



London Borough of Richmond upon Thames

Local Plan

**Pre-Publication
Site Allocations
Development Plan Document**

**Sustainability Appraisal
Progress Report**

September 2013

NON-TECHNICAL SUMMARY

1 Introduction

This document forms the Sustainability Appraisal (SA), incorporating the requirements for a Strategic Environmental Assessment (SEA), of the London Borough of Richmond upon Thames Site Allocations Plan, which is one of a suite of statutory development plan documents (DPDs), all of which make up the Local Plan (previously referred to as Local Development Framework, LDF). This SA Progress report investigates the likely significant impacts on the borough and the wider area in terms of the contribution towards sustainability that might arise if the proposals set out in the Pre-Publication Site Allocations Plan are implemented.

1.1 The Purpose of the SA/SEA

The purpose of the SA (incorporating SEA) is to ensure that environmental, social and economic considerations have been integrated into the preparation of the Site Allocations Plan. The SA will:

- Ensure compliance with the SEA Directive, SEA Regulations and guidance on SEA/SA;
- Review the Local Plan's relationship with other sectoral plan's, and plans operating at a national, regional and more local level with regard to their policies and programmes;
- Establish the baseline environmental, social and economic characteristics of the area;
- Identify any current environmental constraints, issues and problems;
- Help develop viable options and alternatives; and
- Review the sustainability impacts of the options, and of the preferred SPD option.

1.2 The Site Allocations Plan

The Site Allocations Plan (SA Plan) will include site-specific proposals for the whole borough, other than Twickenham town centre, where the [Twickenham Area Action Plan](#) applies. The proposals in the SA Plan will reflect the needs of the borough, existing national, regional and local policies, site specific constraints and opportunities and will be subject to public consultation as part of the statutory planning process. The Plan looks ahead for 15 years after it is adopted in late 2014.

This Plan will update, replace or introduce new development sites from those in the existing [Richmond upon Thames UDP](#).

The main purpose of the Site Allocations Plan is to meet present and future needs for housing, employment, retail, transport, education, health, community facilities, sport and leisure, looking ahead over the next fifteen years. Future needs for these uses have been analysed, and an assessment made of how these needs could be addressed, including where these would result in site specific allocations within the Site Allocations Plan.

Not all needs will result in a site allocation and not all possible sites have been included in the SA Plan. During the Call for Sites consultation in January 2013, a number of sites were proposed by the landowner or other parties, of which some sites were included (such as larger sites) and others (such as small sites and/or where existing policies can be applied) were not included in the SA Plan.

Please refer to the Pre-Publication version of the Plan and the various background documents to the Plan for further information.

To ensure transparency and consistency in the SA/SEA process, all sites, including those proposed by other parties and rejected by the Council, have been subject to Sustainability Appraisal, as set out in Appendix 4 and 5 of this report.

1.3 Methodology

The SA/SEA process consists of the following stages and is being undertaken in accordance with government guidance contained within the [CLG Plan making manual](#) on Sustainability Appraisals, launched in September 2009, which replaces the 2005 government guidance on 'Sustainability Appraisal of Regional Spatial Strategies and Local Development Documents'. Note that whilst the National Planning Policy Framework (NPPF) has superseded the majority of Planning Policy Statements and government guidance, including PPS12, which contained advice on Sustainability Appraisals, the Department of Communities and Local Government (DCLG) is reviewing all their planning guidance, including the Plan making manual, but until it is officially withdrawn or revised, it remains extant.

The methodology is as follows:

- Stage A: Setting the context and objectives, establishing the baseline and deciding on the scope
- **Stage B: Developing and refining options**
- **Stage C: Appraising the effects of the plan**
- Stage D: Consulting on the plan and the SEA/SA report
- Stage E: Monitoring Implementation of the Plan

1.4 Scope of the SA/SEA

Baseline data and the development of the SA/SEA framework has been organised in accordance with the topics required by the SEA Directive and as outlined in the CLG Plan Making Manual. The scope of the baseline review has been refined to cover a broader spectrum of sustainability issues which are a reflection of the combined SEA/SA assessment.

2 Stage B and C: Developing and refining options and appraising the effects of the draft plan

Note that the Council has consulted on the draft Scoping Report in from 15 March until 19 April 2013 (Stage A), to which all three statutory bodies with environmental responsibilities in England responded. As a result, the Scoping Report was amended in line with the consultation responses. The SA baseline information, evidence and analysis were updated so it could inform the production process of the Pre-Publication version of the Site Allocations Plan. The final version of the revised SA Scoping Report was published in July 2013 and is available on the Council's website: http://www.richmond.gov.uk/sustainability_appraisal_ldf.htm

Stage B of the SA/SEA consists of developing and refining options. As the Pre-Publication version of the Site Allocations Plan was produced, the Sustainability Appraisal process provided the plan makers with options and alternatives for the various sites and proposals. The revised and updated Scoping Report has been used to assess and appraise the

options/alternatives for the proposal sites contained within the Site Allocations Plan. This SA Progress report sets out the detailed analysis of the various options and alternatives for specific sites, and highlights which option can be considered the most sustainable. This assessment has fully informed the Pre-Publication Version of the Site Allocations Plan. As such, this SA Progress report also incorporates Stage C of the SA/SEA, and appraises the effects of the draft Site Allocations Plan.

3 Sustainability Appraisal of the options and draft proposals

The development and appraisal of the proposals to be contained within the SA Plan is an iterative process. This process started with appraising the options as set out later in this SA Progress Report. The options were then refined to take account of the SA appraisal. The proposals of the Pre-Publication Site Allocations Plan have therefore been fully informed by Sustainability Appraisal and this report presents the outcomes of that Sustainability Appraisal. The Site Allocations Plan must be in accordance with the national, regional and Local Plan (Core Strategy, Development Management Plan and Twickenham Area Action Plan) policies unless there is good evidence to support a different approach.

The Pre-Publication version of the Plan, which is fully informed by Sustainability Appraisal (Stage C), was prepared over the summer 2013. The proposals of the draft SA Plan will be publicly consulted upon in the autumn of 2013. Any consultation responses on the draft Plan, including on this Sustainability Appraisal report, will be considered, and changes, where appropriate, will be made to the draft SA Plan and Sustainability Appraisal. The Council will then prepare the final Publication version of the Plan, including an accompanying Sustainability Appraisal / Environmental Report, which will be subject to a further round of public consultation in 2014.

4 Results and conclusions of the Sustainability Appraisal

The Sustainability Appraisal has recognised that the Site Allocations Plan has an important role to play in the sustainable development of this borough and in particular in meeting future needs and demands.

The Site Allocations Plan objectives provide the foundation for the development of site specific proposals for the borough. It has to be recognised that the SA Plan needs to be in general conformity with higher level plans (national and regional), including the Local Plan Core Strategy, Development Management Plan and Twickenham Area Action Plan (which only applies within the area covered by the Twickenham AAP). All higher level plans and other adopted Local Plan documents have already been subject to Sustainability Appraisal.

The large majority of the draft proposal sites as set out in the SA Plan that have been assessed in this document are likely to have positive impacts, particularly as they will be addressing identified needs and demands in the borough. A large number of the proposals are for the designation of sites as “Key Employment Site” – this is a very important designation for this borough and all these proposals have been assessed as having positive impacts because they identify and protect locally important industrial estates, businesses and offices. Through the designation as a “Key Employment Site”, the long-term future of these sites, including their contribution to the local economy and the provision of jobs can be secured

Some proposal sites may potentially have positive as well as negative impacts. Generally speaking, the positive as well as negative impacts increase the more action and intervention is taken on sites. For example, an intensification of uses on sites would make more efficient and better use of previously developed land, thus contributing to the protection of the borough's parks and open spaces; however, intensification in uses may have potential negative impacts on traffic and parking as well as on waste. In addition, some sites are within flood risk areas, where new and/or intensified uses could potentially put more users/residents at risk of flooding. Wherever the Sustainability Appraisal identified potential negative impacts or dis-benefits, the Sustainability Appraisal makes recommendations on how mitigation measures could be incorporated into the SA Plan to reduce or mitigate some of these impacts. Any potential negative impacts or consequences of proposals need to be understood and mitigated prior to the development of the detailed design.

As the Pre-Publication version of the SA Plan has been finalised, the Sustainability Appraisal fully informed the refinement of the proposals by assessing various options and alternatives for sites. Changes have been made to the draft SA Plan as it progressed; this included for example more emphasis on heritage assets and their settings in the wider context, enhancement of biodiversity, green infrastructure and provision of open space and recognition of existing traffic/transport problems as well as flood risk areas.

The full Sustainability Appraisal assessment for all the sites that are included in the draft Site Allocations Plan can be found in Appendix 4 of this report. The full SA assessment of sites that have been suggested as part of the 'Call for Sites' consultation in early 2013 and that were not included in the Site Allocations Plan can be found in Appendix 5 of this report.

Sustainability Appraisal Scoping Report

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1 INTRODUCTION

1.1 Strategic Environmental Assessment / Sustainability Appraisal

1.1.1 The Planning and Compulsory Purchase Act 2004 requires that the Regional Spatial Strategy and Local Development Documents be subject to a Sustainability Appraisal, which will incorporate the requirements of the Strategic Environmental Assessment (SEA) Directive.

1.1.2 This document forms the Sustainability Appraisal (SA) for the Pre-Publication Site Allocations Plan (SA Plan), which is part of the London Borough of Richmond upon Thames Local Plan, previously referred to as Local Development Framework (LDF).

1.1.3 A Sustainability Appraisal is a systematic process that attempts to predict and assess the economic, environmental and social effects that may arise from the Local Plan. The SA should¹:

- Take a long term view of how the area covered by the Plan is expected to develop, taking account of social, environmental and economic effects of the proposed plan;
- Provide a mechanism for ensuring that sustainability objectives are translated into sustainable planning policies;
- Reflect global, national and local concerns;
- Provide an audit trail of how the plan has been revised to take account the findings of the SA;
- Form an integral part of all stages of plan preparation, and incorporate the requirements of the European Directive 2001/42/EC “on the assessment of the effects of certain plans and programmes on the environment”, the SEA Directive.²

1.2.3 The Pre-Publication version of the Site Allocations Plan has been fully informed by the Sustainability Appraisal assessment of the options and alternatives, as presented in this SA Progress report. However, firstly, the SA Scoping Report for the Site Allocations Plan was prepared and publicly consulted on from 15 March until 19 April 2013. All three statutory bodies with environmental responsibilities in England, namely the Environment Agency, Natural England and English Heritage, have responded on the Draft Scoping Report. The Council has also consulted other relevant bodies with a sustainability remit or local environmental interest, such as Thames Water. In total, five responses were submitted to the Council; in addition to the statutory bodies, the Council also received responses from Thames Water and The Royal Parks. As a result, the Scoping Report was amended in line with the consultation responses. The SA baseline information, evidence and analysis were updated so it could inform the production process of the Pre-Publication version of the Site Allocations Plan. The final version of the SA Scoping Report, dated July 2013, is available on the Council’s website: http://www.richmond.gov.uk/sustainability_appraisal_ldf.htm

¹ CLG Plan Making Manual: <http://www.pas.gov.uk/pas/core/page.do?pagelid=152450>

² Directive 2001/42/EC of the European Parliament and of the Council of 27 June 2001, “on the assessment of the effects of certain plans and programmes on the environment”.

- 1.2.4 The revised and updated Scoping Report has been used to assess and appraise the options/alternatives for the proposal sites contained within the Site Allocations Plan. This report sets out the detailed analysis of the various options and alternatives for specific sites, and highlights which option can be considered the most sustainable. This assessment has informed the Pre-Publication Version of the Site Allocations Plan.
- 1.2.5 The Authority's Monitoring Report (AMR)³ will be the means of monitoring the SA indicators identified on a regular basis. As well as the baseline information included in this report, research may be undertaken for the Site Allocations Plan, which will form the evidence base for the Plan. The results of this research will be fed into the SA process and AMRs when available.
- 1.2.6 The five stages to be carried out during the Sustainability Appraisal are set out in Figure 1 below.

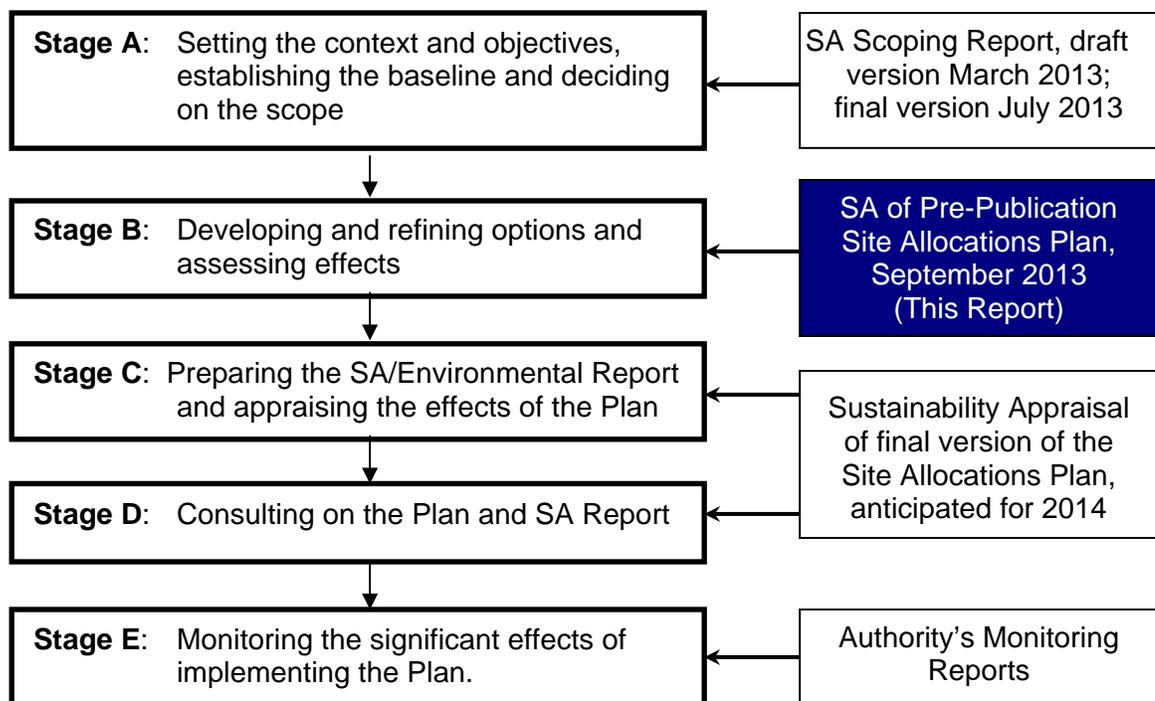


Figure 1: Five stages of SA

- 1.1.4 The section below explains in more detail the above five stages of the Sustainability Appraisal.

1.2 First Stage (A): Scoping Report

- 1.2.1 For the purpose of the Site Allocations Plan, the Scoping Report originally produced for the LDF in 2007⁴ as well as the revised and updated Scoping Report produced for the Twickenham Area Action Plan in May 2011⁵ were used as a baseline. The SA Scoping Report is the result of the first stage in the SA process (Stage A) and it includes baseline information and key environmental issues for the borough. From this

³ http://www.richmond.gov.uk/authority_monitoring_report.htm

information, objectives and indicators have been produced. The objectives form part of the SA framework against which the Site Allocations Plan will be assessed.

- 1.2.2 A Draft Scoping Report for the Site Allocations Plan, dated March 2013⁶, was published for public consultation from 15 March until 19 April 2013. The Council asked for the views of the statutory consultees and any other organisation with interest in sustainability to ascertain whether the Scoping Report addresses the right issues. All three statutory bodies with environmental responsibilities in England, namely the Environment Agency, Natural England and English Heritage, have responded on the Draft Scoping Report. The Council also consulted other relevant bodies with a sustainability remit or local environmental interest. In total, five responses have been received; in addition to the statutory bodies, the Council also received responses from Thames Water and the Royal Parks.
- 1.2.3 The Council considered all the submitted responses on the SA Scoping Report. As a result of the consultation responses, the Scoping Report was amended. The SA baseline information, evidence and analysis were updated so it could inform the production process of the Pre-Publication version of the Site Allocations Plan. The final revised version of the SA Scoping Report, dated July 2013, including the responses received on the SA Scoping Report, are available on the [Council's website](http://www.richmond.gov.uk/sustainability_appraisal_ldf.htm): http://www.richmond.gov.uk/sustainability_appraisal_ldf.htm

1.3 Second Stage (B): Developing and refining options/alternatives and assessing effects – Current stage/this report

1.3.1 Stage B involves:

- Comparing the aims and objectives of the Site Allocations Plan with the 15 sustainability objectives developed as part of the Sustainability Appraisal;
- Developing alternatives to the plan and appraising the options and scenarios set out within the plan; and
- Producing a first draft of a Sustainability Appraisal of those options.

The options and alternatives for the proposal sites to be included in the draft SA Plan were assessed against the 15 sustainability objectives; the results of this assessment are contained within this report. In addition, options and alternatives have also been considered and assessed for all the sites put forward as part of the Call for Sites consultation⁷; some of these sites will have been included in the SA Plan and others may have been rejected; the Sustainability Appraisal results can be used to inform which sites and proposals should be included in the Plan.

This SA Progress report shows the results of the assessment and the extent to which the options and alternatives for the specific sites in the borough help to achieve the relevant sustainability objectives.

⁴ http://www.richmond.gov.uk/sustainability_appraisal_ldf

⁵ http://www.richmond.gov.uk/sustainability_appraisal_ldf

⁶ http://www.richmond.gov.uk/sustainability_appraisal_ldf

⁷ http://www.richmond.gov.uk/call_for_sites.htm

1.4 Third Stage (C): Preparing the SA report

1.3.1 Stage C will involve:

Stage C1: Preparing the SA Report

- Predict and assess the environmental, social and economic effects of the preferred proposals and policies of the draft Plan – this will be on the Council's Publication Version of the Site Allocations Plan.
- Develop proposals for monitoring.
- Produce the Sustainability Appraisal / Environmental Report.

The final proposals for the Site Allocations Plan will be informed by the Sustainability Appraisal Progress Report (i.e. this report) and any consultation responses received on this SA Report and Pre-Publication Version of the Plan. The final proposals and uses for specific sites will be assessed against the 15 sustainability objectives and the results will be presented in the final SA report.

1.5 Fourth Stage (D): Consulting on the draft plan (Publication) and SA report

1.5.1 Stage D will involve:

D1: Public participation on the SA Report and draft Plan

D2: Assessing significant changes

- Consultation on the draft Plan, which will be the Council's Publication Version of the Site Allocations Plan.

At this stage the Council will consult on the draft Plan and accompanying Sustainability Appraisal to find out whether the SA is correct, or if proposals for sites contained within the Plan could be made more sustainable.

Stage D2 will be carried out following the consultation on the Pre-Publication of the Site Allocations Plan, at which stage it will be determined whether any further changes are required to the Plan. Any subsequent changes will then be incorporated into the Submission version of the Plan, which will be again consulted on and accompanied by the final Sustainability Appraisal / Environmental Report.

1.6 The Local Plan and Site Allocations Plan

1.6.1 The Local Plan for the London Borough of Richmond upon Thames will guide development in the future and is made up of a series of documents, prepared in stages. More information on the Local Plan can be viewed on the Council's website⁸. This includes the Local Development Scheme which sets out the programme for the production of documents (see Table 2).

Name	Function	Dates
Core Strategy DPD	Vision Strategic policies	Adopted in April 2009
Development DPD	Detailed policies for the management of development	Adopted in November 2011
Twickenham AAP	Policies and proposals for Twickenham	Adopted in July 2013
Site Allocations Plan	Proposals for sites	Call for sites – 17 December 2012 to 28 January 2013 Pre-publication – Autumn 2013 Publication – Summer 2014 Examination – Autumn 2014 Adoption – Late 2014
Joint West London Waste Plan DPD	Planning for waste	Further consultation on the proposed sites and policies will take place in 2013.
Community Infrastructure Levy Charging Schedule (this is not a DPD)	Charges for certain new developments	Draft Charging Schedule consultation – 8 July to 19 August 2013 Submission – October 2013 Examination – Winter 2013/14 Adoption – Spring 2014

Table 1: Timetable for production of key Development Plan Documents (DPDs)

1.6.2 The **Core Strategy**⁹ has been adopted in April 2009. It outlines the Vision, Spatial Strategy and 20 Core Planning Policies on topics such as climate change, housing, employment and retailing. The Core Strategy provides the framework for other DPDs within the Local Plan to build upon, with more detailed policies and to guide development management decisions.

1.6.3 The **Development Management Plan (DMP)**¹⁰ builds on the objectives and principles of the Core Strategy and includes more detailed policies for the management of development. The DMP has been adopted in November 2011.

1.6.4 The Council has now also adopted the **Area Action Plan for Twickenham Town Centre**¹¹. The Twickenham AAP follows the Core Strategy and DMP objectives, and sets out detailed policies and proposals for Twickenham town centre.

⁸ <http://www.richmond.gov.uk/home/environment/planning/planningpolicy.htm>

⁹ http://www.richmond.gov.uk/local_development_framework_core_strategy.htm

¹⁰ http://www.richmond.gov.uk/development_management_dmp.htm

- 1.6.5 In December 2012, the Council started a “Call for Sites” consultation¹² as part of the first stage of the **Site Allocations Plan**¹³. The Council issued a “Call for Sites” for review for possible inclusion within the Site Allocations Plan, with focus on potential development sites or groups of sites where there might be the opportunity for redevelopment or changes of use. The pre-publication version of the Site Allocations Plan includes site specific proposals for the whole borough, other than Twickenham town centre where the Twickenham AAP applies. The draft proposals have been fully informed by Sustainability Appraisal – this SA progress report – and reflect the needs of the borough, existing national, regional and local policies, site specific constraints and opportunities and will be subject to public consultation as part of the statutory planning process. The Plan looks ahead for 15 years after it will be adopted in late 2014. This Plan will update, replace or introduce new development sites from those in the existing Richmond upon Thames UDP¹⁴.
- 1.6.6 Six West London boroughs (Brent, Ealing, Harrow, Hounslow, Hillingdon and Richmond upon Thames) have joined together to prepare the **West London Waste Development Plan Document**¹⁵. This will be part of each borough's Local Plan and aims to identify possible sites for managing the area's waste until 2026. It will identify sites to deal with this waste. The plan will also contain policy to support sustainable development, site development and awareness of sustainable waste management. It will give priority to waste reduction, recycling and composting.
- 1.6.7 The **Borough Community Infrastructure Levy (CIL) Charging Schedule**¹⁶, although not a formal Development Plan Document, is of relevance to the Local Plan and the Site Allocations Plan. It will set out the Council's proposed rates of CIL, how it will be calculated and where it intends to make exemptions. It is underpinned by a robust and credible evidence base, such as the CIL Viability Study and detailed infrastructure assessments, whereby it must aim to strike an appropriate balance between the desirability of funding infrastructure to support new development, and the potential effects of CIL upon the economic viability of the development across the borough. The Council has already consulted on the Preliminary Draft Charging Schedule in December 2012 as well as on the CIL Draft Charging Schedule from 8 July to 19 August 2013. The Council is now preparing for independent examination of the Draft Charging Schedule. It is anticipated to be adopted in the spring of 2014.

¹¹ http://www.richmond.gov.uk/twickenham_area_action_plan.htm

¹² http://www.richmond.gov.uk/call_for_sites.htm

¹³ http://www.richmond.gov.uk/site_allocations_dpd.htm

¹⁴ http://www.richmond.gov.uk/unitary_development_plan.htm

¹⁵ www.wlwp.net

¹⁶ http://www.richmond.gov.uk/borough_cil.htm

2 OTHER PLANS AND STRATEGIES

2.1 Plans, Policies and Programmes

- 2.1.1 A comprehensive review of relevant Plans, Policies and Programmes (PPPs) was carried out as part of the Scoping Stage (A) in order to ensure that the SA framework and objectives are not in conflict with those in other PPPs, and to highlight areas of potential conflict, which may need to be addressed, such as meeting development needs whilst protecting biodiversity and heritage.
- 2.1.2 A full list of all relevant PPPs can be found in Appendix 1 of this Report. These represent legislation from international to local level and in general terms the lower level plans at national and regional level will have increasing relevance and bearing on the emerging plan. In most instances, lower-tier PPPs would already reflect the higher tier requirements, unless they have been more recently produced or revised. A detailed review, key message and comprehensive analysis of the relationships with the PPPs can be found in Appendix 1 of the Site Allocations Plan Sustainability Appraisal Scoping Report (July 2013).
- 2.1.3 The key findings from the PPP analysis for the LDF are set out below.

2.1 Key findings from the PPP analysis

- **Sustainable Development**

Local Plan documents should be based upon the principles of sustainable development and provide a sustainable spatial vision and objectives. There are three dimensions to sustainable development: economic, social and environmental. Sustainable development requires economic growth that supports social progress and respects the environment; economic growth, social cohesion and environmental protection therefore must go hand in hand. The NPPF is a key planning document, whereby at its heart is a presumption in favour of sustainable development, which should be seen as a golden thread running through both plan-making and decision-taking. Key areas of sustainable development are building a strong and competitive economy, ensuring the vitality of town centres, promoting sustainable transport, delivering a wide choice of high quality homes, requiring good design, promoting healthy communities, mitigating and adapting to climate change, protecting and enhancing the environment, ensuring social cohesion and inclusion, and managing natural resources more prudently and responsibly. Sustainable development should therefore be at the heart and core principle of all Local Plan documents.

- **Climate Change**

The Local Plan should focus on reducing carbon dioxide emissions to assist the UK in meeting its legally binding target of 80% reduction in emissions (of 1990 levels) by 2050, and the London-wide target of 60% (of 1990 levels) by 2025. Policies should address climate change and ensure that all new developments reduce carbon dioxide emissions, and encourage existing developments to reduce their emissions. The overall aim should be to create sustainable communities with low carbon emissions that are resilient to the effects of climate change and to the volatile energy market through focusing on climate change mitigation, including energy efficiency, as well as climate change adaptation. The costs associated with taking preventative action will be much less than those associated with

dealing with consequences if action is not taken now. Therefore, the Local Plan should aim to reduce carbon dioxide emissions to mitigate the effects of climate change, and ensure that predicted changes are taken into account in order to create adaptable communities and buildings.

- **Flood Risk**

The Local Plan should aim to reduce the risks of flooding to communities (people, properties and infrastructure) and ensure that flooding is given appropriate weight when considering the location and design of new development. A Strategic Flood Risk Assessment should inform the Local Plan policies and decisions on the location and design of development. The Local Plan should not promote development in unsustainable locations, such as in areas with high flood probability, and should not allow development that might increase the risk of flooding to others. When new development is brought forward in areas which are vulnerable, care should be taken to ensure that risks can be managed through suitable adaptation measures, including through the planning of green infrastructure (also see below).

- **Biodiversity and nature conservation**

The nature conservation status of designated areas in the borough must be taken into account. An Appropriate Assessment will be required of the potential environmental impacts of the Local Plan on sites designated under the Habitats Directive. Policies should ensure that areas designated for nature conservation purposes, threatened species and habitats are protected and that development does not have any detrimental impacts on biodiversity. The aim should always be to enhance biodiversity wherever possible. Local Plans should also plan positively for the creation, protection, enhancement and management of networks of biodiversity and green infrastructure.

- **Energy and renewable energy**

The Local Plan needs to consider the way energy is supplied and encourage zero- and low-carbon energy technologies. The aims should be to reduce the contribution to climate change by minimising emissions of carbon dioxide through energy efficiency, combined heat and power, renewable energy and other technologies. Government expects all new residential developments to be zero carbon by 2016, and all non-residential development to be zero carbon by 2019. This can be best achieved through the application of the energy hierarchy (as set out in the London Plan and in Richmond's Development Management Plan) whereby development should maximise energy efficiency, use low carbon technologies and reduce carbon dioxide emissions through the use of renewable energy. This should also align with the Council's and Government's aim of tackling fuel poverty.

- **Waste Management**

The Local Plan policies should reflect the principles of sustainable waste management, which is to Prevent/Reduce, Reuse, Recycle & Compost, Recovery of energy, and disposal as the last resort. The Local Plan must contribute to the national commitment to cut biodegradable municipal waste going to landfill to 50% of 1995 level by 2013 and 35% of 1995 level by 2020. The Local Plan policies will need to support these targets and encourage waste reduction, efficient use of raw materials, increased use of recycled materials and composting in the borough.

- **Pollution and contamination**

Local Plan policies should ensure there is no additional pollution (pollution of land, water, air and noise) from new development and road traffic, and the discharges to the environment associated with any development should be considered and mitigated. The

issues of pollution are closely linked with the key areas of water quality, air quality and noise (see below). Policies in the Local Plan should also consider any contamination effects of development as well as encourage remediation and the re-use of contaminated land.

- **Water quality and resources**

Improving water quality, which includes surface water, ground water and rivers, should be a core aim within the Local Plan. Policies should ensure that water quality is protected and improved where possible, and that developments do not have any detrimental impact on both water quality and water resources. The Local Plan should also help to deliver the aims and objectives of the Water Framework Directive and Thames River Basin Management Plan. The Local Plan should assist in achieving the target for the ecological status of the borough's rivers, which is "good ecological potential" by 2027. In addition, policies should ensure that developments meet challenging water consumption targets in order to address the issue of water scarcity in London.

- **Air Quality**

The Local Plan should consider the potential that new development, buildings and transport may have adverse impacts on the air quality and potentially increase air pollution. It should take into account the Richmond upon Thames Air Quality Action Plan to meet the targets set out in the Mayor of London's strategy and the national strategy on air quality, which focus on reducing PM10 and NO2 pollution levels.

- **Noise**

Measures to reduce and mitigate noise impacts on people, noise-sensitive land uses and biodiversity are required. Appropriate measures should be considered for reducing and mitigating noise around people and noise sensitive land uses. Local Plan policies should address noise implications by considering location, design and layout of development. The Local Plan should also be in line with the Mayoral Strategy on Ambient Noise, the aim of which is to minimise the adverse impacts of noise on people living and working in, and visiting London using the best available practices and technology within a sustainable development framework.

- **Transport**

Sustainable travel and the promotion of sustainable modes of transport should be integral to and a core principle of the Local Plan. Policies in the Local Plan should focus on sustainable transport and include reducing car-dependent development, increase other forms and choice of transport modes and promote vibrancy and economic activity in town centres. The Local Plan should facilitate more walking and cycling, improve linkages and ensure there are sufficient public transport linkages between homes, work places, local services and amenities. Making transport systems more efficient and safer, dealing with direct and indirect impact of road traffic, providing travel choice and accessibility for all are key issues to consider in the Local Plan. Sustainable modes of transport will also help to achieve the objectives in relation to mitigating climate change and reducing carbon dioxide emissions as well as in relation to reducing air and noise pollution.

- **Housing**

The Local Plan should aim to create sustainable, high quality homes and consider issues such as design, mixtures of housing types and tenures, associated open amenity spaces and proximity to local centres. The Local Plan should also maximise the provision of affordable accommodation that meets the needs of the community. Policies should promote the redevelopment of sites that provide a housing mix and good design that benefit the

community as a whole while minimising environmental impact. All buildings, including new homes, should achieve high levels of environmental ratings to mitigate and adapt to climate change.

- **Economic development**

The Local Plan should promote the development of positive strategies to underpin the planning and development of town centres. It should take account of existing evidence base to inform policies on employment land and premises, including future supply. There is a strong case for the Local Plan to protect all existing employment sites unless they are inherently unsuitable. Well-planned tourism development, such as the regeneration of urban areas, can bring many benefits for local economies and the environment. Policies on economic development also need to consider the potential impacts on the natural environment that could arise from creating new industry and commerce. All buildings, including non-domestic buildings, should achieve high levels of environmental ratings to mitigate and adapt to climate change.

- **Open spaces and recreation**

Open and recreational spaces are essential to the concept of sustainable development and place-making. Therefore, Local Plan documents should focus on the protection and enhancement of open spaces and recreational facilities, ensure that facilities are accessible to all and promote social inclusion and health and wellbeing. The network of multi-functional green spaces deliver not just a wide range of environmental and biodiversity benefits, but also benefit local communities.

- **Historic environment and heritage**

The Local Plan and its policies should recognise the unique place the historic environment holds in this borough, including the multiple ways that the cultural and historic heritage supports and contributes to the local, regional and national economic as well as to the community. The conservation of these historic assets should be a key priority of the Plan and policies should be in place that ensure that no damages or losses occur. The Local Plan should encourage developments that enhance creativity and culture within the borough and any potential impacts of developments on the historic environment and cultural heritage should always be taken into account.

- **Social environment, health and wellbeing**

Decisions made in spatial planning have direct and indirect impacts on and affect the quality of life, including the social environment as well as the health and wellbeing of the population. Planning can for example contribute to an enhanced social environment by improving the liveability of streets and community cohesion, reducing inequalities that exist in access to housing and increasing opportunities for physical activity by improving access to open spaces, sport and recreation facilities, including the provision of walk-able mixed-use neighbourhoods. Therefore, Local Plan documents should focus on facilitating the improved health and wellbeing of the population, including access to health, education, sport, leisure and recreation facilities. Improved health of the population is also interlinked with reducing air, noise and water pollution as well as a reduction in carbon dioxide and other emissions.

3 BASELINE CHARACTERISATION OF THE BOROUGH

3.1 Introduction

- 3.1.1 Both the SA Guidance and SEA Directive requires the collection of baseline information on environmental, social and economic characteristics of the area to provide the basis for predicting and monitoring effects and aid the identification of sustainability issues and alternative ways of dealing with them. The SEA Directive is concerned with the assessment of *'the likely significant effects on the environment of implementing the plan'*, and this requires an understanding of the 'baseline' situation so that the change that might arise from the influence of the plan can be considered. The following text as well as the information under the key sustainability issues in the next section summarises the baseline data and uses it to characterise the borough. Because SA/SEA is an iterative process it may be that future stages identify other data that need to be collected and monitored.

Note: 2011 Census data has been incorporated where available. The baseline information within this report still contains some 2001 Census data and this will be updated as and when the Scoping Report is revised.

A full analysis of the baseline characterisation of the borough can be found in the Site Allocations Plan Sustainability Appraisal Scoping Report dated July 2013 in Chapter 3.

3.2 Summary of key baseline information

- 3.2.1 The London Borough of Richmond upon Thames is a prosperous, safe and healthy borough and covers an area of 5,095 hectares (14,591 acres) in southwest London. It is the only London borough spanning both sides of the Thames, with river frontage of 21.5 miles and over 100 parks; this includes two Royal Parks, Richmond and Bushy, the Royal Botanical Gardens at Kew and many other wildlife habitats. There are also many conservation areas and listed buildings, which reflect the rich historic character of the borough. The local community has a clearly expressed view that the borough's natural and built environment should be protected and enhanced. The main town centre is Richmond and there are four district centres at Twickenham, Teddington, East Sheen and Whitton. Richmond borough is one of the least deprived areas in the country It also has maintained a consistently higher employment rate than that of London as a whole since the onset of the economic downturn in late 2008. A large proportion of the population of Richmond work in managerial, professional and technical jobs, meaning that the residents are generally highly skilled. Median annual earnings for residents of Richmond are considerably higher than the London average, which reflects the borough's position as a desirable place to live and to commute from for well paid jobs. Many local people commute out of the borough to work and at the same time, many non-residents come to work in Richmond each day. Overall, Richmond is an enterprising borough, whereby the enterprise stock has grown faster than in London since 2000 and business density levels are high. The visitor economy in Richmond supports a large amount of jobs. Major attractions like Kew Gardens, Hampton Court, Richmond Park and Twickenham stadium help to bring in around 3 million visitors per year. Whilst the borough has been relatively resilient to the economic pressures of recent years, there are some economic challenges and a significant constraint to growth

is the physical infrastructure of the borough and the limited availability of the highest quality of office space. Richmond is also the most expensive Outer London borough to buy in and private rents are high. Affordability is also a key issue affecting residents in Richmond both in the ability to rent privately or buy property.

Population

- 3.2.2 According to the 2011 Census, the borough has a resident population of 187,000. This indicates that there was a 8.5% increase in population over the ten years since the 2001 Census, which gave a figure of 172,300 people living in the borough. When compared to London, Richmond has a significantly lower percentage of people aged 20-24 (4.9% in Richmond and 7.7% in London) and 25-29 (6.5% in Richmond compared to 10% in London). Overall, Richmond has a smaller percentage of the population in all the age quintiles between age 10 and age 34 compared to London but a higher percentage of the population in age quintiles 49 and over. This mirrors our understanding of Richmond as an attractive place to live for families with children and older people while the relative affluence can mean it is difficult for young people to move into the borough.
- 3.2.3 The average age of a Londoner is 35.8 compared to 40 for the UK as a whole. The average age of a Richmond resident is 37.1. The median age (where half the population is older and half younger) of Richmond resident's is older than London in general and more in line with the rest of the UK at 38.4. Half of Londoners are 34 or younger while the equivalent age for the UK is 39.
- 3.2.4 Richmond is similarly diverse as the rest of England and Wales but it is one of the least ethnically diverse boroughs in London. The non-white population is similar to the average for England & Wales with just over 14% of the borough's population in 2011 made up of non-white minority ethnic groups, the largest of which is Indian – 2.8%. In 2001, Heathfield ward has by far the largest concentration of non-white ethnic minority groups (16.2%) living in the borough. Whitton and West Twickenham are also more ethnically diverse compared to the borough average, whereas Hampton is the least diverse.
- 3.2.5 Richmond upon Thames is one of the least deprived areas in the country and the least deprived within London (IMD 2010). No areas in Richmond are among the 25% most deprived in the country, and 46% of areas are among the least deprived 20% in England. However, there are pockets of relative disadvantage in the borough. The most deprived wards in the borough are: Ham & Petersham, Heathfield, Hampton North, Barnes, Hampton and Whitton. In these areas there are concentrations of less well off residents facing higher levels of unemployment, worklessness, lower skill levels and poorer physical and mental health. A targeted approach is being developed to improve opportunities for all.
- 3.2.6 Greater London Authority analysis of Labour Force survey data for London 2001/2002 (Disabled People and the Labour Market) shows that 8.3% of the borough's working age population are both disabled and economically active. The 2001 Census data shows that 12.4% of the borough's population has a limiting long term illness, health problem or disability which limited their daily activities or the work they could do (includes problems that are due to old age). 5.25% of the working age population are

permanently sick or disabled. The England & Wales average for long term limiting illness is 18.2% and 13.6% for permanently sick or disabled respectively.

Economy and employment

- 3.2.7 A measure of the number of employee jobs (i.e. not all jobs) is the Annual Business Inquiry (ABI). This sample survey generates estimates of employee jobs by industry and geography. It is a useful measure of the state of various sectors of industry. Between July 2009 and June 2010, approximately 92,200 residents had jobs; of these 20,500 (16.0%) were self-employed workers. This is a much higher proportion than in London (10.7%) and England (9.0%). 11% of Richmond residents worked mostly from home compared to around 9% in London and England and this is likely to be underestimated.
- 3.2.8 68% of Richmond working age residents work in managerial, profession and technical jobs. Only 2.9% work in 'elementary' positions such as manufacturing processing and cleaning. There is a good supply of office premises in Richmond although the dense nature of the borough limits the availability of potential new developments.
- 3.2.9 The resident population is highly skilled with 53 % of the workforce having NVQ4+ and only 6% having no qualifications. The level of qualification of the resident workforce in managerial, senior official positions and professional occupations is well above the London and UK average and the workforce in elementary occupations is significantly below the London and UK average. Richmond's resident weekly earnings are on average 23% higher than in London as a whole and 49% above the national average at £747 per week.
- 3.2.10 However, a highly skilled, high earning, articulate population conceals the fact that there are those less fortunate: without work; with health problems; in fuel and housing poverty and those living in the scattered pockets of relative deprivation across the borough.
- 3.2.11 Many local people commute out of the borough to work and at the same time, many non-residents come to work in Richmond each day. In 2001, the census told us that 62% (55,500 people) of all employed residents commuted out of the borough to work – most significantly to The City, Westminster, Hounslow and Kingston. 38% (34,000 people) of the resident workforce both lived and worked in the borough, and 50% of the borough's workforce (34,500 people) commuted into the borough to work.
- 3.2.12 Although unemployment rose significantly during the recession, it remains relatively low. In January 2013, 1.6% of the borough's residents were claiming unemployment benefit, significantly lower than in London and Great Britain. Fewer Richmond residents experience long-term unemployment: 0.3% of all residents have been claiming for over 12 months compared to 1.1% in London and 1.0% in Great Britain.
- 3.2.13 The Office for National Statistics released on 28th November 2008 a new National Statistics series on business births, deaths and survival rates. See <http://www.statistics.gov.uk/StatBase/Product.asp?vlnk=15186>. Using data on business start-ups and closures, this is an indicator of the health of businesses based within the borough. The data shows that the direction of travel for business births is improving.

Transport

- 3.2.14 The Mayor's Transport Strategy¹⁷ identifies Richmond as a Major Town Centre, and strategic transport corridors (of sub-regional importance) are identified into/out of the borough; these include: links to and from Heathrow and Richmond then through to Kingston, Sutton and Croydon; links northeast towards the centre of London; and links southwest into Surrey. The Council's Local Implementation Plan (LIP2)¹⁸ sets out the Council's transport objectives and delivery proposals for 2011/12 to 2013/14 and provides direction of travel on longer term proposals to implement the Mayor's Transport Strategy (MTS2)¹⁹ over the 20 year horizon, 2011-2031.
- 3.2.15 The River Thames and the Royal Parks act as barriers to through routes in the borough, and as a result, high volumes of traffic are being channelled onto a small number of local roads. In particular, the transport network is a particular barrier in the north of the borough adversely affecting the areas of Sheen, Mortlake and Barnes. The rail lines also cause further difficulties. The severance to local communities caused by the A205 South Circular, the River Thames and railway lines is already a significant issue.
- 3.2.16 High car ownership within the borough combined with high rates of through-commuting results in congestion on local roads. The 2001 Census suggests that 76% of households in the borough have access to a car. (England & Wales average of 73.2%). Overall, between 1993 and 1997 there has been a 7% increase in vehicle flows on roads in Richmond upon Thames. There are high levels of traffic, including through traffic, which has led to significant road congestion particularly in the morning and evening peaks. Around 24% of households do not have a car. This accounts for approximately 41,500 people. Whilst much of the area has good public transport accessibility levels (PTAL), there are a few areas with lower levels, such as parts of Ham and Petersham, and areas in the extreme west of the borough.
- 3.2.17 Public Transport Accessibility Levels (PTALS) provide a way of measuring the density of the public transport network at any location within Greater London. It is a measure of the accessibility of a point to the public transport network, taking into account walk access time and service availability. Walk times are calculated from specified point(s) of interest to all public transport access points. The PTAL is categorized in 6 levels, 1 to 6, whereby 6 represents a high level of accessibility, and 1, a very poor level of accessibility. However, PTAL places emphasis on access by train and underground stations. Therefore, the SA framework should also take account of location and frequency of bus routes when assessing options and proposals.
- 3.2.18 The rail network is good with 14 stations across the borough, but they are largely radial with overland (Waterloo and North London lines) and underground (District Line) rail links. Whilst the majority of the stations serve as local interchanges with bus services, some of them are isolated from areas of major activity and suffer from safety and security issues, which can be either actual or perceived. These issues have been address under the Station Access Programme. Work has been carried out on behalf of South West Trains to install secure cycle parking at several stations in the Borough. Restricted cycle parking has been installed at Twickenham Rail Station, making cycle

¹⁷ Mayor of London – Transport Strategy (2011-2031), May 2010;

<http://www.london.gov.uk/publication/mayors-transport-strategy>

¹⁸ LBRuT Second Local Implementation Plan for Transport (2011-2014);

http://www.richmond.gov.uk/second_local_implementation_plan.pdf

¹⁹ Mayor of London – Transport Strategy (2011-2031); <http://www.london.gov.uk/publication/mayors-transport-strategy>

parking far more secure. A cycle hire scheme has been introduced at Richmond Railway Station, a partnership between the Council and South West Trains, launched June 2010.

- 3.2.19 The bus network coverage in the borough is extensive; there are around 30 bus services that provide services to most parts of the borough. The major bus interchanges are located at the Richmond, Twickenham and Teddington town centres. In addition, a bus garage is located at Fulwell.
- 3.2.20 The topography, layout of the road network, large amount of green spaces and high levels of bicycle ownership in the borough (compared with other parts of Outer London) make it conducive to cycling. The borough's cycle network includes an extensive network of routes linking district centres, railway stations and green spaces. Many of these routes follow quieter residential roads, with some facilities on busier main roads to cater for different types of users and cycling abilities. However, the road network generally should be regarded as a facility for cyclists as much as for vehicular traffic. It is recognised that cyclists can and will use the highway network as a whole for their highly individual trips and to link with the formal cycle route network. The River Thames offers many opportunities for recreation and cycling trips with public access to approximately 27 kilometres of the riverbank. In addition, National Cycle Network Route 4 (Thames Cycle Route) passes through the borough running between Hampton Court Palace and the Wildfowl and Wetland Trust at Barnes via Kingston Bridge, Teddington Lock, Richmond Park and Barnes.
- 3.2.21 Walking plays an important part in urban life and is a part of almost all journeys, whether as the complete journey or as a link between other modes of transportation making up longer trips. While there are parts of the borough where the condition of the footways, the signing and the street furniture could be improved, there is a generally good basic walking infrastructure within the borough. The majority of the borough's signal-controlled junctions now have pedestrian phases and the majority of the borough's 305 public rights of way are adequately accessible. There are also a number of long distance recreational walking routes that are signed and promoted. There are three strategic walking routes within the borough and they include sections of the London Outer Orbital Path, the Capital Ring and the Thames Path. The 27 km towpath along the River Thames provides a very important regional recreational function. In general, the River Thames, its towpath and the recreational areas along the river are well used by local communities, residents, workers as well as by visitors.
- 3.2.22 The River Thames meanders for 34 km through a landscape of historic and royal parks, heritage sites, a variety of wildlife habitats, residential and employment areas through this borough. It links major visitor attractions of the borough including Hampton Court Palace, Ham House, Marble Hill House, Richmond town centre and Kew Gardens with central London. This borough it is the only London borough that is bisected by the Thames and therefore has one of the longest river frontages and recreational areas along the Thames (on both banks) in London. Also see the Thames Landscape Strategy Hampton to Kew²⁰.

Education

²⁰ Thames Landscape Strategy, Hampton to Kew: <http://thames-landscape-strategy.org.uk/arcadianthames>

- 3.2.23 The London Borough of Richmond upon Thames maintains one nursery school and 16 nursery units, 40 primary schools, eight secondary schools, seven of which are academies and one of which is voluntary-aided. Another catholic secondary school is due to open in September 2013. Provision for children with special needs is made in all mainstream schools. By September 2014, sixth forms will have been established at all eight secondary schools in the borough.
- 3.2.24 The standards attained by pupils in Richmond's primary and secondary schools and academies are above the national average. At present, secondary schools in Richmond upon Thames do not have sixth forms and over 16s generally attend Richmond upon Thames College or other post-16 colleges in nearby Esher, Kingston upon Thames or the private sector, but by September 2014, sixth forms will have been established at all eight secondary schools in the borough.
- 3.2.25 Demand for places at maintained nurseries and pre-schools is high, and it is considered likely to remain high in the future

Health and wellbeing

- 3.2.26 Overall Richmond is healthy, safe and rich in assets. Life expectancy is increasing and the number of people dying prematurely is lower than other areas. There are low levels of crime and accidents and lots of green spaces, good schools and high levels of volunteering. For many in Richmond, health and wellbeing is already much better than average. However, although the overall picture compared to the rest of England is positive, this can hide the fact that there are large numbers with health and wellbeing issues. The local Strategic Needs Assessments process (JSNA)²¹ examines a broad cross-section of data and reveals needs which might otherwise be overlooked. The particular priorities identified by staff, patients and members of the public in focus groups, meetings and surveys are to: Give children a good start; Integrate health and social care to increase independence and manage patients with long-term conditions out-of hospital; Adopt a systematic approach to prevention and self-care; Look out for hidden risks and harms and be ready to address them when they become known.

Health care infrastructure

- 3.2.27 From April 2013, Primary Care Trusts (PCTs) have been replaced across England by more than 200 GP-led organisations called Clinical Commissioning Groups (CCGs). GPs in Richmond are now working together as the [Richmond Clinical Commissioning Group](#), which offer free primary care health services for local people. Therefore, the [new partners](#) in relation to health care infrastructure are now the Richmond Clinical Commissioning Group²² (CCG) and NHS England²³; the PCT and NHS South West London have been abolished. The nearest Hospitals for acute Accident & Emergency are outside of the borough – in particular West Middlesex University Hospital at Isleworth and Kingston Hospital.

²¹ <http://www.richmond.gov.uk/jsna.htm>: A JSNA is the vehicle through which local authorities and PCTs describe the health, care and well being needs of local populations to inform the strategic direction of service commissioning and delivery.

²² <http://www.richmondccg.nhs.uk>

²³ <http://www.england.nhs.uk/>

- 3.2.28 Hounslow and Richmond Community Healthcare²⁴ (HRCH) are the NHS organisation responsible for providing community healthcare to the 425,000 adults and children living in the boroughs of Hounslow and Richmond. They have a distinct role in enabling people to stay healthy and active in their communities and in preventing them from spending unnecessary time in hospital. This is part of an integrated health and social care system and can make significant improvements for patients but by working in partnership with primary care, social care, education, acute hospitals and with commissioners we can together go further, providing joined up, higher quality, personalised and efficient services that lead to better outcomes for patients.
- 3.2.29 The main provider of adult and children's mental health services is South West London and St George's NHS Mental Health Trust²⁵. A range of services are provided across sites, including Barnes Hospital, Richmond Royal Hospital, the Maddison Centre in Teddington, and the Kingston Lane Hostel in Teddington, with other outreach teams and services. The tiered model of care is designed to provide a single point of access, for adults and older people enabling an early assessment and initial consultation from a full range of qualified mental health professionals, and ensuring that service users are referred to the most appropriate service. The emphasis in each tier will be to provide discrete, personalised packages of care, provided by the right team, in the right setting at the right time.

Social care

- 3.2.30 Richmond Social Services provides a range of services aimed at the most vulnerable within the community, including services for children and families, services for people with learning disabilities, services for adults, and services for people with mental health problems. There are various means of support for adults, including for those staying at home, including services run by the Council and those run by voluntary groups. Providers of retirement housing range from large mainstream housing associations, such as Richmond Housing Partnership (RHP), to small voluntary organisations. The Council no longer provides retirement housing but administers the Supporting People Programme, which helps to meet some of the costs of housing related support.
- 3.2.31 The Council reviewed adult social care services in 2010/11 covering self directed support contributions, fair access to care services eligibility criteria and changes to day services for older people. For new service users, people assessed with moderate needs will no longer be eligible to receive social care services and support and will receive general information and advice signposting to services elsewhere in the community e.g. luncheon clubs, hot meals, community alarms, befriending and handy person schemes and help with shopping; only those with substantial and critical needs will be eligible.
- 3.2.32 Age UK Richmond upon Thames (an independent charity) operate social centres at Twickenham Day Centre, Barnes Green Centre, Whitton and at the Dean Road Extra Care Scheme in Hampton, for activity and social venues for people over 50 years of age and offer many activities subsidised to make them affordable. The charity also provides a telephone helpline, welfare benefits advice and a handyperson service, and runs an outreach programme. Other centres offering activities include the Greenwood Centre in Hampton Hill, the Avenue Club in Kew, Linden Hall in Hampton, and Ellera

²⁴ <http://www.hrch.nhs.uk/>

²⁵ <http://www.swlstg-tr.nhs.uk/>

Hall in Teddington. Richmond Carers Day Centre is located in Twickenham operating appointments, a drop in service at set times and a support telephone line. It offers training and events.

