WHOLE PLAN VIABILITY ASSESSMENT

Report for the consideration of
London Borough of Richmond upon Thames

This document does not constitute Council Policy

DRAFT REPORT

December 2016
Contents

Executive Summary 3

1 Introduction 5

2 What the Appendices show 6

3 Reference documents 6

4 Local Policy Context 9

5 Starter Homes 11

6 Residential sites methodology 11

7 Notional Sites appraisal modelling 14

8 Viability and Viability Thresholds 15

9 Profit 19

10 Build Costs 19

11 Other Valuation Inputs 23

12 Affordable Housing 23

13 Sales Values 25

14 Non-residential Methodology 26

15 Conclusions 30

Appendices

1 Tables of housing mixes
2 Extract from BCIS for build costs
3 Table showing assumed cost of new policies
4 Table of land valuation inputs
5 Table of affordable housing values
6 Examples of the residential appraisals
7 Sales research
   a. Detailed research sheets
   b. Table of proposed values
8 Tables of residential land valuation outcomes
9 Table of Non-residential comparable values
10 Table of Non-Residential appraisal inputs
11 Non-residential Residual Appraisals
EXECUTIVE SUMMARY

1. This viability study considers the cumulative impact of the Council’s policies that are emerging as part of the current Local Plan review. It has been carried out in accordance with accepted government and industry guidelines.

2. We developed, with the Council, a number of notional residential and non-residential development scenarios and have assessed them for viability, assuming different locations and different existing uses.

3. For each scenario, we carry out a number of valuations that determine the land value attributable to that scenario.

4. Viability is assessed by considering land value outcomes, produced by the different scenarios, against threshold land values that are based, in turn, on existing use values.

5. Certain policies have a more direct bearing on financial viability, including affordable housing and sustainability policies. These have been addressed more specifically in the report.

6. We have not yet addressed the issue of starter homes, as introduced by the Government in the Housing and Planning Act 2016. We have assumed that affordable housing will be provided in accordance with current Council policy guidelines, focussing on affordable rent and shared ownership tenures.

7. We have tested small residential sites, of between 1 and 6 units, along with larger sites of between 10 and 100 units. In addition, we have tested a range of non-residential sites.

8. Our residential sales research has suggested that the Borough can be divided into four value locations, centred on Richmond, Teddington, Hampton and Whitton. We have allocated a value point to each of these, as will be seen in the tables of valuation outcomes at Appendix 8.

9. Valuation inputs are based largely upon industry standards. We have also, however, considered evidence from a number of actual developments within the Borough and have adopted more local inputs where these appear to be common to the developments.

10. The threshold land values, against which the development scenarios are assessed for viability, are based upon local existing use values, plus a premium that is designed to persuade a landowner to release land for development. Local existing uses have a wide range of values and we...
have, therefore, formed our viability conclusions from the existing use values of those sites that form the site allocations in the Local Plan Review which the Plan seeks to bring forward. These existing uses would mainly fall at the lower end of the values spectrum and this helps, in particular, the viability of developments in lower value locations.

11. We have tested the residential development scenarios on the basis of today’s costs and values. We have then applied a level of sensitivity, by increasing the sales values by 5% and then reducing them by 5%.

12. The viability outcomes for the residential sites are shown at the tables in Appendix 8 and indicate that the Council’s policies should not have an adverse impact upon the viability of residential sites. This is on the basis of allocations being in relatively low value employment existing uses, as opposed to higher value residential.

13. With regard to non-residential sites, we have concluded that most retail uses and main centre offices will be viable, but that local retail and other employment uses could experience viability difficulties.
1 INTRODUCTION

1.1 Adams Integra has been instructed by the London Borough of Richmond upon Thames to provide a Whole Plan Viability Assessment, in connection with the Council’s current Local Plan Review.

1.2 The main aim of the study is set out in the Council’s original brief, being to assess the cumulative impact of all of the emerging plan policies, proposals and requirements. “The main objective of the Viability Assessment work will be to assist the Council in satisfying the viability and deliverability tests in the National Planning Policy Framework (NPPF), particularly that the Council’s policy and infrastructure requirements will remain financially viable over the Plan period.”

1.3 The report will assess viability for both residential and non-residential uses, in accordance with the Council’s requirements. It should be noted, from the outset, that the basis of the report is the evaluation of a number of development scenarios, being notional sites drawn up in conjunction with the Council. We are not, therefore, considering actual sites.

1.4 At this stage, we would point out that the assessment for residential development is suggesting that the Borough can be broken down into four different value point locations, as explained more fully later in the Sales Value section, but also set out below:

| Value Point 1 | Barnes, Kew, East Sheen, Richmond, Twickenham |
| Value Point 2 | Teddington |
| Value Point 3 | Hampton, Hampton Hill |
| Value Point 4 | Whitton |

1.5 We test the viability of development scenarios in each of these value locations, against existing use values (EUVs) that will also vary with location.

1.6 For non-residential forms of development the values attributable to each type of use is influenced by different factors. It was found that a different approach to the residential value points was appropriate. Generally non-residential values for the likes of offices and business units will be similar across the Borough. On the other hand some retail types will attract higher values in the Main Centres compared to the Local and Neighbourhood centres, as identified in the Local Plan’s Table of centre hierarchy. For these reasons we have adopted a range of values for the types of development.

---

1 7.1.1 The centre hierarchy as referred to in Policy LP 25 Development in Centres
development, applicable to either the Main centres or Local Centres, rather than the specific locations of the residential development scenarios.

2 WHAT THE APPENDICES SHOW

1 Tables of housing mixes
2 Extract from BCIS for build costs
3 Table showing assumed cost of new policies
4 Table of land valuation inputs
5 Table of affordable housing values
6 Examples of the residential appraisals
7 Sales research
   a. Detailed research sheets
   b. Table of proposed values
8 Tables of residential land valuation outcomes
9 Table of Non-residential comparable values
10 Table of Non-Residential appraisal inputs
11 Non-residential Residual Appraisals

3 REFERENCE DOCUMENTS

3.1 In preparing this assessment, we have had regard to a number of documents, which provide guidance on both general viability issues and more specific matters to do with the borough. The documents are as follows:

3.1.1 National Planning Policy Framework (NPPF)

In particular we have carried out the assessment in accordance with paragraphs 173 and 174. There are some particularly relevant points in NPPF that help to frame a study such as this. These would be:

The costs of any development requirements should provide “competitive returns to a willing landowner and willing developer to enable the development to be deliverable.”

Local authorities should assess the “cumulative impacts on developments in their area of all existing and proposed local standards...”

3.1.2 Financial Viability in Planning, RICS August 2012

This is a guidance note from the RICS and, as such, it provides recommendations for accepted good practice. The document defines financial viability, for planning purposes, as “an objective financial
viability test of the ability of a development project to meet its costs, including the costs of planning obligations, while ensuring an appropriate Site Value for the landowner and a market risk adjusted return to the developer in delivering that project.”

