residential development
- Employment development
- Community and social infrastructure development
- Increase in vehicle traffic

Appendix D Screening Matrix for Proposed Policies within the Local Plan

- Increase in recreational pressure
- Increased demand for water treatment

Potential effects if proposal implemented

- Impacts of recreation
- Water quality and quantity
- Air pollution

Potential mitigation measures – if implemented would avoid likely significant effect

- Mitigation is provided by Policies LP 39 Biodiversity & geodiversity; LP 34 Green and blue infrastructure; LP 9 water resources and infrastructure; LP 8 Flood risk and sustainable drainage; LP37 Public open space, play space, sport and recreation; LP 47 Sustainable travel choices; Policy 48: Vehicular Parking, Cycle Parking, Servicing and Construction Logistics Management and LP 7 Waste and the circular economy.

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- No - This site alone will not contribute to a significant increase in air pollution or recreation impacts. The potential for air pollution or recreation impacts in combination with other developments is considered within the assessment of overall development (LP 10 New Housing).
- This site is not within a European site and lies more than 500m from a European site. Non-physical disturbance can therefore be screened out.
- This site does not support significant wetland habitat (and therefore Special Protection Area bird species) and based on a review of aerial photography, the site does not appear suitable for stag beetle, consisting of predominantly hard standing and buildings. Development of this site will

therefore not cause physical loss of or damage to habitats functionally linked to the European sites.

- Planned upgrades, regulatory mechanisms and Policy LP 9 provide sufficient safeguards against significant water quantity and quality effects.

Site Allocation: 29 Sainsbury's, Lower Richmond Road, Richmond

- Updated allocation (2018 Local Plan SA 21), for retail and residential uses.

Likely activities (operation) to result as a consequence of the proposal

- Retail development
- Residential development
- Increase in vehicle traffic
- Increase in recreational pressure
- Increased demand for water treatment

Potential effects if proposal implemented

- Impacts of recreation
- Water quality and quantity
- Air pollution

Potential mitigation measures – if implemented would avoid likely significant effect

- Mitigation is provided by Policies LP 39 Biodiversity & geodiversity; LP 34 Green and blue infrastructure; LP 9 water resources and infrastructure; LP

8 Flood risk and sustainable drainage; LP37 Public open space, play space, sport and recreation; LP 47 Sustainable travel choices; Policy 48: Vehicular Parking, Cycle Parking, Servicing and Construction Logistics Management and LP 7 Waste and the circular economy.

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- No - This site alone will not contribute to a significant increase in air pollution or recreation impacts. The potential for air pollution or recreation impacts in combination with other developments is considered within the assessment of overall development (LP 10 New Housing, LP 22 Promoting jobs and our local economy).
- This site is not within a European site and lies more than 500m from a European site. Non-physical disturbance can therefore be screened out.
- This site does not support significant wetland habitat (and therefore Special Protection Area bird species) and based on historical records (2016), stag beetles have not been recorded in or near this site. Development of this site will therefore not cause physical loss of or damage to habitats functionally linked to the European sites.
- Planned upgrades, regulatory mechanisms and Policy LP 9 provide sufficient safeguards against significant water quantity and quality effects.

Place-based Strategy for Kew

- Focus on maintaining its character, with potential to improve the character at East Kew. Recognises historic settings of Royal Botanic Gardens, Kew WHS and Old Deer Park.

Site Allocation: 30 Kew Retail Park, Bessant Drive, Kew

- A new site allocation, opportunity for residential-led redevelopment with commercial uses (retail, offices, affordable workspace, leisure) along with improvements to public realm, active transport and links to the River.

Likely activities (operation) to result as a consequence of the proposal

- Residential development
- Retail development
- Recreation/ Leisure development
- Increase in vehicle traffic
- Increase in recreational pressure
- Increased demand for water treatment

Potential effects if proposal implemented

- Impacts of recreation
- Water quality and quantity
- Air pollution

Potential mitigation measures – if implemented would avoid likely significant effect

- Mitigation is provided by Policies LP 39 Biodiversity & geodiversity; LP 34 Green and blue infrastructure; LP 9 water resources and infrastructure; LP 8 Flood risk and sustainable drainage; LP37 Public open space, play space, sport and recreation; LP 47 Sustainable travel choices; Policy 48:

Vehicular Parking, Cycle Parking, Servicing and Construction Logistics Management and LP 7 Waste and the circular economy.