Housing

- 3.2.33 At the time of the 2011 Census there were 79,835 households in the borough. This represents an increase of approximately 3,735 homes over the 2011 figure, which already reported an increase of just over 3,000 on the 1991 figure. The London-wide Strategic Housing Land Availability Assessment and Housing Capacity Study 2009 (SHLAA/HCS) informed the new London Plan (2011) and proposed a new annual target for the borough of 245 homes per annum for 2011 – 2021.
- 3.2.34 In 2001, the average size household in the borough was 2.23 people, and over a third of households were single people. This has now risen to 2.31 (2011 Census). The average household size in London increased from 2.35 persons in 2001 to 2.47 persons in 2011, challenging assumptions over the last 10 years that average household size is generally in decline. According to the 2001 census, the level of home ownership is 69%, with a further 15% renting from private landlords and another 12% (nearly 9,000) households renting from a registered social landlord. Following the Large Scale Voluntary Transfer of stock to the Richmond Housing Partnership in July 2000, there is no permanent council housing in the borough. When the 2011 Census data has been analysed, this will be updated.
- 3.2.35 In common with most of the rest of London, the cost of housing is extremely high. In January 2013, according to the Land Registry, the average house price in Richmond upon Thames was £489,741. Comparing average prices of houses across Greater London, Richmond is the most expensive Outer London borough to buy in and private rents are high. The attractiveness of the borough as a place to live is also reflected in the rent levels found in the private sector. Affordability is a key issue affecting residents and some may experience overcrowding or homelessness.
- 3.2.36 The borough has one of the highest average house prices in the UK. Fewer than 12% of homes in the borough are in the social rented sector, the fourth lowest in London. The borough undertook a Large Scale Voluntary Transfer in 2000 with Richmond Housing Partnership (RHP) now forming the largest housing association in the borough with around 6000 units. Richmond upon Thames Churches Housing Trust also has significant stock at just under 2000 units. Other housing associations include London and Quadrant and Thames Valley, and a large number of other associations with fewer than 200 units each.

Crime and community safety

- 3.2.37 There has been a 2% increase in crime between 2010/11 and 2011/12, meaning that Richmond is the fourth safest Borough as of March 2012. Crime levels are still very low in Richmond compared to London and especially some of the neighbouring boroughs.
- 3.2.38 Anti-Social Behaviour (ASB) levels for 2011-12 in the main town centre wards of Richmond Borough were as follows:
- There were 5272 reports of ASB during 2011-12, the vast majority of these reports concern Litter issues, including Flytipping.

- ASB levels were 4% down on 2010-11.
- There has been an average of 439 ASB calls/reports a month during 2011-12.
- The main wards for ASB were Ham, South Richmond and Mortlake.
- Most ASB incidents in the borough occur between 2000-0000 hrs, usually on the weekends.

Leisure

3.2.39 Residents and visitors to the borough enjoy a great deal of cultural activity. Each year, over 1.4 million visits are made to our libraries, 900,000 visits to sports centres, 500,000 visits to galleries and museums, and 460,000 visits to theatres and performing arts venues. The borough has a varied arts scene, making use of its many beautiful venues, and Richmond upon Thames Arts Council²⁶ (“artsrichmond”) is an umbrella voluntary organisation. The borough also has the Orange Tree Theatre, Richmond Theatre, and many drama groups. There are 12 lending libraries, catering for all ages, in the borough; information and reference services and a local studies collection can be found in the Old Town Hall in Richmond. The Council’s Arts Service²⁷ works to deliver innovative and accessible arts for residents and visitors of the borough by organising and encouraging all forms of creative development to provide arts for everyone, including exhibitions in three galleries, a diverse range of festivals, events for families and an award winning education provision for all ages and needs.

3.2.40 There are a number of indoor sport and leisure facilities in the borough. The Council’s Sport & Fitness Service directly manages 5 dual use sports & fitness centres in the borough. There are also various private facilities in the borough, catering for a wide range of residents. There are two large public indoor pools in Teddington and Richmond (Pools on the Park), where there is also an outdoor pool. Hampton outdoor pool is run by a charity and open to the public. There are various indoor and outdoor pools attached to schools. There are a number of specialist centres in the borough catering for individual sports including Richmond Gymnastics Centre, Busen Martial Arts & Fitness Centre and the Anglo’-Japanese Judo Club. The borough is also home of the English Rugby Football Union (RFU) and the Harlequins Rugby Football Club in Twickenham. There are two main athletics facilities at Barn Elms (Barnes) and St Mary’s College (Strawberry Hill).. The River Thames and Thames Young Mariners lake at Ham caters for a variety of water-based sports activities. There are also a wide range of different types of community centres across the borough, from which are run many different activities and spaces available to hire.

Natural environment

3.2.41 Richmond Borough is one of the richest boroughs in London in terms of the total area of green space, the quality and diversity of parks, open spaces, conservation areas and the wealth of different habitats and species. It has over 21 miles of River Thames frontage, the longest stretch of the River Thames of any London borough, and over 100 parks. This includes two Royal Parks, Richmond and Bushy, containing herds of red and fallow deer, the Royal Botanical Gardens at Kew and many other wildlife habitats.

²⁶ <http://www.artsrichmond.org.uk/>

²⁷ http://www.richmond.gov.uk/home/leisure_and_culture/arts.htm

3.2.42 Around 135 ha within the borough are designated as Green Belt (30 ha of which is designated as a Major Developed Site in the Green Belt - Hampton Waterworks). A large contribution to the open space network are the areas designated as Metropolitan Open Land (MOL), which makes up around 60% (3054 ha) of the borough's area. Historic parks and gardens cover around 2026 ha of the Borough (generally on land also designated as MOL), whereby Richmond Park is 930 hectares and Bushy Park is 445 hectares. The borough has large areas of open grassland but many of these sites are not managed primarily for nature conservation, for example the sports pitches, recreational areas and playing fields. Sites designated as Other Open Land of Townscape Importance (OOLTI) are smaller pieces of open land; there are just over 160 sites designated as OOLTI.

Biodiversity, geodiversity, flora & fauna

3.2.43 Richmond has an enormous wealth of wildlife (biodiversity) and there are many important areas of land with statutory and non-statutory designations. These include two sites designated as Site of Special Scientific Interest (SSSI) (Richmond Park, Barn Elms Wetland), two sites that are currently being considered for SSSI notification (Bushy Park, Home Park) and over 110 Other Sites of Nature Importance. The Local Biodiversity Action Plan (LBAP)²⁸ sets out the framework for the protection, conservation and enhancement of wildlife within the borough. There are many important areas of broad-leaved woodland within Richmond borough and many magnificent ancient trees in Richmond Park and The Copse in Ham. There are also many important wetland (flowing and standing water) areas within the borough, most importantly the River Thames. A lot of the borough's grasslands are acidic and the largest areas are contained within Richmond Park, Bushy Park and Home Park (Hampton Court).

Water quality

3.2.44 The most important watercourse in the borough is the River Thames, of which there are tidal and non-tidal sections. Other watercourses include the River Crane, Duke of Northumberland River, Longford River and Beverley Brook. There are also wetland areas, which provide ideal habitats for many species, for example Leg O'Mutton reservoir and London Wetland Centre in Barnes as well as the Stain Hill reservoirs in Hampton and Pen Ponds in Richmond Park.

3.2.45 The Water Framework Directive (WFD) is designed to protect and enhance the quality of our rivers, lakes, streams, groundwater, estuaries and coastal waters, with a particular focus on ecology. There are four designated river water bodies that extend across the borders of Richmond upon Thames, which will, under the WFD, need to achieve good ecological potential by 2027:

- The River Thames – poor ecological status
- Beverley Brook – poor ecological status
- The River Crane – poor ecological status
- Port Lane Brook – moderate ecological status

Water resources

²⁸ http://www.richmond.gov.uk/richmonds_biodiversity_action_plan.htm

3.2.46 The London Borough of Richmond upon Thames falls within the “London Water Resource Zone”. This zone is classified as being ‘water-stressed’. In Richmond upon Thames the average water consumption in 2010-11 was 167 litres per person per day. This compares to the five year average for the borough of 161 litres consumed per person per day between 2006/07 and 2010-11. London’s principal source of water is the Lower River Thames upstream of Teddington Weir; two thirds is from the River Thames, 22% from the River Lee and 15% from groundwater (the confined Chalk aquifer). Thames Water’s Hampton Water Treatment Works (WTW) is located within this borough; it is one of the UK’s largest WTW and provides a safe, dependable water supply for one third of London’s inhabitants; 3 million people.

Pollution of watercourses

3.2.47 Water quality in the River Thames is vital for the survival of fish, especially in summer months. Storm water can overwhelm the sewers leading to high levels of organic matter discharging to the river, which is then oxidised by bacteria. If the river flow is low and the temperatures high the oxygen content is rapidly depleted and fish die. The Rivers Crane and Duke of Northumberland are also of high wildlife value but there is room for improvement in those parts of the borough where the Crane has been channelled into a concrete-lined open conduit. The main factor influencing water quality of the River Thames is Mogden sewage treatment works (STW) and in the Kew to Barnes stretches, a combined sewage overflow (CSO) problem. Thames Water is currently carrying out a £140m upgrade at Mogden Sewage Treatment Works in west London (LB Hounslow) to extend sewage treatment capacity by 50%; this will significantly reduce the amount of storm sewage that overflows into the River Thames.

Soil and land contamination

3.2.48 Impacts on soil include the loss of productive areas and erosion of soils due to construction activities and maintenance of the transportation infrastructure, as well as contamination from current use of de-icing and other chemical agents, and past contamination from lead in vehicle exhausts and other toxic land uses and processes. Although the borough is primarily residential in character, historically there have been a range of industrial activities including: chemical manufacture, sewage treatment, gas works and many more. Contamination may also arise from inappropriate disposal of household materials e.g. cleaning products (e.g. white spirits and bleaches), technical oils, paints, ash and pesticides.

Flooding

3.2.49 The Council is legally required to take the lead role in managing local flood risk (this includes flood risk from all sources except from the River Thames and its main tributaries, for which the Environment Agency remains the lead body). Local research has been undertaken to understand the flooding issues within the borough and to identify areas of high flood risk: this includes the Council’s Strategic Flood Risk Assessment (SFRA)²⁹ and the Council’s Preliminary Flood Risk Assessment (PFRA)³⁰. In addition, as part of the Drain London project³¹, led by the Greater London Authority, a

²⁹ LBRuT Strategic Flood Risk Assessment: http://www.richmond.gov.uk/flood_risk_assessment.htm

³⁰ LBRuT Preliminary Flood Risk Assessment:
http://www.richmond.gov.uk/preliminary_flood_risk_assessment.htm

³¹ Drain London project, Greater London Authority:; <http://www.london.gov.uk/drain-london>

Surface Water Management Plan (SWMP)³² was completed for the London Borough of Richmond. The SWMP is a borough-wide investigation, identifying areas that may potentially be at risk from surface water and groundwater flooding. Flooding may also occur due to a failure in the sewerage infrastructure.

3.2.50 A large proportion of the borough is situated in proximity to the River Thames and its tributaries, and not surprisingly therefore a relatively large number of properties within the borough are potentially at risk of flooding from rivers. The existing sources of flooding within this borough are:

- Tidal from the Thames upriver of the Thames Barrier (probability of 0.1% per annum, barrier controlled); flood depths up to 2 m if the Thames Barrier failed.
- Fluvial and tidal/fluvial from the Thames (probability >1% per annum; flood depths up to 3 m).
- Fluvial flooding from Beverley Brook (probability about 10% per annum)
- Fluvial from the River Crane, exacerbated by backing up from the Thames (probability >1% per annum, flood depths up to 2 m). The River Crane has an extensive floodplain in the tidal/ fluvial interaction zone.
- Fluvial and tidal/fluvial from the Duke of Northumberland's River. The flood risk is believed to be small.
- Local drainage, e.g. as a result of surface water runoff or insufficient capacity in the sewerage system.
- Groundwater flooding from superficial strata, possibly connected to Thames levels.

3.2.51 Existing flood risk management systems that affect flooding in this borough are:

- The Thames Barrier, to control tidal water levels.
- The Thames Barrier is also used to reduce fluvial flood levels.
- Secondary tidal defences along the Thames frontage.
- Beverley Brook flapped outfall.
- Beverley Brook bypass culverts that provide relief from fluvial flooding.
- The Crane gates that prevent high water levels in the Thames entering the River Crane. They are only effective when Crane flows are relatively low. When fluvial flows on the River Crane are high, the gates open even if the Thames water level is high.
- Local fluvial defences on the River Crane.
- Known combined sewer overflows (CSOs) for urban drainage flood mitigation.
- Flood forecasting and warning (provided by the Environment Agency).

3.2.52 Whilst the amount of property at risk is not significant (there are approximately 20,500 properties in areas at risk of flooding from fluvial and tidal sources; around 22% of all properties in the borough), there are some historic and important sites, including several schools, care homes, electricity substations, large residential areas, offices, major arterial routes and railway lines in areas prone to flooding.

Climate change

3.2.53 London and Richmond borough have experienced and will continue to experience significant changes in climate over the coming decades. These climatic changes can be summarised as follows:

³² LBRuT Surface Water Management Plan:
http://www.richmond.gov.uk/surface_water_management_plan.htm

- Hotter, drier summers;
- Milder, wetter winters;
- More frequent extreme high temperatures;
- Increases in rainfall and associated increase in fluvial flooding and surface water flooding;
- Increases in sea level rise and increases in storm surge height;
- Decreases in soil moisture content in summer;
- Possible higher wind speeds.

3.2.54 The likely effects of climate change, such as the drier/hotter summers and the increased precipitation in winters can have various impacts on the borough, including:

- Higher probability of flooding as a result of the increase in precipitation during the winter, particularly the risk of surface water flooding but also fluvial flooding.
- Drier, warmer summers are likely to lead to pressure on water resources, possible drying out of grassland and parks, less evaporative cooling benefit from vegetation, increased demand on recreational outdoor activities, possible hosepipe bans and damages to infrastructure.
- Changes could also affect biodiversity, habitats and water quality, particularly during long spells of dry and hot weather; there may be changes in the abundance of species, which may need to adapt to changes in weather patterns and climate.
- Impacts on health could include heat stress to the old, poor and vulnerable communities and people, increased demand for cooling and ventilation for thermal comfort, which is likely to have knock-on impacts on the emergency services.
- The changes are also likely to have economic and financial impacts, for example the losses and damages due to flooding, subsidence, heat waves, increased cooling demand etc.

3.2.55 It is an unfortunate fact that Richmond upon Thames has one of the highest ecological, carbon and greenhouse gas footprints in London and the UK. The carbon footprint in Richmond upon Thames is 13.99 tonnes of CO₂ per capita³³. The sector with the highest contribution to this footprint is the domestic sector, i.e. housing, and more specifically the electricity, gas and other fuels used in the home. Large contributions are also associated with the transport and food sector.

Air quality

3.2.56 The whole borough has been designated an 'Air Quality Management Area³⁴' (AQMA) for both nitrogen dioxide (NO₂) and PM₁₀ (particles less than 10 microns), whereby the majority of air pollution derives from road traffic. The Council monitors local air quality by the use of both continuous analysers and diffusion tubes. Diffusion tubes are located at a number of sites throughout the borough and monitor nitrogen dioxide, benzene and polycyclic aromatic hydrocarbons. Continuous analysers monitor air quality in the borough 24 hours a day; currently the Council has one mobile monitoring unit that is moved around the borough to different locations and two static units (one is located in Castelnau outside the Public Library and the other is at the Wetlands site in Barnes).

³³ Resources and Energy Analysis Programme (REAP). *Footprint data, London*. REAP v2 Experimental release: 15-10-08. Published by SEI 2008. Available at <http://www.resource-accounting.org.uk/downloads>

³⁴ http://www.richmond.gov.uk/air_quality_action_plan.htm

The diffusion tubes measure and monitor NO₂; these are located at a number of sites throughout the borough.

Waste

3.2.57 The London Borough of Richmond is a Waste Collection Authority and part of the West London Waste Authority (WLWA), which is the authority responsible for its waste collection, disposal and recycling. The other boroughs in the WLWA are Brent, Ealing, Harrow, Hillingdon and Hounslow. These boroughs are in the process of preparing a joint West London Waste Plan. This Plan will identify sites for the wide range of waste facilities needed to manage the waste produced in West London up to 2026.

3.2.58 Arisings of local authority collected waste in the WLWA in 2009/10 is 691,746 tonnes. This is less than the 733,313 tonnes in 2008/09. Household waste accounts for around 600,000 tonnes or 87% of local authority collected waste arisings in the WLWA. Household waste in Richmond upon Thames accounted for around 77,000 tonnes of the WLWA total. There has been an overall reduction in the amount of local authority collected waste sent to landfill in recent years; from 79% in 2005/06 to 56% in 2010/11. However, landfill remains the primary waste disposal method used by the WLWA. There is a kerbside recycling collection for residential properties and recycling facilities are situated throughout the borough. Recycling and composting of local authority collected waste in the WLWA increased from 21% in 2005/06 to 36% in 2009/10. Richmond upon Thames has one of the highest household recycling and composting rates in London, ranking 5th in 2010/11, at 43%; the London average is around 32% and the WLWA rate of 38%. The household recycling and composting rate has increased steadily since 2000/01, aided by significant increases in composting. The volume of hazardous waste arising in Richmond upon Thames in 2010 was 2,295 tonnes. This accounted for less than 1% of all London's hazardous waste.

Historical environment and archaeology

3.2.59 The borough has 72 designated Conservation Areas³⁵, each of which is accompanied by a Conservation Area Statement. Richmond upon Thames has the richest historic environment outside central London with approximately 1,600 listed buildings³⁶. The heritage attractions within the borough include Hampton Court Palace, Ham House, Strawberry Hill House, Garrick's Temple to Shakespeare, Kew Palace, Marble Hill House and Richmond Theatre. There are also four Scheduled Ancient Monuments in the borough; they include: The Brew House in Bushy Park; Ham House; Hampton Court Palace; and Kew Place. Royal Botanic Gardens Kew was inscribed on the UNESCO World Heritage Site List in 2003. In addition, there are 14 open spaces on the English Heritage register of historic parks and gardens, including Richmond Park, Bushy Park, Hampton Court Park, Royal Botanic Gardens Kew (including Old Deer Park), Ham House, Marble Hill House, Strawberry Hill, Hampton Court House, Richmond Terrace Walk, Pope's Garden, York House Gardens, Terrace Gardens and Buccleugh Gardens (Richmond Hill) and Teddington Cemetery.

³⁵ Further information on the Borough's Conservation Areas and Conservation Area Statements: http://www.richmond.gov.uk/conservation_area_appraisals_and_management_plans

³⁶ Further information on the Borough's Listed Buildings: http://www.richmond.gov.uk/listed_buildings

- 3.2.60 Richmond Borough contains an elaborate network of framed view lines, avenues and vistas along and from the River Thames and Richmond Hill, which are afforded protection in the Local Plan. Within the borough there are many locally listed buildings, i.e. Buildings of Townscape Merit (BTM), over 4,000 in this borough, whereby the majority of them can be found in the 72 Conservation Areas. There are also 11 entries in the Heritage at Risk Register³⁷ that are located in this borough.
- 3.2.61 There are large areas within the borough where archaeological potential exists, such as Kew Gardens, Richmond Park, parts of Ham and Petersham, Hampton Court and Bushy Parks, parts of Twickenham riverside and Richmond town. Specialist bodies, normally English Heritage³⁸ and the Greater London Archaeological Advisory Service³⁹, provide advice and guidance on areas where archaeological potential exists.

Environmental quality

- 3.2.62 In autumn 2012, an environmental quality survey of the main town centres in the borough (i.e. Richmond, Twickenham, Teddington, East Sheen, and Whitton) as well as the local centre Barnes has been carried out as part of the Town Centres Health Checks. The full report – Town Centre Environmental Quality Assessment Report, December 2012⁴⁰ – can be found on the Council's website at:
http://www.richmond.gov.uk/retail_study_march_2006.

³⁷ Heritage at Risk Register, English Heritage: <http://www.english-heritage.org.uk/caring/heritage-at-risk/>

³⁸ English Heritage: <http://www.english-heritage.org.uk>

³⁹ <http://www.english-heritage.org.uk/professional/advice/our-planning-role/greater-london-archaeology-advisory-service/>

⁴⁰ Town Centre Environmental Quality Assessment Report:
http://www.richmond.gov.uk/town_centre_env_quality_assessment_report_dec_2012.pdf

4 IDENTIFYING SUSTAINABILITY ISSUES

4.1.1 The identification of sustainability issues and problems is an opportunity to define some of the key issues for the Local Plan to address⁴¹. This stage was undertaken during the SA Scoping Stage (A). There are many possible sustainability issues but not all will be significant for the borough. The issues recorded are those acknowledged as a priority for the borough.

4.1.2 The sustainability issues confronting the London Borough of Richmond upon Thames have been identified from the following sources:

- Issues identified in review of PPPs (see section 2 above);
- Analysis of baseline data and trends (see section 3 above);
- Knowledge of officers working in the borough;
- Previous responses on the SA Scoping Report and preliminary consultation with key organisations such as the Environment Agency, English Heritage and Natural England.

4.2.2 The key issues are divided into the three main aspects of sustainability (Environment, Social and Economic) and are set out in the table below. It is recognised that many of the issues are cross-cutting and could have been placed under any one of the headings. However, for ease of discussion, and to link in with the sustainability objectives (identified in the Sustainability Framework, see below), they have been placed under one section only.

⁴¹ ODPM: A Practical Guide to the Strategic Environmental Assessment Directive, 2005

Aspect	Sustainability Issue
Environment	Protection and enhancement of the natural environment and green infrastructure, including green and open spaces
	Protection and enhancement of the built environment, historic assets and heritage at risk
	High quality design and public realm
	Mitigation and adaptation to climate change, including flood risk
	Sustainable construction, energy efficiency and renewable energy
	Pollution (air, noise, water) and poor air quality
	Waste reduction, waste treatment and increased recycling
Social	Varying levels of poverty and affluence across the borough
	Lack of opportunities for the provision and adequate supply of affordable housing
	Need for housing opportunities for all
	Access to essential community facilities (health, education, local services, leisure etc)
	Creating a safe place to live
	Accessible public transport for all
Economic	Protection of employment land and premises
	Skills mismatch and small employment base within the borough
	Improve the resilience of businesses and the economy
	High car use and transport infrastructure at capacity during peak times; congestion on road network
	Need for education, training and local employment opportunities
	Protect and enhance the vitality and viability of town centre
	Adequate supply of hotels to support sustainable tourism

Table 2: List of sustainability aspects and key issues identified

- 4.2.3 Appendix 2 of this report provides detailed background information for each sustainability issue (as set out in the table above) and outlines considerations to be taken forward in preparing Development Plan Documents. It should be noted that the possible policy option put forward are an initial view only. Policy options and options for sites will be developed as work on the Local Plan progresses and information from the evidence base becomes available. The results of this consultation will help to shape the policy and proposal sites direction.

5 SUSTAINABILITY APPRAISAL FRAMEWORK

5.1 Introduction

- 5.1.1 In order to help assess the sustainability of the policies in the Local Plan, and to monitor its achievement in sustainability terms, sustainability objectives and indicators are developed in order to measure the operation of the Local Plan. The objectives are, where possible expressed in terms of targets, the achievement of which should be measurable using indicators selected. Note that the SA objectives are applied to all Local Development Documents (the Local Plan).
- 5.1.2 The Sustainability Appraisal (SA) objectives are based on the issues, which are affecting the borough, as identified in the previous chapter and in the SA Scoping Report.

5.2 SA Objectives and SA Assessment Framework

- 5.2.1 The SA objectives for the Site Allocations Plan, shown in the table below, are intended to compliment the Local Plan objectives, and are not designed to supersede or replace these. The SA objectives purely provide the framework for assessment. They are designed to provide a balance between the three pillars of sustainable development: the environment, the economy and society. The actual numbers of social, environmental and economic objectives are not the same because they reflect the key issues in the borough.
- 5.2.2 The SA objectives have been initially developed for the Sustainability Appraisal of the Core Strategy. They were subsequently reviewed for the DMP and then again for the Twickenham AAP. They have been reviewed again as part of the Scoping Report for the Site Allocations Plan to take account of changes to baseline information as well as policies, plans and programmes. Final minor amendments have been made to the SA objectives following the consultation responses received during the consultation on the draft SA Scoping Report in March/April 2013.
- 5.2.3 In addition, the SA Assessment Framework and Decision Making Criteria (see below) have been developed specifically for the Site Allocations Plan and to assess the sustainability of options and alternatives for sites coming forward in the SA Plan. This framework has also been revised following the consultation responses on the Scoping Report.

SA objectives for the London Borough of Richmond upon Thames Local Plan			
	Env	Econ	Soc
1) To prevent and reduce the amount of waste that is produced and increase the proportion that is reused, recycled and composted, recovered (including energy recovery) before lastly disposal.	✓		
2) To reduce pollution (such as air, noise, light, water and soil) from any source and ensure air and water quality improves and safeguard soil quality and quantity.	✓		
3) To reduce the need for travel, encourage alternatives to the car, make best use of existing transport infrastructure and improve public transport integration.	✓		✓
4) To mitigate climate change by reducing greenhouse gas emissions and promoting sustainable energy use through maximising energy efficiency, use of zero- and low carbon technologies and renewable energy, and provide satisfactory water and sewerage infrastructure.	✓		✓
5) To ensure resilience to the effects of climate change through effective adaptation, in particular avoiding or reducing flood risk from all sources and conserving water.	✓	✓	✓
6) To conserve and enhance biodiversity, avoid damage and irreversible losses to designated sites and protected species, adding to the abundance of non-designated biodiversity features and habitats (such as trees, gardens, green roofs and other features).	✓		
7) To promote high quality places, spaces and buildings and conserve and enhance the borough's landscape and townscape character and its heritage assets and their settings..	✓	✓	✓
8) To protect and enhance the quality and range of parks and open spaces and plan positively for the creation, protection and enhancement of the green infrastructure network.	✓		✓
9) To make best and efficient use of previously developed land and existing buildings, implement sustainable design and construction practices and remediate and reuse contaminated land.	✓	✓	✓
10) To provide new housing opportunities and sufficient affordable housing that meets local needs.		✓	✓
11) To facilitate and improve the health and well-being of the population, reduce health inequalities and deliver safer and more secure communities.			✓
12) To promote the independence of people and communities by improving the quality, range and accessibility of services and facilities, such as health, transport, education, training, employment, environment, leisure, sport and recreation opportunities.		✓	✓
13) To increase the vitality and viability of existing town centres, local centres and parades.		✓	✓
14) To promote and strengthen a buoyant, diverse and resilient local economy and facilitate inward investment that will secure sustainable economic growth.		✓	✓
15) To increase the amount and quality of commercial development opportunities to meet the needs of the local and sub-regional economy.		✓	✓

Table 3: SA objectives for the Richmond upon Thames Local Plan

5.3 SA Assessment Framework and Decision Making Criteria

Sustainability Appraisal objective	Decision making criteria	Assessing of Proposals Sites
1) To prevent and reduce the amount of waste that is produced and increase the proportion that is reused, recycled and composted, recovered (including energy recovery) before lastly disposal.	<ul style="list-style-type: none"> • Will it prevent waste wherever it occurs? • Will it promote sustainable waste management, following the waste hierarchy, and reduce consumption of materials and resources? • Will it increase waste recycling? 	Analysis of: <ul style="list-style-type: none"> • Existing use and buildings • Vacant site • Derelict site • Potential options for future land uses
2) To reduce pollution (such as air, noise, light, water and soil) from any source and ensure air and water quality improves and safeguard soil quality and quantity.	<ul style="list-style-type: none"> • Will it impact on natural resources, soil, air and water quality? • Will it reduce emissions of pollutants? • Will it impact on locations that are sensitive to air pollution? • Will it impact on noise levels? • Will it lead to more light pollution? • Does it improve water quality? • Will it safeguard soil quality and quantity? 	<ul style="list-style-type: none"> • The whole borough is an Air Quality Management Area • Analysis of potentially contaminated land and past industrial land uses • River Thames Policy Area • River Crane Opportunity Area
3) To reduce the need for travel, encourage alternatives to the car, make best use of existing transport infrastructure and improve public transport integration.	<ul style="list-style-type: none"> • Will it impact on traffic congestion? • Will it encourage the use of public transport? • Is the proposal/land use in a location with appropriate PTAL level? • Will it make use of existing transport infrastructure? 	<ul style="list-style-type: none"> • PTAL level • Town centre boundary • Area of Mixed Use • 1 km distance to primary school • 3 km distance to secondary school • 1 km distance to GP surgery • 400m distance to Area of Mixed Use • 400m distance to main town centre • Public Right of Way
4) To mitigate climate change by reducing greenhouse gas emissions and promoting	<ul style="list-style-type: none"> • Will it reduce greenhouse gas and particularly carbon dioxide emissions by reducing energy consumption? 	Analysis of: <ul style="list-style-type: none"> • Existing use and buildings • Potential options for future land uses

Sustainability Appraisal objective	Decision making criteria	Assessing of Proposals Sites
sustainable energy use through maximising energy efficiency, use of zero- and low carbon technologies and renewable energy, and provide satisfactory water and sewerage infrastructure.	<ul style="list-style-type: none"> • Does it involve the incorporation of zero- and low carbon technologies? • Does it incorporate renewable energy technologies? • Is it in keeping with the principles of the Council's Sustainable Construction Checklist SPD? • Will there be satisfactory water supply and sewerage infrastructure provision? 	
5) To ensure resilience to the effects of climate change through effective adaptation, in particular avoiding or reducing flood risk from all sources and conserving water.	<ul style="list-style-type: none"> • Will the proposal be affected by flooding, i.e. is it within zone 2, 3a or 3b? • Will it lead to increased surface water flooding? • Will it lead to sewer flooding? • Will it impact or increase the risk of flooding to other people and property? • Will it promote and include climate change adaptation measures? • Will it include measures to reduce water consumption? 	Analysis of: <ul style="list-style-type: none"> • Location within flood zone • Surface water maps • Localised flooding maps, where available
6) To conserve and enhance biodiversity, avoid damage and irreversible losses to designated sites and protected species, adding to the abundance of non-designated biodiversity features and habitats (such as trees, gardens, green roofs and other features).	<ul style="list-style-type: none"> • Will it impact on national, regional or local BAP habitats and/or species? • Does it affect a site designated for nature conservation purposes? • Will it impact on access to nature? • Does it support ecosystems and lead to any enhancements in biodiversity, particularly in non-designated sites? • Will it impact on existing networks of open spaces and create new green spaces? • Will it lead to a degradation or fragmentation of the green spaces? 	Analysis of: <ul style="list-style-type: none"> • Tree Preservation Orders • Sites designated for nature conservation purposes, including SSSI and OSNI • Existing on-site habitats and biodiversity features (NB: If development is proposed on protected or BAP species sites, local authorities should consult the Natural England Standing Advice)
7) To promote high quality places, spaces and buildings and conserve and enhance the borough's landscape and	<ul style="list-style-type: none"> • Will it affect the settings or features of heritage assets? • Will the design enhance the local character? 	Analysis of: <ul style="list-style-type: none"> • Conservation Area(s) • Listed Building(s)

Sustainability Appraisal objective	Decision making criteria	Assessing of Proposals Sites
townscape character and its heritage assets and their settings.	<ul style="list-style-type: none"> • Have opportunities that make a positive contribution to the local character and area been identified? • Will it impact on any potential archaeological remains? 	<ul style="list-style-type: none"> • Building(s) of Townscape Merit • Archaeological Priority Area • River Thames • River Crane • Historic Parks & Gardens
8) To protect and enhance the quality and range of parks and open spaces and plan positively for the creation, protection and enhancement of the green infrastructure network.	<ul style="list-style-type: none"> • Will it increase or decrease public open space deficiency? • Will it lead to loss or degradation of designated spaces such as MOL or OOLTI? • Will it improve connectivity between existing open spaces? 	Analysis of: <ul style="list-style-type: none"> • Existing use and buildings • Metropolitan Open Land • Green Belt / Major Developed Site in GB • Historic Parks & Gardens
9) To make best and efficient use of previously developed land and existing buildings, implement sustainable design and construction practices and remediate and reuse contaminated land.	<ul style="list-style-type: none"> • Will it optimise on the use of previously developed land, buildings and existing infrastructure? • Will it lead to a loss of greenfield sites or backgarden land? • Does it incorporate sustainable design and construction practices? • Is there remediation of contaminated land? 	Analysis of: <ul style="list-style-type: none"> • Existing use and buildings • Vacant site • Derelict site • Potential options for future land uses • Potential contaminated land
10) To provide new housing opportunities and sufficient affordable housing that meets local needs.	<ul style="list-style-type: none"> • Will it increase the number of homes? • Will it increase the number of affordable homes? • Will it reduce the number of unsuitable/unfit homes? • Does it achieve Lifetime Homes standard and increase accessibility for wheelchair users? 	Analysis of: <ul style="list-style-type: none"> • Existing use and buildings • Potential options for future land uses • Conservation Areas
11) To facilitate and improve the health and well-being of the population, reduce health inequalities and deliver safer and more secure communities.	<ul style="list-style-type: none"> • Will it impact on access and/or provision of health facilities? • Will it encourage healthy life styles? • Does it follow Security by Design principles? • Will it contribute to a reduction in the actual crime level? • Will it contribute to a reduction in the fear of crime? 	Analysis of: <ul style="list-style-type: none"> • Existing use and buildings • Area of relative disadvantage • Potential options for future land uses
12) To promote the	<ul style="list-style-type: none"> • Will it improve accessibility to key local services? 	Analysis of:

Sustainability Appraisal objective	Decision making criteria	Assessing of Proposals Sites
independence of people and communities by improving the quality, range and accessibility of services and facilities, such as health, transport, education, training, employment, environment, leisure, sport and recreation opportunities.	<ul style="list-style-type: none"> • Will it impact or lead to a loss of essential services and community facilities? • Will it enable people to stay independent? • Does it improve access for all, such as for those with limited mobility, wheelchairs? • Does it provide any facilities or services that can be accessed by all? 	<ul style="list-style-type: none"> • Area of relative disadvantage • 1 km distance to primary school • 3 km distance to secondary school • 1 km distance to GP surgery • 400m distance to Area of Mixed Use • 400m distance to main town centre • Public open space deficiency • Town Centre Boundary • Area of Mixed Use • Public Right of Way
13) To increase the vitality and viability of existing town centres, local centres and parades.	<ul style="list-style-type: none"> • Will it promote and add to the vitality and viability of town centres? • If the site is located in a town centre, will it include retail or town centre uses? • Does it reinforce a centres' retail role? 	Analysis of: <ul style="list-style-type: none"> • Employment use • Town Centre Boundary • Area of Mixed Use • Key shopping frontage • Secondary shopping frontage • Frontage/area subject to specific restrictions
14) To promote and strengthen a buoyant, diverse and resilient local economy and facilitate inward investment that will secure sustainable economic growth.	<ul style="list-style-type: none"> • Will it improve business development? • Will it impact on the local economy? • Will it lead to local economic growth? • Does it provide jobs? • Will it meet local business needs? 	Analysis of: <ul style="list-style-type: none"> • Employment use • Town Centre Boundary • Area of Mixed Use
15) To increase the amount and quality of commercial development opportunities to meet the needs of the local and sub-regional economy.	<ul style="list-style-type: none"> • Will the site/land use include commercial development? • Is it flexible space, of suitable size and in an appropriate location? • Will it increase employment opportunities? • Will it increase training and skilled employment? 	Analysis of: <ul style="list-style-type: none"> • Employment use • Town Centre Boundary • Area of Mixed Use

Table 4: SA Framework and Decision Making Criteria

6 TESTING THE SITE ALLOCATIONS PLAN OBJECTIVES

6.1 Introduction

6.1.1 The objectives of the Site Allocations Plan set out what the Plan is aiming to achieve in spatial planning terms. The compatibility testing of the Plan's objectives with the SA objectives is a formal stage in the SA Scoping process and is advocated in Sustainability Appraisal guidance. It is important that the Plan's objectives reflect sustainable development principles and for this reason, they should be 'tested' for compatibility with the SA objectives (as described in Section 5 above). The Site Allocations Plan objectives should also be tested for compatibility with one another.

6.1.2 It must be noted that whilst the aim should be to achieve consistency between plan objectives, in practice there may be tensions between objectives. Where win-win outcomes cannot be achieved, it is advised that decision makers will need to determine where the priorities should lie and this should be recorded explicitly as part of the SA process.

6.2 Site Allocations Plan objectives

6.2.1 A draft vision and objectives for the Site Allocations Plan have been developed for the preparation of the SA Scoping Report. These have now been refined and are set out below. The **vision** for the Site Allocations Plan is to identify proposal sites or other projects for future development or change within the borough, which will progress the three Local Plan⁴² themes of 1) A sustainable future, 2) Protecting Local Character, and 3) Meeting people's needs.

6.2.2 The **objectives** of the Plan are as follows:

- 1) Secure development that helps create a more sustainable borough, with a well designed, accessible and safe environment;
- 2) Facilitate development which protects and enhances the amenity of the local area, identifying key environmental, historic and cultural features to be taken into account;
- 3) Help to maintain and grow the local economy and improve and enliven the town centres;
- 4) Make balanced and sufficient provision for future needs for housing (including affordable), employment, retail, transport, community, leisure, open space and infrastructure.

6.2.3 The vision and objectives for the Site Allocations Plan are consistent with those set out in the Council's Core Strategy, which have already been tested against the SA objectives. Nonetheless, the initial draft objectives of the SA Plan have been tested against the SA framework to identify both potential synergies and inconsistencies.

6.3 Testing the objectives

6.3.1 The Site Allocations Plan objectives were tested against the sustainability framework to ascertain how compatible the aims for the borough are with the principles of sustainable development. The results of the appraisal are shown in the tables below.

⁴² Formerly Local Development Framework; the over-arching vision is set out in full in the Core Strategy 2009

Sustainability Appraisal of Site Allocations Plan objectives																
SA PLAN OBJECTIVES	A			+/+				+	+	+		+	+			
	B					+	+	+	+							
	C		?/X								+/+	+		+	+	+
	D	?/X		?		+					+		+	+	+	+
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
SUSTAINABILITY APPRAISAL OBJECTIVES																

KEY	+	Positively compatible
	X	Possible conflict
	?	Uncertain
		Neutral

Table 5: Sustainability Appraisal of Site Allocations Plan objectives

Explanation of Results	
Site Allocations Plan Objectives	Summary comments
A) Secure development that helps create a more sustainable borough, with a well designed, accessible and safe environment.	(3) potentially positively compatible with reducing the need to travel; (7) this SA Plan objective will help to achieve high quality places, spaces and buildings; (8) this objective promotes the protection and enhancement of the quality and range of parks and open spaces; (9) positive compatibility with the objective for securing best and efficient use of land; (11) it should help deliver safer and more secure communities; (12) access is a main focus of both the SA Plan and SA objective;
B) Facilitate development which protects and enhances the amenity of the local area, identifying key environmental, historic and cultural features to be taken into account.	(5) directing future development away from areas of flood risk is positively compatible with facilitating development that protects and enhances the local area; (6) very positively compatible with the Sustainability Appraisal objective as it promotes the conservation and enhancement of biodiversity and plans positively for environmental features; (7) it will protect and enhance the borough's landscape/townscape character and its heritage assets; (8) it will promote the protection and enhancement of parks and open spaces;

Explanation of Results	
Site Allocations Plan Objectives	Summary comments
C) Help to maintain and grow the local economy and improve and enliven the town centres.	(2) Potential for increased air and noise pollution from economic growth, but this can be minimised through mitigation measures; (5) directing future development away from areas of flood risk is positively compatible with maintaining and growing the local economy; (10) new housing opportunities may become available as part of mixed use schemes in town centres; (11) positively compatible with health & well-being objective as communities will benefit from enlivened town centres (13) very positively compatible with town centre viability and vitality objective; (14) it will assist in strengthening and promoting the local economy; (15) positively compatible with this objective because it focuses on economy and employment;
D) Make balanced and sufficient provision for future needs for housing (including affordable), employment, retail, transport, community, leisure, open space and infrastructure	(1) More activity and development will inevitably generate more waste but there are mitigation measures such as site waste management plans, reuse of demolition waste, provision of recycling and adherence to the waste hierarchy. (3) Provision of local facilities could potentially lead to people travelling less, but it could also increase traffic and thus result in a conflict; this could be mitigated through travel plans etc; (10) very positively compatible with the objective on new homes, including affordable housing; (12) very positively compatible with improving quality, range and accessibility of services; (13) positively compatible with town centres objective due to focus on provision of various land uses and infrastructure; (14) it will assist in strengthening and promoting the local economy; (15) positively compatible as potential increase in amount and quality of commercial development and employment ;

Table 6: Explanation of results of compatibility testing of Plan's objectives

6.3.2 The implementation of the aim and objectives for the Site Allocations Plan is generally positively compatible with the SA objectives; there may however be inevitable tensions between certain areas. The key areas where this might arise are:

- **Traffic and transport:** The Site Allocations Plan will support the redevelopment of existing sites and bringing forward vacant and derelict sites. There is the risk that this will lead to increased demand for car travel to access these new developments and services, which in some cases might have an adverse impact on traffic and/or parking in the local area. Therefore, sites should ideally be allocated for uses in such a way so that they can support the most sustainable travel options. Traffic, transport and accessibility considerations and arrangements should secure a modal shift away from car use. Improvements to legibility, road safety, car parking management and connected and well-integrated public transport can all play a role. The impact of existing road traffic also needs to be taken into account, especially any cumulative impacts of (re-)developments.
- **Need for additional resources and potential for increased pollution:** New development will inevitably result in the consumption of additional natural resources, in particular energy,

building materials and water. Sustainable construction should therefore be promoted and enforced. There will be a need to ensure new development is more energy and water efficient and lower carbon energy sources are used wherever feasible. There should be an analysis of the feasibility of Decentralised Energy Networks and small scale renewable energy generation should be integrated wherever possible. In addition, in all redevelopment areas and proposal sites every attempt should be made to retain existing buildings where this is considered to be the most sustainable option, or at the least building materials should be re-used on the site.

- The natural environment: Development in certain parts of the borough could have adverse impacts on the natural environment, such as on the rivers' biodiversity as well as on the biodiversity of sites designated for nature conservation purposes. Impacts could include pollution from water run-off, sewerage as well as direct disturbance of habitats. The potential for impacts and the need to avoid harm to habitats and species needs to be recognised in the Site Allocations Plan.
- Provision of (affordable) housing versus the need for protection of town centre uses and employment land: The national shortage in housing, particularly affordable housing, puts increasing pressure on redeveloping vacant or existing sites for residential uses. The re-use of land and premises for housing and mixed use development may be appropriate in circumstances where there is an oversupply of employment land or if sites are no longer appropriate for such uses. However, the priority for building new homes can lead to pressure for re-using existing employment sites or town centre uses even when they are in active use. This premature loss of sites can be harmful to the local economy, lead to a loss of local employment and create pressure for development in unsuitable locations that may also increase the need to travel. The need for local employment that is suited to the skills of the local workforce as well as the needs for local services and other town centre uses needs to be balanced with the need to provide (affordable) housing.

7 THE SITE ALLOCATIONS PLAN

- 7.1.1 The Site Allocations Plan (SA Plan) will include site-specific proposals for the whole borough, other than Twickenham town centre, where the [Twickenham Area Action Plan](#) applies. The proposals in the SA Plan will reflect the needs of the borough, existing national, regional and local policies, site specific constraints and opportunities and will be subject to public consultation as part of the statutory planning process. The Plan looks ahead for 15 years after it is adopted in late 2014.
- 7.1.2 This Plan will update, replace or introduce new development sites from those in the existing [Richmond upon Thames UDP](#).
- 7.1.3 The main purpose of the Site Allocations Plan is to meet present and future needs for housing, employment, retail, transport, education, health, community facilities, sport and leisure, looking ahead over the next fifteen years. Future needs for these uses have been analysed, and an assessment made of how these needs could be addressed, including where these would result in site specific allocations within the Site Allocations Plan.
- 7.1.4 Not all needs will result in a site allocation and not all possible sites have been included in the SA Plan. During the Call for Sites consultation in January 2013, a number of sites were proposed by the landowner or other parties, of which some sites were included (such as larger sites) and others (such as small sites and/or where existing policies can be applied) were not included in the SA Plan. Please refer to the Pre-Publication version of the Plan and the various background documents to the Plan for further information.
- 7.1.5 To ensure transparency and consistency in the SA/SEA process, all sites, including those proposed by other parties and rejected by the Council, have been subject to Sustainability Appraisal, as set out in Appendix 4 and 5 of this report

8 TESTING THE PROPOSALS OF THE PLAN

8.1 Introduction and methodology

8.1.1 The SA procedure was to appraise each of the proposal sites against the SA objectives and identify the effects over the short, medium and long term using the key shown in the table below. The full findings of this SA are set out in Appendix 4 of this document.

++	Very sustainable
+	Sustainable
?	Uncertain
-	Unsustainable
--	Very unsustainable
Neutral	Neutral

+/-/? In some instances, the option could have both positive and negative effects against a sustainability objective. The reasons for including both pluses and minuses in the appraisal are explained in the commentary. In other instances, where there is some uncertainty as to whether the effect will occur, a question mark may be added.

Table 7: Key to the SA matrices

- 8.1.2 The assessment looks at key discernible effects, but there may be other impacts on the environment such as an increase in the need to travel, which will in all likelihood have a wide range of effects on the environment including on water quality because of contaminants and on biodiversity through land take. The system does not attempt to score or weight options, but to flag up significant impacts. The impact of proposals and policies identified as having significant adverse effects on a sustainability objective may, with appropriate mitigation, be modified to reduce its negative effects.
- 8.1.3 For this exercise short term is considered to be a 5 year period, from 2013 up to 2018; medium term is 2018 to 2023; long term is 2023 to 2028 and beyond.
- 8.1.4 The SA of the site-specific proposals of the Site Allocations Plan was conducted by a team of Council planning officers.
- 8.1.5 In some cases, knowledge of the potential impacts of a proposal/policy may be limited, particularly where cumulative effects are concerned and the appraisal therefore involves making a certain amount of subjective judgements of the likely sustainability impacts of proceeding with any proposal/policy over the short, medium and long term. The judgement is made by reference to what the sustainability objective is trying to achieve and the possible impact a proposed action may have.
- 8.1.6 In this stage of the Sustainability Appraisal (SA) the purpose is to identify what the sustainability issues may be of delivering the site-specific proposals as set out in the draft

SA Plan, looking for positive and potentially negative impacts. Where the potential for negative impacts are identified, the SA makes recommendations on how these could be avoided or mitigated against.

- 8.1.7 The appraisal is based on the information available at this time (contained within the draft SA Plan). It is evident that detailed aspects of proposals and/or policies, including their delivery, will be subject to further detailed plans contained within for example site briefs and/or planning applications.
- 8.1.8 The full detailed analysis and matrices of the SA for each proposal and policy can be found within Appendix 4. The following provides a summary of the potentially positive and likely negative impacts.

8.2 Summary of Sustainability Appraisal assessment

- 8.2.1 The development and appraisal of the proposals contained within the Pre-publication version of the SA Plan is an iterative process. This process started with appraising the options as set out in Appendix 4 and 5 of this SA Progress report. The options were then refined to take account of the SA appraisal.
- 8.2.2 The Sustainability Appraisal has recognised that the Site Allocations Plan has an important role to play in the sustainable development of this borough and in particular in meeting future needs and demands.
- 8.2.3 The Site Allocations Plan objectives provide the foundation for the development of site specific proposals for the borough. It has to be recognised that the SA Plan needs to be in general conformity with higher level plans (national and regional), including the Local Plan Core Strategy, Development Management Plan and Twickenham Area Action Plan (which only applies within the area covered by the Twickenham AAP). All higher level plans and other adopted Local Plan documents have already been subject to Sustainability Appraisal.
- 8.2.4 The large majority of the draft proposal sites as set out in the SA Plan that have been assessed in this document are likely to have positive impacts, particularly as they will be addressing identified needs and demands in the borough. A large number of proposals are for the designation of sites as “Key Employment Site” – this is a very important designation for this borough and all these proposals have been assessed as having positive impacts because they identify and protect locally important industrial estates, businesses and offices. Through the designation as a “Key Employment Site”, the long-term future of these sites, including their contribution to the local economy and the provision of jobs can be secured.
- 8.2.5 Some proposal sites may potentially have positive as well as negative impacts. Generally speaking, the positive as well as negative impacts increase the more action and intervention is taken on sites. For example, an intensification of uses on sites would make more efficient and better use of previously developed land, thus contributing to the protection of the borough’s parks and open spaces; however, an intensification in uses may have potential negative impacts on traffic and parking as well as on waste. In addition, some sites are within flood risk areas, where new and/or intensified uses could potentially put more users/residents at risk of flooding. Wherever the Sustainability Appraisal identified potential negative impacts or dis-benefits, the Sustainability Appraisal makes recommendations on how mitigation measures could be incorporated into the AAP to reduce or mitigate some of

these impacts. Any potential negative impacts or consequences of proposals need to be understood and mitigated prior to the development of the detailed design.

- 8.2.6 As the Pre-Publication version of the SA Plan has been finalised, the Sustainability Appraisal fully informed the refinement of the proposals by assessing various options and alternatives for sites. Changes have been made to the draft SA Plan as it progressed; this included for example more emphasis on heritage assets and their settings in the wider context, enhancement of biodiversity, green infrastructure and provision of open space and recognition of existing traffic/transport problems as well as flood risk areas.
- 8.2.7 The full Sustainability Appraisal assessment for all the sites that are included in the draft Site Allocations Plan can be found in Appendix 4 of this report.
- 8.2.8 The full SA assessment of sites that have been suggested as part of the ‘Call for Sites’ consultation in early 2013 and that were not included in the Site Allocations Plan can be found in Appendix 5 of this report.

9 MONITORING PROPOSALS

- 9.1.1 The success and effectiveness of the SA/SEA process will be monitored by the continued collection of baseline data according to identified indicators. These indicators and their relevant targets are set out in the Authority's Monitoring Report (AMR). The indicators monitor the significant effects of the Plan and identify remedial action required if the trends or targets are not met. If indicators are monitored over time, the resulting data can reveal trends in performance (i.e. whether something is getting better or worse). Indicator performance can also be gauged in relation to wider geographical areas (e.g. regional) if comparable data is available. Indicator performance can also be assessed in relation to targets where these exist.
- 9.1.2 Indicator data will be very useful for identifying the sustainability problems in the borough to which the Local Plan may need to respond. The AMR required for the Local Plan contains regularly updated information relating to a number of indicators, and will provide the basis for monitoring the Plan's effects. The proposals in the draft Site Allocations Plan will be reviewed in the light of the results of monitoring and any other significant changes in circumstances.
- 9.1.3 The monitoring framework of the Local Plan has been recently reviewed and updated to take account of the Government's changed requirements for monitoring as well as resource implications in order to provide a comprehensive programme to evaluate the significant environmental effects of the implementation of the Council's Local Plan, which includes the Core Strategy, DMP and Twickenham AAP.
- 9.1.4 The proposed SA monitoring framework is included in Appendix 3 of this SA Report.

10 NEXT STAGES

- 10.1.1 The next stages in the SA process are completed alongside the preparation of the Site Allocations Plan and will consider any responses received to this SA Report. Following the consultation on the proposals contained within the Pre-Publication of the Site Allocations Plan, the Publication version of the draft SA Plan will be prepared. The results of the consultation on the draft plan (Pre-Publication Site Allocations Plan) and this SA report will determine whether any further changes are required to the Plan.
- 10.1.2 Any subsequent changes will then be incorporated into the Publication version of the Plan, which will be again consulted on and accompanied by Sustainability Appraisal (Stage C and D of the SA process).

11 GLOSSARY

Affordable Housing

Social rented, affordable rented and intermediate housing, provided to eligible households whose needs are not met by the market. Eligibility is determined with regard to local incomes and local house prices. Affordable housing should include provisions to remain at an affordable price for future eligible households or for the subsidy to be recycled for alternative affordable housing provision. See the NPPF for definitions of “social rented”, “affordable rented” and “intermediate housing”.

