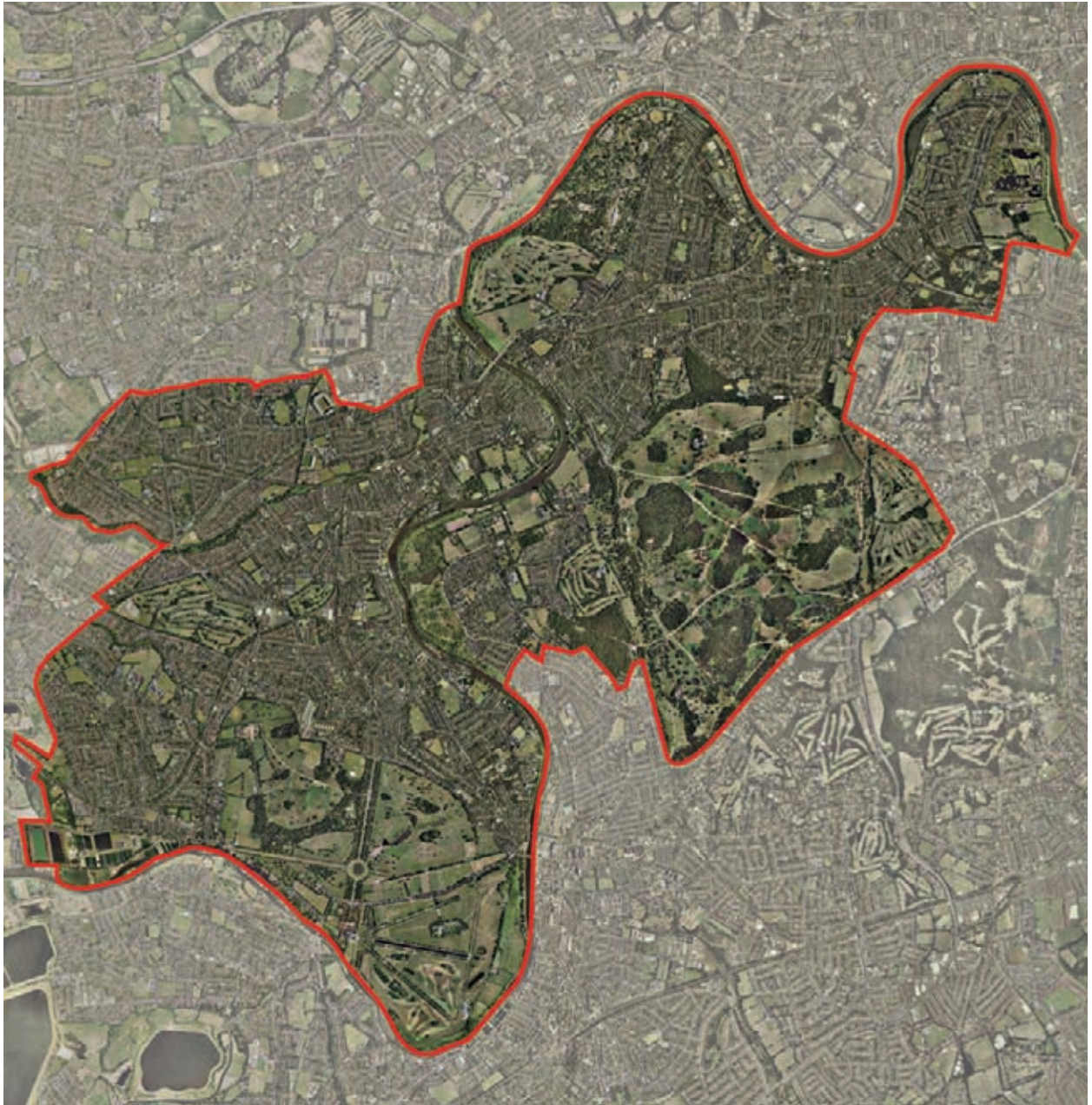


LONDON BOROUGH OF RICHMOND UPON THAMES
BOROUGH-WIDE
SUSTAINABLE URBAN DEVELOPMENT STUDY



SEPTEMBER 2008

TURLEYASSOCIATES

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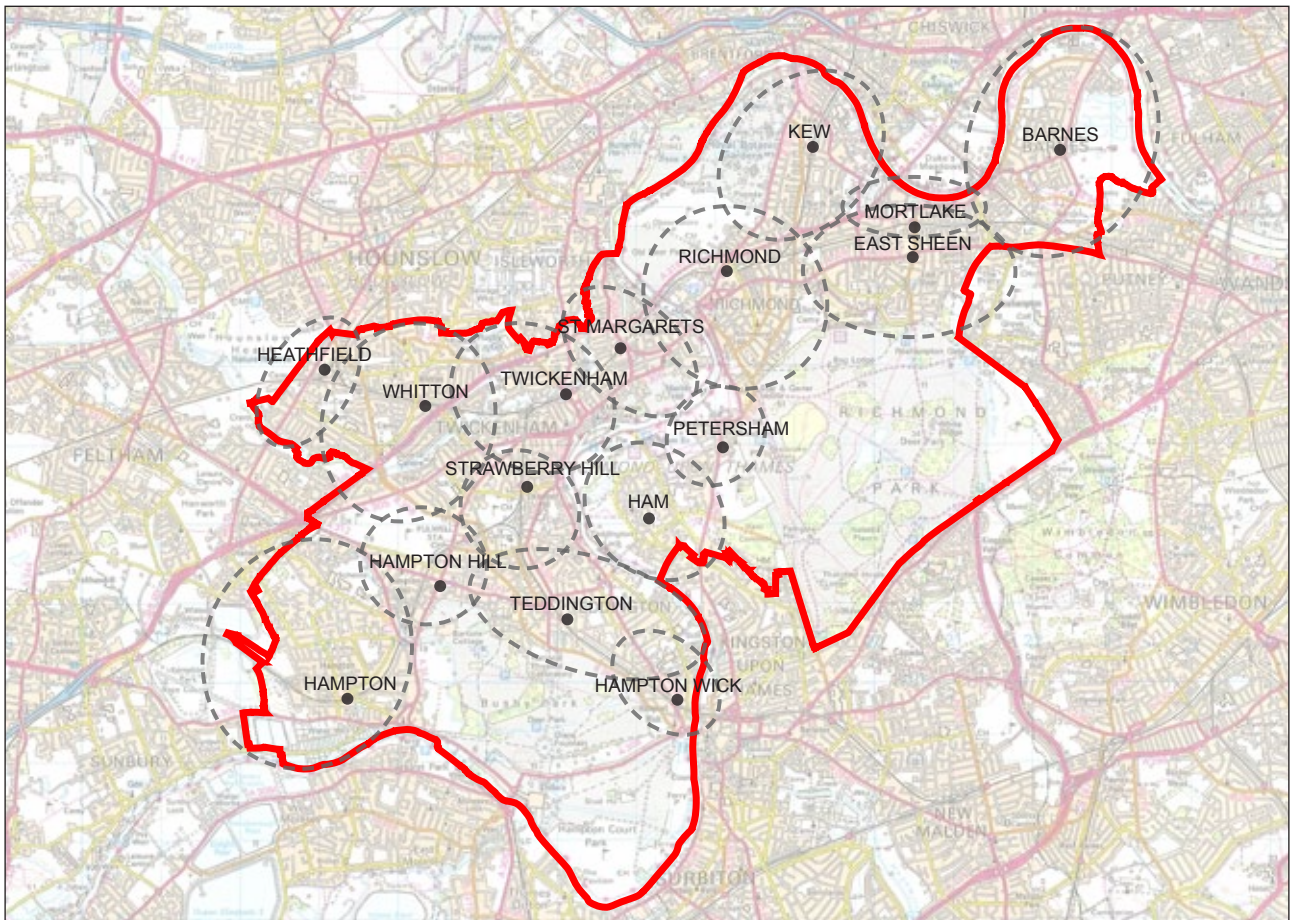
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EXECUTIVE SUMMARY

'Higher-density developments can help to create more viable neighbourhoods capable of supporting local services.' Better Neighbourhoods: Making High Densities Work CABE (2005)

Introduction

1. This Borough-wide Sustainable Urban Development Study has been prepared by Turley Associates for the London Borough of Richmond upon Thames (LBRuT). The purpose of the study is to identify areas that are inappropriate and those with potential for higher density development, particularly taller buildings, within the LBRuT. The recognition of this will help to protect the Borough's local character and enhance town centres and other areas where possible.
2. The study is organised in three stages. The first stage comprises an understanding of the Borough's context both regionally and locally through planning policy, especially LBRuT's existing Supplementary Planning Document (SPD), and its environment. The second is a sieving exercise to establish areas within the surrounding settlements that are unsuitable, appropriate or need careful consideration for higher density development, particularly taller buildings. This will be undertaken by reviewing the restrictive development policies within the adopted UDP and the developing LDF, and analysing the Borough's context and surroundings. The third stage identifies the current policy guidance for higher density development and/or tall buildings, and provides design guidance for each identified settlement.



London Borough of Richmond upon Thames annotated with a red line

Policy Context

3. Existing national, regional and local planning policies and good practice guidance promotes intensification, provided there is adequate public transport and social infrastructure capacity. Also within these policies high standards of design, and relating proposals to the surrounding context is promoted in new developments.

Regional Context

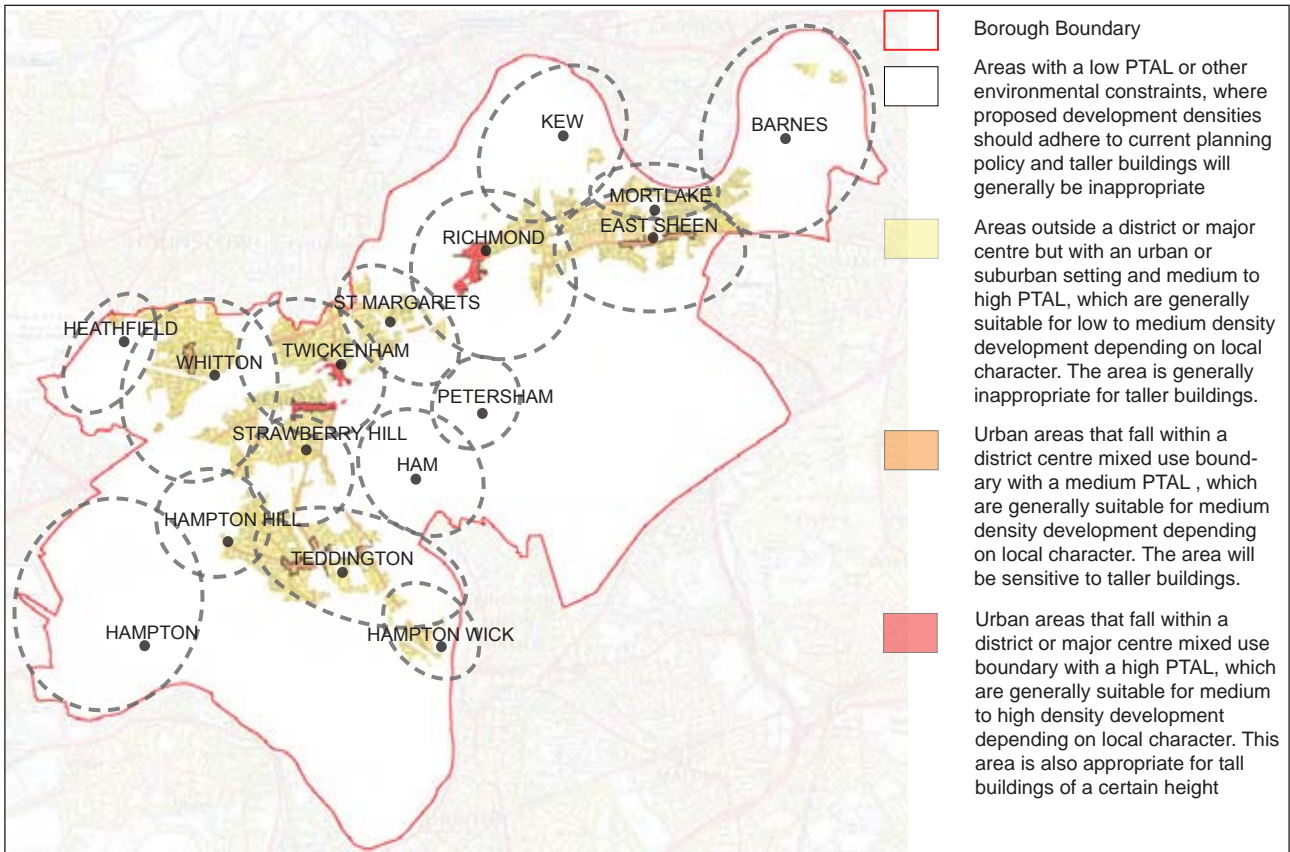
4. The Borough is located on the outskirts of the south west of London and has been identified as being in the South West Sub-region in the London Plan (2008). The plan also recognised that the Borough contains one major centre, Richmond, and four district centres, Twickenham, Teddington, East Sheen and Whitton. The public transport accessibility level (PTAL) for the region shows that the Borough has a rating of between 1 to 6a, this is typical of a London suburb.

Local Context

5. The River Thames and open space within the Borough combine to provide a distinct high quality environment and character. The skylines outside the major and district centres are formed by the roofs of two to four storey dwellings and tree tops punctuated by church spires and the odd four to five storey flat block. The skylines vary around the centres within the Borough with the roof lines of the three to four storey mixed-use blocks punctuated by six to nine storey office blocks.

Sieve Exercise

6. The sieve exercise was undertaken in three stages, the first being a restrictive policy review, which identified existing policies that do not allow for the majority of development within them. The second stage established the existing residential densities, district and major centres, and PTALs within the Borough. The final third stage discussed the existing features, area character and adopted policies that could constrain the suitable areas. The resulting plan illustrates where higher density developments and taller buildings are inappropriate, appropriate or sensitive within the LBRuT. The findings are summarised below.
7. The Borough's normally inappropriate accessibility levels and distances from centres are removed from the plan. These include the local centres of Hampton, Hampton Hill, Ham Petersham and Kew. Also, further areas of the Borough that are designated Conservation Areas have been highlighted as unsuitable due to the proposed type of development being in strong contrast with the existing character or appearance of the area.
8. The areas that normally need careful consideration before implementing higher density developments and are inappropriate for taller buildings based on the study's assumptions include Hampton Wick, Barnes, Strawberry Hill, St Margaret's and Mortlake. These areas are predominately suburban in character with small local centres. They also fall within the walking distance of 800 m of a district, major or metropolitan centre and have a PTAL of 2 or higher.
9. The areas outside the mixed use boundaries of the five town centres, need careful consideration when proposing higher density developments and taller buildings, but are unsuitable for tall buildings. These areas include East Sheen, Whitton, Teddington, Richmond and Twickenham. These settlements all have a PTAL of 2 or over. Care would need to be taken with this type of development to that demonstrate that it preserves or enhances the character or appearance of the Conservation Areas within these settlements. The mixed use area boundaries of East Sheen, Whitton and Teddington are appropriate for higher densities and taller buildings, subject to local character, design and impact on amenities and ecology.
10. The mixed-use area boundaries defined for Richmond and Twickenham are also appropriate for higher densities and taller buildings as they all have a PTAL of 4 or over and in some places tall buildings would



Key Findings Plan

be appropriate to identify key nodes. Although the characteristic of the Central Richmond Conservation Area indicates that new buildings should not exceed around six storeys in height.

Guidance on Tall Buildings and High Density development

11. The identified regional and local policies highlighted the following locally specific guidelines that need to be considered when locating either higher density development and/or taller buildings. These include in summary:
 - enhancing existing heritage features and views, and avoid detracting from them;
 - sufficient public transport accessibility to and from the site, unless the development brings about public transport improvements.
12. Specific tall building guidance includes: care should be taken on the location of tall buildings to accentuate key nodes or gateways; and avoid blocking or distracting designated strategic and local views.
13. The identified regional and local policies also provided the following locally specific guidelines that need to be considered when designing either higher density development and/or taller buildings. These include, in summary:
 - the form relates or responds to the massing and scale of the surrounding context;
 - preserves heritage features;

- considers safety and security as part of the design; and
- promotes sustainability principles.

14. Specific tall building guidance includes, in summary:

- provides an attractive landmark building;
- minimises the impact of privacy on adjacent buildings and areas; and
- consideration the proposals would have on the surrounding microclimate including overshadowing.

Local Density Matrix

15. A summary has been provided for each of the areas within LBRuT which shows suggested densities and taller building locations based on the London Plan, the sieving exercise and character studies. This is set out in the table below.

Overall character	Settlement area	Indicative density range**	Other^^
Poor public transport links and restrictive environmental policy constraints.	Hampton, Heathfield, Ham, Petersham, Kew	In line with regional guidance (above 35 u/ha)	Taller buildings will be inappropriate.
Suburban or urban setting with a medium to high public transport accessibility, outside a town centre settlement area.	Mortlake, St Margarets, Strawberry Hill, Hampton Hill, Hampton Wick, Barnes	35-120 u/ha	Taller buildings will be inappropriate in general.
Urban town centre setting with medium public transport accessibility, and its suburban/urban environs.	Whitton, East Sheen, Teddington	35-145 u/ha	Potential for taller buildings in town centre locations.
Urban town centre setting with high public transport accessibility, and its suburban/urban environs	Richmond, Twickenham	35-260 u/ha	Taller buildings may be appropriate around town centre locations. Potential for tall buildings generally clustered close to train stations.

**Over and above the local policy requirement for housing gain on a site by site basis. Density ranges will be led by an assessment of local character, design quality and form, and impact on local amenities and ecology.

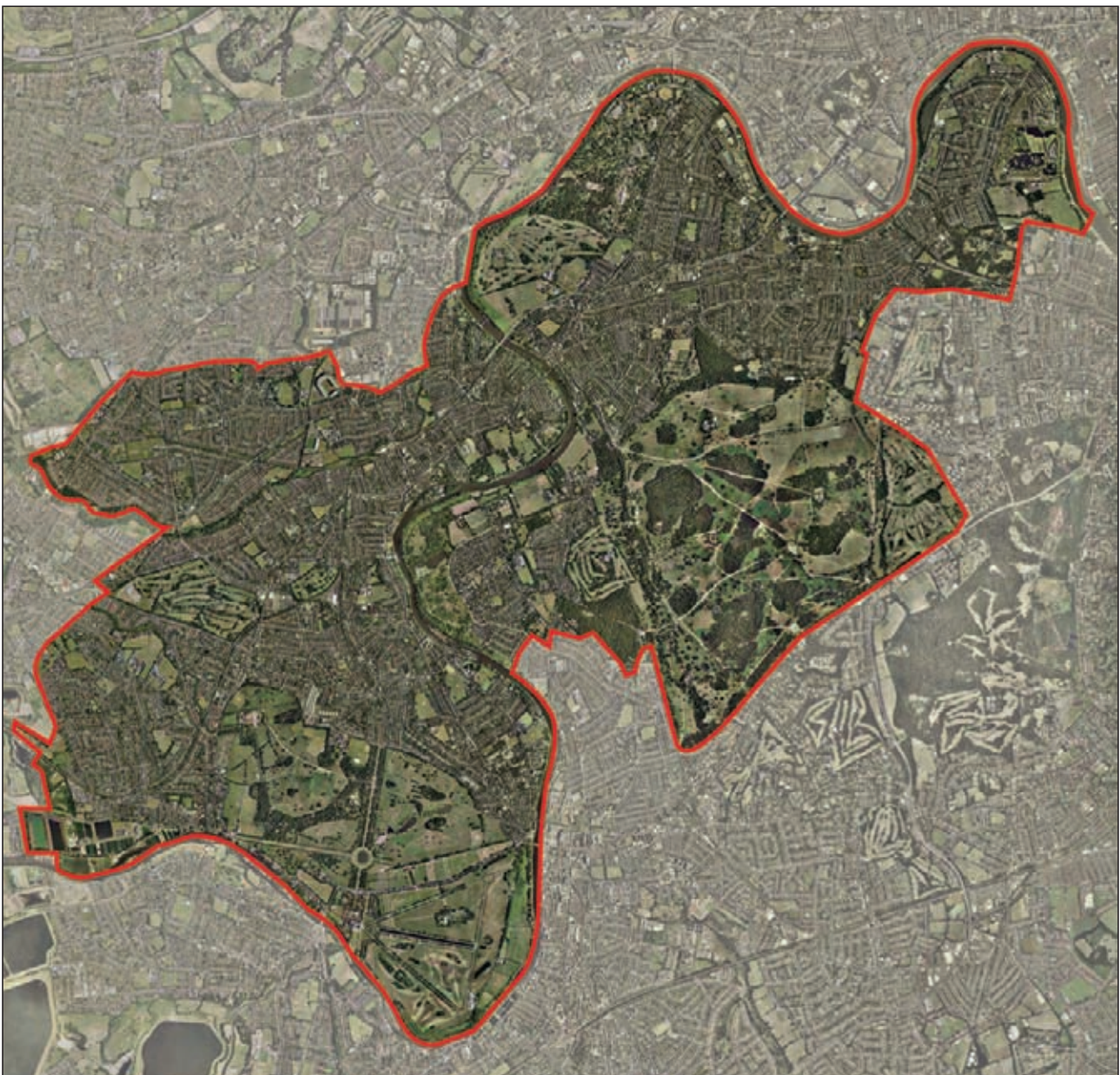
^^Taller buildings defined as up to five storeys depending on context, tall buildings defined as six or more storeys, see terminology.

16. The study demonstrates that the Borough has many areas that are sensitive to denser developments and taller buildings. In these areas generally the lower to medium range of the London Plan matrix would be appropriate. Any proposals within the existing settlement area identified in the table above will require further detailed investigation to ascertain area boundaries, specific density and height limits, preferred land use mixes and other urban design issues. Until site specific allocations have been identified any proposals within the areas recognised would require the following within their application package:
- detailed analysis on the proposals relationship to the surrounding context;
 - consideration of accessibility and connections;
 - demonstration that an appropriate land use has been proposed;
 - environmental issues are considered within the proposal; and
 - demonstration of the quality of the design and the architectural form.

1.0 INTRODUCTION

Introduction

- 1.1 Turley Associates has been commissioned by the LBRuT to prepare a Borough-wide Sustainable Urban Development Study.
- 1.2 The local planning authority must have regard to development plan policy set out in the Mayor's London Plan (2008), which states in Policy 3A.3 that he will, and Boroughs should, "*ensure that development proposals achieve the maximum intensity of use compatible with local context ... and with public transport capacity*". Within the plan a density matrix is provided to outline appropriate densities for different locations. The plan states, "*Appropriate density ranges are related to setting in terms of location, existing building form and massing, and the index of PTAL*".



