BNP PARIBAS REAL ESTATE | Real Estate for a changing world

Southwark Student Housing Study – Implementation

Prepared for

Southwark Council

March 2011

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Appendices

1 Introduction and approach

1.1 Introduction

BNP Paribas Real Estate has been commissioned by the London Borough of Southwark "the Council" to provide a research report informing how the emerging Southwark Core Strategy might be implemented and to provide sensitivity testing of the viability of implementing such a policy. This study supplements the Affordable Housing Viability Study produced by BNP Paribas Real Estate in January 2010. We have also produced a separate report; Southwark Student Housing Study (July 2010) which provided consolidated information on:

- Existing student accommodation in the Borough;
- The schemes of student housing currently in the pipeline with planning consent, including those under construction and those not yet started; and
- The student housing schemes with current applications.

The Council is currently revising their Affordable Housing Supplementary Planning Document and this study will provide further guidance on the Council's new approaches. In this report, we therefore refer to the current SPD as the '2008' SPD to distinguish between them.

1.2 Approach to Financial Viability

We have adopted a similar approach to our report earlier in the year where we tested affordable housing provision on residential led schemes. We have run a series of development appraisals taking into account different variables at different sensitivities. These variables are rental values, densities, construction costs and ancillary costs, including policy requirements for affordable housing provision and financial planning obligations.

Development Appraisal models are in essence simple and can be summarised via the following equation:

Completed Development Value
MINUS
Total construction costs
MINUS
Developer's profit
EQUALS
Residual land value

Residual Land Value – the sum that the developer will pay to the landowner to secure a site for development – will normally be the critical variable. If a proposal generates sufficient positive land value (normally in excess of the site's current/existing use value, it will be implemented. If not, the proposal will not go ahead, unless there are alternative funding sources to bridge the 'gap'. We discuss later in our report that such alternative funding sources are now unlikely to be available given the economic climate and the Chancellor's June 2010 Budget announcements.

The problems with Development Appraisals all stem from the requirement to identify the key variables – rental values, costs etc – with some degree of accuracy in advance of implementation. Even on the basis of the standard convention, namely that current values and costs are adopted (not values and costs on completion), this can be very difficult. Problems with key appraisal variables can be summarised as follows:

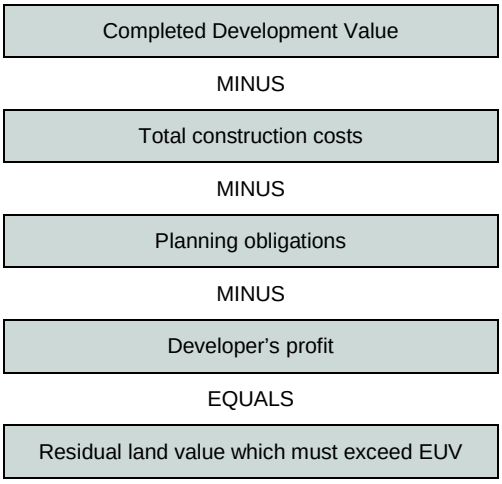
- Development costs are subject to extensive national and local monitoring and can be reasonably accurately assessed in 'normal' circumstances. However, in boroughs like Southwark, most sites have been previously developed (i.e. brownfield) and 'exceptional' costs such as decontamination are common. Such costs can be very difficult to anticipate before detailed site surveys.

- Development value and costs will also be significantly affected by assumptions about the nature and type of affordable housing provision and other Planning Obligations and on major projects, assumptions about development phasing and infrastructure triggers. In essence, where the cost of affordable units and/or obligations are deferred, the less the real cost to the applicant (and the greater the scope for increased affordable housing and other planning obligations).

- While Developer's Profit has to be assumed in any appraisal, its level is closely correlated with risk. The greater the risk, the greater the profit level, in part as a contingency against the unexpected. While profit levels were typically around 13% - 15% of completed development value at the peak of the market in 2007, banks now require schemes to show a profit normally in excess of 20%. We do not know when profit levels may begin to fall back, if they ever do.

- Ultimately, the landowner holds the key and will make a decision on implementing the project or not on the basis of return and the potential for market change and thus alternative developments. The landowner's 'bottom line' will be achieving a residual land value that sufficiently exceeds 'existing use value' to make development worthwhile.

What in essence, therefore, is a simple equation - the development appraisal calculation – is in reality fraught with problems. The following two diagrams summarise the outcomes.



The standard appraisal calculation shown above is reasonably clear cut, subject to the problems noted earlier. However, the delivery of Planning Obligations, and in particular the provision of affordable housing, complicates the calculation by reducing Completed Development Value. The extent to which Completed Development Value is reduced depends on the percentage, tenure and funding of the affordable housing. On the assumption that other development costs remain unchanged, a reduced Completed Development Value resulting from the requirement to provide affordable housing results in a lower Residual Land Value and that is the essence of much of this debate.

Completed Development Value
MINUS
Total construction costs
MINUS
Planning obligations
MINUS
'Subsidy' or value forgone to provide affordable housing
MINUS
Developer's profit
EQUALS
Residual land value (must still exceed existing use value, but reduced by affordable housing obligations, which depends on tenure and %)

The outcome of the development appraisal process is fairly predictable given that when negotiating with the landowner, the prudent developer will either attempt to reflect planning requirements in the offer for the land, or negotiate an option to purchase, which put crudely, will enable any additional costs arising (Planning obligations and affordable housing for example) to be passed on to the landowner. Ultimately, the landowner pays, providing the basic condition for Residual Land Value to exceed existing use value is met.

Clearly however, landowners may have expectations of the value of their land which exceed the value of the existing use. Planning obligations required by local policy will be a cost to the scheme and impact on the residual land value. Ultimately, landowners cannot be forced to sell their land and (unless a Local Authority is prepared to use its compulsory purchase powers) some may simply hold on to their sites, in the hope that policy may change at some future point with reduced requirements. It is within the scope of those expectations that developers have to formulate their offers for sites. The task of formulating an offer for a site is complicated further still during buoyant land markets, where developers have to compete with other developers to secure a site, often speculating on continued rises in value.

1.3 Viability benchmark

Having established the residual land value of a scheme, it is then necessary to compare it to a benchmark value. PPS3 provides no specific guidance on how local authorities should test the viability of their affordable housing requirements. However, there is a range of guidance generated by both the Homes and Communities and appeal decisions that assist in how planning authorities should approach viability.

The Homes and Communities Agency recently published a good practice guidance manual 'Investment and Planning Obligations: Responding to the Downturn'. This defines viability as follows: "*a viable development will support a residual land value at level sufficiently above the site's existing use value (EUV) or alternative use value (AUV) to support a land acquisition price acceptable to the landowner*".