It is also relevant to note the RICS definition of Site Value being, in this context, the value that a landowner would need to receive, in order for his land to be brought forward. “Site Value should equate to the market value subject to the following assumption: that the value has regard to development plan policies and all other material planning considerations and disregards that which is contrary to the development plan.”

3.1.3 Viability Testing Local Plans, Sir John Harman June 2012

This report was produced by the Local Housing Delivery Group, in support of NPPF and outlines the importance of viability and deliverability in developing Local Plans. The viability principles are similar to those of the RICS, although it is worth noting the comments on the level of land value that might persuade a landowner to bring forward his land for development.

Whereas the RICS provided a definition of Site Value, as above, this report refers to a Threshold Value as the required land value and recommends that the Threshold Value is based upon a premium over current use values.

For the purpose of this study, we will assume a Threshold Value in the same way, to include a premium. We discuss this in more detail, later in the report.

3.1.4 The Current London Plan, March 2016

The London Plan is subtitled “The Spatial Development Strategy for London Consolidated with Alterations since 2011.” The Mayor has to produce a spatial development strategy, known as the London Plan, and keep it under review. Local development documents of individual Boroughs should be “in general conformity” with the London Plan, which sets out an integrated framework for the development of London over the next 20 to 25 years.

3.1.5 GLA Housing Standards Review Viability Assessment, David Lock Associates May 2015

This study was commissioned by the GLA to establish the impact of the Government’s new national housing standards on the viability of
development in London. Relevant paragraphs from the Executive Summary are reproduced below:

There is no measurable cost impact from the nationally prescribed space standards as these are no more onerous than existing London Plan Requirements.

The estimated cost impact of the optional access requirements represents circa an additional 2-2.4% of base build cost for small low rise developments, which is where the requirement for step free access to all homes is an additional requirement to current London Plan standards.

There is no measurable cost impact from the Building Regulation optional requirement for the provision of Wheelchair User Housing M4(3) as this is no more onerous than existing London Plan requirements.

There is no measurable cost impact from the optional requirement for water usage of 110 litres per head per day as this is no more onerous than existing London Plan standards.

The estimated cost impact of moving to zero carbon homes in 2016 represents circa an additional 1-1.4% of base build cost.

The overall outcomes indicated that the introduction of the new Housing Standards, and the move to zero carbon homes in 2016 did not represent a significant determinant in the viability and the deliverability of housing development.

3.1.6 London Borough Development Viability Protocol, November 2016

The protocol sets out overarching principles for how London boroughs will consider development viability as a part of the planning process. The principles are similar to those in other guidance documents and have been adopted for this study.

From the point of view of this study, the protocol confirms that the preferred method of assessing the Threshold Value for development is the existing use value plus a premium. It also states that this premium will vary according to the circumstances of the landowner.

3.1.7 Nationally Described Space Standards March 2015

The standard sets out requirements for the Gross Internal Area of new dwellings, dependant upon a number of factors, including
number of bedrooms and occupancy. The assumed floor areas in this report are taken from these standards, which was part of the Council’s original brief.

3.1.8 London Borough of Richmond CIL Viability Study, Peter Brett Associates, May 2013

A CIL viability study uses many of the same viability principles as we would use in this report, including a residual land valuation and the use of benchmark land values. Whilst the current whole plan assessment will use today’s costs and values, along with current policy requirements, we will have in mind the outcomes of the CIL report (which informed the borough CIL rates that came into effect in 2014), with a view to maintaining a degree of consistency.

4 LOCAL POLICY CONTEXT

4.1 The Council is currently reviewing its Local Plan, the pre-publication version was published for consultation 8th July to 19th August 2016. The following is an extract from the Introduction:

“The Council’s Local Plan will set out policies and guidance for the development of the borough over the next 15 years. It looks ahead to 2033 and identifies where the main developments will take place, and how places within the borough will change, or be protected from change, over that period. The Council’s Local Plan forms part of the development plan for the borough. It has to go through an Examination in Public by an independent Government inspector before it can be adopted by the Council. The London Plan, prepared by the Mayor of London, also forms part of the development plan, and the Council’s Local Plan has to be in general conformity with it.”

4.2 The publication version is due to be agreed by the Council’s Cabinet in December for public consultation to start in January 2017.

4.3 This study is testing the cumulative impact of policies on the viability of development and it is, therefore, relevant to highlight particular policies that have a bearing upon the valuation inputs. We have also extracted the text that describes what the policy is looking to achieve.

- Policy LP1 Local Character and Design Quality. Emphasises the need for high quality architecture and urban design.

- Policy LP17 Green Roofs and Walls. Green roofs should be incorporated into new major developments.
• Policy LP20 Climate Change Adaptation. The Council will promote and encourage development to be fully resilient to the future impacts of climate change. New developments should minimise the effects of overheating as well as minimise energy consumption.

• Policy LP21 Flood Risk and Sustainable Drainage. All developments should avoid, or minimise, contributing to all sources of flooding, including fluvial, tidal, surface water, groundwater and flooding from sewers, taking account of climate change and without increasing flood risk elsewhere. In areas at risk of flooding, all proposals on sites of 10 dwellings or more or 1000sqm of non-residential development or more, or on any other proposal where safe access/egress cannot be achieved, a Flood Emergency Plan must be submitted.

• Policy LP22 Sustainable Design and Construction. Developments will be required to achieve the highest standards of sustainable design and construction in order to mitigate against climate change and move towards zero carbon.

• Policy LP31 Public Open Space, Play Space, Sport and Recreation. Public Open Space, children's and young people's play facilities as well as formal and informal sports grounds and playing fields will be protected, and where possible enhanced. Improvements of existing facilities and spaces, including their openness and character and their accessibility and linkages, will be encouraged.

• Policy LP35 Housing Mix and Standards. Development should generally provide family sized accommodation, except within the five main centres and areas of mixed use where a higher proportion of small units would be appropriate. The housing mix should be appropriate to the location. All new housing development, including conversions, are required to comply with the Nationally Described Space Standards. Ninety percent of all new build housing is required to meet Building Regulation Requirement M4 (2) ‘accessible and adaptable dwellings’ and 10% of all new build housing is required to meet Building Regulation Requirement M4 (3) ‘wheelchair user dwellings’.
4.4 The Council notes the context that in many policy areas the Review has continued the approach of adopted policies, rather than introducing a change in approach.

5 STARTER HOMES

5.1 The Housing and Planning Act 2016 introduced the concept of Starter Homes, being homes that would be sold at a discounted price to qualifying buyers. We understand that further detailed guidance is required through secondary legislation, before the scheme can be widely implemented. For reasons of uncertainty over the final requirements for starter homes, we have not modelled them as part of this assessment. Our initial view, however, is that the inclusion of starter homes in a development should not have an adverse impact upon viability for two reasons. First, the indications of the Government’s approach are that they might replace the existing affordable housing quota and, second, the discount to market value is proposed at 20%, being less of a discount than conventional affordable housing.

6 RESIDENTIAL SITES METHODOLOGY

6.1 In this section we discuss the means by which we have sought to respond to the Council’s brief in testing viability across a range of notional development scenarios.