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- No - This site alone will not contribute to a significant increase in air pollution or recreation impacts. The potential for air pollution or recreation impacts in combination with other developments is considered within the assessment of overall development (LP 10 New Housing, LP 22 Promoting jobs and our local economy).
- This site is not within a European site and lies more than 500m from a European site. Non-physical disturbance can therefore be screened out.
- This site does not support significant wetland habitat (and therefore Special Protection Area bird species) and based on a review of aerial photography, the site does not appear suitable for stag beetle, consisting of predominantly hard standing. Development of this site will therefore not cause physical loss of or damage to habitats functionally linked to the European sites.
- Planned upgrades, regulatory mechanisms and Policy LP 9 provide sufficient safeguards against significant water quantity and quality effects.

Site Allocation: 31 Kew Biothane Plant, Mellis Avenue, Kew

- An updated allocation (2018 Local Plan SA 26), for residential and open space. Reflects extant permission.

Likely activities (operation) to result as a consequence of the proposal

- Residential development

Appendix D Screening Matrix for Proposed Policies within the Local Plan

- Increase in vehicle traffic
- Increase in recreational pressure
- Increased demand for water treatment

Potential effects if proposal implemented

- Impacts of recreation
- Water quality and quantity
- Air pollution

Potential mitigation measures – if implemented would avoid likely significant effect

- Mitigation is provided by Policies LP 39 Biodiversity & geodiversity; LP 34 Green and blue infrastructure; LP 9 water resources and infrastructure; LP 8 Flood risk and sustainable drainage; LP37 Public open space, play space, sport and recreation; LP 47 Sustainable travel choices; Policy 48: Vehicular Parking, Cycle Parking, Servicing and Construction Logistics Management and LP 7 Waste and the circular economy.

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- No - This site alone will not contribute to a significant increase in air pollution or recreation impacts. The potential for air pollution or recreation impacts in combination with other developments is considered within the assessment of overall development (LP 10 New Housing).
- This site is not within a European site and lies more than 500m from a European site. Non-physical disturbance can therefore be screened out.
- This site does not support significant wetland habitat (and therefore Special Protection Area bird species) and based on historical records (2016), stag beetles have not been recorded in or near this site.

Appendix D Screening Matrix for Proposed Policies within the Local Plan

Development of this site will therefore not cause physical loss of or damage to habitats functionally linked to the European sites.

- Planned upgrades, regulatory mechanisms and Policy LP 9 provide sufficient safeguards against significant water quantity and quality effects.

Site Allocation: 32 Pools on the Park and surroundings, Old Deer Park, Richmond

- Updated allocation (2018 Local Plan SA 22), for continued sporting uses, additional leisure/community/complementary uses provided meet identified needs and do not detract from main use, subject to heritage assessment. Links to Old Deer Park SPD.

Likely activities (operation) to result as a consequence of the proposal

- None - refurbishment and replacement of existing facilities within existing footprint of the site.

Potential effects if proposal implemented

- N/A

Potential mitigation measures – if implemented would avoid likely significant effect

- N/A

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- N/A

Site Allocation: 33 Richmond Athletic Association Ground, Old Deer Park, Richmond

- Updated allocation (2018 Local Plan SA 23), for continued sporting uses, additional leisure/complementary uses provided meet identified needs and do not detract from main use, subject to MOL and historic designations. Links to Old Deer Park SPD.

Likely activities (operation) to result as a consequence of the proposal

- None - refurbishment and replacement of existing facilities within existing footprint of the site.