The appeal decisions listed below are some examples of where EUV is supported as an appropriate benchmark in assessing a scheme's viability.

Barnet & Chase Farm: APP/Q5300/A/07/2043798/NWF
"the appropriate test is that the value generated by the scheme should exceed the value of the site in its current use. The logic is that, if the converse were the case, then sites would not come forward for development"

Bath Road, Bristol: APP/P0119/A/08/2069226
"The difference between the RLV and the existing site value provides a basis for ascertaining the viability of contributing towards affordable housing."

Beckenham: APP/G5180/A/08/2084559
"Fundamental to the appellant's case is the contention that when the current use value (CUV) of the building and its associated land are taken into account, the residual site value (RSV), with a 35% affordable housing component, renders the scheme unviable."

Oxford Street, Woodstock: APP/D3125/A/09/2104658
"The main parties agree on many of the costs incurred and values derived from building the proposed mixed use development. They disagree, however, on several main costs and values. The most significant of these are the existing use value of the land…"

Stokes Croft and Ashley Road, Bristol: APP/Z0116/E/09/2113943
"…the full section 106 package and affordable housing provision within the site would be feasible and still leave a positive land value above its existing use value."

Lee High Road, Lewisham: APP/C5690/A/08/2092616
"the Council and the appellant agreed that the appeal scheme would result in a residual value of over £4m, well in excess of the alternative use value."

Land at Flambard Way, Godalming: APP/R3650/A/08/2063055
"Whilst the District Valuer accepted that the acquisition costs of the appellant were reasonable, it is common ground that the appropriate approach would be on the basis of existing use values."

Streatham Road, Mitcham: APP/T5720/A/08/2087666
"In my view the correct method of calculating the requirement as an input to the toolkit will normally be by the use of the existing or alternative value of the site, and not in its acquisition price."

A number of planning appeal decisions provide guidance on the extent to which the residual land value should exceed existing use value to be considered viable:

Beckenham: APP/G5180/A/08/2084559
"without an affordable housing contribution, the scheme will only yield less than 12% above the existing use value, 8% below the generally accepted margin necessary to induce such development to proceed."

Oxford Street, Woodstock: APP/D3125/A/09/2104658
"The main parties' valuations of the current existing value of the land are not dissimilar but the Appellant has sought to add a 10% premium. Though the site is owned by the Appellants it must be assumed, for valuation purposes, that the land is being acquired now. It is unreasonable to assume that an existing owner and user of the land would not require a premium over the actual value of the land to offset inconvenience and assist with relocation. The Appellants addition of the 10% premium is not unreasonable in these circumstances."

It is clear from the decisions above and HCA guidance that the most appropriate test of viability for planning policy testing purposes is to consider the residual value of schemes compared to the existing use value plus a premium of between 10% and 20%. As discussed later in this report, our study adopts a premium above EUV of 15%, this is consistent with the Council's Affordable Housing Viability Study, which has been tested at the recent Core Strategy Examination in Public.

2 Appraisal Assumptions

2.1 Existing Use Values

EUV

We undertook an Affordable Housing Viability Assessment in 2009. As part of this study we undertook high level analysis into the viability of affordable housing policy requirements on various site types. The previous report set out the importance of benchmarking viability against a relevant land value. We have followed the same basis and below is an extract from that original report.

Existing Use value / Alternate Use value requires particular attention. Clearly, there is a point where the Residual Land Value that results from the development appraisal – what the landowner receives – may be less than the land's existing use value. Existing use values can vary significantly, from very little – agricultural at say £7,200 per hectare (£3,000 per acre) to existing office sites at up to £50 million per hectare or more. Similarly, subject to planning permission, the potential development site may be capable of being used in different ways – business rather than residential for example or at least a different mix of uses (the latter being a key factor). EUV / AUV is effectively a 'bottom line' in the financial sense (especially in cases where an extant consent may still be deliverable) and a major driver in this modelling.

In this exercise, we have sought to provide a guide that compares all the above variables with Existing/ Alternate Use Values. Ultimately, the product of the benchmarking exercise must be a guide (but no more) as to how much affordable housing and other S106 obligations can be delivered before the value generated by residential development falls below EUV/AUV. EUV has of course been a contentious subject because one of the chief criticisms of the original Three Dragons work for the Greater London Authority was that they underestimated EUV in their original Toolkit. This was indeed the case. In this exercise, we have indicated in our tabular results (see Appendix 1 and explanations below), EUVs which have been individually valued for the 'real' sites, while the EUVs on the notional sites have been 'estimated' using the assumptions detailed below, in order to test the viability of different development scenarios.

Redevelopment proposals that generate residual land values below EUV will fail to be delivered. While any such thresholds are only a guide in 'normal' development circumstances, it does not imply that individual landowners, in particular financial circumstances, will not bring sites forward at a lower return or indeed require a higher return. It is simply indicative. If proven Existing Use Value (via a formal Red Book valuation which is essential) justifies a higher EUV than those assumed, then appropriate adjustments may be necessary. As such, Existing Use Values should be regarded as benchmarks rather than definitive fixtures. At a practical level, it is also necessary to stress that in the Borough area, some residential development sites are redevelopments of existing residential uses, thus emphasising the significance of value uplift.

It should be noted that the notional sites discussed in text above have not been used within this study on student housing. The EUVs for the 'real' sites in the main study ranged between £0 and £25.7 million. We have used the values of these 10 real sites to inform the range of existing use values within the appraisals. For the purposes of our student housing study we have applied existing use values of between £1m and £26m per ha thus illustrating the range that is typically found in Southwark. In addition, we have applied a 15% premium to provide an incentive to the landowner to bring the sites forward.

A developer will make a decision on whether to implement a project on the basis of return and the potential for market change, and whether alternative developments might yield a higher value. The developers 'bottom line' will be achieving a residual land value that sufficiently exceeds 'existing use value' or other appropriate benchmark to make development worthwhile.

2.2 Appraisal Variables

Our affordable housing viability assessment was based upon 20 sites, 10 real and 10 notional sites. For the purposes of this study, we have set our EUV benchmarks against the same real sites used in the previous study only. This is because both the values of both sets of sites were generally in the same range. Table 2.2.1 below summarises the key assumptions used to establish the EUVs of the 10 sites. Although a short period of time has elapsed since we arrived at these assumptions, it is not considered that there has been any significant change over the intervening period.