6.2 The implication of the notional sites is that we are creating a series of unit numbers, mixes and densities that reflect those that might be experienced across the Richmond borough area.

6.3 The advantage of testing notional sites is that they can be created to represent a full spread of scenarios, in such a way that maximises the chances of the outcomes reflecting most development situations.

6.4 Housing Numbers and Densities for notional sites

It was agreed that we would test notional sites as follows:

- 1 house, which we have assumed to be 5 bed detached
- 6 houses, which we have assumed to be 3 and 4 bed semis
- 6 flats, assumed to be 2no. 1 bed and 4no. 2 bed
- 10 mixed units at 50 and 100 dwellings per hectare (dph)
- 30 mixed units at 50 and 100 dph
- 50 mixed units at 50 and 100 dph
- 100 mixed units at 55 and 110 dph
6.4.1 The assumed mixes for the notional housing schemes are enclosed as Appendix 1.

With regard to densities, we have considered these in the context of both existing sites and Table 3.2 of the London Plan, headed Sustainable Residential Quality (SRQ) matrix (habitable rooms and dwellings per hectare). We have looked at the following existing sites:

- **Richmond upon Thames College**
  - Estimated site area for 180 residential units is 2.35 hectares, equating to a density of 77dph.

- **Post Office Sorting Office, Twickenham**
  - A total of 110 residential units, being 82 flats and 28 houses. Residential site area is 0.99ha. Equates to a density of 111dph.

- **101-105 Waldegrave Road, Teddington**
  - A total of 36 residential units, being 18 houses and 18 flats. Site area is 0.35ha. Equates to a density of 103dph.

- **159 Heath Road, Twickenham**
  - A total of 21 flats on 0.18ha. Equates to a density of 133dph.

- **Somerset House, Teddington**
  - A total of 58 residential units, being 34 flats and 24 houses. Site area is 0.55ha, equating to 105dph.

6.4.2 Table 3.2 of the London Plan suggests different density levels, depending upon average habitable rooms per unit and location in relation to public transport. The table uses the Public Transport Accessibility Level (PTAL), whereby level 1 would indicate a longer distance from public transport and level 6 would indicate a short distance to public transport.

Table 3.2 from the London Plan is set out below.
### Sustainable residential quality (SRQ) density matrix (habitable rooms and dwellings per hectare)

<table>
<thead>
<tr>
<th>Setting</th>
<th>Public Transport Accessibility Level (PTAL)</th>
<th>Setting</th>
<th>Public Transport Accessibility Level (PTAL)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0 to 1</td>
<td>2 to 3</td>
<td>4 to 6</td>
</tr>
<tr>
<td>Suburban</td>
<td>150–200 hr/ha</td>
<td>150–250 hr/ha</td>
<td>200–350 hr/ha</td>
</tr>
<tr>
<td>3.8–4.6 hr/unit</td>
<td>35–55 u/ha</td>
<td>35–65 u/ha</td>
<td>45–90 u/ha</td>
</tr>
<tr>
<td>3.1–3.7 hr/unit</td>
<td>40–65 u/ha</td>
<td>40–80 u/ha</td>
<td>55–115 u/ha</td>
</tr>
<tr>
<td>2.7–3.0 hr/unit</td>
<td>50–75 u/ha</td>
<td>50–95 u/ha</td>
<td>70–130 u/ha</td>
</tr>
<tr>
<td>Urban</td>
<td>150–250 hr/ha</td>
<td>200–450 hr/ha</td>
<td>200–700 hr/ha</td>
</tr>
<tr>
<td>3.8 –4.6 hr/unit</td>
<td>35–65 u/ha</td>
<td>45–120 u/ha</td>
<td>45–185 u/ha</td>
</tr>
<tr>
<td>3.1–3.7 hr/unit</td>
<td>40–80 u/ha</td>
<td>55–145 u/ha</td>
<td>55–225 u/ha</td>
</tr>
<tr>
<td>2.7–3.0 hr/unit</td>
<td>50–95 u/ha</td>
<td>70–170 u/ha</td>
<td>70–260 u/ha</td>
</tr>
<tr>
<td>Central</td>
<td>150-300 hr/ha</td>
<td>300–650 hr/ha</td>
<td>650–1100 hr/ha</td>
</tr>
<tr>
<td>3.8–4.6 hr/unit</td>
<td>35–80 u/ha</td>
<td>65–170 u/ha</td>
<td>140–290 u/ha</td>
</tr>
<tr>
<td>3.1–3.7 hr/unit</td>
<td>40–100 u/ha</td>
<td>80–210 u/ha</td>
<td>175–355 u/ha</td>
</tr>
<tr>
<td>2.7–3.0 hr/unit</td>
<td>50–110 u/hr</td>
<td>100–240 u/ha</td>
<td>215–405 u/ha</td>
</tr>
</tbody>
</table>


6.4.3 The unit mixes for 10, 30, 50 and 100 units, at Appendix 1, show the average habitable rooms per unit. The density levels have been applied from these figures and are designed to relate to as many development scenarios as possible through the plan area. The table below shows the average number of habitable rooms, along with the resultant density (dwellings per hectare or dph) and site area (hectares).

6.4.5 We have generated housing mixes and densities based upon PTAL ratings of both 2 and 4-6.
Table showing average habitable rooms and site areas

<table>
<thead>
<tr>
<th>No. of units</th>
<th>10</th>
<th>30</th>
<th>50</th>
<th>100</th>
</tr>
</thead>
<tbody>
<tr>
<td>PTAL rating</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>4-6</td>
<td>4-6</td>
<td>4-6</td>
<td>4-6</td>
</tr>
<tr>
<td>Average hab rooms Per unit</td>
<td>4.4</td>
<td>3.2</td>
<td>4.5</td>
<td>3.5</td>
</tr>
<tr>
<td>Density (dph)</td>
<td>50</td>
<td>100</td>
<td>50</td>
<td>100</td>
</tr>
<tr>
<td>Resultant site area (ha)</td>
<td>0.2</td>
<td>0.1</td>
<td>0.6</td>
<td>0.3</td>
</tr>
</tbody>
</table>

Source: Adams Integra research

The resultant site areas are then used to calculate the residual land value per hectare, which is then compared to the Threshold Value for viability purposes.

7 NOTIONAL SITES APPRAISAL MODELLING

7.1 In order to assess the viability of the different sites, we use a valuation toolkit that carries out a residual land valuation, the result of which is then compared to either existing or alternative land values. The residual appraisal is, essentially, a calculation of land value that deducts all anticipated costs of a project from the expected revenues to leave a “residue” that will be available for the land purchase. It needs to be remembered that this residue will include the costs of acquiring and financing the land, so it is the net land figure that is of interest, when comparing to other potential uses for viability purposes. This is discussed further below.

7.2 We are attaching, as Appendix 6, two examples of the appraisals used for this exercise. The first assumes six houses in Teddington and the second assumes 30 mixed units in Hampton/Hampton Hill.