Aerial image with Borough boundary in red

1.3 One way of achieving higher densities is through tall buildings, the location of which need to be considered more carefully than other types of higher density schemes. Policy 4B.9 of the London Plan states that Boroughs should, “*identify suitable locations for tall buildings*”, that they, “*may wish to identify defined areas of specific character that could be sensitive to tall buildings*” and that, “*they should not impose unsubstantiated borough-wide height restrictions*”.

1.4 This is emphasised in the CABI and English Heritage ‘Guidance on Tall Buildings’ which recommends that local planning authorities undertake an urban design appraisal of the local area to highlight areas that are “*appropriate, sensitive or inappropriate*” for tall buildings.

“*Higher-density neighbourhoods have the potential to capture the appeal of older places, by contributing to lively, well-used neighbourhoods and by creating a sense of community*” Better Neighbourhoods: Making High Densities Work CABI (2005).

Purpose of the Study

1.5 As set out above, the purpose of the study is to identify areas that are unsuitable, and those with potential for, higher density development, particularly taller buildings, within the LBRuT. The recognition of which will help to protect the Borough’s local character and enhance town centres and other areas where possible.

1.6 As part of the study, areas unsuitable, appropriate or require careful mitigation to deal with local sensitivities for higher density development have been identified through using a three stage sieving exercise the methodology for which is discussed below. Also, in line with the CABI and English Heritage guidance the appropriate locations for taller buildings within the Borough are considered as part of the sieving exercise. The intention of this study is to aid the implementation of the Borough’s Local Development Framework (LDF).

“*To be acceptable, any new tall building should be in an appropriate location, should be of excellent design quality in its own right and should enhance the qualities of its immediate location and wider setting. It should produce more benefits than costs to the lives of those affected by it*” CABI and English Heritage (2007).

Methodology and Structure of the Study

1.7 The methodology has been developed using guidance from both regional and local policy, and good practice guidance.

1.8 The study is broken up into three stages. The first stage comprises an understanding of the Borough’s context both regionally and locally through planning policy, especially LBRuT’s existing Supplementary Planning Document (SPD), and its environment. The second is a sieving exercise to establish areas unsuitable, appropriate or require careful mitigation to deal with local sensitivities for higher density development, particularly taller buildings. This will be undertaken by reviewing the restrictive development policies within the adopted UDP and the developing LDF and analysing the Borough’s context and surroundings.

1.9 The outcome of this exercise will be used to define specific area locations, which are inappropriate or appropriate for such developments, and provide design guidance for such proposals.

Benefits of Sustainable Higher Density Developments

1.10 The Urban Task Force report ‘Towards an Urban Renaissance’ highlighted the relationship between sustainable design and density stating, “the critical mass of development contributes to the informal vitality of the street and public places that attracts people to city centres and urban neighbourhoods, as well as contributing to energy efficiency”, The ‘Urban Design Compendium 2: Delivering Quality Places’ highlights that the resolution of the design process can be used to prevent the conflict between the

aims of economic growth, housing need and affordability, and environmental sustainability.

1.11 The term 'higher density development' has been perceived in the past as being negative, as these types of developments can be viewed as putting a strain on the existing infrastructure through overshadowing, amenity, parking and effects on surrounding habitats. The advantages of such a development are not always seen. The 'Urban Design Compendium 1' outlines the key sustainable benefits of higher density development which are summarised below.

Social

- social proximity encourages positive interaction and diversity;
- improves viability of and access to community services; and
- enables more and better integrated social housing.

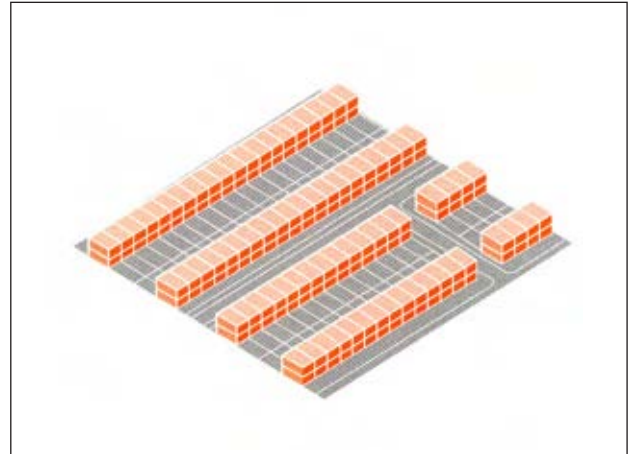
Economic

- enables economic viability of development; and
- provides economies of infrastructure.

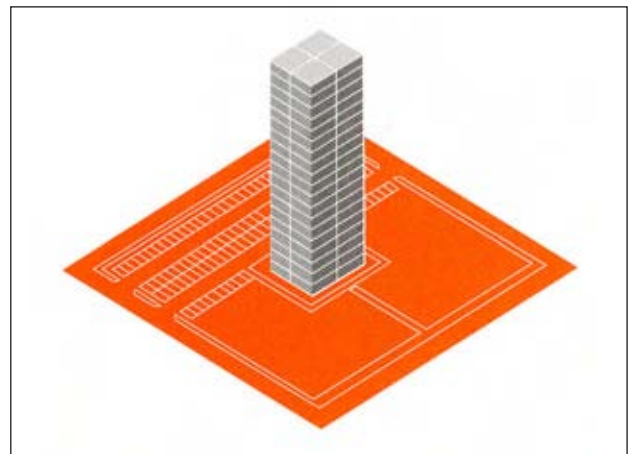
Environmental

- increases energy efficiency;
- decreases resource consumption;
- creates less pollution;
- preserves and helps fund maintenance of public open space; and
- reduces overall demand for development land – avoiding sprawl.

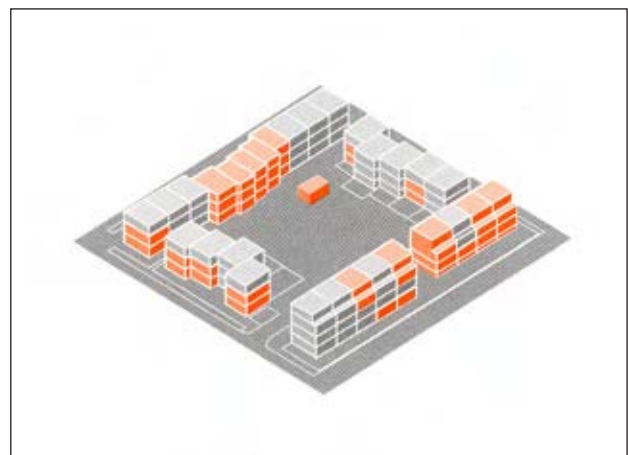
1.12 Developments can be laid out in a variety of ways to achieve higher densities. The adjacent images illustrate three different forms of architecture – a single high-rise building; traditional terrace street layout; and the urban block. These typologies all have a similar density but have a different private and public open space relationship. This brings with it various positive and negative aspects.



75u/ha - Terrace Blocks



75u/ha - Tall Building



75u/ha - Perimeter Block

1.13 Therefore higher densities developments do not have to mean taller buildings, but some townscape benefits can arise, for instance tall buildings can act as a landmark either on their own or within a cluster of buildings. They can be a positive addition within an environment by aiding orientation, marking key nodes or gateways. They can frame views or act as end points for corridor views. The design of the buildings can also contribute to local identity and pride, bringing social and economic contributions to the surrounding area. But high buildings can also be a negative factor within an environment due to their impact on the surrounding context, by the creation of an overbearing built form.

Study Terminology

1.14 The Mayor’s ‘Housing for a Compact City’ document states that “*density describes how many people or households occupy an area of land*”. It is difficult to define what higher density is as it varies depending on the surrounding context’s density. An example of this is that higher density within a suburban setting compared to a city centre location could be viewed very differently.

1.15 The London Plan’s density matrix provides an indication of density ranges, which depend on setting and unit size, and public transport accessibility level (PTAL) the area falls within. This is promoted in order to reduce pressure on space within London and to ensure that new housing is built at a suitable density. The table below shows the density matrix which will be referenced when determining the studies density terminology. As well as showing the London Plans units to the hectare (u/ha) in relation to the PTAL it splits these ranges up into low, medium and high. This relates to the u/ha in relation to the surrounding setting and context.

Setting	Public Transport Accessibility Level (PTAL)		
	0 to 1	2 to 3	4 to 6
Suburban	35-75 u/ha	35-95 u/ha	45-130 u/ha
Low range	35-55 u/ha	35-65 u/ha	45-90 u/ha
Medium range	40-65 u/ha	40-80 u/ha	55-115 u/ha
High range	50-75 u/ha	50-95 u/ha	70-130 u/ha
Urban	35-95 u/ha	45-170 u/ha	45-260 u/ha
Low range	35-80 u/ha	45-120 u/ha	45-185 u/ha
Medium range	40-80 u/ha	55-145 u/ha	55-225 u/ha
High range	50-90 u/ha	70-170 u/ha	70-260 u/ha
Central	35-110 u/ha	65-240 u/ha	140-405 u/ha
Low range	35-80 u/ha	65-170 u/ha	140-290 u/ha
Medium range	40-100 u/ha	80-210 u/ha	175-355 u/ha
High range	50-110 u/ha	100-240 u/ha	215-405 u/ha

1.16 The Dictionary of Urbanism defines a tall building as “*a building significantly higher than most of the surrounding buildings, or a building of more than six storeys or 25 metres*”. CABE and English Heritage support this definition by defining a tall building as one that is “substantially taller than its neighbours and/or which significantly change the skyline”.

1.17 The London Plan states that tall buildings “*that are significantly taller than their surroundings and/or have a significant impact on the skyline*”. Part 1 of The Town and Country Planning (Mayor of London) Order goes into further detail and defines large scale development in relation to tall buildings as buildings that are more than 25m high within the Thames Policy Area and buildings more than 30 m high outside the City of London.

1.18 These definitions highlight the fact that taller buildings need to be considered in relation to their local and

wider context. In order to establish what a high building is in relation to the Borough the study, in Section 3, establishes the Borough's context.

1.19 For the purpose of this study the terminology which will be used is discussed below:

Terminology	Description
Taller Buildings	Buildings that are significantly taller than their neighbours but less than 18m in height (below six storeys)
Tall Buildings	Buildings of 18m in height (approximately six storeys), or taller, above existing ground level
Higher density development	A development that has significantly higher densities to that of the majority of the surrounding area
Clusters	A group of three or more buildings
Inappropriate Area for Higher Density Developments	These areas have been defined as being unsuitable for higher density developments and taller buildings. This is due to a variety of reasons which include; being located within designated policy areas that prevent the majority of development; being defined as suburban in the London Plan definition; within a PTAL of below 1a and 1b, leading to poor accessibility; and within restrictive Conservation Areas and the Kew World Heritage site buffer.
Sensitive Area for Higher Density Developments	Any higher density developments within these areas would need to be carefully considered. These areas are also not suitable for taller building in most locations. This is due to the area falling within a PTAL of 2 or over and within the 800 m boundaries of district and major centres. The predominant land use within this area is residential. Residential developments, and where appropriate some mixed use, that are higher than the surrounding context may be suitable in some locations. But care would need to be taken that the proposals respond to the local character, which is predominantly suburban in character.
Appropriate Area for Higher Density Developments	These areas have been defined as being appropriate for higher density developments, but not suitable for tall buildings. This is due to the area falling within a PTAL of 2 or over and within the defined boundaries of district and major centres. The land use within this area is typically mixed use. These areas could be suitable for mixed use developments that are higher and taller than the surrounding context subject to the proposals responding to the local character.
Appropriate Area for Higher Density and Tall Buildings	These areas have been defined as being appropriate for both higher density developments and taller buildings mixed use developments. This is due to the area falling within a PTAL of 4 or over and within the defined boundaries of district and major centres. These areas could be suitable for tall buildings subject to the proposals responding to the surrounding context character. Therefore, in some locations tall buildings may be unacceptable.

2.0 POLICY CONTEXT

- 2.1 The relevant planning policies relating to higher density development and taller buildings have been summarised below. These include national, regional and local planning policy guidance and are relevant to decisions on high buildings in individual planning applications and at appeals.

National Policies

- 2.2 Planning policy guidance (PPG) and their replacement planning policy statements (PPS) have been prepared by the Government to provide guidance on the planning system and policy.

PPS1 Delivering Sustainable Development (2005)

- 2.3 PPS1 identifies the Government's approach to planning as being founded upon the principles of sustainable development. It also stresses that good design ensures attractive, usable, durable and adaptable places. It is indivisible from good planning, and high quality, inclusive design should be the aim of all of those involved in the development process. The guidance makes it clear that:

"Design which is inappropriate in its context, or which fails to take the opportunities available for improving the character and quality of an area and the way it functions, should not be accepted".

- 2.4 PPS1 also states that planning policies should protect and enhance the quality, character and amenity value of urban areas as a whole, stating:

"A high level of protection should be given to most valued townscapes and landscapes, wildlife habitats and natural resources. Those with national and international designations should receive the highest level of protection". By Design: Urban Design and the Planning System: Towards Better Practice

- 2.5 By Design supports the PPS1 commitment to good design. It emphasises that the scale, massing and height of a proposed development should be considered in relation to that of the adjoining buildings, topography, general pattern of heights in the area and views, vistas and landmarks.

- 2.6 The document suggests undertaking character appraisals as a way to understanding the local context and promoting better design. Here elements that create local character and constraints are identified. These include such features as:

- natural topography;
- urban grain; significant views of skylines;
- scale and height;
- streetscape;
- landmark buildings and their settings.

- 2.7 All of these features are key to establishing the appropriate context for locating high buildings.

PPG13 Transport (2001)

- 2.8 This guidance sets out the Government's objectives to integrate planning and transport at the national, regional, strategic and local level and to promote more sustainable transport choices both for carrying people and for moving freight. The guidance states that a key planning objective is to ensure that jobs, shopping, leisure facilities and services are accessible for those who do not have regular use of the car and local authorities should give particular emphasis to accessibility in identifying preferred development sites.

PPG15 Planning and the Historic Environment (1994)

- 2.9 PPG15 provides a full statement of Government policies for the identification and protection of historic buildings, conservation areas, and other elements of the historic environment. It explains the role played by the planning system in their protection in the formulation of development control and planning policy.

It states that the design of new buildings that are located near historic buildings needs to be carefully considered by: respecting their setting; following fundamental architectural principles of scale, height, massing and alignment; and using appropriate materials. This does not mean that new buildings have to copy their older neighbours in detail but together form a harmonious group.

Guidance on Tall Buildings (CABE/English Heritage)

- 2.10 This guidance outlines how to evaluate proposals for tall buildings and it provides recommendations to inform policy making. It states that many unpopular tall buildings were designed with a lack of appreciation or understanding of the context in which they were to sit. It recommends that local planning authorities undertake an urban design appraisal of the local area, identifying its constraints and opportunities. This appraisal would highlight areas that are appropriate, sensitive or inappropriate for tall buildings. Such an approach will ensure that tall buildings are properly planned as part of an exercise in place-making informed by a clear long-term vision rather than in a piecemeal manner.
- 2.11 Section four of the guidance provides criteria for evaluating tall building proposals. In summary the following points should be considered when developing a high buildings strategy:
- The relationship to context, including natural topography, scale, height, urban grain, streetscape and built form, open spaces, rivers and waterways, important views, prospects and panoramas, and the effect on the skyline.
 - The effect on the historic context, including the need to ensure that the proposal will preserve and/or enhance historic buildings, sites, landscapes and skylines.
 - The effect on World Heritage Sites. The Government has an international obligation to protect the outstanding universal value of World Heritage sites as set out at the time of inscription in the Statement of Significance.
 - The relationship to transport infrastructure, aviation constraints, and, in particular, the capacity of public transport, the quality of links between transport and the site, and the feasibility of making improvements, where appropriate.

Regional Policies

- 2.12 The Borough falls within the region covered by the London Plan – Consolidated with Alterations since 2004 (2008). The following policies are taken from the plan and relate to higher density developments and taller buildings.

Policy I.1 - Mayor's Objectives

- 2.13 The policy lists a number of objectives. Objective 1 is the most relevant to this study and seeks to “accommodate London’s growth within its boundaries without encroaching on open spaces.” A key policy directive for achieving this objective is to: “achieve an urban renaissance through higher density and intensification in line with public transport capacity, leading to a high quality, compact city, building upon London’s existing urban quality and sense of place” .

Policy 3A.3 - Maximising the Potential of Sites

- 2.14 The policy states that:

“Boroughs should ensure that development proposals achieve the highest possible intensity of use compatible with local context, the design principles in Policy 4B.1 and with public transport capacity. Boroughs should develop residential and commercial density policies in their UDP’s in line with this policy and adopt the residential density range set out in Table 3A.2. The Mayor will refuse permission for strategic referrals that, taking into account context and potential transport capacity, under-use the potential of the site”.

Policy 4B.8 - Respect Local Context and Communities

- 2.15 This policy states that, “boroughs should work with local communities to recognise and manage local distinctiveness ensuring proposed developments preserve or enhance local social, physical, cultural, historical, environmental and economic characteristics.”

Policy 4B.9 - Tall Buildings - Location

- 2.16 The policy states that:

“The Mayor will promote the development of tall buildings where they create attractive landmarks enhancing London’s character, help to provide a coherent location for economic clusters of related activities and/or act as a catalyst for regeneration, and where they are also acceptable in terms of design and impact on their surroundings.”

- 2.17 It goes on to state that Boroughs may wish to identify defined areas of specific character that could be sensitive to taller buildings and explain what aspects of local character could be affected and why, although unsubstantiated, borough-wide height restrictions should not be imposed. In the sub text to the policy the plan does state that intensive development does not necessarily imply high-rise buildings although well designed tall buildings can be a very efficient way of using land.

Policy 4B.10 - Large-Scale Buildings - Design and Impact

- 2.18 This policy outlines that all large-scale buildings, including taller buildings, should be of the highest quality design. It goes on to list the criteria that developments should meet. The key points in relation to this study are that new tall buildings should:

- meet the requirements of the View Protection Framework set out in Policy 4B.16 of this plan;
- be suited to their wider context in terms of proportion and composition and in terms of their relationship to other buildings, streets, public and private open spaces, the waterways or other townscape elements;
- be attractive city elements as viewed from all angles and where appropriate contribute to an interesting skyline, consolidating clusters within that skyline or providing key foci within views;
- be safe in terms of their own integrity and the safety of occupiers and have an acceptable relationship to aircraft, navigation and telecommunication networks;
- be appropriate to the transport capacity of the area ensuring adequate, attractive, inclusive and safe pedestrian and public transport access; and
- relate positively to water spaces taking into account the particular needs and characteristics of such spaces.

Policy 4B.16 - London View Protection Framework

- 2.19 Within this policy the Mayor designates 16 strategically important views. One of three of the linear views crosses through the LBRuT. This is view number nine, the ‘Protected Vista of St Paul’s Cathedral from Richmond Park (King Henry VIII’s Mound)’.

Policy 4B.17 - View Management Plan

- 2.20 This policy sets out that the Mayor will, in collaboration with strategic partners, prepare and review management plans for the views designated under Policy 4B.16. These plans will “*prevent undue damage to the view*”.

Policy 4B.18 - Assessing the Development Impact on Designated Views

- 2.21 This policy states that development proposals will be assessed by the Mayor and the Borough where they fall within the assessment area of the designated views.

Policy 4C.16 - Importance of the Thames

- 2.22 The sub text to this policy states “Many other stretches [of the River Thames] have important historic, cultural and natural connections. These aspects of the Thames should be protected”.

Policy 4C.17 - Thames Policy Area

- 2.23 The policy states that relevant Boroughs must designate a Thames Policy Area and have regard for the following points (in summary):

- contiguous areas with clear visual links between areas and buildings and the river, including views from across the river and areas where it may be beneficial to establish future visual links; and
- areas and buildings that have an historic, archaeological or cultural association with the Thames, including planned vistas marked by existing or former landscape features.

London View Management Framework SPG (2007)

- 2.24 London View Management Framework (LVMF) provides guidance on the management of development within designated, strategically important views of London and its major landmarks. The framework relates to Policies 4B.16 – 4B.18 of the London Plan and it confirms the protected vistas that exist within London.

- 2.25 Only one of the three linear views defined within the LVMF cross through the LBRuT. A management plan is provided for this view and Appendix G of the LVMF provides directions on consultation that should be adhered to should development take place within the view’s corridor.