Air Quality Management Areas

Areas designated by local authorities because they are not likely to achieve national air quality objectives by the relevant deadlines.

Archaeological interest

There will be archaeological interest in a heritage asset if it holds, or potentially may hold, evidence of past human activity worthy of expert investigation at some point. Heritage assets with archaeological interest are the primary source of evidence about the substance and evolution of places, and of the people and cultures that made them.

Authority’s Monitoring Report (AMR)

Provides an annual evidence base upon which the implementation of the policies in the Local Plan (also previously referred to as Local Development Framework) and Unitary Development Plan can be assessed.

Baseline

A description of the present and future state of an area, in the absence of any plan, taking into account changes resulting from natural events and from other human activities.

Biodiversity

Literally the 'variety of life' - the number and mix of species of animals and plants in a given area, and the range of urban and rural habitats making up the ecosystem, including the links and interactions between all of these.

Biodiversity Action Plan

A plan that sets objectives and actions for the conservation of biodiversity in the UK, London and Richmond respectively, with measurable targets. The action plan also identifies priority species and habitats for conservation.

Birds and Habitats Directives

European Directives to conserve natural habitats and wild fauna and flora.

BREEAM

BREEAM (Building Research Establishment Environmental Assessment Method) is the leading and most widely used environmental assessment method for buildings within the UK. It sets the standard for best practice in sustainable design and has become the de facto measure used to describe a building's environmental performance. It assesses the performance of buildings in the following areas: management, energy use, health and well-being, pollution, transport, land use and ecology, waste, materials and water.

Brownfield Site – see Previously Developed Land**Climate change adaptation**

Adjustments to natural or human systems in response to actual or expected climatic factors or their effects, including from changes in rainfall and rising temperatures, which moderate harm or exploit beneficial opportunities.

Climate change mitigation

Action to reduce the impact of human activity on the climate system, primarily through reducing greenhouse gas emissions.

Code for Sustainable Homes

The Code for Sustainable Homes is the national standard for the sustainable design and construction of new homes, which aims to reduce carbon emissions and create homes that are more sustainable. The Code measures the sustainability of a new home against categories of sustainable design, rating the 'whole home' as a complete package. The Code uses a 1 to 6 star rating system to communicate the overall sustainability performance of a new home.

Combined Heat and Power (also see Decentralised Energy)

Combined Heat and Power (CHP) is the use of a single piece of plant to generate both heat and electricity. In conventional power generation large quantities of energy in the form of heat are wasted. The waste heat from the CHP plant's engine is utilised for a heating application such as making hot water or space heating.

Community Infrastructure Levy

A levy allowing local authorities to raise funds from owners or developers of land undertaking new building projects in their area.

Conservation (heritage)

The process of maintaining and managing change to a heritage asset in a way that sustains and, where appropriate, enhances its significance.

Consultation Body

In the context of SA and SEA, a Consultation Body is an authority, which, because of its environmental responsibilities, is likely to be concerned by the effects of implementing plans and programmes and must be consulted under the SEA Directive. The Consultation Bodies in England are English Heritage, Natural England and the Environment Agency.

Core Strategy

The Core Strategy sets out the key elements of the planning framework for the area. It is comprised of a spatial vision and strategic objectives for the area; a spatial strategy; core policies; and a monitoring and implementation framework with clear objectives for achieving delivery. All other Development Plan Documents must be in conformity with the adopted Core Strategy.

Decentralised Energy (also see Combined Heat and Power)

A Decentralised Energy (DE) scheme provides heat and/or power from a central source at or near the point of consumption to more than one building, dwelling or customer. It includes high efficiency co-generation or Combined Heat and Power (CHP), on-site renewable energy systems and/or energy recycling systems. It is an alternative to providing individual national grid-

connected systems to each dwelling. Schemes can vary in size from a few dwellings to city-wide networks, and reduce costs for tenants and cut carbon dioxide emissions.

Development

Defined and qualified by the Town and Country Planning Act 1990 (s.22) as the carrying out of building, engineering, mining or other operations in, on, over, or under land, or the making of any material change in the use of any building or other land.

Development Plan Documents (DPDs)

The adopted Local Plan (previously referred to as Local Development Framework) is partly comprised of Development Plan Documents, which in turn comprise the Core Strategy, Site Allocations, Proposals Map, Development Management DPD and sometimes Area Action Plans. Local Plans are defined in section 38 of the Planning and Compulsory Purchase Act 2004.

Economic development

Development, including those within the B Use Classes, public and community uses and main town centre uses (but excluding housing development).

Ecological networks

These link sites of biodiversity importance.

Environmental Assessment

Generically, a method or procedure for predicting the effects on the environment of a proposal, either for an individual project or a higher-level “strategy” (a policy, plan or programme), with the aim of taking account of these effects in decision-making. The term “Environmental Impact Assessment” (EIA) is used, as in European Directive 337/85/EEC, for assessments of projects. In the Strategic Environmental Assessment (SEA) Directive, an environmental assessment means “the preparation of an environmental report, the carrying out of consultations, the taking into account of the environmental report and the results of the consultations in decision-making and the provision of information on the decision”, in accordance with the Directive’s requirements.

Environmental Report

A document required by the SEA Directive as part of an environmental assessment, which identifies, describes and appraises the likely significant effects on the environment of implementing a plan or programme (see SA Report).

European site

This includes candidate Special Areas of Conservation, Sites of Community Importance, Special Areas of Conservation and Special Protection Areas, and is defined in regulation 8 of the Conservation of Habitats and Species Regulations 2010.

Green infrastructure

A network of multi-functional green space, urban and rural, which is capable of delivering a wide range of environmental and quality of life benefits for local communities.

Heritage asset

A building, monument, site, place, area or landscape identified as having a degree of significance meriting consideration in planning decisions, because of its heritage interest. Heritage asset includes designated heritage assets and assets identified by the local planning authority (including local listing).

Historic environment

All aspects of the environment resulting from the interaction between people and places through time, including all surviving physical remains of past human activity, whether visible, buried or submerged, and landscaped and planted or managed flora.

Indicator

A measure of variables over time, often used to measure achievement of objectives.

- **Output Indicator:** An indicator that measures the direct output of the plan or programme. These indicators measure progress in achieving plan or programme objectives, targets and policies.
- **Significant Effects Indicator:** An indicator that measures the significant effects of the plan or programme.
- **Contextual indicator:** An indicator used in monitoring that measures changes in the context within which a plan or programme is being implemented.

International, national and locally designated sites of importance for biodiversity

All international sites (Special Areas of Conservation, Special Protection Areas, and Ramsar sites), national sites (Sites of Special Scientific Interest) and locally designated sites including Local Wildlife Sites.

Local Development Document (LDD)

There are two types of Local Development Document: Development Plan Documents and Supplementary Planning Documents.

Local Development Framework (LDF) – see Local Plan**Local Development Scheme (LDS)**

The LDS sets out the local authority's programme for preparing the Local Plan.

Local planning authority

The public authority whose duty it is to carry out specific planning functions for a particular area. This includes all London boroughs, district councils, county councils and also the Greater London Authority.

Local Plan

The plan for the future development of the local area, drawn up by the local planning authority in consultation with the community. In law this is described as the development plan documents adopted under the Planning and Compulsory Purchase Act 2004. Current core strategies or other planning policies, which under the regulations would be considered to be development plan documents, form part of the Local Plan. The term includes old policies, which have been saved under the 2004 Act. Since the Localism Act 2011, the LDF is now referred to as Local Plan.

Main town centre uses

Retail development (including warehouse clubs and factory outlet centres); leisure, entertainment facilities the more intensive sport and recreation uses (including cinemas, restaurants, drive-through restaurants, bars and pubs, night-clubs, casinos, health and fitness centres, indoor bowling centres, and bingo halls); offices; and arts, culture and tourism development (including theatres, museums, galleries and concert halls, hotels and conference facilities).

National Planning Policy Framework (NPPF)

The National Planning Policy Framework was published by the UK's Department of Communities and Local Government in March 2012 and forms the basis of the planning system in England. It has replaced national planning policy and guidance, which was previously delivered in the form of Planning Policy Statements (PPSs) and Planning Policy Guidance (PPGs). Its central theme is the 'presumption in favour of sustainable development', set out in twelve core land-use planning principles, which underpin both plan-making and decision-taking.

Objective

An objective is a statement of what is intended, specifying the desired direction of change in trends.

Open Space

Any open land that is used by the public or local community for outdoor recreation, whether publicly or privately owned and whether use is by permission, as of right, or de facto. All open space of public value, including not just land, but also areas of water (such as rivers, canals, lakes and reservoirs) which offer important opportunities for sport and recreation and can act as a visual amenity.

Planning Policy Statement (PPS)

Statements of national policy and principles on aspects of the town planning framework. They were introduced under the provisions of the Planning and Compulsory Purchase Act 2004, but with the exception of PPS10, they have all been replaced by the NPPF. Some PPS guidance documents to previous PPSs still remain in place.

Pollution

Anything that affects the quality of land, air, water or soils, which might lead to an adverse impact on human health, the natural environment or general amenity. Pollution can arise from a range of emissions, including smoke, fumes, gases, dust, steam, odour, noise and light.

Previously developed land

Land which is or was occupied by a permanent structure, including the curtilage of the developed land (although it should not be assumed that the whole of the curtilage should be developed) and any associated fixed surface infrastructure. This excludes: land that is or has been occupied by agricultural or forestry buildings; land that has been developed for minerals extraction or waste disposal by landfill purposes where provision for restoration has been made through development control procedures; land in built-up areas such as private residential gardens, parks, recreation grounds and allotments; and land that was previously-developed but where the remains of the permanent structure or fixed surface structure have blended into the landscape in the process of time.

Primary shopping area

Defined area where retail development is concentrated (generally comprising the primary and those secondary frontages which are adjoining and closely related to the primary shopping frontage).

Primary and secondary frontages

Primary frontages are likely to include a high proportion of retail uses which may include food, drinks, clothing and household goods. Secondary frontages provide greater opportunities for a diversity of uses such as restaurants, cinemas and businesses.

Ramsar sites

Wetlands of international importance, designated under the 1971 Ramsar Convention.

Renewable and low carbon energy

Includes energy for heating and cooling as well as generating electricity. Renewable energy covers those energy flows that occur naturally and repeatedly in the environment – from the wind, the fall of water, the movement of the oceans, from the sun and also from biomass and deep geothermal heat. Low carbon technologies are those that can help reduce emissions (compared to conventional use of fossil fuels).

Responsible Authority

In the SEA Regulations, a Responsible Authority means an organisation, which prepares a plan or programme subject to the SEA Directive and is responsible for the SEA.

Scoping

The process of deciding the scope and level of detail of an SA, including the sustainability effects and options which need to be considered, the assessment methods to be used, and the structure and contents of the SA Report.

Setting of a heritage asset

The surroundings in which a heritage asset is experienced. Its extent is not fixed and may change as the asset and its surroundings evolve. Elements of a setting may make a positive or negative contribution to the significance of an asset, may affect the ability to appreciate that significance or may be neutral.

Site of Special Scientific Interest

Sites designated by Natural England under the Wildlife and Countryside Act 1981.

Special Areas of Conservation

Areas given special protection under the European Union's Habitats Directive, which is transposed into UK law by the Habitats and Conservation of Species Regulations 2010.

Special Protection Areas

Areas which have been identified as being of international importance for the breeding, feeding, wintering or the migration of rare and vulnerable species of birds found within European Union countries. They are European designated sites, classified under the Birds Directive.

Strategic Environmental Assessment (SEA)

Required by European (European Directive 2001/42/EC) and UK law, SEA is a way of systematically identifying and evaluating the impacts that a plan is likely to have on the environment. The aim is to provide information in the form of an Environmental Report that can be used to enable decision makers to take account of the environment and minimise the risk of the plan causing significant environmental damage. Government guidance advises that where a plan requires both strategic environmental assessment and sustainability appraisal, that the former process should be integrated into the latter one.

Strategic Environmental Assessment (SEA) Directive

European Directive 2001/42/EC on the assessment of the effects of certain plans and programmes on the environment.

Strategic Environmental Assessment (SEA) Regulations

The Environmental Assessment of Plans and Programmes Regulations, 2004.

Strategic Flood Risk Assessment

The NPPF requires Local Planning Authorities to appraise the risk of flooding in their areas by undertaking a Strategic Flood Risk Assessment (SFRA), the aim of which is to avoid inappropriate development in areas at risk of flooding, and to direct development away from areas at highest risk. The SFRA is a report which includes a series of maps that define areas of flooding in the borough according to various levels of risk and from the River Thames, its tributaries and other sources. The Council's SFRA was published in June 2008 and it has been used as important evidence base document for the Council's Core Strategy. In August 2010, the London Borough of Richmond upon Thames has completed the update to the 2008 SFRA. The SFRA Update supersedes the previous June 2008 SFRA. This SFRA will be used to inform land allocations, to facilitate the application of the Sequential Test and in particular, advise Development Management and developers on flood risk matters.

Statement of Community Involvement (SCI)

The SCI is a document explaining to stakeholders and the community how and when they will be involved in the preparation of the Local Plan, previously referred to as Local Development Framework, and the steps that will be taken to facilitate this involvement.

Supplementary planning documents

Documents which add further detail to the policies in the Local Plan. They can be used to provide further guidance for development on specific sites, or on particular issues, such as design. Supplementary planning documents are capable of being a material consideration in planning decisions but are not part of the development plan.

Sustainability Appraisal

The Planning and Compulsory Purchase Act 2004 requires Local Development Documents to be prepared with a view to contributing to the achievement of sustainable development. Sustainability Appraisal is a systematic appraisal process. The purpose of Sustainability Appraisal is to appraise the social, environmental and economic effects of the strategies and policies in a Local Development Document from the outset of the preparation process. This will ensure that decisions are made that accord with sustainable development.

Sustainable transport modes

Any efficient, safe and accessible means of transport with overall low impact on the environment, including walking and cycling, low and ultra low emission vehicles, car sharing and public transport. It is also used to describe all forms of transport which minimise emissions of carbon dioxide and pollutants.

Town centre

Area defined on the local authority's proposal map, including the primary shopping area and areas predominantly occupied by main town centre uses within or adjacent to the primary shopping area. References to town centres or centres apply to city centres, town centres, district centres and local centres but exclude small parades of shops of purely neighbourhood significance. Unless they are identified as centres in Local Plans, existing out-of-centre developments, comprising or including main town centre uses, do not constitute town centres.

Transport assessment

A comprehensive and systematic process that sets out transport issues relating to a proposed development. It identifies what measures will be required to improve accessibility and safety for all modes of travel, particularly for alternatives to the car such as walking, cycling and public transport and what measures will need to be taken to deal with the anticipated transport impacts of the development.

Transport statement

A simplified version of a transport assessment where it is agreed the transport issues arising out of development proposals are limited and a full transport assessment is not required.

Travel plan

A long-term management strategy for an organisation or site that seeks to deliver sustainable transport objectives through action and is articulated in a document that is regularly reviewed.

Wildlife corridor

Areas of habitat connecting wildlife populations.

Unitary Development Plan (UDP)

UDPs have been previously produced by each London Borough, which integrated strategic and local planning responsibilities, through policies and proposals for the development and use of land in their areas.

APPENDIX 1 – Relevant policies, plans and programmes

Level: International / European Context
Conservation of Natural Habitats of Wild Fauna and Flora Directive 92/43/EEC
The Wild Birds Directive 2009/147/EC
The Convention on Biological Diversity 93/626/EEC
The EU Water Framework Directive 2000/60/EC
Ambient air quality assessment and management Directive 1996/62/EC
Limit values for sulphur dioxide, nitrogen dioxide and oxides of nitrogen, particulate matter and lead in ambient air Directive 1999/30/EC
Air Quality Directive 2008/50/EC
Environmental Noise Directive 2002/49/EC
Approval of the Kyoto Protocol on Climate Change Decision 2002/358/EC
Allocation of emission levels under the Kyoto Protocol Decision 2010/778/EU
Landfill Directive 1999/31/EC
EU Renewable Energy Directive 2001/77/EC
EU Energy Efficiency Directive 2012/27/EU
EU Floods Directive 2007/60/EC
Pan-European Biological and Landscape Diversity Strategy 2003
Mainstreaming sustainable development into EU policies: Review of the European Union Strategy for Sustainable Development 2009
European Spatial Development Perspective 1999
Roadmap to a Single European Transport Area – Towards a competitive and resource efficient transport system, White Paper 2011
European Landscape Convention 2000
Proposal for a new EU Environment Action Programme to 2020 - "Living well, within the limits of our planet" 2012
The Johannesburg Declaration on Sustainable Development 2002
Living Planet Report 2012 – Biodiversity, biocapacity and better choices
Level: National Context
National Planning Policy Framework 2012
Technical Guidance to the National Planning Policy Framework 2012
Planning policy for traveller sites 2012
PPS 10: Planning for Sustainable Waste Management 2011
Planning for Renewable Energy: A Companion Guide to PPS22 2004
Planning for Sustainable Waste Management: A Companion Guide to PPS10 2006
Planning for Town Centres: Practice guidance on need, impact and the sequential approach 2009

Historic Environment Planning Practice Guide to PPS5 2010
Planning for climate change – guidance for local authorities 2012
Practice Guide to PPS25 on Development and Flood Risk 2009
Good Practice Guide on Planning for Tourism 2006
Localism Act 2011
Public Services (Social Value) Act 2012
'Reuniting health with planning: healthier homes, healthier communities' 2012
UK Sustainable Development Strategy "Securing the Future" 2005
Conservation of Habitats and Species Regulations 2010
Biodiversity 2020: A strategy for England's wildlife and ecosystem services 2011
UK Biodiversity Action Plan (UK BAP) 1994
UK Post-2010 Biodiversity Framework 2012
Transport White Paper – "Creating Growth, Cutting Carbon: making sustainable local transport happen" 2011
Draft aviation policy framework 2012
The Wildlife and Countryside Act (as amended) 1981
Sustainable Communities Act 2007 (as amended)
UK Energy Efficiency Strategy 2012
Climate Change Act 2008
UK Climate Projections 2009
The Air Quality Strategy (Volume 2) 2007
Air Pollution: Action in a Changing Climate 2010
National Flood and Coastal Erosion Risk Management Strategy for England
Natural England Corporate Plan 2012-2015
The Code for Sustainable Homes: Setting the Sustainability Standards for new homes 2008
The Code for Sustainable Homes: Technical Guide 2012
English Heritage Corporate Plan 2011 - 2015
Suburbs and the Historic Environment 2007
Guidance on Tall Buildings 2007
The Water Resources Act 1991
The Water Act 2003
Flood Risk Regulations 2009
Flood and Water Management Act 2010
Healthy Lives, Healthy People: Our Strategy for Public Health in England
CL:AIRE Definition of Waste: Development Industry Code of Practice 2011
The Plan for Growth 2011
A Practical Guide to the SEA Directive 2006

Level: Regional Context
The London Plan: Spatial Development Strategy for Greater London 2011
The Mayor's Housing Strategy (draft) 2012
The Mayor's Transport Strategy (draft) 2010
The Mayor's Ambient Noise Strategy 2004
The Mayor's Air Quality Strategy 2010
The Mayor's Biodiversity Strategy 2002
The Mayor's Cultural Strategy 2010
The Mayor's Economic Development Strategy 2010
The Mayor's Climate Change Mitigation and Energy Strategy 2011
The Mayor's Climate Change Adaptation Strategy (draft) 2010
London Biodiversity Action Plan 2001
Sub Regional Development Framework for the south sub region 2006
Thames Waterway Plan 2006-2011
Thames Corridor Catchment Abstraction Management Strategy 2004
Thames River Basin Management Plan 2009
Thames Catchment Flood Management Plan 2009
The Thames Estuary 2100 Plan 2012
The Lower Thames Flood Risk Management Strategy (draft) 2010
London Strategic Parks Project 2006
Transport Assessment Best Practice Guidance 2010
A New Way to Plan – Travel planning for new development in London 2010
Managing Freight Effectively: Delivery and Servicing Plans 2010
The Mayor's Equality Framework 2009
Level: Local Context (London Borough of Richmond upon Thames)
Core Strategy 2009
Development Management Development Plan Document 2011
Unitary Development Plan 2005
Village Plans 2012
Community Plan 2007-2017
Air Quality Action Plan 2003
Richmond Biodiversity Action Plan 2005
Children and Young People's Plan 2009-2013
Local Implementation Plan for Transport 2011-2014
Housing Strategy 2008-2012
Homelessness Strategy 2012-2016

Tenancy Strategy 2012
Climate Change Strategy 2009
Director of Public Health's Annual Report 2011-2012
Joint Strategic Needs Assessment 2010-2012
Strategic Flood Risk Assessment 2010
Preliminary Flood Risk Assessment 2011
Surface Water Management Plan 2011
Contaminated Land Strategy 2001
Employment Land Study 2009
Retail Study 2006 and 2009 update
Local Economic Assessment 2010
Infrastructure Delivery Plan 2012
Borough's sport, open space and recreation needs assessment 2008
The Thames Landscape Strategy 2012

Table 8: List of relevant policies, plans, programmes, strategies and initiatives reviewed;
Source: Revised LBRuT SA Scoping Report, July 2013

APPENDIX 2 – Sustainability issues in the London Borough of Richmond upon Thames

Sustainability Issues	Description	Possible policy option	Data Source
Environmental Issues			
Conservation and enhancement of biodiversity	<p>The borough contains some areas designated as being of international and national, regional and local importance. Most notably, Richmond Park, the Wetlands Centre, as well as Bushy and Home Park.</p> <p>Non-native invasive species introduced into the borough can damage the environment and biodiversity.</p> <p>Increased access to sensitive habitats, including designated sites, may potentially have negative impacts.</p> <p>The density of development around a park can increase its isolation resulting in a greater degree of fragmentation of the green spaces.</p>	<p>Ensure biodiversity is not adversely affected by development and enhance wherever possible.</p> <p>Ensure development around and in between the Royal Parks does not threaten their biodiversity value or lead to a degradation and fragmentation of the green spaces.</p> <p>Take account of the threat of non-native species when developing policies and proposals for sites.</p> <p>Whilst access to nature should be promoted, mitigation measures need to be identified for specific development schemes to mitigate any potential impacts where required.</p>	<p>Condition of SSSIs / Natural England</p> <p>Access to Nature / Natural England</p>
Conservation and enhancement of the built environment and historic assets and their settings, and heritage at risk	<p>Short-term visions for the development and demand for new housing and other needs can result in inappropriate development and demolition, which can affect the character of a historic area or individual building. Potentially, the loss of character by incremental change is the biggest pressure.</p>	<p>Continue protecting, and wherever possible enhancing, the borough's rich historic environment, including its Conservation Areas, Listed Buildings and Buildings of Townscape Merit. As and when opportunities arise, support and encourage the reduction of the number of sites at risk of loss.</p>	<p>English Heritage</p> <p>LBRuT monitoring</p>
High quality design and public realm	<p>The quality of new developments and the quality of public realm, civic spaces and general soft/hard landscaping is of high importance to this borough.</p>	<p>Ensure development is of the highest possible design and quality that does not impact on the townscape and landscape character of the borough.</p>	<p>LBRuT monitoring</p>

Sustainability Issues	Description	Possible policy option	Data Source
Pressure for new development	<p>The riparian landscape, historic environment, proximity to good transport links and facilities make Richmond upon Thames an attractive location.</p> <p>The borough is centred around the River Thames. Four other major water courses run through the borough: River Crane, Beverley Brook, Duke of Northumberland's River and Longford River.</p> <p>There is potential for the character of the landscape and townscape to be harmfully affected by change, e.g. through insensitive housing development.</p> <p>There are 72 conservation areas, over 1,600 Listed Buildings and over 4,000 Buildings of Townscape Merit.</p>	<p>Protect and promote a high quality environment. Ensure that development needed for economic or social needs does not adversely affect the character of the borough.</p> <p>Development should be strictly restricted within 16 metres of the tidal sections of the River Thames, within 8 metres of non tidal main rivers and within 5 metres of all other watercourses (including ditches and drains).</p> <p>Direct inappropriate development (more vulnerable classification) away from areas of flood risk using the appropriate sequential and exception tests.</p> <p>Protect the most important buildings, including the listed buildings, and the character of the area.</p>	<p>LBRuT</p> <p>Environment Agency</p> <p>Conservation/Urban design monitoring</p> <p>English Heritage</p>
Climate change mitigation, sustainable construction, energy efficiency and renewable energy	<p>The main source of carbon dioxide is from combustion of fossil fuels i.e. through electricity generation, or vehicle emissions.</p> <p>Buildings are the biggest cause of carbon dioxide emissions in the UK.</p> <p>Richmond has one of the highest carbon footprints in London per capita.</p> <p>Need to conserve natural resources e.g. through energy efficiency, & conservation of materials and water.</p> <p>Communities and buildings have to adapt to the likely effects of climate change.</p>	<p>Developments must follow the Mayor's Energy Hierarchy (Lean, Clean, Green)</p> <p>Seek a reduction in traffic congestion and encourage sustainable modes of transport in order to reduce pollution.</p> <p>Criteria must be established that require low carbon and renewable energy within development proposals.</p> <p>Development should meet the highest standards of energy efficiency, sustainable design and construction possible, and ensure that buildings are designed to cope with the likely predicted changes in climate.</p>	<p>DECC</p> <p>EU Renewable Energy Directive</p> <p>EU Energy Efficiency Directive</p> <p>Code for Sustainable Homes</p> <p>BREEAM</p>

Sustainability Issues	Description	Possible policy option	Data Source
Climate change adaptation and increasing threat of flooding due to	<p>Climate change is a key issue facing the borough. Buildings of the future will need to be able to adapt to increased temperatures, drier summers and wetter winters.</p> <p>Flooding both upstream (fluvial/non tidal) and downstream (tidal) of Teddington Weir is serious during extreme events and may well worsen in years to come as a result of climate change. Limiting run off from new development is an extremely important issue that will need to be addressed. All sources of flooding should be considered, including surface water and sewer flooding.</p>	<p>Development should be designed in a way so that it can adapt to the likely effects of climate change.</p> <p>Development should be limited in areas that are identified as being likely to flood, especially residential (more vulnerable) and basement (highly vulnerable) developments, should be <i>strictly</i> limited in floodplain areas. In all areas of the borough consideration should be given to sustainable drainage systems (SuDS). Through the use of SUDS, runoff from new developments should be limited to that of equivalent Greenfield runoff rates. Implementation should be in line with the London Plan drainage hierarchy.</p>	<p>DCLG and DEFRA Flood and Water Management Act</p> <p>Environment Agency</p> <p>EU Floods Directive</p>
High pollution levels and poor air quality	<p>The main source of pollution is the large volumes of road and air traffic.</p> <p>The whole borough is an Air Quality Management Area</p>	<p>Ensure development does not exacerbate the existing air quality issue and seek to implement measures to reduce predicted exceedences.</p> <p>Development should be located where it may reduce distances travelled.</p>	<p>Days of air pollution</p> <p>Annual mean levels of NO2 and particulates</p> <p>Local monitoring</p>
Amount of household waste and recycling	<p>The Council will need to increase recycling rates and provide facilities for dealing with waste locally.</p>	<p>Avoid waste, promote the sustainable waste management hierarchy and ensure disposal and landfill is the last considered option</p>	<p>London Plan, GLA waste strategy</p> <p>DEFRA Municipal Waste Statistics</p> <p>EU Directive on Landfill, 1999</p>
Social Issues			
Varying levels of poverty and social exclusion	<p>The borough is generally affluent with 24 super output areas (SOAs) included in the most prosperous 10% in England. However within the most affluent wards it is likely that there are pockets of local deprivation.</p>	<p>Address issues of social exclusion and accessibility for disadvantaged groups.</p> <p>Ensure that social and economic sustainability objectives are taken fully into consideration in key wards.</p>	<p>London Plan</p> <p>English Indices of Deprivation 2010</p> <p>ONS Annual Population Survey</p>

Sustainability Issues	Description	Possible policy option	Data Source
Lack of opportunities for the provision and adequate supply of affordable housing	The provision of housing, in particular affordable housing, is one of the most important issues affecting the borough.	<p>Ensure that housing provision helps to provide sufficient homes for all sections of the community. Possible need to reallocate land for housing.</p> <p>The location of additional housing is important as it should be situated on previously developed land where possible and accessible to employment, facilities and public transport.</p>	<p>LBRuT monitoring</p> <p>Local Housing Needs Assessment (2006)</p> <p>Annual housing land supply update in LBRuT AMR</p>
Need for housing opportunities for all, including issue of affordable housing price/earnings affordability ratio	<p>House prices in the area are higher on average (£489,741) compared to the National Average (£162,441), according to Land Registry in January 2013. This makes it difficult for people to afford to buy homes. There is also a shortage of affordable (rented / part-owned) homes in the district.</p> <p>The Council's housing service indicates that the provision of family accommodation for social affordable rent is the main priority.</p>	<p>Policies to continue to provide for meeting affordable housing need.</p> <p>The location of affordable housing also has implications (see above).</p>	<p>NPPF London Plan</p> <p>ONS Annual Survey of Hours and Earnings</p> <p>Local Housing Needs Assessment (2006)</p> <p>Census 2011</p>
Access to health facilities and services	<p>Generally the health of the borough is good with a high life expectancy.</p> <p>76.3%, 17.8% and 5.9% of borough residents reported their health to be respectively good, fairly good and not good.</p> <p>However the population is aging and this will require additional services and facilities to support its well-being.</p>	<p>Ensure that enough health care facilities are provided as part of new development and that there is comprehensive transport to health centres and facilities throughout the borough.</p> <p>Increasing health service provision to meet requirements for older age groups</p>	<p>Joint Strategic Needs Assessment Census 2011</p> <p>ONS Projections show a significant increase in the 85+ population over the next 12 years.</p> <p>NHS Richmond DWP Benefit Claimants</p>

Sustainability Issues	Description	Possible policy option	Data Source
Access to educational facilities and services	<p>Results from the borough's schools are generally above the England average. Due to increasing demand (often from outside the borough) many schools are operating at capacity.</p> <p>The population of Richmond upon Thames is generally well educated, with a well qualified workforce. There are problems due to lack of childcare facilities/after school clubs etc.</p>	<p>Need to ensure that sufficient educational facilities and choice is provided and are accessible to potential users.</p> <p>There are areas in the borough with a need for more primary school places.</p> <p>Childcare provision can be encouraged as part of new development.</p>	<p>Department for Education Performance Tables</p> <p>Choice and diversity: a policy paper for Education and Children's Services 2010</p>
Access to leisure facilities and local services	<p>Access to a range of accessible and inclusive activities can enhance the quality of life of residents and visitors.</p> <p>Access to local shopping.</p> <p>The River Thames is a popular and important natural attraction for locals and tourists alike. The Thames path should be safeguarded.</p>	<p>New housing and publicly accessible buildings and workplaces should be accessible for mobility impaired and disabled.</p> <p>Need to ensure there is sufficient provision of accessible leisure facilities as part of new housing development and that proposals are located in areas, which meet a requirement for local needs and do not harm amenity of residents.</p> <p>Protection of local shopping facilities and filling gaps where identified.</p> <p>Develop greater public access to waterways within the borough.</p>	<p>Labour Force Survey</p> <p>ONS Annual Population Survey</p> <p>Sport, Open Space and Recreation Needs Assessment</p> <p>LBRuT Town Centre & Retail Research</p> <p>LBRuT monitoring</p>
A safe place to live	<p>Fear of crime and antisocial behaviour (which is disproportionate to actual level of crime) could possibly lead to negative effects upon the health of residents.</p> <p>Disorder and anti-social behaviour especially related to crowds, weekends and evening in the borough's town centres is a concern. This could have a possible negative effect upon the economic well-being e.g. in town centres.</p> <p>Decrease in community cohesion.</p>	<p>Use of design and layout of development to reduce crime, vandalism, graffiti and fear of crime.</p> <p>Ensure a balanced town centre retail and evening economy. Potentially introduce areas of special control.</p>	<p>Anti-social behaviour as recorded by LBRuT</p> <p>Crime rate (per 1000 population) recorded by the Metropolitan Police Authority</p>

Sustainability Issues	Description	Possible policy option	Data Source
Accessible public transport for all	Approximately 24% of households do not have a car; this accounts for around 18,000 people. Whilst much of the area has good public transport accessibility levels (PTAL), there are a few areas with lower levels, such as parts of Ham and Petersham, and areas in the extreme west of the Borough.	Reducing the impact of new developments through new traffic management funded by developer contributions; layouts will be designed that decrease the permeability of a new development at the same time increasing its pedestrian and cycle permeability. Travel assessments and travel plans, particularly for school and workplaces.	LBRuT Highways monitoring Local Implementation Plan (2)
Economic Issues			
Protection of employment land and premises	There is a very limited amount of employment land in the borough. For the remaining employment land and premises, there is pressure from housing and higher value land uses to redevelop existing employment sites.	Protect all existing employment sites unless they are inherently unsuitable.	LBRuT Employment Land Study 2009
Promotion of economic growth	Possible mismatch between land and property available for business development and demand.	Ensure employment land availability	Monitoring of consents Employment Land Study (2009)
Business start ups and closures	Large numbers of small businesses & entrepreneurship.	Provide for the needs of local businesses on appropriate sites.	OND Business Demography ABI data Local Economic Assessment (2010)
Skills Shortages and small employment base within the borough	There are very low unemployment levels in the borough, with only 1.6% of the working age population (or 1,935 people) claiming Job Seekers Allowance; compared to 4.4% in London and 4.8% in the UK as a whole. Claimant count has remained more or less static since late 2010. Only a small proportion of the local population is classified long term unemployed. The high house prices have lead to a shortage of low paid and key workers living in the area.	Ensure affordable housing targets are met including the provision of sufficient rented and shared ownership accommodation for lower paid workers.	Unemployment rate for the borough from GLA claimant rates 2011 Business All in One (LBRuT) ONS Claimant Count data DWP Benefits Claimants

Sustainability Issues	Description	Possible policy option	Data Source
Improve the resilience of businesses and the economy	Insufficient diversity of economic sectors represented in the area Number of empty non-domestic properties.	Encourage the retention and provision of a range of small business units to meet the needs of local business.	IDBR/ABI LBRuT Town Centre Land Use Surveys Council Tax & Revenues
High car use, transport infrastructure at capacity during peak times, congestion on road network	High levels of traffic, including through traffic, which leads to significant road congestion particularly in the morning and evening peaks. High levels of car ownership and dependency	Locate major trip generating activities in town centres and areas of high public transport accessibility (in order to increase opportunities for alternative means of travel). Reduction of congestion and encouragement of travel choice and car clubs. Promote walking, cycling and public transport as alternatives to car travel for short journeys	Employment floorspace in main centres LBRuT monitoring Public Transport use from TfL
Need for education, training and local employment opportunities	The borough has generally a highly skilled, high earning, articulate population but this conceals the fact that there are those less fortunate: without work; with health problems; in fuel and housing poverty and those living in the pockets of relative deprivation across the borough.	Ensure policies and initiatives are in place that focus on providing training and local employment opportunities, particularly for those in the areas of relative deprivation.	Unemployment rate for the borough from GLA claimant rates English Indices of Deprivation 2010
Protect and enhance the vitality and viability of town centre	Overall, the number of vacancies throughout the borough's five main centres is between around 5% and 11%, whereby Teddington has the lowest and Whitton the highest rate. Rates are generally below the national average (c.15%).	Ensure that main town centre uses are protected and that any new town centre uses are located in the high streets.	LBRuT Town Centre & Retail Research LBRuT monitoring
Adequate supply of hotels to support sustainable tourism	Tourism could be a greater economic force in the area given the number and quality of historic sites, houses, and gardens etc. Potential to capitalise on the 2015 Rugby World Cup.	Support tourist and overnight visitor accommodation development in appropriate locations.	LBRuT monitoring LBRuT Hotel Study

Table 9: Sustainability Issues in the London Borough of Richmond upon Thames; Source: Revised LBRuT SA Scoping Report, July 2013

APPENDIX 3 – Proposed Sustainability Appraisal Monitoring Framework

SA Objective	Monitoring indicator	Monitored by	Timeframe
1) To prevent and reduce the amount of waste that is produced and increase the proportion that is reused, recycled and composted, recovered (including energy recovery) before lastly disposal.	Capacity of new waste management facilities by type	www.capitalwastefacts.com and any Reporting by (LBRuT) Street Scene performance	3 year programme
	Quantity of household waste arising, and managed, by management type	Reporting by (LBRuT) Street Scene performance	3 year programme
	Quantity of household waste reused, recycled and composted	Reporting by (LBRuT) Street Scene performance	Annually
	Quantity of municipal waste land filled	Reporting by (LBRuT) Street Scene performance	3 year programme
2) To reduce pollution (such as air, light, noise, water and soil) from any source and ensure air and water quality improves and safeguard soil quality and quantity.	Number of days p.a. when air pollution is moderate or high for PM10* *Daily mean particles (PM10) not to exceed 50 micrograms per cubic metre, more than 35 times a year, at any measuring site	(LBRuT) Special Projects team LBRuT	3 year programme
	Number of new developments (subject to Sustainable Construction Checklist SPD) that incorporate measures to reduce noise.	LBRuT monitoring of Sustainable Construction Checklist SPD	Annually through monitoring of SCC SPD
	Planning permissions granted contrary to Environment Agency advice on flooding and water quality grounds.	Environment Agency and LBRuT	Annually
	River water bodies classified under the Water Framework Directive to achieve good ecological status	Environment Agency monitoring	3 year programme
	Number of contaminated land sites remediated or investigated with no further requirement for remediation	(LBRuT) Special Projects team	3 year programme
	Percentage of completed non residential development complying with maximum parking standards set out in the LDF.	LBRuT monitoring	Annually
3) To reduce the need for travel, encourage alternatives to the car, make best use of existing transport infrastructure and improve public transport integration.	No of households registered with a car club	LBRuT monitoring	3 year programme
	Percentage of trips by main mode: walking and cycling	LBRuT monitoring	3 year programme
	Level of parking occupancy in town and local centre car parks.	LBRuT monitoring	Annually

SA Objective	Monitoring indicator	Monitored by	Timeframe
4) To mitigate climate change by reducing greenhouse gas emissions and promoting sustainable energy use through maximising energy efficiency, use of zero- and low carbon technologies and renewable energy, and provide satisfactory water and sewerage infrastructure.	Percentage of regulated CO ₂ emissions saved below Building Regulations 2010 target level through all low carbon measures (for developments subject to Sustainable Construction Checklist – SCC).	LBRuT monitoring of Sustainable Construction Checklist SPD	Annually through monitoring of SCC SPD
	Energy trends data at LA level	DECC data	Annually
	Proportion of new residential developments that meet Code for Sustainable Homes Level 3	LBRuT monitoring of Sustainable Construction Checklist SPD	Annually through monitoring of SCC SPD
	Proportion of new non residential buildings over 100sqm to meet the relevant BREEAM “excellent” standard.	LBRuT monitoring of Sustainable Construction Checklist SPD	Annually through monitoring of SCC SPD
	Proportion of residential conversions that can be assessed under EcoHomes (or any subsequent new applicable standard) that meet the “excellent” rating.	LBRuT monitoring of Sustainable Construction Checklist SPD	Annually through monitoring of SCC SPD
	Number of developments approved against the recommendation of the statutory water / sewerage undertaker on low pressure / flooding grounds.	LBRuT monitoring	3 year programme
5) To ensure resilience to the effects of climate change through effective adaptation, in particular avoiding or reducing flood risk from all sources and conserving water.	Proportion of residential developments subject to the Sustainable Construction Checklist with a maximum water consumption target of 105 litres/person/day.	LBRuT monitoring of Sustainable Construction Checklist SPD	Reported on 3-yearly basis through monitoring of SCC SPD
	Number of new developments subject to the Sustainable Construction Checklist that have incorporated sustainable drainage in their development; by type of sustainable drainage technique	LBRuT monitoring of Sustainable Construction Checklist SPD	Reported on 3-yearly basis through monitoring of SCC SPD
	Change in area of permeable surfacing (net gains and net losses in sqm) as a result of new developments subject to the Sustainable Construction Checklist.	LBRuT monitoring of Sustainable Construction Checklist SPD	Reported on 3-yearly basis through monitoring of SCC SPD
	Number of new developments subject to the Sustainable Construction Checklist that have incorporated energy efficient design with a specific heat demand of less than equal to 15kWh/sqm	LBRuT monitoring of Sustainable Construction Checklist SPD	Reported on 3-yearly basis through monitoring of SCC SPD

SA Objective	Monitoring indicator	Monitored by	Timeframe
	Planning permissions granted contrary to Environment Agency advice on flooding and water quality grounds.	Environment Agency and LBRuT	Annually
6) To conserve and enhance biodiversity, avoid damage and irreversible losses to designated sites and protected species, adding to the abundance of non-designated biodiversity features and habitats (such as trees, gardens, green roofs and other features).	Loss of or inappropriate development on designated SSSIs, and Other Sites of Nature Importance.	LBRuT monitoring	Annually
	River water bodies classified under the Water Framework Directive to achieve good ecological status	Environment Agency monitoring	3 year programme
	No of developments subject to the SCC which improve on-site biodiversity by incorporating new features and/or habitats, by type of features.	LBRuT monitoring of Sustainable Construction Checklist SPD	Reported on 3-yearly basis through monitoring of SCC SPD
	No of developments subject to the SCC incorporating green roofs, by type	LBRuT monitoring of Sustainable Construction Checklist SPD	Annually through monitoring of SCC SPD
	Area of borough deficient in access to Sites of Nature Importance (hectares) (includes SSSIs and Other Sites of Nature Importance)	LBRuT monitoring	3 year programme
7) To promote high quality places, spaces and buildings and conserve and enhance the borough's landscape and townscape character and its heritage assets.	Number of Listed Buildings or Buildings of Townscape Merit demolished	LBRuT monitoring	Annually
	Number of heritage assets on/added/removed from the English Heritage "Heritage At Risk" Register p.a.	LBRuT monitoring	3 year programme
	The level of satisfaction with the design and layout of new housing schemes	LBRuT monitoring	3 year programme
	Percentage of new homes built to Lifetimes Homes standards (see also 11 below)	LBRuT monitoring	3 year programme
8) To protect and enhance the quality and range of parks and open spaces and plan positively for the creation, protection and enhancement of the green infrastructure network.	Loss/inappropriate development on designated open spaces e.g MOL, River Thames, Green Belt, OOLTI and public open space	LBRuT monitoring	Annually
9) To make best and efficient use of previously developed land and existing buildings, implement sustainable design and construction practices	Proportion of new residential developments that meet Code for Sustainable Homes Level 3	LBRuT monitoring of Sustainable Construction Checklist SPD	Annually through monitoring of SCC SPD
	Proportion of new non residential buildings over 100sqm to meet the relevant BREEAM "excellent" standard.	LBRuT monitoring of Sustainable Construction Checklist SPD	Annually through monitoring of SCC SPD

SA Objective	Monitoring indicator	Monitored by	Timeframe
	Proportion of residential conversions that can be assessed under EcoHomes (or any subsequent new applicable standard) that meet the “excellent” rating.	LBRuT monitoring of Sustainable Construction Checklist SPD	Annually through monitoring of SCC SPD
	Number of contaminated land sites, remediated or investigated with no further requirement for remediation	(LBRuT) Special Projects team	3 year programme
	Net additional dwellings for reporting year, over previous, years and in future	LBRuT monitoring	Annually
10) To provide new housing opportunities and sufficient affordable housing that meets local needs.	Percentage of all new housing completions which is affordable housing	LBRuT monitoring	Annually
	Completions by dwelling size	LBRuT monitoring	3 year programme
	Percentage of new homes built to wheelchair standards on developments	LBRuT monitoring	3 year programme
	Conversion of office space to residential on upper floors (amount in m2) where planning permission is needed.	LBRuT monitoring – Twickenham AAP indicator	TBC
11) To facilitate and improve the health and well-being of the population, reduce health inequalities and deliver safer and more secure communities.	Percentage of new homes built to Lifetimes Homes standards	LBRuT monitoring	3 year programme
	Number of recorded crimes pa. Retain position in top 3 for lowest crime figures in Met Police area.	Metropolitan Police Service figures	Annually
	Progress on Public Transport improvements in 5 areas of relative disadvantage	LBRuT monitoring	3 year programme
	Amount of completed floorspace in clinic/health centre use	LBRuT monitoring	3 year programme
12) To promote the independence of people and communities by improving the quality, range and accessibility of services and facilities, such as health, transport, education, training, employment, environment, leisure, sport and recreation opportunities.	Number of planning obligations achieved and money raised for community uses by type (health, sport, education, etc).	LBRuT monitoring	Annually
	Improving public health profile. Ranking in the top 3 within the SHA for the range of indicators used in the Local Health Profiles.	Department of Health	Annually
	Percentage of completed floorspace (new development & net additional floorspace) for town centre uses (A2, B1a and D2) within town centre boundaries/mixed use areas. For A1, % of completed floorspace within, adjacent to or well-related to designated frontages.	LBRuT monitoring	Annually

SA Objective	Monitoring indicator	Monitored by	Timeframe
13) To increase the vitality and viability of existing town centres, local centres and parades.	Vacancy rates within designated shopping frontages for Richmond, the district and smaller centres.	LBRuT monitoring	Annually
	Proportion of retail A1 uses in key shopping frontages	LBRuT monitoring	3 year programme
	Amount and type of completed employment floorspace developed by employment type.	LBRuT monitoring	Annually
	Percentage of new retail completions less than 100m2	LBRuT monitoring – Twickenham AAP indicator	TBC
	Completions for appropriate expansion to existing retail units in m2.	LBRuT monitoring – Twickenham AAP indicator	TBC
	Investigation of potential for BID completed by 2013	LBRuT monitoring – Twickenham AAP indicator	TBC
	Progress on promotion of visitor destinations in Twickenham (St Mary's Church, Twickenham Museum, Twickenham Library and the Mary Wallace Theatre)	LBRuT monitoring	TBC
	Progress on promotion of markets and events in Twickenham.	LBRuT monitoring	Annually
14) To promote and strengthen a buoyant, diverse and resilient local economy and facilitate inward investment that will secure sustainable economic growth.	Employment land for which planning permission has been granted by UCO for the monitoring year (ha)	LBRuT monitoring	Annually
	Amount of employment floorspace lost to completed non-employment uses (identifying use classes)	LBRuT monitoring	Annually
	Number of new businesses in Twickenham town centre compared to previous year (report on retailers separately, report on net figure)	LBRuT monitoring – Twickenham AAP indicator	Annually
	Overall number of businesses in town centre (TCLUS or other reliable annual source).	LBRuT monitoring – Twickenham AAP indicator	TBC
15) To increase the amount and quality of commercial development opportunities to meet the needs of the local and sub-regional economy.	Completed small business units under 250sqm	LBRuT monitoring	3 year programme
	No of workers in the borough (employees in employment)	LBRuT monitoring	3 year programme
	Number of unemployed (claimant count) and estimated rate(GLA estimates)	LBRuT monitoring	3 year programme

Table 10: Draft Sustainability Appraisal Monitoring Framework, as of September 2013

APPENDIX 4 – Sustainability Appraisal matrices of INCLUDED proposal sites

Proposal Site: Hampton Square							
Option A: Retain status quo							
SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		
1. Waste							Neutral
2. Pollution & soil							Neutral
3. Travel							Neutral
4. Climate change mitigation							Neutral
5. Climate change adaptation, flood risk & water							Neutral
6. Biodiversity							Neutral
7. Landscape & townscape							Neutral
8. Parks & open spaces							Existing Public Open Space
9. Best use of land & sustainable construction	?-		?-	?-			The area is run down and some shops have closed; unlikely to make the most efficient use of land
10. Housing							Neutral
11. Health, well-being, secure communities	-		-				Some existing community uses but lacks cohesion
12. Accessible local services							Neutral
13. Town centres	-		-				Designed as a local centre but now showing some vacancies and poor environmental quality
14. Local economy	-		-				Vacant shops do not contribute to the local economy
15. Commercial development opportunities							Neutral
Summary of assessment: <i>(likely sustainability impact of the option)</i>							
This area was designed to be the local centre for a residential estate in the 1980s. It does not optimise on the use of previously developed land and some minor negative impacts have been identified due to the decline in retail, community and local services.							
Possible Mitigation: <i>(measures to mitigate likely negative effects and enhance positive effects)</i>							

None							
Proposal Site: Hampton Square							
Option B: Partial redevelopment and improvement for community, retail, service and residential uses with car parking							
SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		
1. Waste							Neutral
2. Pollution & soil							Neutral
3. Travel							Neutral
4. Climate change mitigation							Neutral
5. Climate change adaptation, flood risk & water							Neutral
6. Biodiversity							Neutral
7. Landscape & townscape	+		+				Environmental improvements and better links of civic space to residential area and open spaces is likely to make a positive contribution to the local character
8. Parks & open spaces	+		+				Improvement to existing Public Open Space is likely to improve the quality of the open space
9. Best use of land & sustainable construction	+		+	+		+	The area is run down and some shops have closed; unlikely to make the most efficient use of land
10. Housing	+		+				Additional residential development
11. Health, well-being, secure communities	+		+				Some existing community uses but lacks cohesion
12. Accessible local services	+		+				Improvements to existing local services, particularly shops and community premises
13. Town centres	+		+				Designed as a local centre but now showing some vacancies and poor environmental quality
14. Local economy	+		+				Vacant shops do not contribute to the local economy
15. Commercial development opportunities	+		+				Potential for new commercial development opportunities, including retail and business units
Summary of assessment: <i>(likely sustainability impact of the option)</i>							
Overall very positive impacts, particularly due to the environmental and design improvements; likely to create a more attractive local centre that will benefit the local residents in providing local services; it would reinforce the local centre's role and provide some opportunities for commercial development and meet local business needs.							
Possible Mitigation: <i>(measures to mitigate likely negative effects and enhance positive effects)</i>							
No negative impacts have been identified.							

Conclusions: compare the different options
Option B is the more sustainable.

Proposal Site: Hampton Water Treatment Works

Option A: Not include in the Site Allocations Plan as a Proposal Site and rely on existing adopted policies and the NPPF

SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		
1. Waste							Neutral
2. Pollution & soil							Neutral
3. Travel							Neutral
4. Climate change mitigation							Neutral
5. Climate change adaptation, flood risk & water							Neutral
6. Biodiversity							Neutral
7. Landscape & townscape							Neutral
8. Parks & open spaces							Neutral
9. Best use of land & sustainable construction							Neutral
10. Housing							Neutral
11. Health, well-being, secure communities							Neutral
12. Accessible local services							Neutral
13. Town centres							Neutral
14. Local economy							Neutral
15. Commercial development opportunities							Neutral

Summary of assessment: *(likely sustainability impact of the option)*

Neutral – not having a policy/proposal site for this area would mean the existing adopted policies and the NPPF apply, which have been subject to Sustainability Appraisal

Possible Mitigation: <i>(measures to mitigate likely negative effects and enhance positive effects)</i>							
None							
Proposal Site: Hampton Water Treatment works							
Option B: Include in the Site Allocations Plan for operational water works development							
SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		
1. Waste							Neutral
2. Pollution & soil							Neutral
3. Travel							Neutral
4. Climate change mitigation							Neutral
5. Climate change adaptation, flood risk & water							Neutral
6. Biodiversity	+		+	+	+		OSNI and TPOs would continue to be protected
7. Landscape & townscape	+		+	+	+		Allowing for essential operational water works development only would contribute to the preservation of the Conservation Area, Listed Buildings, BTMs and general character of the local area.
8. Parks & open spaces	++		++	++	++	++	The current essential waterworks infrastructure and facilities contribute to the openness and character of the Green Belt and relationship with the River.
9. Best use of land & sustainable construction							Neutral
10. Housing	-		-	-	-		This policy would allow for the continuing use of the essential waterworks, but it would not provide any opportunities for residential uses.
11. Health, well-being, secure communities							Neutral
12. Accessible local services							Neutral
13. Town centres							Neutral
14. Local economy							Neutral
15. Commercial development opportunities	-		-	-	-		This policy would allow for the continuing use of the essential waterworks, but it would not allow for new commercial development.
Summary of assessment: <i>(likely sustainability impact of the option)</i>							
Overall, this option would maintain the openness and character of the Green Belt, Conservation Area and the important relationship with the							

River Thames. There are positive impacts in relation to biodiversity as this option would preserve OSNI and TPOs. This site is essential for the existing green infrastructure network and maintains the connectivity between existing green spaces. This option would also preserve the heritage assets and their settings. There may be some minor negative impacts in relation to housing and commercial development opportunities as this option only allows for the continuing use of the essential waterworks.