7.3 The residual land valuation relies upon a series of inputs. These inputs would set out:

- The number, mix and floor area of the units to be built.
- Affordable housing mixes, tenures and revenues.
- The values attributable to these units, producing a total sales revenue.
7.4 These inputs should relate to the same moment in time, since many of the values will vary with market conditions.

7.5 The following headings set out the background to both assessing viability and creating the valuation inputs that result in the land values for each scenario.

8 VIABILITY AND VIABILITY THRESHOLDS

8.1 Viability is at the heart of a study such as this and it is, therefore, important that we define what we mean by the term.

8.2 In essence, viability is the measure by which a project will be judged to be worth pursuing. The way in which viability is measured will depend upon individual circumstances, which will vary between, for example, a landowner and a developer that might be interested in purchasing the land.

8.3 From the developer's point of view, the main measure of viability will be the profit generated by the project, assuming a specific land value. Sufficient profit is required in order to provide an incentive to proceed with a project, while also being necessary to attract funding. The attitude of lenders will relate to risk and the required profit level will rise and fall with the assessment of that risk.

8.4 The landowner, on the other hand, has other considerations when deciding to bring his land forward for housing, the main ones being an existing use value or the value of an alternative use that might receive planning permission. The levels of any alternative value will vary, depending upon both locational factors and the specific alternative use that might be applicable.

8.5 For the purpose of studies such as this, we are basing our assessment of viability on the residual land values that arise from the valuations of the different development scenarios. Each scenario will produce a different land value, based upon factors such as density, sales values and build costs. If we express the land values, produced by the valuations, in terms of sums per hectare, then we can compare these to the existing or alternative uses that could apply to the site.
8.6 In this connection, we use the term “viability threshold” to describe the level of land value that needs to be exceeded before a development can be described as being viable. This threshold will be the level of existing use value plus an incentive premium that persuades a landowner to sell for development. This methodology of existing use plus premium is favoured by the Harman Report “Viability Testing Local Plans”.

8.7 In order to establish appropriate viability thresholds in the borough, we have looked at the existing uses of sites listed for housing in the Site Allocations from the emerging Local Plan. Existing uses guide us towards the levels of existing use value that need to be exceeded before a development is considered viable and before the Council can safely assume that these sites will come forward for development. These existing uses include the following:

- An island with restricted access
- Telephone exchanges that would have a high remediation cost
- Royal Mail delivery offices
- Child care
- Education
- Day centre
- Hospital
- Car park

8.8 It is evident that, for the key sites identified as site allocations (which are considered to assist with delivery of the Local Plan Spatial Strategy), the Council is not relying upon housing numbers from higher value uses, such as established offices or residential and this would point towards potentially better viability than might otherwise be the case.

To address the different possible outcomes we need, therefore, to assume land values for a range of existing uses.

8.9 Whilst the greater weight should be given to existing uses, as reflected in the site allocations, we should also expect that a number of windfall sites will arise on land that is currently in employment or residential use, similar to previous patterns of delivery. We would therefore consider threshold values for these uses, although they are less relevant to the proposed site allocations.

8.10 At this point it is worth noting the threshold values that were applied to different land uses for the CIL viability study, that was carried out for the Council in May 2013. These were:

- Residential: £5million to £10million per hectare, depending upon location
8.11 As stated above recent guidance, specifically Viability Testing Local Plans June 2012, recommends that a premium should be applied to existing use values, the purpose of which would be to, firstly, provide an incentive for a landowner to release a site for development and, secondly, to comply with the further guidance in the National Planning Policy Framework (NPPF) to provide a “competitive return” to a willing landowner. The amount of premium should be set locally and, in our experience, this is usually set at around 20%. It should be borne in mind, however, that some sites might come forward for development, following a decision to sell, in which case it is likely that the price paid will reflect market conditions, with no premium paid.

8.12 We have assumed the following viability thresholds from existing uses (per hectare) to include a 20% premium:

- Employment low: £4,000,000 per hectare
- Employment medium: £6,000,000 per hectare
- Employment high: £12,000,000 per hectare
- Residential low: £10,000,000 per hectare
- Residential high: £16,000,000 per hectare

8.13 In order to arrive at the Existing Use Values for this study, we have looked at 3 scenarios covering a range of higher, middle and lower value areas in the Borough, that might correspond to, say, Richmond, Teddington and Whitton respectively. This has been assumed to be a redundant office building that is demolished and replaced with new development.

8.14 Whilst it is recognised that the loss of office space is being heavily resisted through policy and Article 4 directives, it is stressed that this is purely for identifying suitable land values. In the lower value areas it is possible that offices would be a less common existing use in favour of other commercial-type uses, such as those specified in connection with the site allocations. To illustrate this possible scenario, we have used a lower site density and values to reflect the lower value of the property.

8.15 We have assumed a plot size of 1 hectare. We have deducted 15% (to allow for the thickness of walls and internal circulation space and common parts) to get to a net internal floor area.
The table of valuation inputs is as follows in each of 3 locations:

<table>
<thead>
<tr>
<th>Location</th>
<th>Building Size [Net Internal]</th>
<th>Site Cover</th>
<th>Rent</th>
<th>Yield</th>
</tr>
</thead>
<tbody>
<tr>
<td>Higher</td>
<td>8,500 m2</td>
<td>100%</td>
<td>£108.00/m2</td>
<td>8.5%</td>
</tr>
<tr>
<td>Middle</td>
<td>6,800 m2</td>
<td>80%</td>
<td>£90.12/m2</td>
<td>9.5%</td>
</tr>
<tr>
<td>Lower</td>
<td>5,100 m2</td>
<td>60%</td>
<td>£70/m2</td>
<td>10.0%</td>
</tr>
</tbody>
</table>

8.16 The EUV is then the investment valuation after deducting typical purchaser’s costs at 6.8% (for Stamp Duty Land Tax, legal and acquiring agent’s fees).

### 8.16.1 Higher Value

8,500 m2 @ £108 per m2    £918,000  
YP in perpetuity @ 8.5%   11.7647  
Value                      £10,800,000  
Less purchaser’s costs at 6.8% £734,400  
£10,065,600  
Say                        £10,000,000  
Plus 20% Premium          £2,000,000  
Total                     £12,000,000

### 8.16.2 Middle Value

6,800 m2 @ £90.12  £612,816  
YP in perpetuity @ 9.5%  10.5263  
Value                      £5,350,000  
Less Purchasers Costs @ 6.8% £363,800  
Value                      £4,986,200  
Say                        £5,000,000  
Plus 20% Premium          £1,000,000  
Total                     £6,000,000

### 8.16.3 Lower Value

5,100 m2 @ £70.00 per m2  £357,000  
YP in perpetuity @ 10.0%   10.00  
£3,570,000  
Less purchaser’s costs @ 6.8% £242,760  
£3,327,240  
Say                        £3,330,000  
Plus 20% Premium          £660,000  
£3,960,000  
Say                        £4,000,000
8.17 We should point out that these viability thresholds are not site valuations in the individual uses. A particular site would need to be valued on its own merits, using site-specific costs and values. The viability thresholds indicate the land values per hectare that, we believe, would need to be achieved in order to persuade landowners/developers to release land for development.