Local Policies

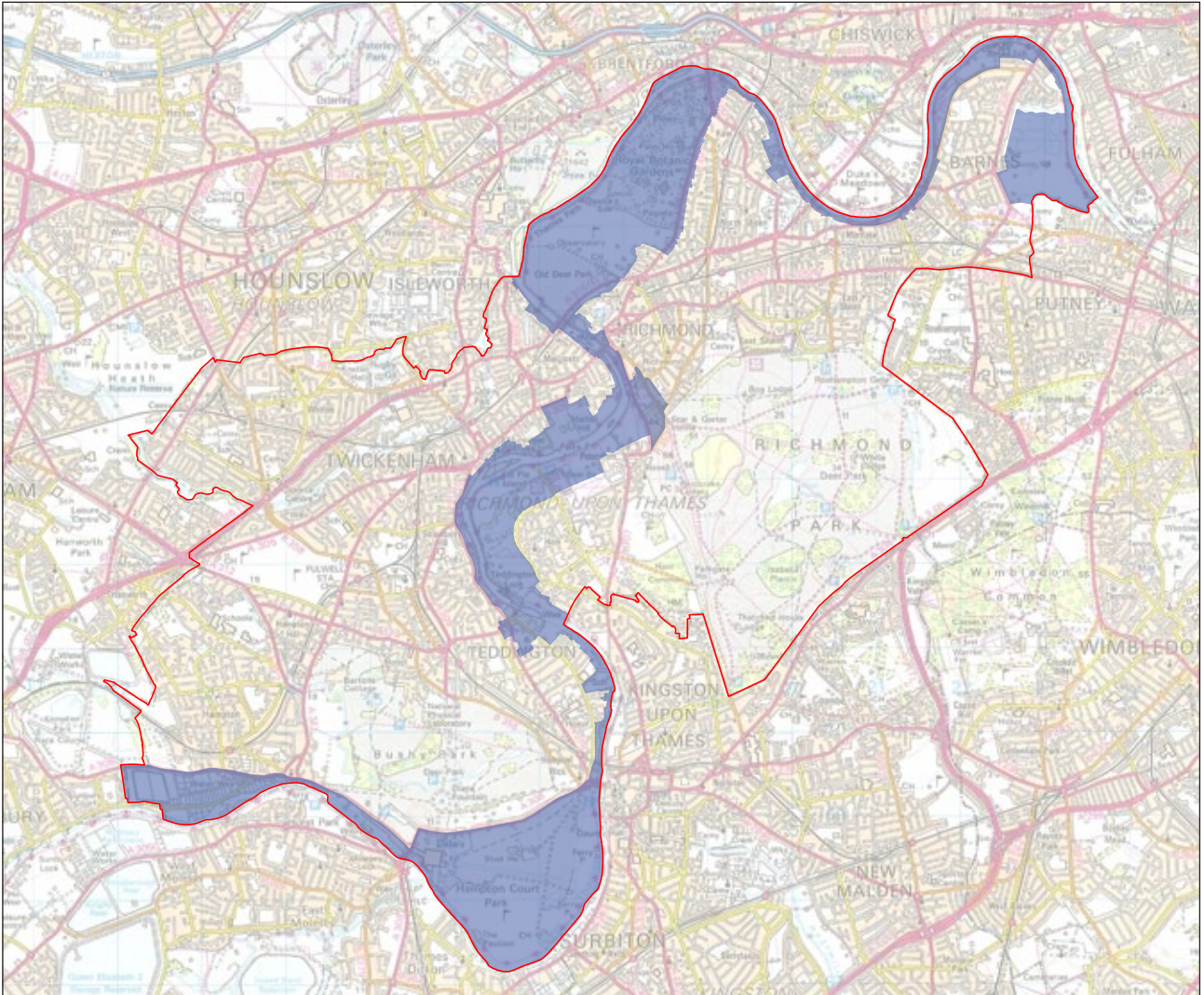
- 2.26 The Borough is covered by the UDP (Saved Policies). Policy BLT18 – High Buildings has not been saved within the UDP but it is an important consideration in understanding the background of this study. It states; “Buildings which are higher than the general height of surrounding buildings will not normally be permitted”. The sub text adds “The Council considers that because of the Borough’s special character, views, skylines and local townscape and because it is principally a residential area with a general building height of two to four storeys, all parts are sensitive to the impact of high buildings” .

- 2.27 The following policies have been saved in the plan and relate to higher density developments and tall buildings within LBRuT.

Policy STG2 - The Environment

- 2.28 The policy states the aspiration of protecting and enhancing the open and the built environment. It states that the council will:

- safeguard the Borough’s green belt and metropolitan open land and protect green chains and green corridors and other areas of open land which are important for visual reasons, agriculture, nature conservation, biodiversity, or sport and recreation;
- conserve and enhance areas and buildings of historic or architectural interest or of special townscape value, and ancient monuments and sites of archaeological interest and registered parks and gardens of special historic interest;
- protect the character of established residential areas, particularly from inappropriate infill and backland development; and
- seek to ensure that developments enhance their surroundings, and do not impair important views or skylines.



Thames Policy Area

Policy STG4 - Town and Local Centre and Retailing

2.29 The policies aspirations are to maintain and reinforce the vitality and viability of existing centres.

Policy ENV5 - Protection of Views and Vistas

2.30 The policy states:

“The Council will seek to protect the quality of views especially those indicated on the Proposals Map. It will also seek opportunities to create attractive new views and vistas and, where appropriate, improve any that have been obscured” .

Policy ENV26 - Thames Policy Area

2.31 The policy seeks to protect and enhance the special character of the Thames Policy Area by addressing a number of points. The key points relating to this study include:

- (a) protecting and enhancing views and vistas of and from the River Thames and its riverside landmarks as identified in RPG 3B/9B, and on the Proposals Map;
- (c) ensuring a high quality of design for buildings and spaces, appropriate to the identity of the context, so that the individuality of the reaches is protected; and
- (e) identifying sites where, exceptionally, landmark buildings may be appropriate.

2.32 The sub text to Design Policy BLT11 – Design Considerations states:

“The Council will generally be opposed to any development or re-development that might be out of scale with existing surrounding development. This could happen if a long frontage is introduced in a context of narrow frontages In cases where large separate sites are to be developed (including sites created through the accumulation of separate plots) consideration will be given to the effect upon the natural environment, and to such factors as local identity, views, topography and the general layout and scale of the surrounding area” (paragraph 6.44).

2.33 It goes on to state:

“Development should be in scale with the adjoining buildings and in proportion to the average street width as defined by building frontages” (paragraph 6.47).

Policy HSG2 – Existing Housing

2.34 This policy needs to be considered when proposing the development of existing housing:

“Existing housing should be retained and where necessary rehabilitated except:

(A) where it is incapable of improvement or conversion to a satisfactory standard or where redevelopment would provide substantial housing gain. Any redevelopment must be compatible with policy HSG 11 and design policy BLT 11; and new backland/infill policy HSG 12, or

(B) where the housing is within an area of missed use and is to be redeveloped in accordance with policy HSG5.”

Policy HSG11 - Residential Density Mix

2.35 The policy states:

“In considering the appropriate density and mix of dwelling sizes for any development the Council will take into account the need to use land as intensively as is compatible with the protection of the quality, character and amenity of the area, and the contribution to meeting housing need for all sections of the community”.

2.36 Further Policies that need to be considered when placing higher density developments and tall buildings are:

- Policy STG 7 - Public Open Space;
- Policy ENV1 - Metropolitan Open Land;
- Policy ENV2 - Green Belt;
- Policy ENV3 - Other Open Land of Townscape Importance;
- Policy ENV6 - Green Chains;
- Policy ENV10 - Historic Parks, Gardens and Landscapes;
- Policy ENV11 - Retention and Improvement of Public Open Space;

- Policy ENV18 - Sites of Special Scientific Interest and other Sites of Nature Importance;
- Policy ENV19 - Nature Conservation and Development Proposals;
- Policy ENV20 - Green Corridors;
- Policy BLT2 - Protection and Enhancement of Conservation Areas;
- Policy BLT3 - Preservation of Listed Buildings and Ancient Monuments;
- Policy BLT4 - Protection of Buildings of Townscape Merit; and
- Policy TRN1 - Location of Development.

2.37 The Borough is currently producing its Local Development Framework and, although it has not been adopted yet, the Core Strategy (Submission 2008) document sets out the Council's vision and guiding principles for development. The following policies are of relevance to this study:

Policy CP1 - Sustainable Development

2.38 The policy's aspirations are to maximise the effective use of resources. Key principles include: locations of facilities and services; making the best use of the land; and reducing environmental impact.

Policy CP7 - Maintaining and Improving the Local Environment

2.39 The policy states, "all new development should recognise distinctive local character and contribute to creating places of a high architectural and urban design quality that are well used and valued". It adds that development should be based on an understanding of the Borough's development patterns, features and views, and connect positively with their surroundings.

Policy CP8 - Town & Local Centre

2.40 The policy outlines the roles and hierarchy of the towns and local centres within the Borough. Detail is provided of the proposed approach towards the growth/development of Richmond, Teddington, Whitton, East Sheen, and local and neighbourhood centres. Twickenham is covered in Policy CP9.

Policy CP9 - Twickenham Town Centre

2.41 This policy looks specifically at the revitalisation and growth of Twickenham town centre.

Policy CP11 - River Thames Corridor

2.42 The policy states:

"The natural and built environment and the unique historic landscape of the River Thames corridor within the Borough will be protected and enhanced, respect the special character of the different reaches identified in the Thames Strategy and the Thames Landscape Strategy".

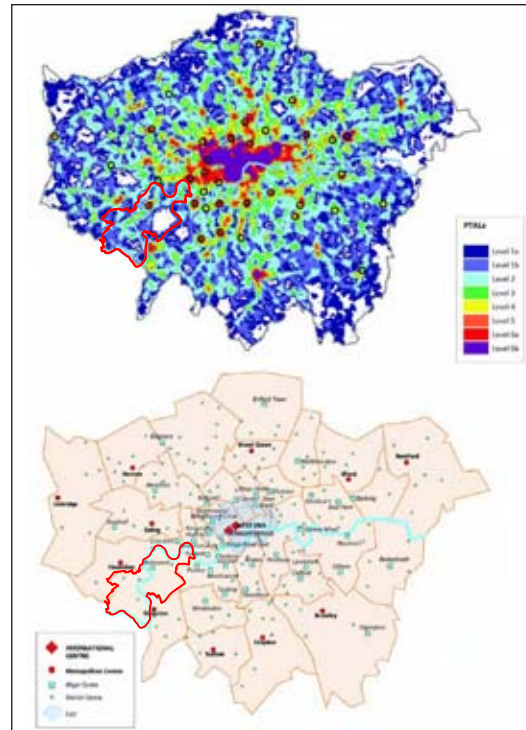
2.43 Further core policies that need to be considered when placing higher density developments and tall buildings are:

- Core Policy 2 - Reducing Carbon Emissions;
- Core Policy 3 - Climate Change - Adapting to the Effects;
- Core Policy 4 - Biodiversity;
- Core Policy 5 - Sustainable Travel;
- Core Policy 10 - The Open Environment; and
- Core Policy 12 - River Crane Corridor.

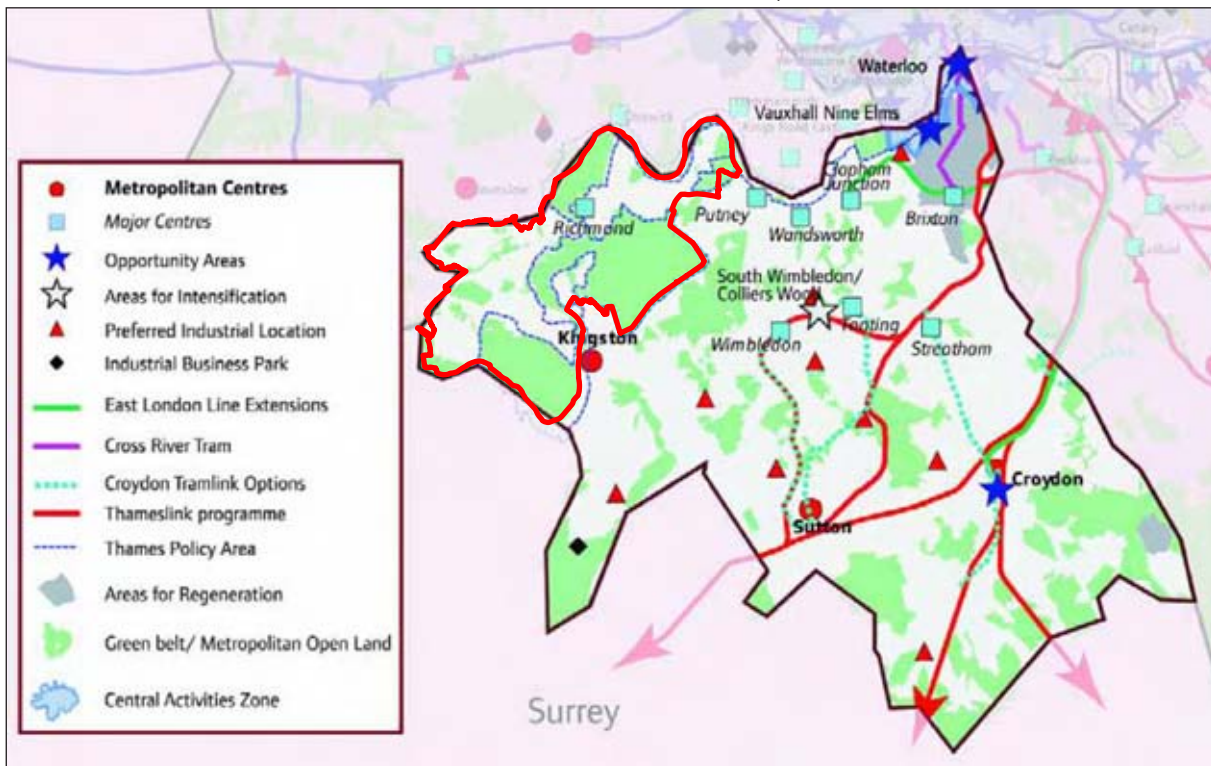
3.0 BOROUGH CONTEXT

Regional Context

- 3.1 The LBRuT is located on the outskirts of the south west of London and has been identified as being in the South West Sub-region in the London Plan (2008).
- 3.2 The plan also provides a hierarchical classification of London's town centres, relating centres of different types to each other according to their function e.g. the scale and type of their retail and service offer. It recognises that the Borough contains one major centre, Richmond, and four district centres, Twickenham, Teddington, East Sheen and Whitton.
- 3.3 The public transport accessibility level (PTAL) for the region shows that the Borough has a rating of between 1 to 6a, which is typical for a London suburb.



Plans to show PTAL and centres (taken from the London Plan)



South East Sub-region Plan (taken from the London Plan)

Local Context

- 3.4 LBRuT is 5,095 hectares (14,591 acres) in size with a population of approximately 182,000 people (based on the revised mid-year estimates for 2004 produced by the Office for National Statistics). It is located to the south west of the centre of London. The River Thames meanders through the Borough from the south west to the north east for 21½ miles and it is the only London Borough to straddle the Thames with districts on both sides of the river.
- 3.5 The topography of the Borough is relatively flat due to the River Thames flood plain, with Richmond Hill raised up to the south west creating panoramic views across the Borough and beyond. Included in this view is the Arcadian View looking from the hill to the west. This is the only view protected by an Act of Parliament in 1902.
- 3.6 The River Thames initially influenced the patterns of settlements within the Borough with the villages of Barnes, Mortlake, Hampton and Totyington being drawn to its banks in Saxon times. Next, the attraction of royalty to the Borough generated substantial growth and influenced the character of the area through the building of Richmond, Hampton Court and Kew Palaces and the enclosure of Richmond, Bushy and Hampton Court Parks to create hunting grounds for the palaces. The rich and famous followed royalty into the Borough, pulled by the quality of the environment and its proximity to London, and located themselves within large estates nearby to Richmond, Twickenham and Petersham.
- 3.7 In the early 18th century the majority of the Borough was predominantly rural in character and made up of large parks and common land, with small villages and the larger town of Richmond being independent settlements within the area. The Borough continued to develop slowly with it expanding in size until the mid to late 19th century with the dawn of the railway spreading into the Borough. This brought with it a boom in housing building, swelling the existing settlements in size and creating a number of new villages.
- 3.8 The 20th century saw development continue to grow along the main transport corridors and on the previous open land to the west of the Borough, due to the sale of Whitton Park estate and Hampton Nursery Lands. Development at the end of the 20th century up to the present day has occurred on former industrial land and the intensification of larger residential plots.



Arcadian view from Richmond Hill

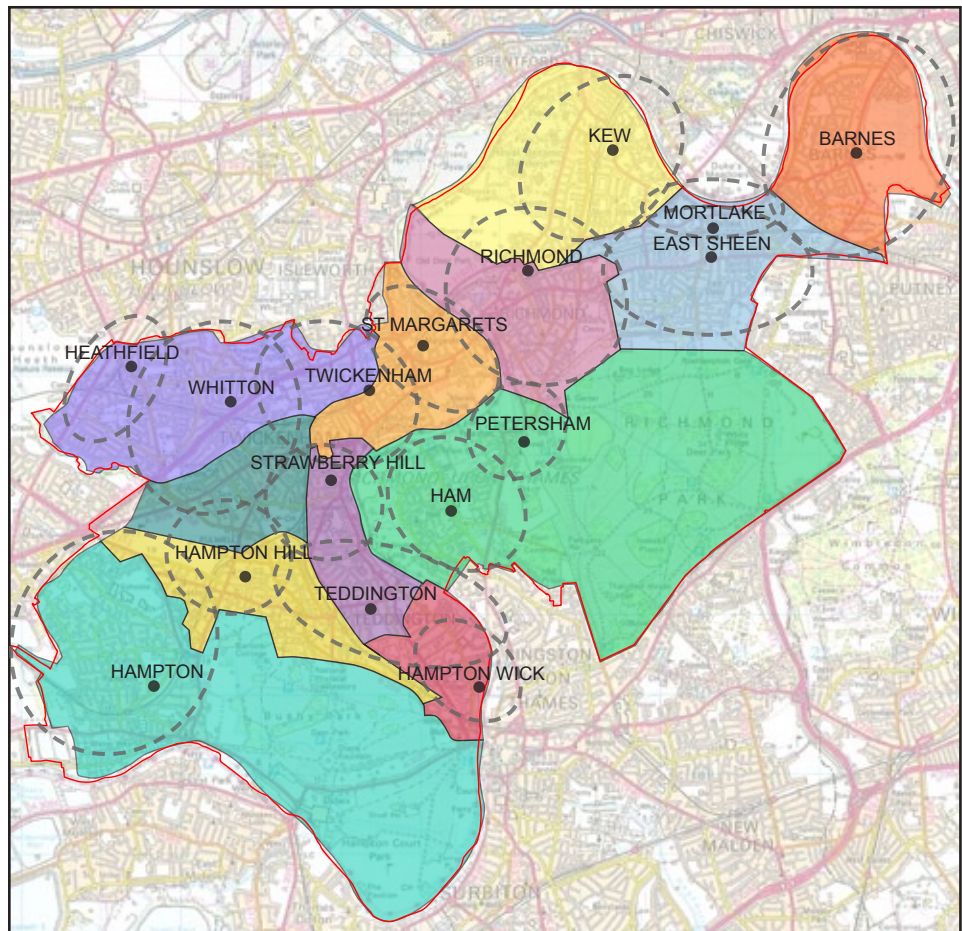
3.9 Due to the links with royalty, the Borough includes a number of heritage features both in the built form and in open spaces. The former includes 72 Conservation Areas, four Scheduled Ancient Monuments, one World Heritage Site and around 1,200 listed buildings and further buildings that make significant contributions to the Borough's appearance and quality that are designated as Buildings of Townscape Merit. The latter includes Kew Botanical Gardens and the three Royal Parks.

3.10 As well as the parks, there are also a number of smaller open spaces within the Borough. In total, public open space covers a third of the Borough, this is five times more green and open space than any other London Borough.

Character Areas

3.11 The river and open space combined provides a distinct high quality environment and character to the Borough. The Borough still contains distinct village character areas which differ in style and quality. The 'Design Quality' SPD has identified twelve areas which "are identifiable, defined by their cohesive identity, or the location of both natural and man made barriers such as the river, open space and the railways". The following descriptions are a summary of these character areas and establishes the qualities which will help further designs within the area:

-  Borough Boundary
-  Barnes
-  Mortlake and East Sheen
-  Kew and North Sheen
-  Central Richmond
-  Ham, Petersham and Richmond Park
-  Twickenham and St. Margarets
-  Whitton and Heathfield
-  West Twickenham and Fulwell
-  Strawberry Hill and Teddington East
-  Hampton Hill and Teddington West
-  Hampton Wick and South Teddington
-  Hampton, Bushy Park and Hampton Court



Character Areas

Hampton, Bushy Park and Hampton Court

- 3.12 North of the Hampton village centre, development is characterised by, mostly inter-war and post war twentieth century housing estates composed of semi-detached and detached houses. The former nursery lands have a greater variety of apartments, bungalows and houses, loosely arranged in courts and cul-de-sac with open grassed areas.

Hampton Hill and Teddington West

- 3.13 Most of the area is residential with a predominately Victorian and Edwardian character of uniform semi-detached homes in avenues of mature trees. There are also many pockets of modern designed terraced housing and flats arranged in courts and parklands.

Hampton Wick and South Teddington

- 3.14 South of the railway line development is mostly Georgian, Victorian and Edwardian and small in scale. To the north of the railway line there is more variation in style and age of residential development. Houses to Lower Teddington Road and the River are more substantial in scale and there are a number of modern residential apartment blocks.

West Twickenham and Fulwell

- 3.15 This is a mixed area of residential housing types which, westwards along Staines Road, progresses from a Victorian to interwar character along Staines Road. North of the Twickenham Green the character of housing is dense, arranged as terrace cottages often against the footway.

Strawberry Hill and Teddington East

- 3.16 The character area is suburban with small pockets of open space and large gardens with a significant numbers of trees. Teddington High Street retains a mix of attractive Victorian and Edwardian shopping parades and Artisan cottages in small side streets. The Strawberry Hill residential area is leafy and contains a mix of large older homes and 20th century infill houses and flats.

Whitton and Heathfield

- 3.17 A largely residential area which is slightly isolated from the rest of the Borough as a result of Chertsey Road and by the River Crane. The character of Whitton is composed almost entirely of large residential estates built between the wars in geometrical and sinuously curving streets. Most homes are arranged in similar arrangements of terraced or semi-detached house types set back from the street with hedgerows but there are few street trees. The High Street forms a focus of retail activity.

Twickenham and St Margarets

- 3.18 Twickenham is a long established settlement with a strong tradition of riverside uses and is also an important commercial centre. The centre is fronted by continuous rows of Victorian and 20th century mixed-use parades which accommodate shops, flats and offices. Towards the south east, the area contrasts with a predominantly village character made up of winding lanes and small cottages, as well as a semi-rural edge with large villas to the riverside. The streets around St Margarets and East Twickenham form a picturesque and leafy landscape containing many fine Victorian and Edwardian villas and inter-war homes.

Kew and North Richmond

- 3.19 This character area contains a meandering river frontage and nearly half of the land is open space, including the Royal Botanical Gardens at Kew. Kew Green to the north of the area forms an important gateway to the Borough and is fronted by finely proportioned Georgian and Victorian houses. To the north east of the green, densely arranged terrace cottages create an intimate urban character. Villas are more densely arranged than the rest of the Borough with shorter set backs and fewer spaces between

properties. Mortlake Road is lined with tall mature trees which enclose and define the street. To the east, the redeveloped sewage works contain grand, formally arranged, contemporary apartments and houses within an immaculate landscape setting. Lower Richmond Road forms the commercial centre of North Richmond with mixed-use parades.

Central Richmond

- 3.20 Centred on the chief settlement and leading commercial and shopping centre in the Borough, the character area also includes a high proportion of residential development. It contains some of the finest buildings and most attractive landscape and open space in the Borough, reflecting its historic fashionable status. On Richmond Hill, St Matthias Church forms a landmark from which residential roads radiate downwards. It is an area of high townscape quality including Georgian and Victorian as well as a mix of housing types, unified by age and building height.