Site No	Existing use of site	Area, Ward & PTAL	Approx size of site	EUV Assumptions	EUV	EUV per hectare	Assumed density - Habitable Rooms per hectare	Actual units based on site area	Sales values (market units)	Building form (& Proposal description)	Design quality
Site 1	Car Park	Urban Zone, PTAL 6a	0.25 ha	Approx 73 car spaces Elephant and castle NCP car parking rates = £15.40 per day,£186 monthly, £505 quarterly, £1,763 annually Note: Uncovered car parking Assume 70% of annual fee. (£1,763 X 73) X0.70= £90,089 Yield: 8.5% £1,059,870 (Charge for maintenance and attendant. 5% of revenue = £4,504)	£1,055,366	£4,221,464	200-700 hrh but may be exceeded Assumed 228 units	c. 60 units	Assumed £285 sq ft	Identified for Housing. Also possibility of small business units and space for a community use - if these uses are not needed it should remain in car parking.	PTAZ Scheme must be of exemplary standard of design, with an excellent standard of living accommodation; and a significant contribution to environmental improvements in the area particularly relating to public transport/cycle/pedestrian movement, safety and security and public realm improvements
Site 2	Car Park	Urban Zone, PTAZ, PTAL 6a	0.4 ha	Approx 130 spaces Elephant and castle NCP car parking rates = £15.40 per day,£186 monthly, £505 quarterly, £1,763 annually Note: Uncovered car parking Assume 70% of annual fee. (£1,763 X 130) X0.70= £160,433 Yield: 8.5% £1,887,447 (Charge for maintenance and attendant. 5% of revenue = £94,372)	£1,793,075	£4,482,688	200-700 hrh but may be exceeded Assumed 228 units	c. 85 units	Assumed £305 sq ft	Identified as suitable for a community use or housing. Some parking may be made available but it will need to established that the loss of parking here does not create a problem elsewhere.	PTAZ Scheme must be of exemplary standard of design, with an excellent standard of living accommodation; and a significant contribution to environmental improvements in the area particularly relating to public transport/cycle/pedestrian movement, safety and security and public realm improvements
Site 3	School	Urban Zone, PTAL 6a	0.85ha	School site has little value especially due to Listed buildings on the central part of the site. We have assumed a value of £1m per hectare = £850,000	£850,000	£1,000,000	340 hrh 90 units	c. 90 units	Townhouse £580-593 Large 2 bed £505-£556 2 bed £564-£644 Studio £564 Assumed £500 sq ft 45 car parking spaces being sold at £15,000 each	Demolition of all buildings on site with some exceptions. Proposed development comprising a mix of studio, one, two and three bedroom apartments and three and four bedroom town houses providing a total of 90 dwellings in six buildings, with basement car parking.	High quality, reflected in sales values
Site 4	Formerly a coach park, now vacant	Central Activities Zone, Riverside ward, PTAL 6b,	1.15 ha	Site could accommodate approximately 415 spaces. Union car parks on St Thomas Street (02073789749) charge £12 daily or £440 quarterly. Annual fee assumed to be £1,760 Note: Uncovered parking assume 70% of annual fee. (£1,760 X 415) X0.70= £511,280 Yield: 8.5% £6,015,059 (Charge for maintenance and attendant. 5% of revenue = £300,753)	£5,714,306	£4,968,962	650-1100 hrh Estimated capacity 350 units	c. 350 units	Assumed £800 sq ft 8,000 sq m cultural centre (As per December 08 plans) (No value) 25,000 sq ft Offices. Assumed £35-£40 sq ft = £9,375,000 Yield 7.5% 20,000 sq ft Retail. Assumed £30-£40 sq ft yield 8%	A comprehensive mixed use scheme including D1 use, A Uses on ground floor only, B1 Use above	
Site 5	Green area likely to be Council owned	Urban Zone, PTAL 5	0.5 ha	£ nil value - recreational land	£0	£0	200-700 Assumed 228 units	c. 115 units	Assumed £370 sq ft		
Site 6	Vacant Hotel	Central Activities Zone, PTAL 6b,	0.5 ha	12,574 sq m vacant hotel Assumed cost of reinstating new hotel on the site of the same size and standard. BCIS: £976 sq m for London Site works(5% build costs) £613,611	£12,885,831	£25,771,662	470 units (44 storeys)	c. 500 units	Terrace 8,967 sq m D2 Theatre/Cafe 713 sq m (£15 sq ft 9% yield) Pavillion building 280 sq m (£10 sq ft 9% yield) Assumed £530 sq ft	Mixed use scheme providing c. 470 residential flats (Class C3), theatre (Class D2) and cafe (Class A3) uses and a pavilion building for retail/marketing suite purposes (Class A1/ Sui Generis) with associated public open space, landscaping, underground car parking and servicing space.	
Site 7	Offices with affordable residential units above	Central Activities Zone, PTAL 6b,	0.2 ha	1- 1 bed social rented unit (assumed 550 sq ft), 1-2 bed social unit (assumed 750 sq ft) Assumed £250 sq ft = £325,000 303.6 sq m gross internal floorspace Offices: In region of £215 sq m (£20.00 psf) Yield: 8% (In town UK provincial offices) =£815,925	£1,140,925	£5,704,625	34 flats (3-6 storeys) 6 four bed townhouses (3 storeys)	c. 40 units	Communal courtyard and garden 43.3 sq m of office space- £20 sq ft 8% yield Assumed £550 sq ft	Erection of part three/four/five/six storey block comprising c. 40 residential flats and townhouses with private terraces/balconies, communal courtyard and roof garden with pergola and cycle parking	
Site 8	Healthcare Centre with vacant community buildings	Urban Zone, PTAL 1-2	2 ha	Existing healthcare centre (Promap measurement 728 sq m)and associated car parking (approximately 13 spaces) Vacant buildings were previously a library, day care centre and community hall (promap measurement 2181 sq m) Assumed rent of £5.00 sq ft Yield: 8.5% out of town leisure	£1,841,568	£920,784	217 flats (sizes on application) (3 storeys) 11 terraced houses 228 units	c. 230 units	195 car spaces (149 for residential) Average £10,000 per space (sale) source- Hastings International-167 Rotherhithe St Community centre 945 sq m gia (no value) Nursery 278 sq m gia (£15 sq ft) 9% yield Healthcare 1,253 sq m gia (£15 sq ft) 9% yield Assumed £475 sq ft	Demolition of existing health centre and the construction of c. 230 new dwellings, community hall, crèche, associated car parking, landscaping and infrastructure works.	
Site 9	Employment	Urban Zone: PTAL 4: B Use and C3 Use	1.2 ha	Available industrial space approximately £9.00 sq ft Promap measurements- 47,229 sq ft Yield: 7.75%	£5,667,480	£4,722,900	Estimate of 300 units 300 units	c. 300 units	Assumed £475 sq ft	2-4 storeys	Exemplary design would need to focus on the local character and context. An employment buffer would be expected between site 33P and any new C3 Use Class
Site 10	Car Park	Urban Zone, PTAL 6a: C3 Use	0.6 ha	Approx 223 car spaces Elephant and castle NCP carparking rates = £15.40 per day,£186 monthly, £505 quarterly, £1,763 annualy Note: Uncovered car parking Assume 70% of annual fee. (£1,763 X 223) X0.70= £275,204 Yield: 8.5% £3,237,697 (Charge for maintenance and attendant. 5% of revenue = £161,884)	£3,075,813	£5,126,355	Estimate of 253 units 253 units	c. 250 units	Assumed £380 sq ft	2-4 storeys	