9 PROFIT

9.1 Profit is vitally important to a project, as a means of assessing its viability. Since profit is, perhaps, most associated with anticipated sales risks, it is common to express it as a percentage of the anticipated sales revenue.

9.2 On the other hand, sales risk is greater from the market housing than from the affordable housing. We adopt, therefore, different profit levels for each sector.

9.3 Profit requirements will differ between one developer and another but, in the current market, we believe it reasonable to adopt 20% on market housing sales values and 6% on affordable housing values.

10 BUILD COSTS

10.1 In order to assess relevant base build cost levels, we consulted the build cost index of the Build Cost Information Service (BCIS), being a common source of information for this type of study. The relevant extract dated 12th November 2016 is enclosed as Appendix 2.

10.2 The BCIS costs do not include external works, for which an allowance of 12% has been made over and above the base cost. For this exercise, we have adopted the median cost level, except for the single house in the most expensive locations, for which the upper quartile has been used. The resultant base costs that have been assumed for this exercise, are:

- Single house: £2,064 to £2,915 per sqm
- Six semi detached houses: £1,318 per sqm
- Six flats: £1,574 per sqm
- Ten mixed units: Houses £1,297, flats £1,574 per sqm
- Thirty mixed units: Houses £1,297, flats £1,574 per sqm
- Fifty mixed units: Houses £1,297, flats £1,574 per sqm
- One hundred mixed units: Houses £1,297, flats £1,574 per sqm

10.3 In connection with the flats, the build cost has been applied to the unit areas plus 15%, being the assumed area of the common parts, such as corridors and stairs.
10.4 The basis of this assessment is the cumulative impact of the Council’s emerging policies, resulting from the Local Plan Review. There is a possibility that where similar to existing policy requirements this could have been reflected in recent BCIS costs, however this is not certain. We have assumed that the cost implications of these policies will not be included in the BCIS costs and we have, therefore, made separate allowance for them in our appraisals. These costs have been provided by an independent quantity surveyor and are based upon information from ourselves relating to each policy. We are attaching, as Appendix 3, a table that sets out the cost assumptions of these individual policies, for each of the tested development scenarios. We are also setting out below the cost build-up of the policies that results in the total costs that are shown on the table.

10.4.1 Policy LP17 Green Roofs and Walls

We have applied this cost to flats only. The cost is based on an extra cost for roof construction and covering at £125 per sqm. We have applied the same cost and area for the walls. For example, for the 10 mixed units, with 4 flats, we have assumed that the roof area will be the size of 1no.1 bed flat plus 1no.2 bed flat and 15% for circulation area. The assumed cost is, therefore:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1 bed flat</td>
<td>52 sqm</td>
</tr>
<tr>
<td>2 bed flat</td>
<td>70 sqm</td>
</tr>
<tr>
<td></td>
<td>122 sqm</td>
</tr>
<tr>
<td>Add 15%</td>
<td>18 sqm</td>
</tr>
<tr>
<td></td>
<td>140 sqm</td>
</tr>
<tr>
<td>Cost for roof and walls</td>
<td><strong>£250</strong></td>
</tr>
<tr>
<td>Total cost</td>
<td><strong>£35,000</strong></td>
</tr>
</tbody>
</table>

10.4.2 LP20 Climate Change Adaptation

We have assumed that the costs of this are already taken into account through other allowances.

10.4.3 LP21 Flood Risk

We have assumed that this cost will be mainly fees, in preparing the required Flood Emergency Plan. For most sites the cost may be far lower, however to be reasonable the allowance is between £2,000 and £5,000. This is on top of the 12% fee allowance in the appraisals.
**10.4.4 LP22 Sustainable Design**

Zero Carbon (or equivalent payment to the Carbon Offset Fund) has been assumed for sites of at least 10 units. The cost for flats is based upon the provision of PV panels to a scheme of 40 flats on 4 floors, assessed by our quantity surveyor at £175,000. For the different development scenarios we have apportioned this cost to the flats on a “per unit” basis.

For the houses, we have costed on the basis of brises soleil at £6,000 per unit for 10 units, reducing to £5,000 for 50 and 100 units, to reflect economies of scale.

We have assumed for other elements of sustainable design that the costs of this are already taken into account through other allowances.

With regard to non-residential uses, the requirement to achieve a BREEAM ‘Excellent’ rating is now considered to be achievable generally though more diligent construction planning and using more sustainable construction methods and materials. Therefore, after conforming with Building Regulations Part L² and Regulations for Non-Domestic Building Services³, and using BCIS Build Costs from only the last 5 years, where more sustainable construction methods adhering to these new Regulations are now generally used, we consider that this policy is suitably addressed by the construction costs we have selected for each type of use.

**10.4.5 LP31 Public Open Space**

We have allowed this cost for 30 units and above. For the larger sites we have allowed a cost that assumes equipment at between £60,000 and £125,000.

**10.4.6 LP 35 Housing Mix and Standards.**

The main cost element of this policy relates to Part M4(2) and Part M4(3) of Building Regulations. The greater cost is in M4(3), which we have assumed to 10% of the units. For the mixed units we have assumed that the cost would relate to a house at £15,000 per unit. For the 6 flats scheme, we have assumed that the cost would apply to one unit at £10,000.

---

³Non-domestic building services compliance guide - 2013 edition- as amended
**10.4.7 LP 41 Offices**

The council will require the provision of affordable office space within major developments, where over 1,000sqm of office floorspace is proposed. Affordable floorspace should constitute at least 10% of the proposed office floor space and the workspace must remain affordable for a minimum of 10 years. Affordable workspace is considered to have a rent and service charge of less than 80% of comparable market rates. Affordable office provision, including appropriate rental values, will be agreed and secured through Planning Obligations in line with the Council’s Planning Obligations SPD.

We have tested and made assumptions for a notional major office scheme in one of the Main Centres, allowing for a part of the building to be let on an ‘affordable basis’ as proposed. Namely 10% of the floor area generating 20% less rent. As the proportion is relatively negligible the investment yield has not been modified as the value of the freehold investment is not likely to be sufficiently sensitive to be affected.

**10.4.8 LP 43 Visitor Economy**

This Policy requires new visitor accommodation and facilities to be accessible to all; such that at least 10% of hotel bedrooms should be wheelchair accessible. The Equality Act⁴ already addresses similar requirements and it is considered, particularly in the case of hotels, that it is in the commercial interests of the operator to provide this level of accessibility to wheelchair users. Therefore we consider that there is no additional financial burden on the developer.

**10.4.9 LP 44 Sustainable Travel Choices**

We have assumed that any costs attributable to this Policy have already been taken into account through other allowances or that there is no financial impact on viability.

**10.4.10 LP 45 Parking Standards and Servicing**

The emphasis of Policy LP45 is to make provision for vehicles to provide for the needs of development while minimising the impact of car based travel. There is a possible cost saving to non-residential developments, particularly for schemes in sustainable locations where staff and customers can arrive by foot such that no on-site car parking spaces need be provided. These sustainable locations have been identified in the Plan, including high PTAL areas.