Ham, Petersham and Richmond Park

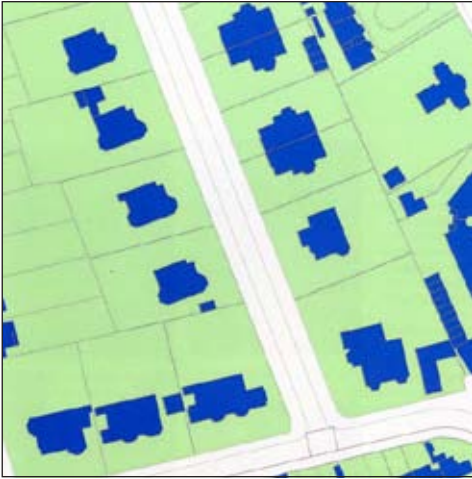
- 3.21 The majority of this character area is dominantly open space, including Richmond Park. The park has a varied topography, is heavily wooded with oak and inhabited with deer. Petersham Road running north-south links the old village centres of Ham and Petersham and the route retains a semi-rural quality through mature landscape and its winding character. Petersham Village has a strong village appeal containing large 18th century and older houses behind high brick walls. Ham retains some characterful groupings of traditional buildings around Ham Common and Ham House and has a large area of 20th century suburban housing to the west.

Mortlake and East Sheen

- 3.22 Mortlake has a dense, built-up character composed of regular patterns of terraced Victorian streets with some set back but little planting. A similar character prevails in parts of East Sheen, becoming more suburban towards East Sheen Common. Near the common are some of the lowest density homes in the Borough, set back from the street within extensive and mature grounds enclosed by gated high boundaries.

Barnes

- 3.23 In the north eastern extremity of the Borough, contained by a tight curve in the river, this character area is composed of residential development and open space. In Castlenau and Lonsdale Road, large early Victorian houses with formal front gardens and mature street trees face a predominantly inter-war residential area of suburban, private built homes and cottage like Council built homes. Barnes Green and the High Street have a village-like atmosphere with areas of fairly dense but lavishly detailed villas to the east and Georgian townhouses to the riverside.



Villas - Typically 10 – 20 u/ha



Mansion Terraces - Typically 50 – 100 u/ha



Suburban Family Homes - Typically 15 – 30 u/ha

Building Mass and Density

3.24 The Borough's residential areas range in character, styles, mass and density. The 'Small and Medium Housing Site' SPD identifies six broad character types. Although this does not reflect the full diversity of housing within the area it provides a basis for categorising different dwelling typologies. Using these character types, the mass and density of buildings within the LBRuT are discussed in the following sections. These are also illustrated within the adjacent urban grain swatches.

Villas

3.25 This typology is made up of the grand imposing mansions and semi-detached houses, which are surrounded by large amounts of open space. These are typically up to four storeys in height and, due to the large amount of open space that the surrounds the dwellings, means that the density of the developments is relatively low.

Mansion Terraces

3.26 These are large homes or apartment blocks located within little open space. The imposing dwellings are typically up to four storeys in height and are developed at a relatively higher density.

Suburban Family Homes

3.27 This is a 20th century typology with the layout designed to suit the car with wider street to building heights they are lower than previous developments. The dwellings are two to two and a half storeys in height and the density of this development is relatively low.

Courts and Parklands

- 3.28 This typology is similar to the 'suburban family homes' as it has been developed to accommodate the car. However, the open space is shared within the development and the car does not dominate the public realm. The dwellings are between two and four storeys in height and have been developed at a medium to higher density.

Tight Knit Housing

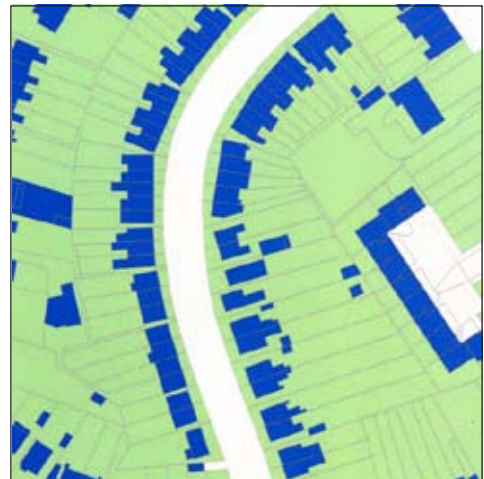
- 3.29 This typology includes detached, semi-detached and terraced houses, which are predominantly two storeys in height. These dwellings have been developed at a medium to higher density.

Terraced Cottages

- 3.30 This is the highest density typology with terraced houses with small rear yards and little to no front garden space. The dwellings are predominantly two storeys in height.



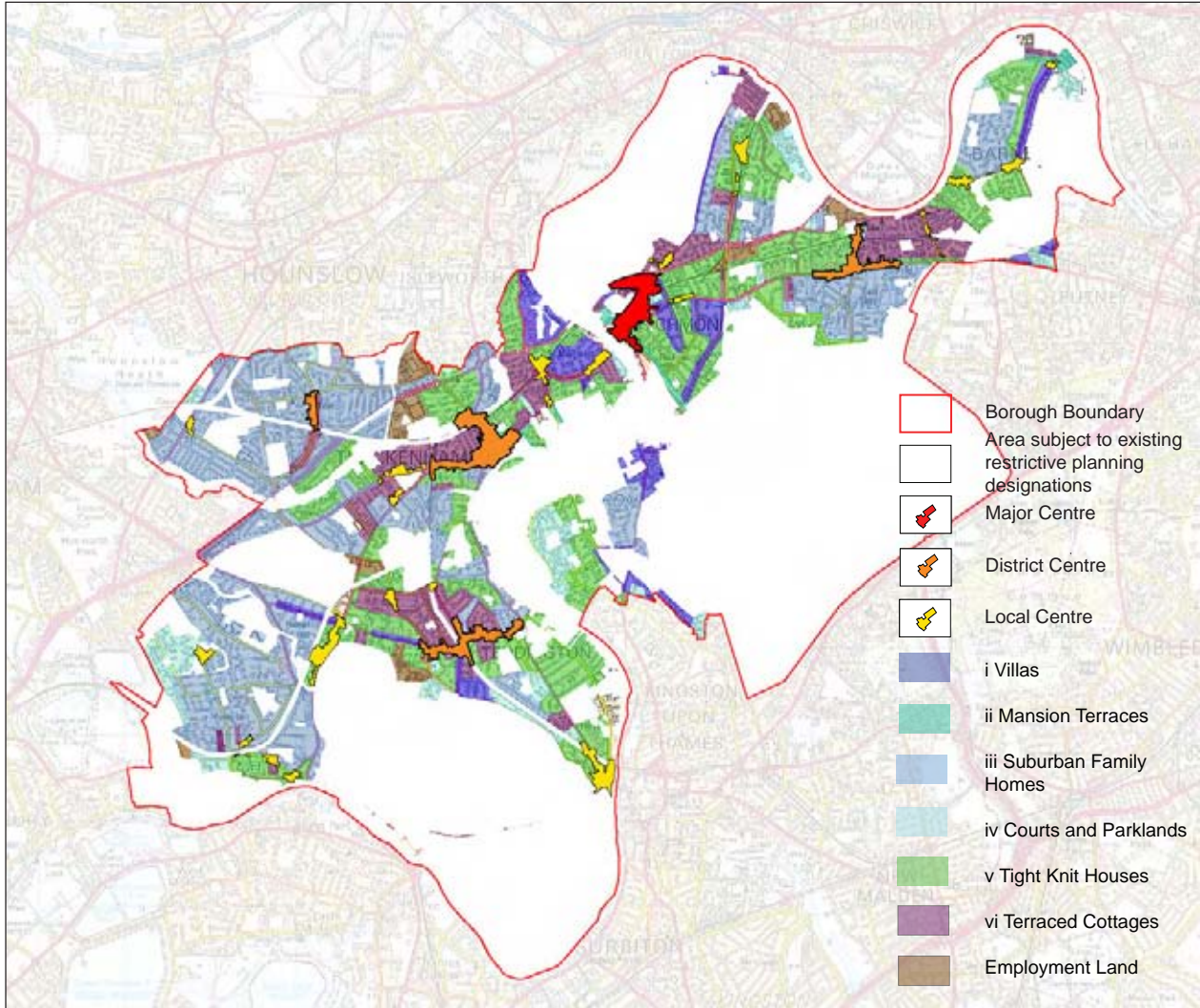
Courts and Parklands - Typically 30 – 40 u/ha



Tight Knit Housing - Typically 25 – 40 u/ha



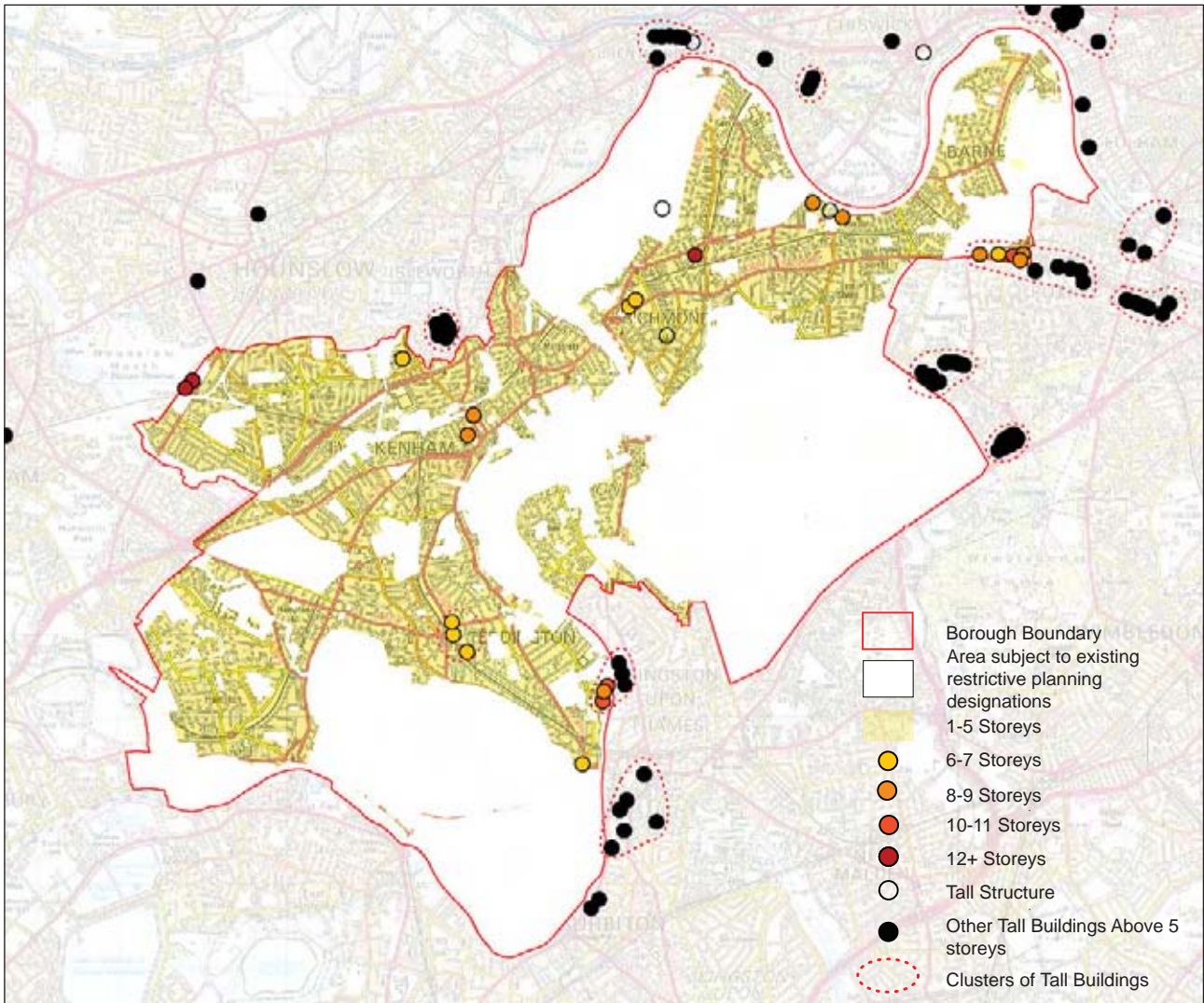
Terraced Cottages - Typically 40 – 80 u/ha



Plan to show Building Typologies

3.31 The plan provides a broad indication of where these typologies are located within the LBRuT. It shows that the medium to higher density developments are located close to the major and district centres, with the lower density developments located on the periphery.

3.32 The results of the typology plan are generally reflected in the population density map below. Here again the higher population density is located close to the major and district centres and transport corridors, with the lower density developments located on the periphery adjacent to open space or poorly accessible areas.



Taller Building Analysis

Skyline and Gateways

3.33 The majority of the skylines outside the major and district centres are formed by the roofs of two to four storey dwellings and tree tops punctuated by church spires and the odd four to five storey flat block. The skylines alter around the centres within the Borough with the roof lines of the three to four storey mixed-use blocks interrupted by six to nine storey office blocks. These emphasise the importance of the centres and create gateways to the transport interchanges they contain.

Tall Buildings and Clusters

3.34 When viewed at a high geographical level, it is apparent that the majority of the Borough's tall buildings are located within the existing centres and transport interchanges such as Twickenham, and to a lesser extent at Richmond, Teddington and Hampton Wick. The tallest buildings in the Borough are 16 storeys high and are located to the western boundary of the Borough next to Hounslow Heath. These are modernist in style and reflect the trend for the development of social housing in the post-war period. Other tall buildings include the Brewery Buildings at Mortlake.

3.35 There are also three tall building clusters within the Borough. A cluster is defined as “a compact group formed by a number of similar things or people; a bunch” within the ‘Penguin English Dictionary’. For the purpose of this study three or more buildings grouped together are classified as clusters.

3.36 One of these clusters is next to the River Thames, to the north of Hampton Wick, and is a series of residential blocks. These are reflected on the opposite side of the river in the adjacent Royal Borough of Kingston upon Thames. The second cluster is located to the south of Barnes and is associated with the Upper Richmond Road, A205 (South Circular). Here there are a number of tall buildings that frame the road from Putney to Barnes Common. The third and final cluster is located within Teddington with three six storey buildings.

3.37 These clusters represent the impetus for the development of tall buildings over the last 50 years which has radiated out from the central London area out to the outer areas of the metropolis.

Other Tall Structures

3.38 The other tall structures in the Borough include the pergola in Kew Botanical Gardens, St Matthias Church at Richmond Hill and the Chimney at the Stag Brewery in Mortlake. These all provide iconic landmarks which are highly visible within the west of the Borough.



Mortlake Skyline



Teddington Skyline



Twickenham Skyline

Case Studies

3.39 Three existing higher density developments have been analysed to understand how such proposals were developed within the Borough to date. The case studies are listed below and can be found at Appendix 1:

- Teddington;
- Kew Riverside; and
- Dukes Court, Mortlake.

3.40 These case studies have been built over the last ten years and range in scale and density. Incidentally all of these are located adjacent to the River Thames. This could be because the majority of recent development sites have come from old industrial uses (the sewage works at Kew riverside) or larger single dwellings residential plots being developed to flats (the land at Dukes Court).

3.41 The lessons learnt from these case studies include:

- relating the development to the surrounding context and environment is required to help to assimilate it into its existing setting;
- the larger the development, the more permeability and legibility principles should be considered;
- high quality and varied materials are required to help to reduce the effect of the overall massing of a dense or taller building; and
- care must be taken to reduce the impact of the car parking need for such a dense development.

4.0 SIEVING EXERCISE

4.1 The London Plan states that large scale developments should be suited to their wider context in terms of their relationship to features such as open space, waterways or other townscape elements and be appropriate to the transport capacity of the area in Policy 4B.9. It goes on to state in Policy 4B.8 that Boroughs may wish to define areas that could accommodate taller buildings. The Tall Buildings Guidance produced by CABI and English Heritage encourages this approach. The guidance states that a detailed urban design study should be undertaken to identify the areas that are inappropriate, sensitive or appropriate for higher density developments, particularly taller buildings

4.2 In order to define these areas this study has undertaken a three staged sieve exercise which overlap each other to provide a robust analysis of the context of the Borough. The stages are discussed below:

Stage 1 - Restrictive Policy Review - this stage identifies existing adopted policy areas that restrict development within them. The result of this review will further define the area.

Stage 2 - Context Review - this stage establishes the existing residential densities, district and major centres, urban and suburban character, and PTALs within the Borough. The outcome of this is to identify the opportunity areas where higher density developments and/or taller buildings could be assimilated.

Stage 3 - Detailed Constraint Sieving Exercise - this stage discusses the existing features, area character, and adopted policies that could constrain the opportunity areas for higher density developments and/or taller buildings. The outcome of this final stage will be a graphical plan of the Borough showing where such developments could be potentially located, within different settlements, with sensitive or inappropriate areas either highlighted or blocked out.

Stage 1 – Restrictive Policy Review

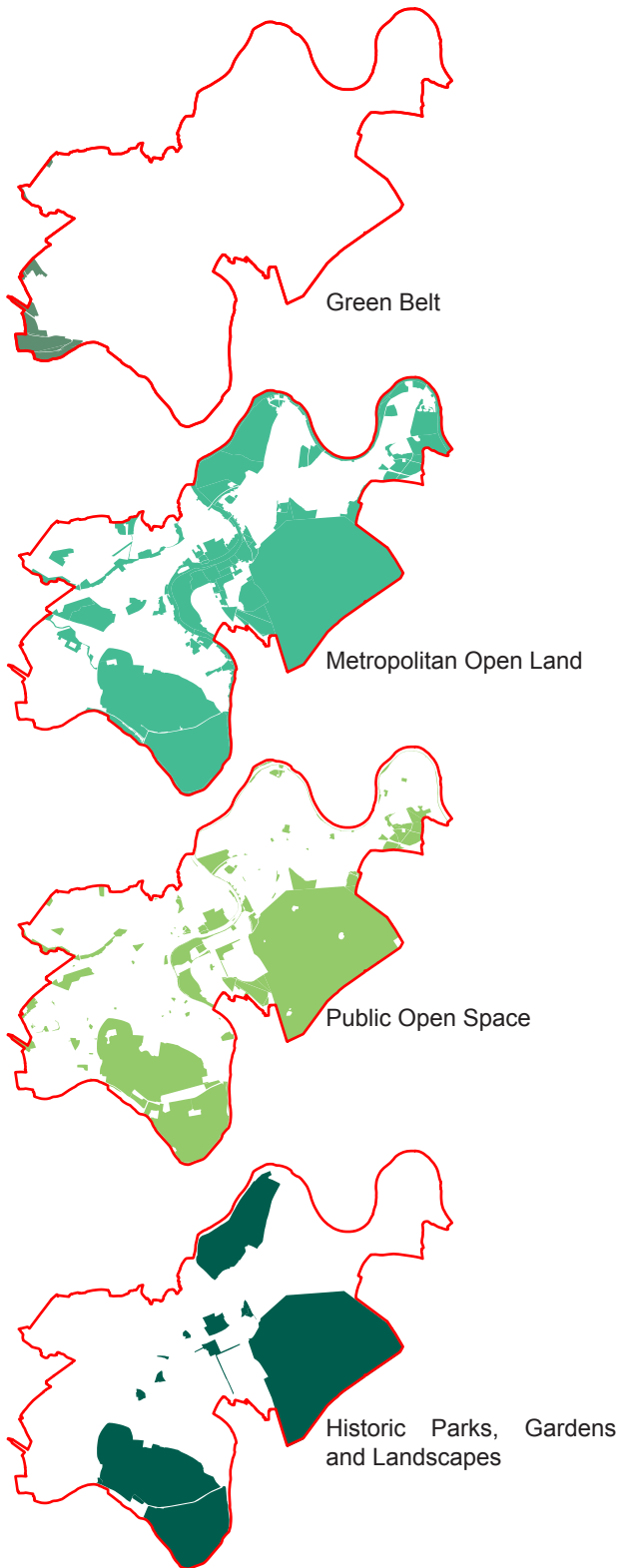
4.3 A review was undertaken of the LBRuT UDP and Core Strategy – Preferred Options (2007) document and checked against the submission 2008 draft for consistency. A number of policies were identified that restrict development within them. They included:

- Policy ENV1 - Metropolitan Open Land;
- Policy ENV2 - Green Belt;
- Policy ENV3 - Other Open Land of Townscape Importance;
- Policy ENV10 - Historic Parks, Gardens and Landscapes;
- Policy ENV11 - Retention and Improvement of Public Open Space;
- Policy ENV18 - Sites of Special Scientific Interest and other Sites of Nature Importance;
- Policy ENV19 - Nature Conservation and Development Proposals; and
- Policy ENV20 - Green Corridors.

These are summarised in the sections below and illustrated in the Sieve 1a Plan, at Appendix 2.

Metropolitan Open Land

4.4 The objective of this policy is to protect and conserve Metropolitan Open Land (MOL) by keeping it in open use (as well as land, this policy covers waterways). There will be a presumption against inappropriate development and consideration taken on the visual impact of any developments adjacent to the open land.



4.5 The Council, in the sub text to the policy, considers the contribution of MOL is as vital as green belt in defining London's structure, consequently substantial development within it will be vigorously resisted. Therefore this is considered a restrictive policy.

Green Belt

4.6 The objective of this policy is to protect and enhance the green belt and there will be a general presumption against inappropriate development. Similarly to the MOL policy, new developments will be required to have a minimum visual impact when viewed from the green belt.

4.7 The policy allows for some development that relates to the uses within the green belt. An example of this is development that is needed to meet the operational requirements of the Hampton Water Treatment Works. This does not however include higher density developments or taller buildings; therefore it is considered a restrictive policy.

Other Open Land of Townscape Importance

4.8 The objective of this policy is to protect and seek to enhance other open areas that are of townscape importance. Again new developments will be required to consider the possible visual impact on the character of the open land.

4.9 The sub text highlights that the Borough has a number of open spaces that act as pockets of local greenery. These contribute to the local character of the area and are valued by local residents. The policy safeguards this land and recognises that there may be exceptional cases where it would be appropriate to allow modest buildings and extensions provided they do not have a harmful effect on its character. These would exclude higher density developments and taller buildings; therefore it is considered a restrictive policy.

Historic Parks, Gardens and Landscapes

4.10 The objective of this policy is to protect and enhance the parks and gardens of special historic interest. Proposals which would have an adverse effect on the settings, views, and vistas to and from historic parks and gardens, will not be permitted.

4.11 In practice this policy would prevent the majority of development within the designated areas and therefore it is considered a restrictive policy.

Retention and Improvement of Public Open Space

4.12 The objective of this policy is to resist the loss of any land shown as public open space. It also aims to protect and enhance the visual quality of these areas by ensuring a high quality of design in new development within or adjacent to it.