Potential effects if proposal implemented

- N/A

Potential mitigation measures – if implemented would avoid likely significant effect

- N/A

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- N/A

Place-based Strategy for Mortlake & East Sheen

Site Allocation: 34 Stag Brewery, Lower Richmond Road, Mortlake

- Updated allocation (2018 Local Plan SA 24), for comprehensive redevelopment for a mix of uses to deliver a new heart for Mortlake, including a new 6-form entry secondary school plus sixth form, residential, employment, commercial – retail, other employment generating uses, health facilities, community and social infrastructure, river-related uses, sport and leisure uses, including retention/reprovision and upgrading of the playing field, with public realm and links to surrounding area and riverside.

Likely activities (operation) to result as a consequence of the proposal

- Residential development
- Employment development
- Social and community infrastructure development
- Increase in vehicle traffic
- Increase in recreational pressure
- Increased demand for water treatment

Potential effects if proposal implemented

- Impacts of recreation
- Water quality and quantity
- Air pollution

Potential mitigation measures – if implemented would avoid likely significant effect

- Mitigation is provided by Policies LP 39 Biodiversity & geodiversity; LP 34 Green and blue infrastructure; LP 9 water resources and infrastructure; LP 8 Flood risk and sustainable drainage; LP37 Public open space, play space, sport and recreation; LP 47 Sustainable travel choices; Policy 48: Vehicular Parking, Cycle Parking, Servicing and Construction Logistics Management and LP 7 Waste and the circular economy.

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- No - This site alone will not contribute to a significant increase in air pollution or recreation impacts. The potential for air pollution or recreation impacts in combination with other developments is considered within the assessment of overall development (Policies LP 49 Social and community infrastructure, LP 50 Education and training, LP 10 New Housing).
- This site is not within a European site and lies more than 500m from a European site. Non-physical disturbance can therefore be screened out.
- This site does not support significant wetland habitat (and therefore Special Protection Area bird species) and based on historical records (2016), stag beetles have not been recorded in or near this site. Development of this site will therefore not cause physical loss of or damage to habitats functionally linked to the European sites.
- Planned upgrades, regulatory mechanisms and Policy LP 9 provide sufficient safeguards against significant water quantity and quality effects.

Site Allocation: 35 Mortlake and Barnes Delivery Office, Mortlake

- Updated allocation (2018 Local Plan SA 25), for employment or other commercial and retail uses.

Likely activities (operation) to result as a consequence of the proposal

- Employment and retail development
- Increase in vehicle traffic
- Increase in recreational pressure
- Increased demand for water treatment

Potential effects if proposal implemented

- Impacts of recreation
- Water quality and quantity
- Air pollution

Potential mitigation measures – if implemented would avoid likely significant effect

- Mitigation is provided by Policies LP 39 Biodiversity & geodiversity; LP 34 Green and blue infrastructure; LP 9 water resources and infrastructure; LP 8 Flood risk and sustainable drainage; LP37 Public open space, play space, sport and recreation; LP 47 Sustainable travel choices; Policy 48: Vehicular Parking, Cycle Parking, Servicing and Construction Logistics Management and LP 7 Waste and the circular economy.

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- No - This site alone will not contribute to a significant increase in air pollution or recreation impacts. The potential for air pollution or recreation impacts in combination with other developments is considered within the assessment of overall development (LP 22 Promoting jobs and our local economy).

Appendix D Screening Matrix for Proposed Policies within the Local Plan

- This site is not within a European site and lies more than 500m from a European site. Non-physical disturbance can therefore be screened out.
- This site does not support significant wetland habitat (and therefore Special Protection Area bird species) and based on historical records (2016), stag beetles have not been recorded in or near this site. Development of this site will therefore not cause physical loss of or damage to habitats functionally linked to the European sites.
- Planned upgrades, regulatory mechanisms and Policy LP 9 provide sufficient safeguards against significant water quantity and quality effects.

Site Allocation: 36 Telephone Exchange and 172-176 Upper Richmond Road West, East Sheen

- This is an updated allocation (2018 Local Plan SA 27), for employment and commercial uses as well as community and social infrastructure, mixed use with housing above and to the rear.