⁴ Equality Act 2010- SCHEDULE 4, Premises: reasonable adjustments
10.5 For this report we consider that the financial implications are neutral in terms of the viability of all new non-residential development.

11 OTHER VALUATION INPUTS

11.1 Other valuation inputs used:

- Percentage build cost for architect: 6%
- Percentage build cost for other consultants: 6%
- Percentage of sales revenue for sales and marketing costs: 3%
- Finance rate: 6.75%
- Build cost contingency: 5%
- Profit on market housing: 20%
- Profit on affordable housing: 6%

11.2 A rate of £1,000 per housing unit for any other S106 costs has been allowed for, that could be S278 contributions or other site specific contributions if in accordance with the revised Planning Obligations SPD alongside the borough and Mayoral CIL contributions.

11.3 We are enclosing, as Appendix 4, a full list of the valuation inputs.

12 AFFORDABLE HOUSING

12.1 Policy LP36 of the Local Plan Review states that the Council will seek 50% of new units to be affordable. Sites of 10 or more units, and former employment sites, should make the provision on-site, while smaller sites should make a financial contribution in accordance with the policy and by reference to the Council’s Affordable Housing SPD.

12.2 The Council’s policy approach to the percentage, tenure, mix and affordability of affordable housing have been applied, however it would be for an individual scheme viability assessment to consider any site specifics in detail and engage with Registered Providers to maximise delivery.

12.3 For the purpose of this assessment, it has been agreed with the Council that we will test 40% affordable housing on notional sites of 10 or more units, where a mix of market and affordable units will be provided (in accordance with the Richmond CIL Viability Study 2013). We have noted the requirement for family rented accommodation, but we have also assumed that general densities will be higher in locations with a higher PTAL level, as illustrated at Table 3.2 of the London Plan. The overall housing mixes, including affordable housing, are enclosed as Appendix 1.

12.4 This attachment also confirms the proportion of affordable housing and the percentage breakdown between affordable rent and intermediate.
12.5 With regard to affordable housing revenues, we approached a number of local registered providers and we were also provided with information from the Council in respect of a selection of actual sites.

12.6 It is common practice to represent affordable housing values as a percentage of open market value. The percentages will vary according to both tenure and location, with the overriding consideration being affordability. The summary of the information showed that the percentage for affordable rent varied between 33% and 50%, while for intermediate it varied between 44% and 81%.

12.7 In connection with affordable housing, the Council should note that we have assessed revenues on the following basis:

- The floor areas for the affordable houses are smaller than those applicable to open market houses, but they are based upon the minimum space standards as set out in the Nationally Described Space Standards of March 2015. We have assumed 102sqm for a 3 bed house (6 person) and 115sqm for a 4 bed house (7 person). The floor areas for the affordable flats remain the same as for market flats, at 52sqm for 1 bed flats and 70 sqm for 2 bed flats.

- The market value for affordable housing purposes has been assessed separately from the open market properties, but within the four identified value locations. This is to reflect the fact that, whilst Richmond Borough contains many high value properties, the market value for affordable purposes would be based upon a more mid-range level of price. A separate assessment was also made necessary by the fact that the house sizes were different from market sizes.

- Based upon the percentages provided by the registered providers, we have adopted 35% of market value for affordable rent units and 50-55% of market value for shared ownership units.

12.8 We are enclosing, as Appendix 5, a table of assumed affordable housing values.

12.9 As stated above, Council policy dictates that sites below 10 units may make a financial contribution towards affordable housing, as opposed to an on-site provision. The method of calculating the contribution is set out in policy LP36 of the Local Plan Review and in the Council’s Affordable Housing SPD using the accompanying pro-forma. We have been advised
by the Council that, based upon our proposed open market values, the maximum affordable housing contributions should be as set out below. These are based upon the assumed scenarios of 1 to 6 units, as included at Appendix 1.

### Affordable housing contributions from small sites

<table>
<thead>
<tr>
<th></th>
<th>VP1</th>
<th>VP2</th>
<th>VP3</th>
<th>VP4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barnes Kew Richmond</td>
<td>Teddington</td>
<td>Hampton Hampton Hill</td>
<td>Whitton</td>
<td></td>
</tr>
<tr>
<td>1 house</td>
<td>£65,780</td>
<td>£52,409</td>
<td>£37,366</td>
<td>£26,334</td>
</tr>
<tr>
<td>6 houses</td>
<td>£1,458,497</td>
<td>£1,277,982</td>
<td>£971,106</td>
<td>£820,677</td>
</tr>
<tr>
<td>6 flats</td>
<td>£465,329</td>
<td>£393,123</td>
<td>£316,906</td>
<td>£216,620</td>
</tr>
</tbody>
</table>

Source: LB Richmond upon Thames

### 13 SALES VALUES

13.1 Sales values have been derived from our own research and are shown at Appendix 7. At Appendix 7a we show the detailed sales research for the different settlements in the Borough, while at Appendix 7b we show a table of the assumed values for the proposed notional units. We have broken the Borough down into four geographical locations, each being represented by a different value point. These locations correspond broadly to those identified in the viability report for CIL, prepared by Peter Brett in May 2013. There are two adopted residential CIL charging bands, higher and lower, with a conservative approach taken to place Teddington and Hampton Wick wards in the lower band. Clearly there is a good deal of variation of viability within each band, as well as between bands, but logistically in such assessments there is a need to group together broad areas. We set out below the locations that have been assumed for each value point, along with the corresponding sales rate per square metre, relative to a 3 bedroom house.

- **Value Point 1**: £7,879 per sqm
  - Barnes
  - Kew
  - East Sheen
  - Richmond
  - Twickenham
  - Ham

- **Value Point 2**: £6,970 per sqm
  - Teddington
Value Point 3  £6,429 per sqm  Hampton 
Hampton Hill

Value Point 4  £5,643 per sqm  Whitton

13.2 As will be seen below, we are also testing the viability positions, where sales values fall by 5% or rise by 5%.

14 NON-RESIDENTIAL METHODOLOGY

14.1 We have agreed with the Council the different types of new commercial developments that reflect those that might be experienced across the borough during the plan period and borne in mind the identified site allocations including non-residential uses.

14.2 The cumulative impact of the proposed new plan policies has then been incorporated into each of the scenarios to assess the impact on the viability outcome.

14.3 A residual appraisal has been carried out for the various notional sites. These have used industry accepted methodology similar to the residential study above. Recognised ARGUS Developer software has been used to produce the land value that is affordable from the various uses after allowing for all the usual costs of the development and making appropriate allowances to comply with the Local Plan policies listed below.

14.4 Like the residential outcomes, the outcome is the residualised land value which is then compared to the benchmark value that is considered appropriate for the existing use. As shown earlier these simplified benchmark values are the same high, medium and lower values based on the re-use of a redundant brownfield site in different parts of the borough. These being:

- High value use/area - £12m/Ha e.g: prime retail pitch in Richmond
- Middle value use/area - £6m/Ha e.g: Richmond office site
- Lower value use/area - £4m/Ha e.g: workshop site in Whitton

14.5 If the outcome land value is greater than the benchmark it is considered that there is sufficient incentive for a land owner to bring the site forward for that type of policy compliant development.