Specifically the Summary Table 2.2.1 identifies for each real site where possible;

- Column 1 – Site number
- Column 2 – Existing use
- Column 3 – Area, Ward and PTAL rating
- Column 5 – Approximate size of site
- Column 6 – Assumptions underpinning Existing Use Value
- Column 7 – Existing Use Value
- Column 8 – Existing Use Value per hectare
- Column 9 – Density on redevelopment and Housing Mix – See Appendix Three
- Column 10 – Actual units based on site area
- Column 11 – Residential Sales Value
- Column 12 - Building form and Development Proposal
- Column 13 - Design quality

Clearly all these variables are central in determining Existing Use Value and ultimately the Residual Land Value arising from the proposal subject to affordable housing and planning obligations requirements.

From the existing use valuations we have calculated the EUV range on a value per hectare basis as set out in the table below.

Table 2.2.2 EUV benchmarks £ per hectare

Real site	Existing use of site	Approx size of site (ha)	EUV	£ / ha
Site 1	Car Park	0.25 ha	£1,055,366	£4,221,464
Site 2	Car Park	0.4 ha	£1,793,075	£4,482,688
Site 3	School	0.85ha	£850,000	£1,000,000
Site 4	Formerly a coach park, now vacant	1.15 ha	£5,714,306	£4,968,962
Site 5	Green area likely to be Council owned	0.5 ha	£0	£0
Site 6	Vacant Hotel	0.5 ha	£12,885,831	£25,771,662
Site 7	Social Rented Housing	0.2 ha	£1,140,925	£5,704,625
Site 8	Healthcare Centre	2 ha	£1,841,568	£920,784
Site 9	Employment	1.2 ha	£5,667,480	£4,722,900
Site 10	Car Park	0.6 ha	£3,075,813	£5,126,355

This provides a range of site values of between £0 and £26m per ha. We have used the values of the 10 real sites to inform the range of existing use values

within the appraisals. For the purposes of our student housing study we have applied existing use values of between £1m and £26m per ha.

Premium above EUV

The Homes and Communities Agency recently published a good practice guidance manual 'Investment and Planning Obligations: Responding to the Downturn'. This defines viability as follows: *"a viable development will support a residual land value at level sufficiently above the site's existing use value (EUV) or alternative use value (AUV) to support a land acquisition price acceptable to the landowner".*

A number of planning appeal decisions provide guidance on the extent to which the residual land value should exceed existing use value to be considered viable:

Barnet & Chase Farm: APP/Q5300/A/07/2043798/NWF

"the appropriate test is that the value generated by the scheme should exceed the value of the site in its current use. The logic is that, if the converse were the case, then sites would not come forward for development"

Bath Road, Bristol: APP/P0119/A/08/2069226

"The difference between the RLV and the existing site value provides a basis for ascertaining the viability of contributing towards affordable housing."

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Oxford Street, Woodstock: APP/D3125/A/09/2104658

"The main parties' valuations of the current existing value of the land are not dissimilar but the Appellant has sought to add a 10% premium. Though the site is owned by the Appellants it must be assumed, for valuation purposes, that the land is being acquired now. It is unreasonable to assume that an existing owner and user of the land would not require a premium over the actual value of the land to offset inconvenience and assist with relocation. The Appellants addition of the 10% premium is not unreasonable in these circumstances."

It is clear from the decisions above and from HCA guidance that the most appropriate test of viability for planning policy purposes is to consider the residual value of schemes compared to the existing use value plus a premium of between 10% and 20%. We have included a 15% premium over the EUV ranges in our student housing modelling, reflecting a rate that is towards the upper end of this range.

Site size

Although our modelling effectively assumes that each site is of one hectare, we set our assumptions and modelling sensitivities on a per hectare basis, this allows the results to apply to sites of any size. Economies of scale are dealt with through site density and build costs assumptions.

Rents

We have undertaken research into every recent student housing scheme within the London Borough of Southwark and a number of other schemes in the

neighbouring Boroughs of Lambeth and Lewisham. We have looked at student housing schemes run by both universities and by the private sector. New university run student accommodation arranged without ensuite facilities in cluster style flats is available from £120 per week for the 2010-2011 academic year. Private direct let accommodation can range up to £375 per week for new studio accommodation in a prime location for the 2010-2011 academic year. There are direct let student fully self-contained flats available for up to £450 per week; however we have excluded this type of unit from our appraisals as these do not represent a significant proportion of the student accommodation on offer. Rents for private direct let student accommodation must have regard to rents for alternative accommodation in the private rented sector. While student housing schemes have the attraction of co-location with other student units; communal facilities; and services including broadband internet access, if rents are significantly higher than alternative accommodation, take up of student units could be adversely affected. The range we have applied to our appraisals is between £120 and £375 per week.

Table 2.2.3 Rental assumptions used within appraisals

Direct let (rent per week £)			Nomination (rent per week £)		
Cluster	Ensuite	Studio	Cluster	Ensuite	Studio
£170	£190	£255	£120	£130	£155
£190	£210	£295	£135	£145	£180
£210	£230	£335	£150	£160	£205
£230	£250	£375	£165	£175	£230

Density

During the course of our study, we gathered evidence on the densities of all existing student accommodation in Southwark on a room per hectare basis. Site areas have been estimated using large scale Ordnance Survey plans, where we have taken a view on the likely site boundaries. We have not had sight of reports on title of the individual sites; however we consider this a suitable method given the high level nature of this study. The density of student housing schemes ranges from 400 to 5,400 rooms per hectare. Only one scheme exceeds 2,500 rooms per hectare, the scheme is question is in excess of 20 storeys and therefore the build costs of such a scheme would be significantly higher than the lower rise schemes in the Borough. We have excluded this density from our study and applied a range of between 400 and 2,500 rooms per hectare.

Affordable housing provision for residential led developments is assessed on a per unit or habitable room basis. It is difficult to assess the relationship between the densities of student rooms per hectare to the densities of habitable rooms per hectare on a residential scheme.