Possible Mitigation: *(measures to mitigate likely negative effects and enhance positive effects)*

None

Conclusions: compare the different options

Overall, option B is the most sustainable.

Proposal Site: Beveree, High Street, Hampton

Option A: Retain status quo

SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		
1. Waste							Neutral
2. Pollution & soil							Neutral
3. Travel							Neutral
4. Climate change mitigation							Neutral
5. Climate change adaptation, flood risk & water	-		-	-	-		Existing buildings are unlikely to incorporate energy efficiency measures.
6. Biodiversity							Neutral
7. Landscape & townscape							Neutral
8. Parks & open spaces							Neutral
9. Best use of land & sustainable construction	-		-	-	-		Does not make best and efficient use of land and buildings.
10. Housing							Neutral
11. Health, well-being, secure communities							Neutral
12. Accessible local services							Neutral
13. Town centres							Neutral
14. Local economy							Neutral

15. Commercial development opportunities							Neutral
Summary of assessment: <i>(likely sustainability impact of the option)</i>							
Whilst the site is out of date and in need of modernisation, there would be no significant environmental effects by not developing this site. The site has potential for improved facilities and buildings could be more sustainably constructed and adapted to climate change.							
Possible Mitigation: <i>(measures to mitigate likely negative effects and enhance positive effects)</i>							
Not applicable							
Proposal Site: Beveree, High Street, Hampton							
Option B: Redevelop car park and club house and provide upgraded clubroom and changing facilities, including new scout facilities and enabling residential development.							
SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		
1. Waste							Neutral
2. Pollution & soil							Neutral
3. Travel	-		-	-			Potential increase of traffic due to residential and increased use of club house and scout facilities
4. Climate change mitigation	+		+	+			Likely to contribute to reducing emissions over existing levels; increased energy efficiency; potential to incorporate zero carbon and renewable energy technologies
5. Climate change adaptation, flood risk & water	+		+	+			Potential to rebuild facilities with climate change adaptation measures; potential for green roofs
6. Biodiversity	?/-		?/-	?/-	?/-	?/-	Adjacent to OSNI; redevelopment proposals to take account of adjoining land with high biodiversity value
7. Landscape & townscape	?		?				Potential for improved buildings that enhance and make a positive contribution to the local character and Conservation Area.
8. Parks & open spaces	?		?				Site is partly OOLTI – proposed redevelopment should be located outside OOLTI; adjacent to Public Open Space; could improve connectivity between sites;
9. Best use of land & sustainable construction	+		+	+			Proposal is likely to make better use of previously developed land and buildings, including sustainable design and construction techniques
10. Housing	+		+	+			Some opportunity for a few new homes, possibly affordable homes
11. Health, well-being, secure communities	+		+	+	+		Securing club and scout facilities on this site has a positive impact and is for the benefit of the public

12. Accessible local services	+		+	+	+		Inclusion of upgraded club and scout facilities will lead to increased leisure, sport and recreation opportunities.
13. Town centres							Neutral
14. Local economy							Neutral
15. Commercial development opportunities							Neutral
Summary of assessment: <i>(likely sustainability impact of the option)</i>							
Overall, the redevelopment of this site has largely positive impacts. There are some potential uncertainties in relation to biodiversity, OOLTI and OSNI, which can be mitigated by careful design. Whilst it will make better use of previously developed land, this is likely to have some negative impacts on traffic, which can be mitigated through travel plans/assessments.							
Possible Mitigation: <i>(measures to mitigate likely negative effects and enhance positive effects)</i>							
Parking and access, particularly on match days, would need to be controlled and managed.							
Proposal Site: Beveree, High Street, Hampton							
Option C: Redevelop car park and club house and provide upgraded clubroom and changing facilities and enabling residential development.							
SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		
1. Waste							Neutral
2. Pollution & soil							Neutral
3. Travel	-		-	-			Potential increase of traffic due to residential and increased use of club house facilities
4. Climate change mitigation	+		+	+			Likely to contribute to reducing emissions over existing levels; increased energy efficiency; potential to incorporate zero carbon and renewable energy technologies
5. Climate change adaptation, flood risk & water	+		+	+			Potential to rebuild facilities with climate change adaptation measures; potential for green roofs
6. Biodiversity	?/-		?/-	?/-	?/-	?/-	Adjacent to OSNI; redevelopment proposals to take account of adjoining land with high biodiversity value
7. Landscape & townscape	?		?				Potential for improved buildings that enhance and make a positive contribution to the local character and Conservation Area.
8. Parks & open spaces	?		?				Site is partly OOLTI – proposed redevelopment should be located outside OOLTI; adjacent to Public Open Space; could improve connectivity between sites;
9. Best use of land & sustainable construction	+		+	+			Proposal is likely to make better use of previously developed land and buildings, including sustainable design and construction techniques
10. Housing	+		+	+			Some opportunity for more new homes, possibly

							affordable homes
11. Health, well-being, secure communities	+		+	+	+		Securing club facilities on this site has a positive impact and is for the benefit of the public
12. Accessible local services	+		+	+	+		Inclusion of upgraded club facilities will lead to increased leisure, sport and recreation opportunities.
13. Town centres							Neutral
14. Local economy							Neutral
15. Commercial development opportunities							Neutral
Summary of assessment: <i>(likely sustainability impact of the option)</i>							
Overall, the redevelopment of this site has largely positive impacts. There are some potential uncertainties in relation to biodiversity, OOLTI and OSNI, which can be mitigated by careful design. Whilst it will make better use of previously developed land, this is likely to have some negative impacts on traffic, which can be mitigated through travel plans/assessments.							
Possible Mitigation: <i>(measures to mitigate likely negative effects and enhance positive effects)</i>							
Parking and access, particularly on match days, would need to be controlled and managed.							
Conclusions: compare the different options							
Option B is the considered to be more sustainable as it would secure a new purpose designed scout hall, improved club facilities including some new homes.							

Proposal Site: Scout Hall, Hampton							
Option A: Retain status quo							
SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		
1. Waste							Neutral
2. Pollution & soil							Neutral
3. Travel							Neutral
4. Climate change mitigation							Neutral
5. Climate change adaptation, flood risk & water	-		-	-	-		Existing building is unlikely to be energy efficient.
6. Biodiversity							Neutral
7. Landscape & townscape							Neutral
8. Parks & open							Neutral

spaces							
9. Best use of land & sustainable construction							Neutral
10. Housing							Neutral
11. Health, well-being, secure communities							Neutral
12. Accessible local services							Neutral
13. Town centres							Neutral
14. Local economy							Neutral
15. Commercial development opportunities							Neutral
Summary of assessment: <i>(likely sustainability impact of the option)</i>							
Whilst the site is out of date and in need of modernisation, there would be limited environmental effects by not developing this site. The site has potential for an improved building and could be more sustainably constructed and adapted to climate change.							
Possible Mitigation: <i>(measures to mitigate likely negative effects and enhance positive effects)</i>							
Not applicable							
Proposal Site: Scout Hall, Hampton							
Option B: Redevelop site for residential uses subject to local re-provision of Scout Hall							
SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		
1. Waste	-	-	-			?	More activity and residential development will inevitably generate more waste; but this can be mitigated through for example the application of the waste hierarchy
2. Pollution & soil	?		?				Potentially less noisy if the Scout Hall is re-provided elsewhere
3. Travel	?		?	?		-/?	Depends on the level of car use associated with the residential development; uncertain how the number of vehicle movements will change
4. Climate change mitigation	+/?		+/?	+/?			Potential for more energy efficient buildings, but also increase in energy consumption
5. Climate change adaptation, flood risk & water							Neutral
6. Biodiversity	?/-		?/-	?/-	?/-	?/-	Adjacent to OSNI; redevelopment proposal will need to take account of adjoining land with high biodiversity value
7. Landscape &	?		?				Potential for improved buildings that enhance and make a

townscape							positive contribution to the local character and Conservation Area.
8. Parks & open spaces							Neutral
9. Best use of land & sustainable construction	+		+	+			Opportunity for more intensive uses on a previously developed site.
10. Housing	+	+	+	+	+	+	Will provide more new homes to help meet local needs.
11. Health, well-being, secure communities							Neutral – as long as the Scout facilities are re-provided elsewhere in the local area/vicinity of this site.
12. Accessible local services							Neutral – as long as the community facility is re-provided elsewhere in the local area/vicinity of this site.
13. Town centres							Neutral
14. Local economy							Neutral
15. Commercial development opportunities							Neutral
<p>Summary of assessment: <i>(likely sustainability impact of the option)</i> Overall, the redevelopment of this site has positive impacts in relation to providing new homes and making best use of land. There are some potential uncertainties in relation to biodiversity, particularly the adjacent OSNI, which can be mitigated by careful design. Whilst it will make better use of previously developed land, there could be some negative impacts on traffic, which could be mitigated through travel plans/assessments. More activity and development on this site will inevitably generate more waste.</p>							
<p>Possible Mitigation: <i>(measures to mitigate likely negative effects and enhance positive effects)</i> Any redevelopment scheme would need to take full account of the adjacent OSNI and the character of the Conservation Area. More activity and development on this site will inevitably generate more waste but this can be mitigated through the application of waste hierarchy and reuse of demolition waste.</p>							
<p>Conclusions: compare the different options Option B is the most sustainable because redeveloping this site would create new, including affordable, homes as well as new scout facilities in the local area.</p>							

Proposal Site: Platts Eyot							
Option A: Retain status quo							
SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		
1. Waste	-		-				Some flytipping on the island
2. Pollution & soil							Neutral
3. Travel							Neutral
4. Climate change mitigation							Neutral
5. Climate change adaptation, flood risk & water	-		-	-	-		Existing buildings are unlikely to incorporate energy efficiency measures.
6. Biodiversity							Neutral
7. Landscape & townscape	-		-	-	-		Listed Buildings and BTMs are in danger of deteriorating even further – 2 entries in Heritage at Risk Register.
8. Parks & open spaces							Neutral
9. Best use of land & sustainable construction	-		-	-	-		Does not make best and efficient use of land and buildings.
10. Housing							Neutral
11. Health, well-being, secure communities							Neutral
12. Accessible local services							Neutral
13. Town centres							Neutral
14. Local economy	-		-	-	-		River-related and other industries are in decline.
15. Commercial development opportunities	-		-	-	-		River-related and other industries are in decline, leading to loss of employment.
Summary of assessment: <i>(likely sustainability impact of the option)</i>							
Keeping the status quo on Platts Eyot is likely to have significant negative impacts on heritage and conservation; there are already 2 entries in the Heritage at Risk Register: Boat house No. 5 (easternmost 13 bays) and Platt's Eyot Conservation Area at Risk. In addition, keeping the status quo is unlikely to reverse the decline of river-related and other industries. The site has potential for improved facilities and new buildings could be more sustainably constructed and adapted to climate change.							
Possible Mitigation: <i>(measures to mitigate likely negative effects and enhance positive effects)</i>							
Not applicable.							

Proposal Site: Platts Eyot							
Option B: Refurbish and redevelop existing buildings on the island to provide river-dependent and river-related uses, including boatyards, industry and manufacturing as well as café and leisure uses and enabling small-scale residential.							
SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		
1. Waste							Unlikely to increase the waste stream of this site
2. Pollution & soil							Neutral
3. Travel	-	-	-	-			It is an island in the River Thames, with a car park to the north of the River. Intensification of uses on the island could lead to more traffic in the local area and potential parking issues as there is only a footbridge connecting it to the main land.
4. Climate change mitigation	+/?		+/?	+/?			Potential for more energy efficient buildings, but also increase in energy consumption
5. Climate change adaptation, flood risk & water	-	-	-	-	-	-	The island does not have safe access/egress in the event of a flood. Occupiers, residents, users and visitors of/to the island could potentially be put at risk by redeveloping the site. The island itself is also at risk of flooding, but buildings could be designed to remain safe during a flood event.
6. Biodiversity	-	-	-	-	-	-	Wholly OSNI – intensification of uses including residential uses could potentially be harmful to the biodiversity. Would lead to a degradation of green spaces; over 120 individual trees
7. Landscape & townscape	+	+	+	+	+	+	Could improve and enhance the character of the Conservation Area and address heritage at risk assets.
8. Parks & open spaces							Neutral, as long as it does not lead to a loss or degradation of designated Green Belt
9. Best use of land & sustainable construction	+		+	+	+		It would make better use and bring back into use existing buildings and previously developed land. Opportunity for remediating potentially contaminated land.
10. Housing	+		+				Some limited opportunities for creating a few new homes.
11. Health, well-being, secure communities	-		-	-	-		At risk of flooding
12. Accessible local services							Neutral
13. Town centres							Neutral
14. Local economy	+		+	+	+		Positive as it would retain and improve river-related and other industries

15. Commercial development opportunities	+		+	+	+		Opportunity to provide suitable space for commercial uses, in support of the existing island industries
<p>Summary of assessment: <i>(likely sustainability impact of the option)</i> This option has positive and negative impacts. The island does not have safe access/egress in the event of a flood and the island itself is also at risk of flooding. Intensification of uses would result in more traffic and parking issues on the mainland, apart from the river-related uses which utilise waterborne transport. Any redevelopment scheme would need to take account of the biodiversity value, trees and designated open land, ensuring that these designations are not impacted upon. Redevelopment and new development should enhance the character and appearance of the island, and heritage at risk should be addressed. This option would also have positive impacts for the local economy and working community and provide some commercial development opportunities.</p>							
<p>Possible Mitigation: <i>(measures to mitigate likely negative effects and enhance positive effects)</i> A flood risk assessment including assessment of safe access/egress arrangements and a flood emergency plan could potentially address the issue of safe access/egress. Alternative means of access other than car would need to be provided.</p>							
<p>Proposal Site: Platts Eyot Option C: Residential development on the whole island</p>							
SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		
1. Waste	-	-	-	-	-	-	More activity and residential development will inevitably generate more waste; but this can be implemented to mitigate the negative impacts, such as through the application of the waste hierarchy etc
2. Pollution & soil							Neutral
3. Travel	--	-	--	--			It is an island in the River Thames, with a car park to the north of the River. Redeveloping the whole island for residential would lead to a lot more traffic in the local area and parking issues as there is only a footbridge connecting it to the mainland.
4. Climate change mitigation	+/?		+/?	+/?			Potential for more energy efficient buildings, but also increase in energy consumption.
5. Climate change adaptation, flood risk & water	--	-	--	--	--	--	The island does not have safe access/egress in the event of a flood. Residents and visitors of/to the island could potentially be put at risk by redeveloping the site. The island itself is also at risk of flooding, but buildings could be designed to remain safe during a flood event.
6. Biodiversity	-	-	-	-	-	-	Wholly OSNI – intensification of uses including residential uses could potentially be harmful to the biodiversity. Would lead to a degradation of green spaces; over 120 individual trees
7. Landscape & townscape	--	-	--	--	--	--	The character of the Conservation Area is a working community and replacing all industrial and commercial

							uses with residential would be harmful to the character and appearance of the Conservation Area. Residential development would be unlikely to comply with Thames Policy Area requirements.
8. Parks & open spaces							Neutral, as long as it does not lead to a loss or degradation of designated MOL or Green Belt.
9. Best use of land & sustainable construction	+		+	+	+		It would make better use and bring back into use existing buildings and previously developed land. Opportunity for remediating potentially contaminated land.
10. Housing	+		+	+	+		Could potentially provide a large number of new homes.
11. Health, well-being, secure communities	-		-	-	-		At risk of flooding
12. Accessible local services	-		-	-	-		The island is only connected via footbridge and therefore has very poor public transport accessibility; no provision of local services on the island
13. Town centres							Neutral
14. Local economy	--	-	--	--	--	--	Loss of river-related and other industries
15. Commercial development opportunities	--	-	--	--	--	--	No commercial development opportunities; loss of island as a working community; loss of working use of historic buildings
Summary of assessment: <i>(likely sustainability impact of the option)</i>							
This option has many negative impacts. The island does not have safe access/egress in the event of a flood and the island itself is also at risk of flooding. Intensification of uses would result in more traffic and parking issues on the mainland. Any redevelopment scheme would need to take account of the biodiversity value, trees and designated open land, ensuring that these designations are not impacted upon. Residential development would not enhance the character and appearance of the island as a Conservation Area, and historic buildings would be lost. Very negative impacts on the local economy, loss of island as a working community, loss of jobs and no commercial development opportunities.							
Possible Mitigation: <i>(measures to mitigate likely negative effects and enhance positive effects)</i>							
A flood risk assessment including assessment of safe access/egress arrangements and a flood emergency plan could potentially address the issue of safe access/egress; however, developing the whole island for residential uses would likely result in a large number of people at people risk of flooding. No possible mitigation for loss of river-related uses and other industries as well as historic assets. Cannot mitigate loss of Conservation Area. Alternative means of access other than car would need to be provided.							
Conclusions: compare the different options							
Option B is the most sustainable as it would retain river-related uses and light industry, with only very small scale residential development. It would also preserve the setting of historic buildings, complement the existing character and Conservation Area of the island.							

Site to be designated as Key Employment Site: Kempton Gate Business Centre							
Option A: Do not designate this Site in the Site Allocations Plan and rely on existing adopted policies and the NPPF							
SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		
1. Waste							Neutral
2. Pollution & soil							Neutral
3. Travel							Neutral
4. Climate change mitigation							Neutral – modern buildings
5. Climate change adaptation, flood risk & water							Neutral – modern buildings
6. Biodiversity							Neutral
7. Landscape & townscape							Neutral
8. Parks & open spaces							Neutral
9. Best use of land & sustainable construction							Neutral
10. Housing							Neutral
11. Health, well-being, secure communities							Neutral
12. Accessible local services							Neutral
13. Town centres							Neutral
14. Local economy							Neutral
15. Commercial development opportunities							Neutral
Summary of assessment: <i>(likely sustainability impact of the option)</i>							
Neutral – not having a policy/proposal site for this area would mean the existing adopted policies and the NPPF apply, which have been subject to Sustainability Appraisal.							
Possible Mitigation: <i>(measures to mitigate likely negative effects and enhance positive effects)</i>							
Not applicable.							
Site: Kempton Gate Business Centre							
Option B: Designate within the Site Allocations Plan as Key Employment Site							

SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		
1. Waste							Neutral
2. Pollution & soil							Neutral
3. Travel							Neutral
4. Climate change mitigation							Neutral
5. Climate change adaptation, flood risk & water							Neutral
6. Biodiversity							Neutral
7. Landscape & townscape							Neutral
8. Parks & open spaces							Neutral
9. Best use of land & sustainable construction							Neutral
10. Housing							Neutral
11. Health, well-being, secure communities							Neutral
12. Accessible local services							Neutral
13. Town centres							Neutral
14. Local economy	++		+	+	+	++	Contributes to a diverse and resilient local economy by providing jobs and meeting local business needs.
15. Commercial development opportunities	+		+	+	++	++	It provides flexible space of a suitable size and in an appropriate location, which provides jobs.
Summary of assessment: <i>(likely sustainability impact of the option)</i> Identifying and including this locally important industrial estate in the Site Allocations Plan will secure the long-term future of this employment site. It would retain a number of different business uses of a suitable size in an appropriate location with good parking provision							
Possible Mitigation: <i>(measures to mitigate likely negative effects and enhance positive effects)</i> None							
Conclusions: compare the different options Option B is the most sustainable as it would protect much needed industrial land.							

Site to be designated as Key Employment Site: Kingsway Business Park							
Option A: Do not designate this Site in the Site Allocations Plan and rely on existing adopted policies and the NPPF							
SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		
1. Waste							Neutral
2. Pollution & soil							Neutral
3. Travel							Neutral
4. Climate change mitigation							Neutral – buildings could incorporate resource saving features in any upgrade
5. Climate change adaptation, flood risk & water							Neutral – various adaptation measures could be included in any upgrade
6. Biodiversity							Neutral
7. Landscape & townscape							Neutral
8. Parks & open spaces							Neutral
9. Best use of land & sustainable construction							Neutral
10. Housing							Neutral
11. Health, well-being, secure communities							Neutral
12. Accessible local services							Neutral
13. Town centres							Neutral
14. Local economy							Neutral
15. Commercial development opportunities							Neutral
Summary of assessment: <i>(likely sustainability impact of the option)</i>							
Neutral – not having a policy/proposal site for this area would mean the existing adopted policies and the NPPF apply, which have been subject to Sustainability Appraisal.							
Possible Mitigation: <i>(measures to mitigate likely negative effects and enhance positive effects)</i>							
Not applicable							
Site: Kingsway Business Park							
Option B: Designate within the Site Allocations Plan as Key Employment Site							
SA objectives	Geographic scale		Assessment / Length of effect				

	Local	Trans-boundary	Short-term	Medium-term	Long-term	Cumulative	Commentary/explanation, uncertainties, proposed mitigation
1. Waste							Neutral
2. Pollution & soil							Neutral
3. Travel							Neutral
4. Climate change mitigation							Neutral
5. Climate change adaptation, flood risk & water							Neutral
6. Biodiversity							Neutral
7. Landscape & townscape							Neutral
8. Parks & open spaces							Neutral
9. Best use of land & sustainable construction							Neutral
10. Housing							Neutral
11. Health, well-being, secure communities							Neutral
12. Accessible local services							Neutral
13. Town centres							Neutral
14. Local economy	++		+	+	+	++	Contributes to a diverse and resilient local economy by providing jobs and meeting local business needs.
15. Commercial development opportunities	+		+	+	++	++	It delivers flexible business space in a variety of suitable sizes and in an appropriate location, which provides jobs.
Summary of assessment: <i>(likely sustainability impact of the option)</i> This business park is next door to the industrial estate Kempton Gate Business Centre. It is a relatively modern purpose built business park; retaining the status quo would be considered largely neutral, but it is very positive in terms of contributing to the local economy, supplying office and business units in a suitable location and providing jobs.							
Possible Mitigation: <i>(measures to mitigate likely negative effects and enhance positive effects)</i> None							
Conclusions: Option B is the most sustainable. It retains existing mixed employment floorspace and jobs in an appropriate location.							

Site to be designated as Key Employment Site: Castle Business Village and Mount Mews

Option A: Do not designate this Site in the Site Allocations Plan and rely on existing adopted policies and the NPPF

SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		
1. Waste							Neutral
2. Pollution & soil							Neutral
3. Travel							Neutral
4. Climate change mitigation							Neutral
5. Climate change adaptation, flood risk & water							Neutral
6. Biodiversity							Neutral
7. Landscape & townscape							Neutral
8. Parks & open spaces							Neutral
9. Best use of land & sustainable construction							Neutral
10. Housing							Neutral
11. Health, well-being, secure communities							Neutral
12. Accessible local services							Neutral
13. Town centres							Neutral
14. Local economy							Neutral
15. Commercial development opportunities							Neutral
Summary of assessment: <i>(likely sustainability impact of the option)</i> Neutral – not having a policy/proposal site for this area would mean the existing adopted policies and the NPPF apply, which have been subject to Sustainability Appraisal.							
Possible Mitigation: <i>(measures to mitigate likely negative effects and enhance positive effects)</i> Not applicable							
Site to be designated as Key Employment Site: Castle Business Village and Mount Mews Option B: Designate within the Site Allocations Plan as Key Employment Site							
SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		

1. Waste							Neutral
2. Pollution & soil							Neutral
3. Travel							Neutral
4. Climate change mitigation							Neutral
5. Climate change adaptation, flood risk & water							Neutral
6. Biodiversity							Neutral
7. Landscape & townscape							Neutral
8. Parks & open spaces							Neutral
9. Best use of land & sustainable construction							Neutral
10. Housing							Neutral
11. Health, well-being, secure communities							Neutral
12. Accessible local services							Neutral
13. Town centres							Neutral
14. Local economy	++		+	+	+	++	Contributes to a diverse and resilient local economy by providing jobs, a variety of different sized units of employment floorspace and meeting local business needs.
15. Commercial development opportunities	+		+	+	++	++	It delivers flexible business, office and charity space in a variety of suitable sizes and in an appropriate location, which provides jobs for local residents.
Summary of assessment: <i>(likely sustainability impact of the option)</i> The site comprises a variety of relatively modern purpose built offices of various sizes. Retaining them through designation would be considered largely neutral, but it is very positive in terms of contributing to the local economy, supplying a variety of office and business units in a suitable location and providing jobs.							
Possible Mitigation: <i>(measures to mitigate likely negative effects and enhance positive effects)</i> None							
Conclusions: compare the different options Option B is the most sustainable as it would protect existing occupied employment land and buildings to suit local needs.							

Site to be designated as Key Employment Site: Hampton Hill Business Park							
Option A: Do not designate this Site in the Site Allocations Plan and rely on existing adopted policies and the NPPF							
SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		
1. Waste							Neutral
2. Pollution & soil							Neutral
3. Travel							Neutral
4. Climate change mitigation							Neutral
5. Climate change adaptation, flood risk & water							Neutral
6. Biodiversity							Neutral
7. Landscape & townscape							Neutral
8. Parks & open spaces							Neutral
9. Best use of land & sustainable construction							Neutral
10. Housing							Neutral
11. Health, well-being, secure communities							Neutral
12. Accessible local services							Neutral
13. Town centres							Neutral
14. Local economy							Neutral
15. Commercial development opportunities							Neutral
Summary of assessment: <i>(likely sustainability impact of the option)</i>							
Neutral – not having a policy/proposal site for this area would mean the existing adopted policies and the NPPF apply, which have been subject to Sustainability Appraisal							
Possible Mitigation: <i>(measures to mitigate likely negative effects and enhance positive effects)</i>							
Not applicable							
Site to be designated as Key Employment Site							
Option B: Designate within the Site Allocations Plan as Key Employment Site							

SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		
1. Waste							Neutral
2. Pollution & soil							Neutral
3. Travel							Neutral
4. Climate change mitigation							Neutral
5. Climate change adaptation, flood risk & water							Neutral
6. Biodiversity							Neutral
7. Landscape & townscape							Neutral
8. Parks & open spaces							Neutral
9. Best use of land & sustainable construction							Neutral
10. Housing							Neutral
11. Health, well-being, secure communities							Neutral
12. Accessible local services							Neutral
13. Town centres							Neutral
14. Local economy	++		+	+	+	++	Contributes to a diverse and resilient local economy by providing jobs, a variety of different sized units of employment floorspace and meeting local business needs.
15. Commercial development opportunities	+		+	+	++	++	It delivers flexible business, office and charity space in a variety of suitable sizes and in an appropriate location, which provides jobs for local residents .
Summary of assessment: <i>(likely sustainability impact of the option)</i> The site comprises 7 courtyard office units behind a roadside facing office building on the High Street. Relatively modern with parking. Designating the estate to retain the courtyard offices would be considered largely neutral, but it is very positive in terms of contributing to the local economy, supplying office and business units in a suitable location, and providing jobs.							
Possible Mitigation: <i>(measures to mitigate likely negative effects and enhance positive effects)</i> None							

Conclusions: compare the different options
Option B is the most sustainable as it would protect existing occupied employment land and jobs

Site to be designated as Key Employment Site: St Clare Business Park

Option A: Do not designate this Site in the Site Allocations Plan and rely on existing adopted policies and the NPPF

SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		
1. Waste							Neutral
2. Pollution & soil							Neutral
3. Travel							Neutral
4. Climate change mitigation							Neutral
5. Climate change adaptation, flood risk & water							Neutral
6. Biodiversity							Neutral
7. Landscape & townscape							Neutral
8. Parks & open spaces							Neutral
9. Best use of land & sustainable construction	-		-	-			The site is existing developed land falling into disrepair and in part is under-utilised
10. Housing							Neutral
11. Health, well-being, secure communities							Neutral
12. Accessible local services							Neutral
13. Town centres							Neutral
14. Local economy							
15. Commercial development opportunities							

Summary of assessment: *(likely sustainability impact of the option)*

Whilst the site contributes to the local economy, provides jobs and delivers flexible business, office and charity space, it is considered under-utilised and therefore does not make the best use of previously developed land.

Possible Mitigation: (measures to mitigate likely negative effects and enhance positive effects)							
None							
Site to be designated as Key Employment Site: St Clare Business Park							
Option B: Designate within the Site Allocations Plan as Key Employment Site							
SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		
1. Waste							Neutral
2. Pollution & soil							Neutral
3. Travel							Neutral
4. Climate change mitigation							Neutral
5. Climate change adaptation, flood risk & water							Neutral
6. Biodiversity							Neutral
7. Landscape & townscape							Neutral
8. Parks & open spaces							Neutral
9. Best use of land & sustainable construction							Neutral
10. Housing							Neutral
11. Health, well-being, secure communities							Neutral
12. Accessible local services							Neutral
13. Town centres	+		+			+	Provides for a mix of commercial uses that add to the vitality and viability of the local centre
14. Local economy	++		++	++	++	++	Would provide business development and contribute to the local economy
15. Commercial development opportunities	++		++				Increase the amount and quality of commercial development opportunities in a number of different employment uses such as offices, sheds, workshops etc.
Summary of assessment: (likely sustainability impact of the option)							
This site contributes to the local economy and provides jobs and land for employment development. It would also make better							
Possible Mitigation: (measures to mitigate likely negative effects and enhance positive effects)							
None							

Conclusions: compare the different options

Option B is the most sustainable. The designation as Key Employment Site should help to retain the valuable local function of the site providing locally based services to business and residents and helping to reduce the need to travel far.

Proposal Site: Telephone Exchange, Teddington

Option A: Retain status quo

SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		
1. Waste							Neutral
2. Pollution & soil							Neutral
3. Travel							Neutral
4. Climate change mitigation							Neutral
5. Climate change adaptation, flood risk & water							Neutral
6. Biodiversity							Neutral
7. Landscape & townscape	?		?	?	?		Conservation Area; currently not very attractive frontage for a high street
8. Parks & open spaces							Neutral
9. Best use of land & sustainable construction	?		?		-		May not be the best and most efficient use of land given this is in a town centre location
10. Housing							Neutral
11. Health, well-being, secure communities							Neutral
12. Accessible local services							Neutral
13. Town centres							Neutral
14. Local economy							Neutral
15. Commercial development opportunities							Neutral

Summary of assessment: *(likely sustainability impact of the option)*

Mainly neutral impacts. May not be the most efficient use of land and attractive frontage for a high street, but the site is still in operational

use.							
Possible Mitigation: (measures to mitigate likely negative effects and enhance positive effects)							
None							
Proposal Site: Telephone Exchange, Teddington							
Option B: Redeveloping entire site with commercial/retail uses on the ground floor, with residential, including affordable units, above (subject to BT release of land)							
SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		
1. Waste	-		-	-	-		Amount of waste is likely to increase; operation of waste hierarchy should minimise/mitigate any potential negative impacts
2. Pollution & soil							Neutral
3. Travel	-/?		-/?	-/?	-/?	-/?	Depending on the development proposal, it may lead to an increase in traffic and congestion
4. Climate change mitigation	+		+	+			Opportunity to incorporate low- & zero carbon technologies and renewable energy; buildings should be more energy efficient
5. Climate change adaptation, flood risk & water							Neutral
6. Biodiversity							Neutral
7. Landscape & townscape	+		+	+	+	+	Redevelopment proposal could contribute to enhancement of Conservation Area by creating a more attractive frontage
8. Parks & open spaces							Neutral
9. Best use of land & sustainable construction	++		++	++	++		Providing a mix of uses in a town centre location would maximise the potential of previously developed land; potential for incorporation of sustainable construction measures
10. Housing	+		+	+	+		Opportunity for some provision of homes, including affordable units
11. Health, well-being, secure communities							Neutral
12. Accessible local services	+		+	+		+	Access to a range of town centre facilities and services for new users of this site
13. Town centres	+		++	++	+		A mixed use scheme would add to the vitality and viability of the town centre
14. Local economy	+		++	++	+		Contribution to local economy including provision of jobs

15. Commercial development opportunities	+		+	+			Some opportunity to provide modern, flexible commercial units.
Summary of assessment: <i>(likely sustainability impact of the option)</i> Overall, mainly positive impacts, particularly in relation to vitality of town centres, local economy and provision of homes.							
Possible Mitigation: <i>(measures to mitigate likely negative effects and enhance positive effects)</i> Travel – ensure any redevelopment proposal would have no impacts on local parking provision. More activity and development on this site will inevitably generate more waste but this can be mitigated through the application of waste hierarchy and reuse of demolition waste.							
Proposal Site: Telephone Exchange, Teddington Option C: Redevelop whole site for residential uses, including affordable homes, with provision of on-site parking (subject to BT release of land)							
SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		
1. Waste	-		-	-	-		Amount of waste is likely to increase; operation of waste hierarchy should minimise/mitigate any potential negative impacts
2. Pollution & soil							Neutral
3. Travel	-/?		-/?	-/?	-/?	-/?	Depending on the development proposal, it may lead to an increase in traffic and congestion; possibility for car-free development
4. Climate change mitigation	+		+	+			Opportunity to incorporate low- & zero carbon technologies and renewable energy; buildings should be more energy efficient
5. Climate change adaptation, flood risk & water							Neutral
6. Biodiversity							Neutral
7. Landscape & townscape	+		+	+	+	+	Redevelopment proposal could contribute to enhancement of Conservation Area by creating a more attractive frontage
8. Parks & open spaces							Neutral
9. Best use of land & sustainable construction	+		+	+	+		Providing residential uses could be considered better use of previously developed land; potential for incorporation of sustainable construction measures
10. Housing	++		++	+	+		Opportunity for provision of homes, including affordable units
11. Health, well-being, secure communities							Neutral

12. Accessible local services	+		+	+		+	Access to a range of town centre facilities and services for new users of this site
13. Town centres	-		-	-			To enhance and add to the vitality and viability of the town centre, the development should contain some retail/commercial or community uses
14. Local economy	-/?		-/?		-		A wholly residential use in a town centre location would be unlikely to contribute to local economic growth and provision of jobs
15. Commercial development opportunities	-		-	-			Given the town centre location, it would be more appropriate to provide commercial development opportunities.
Summary of assessment: <i>(likely sustainability impact of the option)</i> This option would provide new homes, including affordable units and it should contribute to the enhancement of the Conservation Area. However, given this site is in a town centre, negative impacts have been identified in relation to its contribution to the local economy, business and commercial development opportunities.							
Possible Mitigation: <i>(measures to mitigate likely negative effects and enhance positive effects)</i> None							
Conclusions: compare the different options Option B is the most sustainable because the site is in a town centre, which is suitable for a mixed development, providing both employment, local services and homes.							

Proposal Site: Strathmore Centre							
Option A: Retain status quo							
SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		
1. Waste							Neutral
2. Pollution & soil							Neutral
3. Travel							Neutral
4. Climate change mitigation							Neutral
5. Climate change adaptation, flood risk & water							Neutral
6. Biodiversity							Neutral
7. Landscape & townscape	-		-	-	-		Poor and dilapidated buildings; poor environmental quality
8. Parks & open							

spaces								
9. Best use of land & sustainable construction	-		-	-	-			Not the most efficient use of land as parts of the site are vacant.
10. Housing								Neutral
11. Health, well-being, secure communities								Neutral
12. Accessible local services								Neutral
13. Town centres								Neutral
14. Local economy								Neutral
15. Commercial development opportunities								Neutral
Summary of assessment: <i>(likely sustainability impact of the option)</i>								
Overall, retaining the status quo is considered to be largely neutral. However, it is not considered to make the best use of previously developed land; vacant/dilapidated buildings do not make a positive contribution to the local character/landscape.								
Possible Mitigation: <i>(measures to mitigate likely negative effects and enhance positive effects)</i>								
None								
Proposal Site: Strathmore Centre								
Option B: Redevelop for residential including affordable (subject to relocation and alternative provision of existing nursery)								
SA objectives	Geographic scale		Assessment / Length of effect			Cumulative		Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term			
1. Waste	-		-	-	-			Amount of waste would increase; operation of waste hierarchy should minimise/mitigate any potential negative impacts
2. Pollution & soil								Neutral
3. Travel	-		-	-	-	-		Depending on the development proposal, it may lead to an increase in traffic and congestion; one-way access road, shared with school; poor PTAL however close to Stanley Road with bus routes; all the car parking would have to be provided on-site
4. Climate change mitigation	+		+	+				Opportunity to incorporate low- & zero carbon technologies and renewable energy; buildings should be more energy efficient
5. Climate change adaptation, flood								Neutral

risk & water							
6. Biodiversity							Neutral
7. Landscape & townscape	+		+	+	+	+	Redevelopment proposal could contribute to enhancement of local area and character
8. Parks & open spaces	+		+				The area is public open space deficient; development proposal could incorporate a new open space or improve access to a suitable nearby open space
9. Best use of land & sustainable construction	+		+	+	+		Providing residential uses may be considered to make better use of existing vacant/derelict land; potential for incorporation of sustainable construction measures
10. Housing	++		++	++	++	++	Opportunity for provision of housing, including affordable
11. Health, well-being, secure communities	+		+				Replacing a vacant/derelict site with homes adds to the delivery of safer and more secure communities
12. Accessible local services	+		+				Good access to education facilities and within 400m of a local centre
13. Town centres							Neutral
14. Local economy							Neutral
15. Commercial development opportunities							Neutral
Summary of assessment: <i>(likely sustainability impact of the option)</i>							
Whilst there may potentially be some negative impacts in relation to waste and transport, this site could provide much needed homes; it would replace a partly vacant/derelict site, thus making better use of previously developed land and contributing to the local character and area.							
Possible Mitigation: <i>(measures to mitigate likely negative effects and enhance positive effects)</i>							
Travel – ensure any redevelopment proposal would have no impacts on local parking provision. More activity and development on this site will inevitably generate more waste but this can be mitigated through the application of waste hierarchy and reuse of demolition waste.							
Conclusions: compare the different options							
Option B is the most sustainable.							

Site to be designated as Key Employment Site: Waldegrave Road cluster							
Option A: Do not designate this Site in the Site Allocations Plan and rely on existing adopted policies and the NPPF							
SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		
1. Waste							Neutral
2. Pollution & soil							Neutral

3. Travel							Neutral
4. Climate change mitigation							Neutral
5. Climate change adaptation, flood risk & water							Neutral
6. Biodiversity							Neutral
7. Landscape & townscape							Neutral
8. Parks & open spaces							Neutral
9. Best use of land & sustainable construction							Neutral
10. Housing							Neutral
11. Health, well-being, secure communities							Neutral
12. Accessible local services							Neutral
13. Town centres							Neutral
14. Local economy							Neutral
15. Commercial development opportunities							Neutral
Summary of assessment: <i>(likely sustainability impact of the option)</i> Neutral – not having a policy/proposal site for this area would mean the existing adopted policies and the NPPF apply, which have been subject to Sustainability Appraisal.							
Possible Mitigation: <i>(measures to mitigate likely negative effects and enhance positive effects)</i> None							
Site to be designated as Key Employment Site: Waldegrave Road cluster Option B: Designate within the Site Allocations Plan as Key Employment Site							
SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		
1. Waste							Neutral
2. Pollution & soil							Neutral
3. Travel							Neutral

4. Climate change mitigation							Neutral
5. Climate change adaptation, flood risk & water							Neutral
6. Biodiversity							Neutral
7. Landscape & townscape							Neutral
8. Parks & open spaces							Neutral
9. Best use of land & sustainable construction							Neutral
10. Housing							Neutral
11. Health, well-being, secure communities							Neutral
12. Accessible local services	+		+	+	+	+	Good access to community, restaurant and other facilities and either partly within the town centre or within 400m of the local centre
13. Town centres	++		+	+	+	++	Contributes to a diverse and resilient local economy by providing jobs and meeting local business needs.
14. Local economy	+		+	+	++	++	It delivers flexible business space in a variety of suitable sizes and in an appropriate location, which provides jobs.
15. Commercial development opportunities	++		+	+	+	++	Contributes to a diverse and resilient local economy by providing jobs and meeting local business needs.

Summary of assessment: *(likely sustainability impact of the option)*

Identifying and including this locally important employment area in the Site Allocations Plan will help to secure the long-term future of employment and services in the area. It would retain a number of different business uses and employment land of a suitable size in an appropriate location close to the station and town centre. This cluster provides essential local services, land for employment and business opportunities in a sustainable location; the loss of these facilities to residential uses would have cumulatively a very negative impact on the local economy and provision of local jobs.

Possible Mitigation: *(measures to mitigate likely negative effects and enhance positive effects)*

None.

Conclusions: compare the different options

Option B is the most sustainable because it seeks to designate a cluster of locally significant mixed industrial and office land and space for redevelopment for employment and retention of jobs, businesses and services that serve local needs. Any loss of these facilities to residential uses would be harmful to the local businesses, reduce further land for expansion of employment uses, lead to the loss of jobs and would have cumulatively a very negative impact on the local economy.

Proposal Site: Teddington Studios							
Option A : Retain status quo							
SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		
1. Waste							Neutral
2. Pollution & soil							Neutral
3. Travel							Neutral
4. Climate change mitigation							Neutral
5. Climate change adaptation, flood risk & water							Neutral
6. Biodiversity							Neutral
7. Landscape & townscape							Neutral
8. Parks & open spaces							Neutral
9. Best use of land & sustainable construction	-		-	-	-		Some of the existing buildings are vacant and others are under-utilised, therefore not making best use of land
10. Housing							Neutral
11. Health, well-being, secure communities							Neutral
12. Accessible local services							Neutral
13. Town centres							Neutral
14. Local economy							Neutral
15. Commercial development opportunities							Neutral
Summary of assessment: <i>(likely sustainability impact of the option)</i>							
Retaining the status quo is largely neutral, but it is not considered to make the most efficient use of previously developed land.							
Possible Mitigation: <i>(measures to mitigate likely negative effects and enhance positive effects)</i>							
None							
Proposal Site: Teddington Studios							
Option B: Residential only							

SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		
1. Waste							Neutral
2. Pollution & soil							Potential for improving soil quality
3. Travel	?		?	?	?	?	Very poor PTAL; uncertain whether a residential use would create more traffic in the local area as the existing site already has some significant traffic flows; provision of a riverside walk would be considered positive
4. Climate change mitigation	+		+	+	+		Opportunity for improving the energy efficiency and incorporating low-/zero carbon and renewable technologies
5. Climate change adaptation, flood risk & water	-		-	-	-		Site is in a high probability flood zone; introducing residential uses on this site would increase the flood risk vulnerability and put a lot more users/occupiers at potential risk; mitigation measures should be implemented to reduce risk
6. Biodiversity	?		?				Uncertain whether a complete redevelopment of this site would impact on the adjoining OSNI; potential impacts on TPOs on site
7. Landscape & townscape	+/-		+/-				Redevelopment could potentially improve the character and setting of the Conservation Area including of the small BTM on site. However, there could be adverse impacts, but this would depend on the amount of development and the design. There may be an opportunity to open up the riverside and provide a public walkway along the river.
8. Parks & open spaces	+		+	+	+	+	Opportunity to improve the connectivity between existing open spaces and the River Thames; potential for including on-site open space
9. Best use of land & sustainable construction	?		?	?	?		Uncertain whether a wholly residential scheme would make the best use of land, given that the entire existing site is an important employment site. Potential for remediating existing contaminated land.
10. Housing	++		++	+			Opportunities for substantial amount of new housing, including affordable units.
11. Health, well-being, secure communities	?		?	?	?	?	Putting many new residents in a high probability flood area; could potentially impact on the emergency services during a flood event, consequent possible adverse impact on secure communities
12. Accessible local services	?		?			?	A wholly residential scheme will not provide for local services; site is outside Teddington town centre, but within 400m of it

13. Town centres							Neutral
14. Local economy	-		-	-	-	-	Loss of employment use and jobs
15. Commercial development opportunities	-		-	-	-	-	Loss of commercial development opportunities
Summary of assessment: <i>(likely sustainability impact of the option)</i>							
Overall, this option has many positive but also negative impacts. It would provide for a large number of new homes and could contribute to the visual improvement of the local area, open spaces and Conservation Area. However, this option would mean the loss of an important local employment site where there are many local jobs. Redeveloping in a high probability flood zone and increasing the flood risk vulnerability is also considered to be negative.							
Possible Mitigation: <i>(measures to mitigate likely negative effects and enhance positive effects)</i>							
It is understood that the major employer occupying this site is thinking of relocating else where within the borough (possibly on the Richmond College site); this would potentially mitigate the loss of this important employment land. To mitigate the impacts of flooding, a flood risk assessment and a flood emergency plan should be required for any detailed proposals to ensure that the development and users are safe during a flood event. There may be an opportunity to increase the amount of permeable surfacing as part of redeveloping the existing site, thus providing some mitigation during a flood event.							
Conclusions: compare the different options							
Overall, Option B could be considered as more sustainable, however, various mitigation measures would need to be implemented and the important employment use should be re-provided elsewhere in the borough.							

Site to be designated as Key Employment Site: National Physical Laboratory							
Option A: Do not designate this Site in the Site Allocations Plan and rely on existing adopted policies and the NPPF							
SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		
1. Waste							Neutral
2. Pollution & soil							Neutral
3. Travel							Neutral
4. Climate change mitigation							Neutral
5. Climate change adaptation, flood risk & water							Neutral
6. Biodiversity							Neutral; adjacent to MOL, OSNI and Historic Park & Garden (Bushy Park)
7. Landscape & townscape							Neutral; existing BTMs on the site; not within a Conservation Area; adjacent to Historic Park & Garden (Bushy Park)

8. Parks & open spaces							Neutral; adjacent to Bushy Park
9. Best use of land & sustainable construction							Neutral; this site is a nationally significant research establishment; it is a unique site that provides a large number of jobs and is considered to make good use of land.
10. Housing							Neutral
11. Health, well-being, secure communities							Neutral
12. Accessible local services							Neutral
13. Town centres							Neutral
14. Local economy							Neutral
15. Commercial development opportunities							Neutral
Summary of assessment: <i>(likely sustainability impact of the option)</i> Neutral – not having a policy/proposal site for this area would mean the existing adopted policies and the NPPF apply, which have been subject to Sustainability Appraisal.							
Possible Mitigation: <i>(measures to mitigate likely negative effects and enhance positive effects)</i> None							
Site to be designated as Key Employment Site: National Physical Laboratory Option B: Designate within the Site Allocations Plan as Key Employment Site							
SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		
1. Waste							Neutral
2. Pollution & soil							Neutral
3. Travel							Neutral
4. Climate change mitigation							Neutral
5. Climate change adaptation, flood risk & water							Neutral
6. Biodiversity							Neutral; adjacent to MOL, OSNI and Historic Park & Garden (Bushy Park)
7. Landscape & townscape							Neutral, existing BTMs on the site; not within a Conservation Area; adjacent to Historic Park & Garden

							(Bushy Park)
8. Parks & open spaces							Neutral; adjacent to Bushy Park
9. Best use of land & sustainable construction							This site is a nationally significant research establishment; it is a unique site that provides a large number of jobs and is considered to make good use of land.
10. Housing							Neutral
11. Health, well-being, secure communities							Neutral
12. Accessible local services							Neutral
13. Town centres	+		+	+	+	+	Retention to provide for a continued employment primarily R&D could add to the vitality and viability of the local Town centre
14. Local economy	+	++	+	++	++	++	This site is a nationally significant research establishment; it is a unique site that provides a large number of jobs and contributes significantly to the local economy.
15. Commercial development opportunities	++	++	++	++	++	++	This is a nationally significant research establishment that provides many jobs and supports many smaller scientific businesses and research establishments and commercial business opportunities.
Summary of assessment: <i>(likely sustainability impact of the option)</i> This site is a nationally significant research establishment; it is a unique site that provides a large number of jobs and contributes significantly to the local economy. The loss of this facility to any other uses would have a very negative impact and therefore it should be designated as a Key Employment Site.							
Possible Mitigation: <i>(measures to mitigate likely negative effects and enhance positive effects)</i> None							
Conclusions: compare the different options Option B is the most sustainable because it recognises and seeks to retain a nationally significant research establishment that provides many jobs and supports many smaller scientific businesses and research establishments.							

Site to be designated as Key Employment Site: Teddington Business Park							
Option A: Do not designate this Site in the Site Allocations Plan and rely on existing adopted policies and the NPPF							
SA objectives	Geographic scale		Assessment / Length of effect				Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term	Cumulative	

1. Waste							Neutral
2. Pollution & soil							Neutral
3. Travel							Neutral
4. Climate change mitigation							neutral
5. Climate change adaptation, flood risk & water							Neutral
6. Biodiversity							Neutral
7. Landscape & townscape							Neutral
8. Parks & open spaces							Neutral
9. Best use of land & sustainable construction							Neutral
10. Housing							Neutral
11. Health, well-being, secure communities							Neutral
12. Accessible local services							Neutral
13. Town centres							Neutral
14. Local economy							Neutral.
15. Commercial development opportunities							Neutral
Summary of assessment: <i>(likely sustainability impact of the option)</i> Neutral – not having a policy/proposal site for this area would mean the existing adopted policies and the NPPF apply, which have been subject to Sustainability Appraisal							
Possible Mitigation: <i>(measures to mitigate likely negative effects and enhance positive effects)</i> None							
Site: Teddington Business Park Option B: Designate within the Site Allocations Plan as Key Employment Site							
SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		
1. Waste							Neutral
2. Pollution & soil							Neutral

3. Travel							Neutral
4. Climate change mitigation							Neutral
5. Climate change adaptation, flood risk & water							Neutral
6. Biodiversity							Neutral
7. Landscape & townscape							Neutral, not within a Conservation Area
8. Parks & open spaces							Neutral
9. Best use of land & sustainable construction							Neutral
10. Housing							Neutral
11. Health, well-being, secure communities							Neutral
12. Accessible local services							Neutral
13. Town centres	+		+			+	Provides for a mix of commercial uses that add to the vitality and viability of the local centre
14. Local economy	+		+	+	+	+	Provides for a mix of commercial uses and employment land for businesses seeking to expand or set up in the area. Supports the local economy, and provides jobs
15. Commercial development opportunities	+		+	+	+	+	This estate provides land for employment and business opportunities in a sustainable location where businesses seeking to expand or set up in the area may locate.
Summary of assessment: <i>(likely sustainability impact of the option)</i> Business park within the town centre boundary and next to the railway station that provides a number of jobs and contributes to the local economy.							
Possible Mitigation: <i>(measures to mitigate likely negative effects and enhance positive effects)</i> None							
Conclusions: compare the different options Option B is the most sustainable because it retains a locally significant business estate in a sustainable location that provides jobs and services in support of the local economy.							