4.13 The policy seeks to prevent the majority of developments within the designated areas and therefore it is considered a restrictive policy.

Sites of Special Scientific Interest and other Sites of Nature Importance

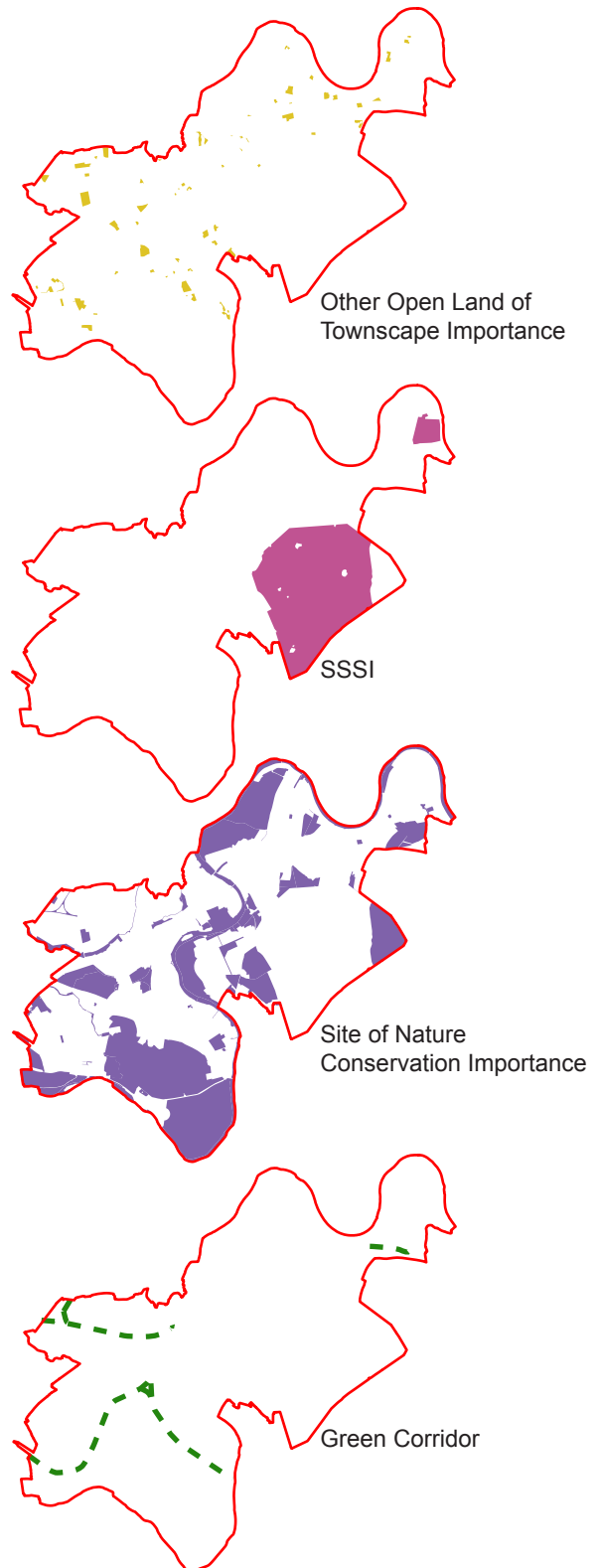
4.14 The objective of this policy is to prevent proposals which may have an adverse effect on a Site of Special Scientific Interest (SSSI), Local Nature Reserve or Other Site of Nature Importance.

4.15 It is inappropriate to consider developing within SSSIs, Local Nature Reserves or Other Sites of Nature Importance as they are highly valued and it would normally be difficult to develop any type of development without adversely affecting the natural habitats and biodiversity of the area. Therefore this has been considered a restrictive policy.

Green Corridors

4.16 The objective of this policy is to protect and enhance the designated Green Corridors. Developments which threaten the integrity of these corridors will not be permitted.

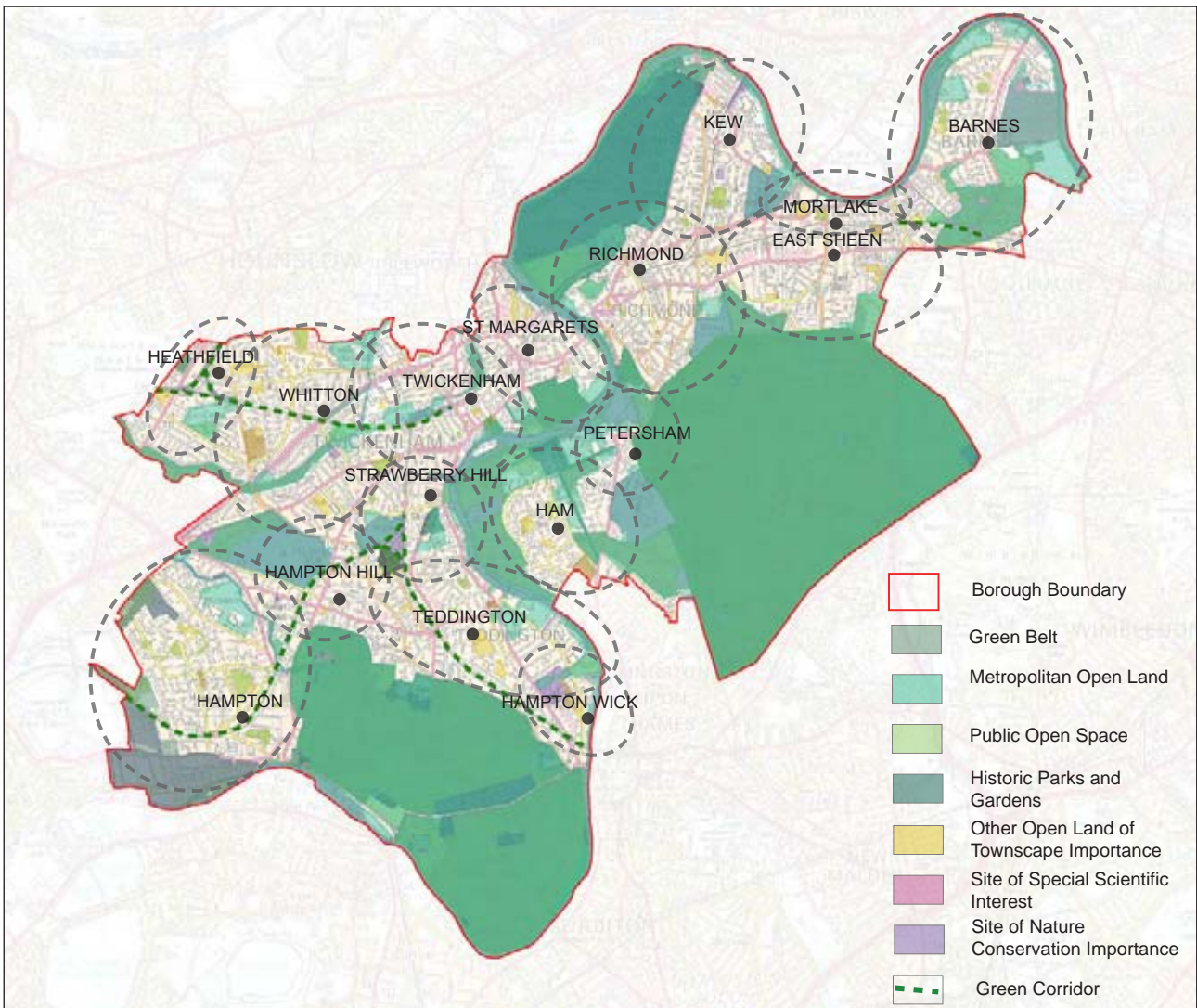
4.17 The policy seeks to prevent the majority of developments within the designated areas and therefore it is considered a restrictive policy.



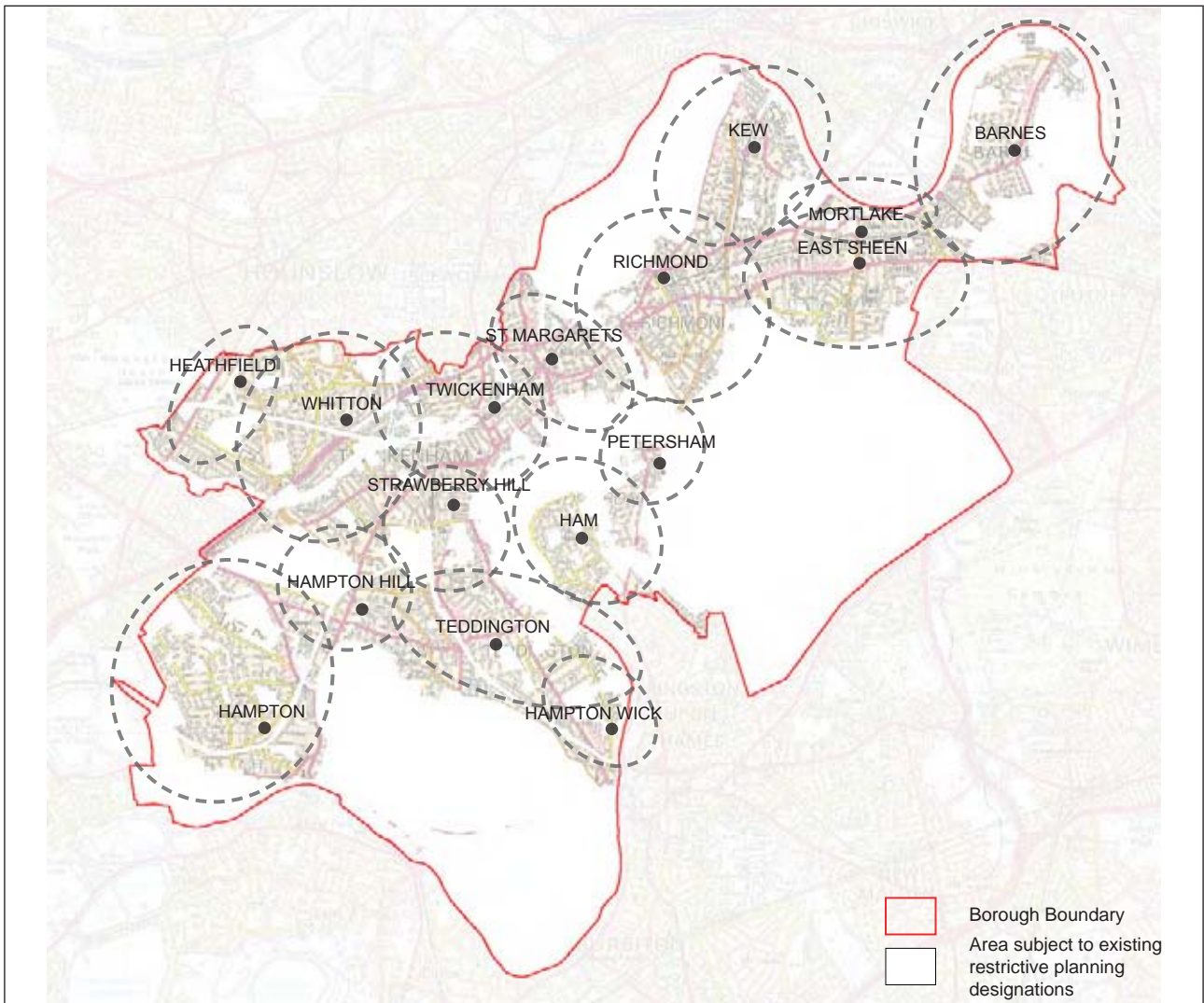
Stage 1 – Restrictive Policy Results

- 4.18 The policies that are discussed above have been overlapped in Sieve 1b Plan, at Appendix 2. The Sieve 1 Results Plan, illustrates the outcome of the Stage 1 sieve with the areas containing restrictive policies shown in white identifying the areas normally unsuitable for higher density developments and taller buildings. These results have predominantly removed all the designated open space areas.
- 4.19 A number of the policies raise the visual impact effect of adjacent new developments on the designated areas. Care would need to be taken when locating higher density developments and/or taller buildings near to such areas and a buffer would potentially need to be considered. This will need to be considered on a case-by-case basis, with reference to local policy.

Stage 2 - Context Review

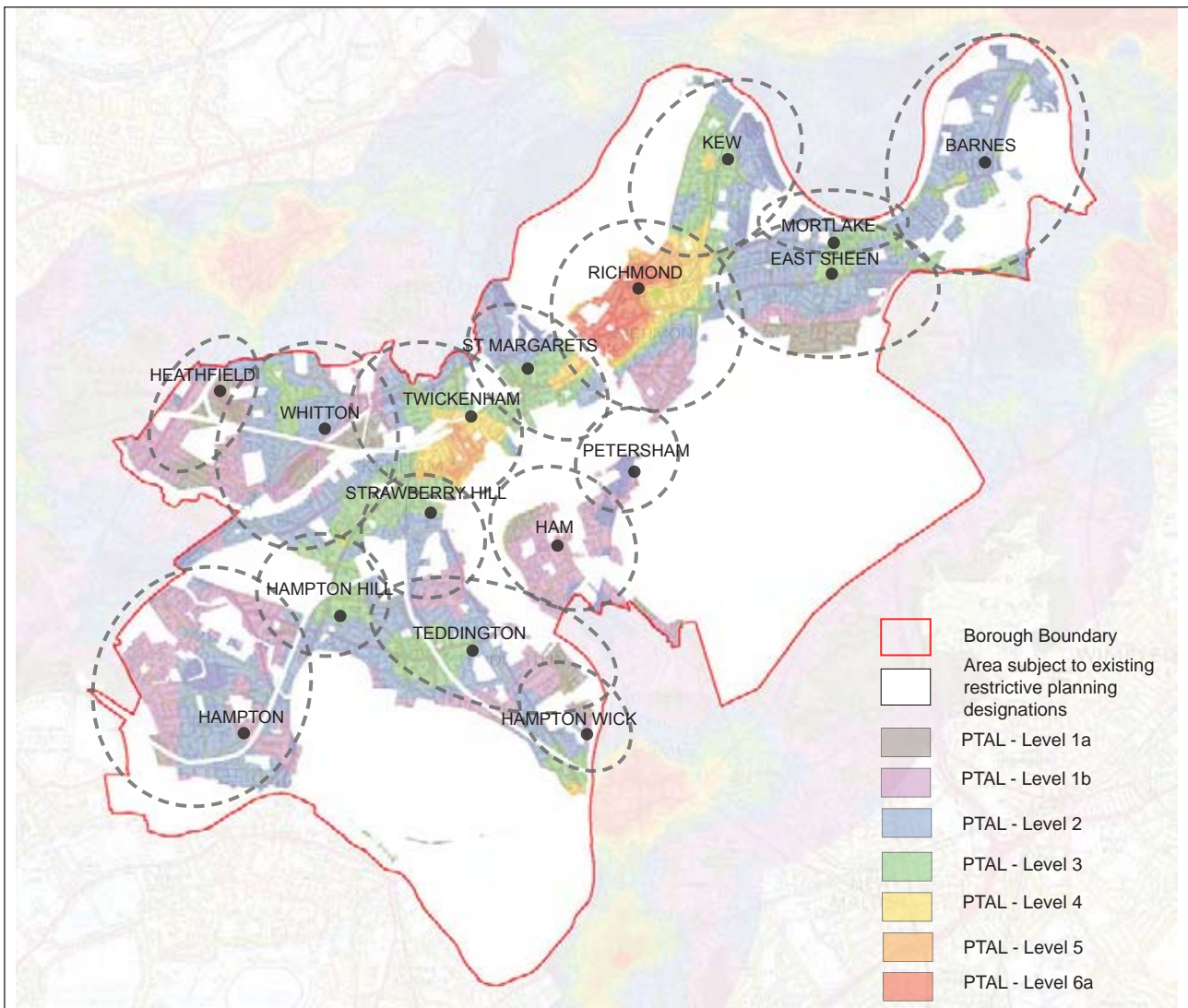


Sieve 1b Plan - Restrictive Policy

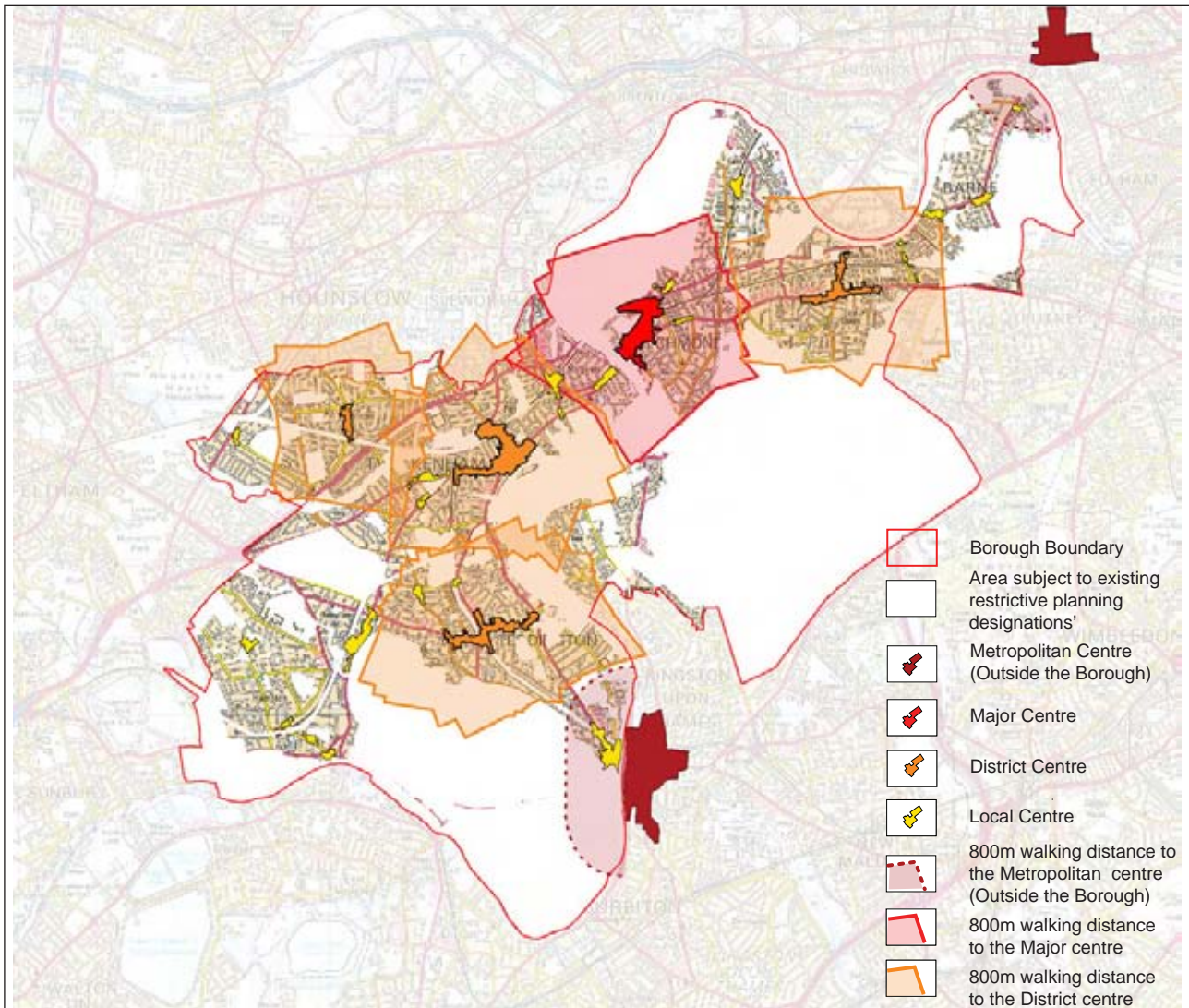


Sieve 1 Results Plan

- 4.20 The residential density of the Borough has been discussed in detail in Section 3 of this study. It shows that there are links to the existing public transport accessibility level (PTAL) map, which show high levels of accessibility near to town centres, relating to the location of higher density developments and taller buildings within the Borough. The PTAL for the Borough is shown in the Sieve 2a Plan – PTAL Plan, at Appendix 2.
- 4.21 Policy 3A.3 of The London Plan addresses the maximisation of the potential of sites whilst considering the local context and the public transport capacity. The sub text to the policy provides a density matrix table, set out below, which sets a strategic framework for densities at different locations whilst taking into account a variety of factors including the accessibility of an area.
- 4.22 An assumption has been made based on the PTAL groups that, due to poor accessibility, higher density developments and/or taller buildings would not appropriately be located within the levels of 1 or below.
- 4.23 The setting of the residential areas is defined in the sub text to the policy as the following.



Sieve 2a Plan - PTAL



Sieve 2d Plan - Town Centre Catchment Areas

- central – areas with very dense development, a mix of different uses, large building footprints and typically buildings of four to six storeys, located within 800 m walking distance of an international, metropolitan or major town centre.
- urban – areas with predominantly dense development such as, for example, terraced houses, a mix of different uses, medium building footprints and typically buildings of two to four storeys, located within 800 m walking distance of a district centre or, along main arterial routes.
- suburban – areas with predominantly lower density development such as for example, detached and semi-detached houses, predominantly residential, small building footprints and typically buildings of two to three storeys.

Setting	Public Transport Accessibility Level (PTAL)		
	0 to 1	2 to 3	4 to 6
Suburban	35-75 u/ha	35-95 u/ha	45-130 u/ha
Low range	35-55 u/ha	35-65 u/ha	45-90 u/ha
Medium range	40-65 u/ha	40-80 u/ha	55-115 u/ha
High range	50-75 u/ha	50-95 u/ha	70-130 u/ha
Urban	35-95 u/ha	45-170 u/ha	45-260 u/ha
Low range	35-80 u/ha	45-120 u/ha	45-185 u/ha
Medium range	40-80 u/ha	55-145 u/ha	55-225 u/ha
High range	50-90 u/ha	70-170 u/ha	70-260 u/ha
Central	35-110 u/ha	65-240 u/ha	140-405 u/ha
Low range	35-80 u/ha	65-170 u/ha	140-290 u/ha
Medium range	40-100 u/ha	80-210 u/ha	175-355 u/ha
High range	50-110 u/ha	100-240 u/ha	215-405 u/ha

4.24 The assumption has been made that a suburban setting would normally be an unsuitable location for the higher range of unit numbers and taller buildings due to context and accessibility to local centres. Also that:

- higher density developments could be located within the 800 m walking distance of the identified international, metropolitan, major and district town centre that has a PTAL rating of 2 or higher subject to careful consideration of design and layout or require careful mitigation to deal with local sensitivities;
- higher density developments should be located within the district centre boundaries that have a PTAL rating of 3 or higher; and
- taller buildings should be located within the international, metropolitan, major and district town centres that have a PTAL rating of 4 or higher.