Student accommodation can be provided in a number of forms with a larger or smaller number of rooms (bedrooms) to a cluster flat. Some cluster flats will have ensuite rooms while others have shared bathrooms. The cluster flats may also have a separate kitchen and living rooms and/or dining rooms; this greatly varies the number of habitable rooms within what could be considered a typical cluster flat. Conversely as studio accommodation this would only be considered as one habitable room. Similar observations can be made of residential accommodation. For the purposes of calculating the number of habitable in individual schemes, the Council could, nevertheless, count lounges and dining rooms as habitable rooms for the purposes of calculating affordable housing requirements.

We have based our appraisals on student rooms per hectare and applied a level of affordable housing contribution based upon this. We have assumed 1 student room to every 1 habitable room. Therefore based on our tested assumption of 35% affordable housing provision, for every 10 student rooms built, 3.5 affordable housing habitable rooms would be required. This relationship is explained in the sections below.

Affordable housing habitable room gross areas

We have based the unit size of the average affordable housing unit on the Council's planning policies. The average base affordable housing unit we have used for our modelling is a two bedroom flat, arranged over 707 sq ft net (65.68 sq m) and consisting of consisting of 3 habitable rooms. Where on site or off site affordable housing provision is tested, we have assumed a tenure split of 70% / 30% between social rented and intermediate tenures.

Student room gross areas

In order to assess the level of affordable housing contribution required by student housing, we have examined the correlation between the gross floor areas of the two uses. Student accommodation will have a large amount of communal and additional amenity space whereas an affordable housing scheme will minimise communal floor areas. It is likely therefore that the gross floor area for each student room will be higher than that of an affordable housing habitable room.

Based on the overall dwelling sizes proposed through the Council's planning policies, the Council is seeking to achieve an average flat size equating to 283 sq ft (26.3 sqm) gross per habitable room. We have carried out research into the gross floor areas of student housing rooms (including all communal areas). We have used example schemes where floor areas are included online within planning applications, on the Council's planning portal. These examples are set out below:

Examples

Land at corner of Lavington Street and Great Suffolk Street, London SE1 – 08/AP/1330

"Erection of a seven storey building (25.5 m in height) fronting Great Suffolk Street, a seven storey building (30.5 m in height) fronting Lavington Street and a fourteen storey building (maximum height 44.25 m) to the rear comprising 230 units for student accommodation and 4,056 sq m of floorpsace providing retail (Class A1) and food and drink (Class A3) and office (Class B1) uses together with access, landscaping and associated works."

This scheme provides 230 student rooms over 83,969 sq ft gross (7,801 sq m). This equates to 365 sq ft gross per student room.

Capital House, 40-46 Weston Street, London, SE1 3QD - 9/AP/2657

"Demolition of Capital House, and erection of a 32 storey building (2 basement levels plus ground and 31 upper storeys) of a maximum 114.15 m AOD high (109.5 m AGL), 18,557sq m. (GEA) to provide 525 student accommodation units (Sui Generis use) on floors 1-28, ancillary bar, gym and library on floors 29-31, a retail/cafe unit (flexible Class A1/A3 use) (371 sq m gea) at ground floor level, 290 cycle parking spaces, 2 accessible car parking spaces and 1 service bay at basement level, associated refuse and recycling and an area of public open space."

This scheme provides 525 student rooms over 178,305 sq ft gross (16,658 sq m). This equates to 340 sq ft gross per student room.

61-63 Great Suffolk Street, London, SE1 0BU - 09/AP/1647

"Demolition of the existing warehouse buildings and redevelopment to provide two mixed use buildings. The first is a triangular building of 10 storeys (9 storeys plus a mezzanine floor) to a maximum height of 30.84 m with 718 sq m of commercial space (Use Classes A and B) at ground and mezzanine levels and 127 self-contained single occupancy student studio units above. The second is a predominantly 8 storey building (7 storeys plus a mezzanine floor) incorporating three split level rooftop pods to a maximum height of 29.7 m (or 9/10 storeys) with 1,512 sq m of commercial space (Use Classes A, B and D) at ground and basement levels and 84 shared facility student apartments (cluster flats) containing 544 single bedrooms above (resulting in a total of 671 bed spaces overall). Also provided is a 2,541 sq m basement area containing 15 disabled parking spaces and 362 cycle spaces with a further 64 visitor cycle spaces outside the main building, a gym (Class D2), commercial storage, plant area plus the upgrade of the adjacent 'Grotto Podiums' park."

This scheme provides 671 student rooms over 237,053 sq ft gross (22,074 sq m). This equates to 353 sq ft gross per student room.

Kings College Hall, 10 Champion Hill, London, SE5 8AN - 09/AP/1089

"The refurbishment of the Platanes building and its annex, the demolition of Cameron and Danehurst and the erection of four new buildings ranging from between four and five storeys in height to provide a total of 740 student bedrooms (net increase of 276), with provision of amenity space, cycle parking and associated facilities including a gymnasium/fitness studio and cafe/bar."

This scheme provides 730 student rooms over 182,868 sq ft gross (16,989 sq m). This equates to 250 sq ft per student room. This is the only example which includes a schedule of accommodation on the Council's website. The schedule of accommodation encompasses only the student rooms and the kitchen/living/dining areas and does not include floor areas of additional amenity space. The gross area of a student room is therefore far lower than the other examples at 250 sq ft per student room.

The average floor area of the three examples where communal space is included is 350 sq ft (gross) per student room. The additional amenity space included in these three schemes would not usually be found in an affordable housing block. Additional amenity space is generally essential in a student housing scheme. The space includes floor areas for cafes, gyms, commercial storage, offices, ancillary bars and libraries. These uses do not trigger affordable housing requirements.

The student housing development at 10 Campion Hill demonstrates that when additional amenity space is excluded, the gross floor area per student room is significantly reduced (in this example, the average room size is 250 sq ft). The average affordable housing habitable room is 283 sq ft gross and the Council's emerging policy requires 35% affordable housing on student housing schemes. We have therefore assumed that where on site provision is tested, for every 6.5 student rooms built, 3.5 affordable housing habitable rooms would be required. The table below applies this calculation to a scheme comprised of 100 habitable rooms. The two uses will never correlate precisely, as can be seen the table, which shows that 35% of habitable rooms equates to an affordable housing floor area of 38%. However, using these assumptions make the policy workable as there needs to be an approximation for ease of calculation and to reflect differences in design of student housing schemes. This approach

provides the greatest consistency and equates to approximately 1 habitable room per 1 bed space.

Table 2.2.4 Affordable housing requirements in a 100 habitable room scheme (excluding student communal space)

			Gross floor area per unit	Total floor area	
Student	65	65%	250	16,250	62%
Affordable	35	35%	283	9,905	38%
	100			26,155	

Grant

Generally, grant funding, provided by the Department for Communities and Local Government, via the Homes and Communities Agency, may or may not be available for schemes with affordable housing.