14.6 Many of the non-residential outcomes show a negative land value indicating that the costs of development outweigh the value of the completed scheme. In these cases, the comparison to the benchmark...
value is immaterial as it is already clear that the scheme would be unviable.

14.7 A Table of these outcomes is provided at the end of this report.

### 14.8 Notional sites

14.8.1 We have looked at a range of commercial types of development that are considered likely to come forward in the borough over the plan period and the commercial uses envisaged in the site allocations. We have used the planning Use Classes\(^5\) to assist in identifying the different categories of development and referred to the Local Plan centre hierarchy\(^6\).

14.8.2 These have included in the ‘A’ Class category:
A large format retail unit for comparison retailing of 1,000 m\(^2\). In reality such large sites are not available or, depending on the location, suitable for retail development in the borough, but it is considered relevant to test a broad range of development types.

14.8.3 A smaller format comparison retail unit of 300 m\(^2\). This could be in a Main Centre where values are higher. Therefore, a similar type has also been tested using values typical in a Local centre.

14.8.4 A convenience store type development of 280 m\(^2\) with residential use above has been tested. We are seeing the main supermarket operators move away from larger format supermarkets to an increase in the number of convenience stores they trade from. Whilst operating under the same A1 use class as a ‘comparison’ retailer such as clothes fashion or mobile phones, the values are differed and therefore the viability outcomes can be different.

14.8.5 Within the ‘B’ Class category there is a range of uses from B1a offices to B1c light industrial, B2 general industrial and B8 storage and distribution.

14.8.6 New B2 and B8-type development is not expected in the borough on new sites because of the high land values and other competing higher value uses.

14.8.7 We have tested a new office development of 1,500 m\(^2\) that may be found in, for example, central Richmond. This would most probably be on 3 or 4 storeys with air conditioning and minimal car parking.

14.8.8 We have tested a smaller format office development in a Local Centre without air conditioning and policy compliant parking. We have also looked

\(^5\) Town & Country Planning (Use Classes) Order 1987 as amended
\(^6\) 7.1.1 The centre hierarchy as referred to in Policy LP 25 Development in Centres
at a small unit business centre type development falling within the general B1 category. This being of 1,000 m\(^2\) but subdivided into 5 units designed for start-up or ‘move-on’ type accommodation for small to medium sized enterprises (SMEs).

14.8.9 It is recognised that there is demand for visitor accommodation in the borough. Applications for hotel development falling within Use Class C1 are likely. The most active sector is the budget type hotel such as the Travelodge, Premier Inn or Holiday Inn Express brands. Therefore, a typical format 100-bedroom budget style development has also been tested in a controlled parking zone with 1 car space per 5 bedrooms.

14.8.10 Within the D category, fitness centres and gyms falling with Class D2 (assembly & leisure) is the most active. Often these uses may convert existing buildings however we have tested a new purpose built scheme with small swimming pool to assess the full policy implications, recognising that this may require more investment and maintenance than other fitness uses.

14.9 Non-Residential Inputs

14.9.1 The Table in Appendix 10 shows the numerical inputs used. These include the size of the notional scheme. To assess the outcome on a like-for-like basis the size of site required is calculated using a ratio of building to site area. This ‘site coverage’ reflects external areas including parking and loading areas where appropriate. With multi storey buildings such as a 3 storey Main Centre office with basement car parking, this could generate 100\% coverage of the site. This is quite typical in urban situations including the likes of replacement development such as in a high-street location.

14.9.2 An estimate of the time taken to build the project is inputted to calculate the finance costs. The software makes a calculation in the background based on inputted time allocated for each phase of the development process. We have used an interest rate of 7.0\% which is widely used as a current interest set for commercial property development funding.

14.9.3 The comparable evidence (shown in Appendix 9) has been analysed for the various categories including a range of other appropriate and available evidence. These include market reports by industry experts such as Savills and Fleurets for leisure and hotel property. A small number of these are from beyond the borough boundaries as considered reasonable comparators to improve the sample size and to broaden the range of different uses particularly within the ‘A’ Use Class category. The evidence is analysed and adjusted to produce values appropriate to the borough.
14.9.4 From these we have deduced a range of rental rates. We have selected the Mid-range rate for the published appraisal. However, the sensitivity testing has looked at the full range of higher and lower rates. The outcome of the sensitivity testing is shown at the end of each appraisal. The software is extremely sophisticated and allows the outputs to be shown in a variety of ways in response to variations to any of the inputs. For this study, we have shown the outcomes as Land values and profit level in response to both positive and negative changes in the construction costs and rental rates.

14.9.5 The investment yields are shown in the Table. Again, these are deduced from market evidence and commentary from industry publications and based on our own findings from published investment transactions. Investment yields can be sensitive to many factors such as the covenant strength of the tenant, the length of the lease as well as the location and general risk profile of the investment compared to other alternative investment products available in the market. There is some uncertainty in the market due to the potential effects of Brexit on the economy and financial markets. We have found no evidence of any significant changes in commercial property investment yields likely in the borough so far.

14.9.6 The Table also shows the construction costs we have used including an allowance for any identified external works. The costs are based on Gross Internal Floor areas and include contractors Preliminary/setting up Costs and profit but exclude professional fees which are inputted separately which generally amount to 10% of the construction costs.

14.9.7 The construction costs are taken from the industry recognised BCIS Average Price data base. These are the time of this report, rebased to the Richmond borough area and taken from competitively tendered new design and build projects with VAT from only the last 5 years, to reflect the effects of the new Building Regulations and economic climate.

14.9.8 The median figure is generally used where there is a good range of evidence. We have also taken advice from a qualified cost consultant to assess the impact of the policies that would affect construction costs particularly on the BCIS results. These would include, for example, Green Roofs and Walls, and Sustainable Design and Construction.

14.9.9 Where appropriate we have taken the advice of the cost consultant and used these figures in the appraisals.

14.9.10 Other inputs such as sales and letting fees are not dissimilar to residential appraisals but reflect the non-residential market norms.

7 WT Partnership-Project and Cost Management consultants (www.wtpartnership.com)
14.9.11 The Developers Profit in each scenario is set at the industry norm of 20% of the Gross Development Cost [GDC]. This is slightly different to residential developers who generally look to measure their profit level, or return, based on the Gross Development Value [GDV]. The ‘Performance Measure’ section within each appraisal shows the level of profit as a percentage of GDC as well as GDV and other measures. However, the 20% profit on GDC is used in the non-residential appraisals to evaluate the surplus left to acquire the site or residual land value.

14.9.12 Appendix 11 shows each appraisal summary and sensitivity testing.

15 CONCLUSIONS

15.1 Residential

15.1.1 In drawing up the residential sales values for the study, we have adopted a range of values across the Borough, that have been expressed as four value points. It is accepted that, within each value point location, there will be areas of both higher and lower value, but we believe that the values will be within the ranges set out in the table at Appendix 7b, even if the specific location might be more suited to a lower value point. In such an instance, an assessment of viability can still be made.