4.25 There are no international or metropolitan centres located within the LBRuT. The London Plan and the Borough's UDP identify five town centres, one of which is a major centre:

- Richmond;

The following areas are identified as being a district centre:

- East Sheen;
- Teddington;
- Twickenham; and
- Whitton.

4.26 These centres' boundaries are defined in the LBRuT UDP Policy Plan as "area of mixed-use" and an associated 800 m walking distance has been identified from these boundaries on the Sieve 2d Plan, at Appendix 2. The study considers that the Borough's town centres fall within the London Plan definition of "urban setting" as they generally have medium sized footprints, smaller scale grain and between two to four storeys in height. The surrounding areas to these centres will be either suburban or urban in character depending on PTAL and local character assessment, taking into account context and dwelling typology, outlined in section 3.

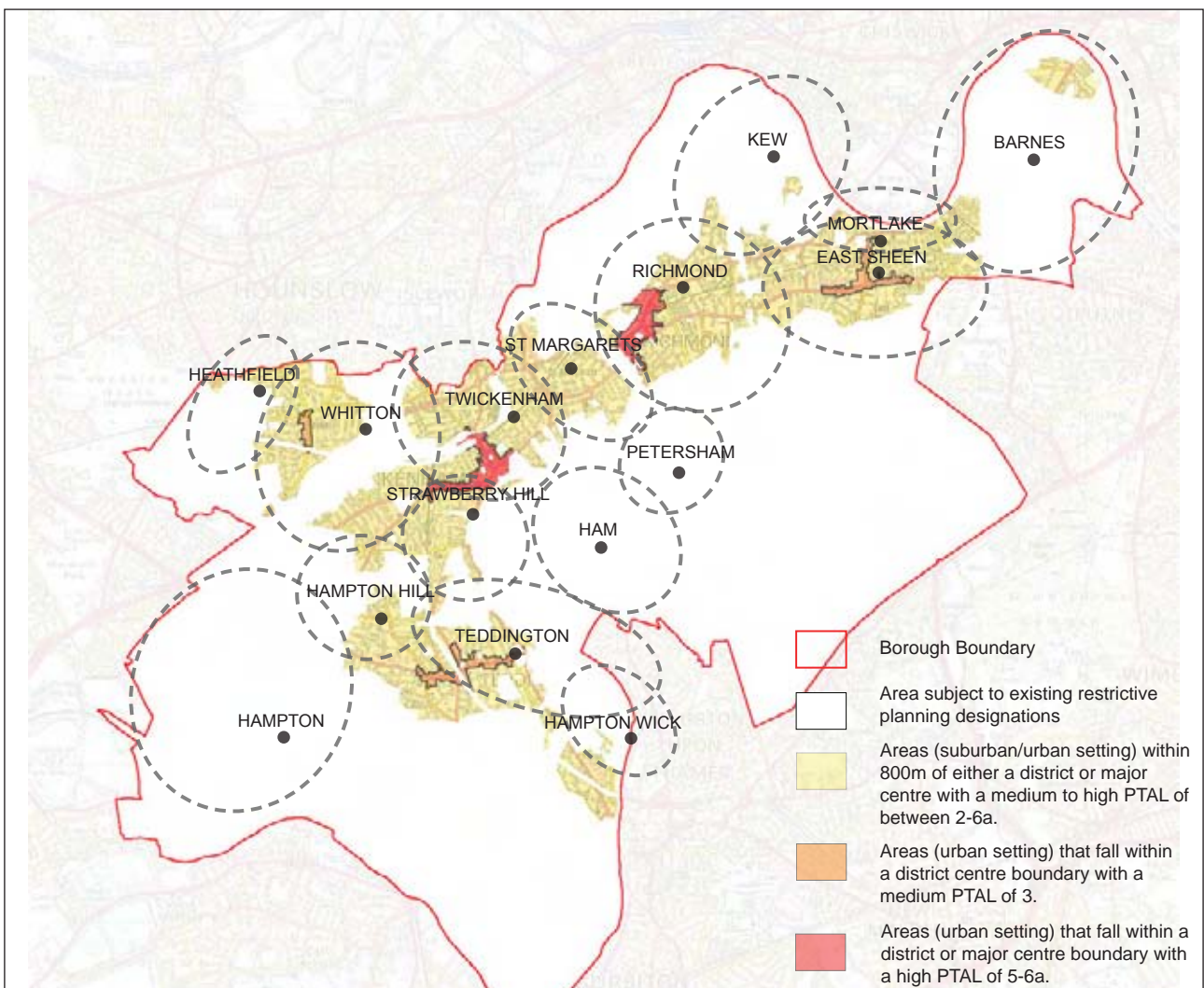
4.27 The study also reviewed the adjacent Borough's centres and found that the 800m walking catchment area from the metropolitan centres of Hammersmith, based in the London Borough of Hammersmith and Fulham, and Kingston-upon-Thames, based in The Royal Borough of Kingston-upon Thames, fell within the LBRuT boundary.

Stage 2 - Context Review Results

4.28 The Sieve 2 Results Plan, at Appendix 2, illustrates the results of the Stage 2 sieve with the area's normally unsuitable accessibility levels and distances from centres removed from the plan.

4.29 The areas that normally need careful consideration before proposing higher density developments and are unsuitable for taller buildings, based on the studies assumptions, have also been highlighted. These locations overlap a number of settlement areas that fall within the walking distance of 800 m of the district and major centres and have a PTAL of 2 or over.

4.30 The areas appropriate for higher density developments are highlighted in the results plan and follow the mixed-used area boundaries and all have a PTAL of 2 or over. The areas that have a PTAL of 4 or over are also more appropriate for taller buildings.



Sieve 2 Results Plan

4.31 Within the urban settlement areas it is clear that in some locations identified there are areas suburban in character and building typology, as identified in Section 3. Therefore a further set of sieve analysis of detailed character constraints is required.

Stage 3 – Detailed Constraint Sieving Exercise

4.32 There are both existing features and adopted policies that could constrain the development of higher density developments and tall buildings based within the Borough. These include:

- heritage features;
- key strategic and local views, vistas and landmarks;
- topography and landform;
- other constraining policies; and
- BBA constraints.

Heritage Features

4.33 There are four different types of heritage features that will influence the location of higher density developments and tall buildings within the Borough. These include the following, which are discussed below unless otherwise stated, and shown in Sieve plan 3a, at Appendix 2:

- World Heritage Sites;
- Historic Parks and Gardens - these have been previously excluded in the Stage 1 sieve exercise;
- Conservation Areas; and
- Listed Buildings.
- World Heritage Sites

4.34 The Royal Botanic Gardens at Kew was officially inscribed on the list of World Heritage Sites in 2003 by UNESCO. This means it is one of 721 sites that are considered, in the interest of the international community, to be preserved for future generations. The preparation of a management plan is integral to being nominated for such a designation. This sets out the vision of how the architectural and landscape heritage can be conserved and the management of visitors, educational and scientific facilities.

4.35 The management plan also sets out a buffer zone which is necessary to “protect unsympathetic or otherwise intrusive development being built close to or overlooking the World Heritage Site”. This study makes the assumption that it would be normally be unsuitable to locate higher density developments and tall buildings within the World Heritage Sites and associated buffer zones.

Conservation Areas

4.36 There are 45 Conservation Areas within LBRuT which fall within the scope of the study after the restrictive policies have been taken into account.

4.37 Conservation Areas are statutorily classified as, “areas of special architectural or historic interest, the character or appearance of which it is desirable to preserve or enhance” (Section 69, Planning (Listed Building and Conservation Areas) Act 1990). Designation brings control over the demolition of existing buildings and makes the preservation or enhancement of existing character or appearance a material consideration in the local authority’s determination of new development proposals within, or in the setting, of the area.

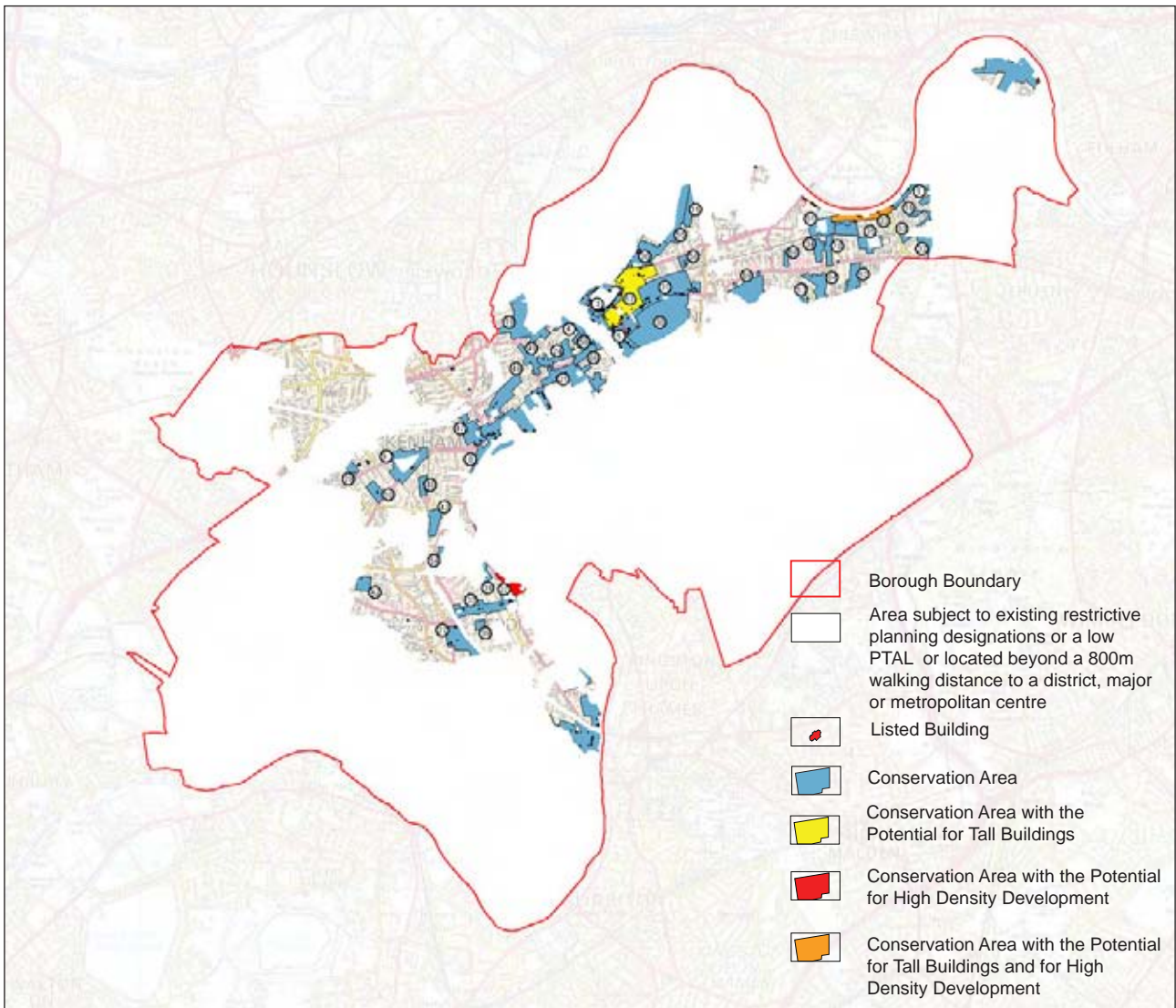
- 4.38 A detailed desk-based study has shown that the majority of the Conservation Areas within LBRuT comprise historic residential areas, with buildings two to three storeys in height and a cohesive urban or suburban character and appearance. In such locations tall buildings would be highly prominent and in strong contrast with existing character or appearance, and therefore inappropriate. Moreover, as such areas are mostly characterised by low or medium density development – detached and semi-detached villas, or short terraces with sizeable garden space – the addition of taller buildings and higher density development require careful consideration and generally inappropriate (unless designed so as to be in-keeping with existing character and appearance, and built without loss of existing positive features of the area).
- 4.39 No land adjacent to the Conservation Areas has been eliminated and generally inappropriate from the potential development zone for heritage reasons as part of this study. The protection of the setting of a Conservation Area should always be a material consideration in the local authority’s determination of development proposals and will therefore need to be taken into account on a case-by-case basis, with reference to national guidance laid out in PPG15 and also local policy.
- 4.40 Of the 45 Conservation Areas, only three have been identified as having potential for higher densities.
- Central Richmond*
- 4.41 This Conservation Area encompasses the historic commercial centre of Richmond and is characterised by a variety of architectural styles, scales and building types. Typical building height is three to five storeys, but due to the substantial character of much of the architecture within this area there may be scope for the addition of a new building(s) of around six storeys.
- 4.42 Any new building proposal should be of high architectural quality and design and must demonstrate that it preserves or enhances the character or appearance of the Conservation Area. Detrimental impacts on listed buildings and their settings, on key views of historic local landmarks (steeple, domes) should be avoided wherever possible.
- Mortlake (river frontage north of High Street only)*
- 4.43 This Conservation Area encompasses a strip of land along the Thames river front (north of the High Street) characterised by a mixture of building types, scales and uses. It includes historic houses, industrial and commercial buildings, as well derelict, vacant, and open spaces. Buildings are typically two to three storeys, with the exception of the Mortlake Brewery Granary building which stands as a local landmark at eight storeys. The derelict, vacant and open spaces along the river frontage may offer opportunities for new development of around six storeys, or for, particularly, the redevelopment of derelict historic buildings (already done in places).
- 4.44 Any new development should be of high architectural quality and design, and demonstrate that it preserves or enhances the character or appearance of the Conservation Area. Ideally, new development would encompass the regeneration of derelict industrial features which add significantly to the panoramic nature of the river frontage, and/or be of a massing and design which complements its historic character and appearance. Detrimental impacts on listed buildings and their settings, and other key landmarks and features – including the Granary, key historic buildings, slipways and wharves, and the gardens along the river should be avoided wherever possible.
- Teddington Lock (Teddington river frontage only)*
- 4.45 This Conservation Area encompasses a strip of land along the Thames river frontage (Teddington side), which is currently characterised by boat industry and industrial buildings, modern residential blocks, and some undeveloped land. There may be scope for sympathetic new development within this area, though the intensity of development should be guided by conservation principles and other riverfront development guidance.

4.46 Any new development should be of high architectural quality and design, and demonstrate that it preserves or enhances the character or appearance of the Conservation Area. Its riverfront location means that any new development should ideally be of a massing and appearance which is in-keeping with existing riverside development and should preserve public access to the riverfront. Detrimental impacts on listed buildings and their settings, on important historic boat yard sites and on views of local landmarks from the river (church towers/spires) should be avoided wherever possible.

Listed Buildings

4.47 The majority of the 1,200 listed buildings in the Borough do not fall within the potential higher density developments and taller buildings sensitive or appropriate development zone. They have been filtered out either as part of Conservation Areas or as part of other environmental constraints.

4.48 Only around 50 listed buildings remain within the potential development zone ranging from Grade II to Grade I. The impact of any proposed development upon the fabric or setting of these listed buildings will

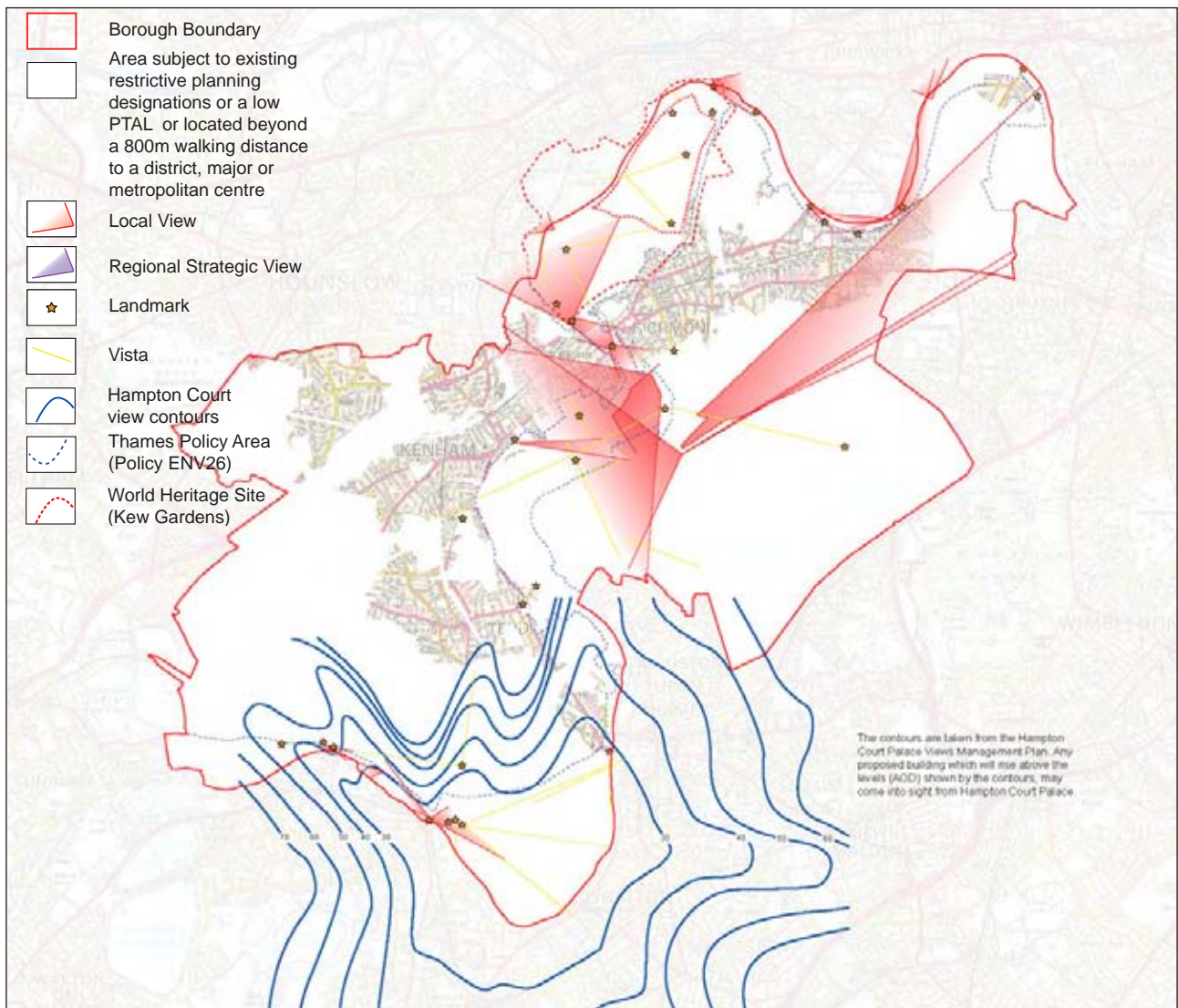


Sieve 3a Plan - Heritage Features

need to be considered on a case-by-case basis, with reference to the guidance and criteria laid out in national guidance laid out in PPG15 and local policy.

Key Strategic and Local Views

- 4.49 Views need to be considered when locating taller buildings. Predominantly views are seen as a constraint to siting higher buildings but in some circumstances clusters of existing higher-rise developments could be consolidated further to unify the skyline and create a recognisable way finding device within the urban form.
- 4.50 The LBRuT, in its UDP has identified both strategic and local views within the area. This is supported by Policy ENV5 which states “The Council will seek to protect the quality of views especially those indicated on the proposals map”.
- 4.51 In total one strategic view and 20 local views have been designated within the UDP and shown in Sieve



Sieve 3b Plan - Views, Vistas and Landmarks

Plan 3b, at Appendix 2. Only six of the local views remain after the restrictive policies have been taken into account. These include:

- views from the railway bridge crossing the River Thames at Richmond;
- views from the road bridge crossing the River Thames at Richmond;
- views from Richmond Hill, including the Arcadia View; and
- three views from within Richmond Park.

4.52 All of these provide a panoramic view, which usually involves a variety of elements that include a fore, middle and background as part of a unified picture. Incongruous features within views, such as both tall and taller buildings, would be readily identifiable.

4.53 The importance of these views to within and outside the Borough has not been challenged in this study. It would be inappropriate to locate taller buildings within these areas which would adversely affect the views. Therefore, these areas have been identified as being sensitive to taller buildings and proposals will need to be considered on a case-by-case basis.

4.54 A Views Management Plan for Hampton Court Palace was produced by the Historic Royal Palaces in 2005. Although this plan has not been formally adopted by the Borough it should be considered as part of the tall building assessment. To clearly define the wider protection of the palace and its setting, the angles of the views were measured and the rising planes were then converted to contour heights Above Ordnance Datum (AOD). This defined the lower edges of the sky space around the palace.

4.55 The sky space defines the areas that need to be protected in order to protect the integrity of the palace and has been identified in this study as being sensitive to taller buildings.

Topography and Landform

4.56 An analysis of the Borough's topography, in conjunction with the previous identified views, helps to disclose which areas are both visually and physically able to absorb both tall and taller buildings.

4.57 The topography of the LBRuT is shaped by the River Thames. The landform is below 10 m AOD around the river and it rises up to above 10m AOD to the west and rises up to above 50 m AOD to the east, to the ridgeline that Richmond Hill and Park lies on. This is shown in Sieve Plan 3c, at Appendix 2.

4.58 The higher areas are potentially the most visually sensitive in terms of landform and taller buildings. Siting taller buildings here would create an imposing character and have a detrimental effect on the character of Richmond. Therefore these areas would be inappropriate areas for taller buildings.

4.59 Within the flatter areas where outwards views are not possible, the scale and form of the immediate surroundings become paramount. Locating tall buildings within these areas can provide a landmark or legibility device if the surrounding scale of development can successfully accommodate it.