Likely activities (operation) to result as a consequence of the proposal

- Employment and retail development
- Social and community infrastructure development
- Increase in vehicle traffic
- Increase in recreational pressure
- Increased demand for water treatment

Potential effects if proposal implemented

- Impacts of recreation
- Water quality and quantity

- Air pollution
- Physical loss of or damage to habitat

Potential mitigation measures – if implemented would avoid likely significant effect

- Mitigation is provided by Policies LP 39 Biodiversity & geodiversity; LP 34 Green and blue infrastructure; LP 9 water resources and infrastructure; LP 8 Flood risk and sustainable drainage; LP37 Public open space, play space, sport and recreation; LP 47 Sustainable travel choices; Policy 48: Vehicular Parking, Cycle Parking, Servicing and Construction Logistics Management and LP 7 Waste and the circular economy.

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- No - This site alone will not contribute to a significant increase in air pollution or recreation impacts. The potential for air pollution or recreation impacts in combination with other developments is considered within the assessment of overall development (Policies LP 49 Social and community infrastructure, LP 50 Education and training, L0 10 New Housing, LP 22 Promoting jobs and our local economy).
- This site is not within a European site and lies more than 500m from a European site. Non-physical disturbance can therefore be screened out.
- This site does not support significant wetland habitat (and therefore Special Protection Area bird species) and based on historical records (2016), stag beetles have been recorded in or near this site and the site is within 2km of Richmond Park Special Area of Conservation. Loss of this site alone would not have a significant impact on the Special Area of Conservation. The potential in-combination effect of developing this site has been considered within the assessment of overall development, as above.

- Planned upgrades, regulatory mechanisms and Policy LP 9 provide sufficient safeguards against significant water quantity and quality effects.

Site Allocation: 37 Barnes Hospital, East Sheen

- An updated allocation (2018 Local Plan SA 28), for social and community infrastructure uses, and provision of a new Special Education Needs school. Reflects extant outline permission.

Likely activities (operation) to result as a consequence of the proposal

- Social and community infrastructure development
- Increase in vehicle traffic
- Increase in recreational pressure
- Increased demand for water treatment

Potential effects if proposal implemented

- Impacts of recreation
- Water quality and quantity
- Air pollution

Potential mitigation measures – if implemented would avoid likely significant effect

- Mitigation is provided by Policies LP 39 Biodiversity & geodiversity; LP 34 Green and blue infrastructure; LP 9 water resources and infrastructure; LP 8 Flood risk and sustainable drainage; LP37 Public open space, play space, sport and recreation; LP 47 Sustainable travel choices; Policy 48:

Vehicular Parking, Cycle Parking, Servicing and Construction Logistics Management and LP 7 Waste and the circular economy.

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- No - This site alone will not contribute to a significant increase in air pollution or recreation impacts. The potential for air pollution or recreation impacts in combination with other developments is considered within the assessment of overall development (Policies LP 49 Social and community infrastructure, LP 50 Education and training).
- This site is not within a European site and lies more than 500m from a European site. Non-physical disturbance can therefore be screened out.
- This site does not support significant wetland habitat (and therefore Special Protection Area bird species) and based on historical records (2016), stag beetles have not been recorded in or near this site. Development of this site will therefore not cause physical loss of or damage to habitats functionally linked to the European sites.
- Planned upgrades, regulatory mechanisms and Policy LP 9 provide sufficient safeguards against significant water quantity and quality effects.