The announcement in the Comprehensive Spending Review ("CSR") to increase Social Housing rents to a capped level of 80% of Local Housing Allowance ("LHA") levels we believe is in order to mitigate against the loss of social housing grant on social rented housing. There is also likely to be no grant for intermediate housing.

The previous government spending programme was spread over 3 years where the government committed £8.2 billion towards new affordable homes. This equated to £2.73 billion per annum. Affordable housing commitments in the new spending programme which will span 2011 to 2014 have been reduced. There is £1.9 billion remaining from the new spending programme which has not yet been allocated. This is to be spread over 4 years which equates to £0.475 billion per annum. This funding is likely to be focused on providing grant on 100% affordable housing schemes.

Given the current economic situation and recent announcements, the most likely outcome will be that social housing grant will not be available for most schemes. In light of the uncertainty around future grant funding we consider it imprudent to assume that grant will be secured. The Council's long term policy approach is not to support affordable housing grant. Based on all of the background information above, we have assumed that social housing grant will not be available for the purposes of this study. Whilst no grant has been assumed, it is important to note that if grant is made available for individual schemes, viability (and consequent ability to provide additional affordable housing) will improve.

Affordable housing values

We have assumed that where the typical affordable housing unit discussed above is provided as a social rented unit without social housing grant, this will provide a capital receipt from the RSL of £100 per sq ft (£1,076 per sq m) to the developer. Where a intermediate unit is provided, this will provide a capital receipt of £235 per sq ft (£2,530 per sq m). Based upon the tenure split of 70% / 30% between social rented and intermediate, this provides a blended rate of £141 per sq ft (£1,518 per sq m). The typical affordable housing unit assumed in this study has 3 habitable rooms arranged over 707 sq ft (65.68 sq m) net floor area. Each habitable room therefore equates to 236 sq ft (21.89 sq m) net. This figure multiplied by the blended rate provides a value payable to the Developer by an RSL for a completed affordable housing habitable room of £33,276 or £99,828 per affordable housing unit. This is included as a capital

receipt to the developer within our modelling exercise where on site and off site affordable housing is provided.

On site affordable housing provision

When on site affordable housing is provided at 35%, the developer will lose 35% of their student housing rent; however they will receive a capital receipt from the 35% affordable housing as discussed above. Based on this percentage, our model assumes that for every 6.5 student rooms built, 3.5 affordable housing habitable rooms will be required. Thus, the capital receipt from those 3.5 habitable rooms will be £122,388.

Our model assumes that each typical affordable housing habitable room, built on site will cost a developer £40,000 per affordable housing habitable room. This is based on typical construction costs for affordable housing across inner London.

Off site affordable housing provision

Where off site affordable housing is provided at 35%, the developer will retain 100% of the revenue produced by their student housing units; however, the developer will have to purchase an additional site in the same area as the student housing site and develop out 35% affordable housing of the relative student housing quantum.

For the purposes of modelling this scenario, we have assumed that the land value/EUV and the density developed will be equivalent to that of the student housing site. Therefore, where the EUV of the student housing site is £1m per hectare, in order to develop 35% affordable housing off site, an additional 0.35 hectares at a cost of £0.35m will be required for affordable housing. We have also assumed that the relative 35% affordable housing will be built at the same density as that of the student housing scheme.

Our build cost and sales assumptions for off site affordable are identical to that of the on site costs and revenues.

Payment in lieu

Where a payment in lieu is provided, the developer will not lose any of their student housing rooms, however, they will not receive a capital receipt from the affordable housing built with that payment in lieu. Payments in lieu of affordable housing are calculated at the appropriate rate per habitable room in respect of all affordable housing that is not provided on site or off site. These monies go into the Council's affordable housing fund. In this study, we do not use a fixed assumption on a payment in lieu as an input to our modelling. Rather, the payment in lieu is calculated on the basis of the amount of 'surplus' value that remains after an allowance has been made for the cost of the land. This surplus figure is then divided by the number of what would have been affordable housing units. I.e. where we have assumed for example 1,000 student rooms per hectare a payment in lieu equating to 35% of this or 350 affordable housing habitable rooms is divided into the surplus figure.

Section 106 financial contributions

We have included section 106 financial contributions within our modelling exercise of between £3,114 and £3,594 per student housing room. This range is based on the outputs of the Council's Section 106 calculator, using the following settings:

Table 2.2.5 Section 106 variables

Variable	No on-site affordable	35% affordable housing on-site	35% affordable housing off-site
Affordable housing	Nil	Assumed to be provided as 3 bed social rented units (4 HRs per unit)	Assumed to be provided as 3 bed social rented units (4 HRs per unit)
Public Realm	Indicative cost used	Indicative cost used	Indicative cost used
Open Space	No deficiency	No deficiency	No deficiency
Affordable housing grant	Nil	Nil	Nil
Transport	Indicative cost used	Indicative cost used	Indicative cost used
Archaeology	Not in priority zone	Not in priority zone	Not in priority zone
Employment	Nil	Nil	Nil
TFL	Nil	Nil	Nil
Community facilities	Nil	Nil	Nil
Crossrail charge	Nil	Nil	Nil

The S106 calculator generates the following averages per type of scheme:

- No on-site affordable housing: £3,114 per unit
- On-site affordable housing: £3,594 per unit
- Off-site affordable housing: £3,469 per unit.

Base construction costs

We have estimated the construction cost of the different room types, which incorporate the additional cost of common areas, based on cost data from other student housing in central London. The mean scheme density within our comparable student housing schemes is around 1,500 rooms per hectare ("rph"). We have used this level as our base build cost level and increased or decreased the build costs according to density of schemes. The build costs we have assumed are set out in table 2.2.5 below:

Table 2.2.6 Build cost variations

Density	400 rph	1,000 rph	1,500 rph	2,000 rph	2,500 rph
	+ 10%	+ 5%	0%	- 2.5%	- 5%
Standard cluster room	£44,000	£42,000	£40,000	£39,000	£38,000
Cluster room with ensuite	£46,200	£44,100	£42,000	£40,950	£39,900
Studio room	£60,500	£57,750	£55,000	£53,625	£52,250

At a higher density the build costs are likely to reduce due to economies of scale to a certain point. Once the density reaches a level where the scheme will

have to be built over a greater number of storeys, the build costs are likely to increase significantly.

Management and maintenance costs

Within our appraisals we have included a deduction from gross rents for management and maintenance costs, including staff costs, cleaning, maintenance, utilities and other services. These costs are based on actual costs from real central London schemes that we have appraised. For university nominated schemes we have assumed management and maintenance costs of 20% of gross rents and for direct let scheme we have assumed 25%. The differential accounts for the enhanced facilities included with direct let schemes such as TVs, broadband and higher quality communal areas which must be maintained in order to attract higher rents. These deductions are based on the operating costs of both university operated and private sector operated student housing schemes in central London.