Other Constraining Policies

4.60 The UDP has a number of policies that whilst, not ruling out development completely, provide a number of constraints on development which must be considered when choosing suitable locations for higher density developments and taller buildings, these are discussed below. These policies will need to be considered on a case-by-case basis for any proposal:

Policy ENV 26 - Thames Policy Area

4.61 The objective of this policy is to protect and enhance the special character of the Thames Policy Area by addressing a number of points. The key points relating to this study include:

- (a) protecting and enhancing views and vistas of and from the River Thames and its riverside

landmarks as identified in RPG 3B/9B, and on the Proposals Map;

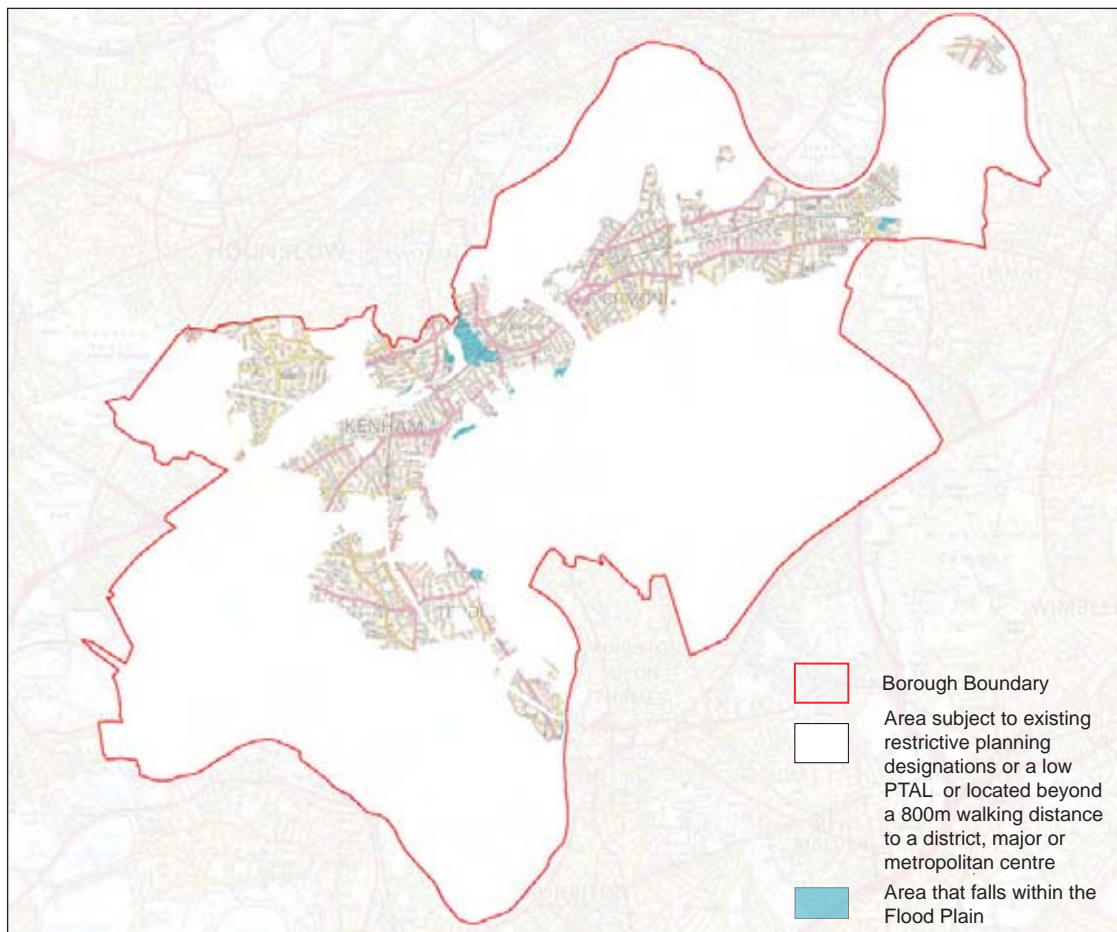
(c) ensuring a higher quality of design for buildings and spaces, appropriate to the identity of the context, so that the individuality of the reaches is protected; and

e) identifying sites where, exceptionally, landmark buildings may be appropriate.

Policy ENV 34 - Flooding

4.62 The Environment Agency has identified that some of the Borough is subject to flooding. The likelihood of a site flooding is a material consideration when considering if development is appropriate for a site. Development will not be permitted within such an area unless it can demonstrate that it would not do the following:

- increase impedance to the follow of floodwater;
- reduce the site's contribution to the capacity of the floodplain to store water (ideally a scheme should enhance its capacity);
- increase the number of people or properties at risk from significant adverse effects of flooding;
- obstruct land adjacent to water courses required for access and or maintenance purposes; or
- adversely affect flood defence structures or other features with the same role.



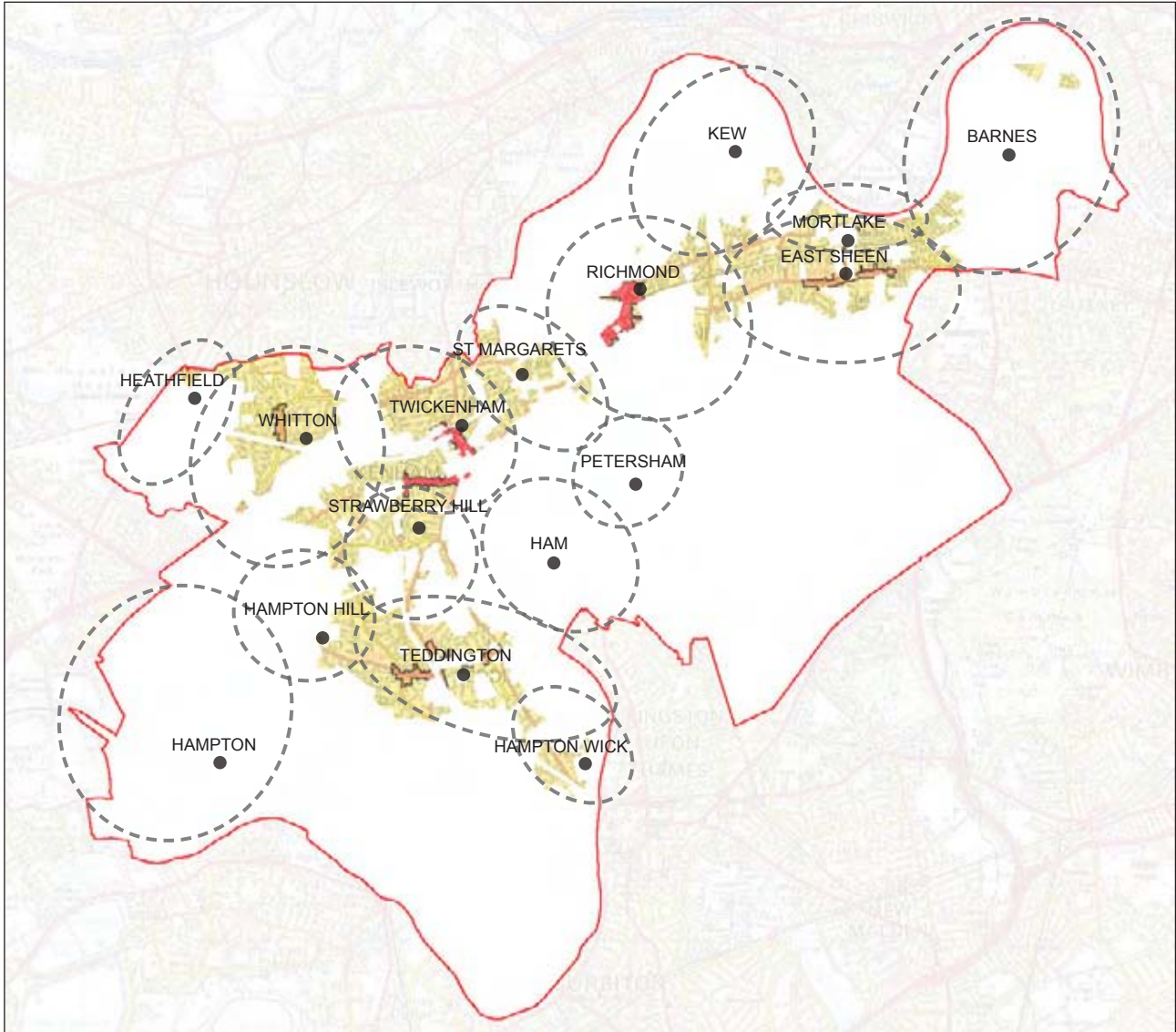
Flood Plain

BAA flight constraints

- 4.63 Heathrow Airport is located six km to the north west of the Borough and lies beneath the 'Obstacle Limitation Surfaces' (flight paths). This means that there is a series of height constraints on the Borough in relation to having taller buildings. This includes:
- Approach Surfaces;
 - Take - Off Climb Surfaces;
 - Outer edge of the Inner Horizontal Surface;
 - Conical Surface; and
 - Outer edge of the Outer Horizontal Surface.
- 4.64 Guidance has been provided by BAA to the constraints boundaries and heights and these can be found at Appendix 3 of this study.

The Results of the Sieve

- 4.65 The resulting plan illustrates where higher density developments and taller buildings are unsuitable, appropriate or need careful consideration of design and layout or require careful mitigation to deal with local sensitivities within the LBRuT.
- 4.66 Those areas with normally unsuitable accessibility levels and distances from centres are unsuitable for high density development and are removed from the plan. These include Hampton, Hampton Hill, Ham Petersham and Kew, due to the low PTAL and distance from the Borough's district and major centres. Also, further areas of the Borough that are designated Conservation Areas have been zoned as inappropriate due to the proposed type of development being in strong contrast with the existing character or appearance.
- 4.67 The areas with an urban or suburban setting normally sensitive to higher density developments and not suitable for taller buildings have also been highlighted, and these include Barnes, Hampton Wick, Strawberry Hill, St Margarets and Mortlake. These areas are predominately suburban in character with small local centres. They also fall within the walking distance of 800 m of the district and major centres and have a PTAL of 2 or higher.
- 4.68 The suburban and urban areas outside the mixed-use boundaries of the five town centres are also sensitive to higher density development. The urban areas appropriate for higher density developments are highlighted in the results plan and follow the mixed-use area boundaries of the settlement areas of East Sheen, Whitton, and Teddington. These areas all have a PTAL of 2 or higher and could accommodate taller buildings in some locations.
- 4.69 The settlement areas of Richmond and Twickenham are also appropriate for taller buildings (generally within their mixed use boundary areas only) as they all have a PTAL of 4 or over with some scope for tall buildings. The centre of Richmond is designated as a Conservation Area, and in general terms constraints of historic scale indicate that new buildings should not exceed around six storeys in height.



- Borough Boundary
- Areas with a low PTAL or other environmental constraints, where proposed development densities should adhere to current planning policy and taller buildings will generally be inappropriate
- Areas outside a district or major centre but with an urban or suburban setting and medium to high PTAL, which are generally suitable for low to medium density development depending on local character. The area is generally inappropriate for taller buildings.
- Urban areas that fall within a district centre mixed use boundary with a medium PTAL, which are generally suitable for medium density development depending on local character. The area will be sensitive to taller buildings.
- Urban areas that fall within a district or major centre mixed use boundary with a high PTAL, which are generally suitable for medium to high density development depending on local character. This area is also appropriate for tall buildings of a certain height

Sieve 3 Results Plan

5.0 DENSITY AND TALL BUILDING GUIDANCE

5.1 This section of the study outlines the current policy guidance and future considerations for locating higher density development and both tall and taller buildings within the Borough.

Current Policy Framework

5.2 The previous section identified, as part of the sieve exercise, where areas are appropriate and sensitive for higher density development and taller buildings. This provides clearly designated zones from a desktop analysis.

5.3 At a regional level, the London Plan outlines generic issues in its key strategic policies, which need to be considered when locating higher density development and taller buildings. These are outlined below:

Policy 4B.8 - Respect Local Context and Communities

5.4 The objectives of this policy are to recognise and manage local distinctiveness by considering the requirements set out in Policy 3A.17. These are:

- provision of social infrastructure, including healthcare and social care;
- safety and security;
- public realm, play space and open space;
- inclusive design and local distinctiveness;
- community engagement; and
- access to employment/skills development opportunities and provision of space for small and medium sized enterprises.

Policy 4B.9 Tall Buildings - Location

5.5 The development of tall buildings is acceptable where they:

- create attractive landmarks enhancing London's character;
- help to provide a coherent location for economic clusters of related activities and/or act as a catalyst for regeneration; and
- are acceptable in terms of design and impact on their surroundings.

5.6 The policy includes an aspiration for public access to the upper floors of the building.

Policy 4B.10 Large-scale Buildings – Design and Impact

5.7 Higher densities and taller buildings are more likely to be acceptable if they:

- meet the requirements of the View Management Framework set out in Policy 4B.16 of the plan;
- are suited to their wider context in terms of proportion and composition and in terms of their relationship to other buildings, streets, public and private open spaces, the waterways or other townscape elements;
- are attractive city elements as viewed from all angles and where appropriate contribute to an interesting skyline, consolidating clusters within that skyline or providing key foci within views;
- illustrate exemplary standards of sustainable construction and resource management and potential for renewable energy generation and recycling, and incorporate CHP infrastructure;
- are sensitive to their impact on micro-climates in terms of wind, sun, reflection and overshadowing;

- pay particular attention, in residential environments, to privacy, amenity and overshadowing;
- are safe and secure in terms of their own integrity and the safety of occupiers and have an acceptable relationship to aircraft, navigation and telecommunication networks;
- are appropriate to the transport capacity of the area ensuring adequate, attractive, inclusive and safe pedestrian and public transport access;
- provide higher quality spaces, capitalise on opportunities to integrate green spaces and planting and support vibrant communities both around and within the building;
- where appropriate, contain a mix of uses with public access, such as ground floor retail or cafes; and
- relate positively to water spaces taking into account the particular needs and characteristics of such spaces.

5.8 The majority of these regional issues have been raised and addressed in the sieving exercise but still need to be considered when undertaking the detailed resolution of development proposals.

5.9 At a local level the Borough's UDP saved policies provide an understanding of facilitating higher and higher density development and taller buildings at a local level. These also need to be considered when locating such developments. These policies are outlined below:

Policy BLT11 – Design Considerations

5.10 The objective of this policy is to promote a higher standard of design in new buildings and the Council will take into consideration the following factors:

- scale of development;
- layout and access arrangements;
- relationship to existing townscape and between proposed buildings;
- height;
- form;
- frontage;
- building materials and colour;
- detailing; and
- compliance with ecological design principles.

5.11 The following policies also need to be considered in the design of higher density development and taller buildings:

- Policy BLT12 – Accessible Environment;
- Policy BLT14 – Landscape and Development;
- Policy BLT15 – Daylighting and Sunlighting;
- Policy BLT16 – 'Un-neighbourliness'; and
- Policy BLT17 – Crime and Public Safety.

5.12 A previous policy which has not been saved within the current UDP was Policy BLT 18 – Higher Buildings. The objective of this policy was to restrict buildings that “are higher than the general height of surrounding buildings”. This policy was promoted as the Council considered that due to “the Borough’s special character, views, skylines and local townscape and because it is principally a residential area with a general building height of two to four storeys, all parts are sensitive to the impact of higher buildings”. Had this policy been retained, it would have prevented taller buildings within the Borough and conflict with the guidance on locating taller building set out in the London Plan.

Future Policy Framework

5.13 The Submission Version of the Borough’s LDF Core Strategy contains Policy CP7 – Maintaining and Improving the Local Environment. The objective of this policy is to protect existing higher quality buildings and areas, and that also new developments should recognise distinctive local character. Any new proposals will have to consider the following:

- the analysis and understanding of the Borough’s development patterns, features and views, public transport accessibility and maintain appropriate levels of amenity; and
- connect positively with their surroundings to create safe and inclusive places through the use of good design principles including layout, form, scale, materials, natural surveillance and orientation, and sustainable construction.

Higher Density and Tall Building Guidelines - Location

5.14 Higher density developments in sensitive or appropriate areas will only be deemed suitable where they address the following guidelines. These guidelines have been drawn from current planning policy and provide a robust basis with which to assess the merit of any proposal.

Guidance Points for Locating Higher Density Developments, including Taller Buildings	National Policy	Regional Policy	Local Policy	Good Practice Guidance
The proposals must preserve and enhance any existing heritage features that are affected by the development, and avoid detracting from the existing character or appearance.	PPG 15 Planning and the Historic Environment	Policy 4B.12	ENV 10 BLT 2, 3&4 BLT11	
Within the surrounding area there must be sufficient existing public transport accessibility to and from the site, unless the proposals bring about public transport improvements.	PPG 13 Transport	Policy 4B.10	TRN 2, 12	
The proposals must contribute to regeneration and support a mixture of land uses appropriate to the context whilst meeting local needs.	PPG 3 PPG4 PPS6	Policy 4B.10	STG 5	

Guidance Points for Locating Higher Density Developments, including Taller Buildings	National Policy	Regional Policy	Local Policy	Good Practice Guidance
The proposals should be accommodated within or provide a contribution towards the local public infrastructure and facilities such as healthcare and social care.	PPS 1 Delivering Sustainable Development	Policy 4B.8	CCE 2	
The proposals must contribute to achieving sustainable principles through social inclusion, responding to the surrounding environmental and the economic health of the Borough.	PPS 1	Policy 4B.8	EMP1	

5.15 The table below outlines specific tall building guidance for positioning proposals adjacent to Richmond and Twickenham railway stations.

Guidance Points for Locating Tall Buildings	National Policy	Regional Policy	Local Policy	Good Practice Guidance
When locating taller buildings within Richmond and Twickenham care should be taken to accentuate key clusters and vary building heights to avoid a plateau roofscape.	PPS 1 Delivering Sustainable Development	Policy 4B.9	ENV 5 BLT 11	Guidance on Tall Building
The proposals must avoid blocking or distracting from designated strategic and local views.	PPG 15 Planning and the Historic Environment	Policy 4B.10 Policy 4B.16	ENV 5 BLT11	Guidance on Tall Building
Mixed use should also be considered when developing intensive development to enhance the vitality and safety of an area. The range in uses will also reduce the need to travel .	PPS 1 Delivering Sustainable Development	Policy 3B.3 Policy 3D.3	STG 5	

Higher Density and Tall Building Guidelines - Design

- 5.16 Higher density developments in sensitive or appropriate areas will only be suitable where they address the following guidelines in relation to designing such proposals. These guidelines have been identified from current planning policy, the reference to which is indicated in the following tables.

Guidance Points for Designing Higher Density Developments, including Taller Buildings	National Policy	Regional Policy	Local Policy	Good Practice Guidance
The proposals should be of the highest design quality both in detailed design and specified materials.	PPS 1 Delivering Sustainable Development	Policy 4B.2 Policy 4B.10	BLT 11	By Design: Urban Design in the Planning System
The proposals must enhance and relate to the context within which the proposals sit by responding to and reinforcing the locally distinct character of the surrounding areas including, in relation to taller buildings, the skyline.	PPG 15 Planning and the Historic Environment	Policy 4B.10	BLT 2 BLT 11 BLT 14	By Design: Urban Design in the Planning System
The proposals must contribute to the urban design objectives of the local area through the developments proposals urban grain, definition of points of proposed activity, reinforcement of character and active street frontages and improvements to legibility and permeability.	PPS 1 Delivering Sustainable Development	Policy 4B.10	BLT2 BLT11	By Design: Urban Design in the Planning System
The proposals should relate or respond to the massing and scale of the surrounding context.	PPS 1 Delivering Sustainable Development	Policy 4B.10	BLT11	By Design: Urban Design in the Planning System
Adequate open space and play areas should be designed into the development where appropriate. Proposals should also enhance the surrounding public realm with high quality landscape schemes and minimise the impact on privacy on adjacent buildings and areas.	PPG 17 Planning for Open Space, Sport and Recreation	Policy 3D.11 Policy 4B.3 Policy 4B.8 Policy 4B.9 SPG – Children and Young People’s Play and Recreation	BLT11 BLT14 BLT16 CCE 10	By Design Fields in Trust - Six Acre Standard

Guidance Points for Designing Higher Density Developments, including Taller Buildings	National Policy	Regional Policy	Local Policy	Good Practice Guidance
The proposals must consider safety and security as part of the design.	PPS 1 Delivering Sustainable Development	Policy 4B.8	BLT17	Secure by Design
The proposals should promote sustainability principles as part of its design.	PPS 1 PPS 22 Renewable Energy	Policy 4B.10 Policy 4A.3	BLT11 BLT 31	Code for Sustainable Homes
An assessment needs to be made on the potential visual and character impact of the proposals on the surrounding context.	PPS 1 Delivering Sustainable Development		BLT11 ENV 5	Guidelines for Landscape and Visual Impact Assessment

5.17 The table below outlines specific tall building guidance for designing proposals adjacent to Richmond and Twickenham railway stations.