Proposal Site: Harlequins Rugby							
Option A: retain as existing (Rugby football sports ground and parking)							
SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		
1. Waste							Neutral
2. Pollution & soil							Neutral
3. Travel							Neutral
4. Climate change mitigation							Neutral
5. Climate change adaptation, flood risk & water							Neutral
6. Biodiversity							Neutral
7. Landscape & townscape							Neutral
8. Parks & open spaces							Neutral
9. Best use of land & sustainable construction	-		-	-	-		Could potentially make better and more efficient use of land and buildings; very large car park on the site
10. Housing							Neutral
11. Health, well-being, secure communities							Neutral
12. Accessible local services							Neutral
13. Town centres							Neutral
14. Local economy							Neutral
15. Commercial development opportunities							Neutral
Summary of assessment: <i>(likely sustainability impact of the option)</i>							
Largely neutral, but not considered to make the most efficient use of land.							
Possible Mitigation: <i>(measures to mitigate likely negative effects and enhance positive effects)</i>							
Not applicable.							
Proposal Site: Harlequins Rugby Ground							
Option B: New north stand and possible leisure and hotel development (intensification of leisure and sports)							
SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-	Short-	Medium-	Long-		

		boundary	term	term	term		
1. Waste	-		-	-	-	-	Additional and intensified uses would increase the waste stream.
2. Pollution & soil							Neutral
3. Travel	-		-	-			Potential increase of traffic due to increased use of leisure, hotel and sports facilities
4. Climate change mitigation	+		+	+			potential to incorporate zero carbon and renewable energy technologies
5. Climate change adaptation, flood risk & water	+		+	+			Potential to rebuild facilities with climate change adaptation measures; potential for green roofs
6. Biodiversity							Neutral
7. Landscape & townscape	?		?				Potential for improved buildings that enhance and make a positive contribution to the local character .
8. Parks & open spaces	+		+				Site is Public open space POS, OOLTI – proposed redevelopment should be located outside OOLTI; adjacent to Public Open Space; could improve connectivity between sites;
9. Best use of land & sustainable construction	+		+	+			Proposal is likely to make better use of previously developed land and buildings, including sustainable design and construction techniques
10. Housing							Neutral
11. Health, well-being, secure communities	+		+	+	+		Securing club facilities on this site has a positive impact and would potentially be for the benefit of the public
12. Accessible local services	+		+	+	+		Inclusion of upgraded club facilities will lead to increased leisure, sport and recreation opportunities.
13. Town centres							Neutral
14. Local economy	+		+				Likely to contribute to the local economy and provision of new jobs
15. Commercial development opportunities	+		+				Possible new sports development and new hotel facilities
<p>Summary of assessment: <i>(likely sustainability impact of the option)</i> Overall positive impacts; would make better use of previously developed land, particularly on the large car parking area. Positive impacts in relation to securing the future of the sports clubs in the borough. There would however potentially be some significant impacts on local transport provision, which would require mitigation.</p>							
<p>Possible Mitigation: <i>(measures to mitigate likely negative effects and enhance positive effects)</i> Travel – a signalised junction between Langhorn Drive and the A316 would be required to mitigate the problems of increased car/coach travel. Need to take account of adjacent development proposals and cumulative impacts on local area.</p>							
<p>Proposal Site: Harlequins Option C: Further development to include housing as well as sport/leisure development</p>							

SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		
1. Waste	-		-	-	-	-	Additional and intensified uses would increase the waste stream.
2. Pollution & soil							Neutral
3. Travel	--		--	--	--	--	Potentially significant increase of traffic due to increased use of leisure, hotel, sports facilities and housing
4. Climate change mitigation	+		+	+			Potential to incorporate zero carbon and renewable energy technologies
5. Climate change adaptation, flood risk & water	+		+	+			Potential to rebuild facilities with climate change adaptation measures; potential for green roofs
6. Biodiversity							Neutral
7. Landscape & townscape	?		?				Potential for improved buildings that enhance and make a positive contribution to the local character.
8. Parks & open spaces	+		+				Site is Public open space POS, OOLTI – proposed redevelopment should be located outside OOLTI; adjacent to Public Open Space; could improve connectivity between sites;
9. Best use of land & sustainable construction	+		+	+			Proposal is likely to make better use of previously developed land and buildings, including sustainable design and construction techniques
10. Housing	+		+	+			Opportunities for new homes, including affordable units
11. Health, well-being, secure communities	+		+	+	+		Securing club facilities on this site has a positive impact and is for the benefit of the public
12. Accessible local services	+		+	+	+		Inclusion of upgraded club facilities will lead to increased leisure, sport and recreation opportunities.
13. Town centres							Neutral
14. Local economy	+		+				Likely to contribute to the local economy and provision of new jobs
15. Commercial development opportunities	+		+				Possible new sports development and new hotel facilities
<p>Summary of assessment: <i>(likely sustainability impact of the option)</i> Overall positive impacts; would make better use of previously developed land, particularly on the large car parking area. Positive impacts in relation to securing the future of the sports clubs in the borough. There would however potentially be significant impacts on local transport provision, particularly with new housing, which would require mitigation.</p> <p>Possible Mitigation: <i>(measures to mitigate likely negative effects and enhance positive effects)</i> Travel – a signalised junction between Langhorn Drive and the A316 would be required to mitigate the problems of increased car/coach</p>							

travel. Need to take account of adjacent development proposals and cumulative impacts on local area.

Conclusions: compare the different options

Option B is likely to be more sustainable than Option C as additional residential development would have impacts on the strategic road network and could lead to over-development of the site, subject to the level of development.

Proposal Site: Central Depot, Twickenham							
Option A: Retain status quo							
SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		
1. Waste							Neutral
2. Pollution & soil	-		-	-	-	-	Potential emissions of pollutants from waste activities but this is a managed waste site
3. Travel							Neutral
4. Climate change mitigation	-		-	-	-	-	Unlikely to include energy efficiency measures
5. Climate change adaptation, flood risk & water							Neutral
6. Biodiversity							Neutral
7. Landscape & townscape							Neutral
8. Parks & open spaces							Neutral
9. Best use of land & sustainable construction	-		-	-	-		Could make better and more efficient use of land and buildings
10. Housing							Neutral
11. Health, well-being, secure communities							Neutral
12. Accessible local services							Neutral
13. Town centres							Neutral
14. Local economy							Neutral
15. Commercial development opportunities							Neutral

Summary of assessment: <i>(likely sustainability impact of the option)</i>							
Largely neutral, but not considered to make the most efficient use of land and potential emissions of pollutants impacting on air and soil quality.							
Possible Mitigation: <i>(measures to mitigate likely negative effects and enhance positive effects)</i>							
Not applicable.							
Proposal Site: Central Depot, Twickenham							
Option B: Continue use as Council Depot, open storage area and waste treatment, including part of the site for sports hall/leisure or other ancillary education facilities or limited residential, including affordable units or small business units							
SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		
1. Waste	+/-		+/-	+/-	+/-	+/-	Continued use as waste and recycling site will promote sustainable waste management; potential increase in waste stream due to additional sports hall/leisure, education or residential or business use
2. Pollution & soil	+		+	+	+	+	Potential to improve soil quality through improvements to existing Council depot facilities and opportunities to reduce pollutants impacting on air quality.
3. Travel	-		-	-			Potential increase in traffic due to additional use on part of site for sports hall/leisure, education, residential or business
4. Climate change mitigation	+		+	+			Potential to incorporate zero- & low-carbon and renewable energy technologies and more energy efficient buildings
5. Climate change adaptation, flood risk & water	+		+	+			Potential for climate change adaptation measures, such as a green roof on the sports hall and business units
6. Biodiversity							Neutral but need to take account of adjacent OSNI designation and the river
7. Landscape & townscape	?		?				Potential for improvements to local character and environmental improvements on the site. New buildings could screen depot from the Craneford Fields.
8. Parks & open spaces	+		+	+	+	+	Extension of Public Open Space along the Duke of Northumberland River
9. Best use of land & sustainable construction	+		+	+			Proposal is likely to make better use of previously developed land and buildings, including sustainable design and construction techniques
10. Housing	+/?		+/?				Neutral; some possibility for limited residential if the sports hall/leisure use is not coming forward
11. Health, well-being, secure communities	+		+				Securing a sports club/leisure on the site could have positive impacts and public benefits

12. Accessible local services	+		+	+	+		A sports hall/leisure use would provide sport and recreation opportunities and business units would provide jobs and possible services.
13. Town centres							Neutral
14. Local economy	+		+				Potential provision of new jobs as part of the sports hall/leisure use, 'green jobs' in relation to the waste treatment and new small business units for firms
15. Commercial development opportunities	+		+				Possible new sports development, ancillary education and business development

Summary of assessment: *(likely sustainability impact of the option)*

Overall positive impacts; would make better use of previously developed land through improvements, intensification and rationalisation of existing site. Positive impacts in relation to health and well-being of the local community and provision of a facility for sport and recreation; potentially some scope for provision of a limited number of new homes and /or small business units if the sports/leisure use is not coming forward. Positive impacts as a result of extending the Public Open Space along the river. There would however be some impacts on local transport provision and traffic, which would require mitigation.

Possible Mitigation: *(measures to mitigate likely negative effects and enhance positive effects)*

Travel – a signalised junction between Langhorn Drive and the A316 would be required to mitigate the problems of increased travel in conjunction with potential development of this and adjacent sites.

Need to take account of adjacent development proposals and cumulative impacts on local area.

Intensified waste uses should be designed to be appropriately screened up to reduce air and noise pollution.

Conclusions: compare the different options

Option B is considered to be more sustainable as it would make better use of the site by allowing for a new sports hall/leisure and other compatible ancillary education facilities and/or affordable units or small business units whilst at the same time safeguarding and intensifying an important depot/storage area and waste management/recycling centre.

Proposal Site: Richmond College, Twickenham

Option A: Retain status quo

SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		
1. Waste							Neutral
2. Pollution & soil							Neutral
3. Travel							Neutral
4. Climate change mitigation	-		-	-	-		Existing buildings are unlikely to be energy efficient and thus contribute to carbon dioxide emissions
5. Climate change adaptation, flood							Neutral

risk & water							
6. Biodiversity							Neutral
7. Landscape & townscape							Neutral
8. Parks & open spaces							Neutral
9. Best use of land & sustainable construction	-		-	-	-		Could make better and more efficient use of land and buildings
10. Housing							Neutral
11. Health, well-being, secure communities							Neutral
12. Accessible local services							Neutral
13. Town centres							Neutral
14. Local economy							Neutral
15. Commercial development opportunities							Neutral
Summary of assessment: <i>(likely sustainability impact of the option)</i>							
Largely neutral, but not considered to make the most efficient use of land; existing buildings are not considered to be energy efficient and should be improved to reduce carbon dioxide emissions.							
Possible Mitigation: <i>(measures to mitigate likely negative effects and enhance positive effects)</i>							
Not applicable.							
Proposal Site: Richmond College, Twickenham							
Option B: Redevelopment to provide a new college, secondary school, special school, offices, residential including some affordable and open space.							
SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		
1. Waste	-		-	-	-	-	Additional and intensified uses would increase the waste stream.
2. Pollution & soil	?		?				Uncertain but there might be a loss of soil quantity and quality due to more development on the site
3. Travel	--		--	--	--	--	Potentially significant increase of traffic due to many additional new uses, particularly office residential and educational uses; poor PTAL
4. Climate change mitigation	+		+	+			Potential to incorporate zero-/low carbon and renewable energy technologies
5. Climate change	+		+	+			Potential to rebuild facilities with climate change

adaptation, flood risk & water							adaptation measures; potential for green roofs
6. Biodiversity							Neutral; but need to take account of adjacent OSNI
7. Landscape & townscape	?		?				Potential for improved buildings that enhance and make a positive contribution to the local character, but this will depend on the overall development/design and intensification on this site
8. Parks & open spaces	--		--	--	--	--	Loss of the playing field / open space to the north of the site
9. Best use of land & sustainable construction	+		+				The proposal is likely to include sustainable design and construction techniques
10. Housing	+		+	+			Opportunities for new homes
11. Health, well-being, secure communities	-		-	-	-	-	Loss of a playing field and a sports club on this site could potentially have a negative impact
12. Accessible local services	-/+		-/+	-/+	-/+	-/+	Loss of leisure, sport and recreation opportunities, but it will provide a new and improved college, secondary school, special school including access to employment
13. Town centres							Neutral
14. Local economy	++		++	++	++	++	Provision of new HQ office building would make a very positive contribution to the local economy by providing new jobs; provision of jobs as part of the educational uses on the site
15. Commercial development opportunities	+		+	+	+	+	Proposal would provide land for commercial development, although not in a town centre location, but will increase training and skilled employment

Summary of assessment: *(likely sustainability impact of the option)*

Overall, there are many positive as well as negative impacts. Provision of modern HQ offices in a prominent location should boost the local economy and provide jobs. Improvements to the educational facilities are considered positive as they increase the quality, range and accessibility of training, employment and education opportunities. There will also be some opportunity for housing. However, the loss of the playing field to the north is considered to have a negative impact depending on whether there are appropriate alternative provision or other arrangements to upgrade nearby space. Transport/travel impacts could be detrimental to the local/strategic network unless mitigated.

Possible Mitigation: *(measures to mitigate likely negative effects and enhance positive effects)*

Travel – access to the trunk and local road network needs to be addressed to mitigate the problems of increased travel in conjunction with the intensification and additional development on this site.

Open space – Some open areas should be provided in the new scheme as well as the opportunity taken to upgrade nearby playing areas. Need to take account of adjacent development proposals and cumulative impacts on local area.

Conclusions: compare the different options

Option B is considered to be more sustainable, particularly when considering the positive impacts on the local economy and the provision of much needed educational space to meet modern day needs. Although there would be a variety of uses these could be seen as

complementary to each other.

Proposal Site: West Twickenham Cluster							
Option A: Retain status quo							
SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		
1. Waste							Neutral
2. Pollution & soil							Neutral
3. Travel							Neutral
4. Climate change mitigation	-		-	-	-		Existing buildings are unlikely to be energy efficient and thus contribute to carbon dioxide emissions
5. Climate change adaptation, flood risk & water							Neutral
6. Biodiversity							Neutral
7. Landscape & townscape							Neutral
8. Parks & open spaces							Neutral
9. Best use of land & sustainable construction	-		-	-	-		Could make better and more efficient use of land and buildings
10. Housing							Neutral
11. Health, well-being, secure communities							Neutral
12. Accessible local services							Neutral
13. Town centres							Neutral
14. Local economy							Neutral
15. Commercial development opportunities							Neutral
Summary of assessment: <i>(likely sustainability impact of the option)</i>							
Largely neutral, but not considered to make the most efficient use of land as same parts are vacant; existing buildings are not considered to be energy efficient and should be improved to reduce carbon dioxide emissions.							
Possible Mitigation: <i>(measures to mitigate likely negative effects and enhance positive effects)</i>							

Not applicable.							
Proposal Site: West Twickenham Cluster							
Option B: Mixed residential, start up and small scale hybrid business space and/or primary school. Proposed designation as Key Employment Site for part of the site.							
SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		
1. Waste	-		-	-	-	-	Additional and intensified uses would increase the waste stream.
2. Pollution & soil	?		?				Uncertain but there might be a improvement in soil quality due to remediation on the site
3. Travel	+/-		+/-	+/-			Reduction in use of larger lorries due to relocation of Greggs bakery but possible increase in smaller car/van traffic due additional new school, residences and small office units
4. Climate change mitigation	+		+	+			Potential to incorporate zero-/low carbon and renewable energy technologies
5. Climate change adaptation, flood risk & water	+		+	+			Potential to rebuild facilities with climate change adaptation measures; potential for green roofs
6. Biodiversity							Neutral;
7. Landscape & townscape	?		?				Potential for improved buildings that enhance and make a positive contribution to the local character, but this will depend on the overall development/design and intensification on this site
8. Parks & open spaces							Neutral but should take account of adjacent MOL and POS
9. Best use of land & sustainable construction	+		+				The proposal is likely to include sustainable design and construction techniques
10. Housing	+		+	+			Opportunities for new homes including affordable
11. Health, well-being, secure communities							Neutral
12. Accessible local services	+		+	+			Will provide new homes within 400 m of AMU and Town Centre and access to employment and or a new primary school.
13. Town centres	+		+			+	Established employment location on edge of the town centre and AMU. Agglomeration of small hybrid uses in the vicinity should help sustain creative industries innovation and future employment

14. Local economy	++		++	++	++	++	Provision of new small scale hybrid business space would make a very positive contribution to the local economy & provide new jobs;
15. Commercial development opportunities	+		+	+	+	+	Proposal would provide land for commercial development, although not in a town centre location, but will increase variety of types of employment
Summary of assessment: <i>(likely sustainability impact of the option)</i> This is an existing employment area with creative industries and a bakery. If the bakery relocates there will be land available for redevelopment for a variety of uses.							
Possible Mitigation: <i>(measures to mitigate likely negative effects and enhance positive effects)</i> Small units and carefully controlled parking and servicing could help reduce traffic impacts from new uses .							
Conclusions: compare the different options Option B is the most sustainable.							

Site to be designated as Key Employment Site: Heathlands Industrial Estate							
Option A: Do not designate this Site in the Site Allocations Plan and rely on existing adopted policies and the NPPF							
SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		
1. Waste							Neutral
2. Pollution & soil							Neutral
3. Travel							Neutral
4. Climate change mitigation							Neutral
5. Climate change adaptation, flood risk & water							Neutral
6. Biodiversity							Neutral
7. Landscape & townscape							Neutral
8. Parks & open spaces							Neutral
9. Best use of land & sustainable construction							Neutral
10. Housing							Neutral
11. Health, well-being, secure							Neutral

communities								
12. Accessible local services								Neutral
13. Town centres								Neutral
14. Local economy								Neutral
15. Commercial development opportunities								Neutral
Summary of assessment: <i>(likely sustainability impact of the option)</i>								
Neutral – not having a designation for this estate would mean the existing adopted policies and the NPPF apply, which have been subject to Sustainability Appraisal.								
Possible Mitigation: <i>(measures to mitigate likely negative effects and enhance positive effects)</i>								
Not applicable.								
Site to be designated as Key Employment Site: Heathlands Industrial Estate								
Option B: Designate within the Site Allocations Plan as Key Employment Site								
SA objectives	Geographic scale		Assessment / Length of effect			Cumulative		Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term			
1. Waste								Neutral
2. Pollution & soil								Neutral
3. Travel								Neutral
4. Climate change mitigation								Neutral
5. Climate change adaptation, flood risk & water								Neutral
6. Biodiversity								Neutral
7. Landscape & townscape								Neutral
8. Parks & open spaces								Neutral
9. Best use of land & sustainable construction								Neutral
10. Housing								Neutral
11. Health, well-being, secure communities								Neutral
12. Accessible local services								Neutral
13. Town centres	++		+	+	+		++	This industrial site contributes to the vitality and viability of

14. Local economy	++		+	+	+	+	Twickenham town centre and reinforces the centre's role. Provides much needed flexible business space in the town centre, contributes to the local economy by providing jobs and meets local business needs and demands for different types of employment space.
15. Commercial development opportunities	++		+	+	+	+	This is considered to be an industrial site that provides flexible space of suitable size in an appropriate location; it also provides employment and the potential for training opportunities
Summary of assessment: <i>(likely sustainability impact of the option)</i> Identifying and including this locally important industrial estate in the Site Allocations Plan will secure the long-term future of this employment site. It would retain a number of different business uses of a suitable size in an appropriate location with good parking provision in an area of the town centre that has been identified for industrial use.							
Possible Mitigation: <i>(measures to mitigate likely negative effects and enhance positive effects)</i> None required.							
Conclusions: compare the different options Option B is the most sustainable as it will retain business/industrial use in the town centre.							

Proposal Site: Mereway Day Centre, Twickenham							
Option A: Retain status quo							
SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		
1. Waste							Neutral
2. Pollution & soil							Neutral
3. Travel							Neutral
4. Climate change mitigation	-		-	-	-		Existing buildings are unlikely to be energy efficient
5. Climate change adaptation, flood risk & water							Neutral
6. Biodiversity							Neutral
7. Landscape & townscape							Neutral
8. Parks & open spaces							Neutral
9. Best use of land & sustainable	-		-	-	-		Could make much better and more efficient use of land and buildings, particularly as the site is vacant/partly

construction							derelict
10. Housing							Neutral
11. Health, well-being, secure communities	-		-				Partly vandalised
12. Accessible local services							Neutral
13. Town centres							Neutral
14. Local economy							Neutral
15. Commercial development opportunities							Neutral
Summary of assessment: <i>(likely sustainability impact of the option)</i>							
Largely neutral, but not considered to make the most efficient use of land, particularly as the site is derelict and partly vandalised.							
Possible Mitigation: <i>(measures to mitigate likely negative effects and enhance positive effects)</i>							
Not applicable.							
Proposal Site: Mereway Day Centre, Twickenham							
Option B: Residential including affordable							
SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		
1. Waste	-		-	-	-		Amount of waste would increase; operation of waste hierarchy should minimise/mitigate any potential negative impacts
2. Pollution & soil	+		+				Opportunity to improve soil quality as there maybe some potentially contaminated land
3. Travel	-		-	-	-	-	Depending on the development proposal, it may lead to an increase in traffic and congestion; Mereway Road is a residential cul-de-sac; poor PTAL; all the car parking would have to be provided on-site
4. Climate change mitigation	+		+	+			Opportunity to incorporate low- & zero carbon technologies and renewable energy; buildings should be more energy efficient
5. Climate change adaptation, flood risk & water	-		-				At medium probability of flooding; potentially more residents/users could be put at risk of flooding
6. Biodiversity							Neutral; adjacent to River Crane and Mereway Nature Park
7. Landscape & townscape	+		+	+	+	+	Redevelopment proposal could contribute to enhancement of local area, character and environmental quality
8. Parks & open							Neutral; adjacent to MOL and POS (Kneller Gardens,

spaces							Mereway Nature Park)
9. Best use of land & sustainable construction	+		+	+	+		Providing residential uses may be considered to make better use of existing vacant/derelict land; potential for incorporation of sustainable construction measures
10. Housing	++		++	++	++	++	Opportunity for provision of housing, including affordable
11. Health, well-being, secure communities	+		+				Replacing a vacant/derelict site that is partly vandalised with homes adds to the delivery of safer and more secure communities
12. Accessible local services	+		+				Good access to education facilities and within 400m of a local centre
13. Town centres							Neutral
14. Local economy							Neutral
15. Commercial development opportunities							Neutral

Summary of assessment: *(likely sustainability impact of the option)*

Whilst there may potentially be some negative impacts in relation to waste and transport, this site could provide much needed homes, including affordable units; it would replace a partly vacant/derelict site, thus making better use of previously developed land and contributing to the local character and largely residential area.

Possible Mitigation: *(measures to mitigate likely negative effects and enhance positive effects)*

Travel – ensure any redevelopment proposal would have no impacts on local parking provision. More activity and development on this site will inevitably generate more waste but this can be mitigated through the application of waste hierarchy and reuse of demolition waste. Flood risk – opportunities to achieve a net reduction in flood risk as part of the redevelopment of the site.

Conclusions: compare the different options

Option B is the most sustainable.

Proposal Site: Rugby Football Union, Twickenham

Option A: Retain status quo (rugby stadium, hotel, leisure centre, shops, conference suit, offices)

SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		
1. Waste							Neutral
2. Pollution & soil							Neutral; potentially contaminated land
3. Travel							Neutral; very poor PTAL, however close to bus routes
4. Climate change mitigation							Neutral
5. Climate change adaptation, flood							Neutral; flood zone 2

risk & water							
6. Biodiversity							Neutral
7. Landscape & townscape							Neutral
8. Parks & open spaces							Neutral; Public Open Space deficient; partly MOL
9. Best use of land & sustainable construction	-		-	-	-		Could make better and more efficient use of land and buildings; very large car park to the north of the site
10. Housing							Neutral
11. Health, well-being, secure communities							Neutral
12. Accessible local services							Neutral
13. Town centres							Neutral
14. Local economy							Neutral
15. Commercial development opportunities							Neutral
Summary of assessment: <i>(likely sustainability impact of the option)</i>							
Largely neutral, although it could make better use of land, particularly due to the large car park to the north.							
Possible Mitigation: <i>(measures to mitigate likely negative effects and enhance positive effects)</i>							
Not applicable							
Proposal Site: Rugby Football Union, Twickenham							
Option B: Continue to use as rugby sports ground, including leisure, mixed uses and residential							
SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		
1. Waste	-		-	-	-	-	Additional and intensified uses would increase the waste stream.
2. Pollution & soil	+/-		+/-			+/-	Potential opportunity to improve soil quality and water quality; but an intensified use may also lead to an increase in noise and light pollution; adjacent to Mogden sewerage treatment plant, which may cause odour issues on this site
3. Travel	--		--	--	--	--	Potentially significant increase of traffic due to increased use of leisure, mixed uses and housing
4. Climate change mitigation	+		+	+			Potential to incorporate zero-& low- carbon and renewable energy technologies
5. Climate change adaptation, flood	+/-		+/-	+/-		+/-	Potential to rebuild facilities with climate change adaptation measures; potential for green roofs and

risk & water							reduction in impermeable areas; need to avoid building in the floodplain
6. Biodiversity	?		?	?	?	?	Need to ensure the adjacent Duke of Northumberland River is protected and enhanced where possible
7. Landscape & townscape	?		?	?	?	?	Uncertain; will depend on detailed design
8. Parks & open spaces	?		?	?	?	?	A strip of land adjacent to river is MOL; any development needs to be outside of MOL; POS deficient
9. Best use of land & sustainable construction	+		+	+		+	Proposal is likely to make better use of previously developed land and buildings, including sustainable design and construction techniques, remediation of contaminated land
10. Housing	+		+	+			Opportunities for new homes, including affordable units
11. Health, well-being, secure communities							Neutral
12. Accessible local services							Neutral
13. Town centres	?		?			?	Uncertain how intensified uses on this site would impact upon Twickenham town centre
14. Local economy	+		+			+	Likely to contribute to the local economy and provision of new jobs
15. Commercial development opportunities	+		+				Possible new leisure development and mixed use

Summary of assessment: *(likely sustainability impact of the option)*

Overall positive impacts; would probably make better use of previously developed land, particularly on the large car park to the north. There would however be significant impacts on local transport provision and road network, particularly with intensified uses including new housing, which would require mitigation. Uncertain impacts in relation to biodiversity, landscape, townscape, and parks & open spaces – would depend on the detailed design of a scheme and how it would impact upon the river, MOL etc.

Possible Mitigation: *(measures to mitigate likely negative effects and enhance positive effects)*

Sufficient parking needs to be retained, particularly for coaches, to mitigate the problems of increased travel. Need to take account of cumulative impacts on local area, amenity and neighbouring properties if there is a large increase in uses on this site. Biodiversity – a buffer strip to along the Duke of Northumberland River should remain free from development and should be protected for biodiversity and allow for an upgrade of the riverside walk. POS deficient – site could include some new public open space and potential for improving connectivity between existing spaces. More activity and development on this site will inevitably generate more waste but this can be mitigated through the application of waste hierarchy and reuse of demolition waste.

Conclusions: compare the different options

Option B could potentially be seen as more sustainable as it makes better use of land and would provide some new, including affordable, homes; however, it also has some negatives and uncertain impacts.

Site to be designated as Key Employment Site: Mereway Road Industrial Estate, Twickenham							
Option A: Do not designate this Site in the Site Allocations Plan and rely on existing adopted policies and the NPPF							
SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		
1. Waste							Neutral
2. Pollution & soil							Neutral
3. Travel							Neutral
4. Climate change mitigation							Neutral
5. Climate change adaptation, flood risk & water							Neutral
6. Biodiversity							Neutral
7. Landscape & townscape							Neutral
8. Parks & open spaces							Neutral
9. Best use of land & sustainable construction							Neutral
10. Housing							Neutral
11. Health, well-being, secure communities							Neutral
12. Accessible local services							Neutral
13. Town centres							Neutral
14. Local economy							Neutral
15. Commercial development opportunities							Neutral
Summary of assessment: <i>(likely sustainability impact of the option)</i>							
Neutral – not having a designation for this estate would mean the existing adopted policies and the NPPF apply, which have been subject to Sustainability Appraisal							
Possible Mitigation: <i>(measures to mitigate likely negative effects and enhance positive effects)</i>							
Not applicable.							

Site to be designated as Key Employment Site: Mereway Road Industrial Estate, Twickenham							
Option B: Designate within the Site Allocations Plan as Key Employment Site							
SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		
1. Waste							Neutral
2. Pollution & soil							Neutral
3. Travel							Neutral
4. Climate change mitigation							Neutral
5. Climate change adaptation, flood risk & water							Neutral
6. Biodiversity							Neutral
7. Landscape & townscape							Neutral
8. Parks & open spaces							Neutral
9. Best use of land & sustainable construction							Neutral
10. Housing							Neutral
11. Health, well-being, secure communities							Neutral
12. Accessible local services							Neutral
13. Town centres							Neutral
14. Local economy	++		+	+	+	+	Provides much needed flexible business space in an existing industrial location; it contributes to the local economy by providing jobs and meets local business needs and demands for different types of employment space, e.g. brewery
15. Commercial development opportunities	++		+	+	+	+	Within a cluster of commercial uses; this is considered to be an industrial site that provides flexible space of suitable size in an appropriate location; it also provides employment and training opportunities
Summary of assessment: <i>(likely sustainability impact of the option)</i> Identifying and including this locally important industrial estate in the Site Allocations Plan will secure the long-term future of this employment site. It would retain a number of different business uses of a suitable size in an appropriate location with good parking provision in an area/cluster of light industrial and other employment uses.							

Possible Mitigation: *(measures to mitigate likely negative effects and enhance positive effects)*

None required.

Conclusions: compare the different options

Option B is the most sustainable as it will retain light industrial/business use.

Site to be designated as Key Employment Site: St George's Industrial Estate, Twickenham

Option A: Do not designate this Site in the Site Allocations Plan and rely on existing adopted policies and the NPPF

SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		
1. Waste							Neutral
2. Pollution & soil							Neutral
3. Travel							Neutral
4. Climate change mitigation							Neutral
5. Climate change adaptation, flood risk & water							Neutral
6. Biodiversity							Neutral
7. Landscape & townscape							Neutral
8. Parks & open spaces							Neutral
9. Best use of land & sustainable construction							Neutral
10. Housing							Neutral
11. Health, well-being, secure communities							Neutral
12. Accessible local services							Neutral
13. Town centres							Neutral
14. Local economy							Neutral
15. Commercial development opportunities							Neutral

Summary of assessment: *(likely sustainability impact of the option)*

Neutral – not having a policy/proposal site for this area would mean the existing adopted policies and the NPPF apply, which have been subject to Sustainability Appraisal							
Possible Mitigation: (measures to mitigate likely negative effects and enhance positive effects) Not applicable.							
Site to be designated as Key Employment Site: St George's Industrial Estate, Twickenham Option B: Designate within the Site Allocations Plan as Key Employment Site							
SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		
1. Waste							Neutral
2. Pollution & soil							Neutral
3. Travel							Neutral
4. Climate change mitigation							Neutral
5. Climate change adaptation, flood risk & water							Neutral
6. Biodiversity							Neutral
7. Landscape & townscape							Neutral
8. Parks & open spaces							Neutral
9. Best use of land & sustainable construction							Neutral
10. Housing							Neutral
11. Health, well-being, secure communities							Neutral
12. Accessible local services	+		+			+	Provides a health facility, employment and training for the local community.
13. Town centres	++		+	+	+	++	This mixed employment site contributes to the vitality and viability of the Twickenham Green Area of Mixed Use and reinforces this local centre's role.
14. Local economy	++		+	+	+	+	Provides much needed flexible business space in an existing industrial location; it contributes to the local economy by providing jobs and meets local business needs and demands for different types of employment space
15. Commercial development	++		+	+	+	+	Within a cluster of commercial uses; this is considered to be an industrial site that provides flexible space of suitable

opportunities							size in an appropriate location; it also provides employment and training opportunities
Summary of assessment: <i>(likely sustainability impact of the option)</i> Identifying and including this locally important industrial estate in the Site Allocations Plan will secure the long-term future of this employment site. It would retain a number of different business uses of a suitable size in an appropriate location with good access and parking provision in an area/cluster of light industrial and other employment uses within an important local centre.							
Possible Mitigation: <i>(measures to mitigate likely negative effects and enhance positive effects)</i> None required.							
Conclusions: compare the different options Option B is the most sustainable as it will retain mixed employment uses.							

Site to be designated as Key Employment Site: Swan Island works, Twickenham							
Option A: Do not include this Proposal Site in the Site Allocations Plan and rely on existing adopted policies and the NPPF							
SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		
1. Waste							Neutral
2. Pollution & soil							Neutral
3. Travel							Neutral
4. Climate change mitigation							Neutral
5. Climate change adaptation, flood risk & water							Neutral
6. Biodiversity							Neutral
7. Landscape & townscape							Neutral
8. Parks & open spaces							Neutral
9. Best use of land & sustainable construction							Neutral
10. Housing							Neutral
11. Health, well-being, secure communities							Neutral
12. Accessible local services							Neutral

13. Town centres							Neutral
14. Local economy							Neutral
15. Commercial development opportunities							Neutral
Summary of assessment: <i>(likely sustainability impact of the option)</i>							
Neutral – not having a policy/proposal site for this area would mean the existing adopted policies and the NPPF apply, which have been subject to Sustainability Appraisal							
Possible Mitigation: <i>(measures to mitigate likely negative effects and enhance positive effects)</i>							
Not applicable.							
Site to be designated as Key Employment Site: Swan Island works, Twickenham							
Option B: Designate within the Site Allocations Plan as Key Employment Site							
SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		
1. Waste							Neutral
2. Pollution & soil							Neutral
3. Travel							Neutral
4. Climate change mitigation							Neutral
5. Climate change adaptation, flood risk & water							Neutral; island is located within zone 3b functional floodplain – river-dependent works are considered to be appropriate in this location
6. Biodiversity							Neutral
7. Landscape & townscape							Neutral
8. Parks & open spaces							Neutral
9. Best use of land & sustainable construction							Neutral
10. Housing							Neutral
11. Health, well-being, secure communities							Neutral
12. Accessible local services	+		+			+	Provides retail, storage, employment and training for the local community.
13. Town centres							Neutral
14. Local economy	++		+	+	+	+	Provides much needed flexible business space in an existing industrial location; river-related industries that are dependent on the location by/adjacent to the river; it

							contributes to the local economy by providing jobs and meets local business needs and demands for different types of employment space
15. Commercial development opportunities	++		+	+	+	+	This is considered to be a locally significant industrial site that provides flexible space of suitable size in an appropriate location; it also provides employment and training opportunities; retail and garage units have road frontage
Summary of assessment: <i>(likely sustainability impact of the option)</i> Identifying and including this locally important industrial estate in the Site Allocations Plan will secure the long-term future of this employment site. It would retain a number of different business uses of a suitable size in an appropriate location, especially for the river-dependent and river-related uses.							
Possible Mitigation: <i>(measures to mitigate likely negative effects and enhance positive effects)</i> None required.							
Conclusions: compare the different options Option B is the most sustainable as it will retain river-related/-dependant industries, storage, light industrial and retail.							

Site to be designated as Key Employment Site: St Margarets Business Centre							
Option A: Do not designate Site in the Site Allocations Plan and rely on existing adopted policies and the NPPF							
SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		
1. Waste							Neutral
2. Pollution & soil							Neutral
3. Travel							Neutral
4. Climate change mitigation							Neutral
5. Climate change adaptation, flood risk & water							Neutral
6. Biodiversity							Neutral
7. Landscape & townscape							Neutral
8. Parks & open spaces							Neutral
9. Best use of land & sustainable construction							Neutral

10. Housing							Neutral
11. Health, well-being, secure communities							Neutral
12. Accessible local services							Neutral
13. Town centres							Neutral
14. Local economy							Neutral
15. Commercial development opportunities							Neutral
Summary of assessment: <i>(likely sustainability impact of the option)</i>							
Neutral – not having a designation for this business centre would mean the existing adopted policies and the NPPF apply, which have been subject to Sustainability Appraisal							
Possible Mitigation: <i>(measures to mitigate likely negative effects and enhance positive effects)</i>							
Not applicable.							
Site to be designated as Key Employment Site: St Margarets Business Centre							
Option B: Designate within the Site Allocations Plan as Key Employment Site							
SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		
1. Waste							Neutral
2. Pollution & soil							Neutral
3. Travel							Neutral
4. Climate change mitigation							Neutral
5. Climate change adaptation, flood risk & water							Neutral
6. Biodiversity							Neutral
7. Landscape & townscape							Neutral
8. Parks & open spaces							Neutral
9. Best use of land & sustainable construction							Neutral
10. Housing							Neutral
11. Health, well-being, secure communities							Neutral

12. Accessible local services	+		+			+	Provides employment and training for the community.
13. Town centres							Neutral
14. Local economy	++		+	+	+	+	Provides much needed flexible business space (B1, B2 and B8), contributes to the local economy by providing jobs and meets local business needs and demands for different types of employment space.
15. Commercial development opportunities	++		+	+	+	+	This is considered to be a business park that provides flexible space of suitable size in an appropriate location; it also provides employment and training opportunities
Summary of assessment: <i>(likely sustainability impact of the option)</i> Identifying and including this locally important business park in the Site Allocations Plan will secure the long-term future as an employment site. It would retain a number of different business uses of a suitable size in an appropriate location.							
Possible Mitigation: <i>(measures to mitigate likely negative effects and enhance positive effects)</i> None required.							
Conclusions: compare the different options Option B is the most sustainable as it will retain business/industrial use near to a local centre.							

Site to be designated as Key Employment Site: Waterside Business Centre							
Option A: Do not designate Site in the Site Allocations Plan and rely on existing adopted policies and the NPPF							
SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		
1. Waste							Neutral
2. Pollution & soil							Neutral
3. Travel							Neutral
4. Climate change mitigation							Neutral
5. Climate change adaptation, flood risk & water							Neutral
6. Biodiversity							Neutral
7. Landscape & townscape							Neutral
8. Parks & open spaces							Neutral
9. Best use of land & sustainable							Neutral

construction								
10. Housing								Neutral
11. Health, well-being, secure communities								Neutral
12. Accessible local services								Neutral
13. Town centres								Neutral
14. Local economy								Neutral
15. Commercial development opportunities								Neutral
Summary of assessment: <i>(likely sustainability impact of the option)</i>								
Neutral – not having a designation for this business centre would mean the existing adopted policies and the NPPF apply, which have been subject to Sustainability Appraisal								
Possible Mitigation: <i>(measures to mitigate likely negative effects and enhance positive effects)</i>								
None								
Site to be designated as Key Employment Site: Waterside Business Centre								
Option B: Designate within the Site Allocations Plan as Key Employment Site								
SA objectives	Geographic scale		Assessment / Length of effect			Cumulative		Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term			
1. Waste								Neutral
2. Pollution & soil								Neutral
3. Travel								Neutral
4. Climate change mitigation								Neutral
5. Climate change adaptation, flood risk & water								Neutral
6. Biodiversity								Neutral
7. Landscape & townscape								Neutral
8. Parks & open spaces								Neutral
9. Best use of land & sustainable construction								Neutral
10. Housing								Neutral
11. Health, well-being, secure								Neutral

communities							
12. Accessible local services							Neutral
13. Town centres							Neutral
14. Local economy	++		+	+	+	+	Provides much needed flexible business space: sign printers, shop-fitters, alarm installers, mini cab office and light industrial that contributes to the local economy by providing jobs and meets local business needs and demands for different types of employment space.
15. Commercial development opportunities	++		+	+	+	+	This is considered to be a business centre that provides flexible space of suitable size in an appropriate location; it also provides employment and training opportunities
Summary of assessment: <i>(likely sustainability impact of the option)</i> Light industrial and mixed use estate in a suitable location. Contributes to the local economy through the provision of low cost flexible workspace.							
Possible Mitigation: <i>(measures to mitigate likely negative effects and enhance positive effects)</i> none							
Conclusions: compare the different options Option B is the most sustainable.							

Site to be designated as Key Employment Site: Twickenham Film Studios and Arlington Works, St Margarets							
Option A: Do not designate this cluster of employment uses in the Site Allocations Plan and rely on existing adopted policies and the NPPF							
SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		
1. Waste							Neutral
2. Pollution & soil							Neutral
3. Travel							Neutral
4. Climate change mitigation							Neutral
5. Climate change adaptation, flood risk & water							Neutral
6. Biodiversity							Neutral
7. Landscape & townscape							Neutral
8. Parks & open spaces							Neutral

9. Best use of land & sustainable construction							Neutral
10. Housing							Neutral
11. Health, well-being, secure communities							Neutral
12. Accessible local services							Neutral
13. Town centres							Neutral
14. Local economy							Neutral
15. Commercial development opportunities							Neutral
Summary of assessment: <i>(likely sustainability impact of the option)</i> Neutral – not having a policy/proposal site for this area would mean the existing adopted policies and the NPPF apply, which have been subject to Sustainability Appraisal							
Possible Mitigation: <i>(measures to mitigate likely negative effects and enhance positive effects)</i> Not applicable.							
Site to be designated as Key Employment Site: Twickenham Film Studios and Arlington Works, St Margarets Option B: Designate within the Site Allocations Plan as Key Employment Site.							
SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		
1. Waste	+		+	+	+	+	Safeguarded waste-oil treatment site
2. Pollution & soil	?		?	?	?		Retaining the site in its existing use may not provide an opportunity to remediate potentially contaminated land
3. Travel							Neutral
4. Climate change mitigation							Neutral
5. Climate change adaptation, flood risk & water							Neutral
6. Biodiversity							Neutral
7. Landscape & townscape	+	+	+	+	+	+	Retaining historic film studios
8. Parks & open spaces							Neutral
9. Best use of land & sustainable construction							Neutral

10. Housing							Neutral
11. Health, well-being, secure communities							Neutral
12. Accessible local services	+		+			+	Provides employment and training for the local community.
13. Town centres	++		+	+	+	++	This mixed employment site contributes to the vitality and viability of the St Margarets Area of Mixed Use and reinforces this local centre's role.
14. Local economy	++		+	+	+	+	Provides much needed flexible business/industrial space in an existing industrial location; it contributes to the local economy by providing jobs and meets local business needs and demands for different types of employment space
15. Commercial development opportunities	++		+	+	+	+	Within a cluster of commercial uses; this is considered to be an industrial site that provides flexible space of suitable size in an appropriate location; it also provides employment and training opportunities. The film studio supports a number of other create industries.

Summary of assessment: *(likely sustainability impact of the option)*

Identifying and including this locally important cluster of special industries in the Site Allocations Plan will secure the long-term future of these employment sites. It would support and retain a number of different service and business uses of a suitable size in an appropriate location with good access in an area/cluster of creative and other employment uses, contributing to the vitality and viability of an important local centre.

Possible Mitigation: *(measures to mitigate likely negative effects and enhance positive effects)*

None required.

Conclusions: compare the different options

Option B is the most sustainable as it will retain a historical film studio, support creative industries, safeguard a waste site and help maintain a thriving local area of mixed use.

Proposal Site: Whitton Library

Option A: Retain status quo

SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		
1. Waste							Neutral
2. Pollution & soil							Neutral
3. Travel							Neutral

4. Climate change mitigation							Neutral
5. Climate change adaptation, flood risk & water	-		-	-	-		Existing building is unlikely to incorporate energy efficiency measures
6. Biodiversity							Neutral
7. Landscape & townscape							Neutral
8. Parks & open spaces							Neutral; POS deficient
9. Best use of land & sustainable construction	-		-				May not make best use of land and buildings
10. Housing							Neutral
11. Health, well-being, secure communities							Neutral
12. Accessible local services							Neutral
13. Town centres							Neutral
14. Local economy							Neutral
15. Commercial development opportunities							Neutral
Summary of assessment: <i>(likely sustainability impact of the option)</i>							
Overall, largely neutral, but may not make the most efficient use of land and existing buildings are unlikely to be energy efficient.							
Possible Mitigation: <i>(measures to mitigate likely negative effects and enhance positive effects)</i>							
Not applicable.							
Proposal Site: Whitton Library							
Option B: Residential, including affordable units, subject to reprovision of library and community uses within the vicinity							
SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		
1. Waste	-		-			-	More activity and intensified uses will inevitably generate more waste; but this can be mitigated through various measures such as applying the waste hierarchy
2. Pollution & soil							Neutral
3. Travel	-		-			-	Housing may increase demand for car parking and potentially a small increase in local traffic
4. Climate change mitigation	+		+	+			Opportunity to incorporate low- & zero carbon technologies and renewable energy; buildings should be

							more energy efficient
5. Climate change adaptation, flood risk & water	+		+				Opportunity to incorporate climate change adaptation measures, such as green roofs
6. Biodiversity							Neutral
7. Landscape & townscape	+		+	+	+	+	Opportunity to improve and enhance the local character and appearance of the town centre
8. Parks & open spaces	?		?				The area is public open space deficient; could include arrangements to improve access to an existing open space if appropriate
9. Best use of land & sustainable construction	+		+	+	+		Likely to optimise on the use of previously developed land and to incorporate sustainable design and construction practices
10. Housing	++		++			+	It will increase the number of homes, including affordable homes to meet local housing needs
11. Health, well-being, secure communities	+		+			+	This option is subject to reprovision of library and community use in a purpose built facility in the vicinity
12. Accessible local services	+		+			+	This location is considered to be an appropriate location for new homes as it has good access to local services
13. Town centres							Neutral; option does not include new town centre or retail uses but may increase footfall
14. Local economy							Neutral
15. Commercial development opportunities							Neutral
Summary of assessment: <i>(likely sustainability impact of the option)</i>							
Overall positive impacts, particularly provision of new homes including affordable units. Opportunity to improve appearance and local character of the town centre. As the proposal is in a POS deficient area, it could incorporate arrangements to improve access to a suitable open space, possibly in conjunction with the other nearby proposal sites (Iceland store and Telephone Exchange)							
Possible Mitigation: <i>(measures to mitigate likely negative effects and enhance positive effects)</i>							
More activity and development on this site will inevitably generate more waste but this can be mitigated through the application of waste hierarchy and reuse of demolition waste. Travel – ensure any redevelopment proposal would have no impacts on local parking provision and would not lead to increase in congestion/traffic.							
Conclusions: compare the different options							
Option B is considered to be the most sustainable.							

Proposal Site: Iceland store and rear, Whitton
Option A: Retain status quo

SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		
1. Waste							Neutral
2. Pollution & soil							Neutral
3. Travel							Neutral
4. Climate change mitigation							Neutral
5. Climate change adaptation, flood risk & water	-		-	-	-		Existing buildings are unlikely to incorporate energy efficiency measures
6. Biodiversity							Neutral
7. Landscape & townscape	-		-			-	Existing buildings are partly derelict
8. Parks & open spaces							Neutral; POS deficient area
9. Best use of land & sustainable construction	-		-				Unlikely to make best and efficient use of land and buildings
10. Housing							Neutral
11. Health, well-being, secure communities							Neutral
12. Accessible local services							Neutral
13. Town centres							Neutral
14. Local economy							Neutral
15. Commercial development opportunities							Neutral
Summary of assessment: <i>(likely sustainability impact of the option)</i> Overall, largely neutral, but does not make the most efficient use of land; existing buildings are partly derelict and unlikely to be energy efficient.							
Possible Mitigation: <i>(measures to mitigate likely negative effects and enhance positive effects)</i> Not applicable.							
Proposal Site: Iceland store and rear, Whitton Option B: Mixed town centre uses to include residential (including affordable), retail or services, new library							
SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		

1. Waste	-		-			-	More activity and intensified uses will inevitably generate more waste; but this can be mitigated through various measures such as applying the waste hierarchy
2. Pollution & soil							Neutral
3. Travel	-		-			-	Additional/intensified uses may increase demand for car parking and potentially an increase in local traffic
4. Climate change mitigation	+		+	+			Opportunity to incorporate low- & zero carbon technologies and renewable energy; buildings should be more energy efficient
5. Climate change adaptation, flood risk & water	+		+				Opportunity to incorporate climate change adaptation measures, such as green roofs
6. Biodiversity							Neutral
7. Landscape & townscape	+		+	+	+	+	Opportunity to improve and enhance the local character and appearance of the town centre and its high street; reflecting predominately 1930s style of high street
8. Parks & open spaces	?		?				The area is public open space deficient; could include arrangements to improve access to an existing open space if appropriate
9. Best use of land & sustainable construction	+		+	+	+		Likely to optimise on the use of previously developed land and to incorporate sustainable design and construction practices
10. Housing	++		++			+	Housing proposed on upper floors, not ground floor; it will increase the number of homes, including affordable homes to meet local housing needs
11. Health, well-being, secure communities							Neutral
12. Accessible local services	+		+			+	This option is likely to include a library and associated facilities, retail or services. It is considered to be an appropriate location for new homes on the upper floors as it has good access to local services by being located on the high street.
13. Town centres	++		++	+	+	+	Key shopping frontage and therefore should include retail on ground floor; retail, services and the library are likely to increase the vitality and viability of Whitton town centre
14. Local economy	+		+	+	+	+	Provides some jobs and opportunities for business development
15. Commercial development opportunities	+		+	+	+	+	Opportunity for retail service development in the town centre
Summary of assessment: (likely sustainability impact of the option)							

Overall largely positive impacts, but this option should include retail on the ground floor as it is located within a designated key shopping frontage. As the proposal is in a POS deficient area, it could incorporate some provision for a new public open space, possibly in conjunction with the other nearby proposal sites (Whitton Library and Telephone Exchange) or incorporate arrangements to improve access to a suitable open space.

Possible Mitigation: *(measures to mitigate likely negative effects and enhance positive effects)*

More activity and development on this site will inevitably generate more waste but this can be mitigated through the application of waste hierarchy and reuse of demolition waste. Travel – ensure any redevelopment proposal would have no impacts on local parking provision and would not lead to increase in congestion/traffic.

Conclusions: compare the different options

Option B is considered to be the most sustainable.

Proposal Site: Telephone Exchange, Whitton

Option A: Retain status quo

SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		
1. Waste							Neutral
2. Pollution & soil							Neutral
3. Travel							Neutral
4. Climate change mitigation	-		-	-	-		Existing buildings are unlikely to incorporate energy efficiency measures
5. Climate change adaptation, flood risk & water							Neutral
6. Biodiversity							Neutral
7. Landscape & townscape							Neutral
8. Parks & open spaces							Neutral; POS deficient
9. Best use of land & sustainable construction	?		?		-		May not be the best and most efficient use of land given this is in a town centre location
10. Housing							Neutral
11. Health, well-being, secure communities							Neutral
12. Accessible local services							Neutral

13. Town centres							Neutral
14. Local economy							Neutral
15. Commercial development opportunities							Neutral
Summary of assessment: <i>(likely sustainability impact of the option)</i> Largely neutral impacts; may not consist of the most energy efficient buildings and not be the most efficient use of land given that this is a quite large site in the town centre.							
Possible Mitigation: <i>(measures to mitigate likely negative effects and enhance positive effects)</i> No applicable.							
Proposal Site: Telephone Exchange, Whitton Option B: Redevelop for residential, including affordable units							
SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		
1. Waste	-		-	-	-		Amount of waste is likely to increase; operation of waste hierarchy should minimise/mitigate any potential negative impacts
2. Pollution & soil							Neutral
3. Travel	-/?		-/?	-/?	-/?	-/?	Depending on the development proposal, it may lead to an increase in traffic and congestion in the local area, but this could be mitigated by ensuring no off-street parking impacts
4. Climate change mitigation	+		+	+			Opportunity to incorporate low- & zero carbon technologies and renewable energy; buildings should be more energy efficient
5. Climate change adaptation, flood risk & water							Neutral
6. Biodiversity							Neutral
7. Landscape & townscape	+		+	+	+	+	Redevelopment proposal could contribute to enhancement of town centre by creating a more attractive building
8. Parks & open spaces	+		+	+	+	+	The area is public open space deficient; it could include some on-site amenity space and/or arrangements to improve access to an existing open space if appropriate
9. Best use of land & sustainable construction	+		+	+	+		Providing a mix of residential would maximise the potential of previously developed land; potential for incorporation of sustainable construction measures
10. Housing	+		+	+	+		Opportunity for providing new homes, including affordable units
11. Health, well-	+		+			+	Provision of housing would increase surveillance and

being, secure communities							overlooking and thus potentially contribute to a reduction in the fear of crime in this part of the town centre
12. Accessible local services	+		+	+		+	Access to a range of town centre facilities and services for new users of this site, although no provision of additional local services on this site
13. Town centres							Neutral; option does not include new town centre or retail uses but may increase footfall
14. Local economy							Neutral
15. Commercial development opportunities							Neutral
Summary of assessment: <i>(likely sustainability impact of the option)</i>							
Overall largely positive impacts through the provision of new, including affordable homes, and visual and environmental enhancements to the town centre. As the proposal is in a POS deficient area, it should incorporate some provision for a new public open space, possibly in conjunction with the other nearby proposal sites (Iceland store and Whitton Library) or improved access to existing public open space.							
Possible Mitigation: <i>(measures to mitigate likely negative effects and enhance positive effects)</i>							
More activity and development on this site will inevitably generate more waste but this can be mitigated through the application of waste hierarchy and reuse of demolition waste. Travel – ensure any redevelopment proposal would have no impacts on local parking provision and would not lead to increase in congestion/traffic.							
Conclusions: compare the different options							
Option B is considered to be the most sustainable.							