Vacancy rates

University nominations are likely to have higher occupancy as the university can direct students to use their accommodation. First year and international students which make up most significant number of student occupiers are likely to choose university accommodation in preference to direct let schemes. To reflect this we have assumed an occupancy rate of 93% on direct let schemes and 97% on university nominated schemes.

Net rent capitalisation

There is limited transactional investment evidence of student housing schemes. In February 2010, Sanctuary Group sold a £125m portfolio of student halls to Tromba Holdings. The 2,000-bed portfolio was spread over campuses in four universities in London and one in Brighton. The sale price reflects a yield of less than 6%. The portfolio included the University of the Arts' 259-room Manna Ash House, SE1. We have capitalised the net rents of the two variables at different rates in order to reflect the reduced risk associated with university nominated schemes. We have capitalised the net rent of university nominated schemes at 6% (reflecting the greater certainty of occupation of these units) and direct let schemes at 6.75% (reflecting the greater risk of direct marketing of units to students).

Scheme mix

From the evidence gathered of student accommodation in Southwark the ratios between cluster rooms and studio accommodation were higher on direct let schemes. University nominated and university managed schemes showed ratios of around 95% cluster style rooms to 5% studio rooms. Direct let schemes were at around 70% cluster rooms to 30% studio rooms. We therefore applied these levels within our appraisals. The evidence also showed that cluster accommodation was available as either standard rooms with shared bathroom facilities or as ensuite rooms; we have applied a ratio of 20% to 80% respectively. Our assumptions are set out the tables 2.2.5 and 2.2.6 below:

Table 2.2.7 Direct let density / ratio assumptions

70/30	400 rph	1000 rph	1500 rph	2000 rph	2500 rph
studios	120	300	450	600	750
single room (ensuite)	224	560	840	1120	1440
single room	56	140	210	280	350

Table 2.2.8 Nomination agreement density / ratio assumptions

95/5	400 rph	1000 rph	1500 rph	2000 rph	2500 rph
studios	20	50	75	100	125
single room (ensuite)	304	760	1140	1520	1900
single room	76	190	285	380	475

Professional fees

Professional fees on this type of development range between 8% and 12% of build costs. Some developers would be able to benefit from their organisation's size and buying power. These developers would therefore incur professional fees at levels below this range, while smaller developers may incur fees above this range. For the purposes of this study we have applied a cost of 10% professional fees, which reflects the mid-point.

Developer's profit

In order for a scheme to obtain development funding from a financial institution a bank will require a scheme to deliver a minimum level of profit return. In light of the changing economic climate, financial institutions have tightened this requirement. Banks have raised their expectations in terms of risk management and the returns that new developments are required to offer. Consequently developers are currently required by lenders to target profits of 20% on GDV.

Interest on land and build costs

A university will agree a discount rate with a private student housing provider in return for reducing vacancy rates at the scheme, by directing students to use the accommodation. A financial institution would provide finance on both the cost of the land and the construction at a reduced interest rate due to the lower perceived risk with such an agreement in place. To reflect this we have assumed interest rates on university nominated schemes at 6% and direct let schemes at 7%.

Tenancy Length

The evidence gathered showed that university managed and university nominated schemes have a tenancy length of around 40 weeks. Direct let schemes have a minimum tenancy length of around 50 weeks. We have applied these as fixed levels within our appraisals.

Summer letting

We have assumed that a direct let schemes will have tenancy lengths of 50 weeks and therefore will already be let during the summer months. University nominated schemes can be rented out during summer months and provide additional income. This additional income improves the viability of affordable housing provision on university nominated schemes; we have assumed 50% occupancy the 12 summer weeks.

3 Appraisal results

The results of our appraisals are attached as Appendix 1. The appraisals compare the residual land value of a range of notional schemes across 1 hectare to a range of existing use values. The range of scenarios tested is summarised as follows:

- Density of 400, 1000, 1500, 2000 and 2500 rooms per hectare;
- Direct let scheme rents of £170 to £230 per week for cluster rooms; £190 to £250 per week for cluster ensuite units; and £255 to £375 per week for studios;
- Existing use values of between £1 million and £26 million, reflecting (on a pro-rata basis) the existing use values of the 10 'real' sites tested in the original Affordable Housing Viability Study;
- Section 106 contributions of between £3,114 and £3,594 per student room or affordable housing habitable room; and
- Direct lets or nomination schemes.

The top table of each page in the appendices shows the residual land values generated by each type of scheme. Each residual land value is then compared to the three existing use values to determine whether or not the scheme would be viable in each case. The letter 'n' denotes where a scheme would be unviable (meaning that the residual land value is less than EUV plus the 15% landowner premium). The letter 'V' denotes where a scheme would satisfy the condition that the residual land value exceeds EUV plus the landowner premium and is thus judged as being viable.

Where a payment in lieu is tested, the outputs of the model show the amount per pro rata affordable housing habitable room that could be charged, while also leaving the developer with a sufficient sum to pay for the land (based on EUV plus 15%). For every 1,000 student rooms per hectare built a payment in lieu equating to 35% of this or 350 affordable housing habitable rooms. This figure is divided into the sum of the EUV plus 15% subtracted from the residual land value. The potential payment in lieu varies between scheme type (i.e. nomination or direct let); rent levels; and existing use value.

The appendices show the results as a grid for each of three existing use values (£26 million per hectare, the top of the range; £10 million per hectare; and £1 million per hectare).

Tables 3.1 and 3.2 below provide a summary of the percentage of situations modelled where on-site and off-site affordable housing provision would be viable for direct let schemes. "SR" denotes student rooms and "AHHR" denotes affordable housing habitable rooms.

Table 3.1: Direct let schemes: On-site affordable provision

	High EUV £26m per ha	Medium EUV £5m per ha	Low EUV £1m per ha
S106 of £3,594 per unit	40%	95%	100%

Table 3.2: Direct let schemes: Off-site affordable provision

	High EUV £26m per ha	Medium EUV £5m per ha	Low EUV £1m per ha
S106 of £3,469 per unit	55%	95%	100%

Tables 3.3 and 3.4 below provide a summary of the percentage of situations modelled where a payment in lieu, on-site and off-site affordable housing provision would be viable for nomination schemes.