15.1.2 Whilst we have borne in mind the evidence from studies such as the CIL assessment, the findings of this study derive from our own primary research, which was carried out during November 2016. We have taken into account, for example, the existing use values as proposed in the CIL report, but we have given greater weight to the existing use values of the proposed site allocations in reaching our conclusions. We have also, however, illustrated viability across a wide range of existing use values, in order to also address the viability of the potential windfall sites that might arise.

15.1.3 When considering viability in the context of the Council’s proposed site allocations, we believe that little weight needs to be given to residential existing uses, due to the lack of allocations in such use.

15.1.4 Whilst we have applied a premium of 20% to existing use values, in order to arrive at the threshold values, we do not believe that this premium will apply in all circumstances, due to the fact that some sites will be sold in the market and the market price will apply. This is more in line with the RICS position, whereby the threshold value should be considered as the price at which the site would sell in the open market.
15.1.5 Regarding build costs, we have made allowances for the Council’s new policies, over and above the assumed base costs from BCIS. We note the comments in the David Lock report of May 2015, in which no extra costs have been applied for such items as accessibility and water requirements, since they are believed to be already provided for in the current London Plan. Since the BCIS costs are built up from sample sites over a period, it is difficult to know for certain whether they already include costs that are now implied by the Council’s policies. We would say, therefore, that we have adopted a conservative approach to build costs.

15.1.6 The land value outcomes are illustrated by the tables enclosed as Appendix 8. These show the viability position, as at today’s date, with our assumed sales values and build costs. The tables also show, however, the viability impact of both a fall in sales values of 5% and a rise of 5%.

15.1.7 These tables provide three figures for each development scenario in each value location. The first figure is the land value produced by the residual appraisal for the particular development scenario. The second figure shows the land value as a percentage of the total sales revenue. This is a common way of assessing land values within the housebuilding industry. The third figure is the land value expressed as a sum per hectare. It is this figure that we compare to the viability thresholds / existing use values to assess the viability of the particular scenario.

15.1.8 For each value location, we have calculated the average land value per hectare, which is then related to the threshold value through the traffic light representation at the bottom of the table. Viable scenarios are shown in green, scenarios where viability is marginal are in orange, whereas non-viable scenarios are shown in red.

15.1.9 We are assuming that the form of development in a given location could be at any of the unit numbers and mixes that we have tested. It could also be different numbers and densities, but we believe that we have tested the broad cross section that might apply. For this reason, we have taken the average land value per hectare for each value location for comparison with the EUV. These averages are shown below the tables themselves.

15.1.10 We then use a traffic light system to illustrate viability against each of the existing use values. The outcomes of this exercise can be summarised as follows:

i. Assuming today’s sales values, the most expensive locations, represented by value point 1, show good viability against all viability thresholds.
ii. At value point 2, being Teddington, there is generally good viability, although it is starting to become marginal where the existing use is expensive residential.

iii. At value point 3, being Hampton and Hampton Hill, we would assume that the lower to medium employment thresholds would apply, in which case this location is also showing viability. The table suggests that sites currently in higher value employment or in residential uses will suffer from a lack of viability.

iv. With regard to Whitton, at value point 4, the average land value per hectare would suggest viability in only the scenarios where the existing use is lower to medium value employment.

v. It is notable that the land values per hectare attributable to the single house are consistently low in relation to other development scenarios.

vi. Given that the Council is not relying upon single units for its housing supply, we have also shown the average land value per hectare, excluding the single house results. Whilst this shows a marginal viability improvement in certain scenarios, the overall pattern of viability remains the same.

vii. When we apply a sensitivity analysis to the sales values, initially increasing them by 5%, we see that previously marginal scenarios are now viable, while value point 4 scenarios are now viable from more valuable employment existing uses. On the other hand, with sales values reduced by 5%, there is still viability in lower value locations against medium value employment existing uses. There is, however, limited viability in these locations against high value employment or residential existing uses. Higher value locations, such as Richmond and Teddington, maintain their viability against all but the most expensive residential existing uses.

15.1.11 We believe that it is reasonable to conclude that lower value locations, such as Hampton and Whitton, will maintain viability for residential sites, on the basis of lower existing use values.

15.1.12 With regard to the residential scenarios, we would conclude, therefore, that the cumulative impact of the Council’s policies, including those new
policies emerging from the Local Plan Review, should not put at risk the viability of development, as envisaged by the site allocations.

15.2 Non-residential

15.2.1 Below is a summary table of the findings. Those outcomes coloured in green exceed the benchmark values. The one coloured in orange (Offices-Local centres) is below the benchmark but shows a positive land value. A relatively small increase in the values or a decrease in the costs, or both, could improve the outcome.

15.2.2 Those coloured in red show that the outcome is a negative land value. In other words, the overall costs of development significantly outweigh the end value of the proposed development. The outcomes are so substantially below even the lowest benchmark value that it is considered unlikely that these types would come forward even if the policy impacts were entirely neutral.

15.2.3 In the case of Local Centre Offices, a small improvement in the investment yield and the rent level would have a significant effect on the residual land value. These influences and the impact of construction costs will be more determined by market forces than policy demands as explained earlier in the report.

15.2.4 In the cases with negative land values, improvements in occupier and investor demand, together with a reduction in the cost of development, are more critical to viability than any potential impact from the proposed policy changes.
<table>
<thead>
<tr>
<th></th>
<th>Residual Land value</th>
<th>Per Hectare</th>
</tr>
</thead>
<tbody>
<tr>
<td>RETAIL Comparison Main Centre</td>
<td>£1,924,365</td>
<td>£96m</td>
</tr>
<tr>
<td>RETAIL Small Convenience with residential</td>
<td>£1,105,524</td>
<td>£12.7m</td>
</tr>
<tr>
<td>OFFICES- Prime-Main Centre</td>
<td>£2,779,310</td>
<td>£27.8m</td>
</tr>
<tr>
<td>RETAIL Large Format</td>
<td>£1,757,063</td>
<td>£4.4m</td>
</tr>
<tr>
<td>OFFICES Local Centres</td>
<td>£68,279</td>
<td>£2.3m</td>
</tr>
<tr>
<td>RETAIL Comparison Local Centre</td>
<td>-£164,719</td>
<td>-£5.5m</td>
</tr>
<tr>
<td>INDUSTRIAL- small unit scheme</td>
<td>-£416,175</td>
<td>-£0.8m</td>
</tr>
<tr>
<td>HOTEL</td>
<td>-£656,512</td>
<td>-£4.4m</td>
</tr>
<tr>
<td>GYM/FITNESS CENTRE</td>
<td>-£2,419,985</td>
<td>-£16.1m</td>
</tr>
</tbody>
</table>

15.2.5 In summary, therefore we conclude that overall the proposed new policies do not have an adverse impact on the viability of non-residential development in the London Borough of Richmond upon Thames.

End of report
Adams Integra
December 2016

Appendices Follow