Proposal Site: Whitton Station, Whitton							
Option A: Retain status quo							
SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		
1. Waste							Neutral
2. Pollution & soil							Neutral
3. Travel							Neutral
4. Climate change mitigation							Neutral
5. Climate change adaptation, flood risk & water							Neutral
6. Biodiversity							Neutral
7. Landscape &							Neutral

townscape								
8. Parks & open spaces								Neutral; POS deficient
9. Best use of land & sustainable construction								Neutral
10. Housing								Neutral
11. Health, well-being, secure communities								Neutral
12. Accessible local services								Neutral
13. Town centres								Neutral
14. Local economy								Neutral
15. Commercial development opportunities								Neutral
Summary of assessment: <i>(likely sustainability impact of the option)</i> Largely neutral.								
Possible Mitigation: <i>(measures to mitigate likely negative effects and enhance positive effects)</i> Not applicable.								
Proposal Site: Whitton Station, Whitton Option B: Interchange improvements, including refurbishment to the station, café, kiosk, forecourt, platform extensions and accessibility improvements								
SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation	
	Local	Trans-boundary	Short-term	Medium-term	Long-term			
1. Waste							Neutral	
2. Pollution & soil							Neutral	
3. Travel	++	+	+	+	+	+	Improvements to public transport, accessibility and increased capacity is likely to encourage use of public transport and makes best use of existing transport infrastructure	
4. Climate change mitigation	++	+	+	+	+	+	Reduction in greenhouse gas and carbon dioxide emissions through improving public transport interchanges and network; more energy efficient buildings	
5. Climate change adaptation, flood risk & water							Neutral	
6. Biodiversity							Neutral	
7. Landscape &	+		+	+	+		Enhancements to the town centre and local character due	

townscape							to new station and forecourt design
8. Parks & open spaces							The area is public open space deficient; the development proposal could contribute to a new civic space or improved forecourt area in the town centre
9. Best use of land & sustainable construction	+		+	+	+		Optimises the existing infrastructure and incorporate sustainable construction practices
10. Housing							Neutral
11. Health, well-being, secure communities							Neutral
12. Accessible local services	+		+				Improved accessibility will be beneficial to all residents, including disabled access
13. Town centres	+		+			+	Improved and refurbished facilities should enhance the vitality and viability of the town centre
14. Local economy							Neutral
15. Commercial development opportunities	+		+				Option includes some small-scale commercial development opportunities, such as the kiosk
Summary of assessment: <i>(likely sustainability impact of the option)</i> Overall very positive impacts, particularly as the interchange improvements and enhancements to the station will contribute to encouraging public transport use, reducing carbon dioxide emissions, improved accessibility and vitality of the town centre.							
Possible Mitigation: <i>(measures to mitigate likely negative effects and enhance positive effects)</i> None.							
Conclusions: compare the different options Option B is considered to be the most sustainable.							

Proposal Site: Barn Elms, Barnes							
Option A: Retain status quo							
SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		
1. Waste							Neutral
2. Pollution & soil							Neutral
3. Travel							Neutral
4. Climate change mitigation							Neutral
5. Climate change							Neutral

adaptation, flood risk & water								
6. Biodiversity								Neutral
7. Landscape & townscape								Neutral
8. Parks & open spaces								Neutral
9. Best use of land & sustainable construction								Neutral
10. Housing								Neutral
11. Health, well-being, secure communities								Neutral
12. Accessible local services								Neutral
13. Town centres								Neutral
14. Local economy								Neutral
15. Commercial development opportunities								Neutral
Summary of assessment: <i>(likely sustainability impact of the option)</i> Largely neutral.								
Possible Mitigation: <i>(measures to mitigate likely negative effects and enhance positive effects)</i> Not applicable.								
Proposal Site: Barn Elms, Barnes Option B: Retain and upgrade sports use and create an indoor sports hall								
SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation	
	Local	Trans-boundary	Short-term	Medium-term	Long-term			
1. Waste							Neutral	
2. Pollution & soil							Neutral	
3. Travel	-		-	-	-	-	Increased and intensified uses on this site will inevitably be more trip-generating; could be mitigated through travel plans, better public transport connections etc.	
4. Climate change mitigation							Neutral; opportunity to incorporate green energy technologies	
5. Climate change adaptation, flood risk & water	-/+		-/+	-/+	-/+	-/+	In flood zone 3a; any loss in flood storage would have to be compensated; development should not increase flood risk to others; potential for climate change adaptation measures, such as green roofs	

6. Biodiversity	-	-	-	-	-	-	Partly OSNI, adjacent to River Thames; SSSI (Wetland Centre) to the north; Barnes Common to the south (OSNI); increased use, particularly any floodlighting proposals are likely to impact on the biodiversity, including bats
7. Landscape & townscape	-/+	-/+	-/+	-/+	-/+	-/+	Designated MOL, POS, River Thames Policy Area – an additional sports centre on this site could potentially impact upon the openness and character of this important local area, depending on scale, design and siting;
8. Parks & open spaces	-	-	-	-	-	-	Designated MOL, POS, River Thames Policy Area – an additional sports centre on this site is likely to impact upon the openness and character of designated MOL; could potentially lead to loss or degradation of designated MOL depending on scale, design and siting
9. Best use of land & sustainable construction	?		?			?	Rationalisation of existing uses could be considered as making better use of previously developed land; however, there is a presumption against inappropriate development in designated MOL
10. Housing							Neutral
11. Health, well-being, secure communities	+	+	+	+	+	+	Provides opportunities for residents to pursue a healthy and active life style
12. Accessible local services	+	+	+	+	+	+	Provides opportunities for local people to access sport and recreation facilities
13. Town centres							Neutral
14. Local economy							Neutral
15. Commercial development opportunities							Neutral

Summary of assessment: *(likely sustainability impact of the option)*

Positive and negative impacts. The sustainability of this option would largely depend on the location of the indoor sports hall and the intensification of uses on the site. This is a very sensitive site, with lots of designations for open spaces and biodiversity. Any new indoor sports hall would need to be very carefully designed, sited and fully mitigated.

Possible Mitigation: *(measures to mitigate likely negative effects and enhance positive effects)*

Travel – alternative means to car travel should be encouraged; may need to look at proposals to integrate it better with local public transport provision. Biodiversity – any floodlighting must be take account of impacts and the proposal should not be harmful but enhance the biodiversity. Rationalisation of existing uses on this site should be designed to have minimum light pollution and to avoid disturbance to wildlife. Open spaces / MOL – the new sports hall should be located within the part of the site not designated as MOL and designed so as not to detract from the openness and character of MOL. Additional landscaping and tree planting should enhance the parkland landscape and minimise any visual impact of the new sports hall. Flood risk – rationalisation of existing uses and new sports hall have to be designed taking flood risk into account.

Conclusions: compare the different options

Option B potentially has positive and negative impacts, depending on the specific design, siting and landscaping of any detailed proposals,

see comments on mitigation above.

Proposal Site: Barnes Hospital, Barnes							
Option A: Retain status quo							
SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		
1. Waste							Neutral
2. Pollution & soil	-		-				Potentially contaminated land
3. Travel							Neutral; existing access constraints
4. Climate change mitigation	-		-				Existing buildings are unlikely to be very energy efficient.
5. Climate change adaptation, flood risk & water							Neutral
6. Biodiversity							Neutral
7. Landscape & townscape							Neutral; 8 existing BTMs on site
8. Parks & open spaces							Neutral; TPOs on site
9. Best use of land & sustainable construction							Neutral; currently still operational; potentially contaminated land
10. Housing							Neutral
11. Health, well-being, secure communities	+		+			+	Provides health facilities
12. Accessible local services	+		+			+	Provides accessible local health services / facilities
13. Town centres							Neutral
14. Local economy							Neutral
15. Commercial development opportunities							Neutral
Summary of assessment: <i>(likely sustainability impact of the option)</i>							
Largely neutral, some potentially contaminated land and unlikely to include energy efficient buildings. Positive impacts as it provides facilities for older people with physical health needs, and mental health patients.							
Possible Mitigation: <i>(measures to mitigate likely negative effects and enhance positive effects)</i>							

Not applicable.							
Proposal Site: Barnes Hospital, Barnes							
Option B: Subject to site being declared surplus, mixed use development with extra-care housing, community hub and potentially enabling residential.							
SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		
1. Waste	-		-	-	-		Amount of waste is likely to increase; operation of waste hierarchy should minimise/mitigate any potential negative impacts
2. Pollution & soil	+		+				Potential to improve soil quality by remediating potentially contaminated land
3. Travel	-/?		-/?	-/?	-/?	-/?	Depending on the development proposal and given the existing access constraints, it may lead to an increase in traffic and congestion in the local area, which would need to be mitigated
4. Climate change mitigation	+		+	+			Opportunity to incorporate low- & zero carbon technologies and renewable energy; buildings should be more energy efficient
5. Climate change adaptation, flood risk & water	+		+				Potential to include climate change adaptation measures, such as green roofs
6. Biodiversity	?		?				Potential impacts on Mortlake Cemetery which is designated OSNI
7. Landscape & townscape	?		?				Redevelopment of this site could impact upon existing BTMs and adjacent Conservation Area
8. Parks & open spaces							Neutral; adjacent Mortlake Cemetery is designated OOLTI
9. Best use of land & sustainable construction	+		+	+	+		Providing a mix of residential uses would maximise the potential of previously developed land if the site is declared surplus to requirements; potential for incorporation of sustainable construction measures
10. Housing	++		++	+	+	++	Opportunity for providing new homes, including affordable units
11. Health, well-being, secure communities	-		-			-	Would lead to a loss of a health facility unless service is re-provided elsewhere
12. Accessible local services	-/+++		-/+++	-/+++		-/+	Would lead to a loss of a health facility which could be considered an essential service/community facility unless service is re-provided elsewhere; extra-care housing and community hub would be considered positive

13. Town centres							Neutral
14. Local economy							Neutral
15. Commercial development opportunities							Neutral
Summary of assessment: <i>(likely sustainability impact of the option)</i> Largely positive, provided that there will be some new community use on the site and that there won't be a gap in health service provision. Provision of extra-care housing may be considered an appropriate replacement for a hospital for older people. Impacts on biodiversity, landscape and the adjacent Mortlake Cemetery will depend on the detailed design for the redevelopment for this site.							
Possible Mitigation: <i>(measures to mitigate likely negative effects and enhance positive effects)</i> Redevelopment proposal would need to ensure that BTMs, boundary wall and existing character of the site are preserved and enhanced; important trees need to be retained and protected; impacts on adjacent OSNI need to be minimised. Minimisation of waste through implementation of waste hierarchy.							
Proposal Site: Barnes Hospital, Barnes Option C: Subject to site being declared surplus, redevelop for educational use and housing, including affordable homes.							
SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		
1. Waste	-		-	-	-		Amount of waste is likely to increase; operation of waste hierarchy should minimise/mitigate any potential negative impacts
2. Pollution & soil	+		+				Potential to improve soil quality by remediating potentially contaminated land
3. Travel	-		-	-	-	-	Depending on the development proposal and given the existing access constraints; particularly education uses are likely to lead to an increase in traffic and congestion in the local area, which would need to be mitigated
4. Climate change mitigation	+		+	+			Opportunity to incorporate low- & zero carbon technologies and renewable energy; buildings should be more energy efficient
5. Climate change adaptation, flood risk & water	+		+				Potential to include climate change adaptation measures, such as green roofs
6. Biodiversity	?/-		?/-			-	Potential impacts on Mortlake Cemetery which is designated OSNI; outdoor educational uses such as play areas are likely to create more disturbance to wildlife
7. Landscape & townscape	?		?				Redevelopment of this site could impact upon existing BTMs and adjacent Conservation Area
8. Parks & open spaces							Neutral; adjacent Mortlake Cemetery is designated OOLTI
9. Best use of land	+		+	+	+		Providing a mix of educational and residential uses would

& sustainable construction							maximise the potential of previously developed land if the site is declared surplus to requirements; potential for incorporation of sustainable construction measures
10. Housing	+		+	+	+	+	Opportunity for providing new homes, including affordable units; number of units would depend on size of new school
11. Health, well-being, secure communities	-		-			-	Would lead to a loss of a health facility; however, the usage of the site has declined over recent years and it will depend on how services are re-provided.
12. Accessible local services	-/++		-/++	-/++		-/+	Would lead to a loss of a health facility which could be considered an essential service/community facility; however, the usage of the site has declined over recent years and it will depend on how services are re-provided. A school would be considered positive,
13. Town centres							Neutral
14. Local economy							Neutral
15. Commercial development opportunities							Neutral
Summary of assessment: <i>(likely sustainability impact of the option)</i>							
Largely positive, provided there won't be a gap in health service provision. A school on this site could be considered positive, but given the poor accessibility of this site, car-borne travel would need to be minimised and mitigated. Impacts on biodiversity, landscape and the adjacent Mortlake Cemetery will depend on the detailed design of the redevelopment for this site.							
Possible Mitigation: <i>(measures to mitigate likely negative effects and enhance positive effects)</i>							
Redevelopment proposal would need to ensure that BTMs, boundary wall and existing character of the site are preserved and enhanced; important trees need to be retained and protected; impacts on adjacent OSNI need to be minimised. Minimisation of waste through implementation of waste hierarchy.							
Conclusions: compare the different options							
Option B might be considered slightly more sustainable as it is unlikely to generate as much traffic as the educational use. In addition, replacing a health facility for older people with extra-care housing might be considered more appropriate in this quiet/sensitive location.							

Site to be designated as Key Employment Site: Glenthams Road, Barnes							
Option A: Do not include within Site Allocations Plan and rely on existing adopted policies and the NPPF							
SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		
1. Waste							Neutral
2. Pollution & soil							Neutral
3. Travel							Neutral

4. Climate change mitigation							Neutral
5. Climate change adaptation, flood risk & water							Neutral
6. Biodiversity							Neutral
7. Landscape & townscape							Neutral
8. Parks & open spaces							Neutral
9. Best use of land & sustainable construction							Neutral
10. Housing							Neutral
11. Health, well-being, secure communities							Neutral
12. Accessible local services							Neutral
13. Town centres							Neutral
14. Local economy							Neutral
15. Commercial development opportunities							Neutral

Summary of assessment: *(likely sustainability impact of the option)*

Neutral – not having a designation for this area would mean the existing adopted policies and the NPPF apply, which have been subject to Sustainability Appraisal

Possible Mitigation: *(measures to mitigate likely negative effects and enhance positive effects)*

Not applicable.

Site to be designated as Key Employment Site: Glenthams Road, Barnes

Option B: Include within Site Allocations Plan to retain mixed office, studio and commercial spaces

SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		
1. Waste							Neutral
2. Pollution & soil							Neutral
3. Travel							Neutral
4. Climate change mitigation							Neutral
5. Climate change							Neutral

adaptation, flood risk & water							
6. Biodiversity							Neutral
7. Landscape & townscape	+		+			+	Historic works and factory buildings that contribute positively to the character and setting of the Conservation Area
8. Parks & open spaces							Neutral
9. Best use of land & sustainable construction							Neutral
10. Housing							Neutral
11. Health, well-being, secure communities							Neutral
12. Accessible local services	+		+			+	Provides storage, employment and training for the local community
13. Town centres							Neutral
14. Local economy	++		+	+	+	+	Provides much needed flexible business space in several historic works and factory buildings; it contributes to the local economy by providing jobs and meets local business needs and demands for different types of employment space, in particular for creative industries
15. Commercial development opportunities	++		+	+	+	+	A create industry cluster that provides flexible business space and storage of suitable size in an appropriate location; it also provides employment and training opportunities

Summary of assessment: *(likely sustainability impact of the option)*

Identifying and including this locally important creative industry cluster in the Site Allocations Plan will secure its long-term future. It would retain a number of different business uses, creative industries and storage of suitable sizes in an appropriate location.

Possible Mitigation: *(measures to mitigate likely negative effects and enhance positive effects)*

None required.

Conclusions: compare the different options

Option B is the most sustainable as it will retain a creative industry cluster and jobs.

Proposal Site: Stag Brewery, Mortlake

Option A: Do not include within Site Allocations Plan and rely on existing adopted policies, NPPF and Site Brief

SA objectives	Geographic scale	Assessment / Length of effect		Commentary/explanation, uncertainties, proposed mitigation
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	Local	Trans-boundary	Short-term	Medium-term	Long-term	Cumulative	
1. Waste							Neutral
2. Pollution & soil							Neutral
3. Travel							Neutral
4. Climate change mitigation							Neutral
5. Climate change adaptation, flood risk & water							Neutral
6. Biodiversity							Neutral
7. Landscape & townscape							Neutral
8. Parks & open spaces							Neutral
9. Best use of land & sustainable construction							Neutral
10. Housing							Neutral
11. Health, well-being, secure communities							Neutral
12. Accessible local services							Neutral
13. Town centres							Neutral
14. Local economy							Neutral
15. Commercial development opportunities							Neutral
Summary of assessment: <i>(likely sustainability impact of the option)</i>							
Neutral – not having a policy/proposal for this site would mean the existing adopted policies and the NPPF apply, which have been subject to Sustainability Appraisal							
Possible Mitigation: <i>(measures to mitigate likely negative effects and enhance positive effects)</i>							
None							
Proposal Site: Stag Brewery , Mortlake							
Option B: Include within the Site Allocations Plan to redevelop for mixed uses to include residential including affordable units, open space, primary school, community use, business, sports and leisure uses; river-related uses; retention of playing fields; possible bus stopping/turning facility							
SA objectives	Geographic scale		Assessment / Length of effect				Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-	Short-	Medium-	Long-	Cumulative	

		boundary	term	term	term		
1. Waste	-		-	-	-	-	Additional and intensified uses would increase the waste stream.
2. Pollution & soil	?		?				Uncertain but there might be a improvement in soil quality due to remediation on the site
3. Travel	+/-		+/-	+/-			Reduction in use of larger lorries due to relocation of brewery but possible increase in smaller car/van traffic due additional new school, sports/ leisure, residences and small businesses. New bus facility could improve currently very poor public transport accessibility
4. Climate change mitigation	+		+	+			Potential to incorporate zero-/low carbon and renewable energy technologies including site wide heating network
5. Climate change adaptation, flood risk & water	+/-		+/-	+/-			Potential to rebuild facilities with climate change adaptation measures; potential for green roofs. Would increase number of people in a flood risk area, which needs to be mitigated.
6. Biodiversity	+		+	+			A number of TPOs on site. Opportunities to enhance biodiversity on site
7. Landscape & townscape	+		+	+			Potential for improved buildings including restoration of the BTM on site, that enhance and make a positive contribution to the local character and conservation area, but this will depend on the overall development/design and intensification on this site. To the north are grade II Listed Buildings whose setting should be enhanced.
8. Parks & open spaces	+		+	+		+	Should take account of adjacent River Thames designated MOL . Next to POS , Mortlake Green. Creates links between the river and the town and enlivens the riverside frontage. Creation of a new green/open space
9. Best use of land & sustainable construction	+		+				The proposal is likely to include sustainable design and construction techniques
10. Housing	++		++	+			Opportunities for many new homes including affordable
11. Health, well-being, secure communities	+		+	+		+	New leisure uses will contribute to healthier lifestyles. Creates a new village heart for Mortlake
12. Accessible local services	+		+	+			Will provide new homes within the Mortlake AMU and access to employment and a new primary school.
13. Town centres	+		+			+	Established employment location close to East Sheen centre and AMU . Reinforce the centre's role and add to vitality of the area.
14. Local economy	++		++	++	++	++	Provision of new small scale hybrid business space, river related uses, and scientific and technical business would make a very positive contribution to the local economy &

15. Commercial development opportunities	+		+	+	+	+	provide new jobs; Proposal would provide land for commercial development, not in a town centre location although close to Mortlake Station, and will increase the variety of types of employment
<p>Summary of assessment: <i>(likely sustainability impact of the option)</i> Overall positive impacts; would make good use of previously developed land. There would however be some impacts on local transport provision and the strategic road network as well as potential impacts, depending on the detailed design of the scheme, on biodiversity, landscape, townscape, and parks & open spaces, particularly with intensified uses including a variety of new uses, which would require mitigation, improvement and enhancements.</p> <p>Possible Mitigation: <i>(measures to mitigate likely negative effects and enhance positive effects)</i> Need to take account of cumulative impacts on local area, amenity and neighbouring properties due to a large increase in uses on this site. The new bus facility could contribute to improving the public transport accessibility. More activity and development on this site will inevitably generate more waste but this can be mitigated through the application of waste hierarchy and reuse of demolition waste. To mitigate flood risk a FRA and Flood Emergency Plan should be required to ensure that development and its users/residents are safe.</p> <p>Conclusions: compare the different options Option A would rely on the Site Brief. The Proposal and uses of Option B reflect the Site Brief. Option B (i.e. including this Proposal Site in the SA Plan) would be more sustainable as it would incorporate the uses and proposals of the non-statutory Site Brief in a statutory development plan document, thus ensuring that any subsequent proposal on this site makes a better use of land, creates a new village heart for Mortlake with affordable homes and a variety of workspaces, whilst respecting its character and history.</p>							

Proposal Site: High Street, Mortlake							
Option A: Retain status quo							
SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		
1. Waste							Neutral
2. Pollution & soil							Neutral
3. Travel							Neutral
4. Climate change mitigation							Neutral
5. Climate change adaptation, flood risk & water							Neutral
6. Biodiversity							Neutral
7. Landscape &							Neutral

townscape							
8. Parks & open spaces							Neutral
9. Best use of land & sustainable construction							Neutral
10. Housing							Neutral
11. Health, well-being, secure communities							Neutral
12. Accessible local services							Neutral
13. Town centres							Neutral
14. Local economy							Neutral
15. Commercial development opportunities							Neutral

Summary of assessment: *(likely sustainability impact of the option)*

Largely neutral.

Possible Mitigation: *(measures to mitigate likely negative effects and enhance positive effects)*

Not applicable.

Proposal Site: High Street, Mortlake

Option B: Environmental transport improvements by narrowing the road, creating an off-road cycle route and carrying out environmental improvements

SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		
1. Waste							Neutral
2. Pollution & soil							Neutral
3. Travel	+/-		+/-			+/-	Encouraging cycling may lead to fewer car-borne trips; narrowing the road may impact negatively on congestions and service provision
4. Climate change mitigation	+		+			+	Encouraging cycling would contribute to reducing carbon dioxide emissions
5. Climate change adaptation, flood risk & water							Neutral
6. Biodiversity							Neutral
7. Landscape & townscape	+		+				Environmental improvements would benefit the townscape
8. Parks & open							Neutral

spaces							
9. Best use of land & sustainable construction							Neutral
10. Housing							Neutral
11. Health, well-being, secure communities							Neutral
12. Accessible local services							Neutral
13. Town centres	+		+				Environmental improvements could benefit the local centre and increase footfall
14. Local economy							Neutral
15. Commercial development opportunities							Neutral
Summary of assessment: <i>(likely sustainability impact of the option)</i>							
Fairly positive; the impacts would depend on the details of the design and the likely environmental improvements proposed. A new off-road cycle path would be very positive; the cycle path needs to connect with the wider cycle network. Improvement works should not impact negatively on parking, traffic and service provision (e.g. access for lorries etc).							
Possible Mitigation: <i>(measures to mitigate likely negative effects and enhance positive effects)</i>							
A traffic impact study would be required at the time of implementation to ensure no unacceptable impact on congestion or accessibility and to understand the cumulative impacts.							
Conclusions: compare the different options							
Option B would be considered more sustainable, depending on the detailed design.							

Proposal Site: Mortlake Station, Mortlake							
Option A: Retain status quo							
SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		
1. Waste							Neutral
2. Pollution & soil							Neutral
3. Travel							Neutral
4. Climate change mitigation	-		-	-	-		Existing station building is unlikely to be energy efficient
5. Climate change adaptation, flood							Neutral

risk & water							
6. Biodiversity							Neutral
7. Landscape & townscape	-		-	-	-		Existing station building (BTM) detracts from the visual and environmental quality of the local area; the local area and station surroundings are not considered to enhance the setting of the BTM and Conservation Area
8. Parks & open spaces							Neutral
9. Best use of land & sustainable construction							Neutral
10. Housing							Neutral
11. Health, well-being, secure communities							Neutral
12. Accessible local services							Neutral
13. Town centres							Neutral
14. Local economy							Neutral
15. Commercial development opportunities							Neutral
Summary of assessment: <i>(likely sustainability impact of the option)</i> Largely neutral.							
Possible Mitigation: <i>(measures to mitigate likely negative effects and enhance positive effects)</i> Not applicable.							
Proposal Site: Mortlake Station, Mortlake Option B: Station and interchange improvements, platform extensions, accessibility and environmental improvements; including better links to bus stops and Stag Brewery site							
SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		
1. Waste							Neutral
2. Pollution & soil							Neutral
3. Travel	++	+	+	+	+	+	Improvements to public transport, accessibility and increased capacity is likely to encourage use of public transport and makes best use of existing transport infrastructure
4. Climate change mitigation	++	+	+	+	+	+	Reduction in greenhouse gas and carbon dioxide emissions through improving public transport interchanges, in particular with the local bus network;

							more energy efficient buildings
5. Climate change adaptation, flood risk & water							Neutral
6. Biodiversity							Neutral
7. Landscape & townscape	+		+	+	+		Enhancements to the character of the Conservation Area and the BTM, including their settings
8. Parks & open spaces							Opportunity for better linkages and improvements with the adjacent Mortlake Green (OOLTI, POS)
9. Best use of land & sustainable construction	+		+	+	+		Optimises the existing infrastructure
10. Housing							Neutral
11. Health, well-being, secure communities							Neutral
12. Accessible local services	+		+				Improved accessibility will be beneficial to all residents, including disabled access
13. Town centres	+		+			+	Improved and refurbished facilities should enhance the vitality and viability of the town centre
14. Local economy							Neutral
15. Commercial development opportunities							Neutral
Summary of assessment: <i>(likely sustainability impact of the option)</i> Overall very positive impacts, particularly as the interchange improvements and enhancements to the station will contribute to encouraging public transport use, reducing carbon dioxide emissions, improved accessibility and vitality of the town centre. There is also an opportunity to improve the BTM and the contribution to the Conservation Area and their settings.							
Possible Mitigation: <i>(measures to mitigate likely negative effects and enhance positive effects)</i> None.							
Conclusions: compare the different options Option B is considered to be the most sustainable.							

Proposal Site: Mortlake Bus Station, Mortlake							
Option A: Retain status quo							
SA objectives	Geographic scale		Assessment / Length of effect				Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term	Cumulative	

1. Waste							Neutral
2. Pollution & soil							Neutral
3. Travel							Neutral
4. Climate change mitigation							Neutral
5. Climate change adaptation, flood risk & water							Neutral
6. Biodiversity							Neutral
7. Landscape & townscape							Neutral
8. Parks & open spaces							Neutral
9. Best use of land & sustainable construction							Neutral
10. Housing							Neutral
11. Health, well-being, secure communities							Neutral
12. Accessible local services							Neutral
13. Town centres							Neutral
14. Local economy							Neutral
15. Commercial development opportunities							Neutral
Summary of assessment: <i>(likely sustainability impact of the option)</i> Neutral							
Possible Mitigation: <i>(measures to mitigate likely negative effects and enhance positive effects)</i> Not applicable							
Proposal Site: Mortlake Bus Station, Mortlake							
Option B: Subject to reprovision of bus facilities in the local area, redevelop for residential including affordable units							
SA objectives	Geographic scale		Assessment / Length of effect				Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term	Cumulative	
1. Waste	-		-	-	-		Amount of waste is likely to increase as a result of residential development; operation of waste hierarchy should minimise/mitigate any potential negative impacts
2. Pollution & soil	+		+				Potential to improve soil quality by remediating potentially

							contaminated land
3. Travel	-/?		-/?	-/?	-/?	-/?	Depending on the development proposal, it may lead to an increase in traffic and congestion in the local area, but this could be mitigated by ensuring no off-street parking impacts, travel plan etc.
4. Climate change mitigation							Neutral
5. Climate change adaptation, flood risk & water	-		-			-	Flood zone 3; although this is only a small site, this option would introduce more people at potential risk; detailed design could include flood risk mitigation measures
6. Biodiversity							Neutral
7. Landscape & townscape							Neutral
8. Parks & open spaces							Neutral
9. Best use of land & sustainable construction	+		+				Neutral; whilst residential development could be considered to make better use of land, bus facilities are essential community infrastructure and would otherwise be required somewhere in the vicinity; opportunity to remediate potentially contaminated land
10. Housing	+		+	+	+		Opportunity for providing new homes, including affordable units
11. Health, well-being, secure communities							Neutral
12. Accessible local services	-		-	-	-	-	Potential loss of a bus facility for the local residents which could impact on accessibility and mobility of public transport users; will depend on the location of the new bus facilities
13. Town centres							Neutral
14. Local economy							Neutral
15. Commercial development opportunities							Neutral
Summary of assessment: <i>(likely sustainability impact of the option)</i>							
Positive and negative impacts. The sustainability of this option would largely depend on the location of the replacement bus facilities and the number of new homes to be provided on this site.							
Possible Mitigation: <i>(measures to mitigate likely negative effects and enhance positive effects)</i>							
More activity and development on this site will inevitably generate more waste but this can be mitigated through the application of waste hierarchy and reuse of demolition waste. Travel – ensure any redevelopment proposal would have no impacts on local parking provision and would not lead to increase in congestion/traffic. Flood risk – new homes would require a flood risk assessment and flood emergency plan.							

Conclusions: compare the different options

Option B is considered to be more sustainable provided that the bus facility is re-provided in the nearby area.

Proposal Site: 172-176 and British Telecom, Upper Richmond Road West, East Sheen

Option A: Retain status quo

SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		
1. Waste							Neutral
2. Pollution & soil							Neutral
3. Travel							Neutral
4. Climate change mitigation	-		-	-	-		Existing buildings are unlikely to incorporate energy efficient measures
5. Climate change adaptation, flood risk & water							Neutral
6. Biodiversity							Neutral
7. Landscape & townscape							Neutral
8. Parks & open spaces							Neutral. POS deficient
9. Best use of land & sustainable construction	?		?	?	?		Telephone Exchange. May not be the most efficient use of land given it is partly within a town centre.
10. Housing							Neutral
11. Health, well-being, secure communities							Neutral
12. Accessible local services							Neutral
13. Town centres							Neutral
14. Local economy							Neutral
15. Commercial development opportunities							Neutral

Summary of assessment: *(likely sustainability impact of the option)*

Largely neutral. May not consist of most energy efficient buildings and may not be best use for a site situated in a town centre.

Possible Mitigation: *(measures to mitigate likely negative effects and enhance positive effects)*

None							
Proposal Site: 172-176 and British Telecom, Upper Richmond Road West, East Sheen							
Option B: Redevelopment for mixed uses to include residential, including affordable and employment uses.							
SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		
1. Waste	-		-	-	-		Amount of waste is likely to increase; operation of waste hierarchy should minimise/mitigate any potential negative impacts
2. Pollution & soil							Neutral
3. Travel	-/?		-/?	-/?	-/?	-/?	Depending on the development proposal, it may lead to an increase in traffic and congestion
4. Climate change mitigation	+		+	+			Opportunity to incorporate low- & zero carbon technologies and renewable energy; buildings should be more energy efficient
5. Climate change adaptation, flood risk & water							Neutral
6. Biodiversity							Neutral
7. Landscape & townscape	+		+	+	+	+	Redevelopment proposal could contribute to enhancement by creating a more attractive frontage
8. Parks & open spaces	?		?				The area is partly POS deficient . There would be an opportunity to include some form of open space
9. Best use of land & sustainable construction	++		++	++	++		Providing a mix of uses in a town centre location would maximise the potential of previously developed land; potential for incorporation of sustainable construction measures
10. Housing	+		+	+	+		Opportunity for some provision of homes, including affordable units
11. Health, well-being, secure communities							Neutral
12. Accessible local services	+		+	+		+	Access to a range of town centre facilities and services for new users of this site
13. Town centres	+		++	++	+		A mixed use scheme would add to the vitality and viability of the town centre
14. Local economy	+		++	++	+		Contribution to local economy including provision of jobs
15. Commercial development opportunities	+		+	+			Some opportunity to provide modern, flexible commercial units.
Summary of assessment: (likely sustainability impact of the option)							

This option would provide new homes, including affordable units and it should contribute to the enhancement of the local shopping area. Positive impacts have been identified in relation to its contribution to the local economy, business and commercial development opportunities.							
Possible Mitigation: <i>(measures to mitigate likely negative effects and enhance positive effects)</i> More activity and development on the site will inevitably generate more waste. This can be mitigated through the application of the waste hierarchy and reuse of construction and demolition waste							
Proposal Site: 172-176 and British Telecom, Upper Richmond Road West, East Sheen Option C: Redevelopment for a primary school							
SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		
1. Waste	-		-	-	-	-	Additional and intensified uses would increase the waste stream.
2. Pollution & soil							Neutral
3. Travel	-		-	-	-	-	Likely to impact on traffic due to school drop offs and pick ups.
4. Climate change mitigation	+		+	+			Potential to incorporate zero-/low carbon and renewable energy technologies
5. Climate change adaptation, flood risk & water	+		+	+			Potential to rebuild facilities with climate change adaptation measures; potential for green roofs
6. Biodiversity							Neutral;
7. Landscape & townscape	?		?				Potential for improved buildings that enhance and make a positive contribution to the local character, but this will depend on the overall development/design and intensification on this site
8. Parks & open spaces	?		?				The area is partly POS deficient . There may be an opportunity to include some open space as part of the school
9. Best use of land & sustainable construction	+		+				The proposal is likely to include sustainable design and construction techniques
10. Housing	-		-				Loss of opportunity for new homes
11. Health, well-being, secure communities							Neutral
12. Accessible local services	++		++	+	+	++	It will provide a new primary school in an accessible location
13. Town centres	-/?		-			-	Not a town centre use that supports vitality though may

							add to footfall.
14. Local economy	-		-	-	-	-	Loss of opportunity for new town centre and employment uses
15. Commercial development opportunities	-		-	-		-	Loss of commercial development opportunity for new town centre and employment uses
Summary of assessment: <i>(likely sustainability impact of the option)</i> Providing a new primary school in this accessible location would be positive for the provision of local education services. However, due to its town centre location alternative town centre uses could add more to the vitality of East Sheen. The negative impacts in relation to waste and transport would need to be mitigated.							
Possible Mitigation: <i>(measures to mitigate likely negative effects and enhance positive effects)</i> A school travel plan should be required to ensure less negative impact on the local road transport network. More activity and development on the site will inevitably generate more waste. This can be mitigated through the application of the waste hierarchy and reuse of construction and demolition waste.							
Conclusions: compare the different options Option B is the most sustainable. However the need for a new school may be considered a higher priority.							

Site to be designated as Key Employment Site: Tideway Yard							
Option A: Do not designate within Site Allocations Plan and rely on existing adopted policies and the NPPF							
SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		
1. Waste							Neutral
2. Pollution & soil							Neutral
3. Travel							Neutral
4. Climate change mitigation							Neutral
5. Climate change adaptation, flood risk & water							Neutral
6. Biodiversity							Neutral
7. Landscape & townscape							Neutral
8. Parks & open spaces							Neutral
9. Best use of land & sustainable							Neutral

construction								
10. Housing								Neutral
11. Health, well-being, secure communities								Neutral
12. Accessible local services								Neutral
13. Town centres								Neutral
14. Local economy								Neutral
15. Commercial development opportunities								Neutral
Summary of assessment: <i>(likely sustainability impact of the option)</i>								
Neutral – not having a policy/proposal site for this area would mean the existing adopted policies and the NPPF apply, which have been subject to Sustainability Appraisal								
Possible Mitigation: <i>(measures to mitigate likely negative effects and enhance positive effects)</i>								
Not applicable								
Site to be designated as Key Employment Site: Tideway Yard								
Option B: Designate within the Site Allocations Plan as Key Employment Site								
SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation	
	Local	Trans-boundary	Short-term	Medium-term	Long-term			
1. Waste								Neutral
2. Pollution & soil								Neutral
3. Travel								Neutral
4. Climate change mitigation								Neutral
5. Climate change adaptation, flood risk & water								Neutral. Flood Zone 3
6. Biodiversity								Neutral. River is OSNI
7. Landscape & townscape								Neutral. Buildings are BTMs in the Conservation Area.
8. Parks & open spaces								Neutral. Towpath is Public Open Space.
9. Best use of land & sustainable construction								Neutral
10. Housing								Neutral

11. Health, well-being, secure communities							Neutral
12. Accessible local services	+		+			+	The Old Power Station is partly used as a youth facility and partly for offices. Provides accessible local services, youth facilities and jobs for the community.
13. Town centres	++		+	+	+	++	This riverside employment site contributes to the vitality and viability of Mortlake High Street and White Hart Lane neighbourhood centre and reinforces the centre's role.
14. Local economy	++		+	+	+	+	Provides accessible, attractive, flexible business space, and meets local business needs and demands for different types of employment space.
15. Commercial development opportunities	++		+	+	+	+	This is considered to be a site that provides flexible space of suitable size in an appropriate location and it also provides employment and training opportunities for local residents.
Summary of assessment: <i>(likely sustainability impact of the option)</i>							
Identifying and including this estate in the Site Allocations Plan would retain a number of different business uses of a suitable size in an appropriate location with good parking provision. The cluster of commercial/office workspaces is in a pleasant riverside location, accessible by public transport and retention of the commercial uses would help the preservation of the character and appearance of the buildings in the Conservation Area. The site contributes to local facilities, services and economy and is close to the White Hart Lane and Mortlake AMUs.							
Possible Mitigation: <i>(measures to mitigate likely negative effects and enhance positive effects)</i>							
None required							
Conclusions: compare the different options							
Option B is the most sustainable.							

Proposal Site: HM Prison, Latchmere Lane							
Option A: Do not include in the Site Allocations Plan and rely on existing policies, NPPF and Site Brief.							
SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		
1. Waste							Neutral
2. Pollution & soil							Neutral
3. Travel							Neutral
4. Climate change mitigation							Neutral
5. Climate change adaptation, flood							Neutral

risk & water								
6. Biodiversity								Neutral
7. Landscape & townscape								Neutral
8. Parks & open spaces								Neutral
9. Best use of land & sustainable construction								Neutral
10. Housing								Neutral
11. Health, well-being, secure communities								Neutral
12. Accessible local services								Neutral
13. Town centres								Neutral
14. Local economy								Neutral
15. Commercial development opportunities								Neutral
Summary of assessment: <i>(likely sustainability impact of the option)</i> Neutral – not having a policy/proposal for this site would mean the existing adopted policies and the NPPF apply, which have been subject to Sustainability Appraisal								
Possible Mitigation: <i>(measures to mitigate likely negative effects and enhance positive effects)</i> None								
Proposal Site: HM Prison, Latchmere Lane Option B: comprehensive redevelopment: residential-led scheme including affordable, possibly community and/or educational use, and open space								
SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation	
	Local	Trans-boundary	Short-term	Medium-term	Long-term			
1. Waste	-		-	-	-	-	Additional and intensified uses would increase the waste stream.	
2. Pollution & soil							Neutral	
3. Travel	--		-	-	-	-	Potential increase in traffic due to intensified uses particularly the new school. Is currently very poor public transport accessibility	
4. Climate change mitigation	+		+	+			Potential to incorporate zero-/low carbon and renewable energy technologies including site wide heating network	
5. Climate change adaptation, flood	+		+	+			Potential to rebuild facilities with climate change adaptation measures; potential for green roofs	

risk & water							
6. Biodiversity	+		+	+			no. of TPOs on site, wood group area. Opportunities to enhance biodiversity on site
7. Landscape & townscape	+		+	+			Potential for improved building including enhancing the BTM on site. Should enhance and make a positive contribution to the local character and conservation area, but this will depend on the overall development/design and intensification on this site. .
8. Parks & open spaces	+		+				Provision of a new on site open space. Should take account of adjacent Ham Common and Richmond Park designated MOL, POS, & OSNI .
9. Best use of land & sustainable construction	+		+				The proposal is likely to include sustainable design and construction techniques
10. Housing	+		+	+			Opportunities for new homes including affordable
11. Health, well-being, secure communities							Neutral
12. Accessible local services	?						Possibly be some new community and /or educational use.
13. Town centres							Neutral
14. Local economy							Neutral
15. Commercial development opportunities							Neutral
<p>Summary of assessment: <i>(likely sustainability impact of the option)</i> Overall positive impacts. There would however be impacts on local transport provision and road network, particularly with intensified uses as it is in a very poor PTAL, which would require mitigation. New open spaces – would depend on the detailed design of a scheme and how it would impact upon the Conservation Area, POS, OSNI and MOL etc.</p>							
<p>Possible Mitigation: <i>(measures to mitigate likely negative effects and enhance positive effects)</i> Need to take account of cumulative impacts on local area, amenity and neighbouring properties due to a large increase in uses on this site.. More activity and development on this site will inevitably generate more waste but this can be mitigated through the application of waste hierarchy and reuse of demolition waste.</p>							
<p>Conclusions: compare the different options Option A would rely on the Site Brief. The Proposal and uses of Option B reflect the Site Brief. Option B (i.e. including this Proposal Site in the SA Plan) would be more sustainable as it would incorporate the uses and proposals of the non-statutory Site Brief in a statutory development plan document, thus ensuring that any subsequent proposal on this site provides for new homes, with possible community and/or educational use and open space.</p>							

Proposal Site: Ham Central Area

Richmond Council and Richmond Housing Partnership have been in discussion about the rejuvenation of Ham Close and the surrounding area. The Council is now considering a range of options from the refurbishment of existing buildings through to possible redevelopment. This may include changing the form and shape of the open space to bring about regeneration of the wider area.

As this Proposal Site is to be subject to a more detailed consultation exercise, the results of that consultation will be fed into this Plan. The detailed work on this site and the various options will be subject to a separate process.

Proposal Site: Inland Revenue, Kew**Option A: Retain status quo**

SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		
1. Waste							Neutral
2. Pollution & soil							Neutral
3. Travel							Neutral
4. Climate change mitigation							Neutral
5. Climate change adaptation, flood risk & water							Neutral
6. Biodiversity							Neutral
7. Landscape & townscape							Neutral
8. Parks & open spaces							Neutral
9. Best use of land & sustainable construction	-		-	-	-		Very inefficient use of land as it is already cleared for development
10. Housing							Neutral
11. Health, well-being, secure communities							Neutral
12. Accessible local services							Neutral
13. Town centres							Neutral
14. Local economy							Neutral

15. Commercial development opportunities							Neutral
Summary of assessment: <i>(likely sustainability impact of the option)</i>							
The site has already been cleared for redevelopment and therefore there are no existing uses that would be worthy of retention.							
Possible Mitigation: <i>(measures to mitigate likely negative effects and enhance positive effects)</i>							
Not applicable							
Proposal Site: Inland Revenue, Kew							
Option B: Mixed uses to include residential, including affordable units, employment, community or health uses							
SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		
1. Waste	-		-	-	-	-	New and intensified uses would increase the waste stream.
2. Pollution & soil	+		+				There might be an improvement in soil quality due to remediation on the site
3. Travel	-		-	-		-	Increase in traffic and transport due new residential, employment, community and/or health uses. Very poor PTAL
4. Climate change mitigation	+		+	+			Potential to incorporate zero-/low carbon and renewable energy technologies including site wide heating network
5. Climate change adaptation, flood risk & water	+/-		+/-	+/-			Potential to rebuild facilities with climate change adaptation measures; potential for green roofs. Would increase number of people in a flood risk area, which needs to be mitigated.
6. Biodiversity	+		+	+			Opportunities to enhance biodiversity on site.
7. Landscape & townscape	+		+				Potential to enhance and make a positive contribution to the local character, but this will depend on the overall development/design and intensification on this site.
8. Parks & open spaces							Neutral; should take account of adjacent River Thames as designated MOL and OSNI.
9. Best use of land & sustainable construction	++		++	++	++	+	Existing site is already cleared for development; providing a mixed use scheme would make much better and efficient use of land. The proposal is likely to include sustainable design and construction techniques.
10. Housing	+		+	+	+		Opportunities for new homes including affordable
11. Health, well-being, secure communities	?		?			?	The proposal may potentially include a new health use.
12. Accessible local services	+		+				Will provide some community or health uses.

13. Town centres							Neutral
14. Local economy	+		+	+	+	+	Provision of some land for employment use that could make a positive contribution to the local economy & provide new jobs.
15. Commercial development opportunities	+		+	+	+	+	Proposal would provide land for commercial development, although not in a town centre location, but will provide some employment.
Summary of assessment: <i>(likely sustainability impact of the option)</i> Overall positive impacts; would make better use of previously developed land. There would however be some impacts on local transport provision and strategic road network, particularly with a range of new uses, which would require mitigation. The detailed design of a scheme will affect how it impacts upon the river, MOL etc.							
Possible Mitigation: <i>(measures to mitigate likely negative effects and enhance positive effects)</i> Need to take account of cumulative impacts on local area, amenity and neighbouring properties due to an increase and new uses on this site. More activity and development on this site will inevitably generate more waste but this can be mitigated through the application of waste hierarchy and reuse of demolition waste. To mitigate flood risk a FRA and Flood Emergency Plan should be required to ensure that development and its users/residents are safe.							
Conclusions: compare the different options Option B would be more sustainable as it makes a better use of previously developed land and includes affordable homes, employment and community or health uses.							

Proposal Site: Kew Gardens car park							
Option A: Don't include as a Proposal Site within the Site Allocations Plan and rely on existing published plans, including Thames Landscape Strategy and Kew Garden's plans for the world heritage site							
SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		
1. Waste							Neutral
2. Pollution & soil							Neutral
3. Travel							Neutral
4. Climate change mitigation							Neutral
5. Climate change adaptation, flood risk & water							Neutral
6. Biodiversity							Neutral
7. Landscape & townscape							Neutral
8. Parks & open							Neutral

spaces								
9. Best use of land & sustainable construction								Neutral
10. Housing								Neutral
11. Health, well-being, secure communities								Neutral
12. Accessible local services								Neutral
13. Town centres								Neutral
14. Local economy								Neutral
15. Commercial development opportunities								Neutral
Summary of assessment: <i>(likely sustainability impact of the option)</i> Neutral – not having a policy/proposal site for this area would mean the existing adopted plans and the NPPF apply, which have been subject to Sustainability Appraisal or other environmental assessments								
Possible Mitigation: <i>(measures to mitigate likely negative effects and enhance positive effects)</i> Not applicable								
Proposal Site: Kew Gardens car park Option B: Include as a Proposal Site within the Site Allocations Plan with the proposal to relocate car park, restoration of existing parking area								
SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation	
	Local	Trans-boundary	Short-term	Medium-term	Long-term			
1. Waste							Neutral	
2. Pollution & soil							Neutral	
3. Travel							Neutral; same level of car parking provision, i.e. not increasing the numbers	
4. Climate change mitigation							Neutral	
5. Climate change adaptation, flood risk & water							Neutral	
6. Biodiversity							Neutral	
7. Landscape & townscape	+		+				Proposal would bring about landscape improvements as new car park would be more suitably located and existing car park shut and landscaped to fit in more appropriately with the environment	
8. Parks & open	+		+				Existing car park is designated POS and therefore this	

spaces							could provide an opportunity to enhance this open space
9. Best use of land & sustainable construction							Neutral
10. Housing							Neutral
11. Health, well-being, secure communities							Neutral
12. Accessible local services							Neutral
13. Town centres							Neutral
14. Local economy							Neutral
15. Commercial development opportunities							Neutral
Summary of assessment: <i>(likely sustainability impact of the option)</i>							
Largely neutral impacts as this proposal relates to the reprovision of the car parking for Kew Gardens; however the new siting is likely to be more convenient and would result in an improved landscape							
Possible Mitigation: <i>(measures to mitigate likely negative effects and enhance positive effects)</i>							
Not applicable.							
Conclusions: compare the different options							
The relocation of the car parking is a Kew Gardens proposal. Option B (i.e. including this Proposal Site in the SA Plan) would be more sustainable as it would incorporate the uses and proposals of Kew Gardens in a statutory development plan document.							

Proposal Site: Kew Biothane Plant							
Option A: Retain status quo							
SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		
1. Waste							Neutral
2. Pollution & soil							Neutral
3. Travel							Neutral
4. Climate change mitigation							Neutral
5. Climate change adaptation, flood risk & water							Neutral
6. Biodiversity							Neutral

7. Landscape & townscape							Neutral
8. Parks & open spaces							Neutral
9. Best use of land & sustainable construction							Neutral
10. Housing							Neutral
11. Health, well-being, secure communities							Neutral
12. Accessible local services							Neutral
13. Town centres							Neutral
14. Local economy							Neutral
15. Commercial development opportunities							Neutral
Summary of assessment: <i>(likely sustainability impact of the option)</i> Neutral – Currently an operational site in use by Thames Water							
Possible Mitigation: <i>(measures to mitigate likely negative effects and enhance positive effects)</i> Not applicable							
Proposal Site: Kew Biothane Plant Option B: Residential, including affordable units and open space							
SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		
1. Waste	-		-	-	-	-	New and intensified uses would increase the waste stream.
2. Pollution & soil	+		+				There might be an improvement in soil quality due to remediation on the site
3. Travel	-		-	-		-	Increase in traffic and transport due new residential uses could be negative as this location is already very busy. Very poor PTAL.
4. Climate change mitigation	+		+	+			Potential to incorporate zero-/low carbon and renewable energy technologies including site wide heating network
5. Climate change adaptation, flood risk & water	+/-		+/-	+/-			Potential to rebuild facilities with climate change adaptation measures; potential for green roofs. Would increase number of people in a flood risk area, which needs to be mitigated.
6. Biodiversity							Neutral

7. Landscape & townscape	+		+				Potential to enhance and make a positive contribution to the local character, but this will depend on the overall development/design and intensification on this site.
8. Parks & open spaces	+		+				Proposal includes provision for a new open space; need to ensure that the development will not affect designated MOL on this site. There should be no harmful impacts on the adjacent River Thames which is designated MOL and OSNI, including OOLTI and POS to the south east.
9. Best use of land & sustainable construction	+		+	+			Subject to the current use becoming surplus to requirements, a residential scheme with open space could be considered a good use for this site.
10. Housing	+		+	+	+		Opportunities for new homes including affordable
11. Health, well-being, secure communities							Neutral
12. Accessible local services							Neutral
13. Town centres							Neutral
14. Local economy							Neutral
15. Commercial development opportunities							Neutral

Summary of assessment: *(likely sustainability impact of the option)*

Overall positive impacts; would make better use of previously developed land provided that the current use will be declared surplus to requirements by Thames Water. There would however be some impacts on local transport provision and strategic road network, which would require mitigation. The detailed design of a scheme will affect how it impacts upon the river, MOL, OSNI, OOLTI and POS and due to its location it will need to be of high quality.

Possible Mitigation: *(measures to mitigate likely negative effects and enhance positive effects)*

Travel/transport – This is already a very busy location and new residential uses on this site would need to be assessed for highways and parking. Waste – more activity and development on this site will inevitably generate more waste but this can be mitigated through the application of waste hierarchy and reuse of demolition waste. Flood risk – a FRA and Flood Emergency Plan should be required to ensure that development and its users/residents are safe.

Conclusions: compare the different options

Subject to the site becoming surplus, Option B would be more sustainable as it would result in residential including affordable homes and new open space.