Place-based Strategy for Barnes

- Focus on maintaining its character, with new development expected through incremental intensification. (there are no site allocations within this place)
- No Site Allocations for Barnes

References

- 1 The Conservation (Natural Habitats, &c.) (Amendment) Regulations 2007 (2007) SI No. 2007/1843. TSO (The Stationery Office), London.
- 2 The Conservation of Habitats and Species Regulations 2017 (2017) SI No. 2017/1012, as amended by The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 (SI 2019/579), TSO (The Stationery Office), London.
- 3 The exception to this would be where 'imperative reasons of overriding public interest' can be demonstrated; see paragraph 2.4.
- 4 The integrity of a site is the coherence of its ecological structure and function, across its whole area, that enables it to sustain the habitat, complex of habitats and/or the levels of populations of the species for which it was designated. (Source: UK Government Planning Practice Guidance)
- 5 UK Government Planning Practice Guidance, available from <https://www.gov.uk/guidance/appropriate-assessment>
- 6 Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora (the 'Habitats Directive')
- 7 Directive 2009/147/EC of 30 November 2009 on the conservation of wild birds (the 'Birds Directive')
- 8 The network of protected areas identified by the EU: https://ec.europa.eu/environment/nature/natura2000/index_en.htm
- 9 <https://www.gov.uk/government/publications/changes-to-the-habitats-regulations-2017/changes-to-the-habitats-regulations-2017>
- 10 <https://www.gov.uk/government/publications/changes-to-the-habitats-regulations-2017/changes-to-the-habitats-regulations-2017>
- 11 NPPF (2021) para 181, available from https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1005759/NPPF_July_2021.pdf

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- 12 The Habitats Regulations Assessment Handbook, Section A3. David Tyldesley & Associates, a subscription based online guidance document: <https://www.dtapublications.co.uk/handbook/European>
- 13 UK Government Planning Practice Guidance, available from <https://www.gov.uk/guidance/appropriate-assessment>
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- 15 CHAPMAN, C. & TYLDESLEY, D. 2016. Functional linkage: How areas that are functionally linked to European sites have been considered when they may be affected by plans and projects - a review of authoritative decisions. Natural England Commissioned Reports, Number 207.
- 16 Obtained from the Natural England website (www.naturalengland.org.uk).
- 17 Obtained from Natural England website <http://publications.naturalengland.org.uk/category/6490068894089216>
- 18 The Conservation of Habitats and Species Regulations 2017 (2017) SI No. 2017/1012, as amended by The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 (SI 2019/579).
- 19 The Habitats Regulations Assessment Handbook. David Tyldesley & Associates, a subscription based online guidance document [online] Available at: <https://www.dtapublications.co.uk/handbook/European>
- 20 Assessment of plans and projects significantly affecting European sites. Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC. European Commission Environment DG, November 2001.
- 21 <http://onlinelibrary.wiley.com/doi/10.1111/j.1469-7998.2006.00282.x/abstract>
- 22 <https://www.royalparks.org.uk/parks/richmond-park/richmond-park-attractions/wildlife/stag-beetles>
- 23 Greenspace Information for Greater London: the capital's environmental record centre. Data obtained 14 November 2016

References

- 24 The geographical accuracy of the Greenspace Information for Greater London data varies. In some cases the point locations mapped just mean that stag beetles have been recorded nearby within a grid square of varying sizes.
- 25 <http://www.arkive.org/stag-beetle/lucanus-cervus/>
- 26 <http://www.apis.ac.uk/>
- 27 <https://www.standardsforhighways.co.uk/dmrb/search/10191621-07df-44a3-892e-c1d5c7a28d90>
- 28 UCL DataShine Commute data: <https://commute.datashine.org.uk/>
- 29 Air Pollution Information System (APIS) data: <http://www.apis.ac.uk/>
- 30 APIS.ac.uk
- 31 <https://www.thameswater.co.uk/about-us/responsibility/days-out/kempton-nature-reserve>
- 32 Thames Water Final Water Resources Management Plan 2019
- 33 <https://www.thameswater.co.uk/media-library/home/about-us/regulation/water-resources/annual-review.pdf>
- 34 Assessment of plans and projects significantly affecting European sites. Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC. European Commission Environment DG, November 2001.
- 35 https://www.london.gov.uk/sites/default/files/air_quality_strategy_v3.pdf
- 36 https://www.richmond.gov.uk/air_quality_action_plan
- 37 Figure C1 from Design Manual for Roads and Bridges (May 2007) Volume 11 Environmental Assessment, Section 3 Environmental Assessment Techniques. Part 1 HA207/7 Air Quality
- 38 <https://designatedsites.naturalengland.org.uk/ReportUnitCondition.aspx?SiteCode=S1004317&ReportTitle=Wimbledon%20Common%20SSSI>
- 39 <https://www.wpcc.org.uk/downloads/publications/commons-strategy-2017-to-2019.pdf>