Guidance Points for Designing Tall Buildings	National Policy	Regional Policy	Local Policy	Good Practice Guidance
When designing a tall building care must be taken that it provides an attractive landmark..	PPS 1 Delivering Sustainable Development	Policy 4B.9 Policy 4B.10	ENV 5 BLT 11	Guidance on Tall Building
The proposals must ensure that they minimises the impact of privacy on adjacent buildings and areas.	PPS 1 Delivering Sustainable Development	Policy 4B.9 Policy 4B.10	BLT 11 BLT 16	Guidance on Tall Building
Care must be taken that the proposals would not effect the surrounding microclimate including overshadowing, wind speeds, heat islands and glare reduction, and neighbouring properties.	PPS 1 Delivering Sustainable Development	Policy 4B.9 Policy 4B.10	BLT11 BLT 15	Guidance on Tall Building

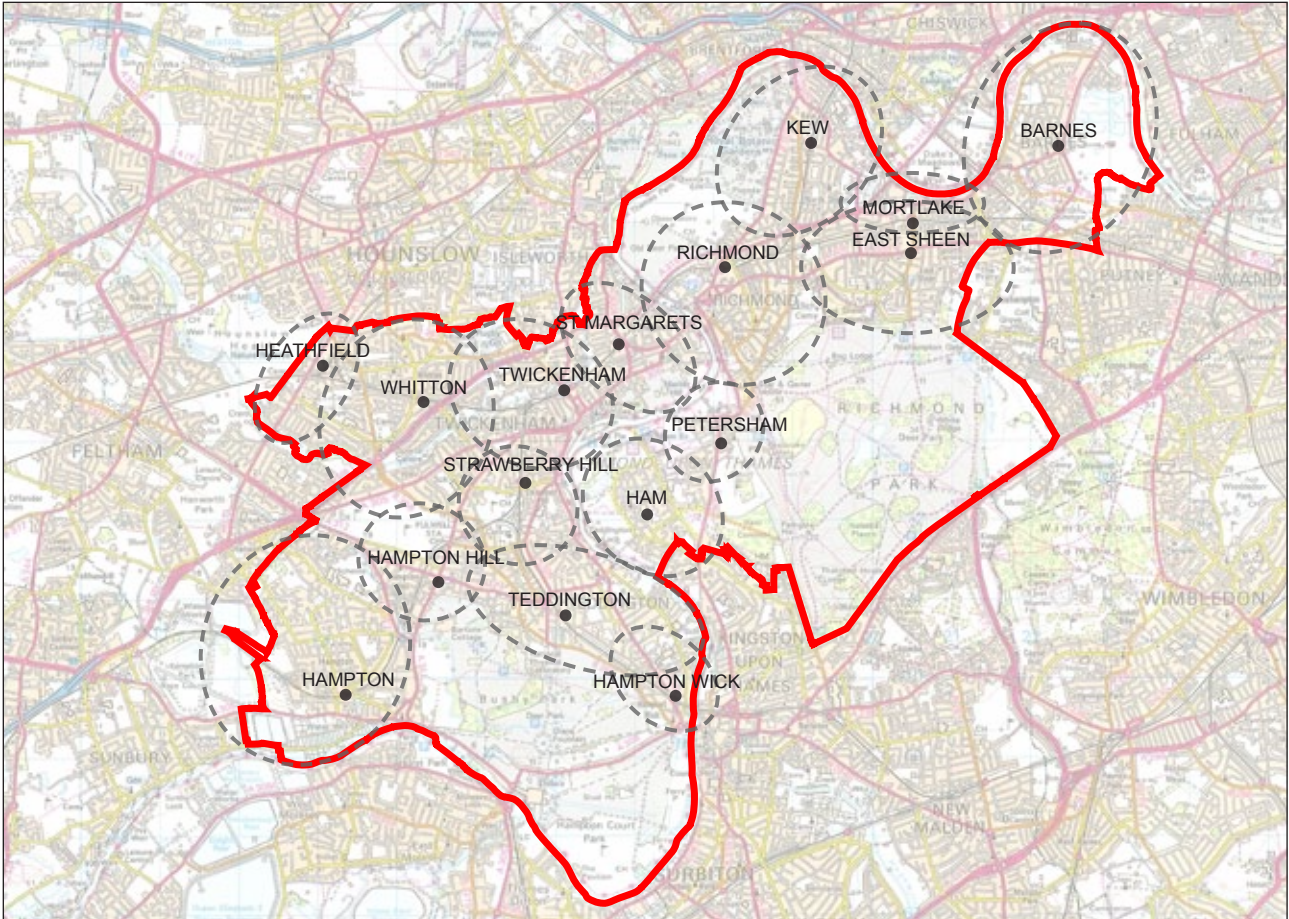
Local Density Matrix and Settlement Area Guidelines

- 5.18 Following the sieving exercise of the Borough, areas generally inappropriate, sensitive and appropriate for higher densities and/or taller buildings have been identified. The unsuitable areas have been excluded from this part of the study. But the sensitive and appropriate areas have been analysed in further detail in the paragraphs below. The London Plan density matrix has been applied and related to the individual settlement areas, taking into account of their character, urban and suburban setting and building typology. The exercise established that these areas are potentially suitable for higher densities and/or taller buildings as they are well serviced and have good accessibility; do not fall within inappropriate heritage areas; and in relation to taller buildings are not located within strategic or local view corridors.
- 5.19 Due to the strategic nature of the study precise densities and heights have not been established, but a summary has been provided for established settlement areas within LBRuT. A detailed investigation will need to be undertaken to establish how any higher density developments and tall or taller buildings proposal will be integrated within the existing urban form. In some cases densities could be raised to the higher part of the indicative range where the development is increasing the PTAL through public transport contributions.

Overall character	Settlement area	Indicative density range**	Other^^
Poor public transport links and restrictive environmental policy constraints.	Hampton, Heathfield, Ham, Petersham, Kew	In line with regional guidance (above 35 u/ha)	Taller buildings will be inappropriate.
Suburban or urban setting with a medium to high public transport accessibility, outside a town centre settlement area.	Mortlake, St Margarets, Strawberry Hill, Hampton Hill, Hampton Wick, Barnes	35-120 u/ha	Taller buildings will be inappropriate in general.
Urban town centre setting with medium public transport accessibility, and its suburban/urban environs.	Whitton, East Sheen, Teddington	35-145 u/ha	Potential for taller buildings in town centre locations.
Urban town centre setting with high public transport accessibility, and its suburban/urban environs	Richmond, Twickenham	35-260 u/ha	Taller buildings may be appropriate around town centre locations. Potential for tall buildings generally clustered close to train stations.

**Over and above the local policy requirement for housing gain on a site by site basis. Density ranges will be led by an assessment of local character, design quality and form, and impact on local amenities and ecology.

^^Taller buildings defined as up to five storeys depending on context, tall buildings defined as six or more storeys, see terminology.



Plan to show settlements within the Borough

Strawberry Hill

- 5.20 Strawberry Hill is described in the 'Design Quality' SPD as having a suburban character with a looser grain than nearby Twickenham, with the residential area being described as "leafy and contains a mix of large older homes and twentieth century infill houses and flats". The area in Strawberry Hill defined in the results of the sieve exercise has been identified as being sensitive to higher density developments. This is due to the satisfactory transport links (PTAL 2) from the railway station and nearby bus routes.
- 5.21 Any sensitive higher density development proposals would need to respect the surrounding context in terms of character and typology. This has been broadly identified within the Appendix 2 2B Sieve Plan as consisting of suburban family homes and tight knit housing. The study, taking into consideration the London Plan density matrix and a review of the context of the surrounding area, suggests a density of at least 35 u/ha within the suburban area, generally up to 80 u/ha with the possibility of 120 u/ha on some urban sites.
- 5.22 Care needs to be taken that any proposals need to consider the views to and from the Conservation Areas within Strawberry Hill are defined by the sieve exercise as unsuitable for this type of development, are not affected.

St Margarets

- 5.23 The streets around St Margaret's are described in the 'Design Quality' SPD as "picturesque and leafy landscape containing many fine Victorian and Edwardian villas and interwar homes". The urban grain appears denser than Strawberry Hill with the homes having smaller back gardens. The area in St Margaret's defined in the results of the sieve exercise, has been identified as being sensitive to higher density developments. This is due to the satisfactory transport links (PTAL 2) from the railway station and nearby bus routes.
- 5.24 Only a small proportion of this area is suitable for sensitive higher density due to the number of Conservation Areas within this area. These have been defined as unsuitable for this type of development and any proposals need to consider the views to and from the Conservation Areas. The setting of a number of listed buildings within this area also needs to be considered.
- 5.25 Any sensitive higher density development proposals would need to respect the surrounding context character and typology, which has been broadly identified within the Appendix 2 2B Sieve Plan as consisting of terraced cottages and tight knit housing. The study, taking into consideration the London Plan density matrix and a review of the context of the surrounding area, suggests a density of at least 35 u/ha within the suburban area, generally up to 80 u/ha with the possibility of 120 u/ha on some urban sites. There are also locally designated views which need to be considered when determining any building heights.

Hampton Wick

- 5.26 Hampton Wick is described in the 'Design Quality' SPD as having "a strong village character through uniform building styles and narrow winding streets". The railway line divides the character of the area with Georgian, Victorian and Edwardian houses located in tree lined streets to the south of the line and a range of building types and ranges to the north. The area in Hampton Wick defined in the results of the sieve exercise has been identified as being sensitive to higher density developments. This is due to the acceptable transport links (PTAL 2-3) from the railway station and nearby bus routes.
- 5.27 Any sensitive higher density development proposals would need to respect the surrounding context character and typology, which has been broadly identified within the Appendix 2 Sieve Plan 2B as consisting of courts and parkland, terraced cottages and tight knit housing. The study, taking into consideration the London Plan density matrix and a review of the context of the surrounding area, suggests a density of at least 35 u/ha within the suburban area, generally up to 80 u/ha with the possibility of 120 u/ha on some urban sites.
- 5.28 Care needs to be taken that any proposals need to consider the views to and from the adjacent Conservation Areas, which are defined as unsuitable in the sieving exercise for this type of development are not effected. The settings of a number of listed buildings within this area need also to be considered. In addition the view contours identified within the Hampton Court View Management plan need to be carefully considered when establishing building heights within the area

Barnes

- 5.29 Barnes is described in the 'Design Quality' SPD as being "contained by a tight curve in the River, this character area is composed of residential development with open space". The area in Barnes defined in the results of the sieve exercise has been identified as being sensitive to higher density developments. This is due to the acceptable transport links (PTAL 2) from the nearest railway station in Hammersmith and nearby bus routes.
- 5.30 Any sensitive higher density development proposals would need to respect the surrounding context character and typology, which has been broadly identified within the Appendix 2 Sieve Plan 2B as consisting of suburban family housing, terraced cottages and tight knit housing. The study, taking into

consideration the London Plan density matrix and a review of the context of the surrounding area, suggests a density of at least 35 u/ha within the suburban area, generally up to 80 u/ha with the possibility of 120 u/ha on some urban sites.

- 5.31 Care needs to be taken that any proposals need to consider the views to and from the adjacent Conservation Areas, which are defined as unsuitable in the sieving exercise for this type of development are not effected. The settings of a number of listed buildings within this area also need to be considered.

Mortlake

- 5.32 Mortlake is described in the 'Design Quality' SPD as having "a dense built up character composing of regular patterns of terraced Victorian streets with some set back but little planting". Within this area there are a number of taller buildings and structures, and large buildings footprints. The area in Mortlake defined in the results of the sieve exercise has been identified as being sensitive to higher density developments. This is due to the acceptable transport links (PTAL 3) from the railway station and nearby bus routes.
- 5.33 Only a small proportion of this area is suitable for higher density due to the number of Conservation Areas within this area. These have been defined as unsuitable for this type of development, although the character of Mortlake Conservation Area is appropriate for higher density development, and any proposals need to consider the views to and from the Conservation Areas. The settings of a number of listed buildings within this area also need to be considered.
- 5.34 Any sensitive higher density development proposals would need to respect the surrounding context character and typology, which is broadly identified within the Appendix 2 2B Sieve Plan as consisting of terraced cottages. The study, taking into consideration the London Plan density matrix and a review of the context of the surrounding area, suggests a density of at least 35 u/ha, generally up to 80 u/ha with the possibility of 120 u/ha on some sites.

East Sheen

- 5.35 East Sheen falls within the same character area as Mortlake in the 'Design Quality' SPD and describes it as having a dense urban grain, which becomes more suburban towards East Sheen Common. The area outside of the mixed-use district centre boundary has been identified as being a sensitive area for higher density developments and within the boundary the area has been identified as being an appropriate area for higher density developments. This is due to the acceptable transport links (PTAL 3) from the railway station and nearby bus routes.
- 5.36 The area in East Sheen that has been identified as being sensitive to higher density developments within the results of the sieve exercise has been reduced by the number of defined inappropriate Conservation Areas, which are defined as unsuitable for this type of development. All proposals need to consider the views to and from the Conservation Areas. The settings of a number of listed buildings within this area also need to be considered.
- 5.37 Any sensitive higher density development proposals would need to respect the surrounding context character and typology, which is broadly identified within the Appendix 2 2B Sieve Plan as consisting of suburban family housing, tight knit housing and terraced cottages. The study, taking into consideration the London Plan density matrix and a review of the context of the surrounding area, suggests a local density range of generally at least 35 u/ha up to 80 u/ha for the suburban character outside the district centre.
- 5.38 The mixed-use area of East Sheen district centre has been identified as an appropriate area for higher density developments within the sieve exercise. The character of this area is more urban, predominately three to four storeys terrace buildings, with commercial on the ground floor and residential and offices above. The study, taking into consideration the London Plan density matrix and a review of the context

of the surrounding area, suggests a density of at least 45 u/ha and could be up to 145 u/ha on some sites.

Whitton

- 5.39 The 'Design Quality' SPD describes the character of Whitton as being "almost entirely of large residential estates built between the wars". This area has perhaps the lowest density of the Borough with the homes having large back and front gardens. The building heights within this character area are typically two storeys. The area outside the mixed-use district centre boundary has been identified as being a sensitive area for higher density developments. Within the boundary the area has been identified as being an appropriate area for higher density developments. This is due to the acceptable transport links (PTAL 3) from the railway station and nearby bus routes.
- 5.40 The area in Whitton that has been identified as being sensitive to higher density developments within the results of the sieve exercise but has limited heritage constraints compared to the rest of the Borough
- 5.41 Any sensitive higher density development proposals would need to respect the surrounding context character and typology, which is broadly identified within the Appendix 2 2B Sieve Plan as consisting of suburban family housing and terraced cottages. The study, taking into consideration the London Plan density matrix and a review of the context of the surrounding area, suggests a local density range of generally at least 35 u/ha up to 80 u/ha for the suburban character outside the district centre. Also proposals would need to enhance transport accessibility within the Borough.
- 5.42 The mixed-use area of Whitton district centre has been identified as an appropriate area for higher density developments within the sieve exercise. The character of this area is predominately three storey terrace buildings, with commercial on the ground floor and residential and offices above. Beyond this are two storey semi-detached and detached houses. The study, taking into consideration the London Plan density matrix and a review of the context of the surrounding area, suggests a density of at least 45 u/ha and could be up to 145 u/ha on some sites.

Teddington

- 5.43 Teddington is split into three different character areas (Hampton Hill and Teddington West, Hampton Wick and South Teddington, and Strawberry Hill and Teddington East) within the 'Design Quality' SPD, which illustrates the range in characters within the settlement. Teddington West consists of predominantly Victorian and Edwardian semi detached homes located in tree lined streets, whilst Teddington South consists of substantial homes and some apartment blocks and Teddington East is denser than the previous two areas but not as dense as Twickenham
- 5.44 The settlement area outside of the mixed-use district centre boundary has been identified as being a sensitive area for higher density developments and within the boundary the area has been identified as being an appropriate area for higher density developments. This is due to the acceptable transport links (PTAL 3) from the railway station and nearby bus routes.
- 5.45 Within the area that has been identified as being sensitive to higher density developments, care should be taken to ensure that any proposals need to consider the views to and from the Conservation Areas. These have been previously defined as unsuitable for this type of development within the sieving exercise.
- 5.46 Any sensitive higher density development proposals would also need to respect the surrounding context character and typology, which is broadly identified within the Appendix 2 2B Sieve Plan as consisting of suburban family housing, tight knit housing, villas and terraced cottages. The study, taking into consideration the London Plan density matrix and a review of the context of the surrounding area, suggests a local density range of generally at least 35 u/ha up to 80 u/ha for the suburban character outside the district centre.



Twickenham Tall Building Zone

5.47 The mixed-use area of Teddington district centre has been identified as an appropriate area for higher density developments within the sieve exercise. The high street is described in the 'Design Quality' SPD as "a mix of attractive Victorian and Edwardian shopping parades (some with original shop fronts) and Artisan Cottages in small side streets". The study, taking into consideration the London Plan density matrix and a review of the context of the surrounding area, suggests a density of at least 45 u/ha, and could be up to 145 u/ha on some sites.

Twickenham

5.48 Twickenham is split into two different character areas (Twickenham and St Margaret's, and West Twickenham and Fulwell) within the 'Design Quality' SPD. The Twickenham character area is described as being a long established settlement, with a strong tradition of riverside use. To the south east of the centre it describes the area as contrasting and having a more village character. The character of West Twickenham is described as having dense housing "arranged in terrace cottages often against the footway".

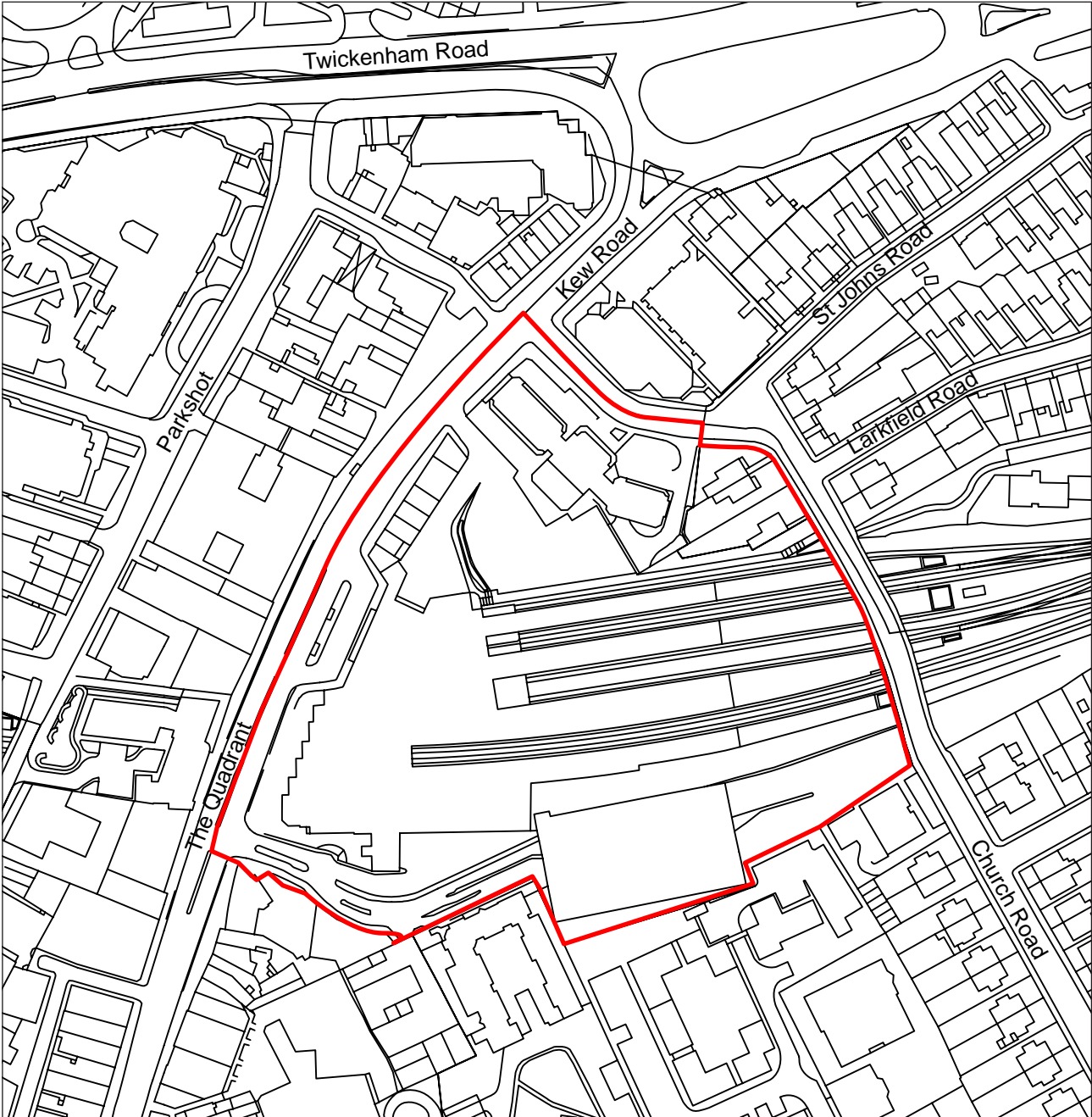
5.49 The area outside of the mixed-use district centre boundary has been identified as being a sensitive area for higher density developments, and within the boundary the area has been identified as being an appropriate area for higher density developments. This is due to the acceptable transport links (PTAL 5-3) from the railway station and nearby bus routes.

5.50 Only a small proportion of this area to the south is suitable for sensitive higher density due to the number of Conservation Areas located here. These have been defined as unsuitable for this type of development and any proposals need to consider the views to and from the Conservation Areas. The settings of the number of listed buildings within this area also need to be considered. The northern part of the area is not as sensitive but care needs to be taken that any development relates to the surrounding building height.

5.51 Any sensitive higher density development proposals would need to respect the surrounding context character and typology, which is broadly identified within the Appendix 2 2B Sieve Plan as consisting of suburban family housing, tight knit housing and terraced cottages. The study, taking into consideration the London Plan density matrix and a review of the context of the surrounding area, suggests a local density range of generally at least 35 u/ha up to 80 u/ha for the suburban character outside the district centre.

5.52 The mixed-use area of Twickenham district centre has been identified as an appropriate area for higher density developments within the sieve exercise. The character of this area is predominately three to four storeys terrace buildings, with commercial on the ground floor and residential and offices above. Beyond this are three to four storey flats and terraces. The study, taking into consideration the London Plan density matrix and a review of the context of the surrounding area, suggests a density of at least 55 u/ha and could be up to 260 u/ha on some sites, particularly those close to the station.

5.53 The mixed-use area has also been recognised as being appropriate for taller buildings. There are currently two tall buildings within the area that are eight and nine storeys respectively. There is an opportunity to create a cluster around the station area which would create a landmark and aid the legibility within the local area. Any future tall buildings should not exceed generally nine storeys in height in order not to break the horizon as viewed from the Arcadian view on Richmond Hill. Also a range of heights should be pursued to ensure more interesting and varied skyline.



Richmond Tall Building Area

Richmond

- 5.54 Richmond within the 'Design Quality' SPD is described as "an area of high townscape quality including Georgian and Victorian as well as a mix of housing types, unified by age and building height". The area outside the mixed-use district centre boundary has been identified as being a sensitive area for higher density developments, and within the boundary the area has been identified as being an appropriate area for higher density developments. This is due to the acceptable transport links (PTAL 6-3) from the railway station and nearby bus routes.
- 5.55 Only a small proportion of this area to the east of the centre is suitable for sensitive higher density due to the number of Conservation Areas located here. These have been defined as unsuitable for this type of development and any proposals need to consider the views to and from the Conservation Areas. The settings of the number of listed buildings within this area also need to be considered.
- 5.56 Any sensitive higher density development proposals would need to respect the surrounding context character and typology, which consists of villas, tight knit housing and terraced cottages. The study, taking into consideration the London Plan density matrix and a review of the context of the surrounding area, suggests a local density range of generally at least 35 u/ha up to 145 u/ha for the suburban character outside the district centre.
- 5.57 The mixed-use area of Richmond major centre has been identified as an appropriate area for higher density developments within the sieve exercise provided it is in character with the Central Richmond Conservation Area. Any proposal would need to demonstrate that it preserves or enhances the character or appearance area. The character of this area and parts of its intermediate hinterland is predominately three to five storeys large footprint buildings, with commercial on the ground floor and offices above. The study, taking into consideration the London Plan density matrix and a review of the context of the surrounding area, suggests a density of at least 55 u/ha and could be up to 260 u/ha on some sites.
- 5.58 The mixed-use area has also been recognised as being appropriate for taller buildings. Again there is an opportunity to create a cluster around the station area, although due to the area being covered by the Central Richmond Conservation Area, only buildings of around six storeys in height would be acceptable, close to the station.