Site to be designated as Key Employment Site: Sandycombe Centre

Option A: Do not designate within Site Allocations Plan and rely on existing adopted policies and the NPPF

SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		
1. Waste							Neutral
2. Pollution & soil							Neutral
3. Travel							Neutral
4. Climate change mitigation							Neutral
5. Climate change adaptation, flood risk & water							Neutral
6. Biodiversity							Neutral
7. Landscape & townscape							Neutral
8. Parks & open spaces							Neutral
9. Best use of land & sustainable construction							Neutral
10. Housing							Neutral
11. Health, well-being, secure communities							Neutral
12. Accessible local services							Neutral
13. Town centres							Neutral
14. Local economy							Neutral
15. Commercial development opportunities							Neutral
Summary of assessment: <i>(likely sustainability impact of the option)</i> Neutral – not having a policy/proposal site for this area would mean the existing adopted policies and the NPPF apply, which have been subject to Sustainability Appraisal.							
Possible Mitigation: <i>(measures to mitigate likely negative effects and enhance positive effects)</i> Not applicable							
Site to be designated as Key Employment Site: Sandycombe Centre Option B: Designate within the Site Allocations Plan as Key Employment Site							
SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		

1. Waste							Neutral
2. Pollution & soil							Neutral
3. Travel							Neutral
4. Climate change mitigation							Neutral
5. Climate change adaptation, flood risk & water							Neutral
6. Biodiversity							Neutral
7. Landscape & townscape							Neutral
8. Parks & open spaces							Neutral
9. Best use of land & sustainable construction							Neutral
10. Housing							Neutral
11. Health, well-being, secure communities							Neutral
12. Accessible local services							Neutral
13. Town centres							Neutral
14. Local economy	++		+	+	+	+	Provides much needed flexible business space in an accessible location just off A316. Contributes to the local economy by providing jobs and meets local business needs for storage and demands for different types of employment space.
15. Commercial development opportunities	++		+	+	+	+	This is considered to be an industrial cluster that provides flexible storage space of suitable size in an appropriate location; it also provides employment opportunities.
Summary of assessment: <i>(likely sustainability impact of the option)</i> Identifying and including this locally important industrial estate and builder's store in the Site Allocations Plan will secure the long-term future of this employment land. It would retain a number of different business uses of a suitable size in an appropriate location with good parking provision in an accessible area next to the strategic road network.							
Possible Mitigation: <i>(measures to mitigate likely negative effects and enhance positive effects)</i> Not applicable							
Conclusions: compare the different options Option B is the most sustainable.							

Site to be designated as Key Employment Site: Blake Mews, Station Avenue, Kew							
Option A: Do not designate through Site Allocations Plan and rely on existing adopted policies and the NPPF							
SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		
1. Waste							Neutral
2. Pollution & soil							Neutral
3. Travel							Neutral
4. Climate change mitigation							Neutral
5. Climate change adaptation, flood risk & water							Neutral
6. Biodiversity							Neutral
7. Landscape & townscape							Neutral
8. Parks & open spaces							Neutral
9. Best use of land & sustainable construction							Neutral
10. Housing							Neutral
11. Health, well-being, secure communities							Neutral
12. Accessible local services							Neutral
13. Town centres							Neutral
14. Local economy							Neutral
15. Commercial development opportunities							Neutral
Summary of assessment: <i>(likely sustainability impact of the option)</i>							
Neutral – not having a designation for this site would mean the existing adopted policies and the NPPF apply, which have been subject to Sustainability Appraisal.							
Possible Mitigation: <i>(measures to mitigate likely negative effects and enhance positive effects)</i>							
Not applicable							

Site to be designated as Key Employment Site: Blake Mews, Station Avenue, Kew							
Option B: Designate within the Site Allocations Plan as Key Employment Site							
SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		
1. Waste							Neutral
2. Pollution & soil							Neutral
3. Travel							Neutral
4. Climate change mitigation							Neutral
5. Climate change adaptation, flood risk & water							Neutral
6. Biodiversity							Neutral
7. Landscape & townscape							Neutral
8. Parks & open spaces							Neutral
9. Best use of land & sustainable construction							Neutral
10. Housing							Neutral
11. Health, well-being, secure communities							Neutral
12. Accessible local services							Neutral
13. Town centres	++		+	+	+	+	This employment site contributes to the vitality and viability of Kew Gardens Station, Local Centre and reinforces the centre's role.
14. Local economy	++		+	+	+	+	Provides much needed flexible business space in an accessible location close to the underground station. Contributes to the local economy by providing jobs and meets local business needs for small units and demands for different types of employment space.
15. Commercial development opportunities	++		+	+	+	+	These are considered to be well located, attractive mews style, small business units for creative, media and office uses.
Summary of assessment: <i>(likely sustainability impact of the option)</i>							
Identifying and including these attractive Mews style offices and studios in the Site Allocations Plan will help to retain employment and a number of different small business units of a suitable size in an appropriate and accessible location next to the underground railway network							

Possible Mitigation: (measures to mitigate likely negative effects and enhance positive effects)

Not applicable

Conclusions: compare the different options
Option B is the most sustainable.

Site to be designated as Key Employment Site: Marlborough Trading Estate, Kew

Option A: Do not designate through the Site Allocations Plan and rely on existing adopted policies and the NPPF

SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		
1. Waste							Neutral
2. Pollution & soil							Neutral
3. Travel							Neutral
4. Climate change mitigation							Neutral
5. Climate change adaptation, flood risk & water							Neutral
6. Biodiversity							Neutral
7. Landscape & townscape							Neutral
8. Parks & open spaces							Neutral
9. Best use of land & sustainable construction							Neutral
10. Housing							Neutral
11. Health, well-being, secure communities							Neutral
12. Accessible local services							Neutral
13. Town centres							Neutral
14. Local economy							Neutral
15. Commercial development opportunities							Neutral

Summary of assessment: (likely sustainability impact of the option)

Neutral – not having a designation for this estate would mean the existing adopted policies and the NPPF apply, which have been subject to Sustainability Appraisal.							
Possible Mitigation: (measures to mitigate likely negative effects and enhance positive effects)							
Not applicable							
Site to be designated as Key Employment Site: Marlborough Trading Estate, Kew							
Option B: Designate within the Site Allocations Plan as Key Employment Site							
SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		
1. Waste							Neutral
2. Pollution & soil							Neutral
3. Travel							Neutral
4. Climate change mitigation							Neutral
5. Climate change adaptation, flood risk & water							Neutral. Flood zone 3a
6. Biodiversity							Neutral
7. Landscape & townscape							Neutral has a no of TPOs on site
8. Parks & open spaces							Neutral
9. Best use of land & sustainable construction							Neutral
10. Housing							Neutral
11. Health, well-being, secure communities							Neutral
12. Accessible local services							Neutral
13. Town centres	++		+	+	+	+	This employment site contributes to the vitality and mix of nearby Kew Retail Park.
14. Local economy	++		+	+	+	+	Provides a design studio for the fashion industry, office, storage and flexible business space in a location next to the South Circular. Contributes to the local economy by providing jobs and meets business needs for different types of employment space.
15. Commercial development opportunities	++		+	+	+	+	This is considered to be a well-located, trading estate used for fashion and creative industry and office uses.

<p>Summary of assessment: <i>(likely sustainability impact of the option)</i> Designating this locally important Trading Estate in the Site Allocations Plan will secure the long-term future of this employment land. It would retain a HQ building, design studios and warehousing in an appropriate location with good parking provision in an accessible area next to the strategic road network.</p>
<p>Possible Mitigation: <i>(measures to mitigate likely negative effects and enhance positive effects)</i> None applicable</p>
<p>Conclusions: compare the different options Option B is the most sustainable.</p>

Proposal Site: Pools on the Park, Richmond							
Option A: Retain status quo							
SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		
1. Waste							Neutral
2. Pollution & soil							Neutral
3. Travel							Neutral
4. Climate change mitigation							Neutral
5. Climate change adaptation, flood risk & water							Neutral
6. Biodiversity							Neutral
7. Landscape & townscape							Neutral
8. Parks & open spaces							Neutral
9. Best use of land & sustainable construction							Neutral
10. Housing							Neutral
11. Health, well-being, secure communities							Neutral
12. Accessible local services							Neutral
13. Town centres							Neutral
14. Local economy							Neutral

15. Commercial development opportunities							Neutral
Summary of assessment: <i>(likely sustainability impact of the option)</i> Neutral – The site is currently in sports use. Not having a policy/proposal for this site would mean the existing adopted policies and the NPPF apply, which have been subject to Sustainability Appraisal.							
Possible Mitigation: <i>(measures to mitigate likely negative effects and enhance positive effects)</i> Not applicable							
Proposal Site: Pools on the Park, Richmond Option B: Intensification of sports use							
SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		
1. Waste	-		-			-	Intensified uses are likely to increase the waste stream.
2. Pollution & soil							Neutral, although there might be some potential for remediation and improved soil quality if some redevelopment takes place.
3. Travel	-		-	-		-	Increase in traffic and transport due to intensification of sports uses could be negative as this location is already busy. Just off A316 and close to Richmond town centre boundary.
4. Climate change mitigation	+		+	+			Potential to incorporate zero-/low carbon and renewable energy technologies including site wide heating network
5. Climate change adaptation, flood risk & water	+		+	+			Potential to refurbish facilities with climate change adaptation measures; potential for green roofs.
6. Biodiversity							Neutral
7. Landscape & townscape	?		?				The pools complex is listed Grade II. Any proposed improvements must respect the character of the building and its setting in the Old Deer Park, (which is included in English Heritage's Register of Historic Parks and Gardens at Grade I)
8. Parks & open spaces	?		?				Development must respect the location adjacent to MOL and must not encroach upon the Old Deer Park, designated MOL on all sides of the site, and POS .
9. Best use of land & sustainable construction	+		+	+			Intensification of already existing sports uses would be considered a more efficient use of already developed land
10. Housing							Neutral
11. Health, well-being, secure	+		+	+		+	Improving the provision of leisure services is likely to contribute to healthier life styles

communities							
12. Accessible local services	+		+	+		+	An accessible sports and leisure facility close to Richmond Town Centre and Kew Road AMU
13. Town centres							Neutral
14. Local economy							Neutral
15. Commercial development opportunities							Neutral
Summary of assessment: <i>(likely sustainability impact of the option)</i>							
With the exception of Waste and Travel, the intensification of sports uses on this site would largely have positive impacts. It is however a highly constrained leisure centre and car park and impacts upon transport/travel, landscape, designated parks and open spaces will depend upon any detailed design of the intensified sports uses.							
Possible Mitigation: <i>(measures to mitigate likely negative effects and enhance positive effects)</i>							
Any further development should respect conservation area and historic park status and its location adjacent to MOL. Any proposals for intensification or redevelopment should have no adverse impacts on the local and strategic road network including local parking provision. More activity and development on this site will inevitably generate more waste but this can be mitigated through the application of waste hierarchy and reuse of demolition waste.							
Conclusions: compare the different options							
Option B is considered to be more sustainable.							

Proposal Site: Richmond Station							
Option A: Do not include in the Site Allocations Plan and rely on existing policies, NPPF and Site Brief.							
SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		
1. Waste							Neutral
2. Pollution & soil							Neutral
3. Travel							Neutral
4. Climate change mitigation							Neutral
5. Climate change adaptation, flood risk & water							Neutral
6. Biodiversity							Neutral
7. Landscape & townscape							Neutral
8. Parks & open							Neutral

spaces								
9. Best use of land & sustainable construction								Neutral
10. Housing								Neutral
11. Health, well-being, secure communities								Neutral
12. Accessible local services								Neutral
13. Town centres								Neutral
14. Local economy								Neutral
15. Commercial development opportunities								Neutral
Summary of assessment: <i>(likely sustainability impact of the option)</i> Neutral – not having a policy/proposal for this site would mean the existing adopted policies and the NPPF apply, which have been subject to Sustainability Appraisal.								
Possible Mitigation: <i>(measures to mitigate likely negative effects and enhance positive effects)</i> Not applicable								
Proposal Site: Richmond Station Option B: Redevelopment of station and concourse to further improve transport interchange, uses to include retail, business, community, leisure, entertainment and residential including affordable units.								
SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation	
	Local	Trans-boundary	Short-term	Medium-term	Long-term			
1. Waste	-		-	-	-	-	New and intensified uses would increase the waste stream.	
2. Pollution & soil							Neutral	
3. Travel	++	+	++	++	++	++	An improved transport interchange would benefit public transport users and encourage more sustainable modes of transport	
4. Climate change mitigation	+		+	+			Potential to incorporate zero-/low carbon and renewable energy technologies including site wide heating network	
5. Climate change adaptation, flood risk & water	+		+	+			Potential to rebuild facilities with climate change adaptation measures; potential for green roofs.	
6. Biodiversity							Neutral	
7. Landscape &	?		?				There could be some potential for design improvements	

townscape							which would need to complement the existing station and take account of the Conservation Area
8. Parks & open spaces							Neutral
9. Best use of land & sustainable construction	+		+	+			Comprehensive redevelopment and provision of a mix of town centre uses, including development over the tracks would make very efficient use of existing land
10. Housing	+		+	+		+	Provides opportunities for creating new homes, including affordable units
11. Health, well-being, secure communities							Neutral
12. Accessible local services	++		++	++	++	+	Proposal includes a number of services and facilities such as retail, community, leisure, offices, employment and jobs in a very accessible location, including improvements of public transport interchange.
13. Town centres	++		++	++	++	++	Opportunity to provide an intensive mix of town centre uses, which would reinforce the centre's role and add to its vitality and viability.
14. Local economy	++	+	++	++	++	++	By including retail , leisure or entertainment, offices and residential, including affordable homes, this proposal should bring many additional benefits to the local economy, provide jobs and meet business needs
15. Commercial development opportunities	++	+	++	++	++	++	Major development opportunity at this important site at the gateway to the town

Summary of assessment: *(likely sustainability impact of the option)*

This option for a comprehensive redevelopment of the existing site would have overall very positive impacts, particularly in relation to providing and improving public transport interchanges and adding to the vitality and viability of Richmond Town Centre. The provision of a mix of town centre uses at this highly accessible town centre location is considered to be very efficient and appropriate in this highly accessible, town centre location.

Possible Mitigation: *(measures to mitigate likely negative effects and enhance positive effects)*

Waste – more activity and development on this site will inevitably generate more waste but this can be mitigated through the application of waste hierarchy and reuse of demolition waste.

Conclusions: compare the different options

Option B (i.e. including this Proposal Site in the SA Plan) would be more sustainable as it would incorporate the uses and proposals of the non-statutory Site Brief in a statutory development plan document, thus ensuring that any subsequent proposal on this site enhances and improves the transport interchange and also includes retail, business, community, leisure, entertainment as well as residential (including affordable) uses.

Proposal Site: Richmond Police Station							
Option A: Retain status quo							
SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		
1. Waste							Neutral
2. Pollution & soil							Neutral; some potentially contaminated land on site
3. Travel							Neutral; adjacent to Richmond bus station
4. Climate change mitigation	-			-	-	-	It is unlikely that the existing buildings incorporate energy efficiency measures
5. Climate change adaptation, flood risk & water							Neutral
6. Biodiversity							Neutral
7. Landscape & townscape							Neutral; within Conservation Area, BTM
8. Parks & open spaces							Neutral
9. Best use of land & sustainable construction	-		-	-	-	-	Site has been declared surplus to requirements by Metropolitan Police, thus retaining the status quo would not be considered the most efficient use of land
10. Housing							Neutral
11. Health, well-being, secure communities							Neutral
12. Accessible local services							Neutral
13. Town centres							Neutral
14. Local economy							Neutral
15. Commercial development opportunities							Neutral
Summary of assessment: <i>(likely sustainability impact of the option)</i> Retaining the status quo would not make the most efficient use of land as this site has been declared surplus to requirements by the Metropolitan Police.							
Possible Mitigation: <i>(measures to mitigate likely negative effects and enhance positive effects)</i> Not applicable.							

Proposal Site: Richmond Police Station							
Option B: Commercial on ground floor, residential above, including affordable units							
SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		
1. Waste	-		-	-	-	-	New and intensified uses would be likely to increase the waste stream from this site
2. Pollution & soil	+		+				Redevelopment would provide the opportunity to remediate potentially contaminated land and improve soil quality
3. Travel	?		?			?	There could potentially be an increase in traffic, but overall there might be no net increase in vehicle movements from this site
4. Climate change mitigation	+		+	+	+	+	Opportunity to incorporate low/zero carbon and renewable energy technologies
5. Climate change adaptation, flood risk & water	+		+	+			Potential to rebuild facilities with climate change adaptation measures; potential for green roofs
6. Biodiversity							Neutral
7. Landscape & townscape	?/+		?/+			?/+	Preservation of the BTM and creating a more attractive frontage could positively enhance the Conservation Area, but this will depend on the detailed design scheme
8. Parks & open spaces							Neutral
9. Best use of land & sustainable construction	+		+	+	+		Comprehensive redevelopment and provision of a mix of uses that are appropriate for this town centre location would make very efficient use of existing land. Opportunity to incorporate sustainable design and construction practices.
10. Housing	+		+	+	+		Provision of housing including affordable homes
11. Health, well-being, secure communities	-/?					?	Could possible be a perception that this part of the town is less secure if police are no longer present. However, the counter service has already moved to Kew Road
12. Accessible local services	?		?			?	Whilst this proposal would lead to the loss of a social/police service, this has been declared surplus to requirements
13. Town centres	+		+	+	+		Improvements to the frontage and provision of some retail/commercial uses on the ground floor could add to the vitality of the town centre
14. Local economy	+		+	+			Potential contribution to more diverse economy due to retail/commercial offer and provision of jobs
15. Commercial	+		+	+			Opportunity for commercial development

development opportunities							
Summary of assessment: <i>(likely sustainability impact of the option)</i> Overall considered to have positive sustainability impacts, with possible minor negative impacts on waste. Redevelopment may contribute to the vitality and viability of the town centre and provide some opportunity for commercial development, thus resulting in a more diverse economy. It would also provide more housing, which should also improve the townscape, enhance the Conservation Area and improve the BTM. There may be the potential that removing the police station from the centre could result in a perceived less secure environment, but the police counter service has already moved to Kew Road.							
Possible Mitigation: <i>(measures to mitigate likely negative effects and enhance positive effects)</i> Waste – more activity and development on this site will inevitably generate more waste but this can be mitigated through the application of waste hierarchy and reuse of demolition waste.							
Conclusions: compare the different options Option B is the most sustainable, subject to the existing police station being declared surplus to requirements.							

Proposal Site: Richmond Rugby							
Option A: Retain status quo							
SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		
1. Waste							Neutral
2. Pollution & soil							Neutral
3. Travel							Neutral
4. Climate change mitigation							Neutral
5. Climate change adaptation, flood risk & water							Neutral
6. Biodiversity							Neutral
7. Landscape & townscape							Neutral
8. Parks & open spaces							Neutral
9. Best use of land & sustainable construction							Neutral
10. Housing							Neutral
11. Health, well-being, secure							Neutral

communities							
12. Accessible local services	-/?		-/?	-/?	-/?		The need for upgrading this sports facility has been identified by the Club. Retaining the status quo would mean that the facilities may not be able to meet future needs for providing local sport and recreation opportunities.
13. Town centres							Neutral
14. Local economy							Neutral
15. Commercial development opportunities							Neutral
Summary of assessment: <i>(likely sustainability impact of the option)</i>							
Largely neutral, although some potential negative impact has been identified; retaining the status quo would mean that the existing facilities will not be updated to meet future needs and demands for local sport and recreation provision, as identified by the Club.							
Possible Mitigation: <i>(measures to mitigate likely negative effects and enhance positive effects)</i>							
Not applicable							
Proposal Site: Richmond Rugby							
Option B: Retain as sports ground and upgrade stands							
SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		
1. Waste	-		-			-	Depending on the amount of new/enabling development and level of intensification of existing uses, it is likely that the waste stream from this site would increase
2. Pollution & soil							Neutral
3. Travel	-		-	-		-	Increase in traffic and transport due to intensification of sports uses could be negative as this location is already busy, but this will depend on the level and amount of new development. Just off the A316 and close to Richmond town centre boundary.
4. Climate change mitigation	+		+	+			Potential to incorporate zero-/low carbon and renewable energy technologies
5. Climate change adaptation, flood risk & water	+		+	+			Potential to rebuild facilities with climate change adaptation measures
6. Biodiversity							Neutral, although account should be taken of adjacent OSNI.
7. Landscape & townscape	-		-	-	-	-	This is a very sensitive site (i.e. MOL, Historic Park & Garden, Conservation Area, Listed Pavilion, Protected view) and therefore any upgrades and redevelopments

							must respect the importance and sensitivity of this area.
8. Parks & open spaces	-		-	-	-	-	There is a presumption against inappropriate development in designated MOL and therefore any upgrades/redevelopments on this site should not lead to a loss of designated MOL. It should also not impact upon the designated historic park & garden.
9. Best use of land & sustainable construction	+		+	+		?	Intensification of already existing sports uses could be considered a more efficient use of already developed land, but this needs to take account of the sensitivity of this site.
10. Housing							Neutral
11. Health, well-being, secure communities	+		+	+		+	Improving the provision of leisure services is likely to contribute to healthier life styles
12. Accessible local services	+		+	+		+	An accessible sports and leisure facility close to Richmond Town Centre and Kew Road AMU
13. Town centres							Neutral
14. Local economy	+		+	+		+	Neutral
15. Commercial development opportunities	+		+	+		+	Neutral
Summary of assessment: <i>(likely sustainability impact of the option)</i> Overall positive and negative impacts; positive particularly in relation to improving leisure and recreational services in a location very close to Richmond town centre, contributing to the local economy and providing jobs.							
Possible Mitigation: <i>(measures to mitigate likely negative effects and enhance positive effects)</i> More activity and development on this site will inevitably generate more waste but this can be mitigated through the application of waste hierarchy and reuse of any demolition waste. Any new development proposal has to contribute to the enhancement of the Conservation Area and ensure that there are no harmful impacts on the historic park & garden, designated MOL and protected view. There should be no loss of designated open land or negative impacts on historic park & garden.							
Conclusions: compare the different options Overall, Option B may be considered as more sustainable as it would secure the long-term future of this sports ground, which contributes to the town centre and the provision of sports and leisure facilities in the borough, subject to any upgrades/redevelopments not impacting on designated MOL, Historic Parks & Gardens and the protected view.							

Proposal Site: Royal Star and Garter							
Option A: Do not include this Proposal Site in the Site Allocations Plan and rely on existing adopted policies, the NPPF and the Site Brief							
SA objectives	Geographic scale		Assessment / Length of effect				Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term	Cumulative	

1. Waste							Neutral
2. Pollution & soil							Neutral
3. Travel							Neutral
4. Climate change mitigation							Neutral
5. Climate change adaptation, flood risk & water							Neutral
6. Biodiversity							Neutral
7. Landscape & townscape							Neutral
8. Parks & open spaces							Neutral
9. Best use of land & sustainable construction							Neutral
10. Housing							Neutral
11. Health, well-being, secure communities							Neutral
12. Accessible local services							Neutral
13. Town centres							Neutral
14. Local economy							Neutral
15. Commercial development opportunities							Neutral
Summary of assessment: <i>(likely sustainability impact of the option)</i> Neutral – not having a policy/proposal for this site would mean the existing adopted policies and the NPPF apply, which have been subject to Sustainability Appraisal.							
Possible Mitigation: <i>(measures to mitigate likely negative effects and enhance positive effects)</i> Not applicable							
Proposal Site: Royal Star and Garter Option B: Include within the Site Allocations Plan to provide for a mix of uses, including hotel, other institutional use or residential, including affordable units, and retention of chapel							
SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		
1. Waste	-		-	-	-	-	Additional and intensified uses, particularly a hotel use, would increase the waste stream from this site
2. Pollution & soil							Neutral

3. Travel	-		-	-		-	There is likely to be an increase in traffic and transport due to intensification of uses on this site
4. Climate change mitigation	?		?	?			Potential to incorporate zero-/low carbon and renewable energy technologies, but this may be limited due to the nature of the historic building
5. Climate change adaptation, flood risk & water							Neutral
6. Biodiversity							Neutral
7. Landscape & townscape	+		+	+		+	Potential for an improved building and securing a long-term use for this key landmark/Grade II Listed building. This is a highly sensitive site lying within the Richmond Hill Conservation Area; it is also surrounded by other listed buildings. Therefore, any proposal should improve and enhance the listed building and Conservation Area.
8. Parks & open spaces	+		+	+		+	Should take account of adjacent River Thames designated MOL . Next to POS , Mortlake Green. Creates links between the river and the town and enlivens the riverside frontage. Creation of a new green/open space
9. Best use of land & sustainable construction	++		++	++	++	++	The refurbishment/redevelopment of the Star and Garter Home for a variety of uses would be considered to make very efficient use of previously developed land and existing building as it would bring back into beneficial use a key historic landmark. There may also be the possibility to incorporate sustainable design and construction techniques.
10. Housing	+		+	+			Opportunities for new homes including affordable
11. Health, well-being, secure communities							Neutral
12. Accessible local services							Neutral
13. Town centres							Neutral
14. Local economy	+		+	+	+		The proposal would contribute to the local economy and provide jobs, but this will depend on the level and amount of non-residential uses
15. Commercial development opportunities	+		+	+	+		Proposal would provide land for commercial development such as a hotel use, but this will depend on the level and amount of non-residential uses

Summary of assessment: *(likely sustainability impact of the option)*

Overall positive impacts. This key landmark, Grade II Listed, provided a care home for ex-service men/women. As it is now no longer needed as a care home, redeveloping the existing land and building would make better and more efficient use of this land.

Possible Mitigation: *(measures to mitigate likely negative effects and enhance positive effects)*

Need to take account of cumulative impacts on local area, amenity and neighbouring properties due to the proposed increase in uses on this site. This is a highly sensitive site and therefore any proposal should improve and enhance the listed building and Conservation Area. More activity and development on this site will inevitably generate more waste but this can be mitigated through the application of waste hierarchy and reuse of demolition waste. There should be no impacts on local traffic and parking services.

Conclusions: compare the different options

Option A would rely on the Site Brief. The Proposal and uses of Option B reflect the Site Brief.

Option B (i.e. including this Proposal Site in the SA Plan) would be more sustainable as it would incorporate the uses and proposals of the non-statutory Site Brief in a statutory development plan document, thus ensuring that any subsequent proposal on this site makes a better use of land and securing the long-term future of this key landmark which is a Grade II listed building.

Proposal Site: Friars Lane car park

Option A: Retain status quo

SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		
1. Waste							Neutral
2. Pollution & soil							Neutral
3. Travel							Neutral
4. Climate change mitigation							Neutral
5. Climate change adaptation, flood risk & water							Neutral
6. Biodiversity							Neutral
7. Landscape & townscape							Neutral
8. Parks & open spaces							Neutral
9. Best use of land & sustainable construction							Neutral
10. Housing							Neutral
11. Health, well-being, secure communities							Neutral
12. Accessible local							Neutral

services							
13. Town centres							Neutral
14. Local economy							Neutral
15. Commercial development opportunities							Neutral
Summary of assessment: <i>(likely sustainability impact of the option)</i> Neutral							
Possible Mitigation: <i>(measures to mitigate likely negative effects and enhance positive effects)</i> Not applicable							
Proposal Site: Friars Lane car park Option B: Residential							
SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		
1. Waste	-		-	-	-		As the existing site is a car park, residential development on this site would lead to an increase in the waste stream; operation of waste hierarchy should minimise/mitigate any potential negative impacts
2. Pollution & soil							Neutral
3. Travel	-		-	-	-	-	Depending on the development proposal, it may lead to an increase in traffic and congestion; one-way access road, shared with school; poor PTAL however it is very close to Richmond town centre; all the car parking would have to be provided on-site
4. Climate change mitigation	+		+	+			Opportunity to incorporate low- & zero carbon technologies and renewable energy; buildings should be more energy efficient
5. Climate change adaptation, flood risk & water	-		-	-	-		Within flood zone 3 and adjacent to River Thames tidal flood defences. Introducing residential uses on this site would increase the flood risk vulnerability and put residents at potential risk; therefore flood risk mitigation measures would need to be implemented to reduce and manage the risk
6. Biodiversity							Neutral
7. Landscape & townscape	+		+	+	+	+	Redevelopment proposal could contribute to enhancement of the character of the Conservation Area and the setting of the adjacent listed buildings
8. Parks & open spaces							Neutral; adjacent to Thames Policy Area
9. Best use of land	+		+	+	+		Providing residential uses on this site may be considered

& sustainable construction							to make better use of previously developed land, potential for incorporation of sustainable construction measures
10. Housing	++		++	++	++	++	Opportunity for provision of housing
11. Health, well-being, secure communities	+		+			+	Replacing a car park with homes could potentially add to the delivery and feeling of safer and more secure communities
12. Accessible local services	+		+				Good access to local services and education facilities due to the site's close proximity to Richmond town centre
13. Town centres							Neutral
14. Local economy							Neutral
15. Commercial development opportunities							Neutral
Summary of assessment: <i>(likely sustainability impact of the option)</i>							
Whilst there may potentially be some negative impacts in relation to waste and transport, this site could provide much needed homes; it would replace a car park, thus making better use of previously developed land and contributing to the Conservation Area and the setting of surrounding listed buildings.							
Possible Mitigation: <i>(measures to mitigate likely negative effects and enhance positive effects)</i>							
Travel – ensure any redevelopment proposal would have no impacts on local parking provision. Waste – more activity and development on this site will inevitably generate more waste but this can be mitigated through the application of waste hierarchy. Flood risk – To mitigate the impacts of flooding, a flood risk assessment and a flood emergency plan should be required for any detailed proposals to ensure that the development and its residents are safe during a flood event. Given that the existing site is largely hard-standing, there may be an opportunity to increase the amount of permeable surfacing as part of redeveloping the existing site, thus providing some mitigation during a flood event.							
Conclusions: compare the different options Option B is considered to be more sustainable.							

Site to be designated as Key Employment Site: Orchard Road, Garden Road and Market Road, Richmond							
Option A: Do not designate the Site in the Site Allocations Plan and rely on existing adopted policies and the NPPF							
SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		
1. Waste							Neutral
2. Pollution & soil							Neutral
3. Travel							Neutral
4. Climate change mitigation							Neutral
5. Climate change							Neutral

adaptation, flood risk & water								
6. Biodiversity								Neutral
7. Landscape & townscape								Neutral
8. Parks & open spaces								Neutral
9. Best use of land & sustainable construction								Neutral
10. Housing								Neutral
11. Health, well-being, secure communities								Neutral
12. Accessible local services								Neutral
13. Town centres								Neutral
14. Local economy								Neutral
15. Commercial development opportunities								Neutral
Summary of assessment: <i>(likely sustainability impact of the option)</i> Neutral – not having a policy/proposal site for this area would mean the existing adopted policies and the NPPF apply, which have been subject to Sustainability Appraisal.								
Possible Mitigation: <i>(measures to mitigate likely negative effects and enhance positive effects)</i> Not applicable.								
Site to be designated as Key Employment Site: Orchard Road, Garden Road and Market Road, Richmond Option B: Designate within the Site Allocations Plan as Key Employment Site								
SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation	
	Local	Trans-boundary	Short-term	Medium-term	Long-term			
1. Waste							Neutral	
2. Pollution & soil	+/?			?			Neutral Potential for remediation of contaminated land where redevelopment is proposed.	
3. Travel							Neutral	
4. Climate change mitigation							Neutral	
5. Climate change adaptation, flood risk & water							Neutral	
6. Biodiversity							Neutral	

7. Landscape & townscape							Neutral
8. Parks & open spaces							Neutral
9. Best use of land & sustainable construction							Neutral
10. Housing							Neutral
11. Health, well-being, secure communities							Neutral
12. Accessible local services	+		+			+	Provides accessible local services for the community.
13. Town centres							Neutral
14. Local economy	++		+	+	+	+	Provides much needed flexible and highly accessible business space by the strategic road network just outside Richmond town centre. Contributes to the local economy by providing jobs and meets local business needs and demands for different types of employment space.
15. Commercial development opportunities	++		+	+	+	+	This is considered to be an industrial site that provides flexible space of suitable size in an appropriate location; it also provides employment and training opportunities
Summary of assessment: <i>(likely sustainability impact of the option)</i> Identifying and designating this locally important industrial estate through the Site Allocations Plan will secure the long-term future of this employment site. It would retain a number of different business, commercial and community uses of a suitable size in an appropriate location with good road access and parking provision in an area outside the town centre that has been identified for primarily industrial/storage uses.							
Possible Mitigation: <i>(measures to mitigate likely negative effects and enhance positive effects)</i> None required							
Conclusions: compare the different options Option B is the most sustainable.							

APPENDIX 5 – Sustainability Appraisal matrices of REJECTED sites

Proposed Site: Land to West of Stain Hill West Reservoir, Upper Sunbury Road							
Option A: Retain status quo							
SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		
1. Waste							Neutral
2. Pollution & soil							Neutral
3. Travel							Neutral
4. Climate change mitigation							Neutral
5. Climate change adaptation, flood risk & water							Neutral
6. Biodiversity							Neutral
7. Landscape & townscape							Neutral
8. Parks & open spaces							Neutral
9. Best use of land & sustainable construction							Neutral
10. Housing							Neutral
11. Health, well-being, secure communities							Neutral
12. Accessible local services							Neutral
13. Town centres							Neutral
14. Local economy							Neutral
15. Commercial development opportunities							Neutral
Summary of assessment: <i>(likely sustainability impact of the option)</i>							
Neutral							
Possible Mitigation: <i>(measures to mitigate likely negative effects and enhance positive effects)</i>							
Not applicable							

Proposed Site: Land to West of Stain Hill West Reservoir, Upper Sunbury Road							
Option B: Residential							
SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		
1. Waste	-		-	-	-		More activity and residential development on this current greenfield site will inevitably generate more waste
2. Pollution & soil	-		-				Loss of soil quantity
3. Travel	-		-				This site has currently no traffic; introducing residential uses on this land would lead to more local traffic; very poor PTAL rating
4. Climate change mitigation	-		-	-	-		As the site is currently greenfield/undeveloped land, any new uses/development would inevitably result in the emission of greenhouse gases and carbon dioxide emissions
5. Climate change adaptation, flood risk & water	-		-	-	-	-	This site is in a flood risk area and also includes some functional floodplain. Any future buildings and its residents could potentially be put at risk by developing this site.
6. Biodiversity	-		-	-	-	-	This site is designated OSNI – residential uses would be inappropriate and harmful to the biodiversity and would lead to the degradation of ecosystems and an important green space
7. Landscape & townscape	-		-	-	-	-	Developing greenfield sites and land protected as Green Belt would neither conserve nor enhance this area and surrounding landscape.
8. Parks & open spaces	--		--	-	-	--	This proposal would lead to a loss and degradation of designated Green Belt
9. Best use of land & sustainable construction							Neutral; developing on designated Green Belt is not considered to make better use of land
10. Housing	+		+	+	+	+	Would provide some opportunities for housing, albeit in a poorly accessible location
11. Health, well-being, secure communities	-		-	-	-		This land is at potentially significant risk of flooding and thus this proposal would not contribute to creating safer communities
12. Accessible local services	-		-	-	-		This area is poorly provided with local services as it is outside of (including outside the 400m of) town centres and areas of mixed use
13. Town centres							Neutral
14. Local economy							Neutral
15. Commercial development							Neutral

opportunities							
Summary of assessment: <i>(likely sustainability impact of the option)</i> This is an undeveloped land strip adjoining the reservoir. This land is designated Green Belt and Other Site of Nature Importance and therefore a residential use would lead to the loss and degradation of Green Belt and ecosystems. In addition, this site has very poor public transport accessibility. With the exception of this proposal providing the opportunity for creating new homes, all other impacts resulting from this proposal would be negative, particularly in relation to parks & open spaces, flood risk, biodiversity etc.							
Possible Mitigation: <i>(measures to mitigate likely negative effects and enhance positive effects)</i> Not applicable as the negative impacts largely outweigh the minor positive contribution from this proposal (i.e. to create new homes).							
Conclusions: compare the different options Option A is the most sustainable.							

Proposed Site: Hydes Field, Hampton							
Option A: Retain status quo							
SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		
1. Waste							Neutral
2. Pollution & soil							Neutral
3. Travel							Neutral
4. Climate change mitigation							Neutral
5. Climate change adaptation, flood risk & water							Neutral
6. Biodiversity							Neutral
7. Landscape & townscape							Neutral
8. Parks & open spaces							Neutral
9. Best use of land & sustainable construction							Neutral
10. Housing							Neutral
11. Health, well-being, secure communities							Neutral
12. Accessible local services							Neutral

13. Town centres							Neutral
14. Local economy							Neutral
15. Commercial development opportunities							Neutral
Summary of assessment: <i>(likely sustainability impact of the option)</i> Neutral							
Possible Mitigation: <i>(measures to mitigate likely negative effects and enhance positive effects)</i> Not applicable							
Proposed Site: Hydes Field, Hampton Option B: Residential							
SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		
1. Waste	-		-	-	-		More activity and residential development on this current greenfield site will inevitably generate more waste
2. Pollution & soil	-		-				Loss of soil quantity
3. Travel	-		-				This site has currently very limited traffic and access provision; it is in a very poor PTAL area; introducing residential uses on this land would lead to more local traffic
4. Climate change mitigation	-		-	-	-		As the site is currently largely greenfield/undeveloped land, any new uses/development would inevitably result in the emission of greenhouse gases and carbon dioxide emissions
5. Climate change adaptation, flood risk & water							Neutral
6. Biodiversity	-		-	-	-	-	This site is designated OSNI – residential uses would be inappropriate and harmful to the biodiversity and would lead to the degradation of ecosystems and an important green space
7. Landscape & townscape	-		-	-	-	-	Developing greenfield sites and land protected as Green Belt would neither conserve nor enhance this area and surrounding landscape.
8. Parks & open spaces	--		--	-	-	--	This proposal would lead to a loss and degradation of designated Green Belt
9. Best use of land & sustainable construction							Neutral; developing on designated Green Belt is not considered to make better use of land
10. Housing	+		+	+	+	+	Would provide some opportunities for housing, albeit in a

							poorly accessible location
11. Health, well-being, secure communities							Neutral
12. Accessible local services	-		-	-	-		This area is poorly provided with local services as it is outside of (including outside the 400m of) town centres and areas of mixed use
13. Town centres							Neutral
14. Local economy							Neutral
15. Commercial development opportunities							Neutral
Summary of assessment: <i>(likely sustainability impact of the option)</i>							
This land is designated Green Belt and also designated as an Other Site of Nature Importance. A residential use would lead to the loss and degradation of Green Belt. In addition, this site has very poor public transport accessibility. With the exception of this proposal providing the opportunity for creating new homes, all other impacts resulting from this proposal would be negative, particularly in relation to parks & open spaces, biodiversity, landscape etc.							
Possible Mitigation: <i>(measures to mitigate likely negative effects and enhance positive effects)</i>							
Not applicable as the negative impacts largely outweigh the very minor positive contribution from this proposal (i.e. to create new homes).							
Conclusions: compare the different options							
Option A is the most sustainable.							

Proposed Site: The Paddock, Old Watermill, Uxbridge Road, Hampton							
Option A: Retain status quo							
SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		
1. Waste							Neutral
2. Pollution & soil							Neutral
3. Travel							Neutral
4. Climate change mitigation							Neutral
5. Climate change adaptation, flood risk & water							Neutral
6. Biodiversity							Neutral
7. Landscape & townscape							Neutral

8. Parks & open spaces							Neutral
9. Best use of land & sustainable construction							Neutral
10. Housing							Neutral
11. Health, well-being, secure communities							Neutral
12. Accessible local services							Neutral
13. Town centres							Neutral
14. Local economy							Neutral
15. Commercial development opportunities							Neutral
Summary of assessment: <i>(likely sustainability impact of the option)</i> Neutral							
Possible Mitigation: <i>(measures to mitigate likely negative effects and enhance positive effects)</i> Not applicable							
Proposed Site: The Paddock, Old Watermill, Uxbridge Road, Hampton Option B:							
SA objectives	Geographic scale		Assessment / Length of effect				Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term	Cumulative	
1. Waste	-		-	-	-		More activity and residential development on this current greenfield site will inevitably generate more waste
2. Pollution & soil	-		-				Loss of soil quantity
3. Travel	-		-				This site has currently very limited traffic and access provision; it is in a poor PTAL area; introducing residential uses on this land would lead to more local traffic
4. Climate change mitigation	-		-	-	-		As the site is currently largely greenfield/undeveloped land, any new uses/development would inevitably result in the emission of greenhouse gases and carbon dioxide emissions
5. Climate change adaptation, flood risk & water							Neutral
6. Biodiversity	-		-	-	-	-	This site is partly designated OSNI – residential uses would be inappropriate and harmful to the biodiversity and would lead to the degradation of ecosystems and an

							important green space
7. Landscape & townscape	-		-	-	-	-	Developing this greenfield site would neither conserve nor enhance this area and its surrounding landscape
8. Parks & open spaces	--		--	-	-	--	This proposal would lead to a loss and degradation of a local green space
9. Best use of land & sustainable construction							Neutral; developing on greenfield sites is not considered to make better use of land
10. Housing	+		+	+	+	+	Would provide some opportunities for housing
11. Health, well-being, secure communities							Neutral
12. Accessible local services	-		-	-	-		This area is poorly provided with local services as it is outside of (including outside the 400m of) town centres and areas of mixed use
13. Town centres							Neutral
14. Local economy							Neutral
15. Commercial development opportunities							Neutral
Summary of assessment: <i>(likely sustainability impact of the option)</i>							
This land is partly designated as an Other Site of Nature Importance. A residential use would lead to the loss and degradation of this green space and it would impact negatively on the protected biodiversity. In addition, this site has poor public transport accessibility. With the exception of this proposal providing the opportunity for creating new homes, all other impacts resulting from this proposal would be negative, particularly in relation to transport, parks & open spaces, biodiversity, landscape etc.							
Possible Mitigation: <i>(measures to mitigate likely negative effects and enhance positive effects)</i>							
Not applicable as the negative impacts largely outweigh the very minor positive contribution from this proposal (i.e. to create new homes).							
Conclusions: compare the different options							
Option A is the most sustainable.							

Proposed Site: Brentham & Bermuda House, Hampton Wick							
Option A: Retain status quo							
SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		
1. Waste							Neutral
2. Pollution & soil							Neutral
3. Travel							Neutral

4. Climate change mitigation	-		-	-	-		Existing buildings are unlikely to incorporate energy efficiency measures
5. Climate change adaptation, flood risk & water							Neutral
6. Biodiversity							Neutral
7. Landscape & townscape							Neutral
8. Parks & open spaces							Neutral
9. Best use of land & sustainable construction	-		-	-	-		May not make best and efficient use of land and buildings
10. Housing							Neutral
11. Health, well-being, secure communities							Neutral
12. Accessible local services							Neutral
13. Town centres							Neutral
14. Local economy							Neutral
15. Commercial development opportunities							Neutral
Summary of assessment: <i>(likely sustainability impact of the option)</i>							
Whilst the site is out of date and in need of modernisation, there would be no significant environmental effects by not developing this site. The site has potential for improved facilities and buildings could be more sustainably constructed and adapted to climate change.							
Possible Mitigation: <i>(measures to mitigate likely negative effects and enhance positive effects)</i>							
Not applicable.							
Proposal Site: Brentham & Bermuda House, Hampton Wick							
Option B: Redevelop for residential, student residential, retail							
SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		
1. Waste	-		-	-			Amount of waste is likely to increase; operation of waste hierarchy should minimise/mitigate any potential negative impacts
2. Pollution & soil	+		+				Land potentially contaminated so redevelopment may remediate the land and improve soil quality
3. Travel	--	-	--	-	-	-	Likely to increase traffic due to more residential/intensified uses in an already difficult

							location
4. Climate change mitigation	+		+	+			Likely to contribute to reducing emissions over existing levels; increased energy efficiency; potential to incorporate low-/zero carbon and renewable energy technologies
5. Climate change adaptation, flood risk & water	+		+	+			Potential to rebuild facilities with climate change adaptation measures; potential for green roofs
6. Biodiversity							Neutral
7. Landscape & townscape	?/+		?/+				Potential for improved buildings that enhance and make a positive contribution to the local character and Conservation Area.
8. Parks & open spaces							Neutral
9. Best use of land & sustainable construction	?		?	?			Proposal is likely to make better use of under-utilised land and buildings; however, if offices are still in use, their loss would be considered a negative impact
10. Housing	+/?		+/?			+/?	Some opportunity for a few new homes, possibly affordable homes. Proposed student housing would however not meet local needs
11. Health, well-being, secure communities							Neutral
12. Accessible local services	?/+		+	+	+		Retail facilities on this site may have a positive impact for the benefit of the public
13. Town centres	?		?				Uncertain; there may be positive and negative impacts on the vitality of the town centre; positive potentially if there are retail units on the ground floor; negative due to the loss of offices and jobs
14. Local economy	-/?		-/?				This proposal would lead to a loss of offices that could contain many workers and provide many jobs. It is very unlikely that this loss and contribution to the local economy would be offset by the retail units
15. Commercial development opportunities	-/?		-/?	-	-	-	Permanent loss of an employment site, but potentially some short-term commercial development opportunities in connection with the retail units
Summary of assessment: <i>(likely sustainability impact of the option)</i>							
Overall, the redevelopment of this site has positive and negative impacts. Whilst it may make better use of an under-utilised site, this is likely to have some negative impacts on traffic, which can be mitigated through travel plans/assessments, car free development and issuing no parking permits. However, the loss of offices and employment land would have negative impacts.							
Possible Mitigation: <i>(measures to mitigate likely negative effects and enhance positive effects)</i>							
Parking and access would need to be controlled and managed. The loss of offices, jobs and commercial development opportunities							

cannot be mitigated and it is unlikely that the retail offer would offset the loss of the offices

Conclusions: compare the different options

Overall, neither option A nor B can be considered more sustainable. Whilst the site is out of date and in need of modernisation, there would be no significant environmental effects by not developing this site. The positive as well as negative impacts increase in Option B. Not including this site in the Site Allocations Plan and applying existing adopted policies would be considered the best way forward on this site.

Proposed Site: The Causeway, Teddington

Option A: Retain status quo

SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		
1. Waste							Neutral
2. Pollution & soil							Neutral
3. Travel							Neutral
4. Climate change mitigation							Neutral
5. Climate change adaptation, flood risk & water							Neutral
6. Biodiversity							Neutral
7. Landscape & townscape							Neutral
8. Parks & open spaces							Neutral
9. Best use of land & sustainable construction							Neutral
10. Housing							Neutral
11. Health, well-being, secure communities							Neutral
12. Accessible local services							Neutral
13. Town centres							Neutral
14. Local economy							Neutral
15. Commercial development							Neutral

opportunities							
Summary of assessment: <i>(likely sustainability impact of the option)</i>							
Neutral							
Possible Mitigation: <i>(measures to mitigate likely negative effects and enhance positive effects)</i>							
Not applicable							
Proposed Site: The Causeway, Teddington							
Option B: Continue as retail and commercial use; attract consumer footfall and to fill the empty units; address the dilapidated site at 16-20 The Causeway; proposals for a Teddington Community Market.							
SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		
1. Waste							Neutral
2. Pollution & soil							Neutral
3. Travel							Neutral
4. Climate change mitigation							Neutral
5. Climate change adaptation, flood risk & water							Neutral
6. Biodiversity							Neutral
7. Landscape & townscape							Neutral
8. Parks & open spaces							Neutral
9. Best use of land & sustainable construction							Neutral
10. Housing							Neutral
11. Health, well-being, secure communities	+		+				Teddington Community Market would likely to contribute to the health and well-being of the local population
12. Accessible local services	+		+	+	+		Retaining retail and commercial uses; Teddington Community Market would provide some local services
13. Town centres	+		+	+	+		Proposal contributes to the vitality and viability of the town centre
14. Local economy	+		+	+	+		Positive impacts as a result of retaining retail and commercial uses and filling empty units
15. Commercial development opportunities							Neutral
Summary of assessment: <i>(likely sustainability impact of the option)</i>							

Largely neutral impacts as this proposal relates to retaining the retail and commercial uses; proposals for a Teddington Community Market would be considered as positive and therefore this would enhance and contribute to the vitality and viability of the town centre.
Possible Mitigation: (measures to mitigate likely negative effects and enhance positive effects) Not applicable.
Conclusions: compare the different options Option B would be considered more sustainable, however, the details of this proposal could be largely addressed via existing planning policies and therefore there may not be a need to include this proposal in the Site Allocations Plan.

Proposed Site: Livingstone House, 2-6 Queens Road, Teddington							
Option A: Retain status quo							
SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		
1. Waste							Neutral
2. Pollution & soil							Neutral
3. Travel							Neutral
4. Climate change mitigation	-		-	-	-		Existing buildings are unlikely to incorporate energy efficiency measures
5. Climate change adaptation, flood risk & water							Neutral
6. Biodiversity							Neutral
7. Landscape & townscape							Neutral
8. Parks & open spaces							Neutral
9. Best use of land & sustainable construction	-		-	-	-		May not make best and efficient use of land and buildings
10. Housing							Neutral
11. Health, well-being, secure communities							Neutral
12. Accessible local services							Neutral
13. Town centres							Neutral
14. Local economy							Neutral

15. Commercial development opportunities							Neutral
Summary of assessment: <i>(likely sustainability impact of the option)</i> Largely neutral impacts, although it is unlikely that the current building includes energy efficiency measures and it may not currently make the most efficient use of previously developed land/building.							
Possible Mitigation: <i>(measures to mitigate likely negative effects and enhance positive effects)</i> Not applicable							
Proposed Site: Livingstone House, 2-6 Queens Road, Teddington Option B: Residential							
SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		
1. Waste	-		-	-			Amount of waste is likely to increase; operation of waste hierarchy should minimise/mitigate any potential negative impacts
2. Pollution & soil	+		+				Land potentially contaminated so redevelopment may remediate the land and improve soil quality
3. Travel	-	-	-	-	-	-	Likely to increase traffic due to more intensified and in particular residential uses in a location of the town centre at a very busy junction that is already congested and heavily parked
4. Climate change mitigation	+		+	+			Likely to contribute to reducing emissions over existing levels; increased energy efficiency; potential to incorporate low-/zero carbon and renewable energy technologies
5. Climate change adaptation, flood risk & water	+		+	+			Potential to rebuild facilities with climate change adaptation measures; potential for green roofs
6. Biodiversity							Neutral
7. Landscape & townscape	?/+		?/+				Potential for improved buildings that enhance and make a positive contribution to the local character and Conservation Area.
8. Parks & open spaces							Neutral
9. Best use of land & sustainable construction	?		?	?			It is uncertain whether a residential proposal would make better use of this land; if offices are still in use, their loss would be considered to be negative
10. Housing	+		+			+	Some opportunity for a few new homes, possibly affordable homes
11. Health, well-							Neutral

being, secure communities							
12. Accessible local services							Neutral
13. Town centres	-		-	-	-	-	This site is within Teddington town centre but the proposal does not contain any town centre uses; although it is acknowledged that a residential use may increase the footfall in the town centre
14. Local economy	-		-	-	-	-	This proposal would lead to a loss of offices that could contain many workers and provide many jobs
15. Commercial development opportunities	-		-	-	-	-	Permanent loss of businesses and a town centre employment site
Summary of assessment: <i>(likely sustainability impact of the option)</i>							
Whilst redeveloping this site may provide some potential positive impacts, such as in relation to climate change and land contamination, overall this proposal has many negative impacts. In particular, it would lead to a permanent loss of employment land, jobs and contribution to the local economy, which cannot be mitigated.							
Possible Mitigation: <i>(measures to mitigate likely negative effects and enhance positive effects)</i>							
Negative consequences resulting from waste and travel could be mitigated (e.g. through application of waste hierarchy, travel plan etc), however, the loss of employment cannot be mitigated.							
Conclusions: compare the different options							
Option A is the most sustainable.							