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- 41 <https://www.wpcc.org.uk/downloads/conservation-reports/item-06.20.13--annual-conservation-report-2019--20-final-red.pdf>
- 42 Information taken from JNCC standard data forms: [Richmond Park Special Area of Conservation](#); [Wimbledon Common Special Area of Conservation](#); and [South West London Waterbodies Special Protection Area](#).
- 43 Information taken from Natural England's Site Improvement Plans: [Richmond Park Special Area of Conservation](#); [Wimbledon Common Special Area of Conservation](#); and [South West London Waterbodies Special Protection Area](#).
- 44 Information taken from JNCC standard data forms: [Richmond Park Special Area of Conservation](#); [Wimbledon Common Special Area of Conservation](#); and [South West London Waterbodies Special Protection Area](#).
- 45 Information taken from Natural England's Site Improvement Plans: [Richmond Park Special Area of Conservation](#); [Wimbledon Common Special Area of Conservation](#); and [South West London Waterbodies Special Protection Area](#).
- 46 Information taken from JNCC standard data forms: [Richmond Park Special Area of Conservation](#); [Wimbledon Common Special Area of Conservation](#); and [South West London Waterbodies Special Protection Area](#).
- 47 Information taken from Natural England's Site Improvement Plans: [Richmond Park Special Area of Conservation](#); [Wimbledon Common Special Area of Conservation](#); and [South West London Waterbodies Special Protection Area](#).
- 48 South West London Waterbodies SPA, Natura 2000 Data Form, JNCC 05/05/2006
- 49 Information taken from JNCC standard data forms: [Richmond Park Special Area of Conservation](#); [Wimbledon Common Special Area of](#)

References

- [Conservation](#); and [South West London Waterbodies Special Protection Area](#).
- 50** Information taken from Natural England's Site Improvement Plans: [Richmond Park Special Area of Conservation](#); [Wimbledon Common Special Area of Conservation](#); and [South West London Waterbodies Special Protection Area](#).
- 51** Information taken from JNCC standard data forms: [Richmond Park Special Area of Conservation](#); [Wimbledon Common Special Area of Conservation](#); and [South West London Waterbodies Special Protection Area](#).
- 52** Information taken from Natural England's Site Improvement Plans: [Richmond Park Special Area of Conservation](#); [Wimbledon Common Special Area of Conservation](#); and [South West London Waterbodies Special Protection Area](#)..
- 53** Information taken from JNCC standard data forms: [Richmond Park Special Area of Conservation](#); [Wimbledon Common Special Area of Conservation](#); and [South West London Waterbodies Special Protection Area](#).
- 54** Information taken from Natural England's Site Improvement Plans: [Richmond Park Special Area of Conservation](#); [Wimbledon Common Special Area of Conservation](#); and [South West London Waterbodies Special Protection Area](#).
- 55** Information taken from JNCC standard data forms: [Richmond Park Special Area of Conservation](#); [Wimbledon Common Special Area of Conservation](#); and [South West London Waterbodies Special Protection Area](#).
- 56** Information taken from Natural England's Site Improvement Plans: [Richmond Park Special Area of Conservation](#); [Wimbledon Common Special Area of Conservation](#); and [South West London Waterbodies Special Protection Area](#).
- 57** Information taken from JNCC standard data forms: [Richmond Park Special Area of Conservation](#); [Wimbledon Common Special Area of](#)

References

[Conservation](#); and [South West London Waterbodies Special Protection Area](#)

- 58** Information taken from Natural England's Site Improvement Plans: [Richmond Park SAC](#); [Wimbledon Common SAC](#); and [South West London Waterbodies SPA](#).

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