Proposed Site: 52 Orchard Road, Twickenham							
Option A: Retain status quo							
SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		
1. Waste							Neutral
2. Pollution & soil							Neutral
3. Travel							Neutral
4. Climate change mitigation							Neutral
5. Climate change adaptation, flood risk & water							Neutral
6. Biodiversity							Neutral

7. Landscape & townscape							Neutral
8. Parks & open spaces							Neutral
9. Best use of land & sustainable construction							Neutral
10. Housing							Neutral
11. Health, well-being, secure communities							Neutral
12. Accessible local services							Neutral
13. Town centres							Neutral
14. Local economy							Neutral
15. Commercial development opportunities							Neutral
Summary of assessment: <i>(likely sustainability impact of the option)</i> Neutral							
Possible Mitigation: <i>(measures to mitigate likely negative effects and enhance positive effects)</i> Not applicable							
Proposed Site: 52 Orchard Road, Twickenham Option B: Residential or leisure							
SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		
1. Waste	-		-	-	-		More activity, in particular residential uses, on this current greenfield site will inevitably generate more waste
2. Pollution & soil	-		-				Loss of soil quantity and quality
3. Travel	--		-	-	-	-	This site has currently no direct access arrangements for vehicular traffic (only via 52 Orchard Road); introducing residential or leisure uses on this land would lead to more local traffic that could impact upon the local and strategic road network (site is adjacent to A316); the site also has poor public transport accessibility
4. Climate change mitigation	-		-	-	-		As the site is currently greenfield/undeveloped land, any new uses/development would inevitably result in the emission of greenhouse gases and carbon dioxide emissions
5. Climate change	-		-	-	-	-	This site is in a flood risk area. Any future buildings and its

adaptation, flood risk & water							residents/users could potentially be put at risk by developing this site.
6. Biodiversity	?		?				This site is currently greenfield site/garden land with large mature trees next to the River Crane and thus there is a possibility for this land to contain some important biodiversity features that could be impacted upon by a redevelopment proposal
7. Landscape & townscape	-		-	-	-	-	Developing greenfield sites and land protected as MOL would neither conserve nor enhance this area and surrounding landscape.
8. Parks & open spaces	--		--	-	-	--	This proposal would lead to a loss and degradation of designated MOL
9. Best use of land & sustainable construction							Neutral; developing on designated MOL is not considered to make better use of land
10. Housing	+/?		+/?				Would provide some opportunities for housing, albeit in a poorly accessible location
11. Health, well-being, secure communities	-/?		-/?	-	-		This land is at potentially significant risk of flooding and thus this proposal would not contribute to creating safer communities; leisure uses could potentially have a positive impact on the life styles and well-being of the local population, but this would depend on detailed scheme
12. Accessible local services							Neutral; leisure use may provide some local service (sport and recreation), but this would depend on detailed scheme
13. Town centres							Neutral
14. Local economy							Neutral
15. Commercial development opportunities							Neutral
<p>Summary of assessment: <i>(likely sustainability impact of the option)</i> This land is part of a strategic MOL, adjacent to the River Crane with large mature trees. The land is designated MOL and used as a residential garden by the owners of 52 Orchard Road. The site has poor PTAL and no direct access to the main road. A residential use would lead to the loss and degradation of MOL. A leisure use may have some positive impacts in relation to the health & well-being of the local community and providing local sport and recreation opportunities, but this would depend on the detailed scheme. With the exception of this proposal providing the opportunity for creating new homes, all other impacts resulting from this proposal would be negative, particularly in relation to parks & open spaces, transport, flood risk, biodiversity etc.</p>							
<p>Possible Mitigation: <i>(measures to mitigate likely negative effects and enhance positive effects)</i> Not applicable as the negative impacts largely outweigh the very minor positive contribution from this proposal.</p>							
<p>Conclusions: compare the different options Option A is the most sustainable. Not including this site in the Site Allocations Plan and applying existing adopted policies would be considered the best way forward on this site.</p>							

Proposed Site: AFT Whitton Salvage							
Option A: retain status quo							
SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		
1. Waste							Neutral
2. Pollution & soil							Neutral
3. Travel							Neutral
4. Climate change mitigation							Neutral
5. Climate change adaptation, flood risk & water	-		-	-	-		Existing buildings are unlikely to incorporate energy efficiency measures.
6. Biodiversity							Neutral
7. Landscape & townscape							Neutral
8. Parks & open spaces							Neutral
9. Best use of land & sustainable construction	-		-	-	-		It may not make the best and efficient use of land and buildings
10. Housing							Neutral
11. Health, well-being, secure communities							Neutral
12. Accessible local services							Neutral
13. Town centres							Neutral
14. Local economy							Neutral
15. Commercial development opportunities							Neutral
Summary of assessment: <i>(likely sustainability impact of the option)</i>							
Whilst the site is a car breakers/scrap metal yard in need of modernisation, there would be no significant environmental effects by not developing this site. The site has potential for improved facilities and buildings could be more sustainably constructed and adapted to climate change and to reduce visual and noise pollution.							
Possible Mitigation: <i>(measures to mitigate likely negative effects and enhance positive effects)</i>							

Construction of a roof /enclosure could assist in improving the appearance and any noise from the site.							
Proposed Site: AFT Whitton Salvage							
Option B: Redevelopment							
SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		
1. Waste							Neutral
2. Pollution & soil							Neutral
3. Travel	-		-	-			Potential increase in traffic but this would depend on detailed proposals
4. Climate change mitigation	+		+	+			Likely to contribute to reducing emissions over existing levels; increased energy efficiency; potential to incorporate low-/zero carbon and renewable energy technologies
5. Climate change adaptation, flood risk & water	+		+	+			Potential to rebuild facilities with climate change adaptation measures; potential for green roofs
6. Biodiversity							Neutral
7. Landscape & townscape	+		+				Potential for improved buildings that enhance and make a positive contribution to the local character and area, but this would depend on detailed scheme
8. Parks & open spaces							Neutral
9. Best use of land & sustainable construction	?		?	?			This is an existing site with an existing use and therefore redevelopment is unlikely to make better use of previously developed land and buildings, although sustainable design and construction techniques could be incorporated in a new scheme
10. Housing	+		+	+			Potential for incorporating a few new homes, possibly affordable homes
11. Health, well-being, secure communities							Neutral
12. Accessible local services	-		-				Potential loss of a local service and employment facility, but this would depend on detailed scheme
13. Town centres							Neutral
14. Local economy	-		-				Potential loss of a business and its associated jobs, but this would depend on detailed scheme
15. Commercial development opportunities	-		-				Potential loss of a commercial development, but this would depend on detailed scheme

Summary of assessment: *(likely sustainability impact of the option)*

Overall, the redevelopment of this site could have some positive impacts, but no specific uses have been suggested as part of the redevelopment and therefore it is difficult to predict the likely significant effects of this proposed site.

Possible Mitigation: *(measures to mitigate likely negative effects and enhance positive effects)*

Parking and access would need to be controlled and managed. Redevelopment proposal should contain employment and meet business needs.

Conclusions: compare the different options

Overall, neither option A nor B can be considered more sustainable. Whilst the site may be considered to be an eye sore by the local community, there would be no significant environmental effects by not developing this site. The positive as well as negative impacts increase in Option B. Not including this site in the Site Allocations Plan and applying existing adopted policies would be considered the best way forward on this site.

Proposed Site: 8 Nelson Road, Whitton

Option A: Retain status quo

SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		
1. Waste							Neutral
2. Pollution & soil							Neutral
3. Travel							Neutral
4. Climate change mitigation							Neutral
5. Climate change adaptation, flood risk & water	-		-	-	-		Existing buildings are unlikely to incorporate energy efficiency measures.
6. Biodiversity							Neutral
7. Landscape & townscape							Neutral
8. Parks & open spaces							Neutral
9. Best use of land & sustainable construction	-		-	-	-		It may not make the best and efficient use of land and buildings
10. Housing							Neutral
11. Health, well-being, secure communities							Neutral
12. Accessible local							Neutral

services								
13. Town centres								Neutral
14. Local economy								Neutral
15. Commercial development opportunities								Neutral
Summary of assessment: <i>(likely sustainability impact of the option)</i>								
This site is a car repair site in active use; whilst it may appear to be in need of modernisation, there would be no significant environmental effects by not developing this site. The site has potential for improved facilities and buildings could be more sustainably constructed and adapted to climate change and to reduce visual and noise pollution.								
Possible Mitigation: <i>(measures to mitigate likely negative effects and enhance positive effects)</i>								
Not applicable								
Proposed Site: 8 Nelson Road, Whitton								
Option B: Redevelopment								
SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation	
	Local	Trans-boundary	Short-term	Medium-term	Long-term			
1. Waste							Neutral	
2. Pollution & soil							Neutral	
3. Travel	-		-	-			Potential increase in traffic but this would depend on detailed proposals	
4. Climate change mitigation	+		+	+			Likely to contribute to reducing emissions over existing levels; increased energy efficiency; potential to incorporate low-/zero carbon and renewable energy technologies	
5. Climate change adaptation, flood risk & water	+		+	+			Potential to rebuild facilities with climate change adaptation measures; potential for green roofs	
6. Biodiversity							Neutral	
7. Landscape & townscape	+		+				Potential for improved buildings that enhance and make a positive contribution to the local character and area, but this would depend on detailed scheme	
8. Parks & open spaces							Neutral	
9. Best use of land & sustainable construction	-		-	-	-		This is an existing site with an existing active use as car repair; therefore redevelopment is unlikely to make better use of previously developed land and buildings, although sustainable design and construction techniques could be incorporated in a new scheme	
10. Housing	+		+	+			Potential for incorporating a few new homes, possibly affordable homes	

11. Health, well-being, secure communities							Neutral
12. Accessible local services	-		-				Potential loss of a local service and employment facility, but this would depend on detailed scheme
13. Town centres							Neutral
14. Local economy	-		-				Potential loss of a business and its associated jobs, but this would depend on detailed scheme
15. Commercial development opportunities	-		-				Potential loss of a commercial development, but this would depend on detailed scheme
Summary of assessment: <i>(likely sustainability impact of the option)</i> Overall, the redevelopment of this site could have some positive impacts, but no specific uses have been suggested as part of the redevelopment and therefore it is difficult to predict the likely significant effects of this proposed site.							
Possible Mitigation: <i>(measures to mitigate likely negative effects and enhance positive effects)</i> Parking and access would need to be controlled and managed. Redevelopment proposal should contain employment and meet business needs.							
Conclusions: compare the different options Overall, neither option A nor B can be considered more sustainable. Whilst the site may be considered to be an eye sore by the local community, there would be no significant environmental effects by not developing this site. The positive as well as negative impacts increase in Option B. Not including this site in the Site Allocations Plan and applying existing adopted policies would be considered the best way forward on this site.							

Proposed Site: Land between 19 & 57 Nelson Road, Whitton							
Option A: Retain status quo							
SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		
1. Waste							Neutral
2. Pollution & soil							Neutral
3. Travel							Neutral
4. Climate change mitigation							Neutral
5. Climate change adaptation, flood risk & water	-		-	-	-		Existing buildings are unlikely to incorporate energy efficiency measures.
6. Biodiversity							Neutral
7. Landscape &							Neutral

townscape								
8. Parks & open spaces								Neutral
9. Best use of land & sustainable construction	-		-	-	-			Garages are derelict/vacant; existing use does not make the best and efficient use of land and buildings
10. Housing								Neutral
11. Health, well-being, secure communities	-		-					Derelict/vacant site may add to the fear of crime
12. Accessible local services								Neutral
13. Town centres								Neutral
14. Local economy								Neutral
15. Commercial development opportunities								Neutral
Summary of assessment: <i>(likely sustainability impact of the option)</i>								
Whilst the site appears to consist of derelict garages, there would be no significant environmental effects by not developing this site. However, the site does not make the best and efficient use of previously developed land, particularly if the garages are surplus to requirements and not in use.								
Possible Mitigation: <i>(measures to mitigate likely negative effects and enhance positive effects)</i>								
Not applicable								
Proposed Site: Land between 19 & 57 Nelson Road, Whitton								
Option B: Redevelopment								
SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation	
	Local	Trans-boundary	Short-term	Medium-term	Long-term			
1. Waste	-		-	-			Amount of waste is likely to increase; operation of waste hierarchy should minimise/mitigate any potential negative impacts	
2. Pollution & soil							Neutral	
3. Travel	-		-	-			Potential increase in traffic but this would depend on detailed proposals	
4. Climate change mitigation	+		+	+			Likely to contribute to reducing emissions over existing levels; increased energy efficiency; potential to incorporate low-/zero carbon and renewable energy technologies	
5. Climate change adaptation, flood risk & water	+		+	+			Potential to rebuild facilities with climate change adaptation measures; potential for green roofs	

6. Biodiversity							Neutral
7. Landscape & townscape	+		+				Potential for improved buildings that enhance and make a positive contribution to the local character and area, but this would depend on detailed scheme
8. Parks & open spaces							Neutral
9. Best use of land & sustainable construction	+		+	+	+		This is a vacant/derelict site and therefore redevelopment is likely to make better use of previously developed land and buildings; sustainable design and construction techniques could also be incorporated in a new scheme
10. Housing	+		+	+			Potential for incorporating a few new homes, possibly affordable homes
11. Health, well-being, secure communities	+		+				Provision of an active use on this site, potentially in conjunction with housing, would increase surveillance and overlooking and thus potentially contribute to a reduction in the fear of crime
12. Accessible local services							Neutral
13. Town centres							Neutral
14. Local economy							Neutral
15. Commercial development opportunities							Neutral
Summary of assessment: <i>(likely sustainability impact of the option)</i> Overall, the redevelopment of this site would have largely positive impacts, particularly as the existing site is vacant/derelict. However, no specific uses have been suggested as part of the redevelopment and therefore it is difficult to predict the likely significant effects of this proposed site.							
Possible Mitigation: <i>(measures to mitigate likely negative effects and enhance positive effects)</i> Parking and access would need to be controlled and managed. Negative consequences as a result of an increase in the waste stream from this site could be mitigated through the application of waste hierarchy and reuse of demolition waste.							
Conclusions: compare the different options Overall, Option B is considered to be more sustainable.							

Proposed Site: Harroddian School, Barnes							
Option A: Retain status quo							
SA objectives	Geographic scale		Assessment / Length of effect				Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term	Cumulative	

1. Waste							Neutral
2. Pollution & soil							Neutral
3. Travel							Neutral
4. Climate change mitigation							Neutral
5. Climate change adaptation, flood risk & water							Neutral
6. Biodiversity							Neutral
7. Landscape & townscape							Neutral
8. Parks & open spaces							Neutral
9. Best use of land & sustainable construction							Neutral
10. Housing							Neutral
11. Health, well-being, secure communities							Neutral
12. Accessible local services							Neutral
13. Town centres							Neutral
14. Local economy							Neutral
15. Commercial development opportunities							Neutral
Summary of assessment: <i>(likely sustainability impact of the option)</i> Neutral							
Possible Mitigation: <i>(measures to mitigate likely negative effects and enhance positive effects)</i> Not applicable							
Proposed Site: Harrodian School, Barnes							
Option B: Remove Metropolitan Open Land designation							
SA objectives	Geographic scale		Assessment / Length of effect				Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term	Cumulative	
1. Waste							Neutral
2. Pollution & soil							Neutral
3. Travel							Neutral
4. Climate change							Neutral

mitigation							
5. Climate change adaptation, flood risk & water							Neutral
6. Biodiversity	-	-	-	-	-	-	Number of on-site TPOs and biodiversity features. Removing the MOL designation on this site would allow for more development, which would have adverse impacts on the biodiversity, lead to a degradation of green spaces and impact on the green infrastructure network.
7. Landscape & townscape	-	-	-	-	-	-	Removing the MOL designation and allowing for even further development would have negative impacts on the local character and landscape.
8. Parks & open spaces	--	-	--	-	-	-	Loss of designated MOL that forms part of a strategic MOL in conjunction with adjacent Leg of Mutton Reservoir and River Thames; would lead to loss of connectivity between green spaces.
9. Best use of land & sustainable construction							Neutral
10. Housing							Neutral
11. Health, well-being, secure communities							Neutral
12. Accessible local services	+		+	+	+	+	Opportunities for creating and extending an existing educational facility
13. Town centres							Neutral
14. Local economy							Neutral
15. Commercial development opportunities							Neutral
Summary of assessment: <i>(likely sustainability impact of the option)</i>							
Removing the MOL designation from this site would allow for even further development on this land. The assessment has identified that this option would have very negative impacts on the Sustainability Appraisal objectives relating to parks & open spaces, landscape & townscape as well as biodiversity.							
Possible Mitigation: <i>(measures to mitigate likely negative effects and enhance positive effects)</i>							
None							
Conclusions: compare the different options							
Option A is the most sustainable. This site forms part of a strategic MOL designation in conjunction with the adjacent Leg of Mutton Reservoir and the River Thames. The MOL designation existed prior to the establishment of the school, which was originally a private sports pavilion. The original permission for the school restricted the size of the school in terms of pupil numbers to reduce the impact on designated MOL; subsequent applications and permission have sought to enlarge the school and increase the number of pupils. Option would lead to a loss of designated MOL, which would have very negative impacts in a number of areas. It is acknowledged that the MOL							

designation may limit the expansion of Harrodian School; however, not including this site in the Site Allocations Plan and applying existing adopted policies to assess the need for any further educational facilities on this site would be considered the best way forward in terms of meeting educational needs.

Proposed Site: 42-44 Arundel Terrace, Barnes							
Option A: Retain status quo							
SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		
1. Waste							Neutral
2. Pollution & soil							Neutral
3. Travel							Neutral
4. Climate change mitigation							Neutral
5. Climate change adaptation, flood risk & water	-		-	-	-		Existing buildings are unlikely to incorporate energy efficiency measures
6. Biodiversity							Neutral
7. Landscape & townscape							Neutral
8. Parks & open spaces							Neutral
9. Best use of land & sustainable construction	-/?		-/?				As the site is partly vacant, it may not make the best and efficient use of land and buildings
10. Housing							Neutral
11. Health, well-being, secure communities							Neutral
12. Accessible local services							Neutral
13. Town centres							Neutral
14. Local economy							Neutral
15. Commercial development opportunities							Neutral
Summary of assessment: <i>(likely sustainability impact of the option)</i>							
Whilst the site is partly vacant and thus may not make the most efficient use of land, there would be no significant environmental effects by							

not developing this site.							
Possible Mitigation: (measures to mitigate likely negative effects and enhance positive effects)							
None							
Proposed Site: 42-44 Arundel Terrace, Barnes							
Option B: Residential and commercial							
SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		
1. Waste	-		-	-			Amount of waste is likely to increase as a result of residential uses; operation of waste hierarchy should minimise/mitigate any potential negative impacts
2. Pollution & soil	+		+				Land is potentially contaminated so redevelopment may remediate the land and improve soil quality
3. Travel	-		-	-	-		Likely to increase traffic due to more residential/intensified uses; site located in a very poor PTAL
4. Climate change mitigation	+		+	+			Likely to contribute to reducing emissions over existing levels; increased energy efficiency; potential to incorporate low-/zero carbon and renewable energy technologies
5. Climate change adaptation, flood risk & water	+		+	+			Potential to rebuild facilities with climate change adaptation measures; potential for green roofs
6. Biodiversity							Neutral
7. Landscape & townscape	?/+		?/+				Potential for improved buildings that enhance and make a positive contribution to the local character and Castelnau Conservation Area.
8. Parks & open spaces							Neutral
9. Best use of land & sustainable construction	?		?	?			Proposal may make better use of under-utilised land; however, part of the site is still in use and its loss would be considered negative
10. Housing	+/?		+/?			+/?	Some opportunity for a few new homes, possibly affordable homes.
11. Health, well-being, secure communities							Neutral
12. Accessible local services							Neutral
13. Town centres							Neutral
14. Local economy	-/?		-/?				This proposal would lead to a loss of warehouses, offices and a recording studio and thus it would lead to a loss of

							jobs and a lower contribution to the local economy.
15. Commercial development opportunities	-/?		-/?	-	-	-	Potentially permanent loss of a mixed employment site, although some opportunities for commercial would remain
Summary of assessment: <i>(likely sustainability impact of the option)</i> Whilst redeveloping this site may provide some potential positive impacts, such as in relation to climate change and land contamination, overall this proposal has many uncertain and negative impacts. In particular, it would lead to a permanent loss of a mixed employment site; loss of jobs and contribution to the local economy cannot be mitigated.							
Possible Mitigation: <i>(measures to mitigate likely negative effects and enhance positive effects)</i> Negative consequences resulting from waste and travel could be mitigated (e.g. through application of waste hierarchy, travel plan etc), however, the loss of employment cannot be mitigated.							
Conclusions: compare the different options Option A is the most sustainable.							

Proposed Site: Liffords Place, Barnes							
Option A: Retain status quo							
SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		
1. Waste							Neutral
2. Pollution & soil							Neutral
3. Travel							Neutral
4. Climate change mitigation							Neutral
5. Climate change adaptation, flood risk & water	-		-	-	-		Existing buildings are unlikely to incorporate energy efficiency measures
6. Biodiversity							Neutral
7. Landscape & townscape							Neutral
8. Parks & open spaces							Neutral
9. Best use of land & sustainable construction	?		?				The site may not make the best and efficient use of land and buildings, but there only appears to be one vacant workshop on this site
10. Housing							Neutral
11. Health, well-being, secure							Neutral

communities								
12. Accessible local services								Neutral
13. Town centres								Neutral
14. Local economy								Neutral
15. Commercial development opportunities								Neutral
Summary of assessment: <i>(likely sustainability impact of the option)</i>								
Whilst the site may not make the most efficient use of land, there would be no significant environmental effects by not developing this site.								
Possible Mitigation: <i>(measures to mitigate likely negative effects and enhance positive effects)</i>								
None								
Proposed Site: Liffords Place, Barnes								
Option B: Residential and commercial								
SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation	
	Local	Trans-boundary	Short-term	Medium-term	Long-term			
1. Waste	-		-	-			Amount of waste is likely to increase as a result of residential uses; operation of waste hierarchy should minimise/mitigate any potential negative impacts	
2. Pollution & soil	+		+				Land is potentially contaminated so redevelopment may remediate the land and improve soil quality	
3. Travel	-		-	-	-		Likely to increase traffic due to more residential/intensified uses; site located in a very poor PTAL	
4. Climate change mitigation	+		+	+			Likely to contribute to reducing emissions over existing levels; increased energy efficiency; potential to incorporate low-/zero carbon and renewable energy technologies	
5. Climate change adaptation, flood risk & water	+		+	+			Potential to rebuild facilities with climate change adaptation measures; potential for green roofs	
6. Biodiversity							Neutral	
7. Landscape & townscape	?/+		?/+				Potential for improved buildings that enhance and make a positive contribution to the local character and Castelnau Conservation Area.	
8. Parks & open spaces							Neutral	
9. Best use of land & sustainable construction	?/-		?/-	?/-	?/-		Proposal may make better use of under-utilised land; however, the majority of this site is still in use and its loss would be considered negative	
10. Housing	+/?		+/?			+/?	Some opportunity for a few new homes, possibly	

							affordable homes
11. Health, well-being, secure communities							Neutral
12. Accessible local services							Neutral
13. Town centres	?		?				It is uncertain whether a mixed use site may contribute more or less to the local centre (i.e. Barnes High Street AMU)
14. Local economy	-/?		-/?				This proposal would lead to a loss of office, carwash, warehouse, shop and workshop and thus it would lead to a loss of jobs and a lower contribution to the local economy
15. Commercial development opportunities	-/?		-/?	-	-	-	Potentially permanent loss of a mixed employment site, although some opportunities for commercial would remain
Summary of assessment: <i>(likely sustainability impact of the option)</i> Whilst redeveloping this site may provide some potential positive impacts, such as in relation to climate change and land contamination, overall this proposal has many uncertain and negative impacts. In particular, it would lead to a permanent loss of a mixed employment site; loss of jobs and contribution to the local economy cannot be mitigated.							
Possible Mitigation: <i>(measures to mitigate likely negative effects and enhance positive effects)</i> Negative consequences resulting from waste and travel could be mitigated (e.g. through application of waste hierarchy, travel plan etc), however, the loss of this employment site that provides a mix of commercial uses cannot be mitigated.							
Conclusions: compare the different options Option A is the most sustainable.							

Proposed Site: 42a and 42b Sheen Lane, East Sheen							
Option A: Retain status quo							
SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		
1. Waste							Neutral
2. Pollution & soil							Neutral
3. Travel							Neutral
4. Climate change mitigation							Neutral
5. Climate change adaptation, flood	-		-	-	-		Existing buildings are unlikely to incorporate energy efficiency measures

risk & water							
6. Biodiversity							Neutral
7. Landscape & townscape							Neutral
8. Parks & open spaces							Neutral
9. Best use of land & sustainable construction	?		?				The site may not make the best and efficient use of land and buildings because there is some vacant storage on this site
10. Housing							Neutral
11. Health, well-being, secure communities							Neutral
12. Accessible local services							Neutral
13. Town centres							Neutral
14. Local economy							Neutral
15. Commercial development opportunities							Neutral

Summary of assessment: *(likely sustainability impact of the option)*

Residential and vacant storage

Possible Mitigation: *(measures to mitigate likely negative effects and enhance positive effects)*

Proposed Site: 42a and 42b Sheen Lane, East Sheen

Option B: Residential and retail

SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		
1. Waste	-		-	-			Amount of waste may increase; operation of waste hierarchy should minimise/mitigate any potential negative impacts
2. Pollution & soil							Neutral
3. Travel	-		-	-			Potential to increase traffic due to more residential/intensified uses
4. Climate change mitigation	+		+	+			Likely to contribute to reducing emissions over existing levels; increased energy efficiency; potential to incorporate low-/zero carbon and renewable energy technologies
5. Climate change adaptation, flood	+		+	+			Potential to rebuild facilities with climate change adaptation measures; potential for green roofs

risk & water							
6. Biodiversity							Neutral
7. Landscape & townscape	?/+		?/+				Potential for improved buildings that enhance and make a positive contribution to the local character, town centre and Conservation Area.
8. Parks & open spaces							Neutral
9. Best use of land & sustainable construction	?		?	?			Proposal may make better use of under-utilised/vacant land and buildings
10. Housing	+/?		+/?			+/?	Potential opportunity for a few new homes
11. Health, well-being, secure communities							Neutral
12. Accessible local services	?/+		+	+	+		Retail facilities on this site may have a positive impact for the benefit of the public and East Sheen town centre
13. Town centres	?/+		?/+				Uncertain; there may be positive impacts on the vitality of East Sheen town centre due to potential retail units
14. Local economy	?		?				This proposal would lead to a loss of a storage space, although some retail units could be provided. It is uncertain whether the loss of much needed storage space would be offset by the retail units
15. Commercial development opportunities	?		?	?			Permanent loss of an employment site, but potentially some short-term commercial development opportunities in connection with the retail units

Summary of assessment: *(likely sustainability impact of the option)*

Whilst redeveloping this site may provide some potential positive impacts, such as in relation to climate change and land contamination, overall this proposal has many uncertain impacts.

Possible Mitigation: *(measures to mitigate likely negative effects and enhance positive effects)*

Negative consequences resulting from waste and travel could be mitigated (e.g. through application of waste hierarchy, travel plan etc), however, the loss of much needed storage space cannot be mitigated.

Conclusions: compare the different options

Overall, neither option A nor B can be considered more sustainable. Whilst the site is partly vacant, there would be no significant environmental effects by not developing this site. The positive as well as uncertain impacts increase in Option B. Not including this site in the Site Allocations Plan and applying existing adopted policies would be considered the best way forward on this site.

Proposed Site: 56 Coval Road, East Sheen

Option A: Retain status quo

SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		
1. Waste							Neutral
2. Pollution & soil							Neutral
3. Travel							Neutral
4. Climate change mitigation							Neutral
5. Climate change adaptation, flood risk & water	-		-	-	-		Existing buildings are unlikely to incorporate energy efficiency measures
6. Biodiversity							Neutral
7. Landscape & townscape							Neutral
8. Parks & open spaces							Neutral
9. Best use of land & sustainable construction	-		-	-	-		The site does not make the best and efficient use of land and buildings as it is vacant
10. Housing							Neutral
11. Health, well-being, secure communities	-		-				Derelict/vacant site may add to the fear of crime
12. Accessible local services							Neutral
13. Town centres							Neutral
14. Local economy							Neutral
15. Commercial development opportunities							Neutral
Summary of assessment: <i>(likely sustainability impact of the option)</i>							
The use of this site has not been established, although it appears to have been used as storage. Whilst there would be no significant environmental effects by not developing this site, it has potential for new uses and improved facilities; buildings could be more sustainably constructed and adapted to climate change							
Possible Mitigation: <i>(measures to mitigate likely negative effects and enhance positive effects)</i>							
None							
Proposed Site: 56 Coval Road, East Sheen							
Option B: Residential							
SA objectives	Geographic scale		Assessment / Length of effect				Commentary/explanation, uncertainties, proposed mitigation

	Local	Trans-boundary	Short-term	Medium-term	Long-term	Cumulative	
1. Waste	-		-	-			Amount of waste is likely to increase as a result of residential; operation of waste hierarchy should minimise/mitigate any potential negative impacts
2. Pollution & soil							Neutral
3. Travel	-		-	-	-		Likely to increase traffic due to more intensified and in particular residential uses in this town centre location
4. Climate change mitigation	+		+	+			Likely to contribute to reducing emissions over existing levels; increased energy efficiency; potential to incorporate low-/zero carbon and renewable energy technologies
5. Climate change adaptation, flood risk & water	+		+	+			Potential to rebuild facilities with climate change adaptation measures; potential for green roofs
6. Biodiversity							Neutral
7. Landscape & townscape	?/+		?/+				Potential for improved buildings that enhance and make a positive contribution to the local character and area
8. Parks & open spaces							Neutral
9. Best use of land & sustainable construction	?/+		?/+	?/-	?/-		It is uncertain whether a residential proposal would make better use of this land; as the site is vacant, in the short-term a residential use may be positive, but it would lead to a loss of industrial land which would be considered to be negative
10. Housing	+		+			+	Opportunity for new homes, possibly affordable homes
11. Health, well-being, secure communities	+		+				Provision of an active use on this site would increase surveillance and overlooking and thus potentially contribute to a reduction in the fear of crime
12. Accessible local services							Neutral
13. Town centres	-		-	-	-	-	This site is within East Sheen town centre and therefore the proposal should contain town centre uses; although it is acknowledged that a residential use may increase the footfall in the town centre
14. Local economy	-/?		?	-	-		This proposal would lead to a permanent loss of industrial land that could potentially meet future business and industrial needs
15. Commercial development opportunities	-		-	-	-		Permanent loss of industrial land
Summary of assessment: <i>(likely sustainability impact of the option)</i>							
Whilst redeveloping this site may provide some potential positive impacts, such as making potentially better use of land, addressing climate							

change and land contamination, this proposal also has many uncertain and some negative impacts.

Possible Mitigation: (measures to mitigate likely negative effects and enhance positive effects)

Negative consequences resulting from waste and travel could be mitigated (e.g. through application of waste hierarchy, travel plan etc), however, the permanent loss of industrial land cannot be mitigated.

Conclusions: compare the different options

Overall, neither option A nor B can be considered more sustainable. Whilst the site is vacant/derelict, there would be no significant environmental effects by not developing this site. The positive as well as uncertain impacts increase in Option B. Not including this site in the Site Allocations Plan and applying existing adopted policies would be considered the best way forward on this site.

Proposed Site: 1 Sudbrook Gardens, Ham

Option A: Retain status quo (residential: 1 large house)

SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		
1. Waste							Neutral
2. Pollution & soil							Neutral
3. Travel							Neutral
4. Climate change mitigation							Neutral
5. Climate change adaptation, flood risk & water							Neutral
6. Biodiversity							Neutral
7. Landscape & townscape							Neutral
8. Parks & open spaces							Neutral
9. Best use of land & sustainable construction							Neutral
10. Housing							Neutral
11. Health, well-being, secure communities							Neutral
12. Accessible local services							Neutral
13. Town centres							Neutral

14. Local economy							Neutral
15. Commercial development opportunities							Neutral
Summary of assessment: <i>(likely sustainability impact of the option)</i> Neutral							
Possible Mitigation: <i>(measures to mitigate likely negative effects and enhance positive effects)</i> Not applicable							
Proposed Site: 1 Sudbrook Gardens, Ham Option B: Residential (4 dwellings instead of 1 dwelling)							
SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		
1. Waste							Neutral
2. Pollution & soil							Neutral
3. Travel							Neutral
4. Climate change mitigation							Neutral
5. Climate change adaptation, flood risk & water							Neutral
6. Biodiversity	-/?		-/?				Loss of garden land which could potentially be of biodiversity value
7. Landscape & townscape	-/?		-/?				Could potentially have adverse impacts on the landscape and local character of this area
8. Parks & open spaces							Neutral
9. Best use of land & sustainable construction							Neutral
10. Housing	+		+				Would create three additional new homes
11. Health, well-being, secure communities							Neutral
12. Accessible local services							Neutral
13. Town centres							Neutral
14. Local economy							Neutral
15. Commercial development opportunities							Neutral

Summary of assessment: *(likely sustainability impact of the option)*

With the exception of this proposal providing more dwellings and losing some potentially important garden space, this option is considered to be largely neutral.

Possible Mitigation: *(measures to mitigate likely negative effects and enhance positive effects)*

None

Conclusions: compare the different options

Neither Option A nor B can be considered more sustainable. Both the existing and proposed uses are residential and therefore there are no significant differences between the 2 options. Not including this site in the Site Allocations Plan and applying existing adopted policies would be considered the best way forward on this site.

Proposed Site: Cassel Hospital, Ham**Option A: Retain status quo**

SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		
1. Waste							Neutral
2. Pollution & soil							Neutral
3. Travel							Neutral
4. Climate change mitigation							Neutral
5. Climate change adaptation, flood risk & water							Neutral
6. Biodiversity							Neutral
7. Landscape & townscape							Neutral
8. Parks & open spaces							Neutral
9. Best use of land & sustainable construction							Neutral
10. Housing							Neutral
11. Health, well-being, secure communities							Neutral
12. Accessible local services							Neutral

13. Town centres							Neutral
14. Local economy							Neutral
15. Commercial development opportunities							Neutral
Summary of assessment: <i>(likely sustainability impact of the option)</i> Neutral							
Possible Mitigation: <i>(measures to mitigate likely negative effects and enhance positive effects)</i> Not applicable							
Proposed Site: Cassel Hospital, Ham Option B: Residential (123-332 dwellings)							
SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		
1. Waste	-		-	-	-		More activity and residential development on this site will inevitably generate more waste
2. Pollution & soil	-		-				Loss of soil quantity and quality
3. Travel	--	-	-	-	-	--	Introducing a large number of residential uses on this land could have significant impacts on the local traffic and parking arrangements, including beyond this borough's boundaries; very poor PTAL rating
4. Climate change mitigation	-		-	-	-	-	The main building is listed and thus there is limited opportunity to upgrade this to reduce green house gas emissions. Creating a large number of new homes in the greenfield/undeveloped part of this site would inevitably result in the emission of greenhouse gases and carbon dioxide emissions
5. Climate change adaptation, flood risk & water							Neutral
6. Biodiversity	-		-	-	-	-	This site is designated OSNI; badger setts are present – residential uses would be inappropriate and harmful to the biodiversity and would lead to the degradation of ecosystems and an important green space
7. Landscape & townscape	-		-	-	-	-	Developing on the undeveloped land would have adverse impacts on Ham Common Conservation Area and it would neither conserve nor enhance this area and surrounding landscape.
8. Parks & open spaces	--		--	-	-	--	This proposal would lead to a loss and degradation of designated Other Open Land of Townscape Importance (OOLTI)

9. Best use of land & sustainable construction							Neutral; developing on designated protected open land is not considered to make better use of land
10. Housing	++		++	+	+	+	Would provide a significant number of new homes, albeit in a poorly accessible location
11. Health, well-being, secure communities							Neutral
12. Accessible local services	-		-	-	-		This area is poorly provided with local services as it is outside of (including outside the 400m of) town centres and areas of mixed use
13. Town centres							Neutral
14. Local economy							Neutral
15. Commercial development opportunities							Neutral
Summary of assessment: <i>(likely sustainability impact of the option)</i> Redeveloping this designated OOLTI and OSNI site would have very negative impacts; the only positive impact identified is the provision of new homes.							
Possible Mitigation: <i>(measures to mitigate likely negative effects and enhance positive effects)</i> None							
Conclusions: compare the different options Option A is the most sustainable. The site is designated Other Open Land of Townscape Importance (OOLTI) and a designated Other Site of Nature Importance (OSNI); the site also has badger setts present. Option B (i.e. a large number of residential homes) would lead to very significant environmental effects on this site.							

Proposed Site: Site adjacent to 1 Niton Road, Kew							
Option A: Retain status quo (Other Open Land of Townscape Importance)							
SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		
1. Waste							Neutral
2. Pollution & soil							Neutral
3. Travel							Neutral
4. Climate change mitigation							Neutral
5. Climate change adaptation, flood							Neutral

risk & water							
6. Biodiversity							Neutral
7. Landscape & townscape							Neutral
8. Parks & open spaces							Neutral
9. Best use of land & sustainable construction							Neutral
10. Housing							Neutral
11. Health, well-being, secure communities							Neutral
12. Accessible local services							Neutral
13. Town centres							Neutral
14. Local economy							Neutral
15. Commercial development opportunities							Neutral
Summary of assessment: <i>(likely sustainability impact of the option)</i> Neutral							
Possible Mitigation: <i>(measures to mitigate likely negative effects and enhance positive effects)</i> Not applicable							
Proposed Site: Site adjacent to 1 Niton Road, Kew Option B: Residential possibly including affordable housing							
SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		
1. Waste	-		-	-	-		More activity and residential development on this current greenfield site will inevitably generate more waste
2. Pollution & soil	-		-				Loss of soil quantity
3. Travel	-		-				Introducing residential uses on currently undeveloped land would lead to more local traffic; poor PTAL rating
4. Climate change mitigation	-		-	-	-		As the site is currently greenfield/undeveloped land, any new uses/development would inevitably result in the emission of greenhouse gases and carbon dioxide emissions
5. Climate change adaptation, flood risk & water							Neutral

6. Biodiversity	-		-	-	-	-	This site is designated OOLTI – residential uses would be inappropriate and harmful to the biodiversity features and it would lead to the degradation of a green space
7. Landscape & townscape	-		-	-	-	-	Developing greenfield sites and land protected as OOLTI would neither conserve nor enhance this area and surrounding landscape.
8. Parks & open spaces	--		--	-	-	--	This proposal would lead to a loss and degradation of designated OOLTI
9. Best use of land & sustainable construction							Neutral; developing on designated OOLTI is not considered to make better use of land
10. Housing	+		+	+	+	+	Would provide some opportunities for housing, albeit in a poorly accessible location
11. Health, well-being, secure communities							Neutral
12. Accessible local services	-		-	-	-		This area is poorly provided with local services as it is outside of (including outside the 400m of) town centres and areas of mixed use
13. Town centres							Neutral
14. Local economy							Neutral
15. Commercial development opportunities							Neutral
Summary of assessment: <i>(likely sustainability impact of the option)</i> This site is an open green space, designated as Other Open Land of Townscape Importance (OOLTI), with mature vegetation adjacent to the A316. The PTAL rating is poor. This option would lead to the loss and degradation of this designated OOLTI. With the exception of this proposal providing the opportunity for creating new homes, all other impacts resulting from this proposal would be considered as negative.							
Possible Mitigation: <i>(measures to mitigate likely negative effects and enhance positive effects)</i> Not applicable as the negative impacts largely outweigh the very minor positive contribution from this proposal (i.e. to create new homes).							
Conclusions: compare the different options Option A is the most sustainable.							

Proposed Site: 275 Sandycombe Road, Richmond							
Option A: Retain status quo							
SA objectives	Geographic scale		Assessment / Length of effect				Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term	Cumulative	

1. Waste							Neutral
2. Pollution & soil							Neutral
3. Travel							Neutral
4. Climate change mitigation							Neutral
5. Climate change adaptation, flood risk & water	-		-	-	-		Existing buildings are unlikely to incorporate energy efficiency measures
6. Biodiversity							Neutral
7. Landscape & townscape							Neutral
8. Parks & open spaces							Neutral
9. Best use of land & sustainable construction	?		?	?			The site may not make the best and efficient use of land
10. Housing							Neutral
11. Health, well-being, secure communities							
12. Accessible local services							Neutral
13. Town centres							Neutral
14. Local economy							Neutral
15. Commercial development opportunities							Neutral

Summary of assessment: *(likely sustainability impact of the option)*

Possible Mitigation: *(measures to mitigate likely negative effects and enhance positive effects)*

Proposed Site: 275 Sandycombe Road, Richmond

Option B: Community based health centre

SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		
1. Waste	?/-		?/-	?/-	?/-		A health centre may possibly generate more waste than the existing use
2. Pollution & soil							Neutral
3. Travel	?		?	?	?		It is uncertain whether a health centre would generate

							more traffic; moderate PTAL rating
4. Climate change mitigation	+		+	+			Likely to contribute to reducing emissions over existing levels; increased energy efficiency; potential to incorporate low-/zero carbon and renewable energy technologies
5. Climate change adaptation, flood risk & water	+		+	+			Potential to rebuild facilities with climate change adaptation measures; potential for green roofs
6. Biodiversity							Neutral
7. Landscape & townscape	?/+		?/+	?/+	?/+		Uncertain whether a residential use would have adverse impacts on the landscape/townscape and local character of the area
8. Parks & open spaces							Neutral
9. Best use of land & sustainable construction	?		?	?	?		The site is still used as a social club/local sports facility and thus it is not certain whether a new health centre could be considered to make better use of this land
10. Housing							Neutral
11. Health, well-being, secure communities	+		+	+	+		Establishing a health centre is likely to have positive impacts upon the health and wellbeing of the local population
12. Accessible local services	-/+		-/+	-/+	-/+		This proposal would to the loss of a social club/sport/leisure use, although it would provide for another community/health use
13. Town centres	+		+				Likely to contribute positively to the Mixed Use Area
14. Local economy							Neutral
15. Commercial development opportunities							Neutral
Summary of assessment: <i>(likely sustainability impact of the option)</i>							
Overall, this option has largely positive impacts but also some negative and unknown consequences.							
Possible Mitigation: <i>(measures to mitigate likely negative effects and enhance positive effects)</i>							
Negative impacts in relation to waste could be mitigated through application of waste hierarchy and possibly reuse of demolition waste.							
Conclusions: compare the different options							
Overall, neither option A nor B can be considered more sustainable. Whilst the site may not be used to its full potential and is in need of modernisation, there would be no significant environmental effects by not developing this site. The positive impacts increase in Option B. However, not including this site in the Site Allocations Plan and applying existing adopted policies would be considered the best way forward on this site.							

Proposed Site: Amenity land between Sayers Walk and Richmond Park							
Option A: Retain status quo							
SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		
1. Waste							Neutral
2. Pollution & soil							Neutral
3. Travel							Neutral
4. Climate change mitigation							Neutral
5. Climate change adaptation, flood risk & water							Neutral
6. Biodiversity							Neutral
7. Landscape & townscape							Neutral
8. Parks & open spaces							Neutral
9. Best use of land & sustainable construction							Neutral
10. Housing							Neutral
11. Health, well-being, secure communities							Neutral
12. Accessible local services							Neutral
13. Town centres							Neutral
14. Local economy							Neutral
15. Commercial development opportunities							Neutral
Summary of assessment: <i>(likely sustainability impact of the option)</i> Neutral							
Possible Mitigation: <i>(measures to mitigate likely negative effects and enhance positive effects)</i> Not applicable							
Proposed Site: Amenity land between Sayers Walk and Richmond Park							
Option B: Residential							
SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		

	Local	Trans-boundary	Short-term	Medium-term	Long-term	Cumulative	
1. Waste	-		-	-	-		More activity and residential development on this current greenfield site will inevitably generate more waste
2. Pollution & soil	-		-				Loss of soil quantity and quality
3. Travel	-		-				Introducing residential uses on currently undeveloped land would lead to more local traffic; poor PTAL rating
4. Climate change mitigation	-		-	-	-		As the site is currently greenfield/undeveloped land, any new uses/development would inevitably result in the emission of greenhouse gases and carbon dioxide emissions
5. Climate change adaptation, flood risk & water							Neutral
6. Biodiversity	-		-	-	-	-	Although this site is not designated, residential uses would be inappropriate and harmful to the biodiversity features, trees and other mature vegetation and it would therefore lead to the degradation of a green space
7. Landscape & townscape	-		-	-	-	-	Developing greenfield sites and land that could be considered as OOLTI would neither conserve nor enhance this area and surrounding landscape.
8. Parks & open spaces	--		--	-	-	--	This proposal would lead to a loss and degradation of an open space
9. Best use of land & sustainable construction							Neutral; developing on valuable green space is not considered to make better use of land
10. Housing	+		+	+	+	+	Would provide some opportunities for housing, albeit in a poorly accessible location
11. Health, well-being, secure communities							Neutral
12. Accessible local services	-		-	-	-		This area is poorly provided with local services as it is outside of (including outside the 400m of) town centres and areas of mixed use
13. Town centres							Neutral
14. Local economy							Neutral
15. Commercial development opportunities							Neutral

Summary of assessment: *(likely sustainability impact of the option)*

This site is an open wooded area with mature vegetation and trees adjacent to Richmond Park. The PTAL rating is very poor. This option would lead to the loss and degradation of important open land, that could be considered as OOLTI. With the exception of this proposal

providing the opportunity for creating new homes, all other impacts resulting from this proposal would be considered as negative.

Possible Mitigation: (measures to mitigate likely negative effects and enhance positive effects)

Not applicable as the negative impacts largely outweigh the very minor positive contribution from this proposal (i.e. to create new homes).

Conclusions: compare the different options

Option A is the most sustainable.

Proposed Site: Land adjacent to Dickson House, Richmond

Option A: Retain status quo

SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		
1. Waste							Neutral
2. Pollution & soil							Neutral
3. Travel							Neutral
4. Climate change mitigation							Neutral
5. Climate change adaptation, flood risk & water							Neutral
6. Biodiversity							Neutral
7. Landscape & townscape							Neutral
8. Parks & open spaces							Neutral
9. Best use of land & sustainable construction	?		?				May not make the best use of previously developed land, but it is understood that there is an established need for this sport facility
10. Housing							Neutral
11. Health, well-being, secure communities							Neutral
12. Accessible local services							Neutral
13. Town centres							Neutral
14. Local economy							Neutral
15. Commercial development opportunities							Neutral

Summary of assessment: (likely sustainability impact of the option)							
This land is currently a sports area with levelled tarmac hardstanding & car park.							
Possible Mitigation: (measures to mitigate likely negative effects and enhance positive effects)							
Not applicable							
Proposed Site: Land adjacent to Dickson House, Richmond							
Option B: Residential							
SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		
1. Waste	-		-	-	-		More activity and residential development on this site will inevitably generate more waste
2. Pollution & soil							Neutral
3. Travel	-		-				Introducing residential uses is likely to lead to more local traffic; very poor PTAL rating
4. Climate change mitigation	-		-	-	-		Any new developments for residential would inevitably result in the emission of greenhouse gases and carbon dioxide emissions
5. Climate change adaptation, flood risk & water							Neutral
6. Biodiversity							Neutral
7. Landscape & townscape	?		?	?	?		Uncertain whether a residential use would have adverse impacts on the landscape/townscape and local character of the area
8. Parks & open spaces							Neutral
9. Best use of land & sustainable construction	-		-	-	-		Developing on land used for sports facilities for which there is an established need would not be considered to make better use of land
10. Housing	+		+	+	+	+	Would provide some opportunities for housing, albeit in a poorly accessible location
11. Health, well-being, secure communities	-		-	-	-		Loss of sport facility (Multi-Use Games Area) and thus the site would no longer contribute to active and healthy lifestyles
12. Accessible local services	-		-	-	-		This proposal would lead to the loss of an important local sport and recreational facility; in addition, this area is poorly provided with local services as it is outside of (including outside the 400m of) town centres and areas of mixed use.
13. Town centres							Neutral
14. Local economy							Neutral

15. Commercial development opportunities							Neutral
Summary of assessment: <i>(likely sustainability impact of the option)</i> It is understood that there is a need for this Multi-Use Games Area (MUGA) as there is only one children's play area and one MUGA on this residential estate. This option would have largely negative impacts; whilst some negative consequences could be mitigated, the loss of an important local sport/leisure facility could not be mitigated unless an alternative and suitable replacement facility can be identified							
Possible Mitigation: <i>(measures to mitigate likely negative effects and enhance positive effects)</i> Some negative consequences may be able to be mitigated.							
Conclusions: compare the different options Option A is the most sustainable.							

Proposed Site: 48b Friars Stile Road, Richmond							
Option A: Retain status quo (Commercial)							
SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		
1. Waste							Neutral
2. Pollution & soil							Neutral; potentially contaminated land
3. Travel							Neutral
4. Climate change mitigation							Neutral
5. Climate change adaptation, flood risk & water	-		-	-	-		Existing buildings are unlikely to incorporate energy efficiency measures
6. Biodiversity							Neutral
7. Landscape & townscape							Neutral
8. Parks & open spaces							Neutral
9. Best use of land & sustainable construction	?		?				The site may not make the best and efficient use of land and buildings
10. Housing							Neutral
11. Health, well-being, secure communities							Neutral
12. Accessible local							Neutral

services							
13. Town centres							Neutral
14. Local economy							Neutral
15. Commercial development opportunities							Neutral
Summary of assessment: <i>(likely sustainability impact of the option)</i>							
Whilst the site may not necessarily make the most efficient use of land and buildings are unlikely to be energy efficient, not developing this site would not have any significant environmental effects.							
Possible Mitigation: <i>(measures to mitigate likely negative effects and enhance positive effects)</i>							
Not applicable							
Proposed Site: 48b Friars Stile Road, Richmond							
Option B: Residential							
SA objectives	Geographic scale		Assessment / Length of effect			Cumulative	Commentary/explanation, uncertainties, proposed mitigation
	Local	Trans-boundary	Short-term	Medium-term	Long-term		
1. Waste	-		-	-			Amount of waste is likely to increase as a result of residential uses; operation of waste hierarchy should minimise/mitigate any potential negative impacts
2. Pollution & soil	+		+				Land potentially contaminated so redevelopment may remediate the land and improve soil quality
3. Travel	-		-	-	-		Likely to increase traffic due to more intensified and in particular residential uses; very poor vehicular access into site itself; would likely impact on local traffic and parking arrangements
4. Climate change mitigation	+		+	+			Likely to contribute to reducing emissions over existing levels; increased energy efficiency; potential to incorporate low-/zero carbon and renewable energy technologies
5. Climate change adaptation, flood risk & water	+		+				Potential to rebuild facilities with climate change adaptation measures; potential for green roofs
6. Biodiversity							Neutral
7. Landscape & townscape	?/+		?/+				Potential for improved buildings that enhance and make a positive contribution to the local character and Conservation Area, including the setting of nearby BTM
8. Parks & open spaces							Neutral
9. Best use of land & sustainable construction	?		?	?			It is uncertain whether a residential proposal would make better use of this land; the loss of commercial units would be considered to be negative

10. Housing	+		+			+	Some opportunity for new homes, possibly affordable homes
11. Health, well-being, secure communities							Neutral
12. Accessible local services	-		-	-	-		This area is poorly provided with local services as it is outside of (including outside the 400m of) town centres and areas of mixed use
13. Town centres							Neutral
14. Local economy	-		-	-	-	-	This proposal would lead to a loss of commercial uses that could contain a number of workers and provide many jobs
15. Commercial development opportunities	-		-	-	-	-	Permanent loss of an employment site
<p>Summary of assessment: <i>(likely sustainability impact of the option)</i> Whilst redeveloping this site may provide some potential positive impacts, such as in relation to providing new homes, addressing climate change and land contamination, overall this proposal has many uncertain and negative impacts. In particular, it would lead to a permanent loss of an employment site; loss of jobs and contribution to the local economy cannot be mitigated.</p>							
<p>Possible Mitigation: <i>(measures to mitigate likely negative effects and enhance positive effects)</i> Some negative consequences may be mitigated (e.g. waste, travel); however, the permanent loss of this employment site cannot be mitigated.</p>							
<p>Conclusions: compare the different options Option A is the most sustainable.</p>							