Table 3.3: Nomination schemes: On-site affordable provision

	High EUV £26m per ha	Medium EUV £5m per ha	Low EUV £1m per ha
S106 of £3,594 per unit	0%	25%	45%

Table 3.4: Nomination schemes: Off-site affordable provision

	High EUV £26m per ha	Medium EUV £5m per ha	Low EUV £1m per ha
S106 £3,469 per unit	0%	35%	50%

Tables 3.5 and 3.6 show the potential amounts of payment in lieu per affordable housing habitable room that could be secured, while leaving the developer with sufficient value to secure the land (based on an assumption of EUV plus 15%) which provides the 'surplus'. The results set out below are the sum of the surplus divided by 35% of the student rooms per hectare.

Table 3.5: Direct let schemes

VIABILITY BASED ON EXISTING USE VALUE 1:				£26,000,000	
Density -->	400 rph	1000 rph	1500 rph	2000 rph	2500 rph
Rents (cluster/enuite/studio)					
£170 / £190 / £255	n/a	n/a	£13,496	£27,735	£36,277
£190 / £210 / £295	n/a	£11,276	£39,752	£53,990	£62,533
£210 / £230 / £335	n/a	£37,532	£66,008	£80,246	£88,789
£230 / £250 / £375	n/a	£63,787	£92,263	£106,501	£115,044

VIABILITY BASED ON EXISTING USE VALUE 1:				£5,000,000	
Density -->	400 rph	1000 rph	1500 rph	2000 rph	2500 rph
Rents (cluster/enuite/studio)					
£170 / £190 / £255	£25,150	£54,020	£59,496	£62,235	£63,877
£190 / £210 / £295	£55,633	£80,276	£85,752	£88,490	£90,133
£210 / £230 / £335	£81,889	£106,532	£112,008	£114,746	£116,389
£230 / £250 / £375	£108,144	£132,787	£138,263	£141,001	£142,644

VIABILITY BASED ON EXISTING USE VALUE 1:				£1,000,000	
Density -->	400 rph	1000 rph	1500 rph	2000 rph	2500 rph
Rents (cluster/enuite/studio)					
£170 / £190 / £255	£58,008	£67,163	£68,258	£68,806	£69,135
£190 / £210 / £295	£88,490	£93,419	£94,514	£95,062	£95,390
£210 / £230 / £335	£114,746	£119,674	£120,770	£121,317	£121,646
£230 / £250 / £375	£141,001	£145,930	£147,025	£147,573	£147,901

Table 3.6: Nomination schemes

VIABILITY BASED ON EXISTING USE VALUE 1:				£26,000,000	
Density -->	400 rph	1000 rph	1500 rph	2000 rph	2500 rph
Rents (cluster/enuite/studio)					
£170 / £190 / £255	n/a	n/a	n/a	n/a	n/a
£190 / £210 / £295	n/a	n/a	n/a	n/a	n/a
£210 / £230 / £335	n/a	n/a	n/a	n/a	£1,337
£230 / £250 / £375	n/a	n/a	n/a	£10,971	£19,514

VIABILITY BASED ON EXISTING USE VALUE 1:				£5,000,000	
Density -->	400 rph	1000 rph	1500 rph	2000 rph	2500 rph
Rents (cluster/enuite/studio)					
£170 / £190 / £255	n/a	n/a	n/a	n/a	n/a
£190 / £210 / £295	n/a	£903	£6,379	£9,117	£10,760
£210 / £230 / £335	n/a	£19,080	£24,556	£27,294	£28,937
£230 / £250 / £375	£12,614	£37,257	£42,733	£45,471	£47,114

VIABILITY BASED ON EXISTING USE VALUE 1:				£1,000,000	
Density -->	400 rph	1000 rph	1500 rph	2000 rph	2500 rph
Rents (cluster/enuite/studio)					
£170 / £190 / £255	n/a	n/a	n/a	n/a	n/a
£190 / £210 / £295	£9,117	£14,046	£15,141	£15,689	£16,017
£210 / £230 / £335	£27,294	£32,223	£33,318	£33,866	£34,194
£230 / £250 / £375	£45,471	£50,400	£51,495	£52,043	£52,371

3.1 Assessment

The results indicate that a requirement for a payment in lieu will result in a higher proportion of viable schemes than would be the case for on-site provision of affordable housing and marginally more viable than off-site provision. This is largely due to the following factors:

- The payment in lieu can be varied to suit the individual circumstances of each proposed scheme, including the existing use value; rent levels; and other appraisal variables;
- the costs of building the affordable units and meeting all the associated regulatory requirements outweigh the revenue that would be received for the completed units from the acquiring RSL;
- Student housing makes a much more efficient use of floorspace than general residential housing (including affordable), as the space standards are much lower. The rental income generated by student housing is therefore very high per square metre of floorspace. Loss of student housing floorspace to affordable housing therefore has a significant impact on scheme value.

The viability of all scenarios; on-site / off-site provision and as a payment in lieu are highly sensitive to EUV. The results indicate that on sites with a pro-rata EUV of circa £10 million per hectare (real sites 1, 2, 4, 7, 9 and 10) and £1 million per hectare (real sites 3, 5 and 8) the prospects of securing affordable housing contributions are good. However, schemes on sites with EUVs of £26 million (real site 6) would be less capable of contributing towards affordable housing.

Securing payments in lieu from or on-site / off-site affordable housing from schemes with nomination agreements with universities is less likely to be financially viable than where schemes are direct let.

The summary tables above indicate that a requirement for Section 106 contributions has a relatively marginal affect on the results. This indicates that, in general terms, the Borough should be able to impose requirements without adversely affecting the viability of schemes.

4 How a 35% affordable housing policy can be implemented

This section outlines how the Council might approach implementing a requirement for affordable housing within student housing schemes in the Borough. We consider how affordable housing should be calculated; a sequential test for determining whether affordable housing should be delivered on-site / off-site or through a payment in lieu; and approaches to determining viability.

4.1 Calculating a 35% requirement

Affordable housing requirements can be calculated on various measures; with the most typical being units or habitable rooms. In some instances, affordable housing requirements are calculated on the basis of floor area.

Student housing schemes are clearly very different from standard residential developments, in that a room is typically considered to be a standalone 'unit', even when it is part of a cluster flat. Consequently, calculating an affordable housing requirement on the basis of units would result in a disproportionately high amount of affordable housing in terms of floorspace. This is because the Borough's affordable housing requirement will typically comprise a mix of units, including larger family-sized housing. The Council could, however, count shared living rooms and dining areas as habitable rooms for the purposes of calculating affordable housing requirements.

Alternatively, the calculation could be based on a percentage of cluster flats, which typically comprise four bedrooms. However, on the assumption that the Council would require a mix of unit types, this could result in a considerably lower quantum affordable housing floorspace relative to student housing floorspace.

As discussed in Section 2.2 we tested the viability of the Council's student housing policy by establishing a link between individual student rooms and affordable housing habitable rooms. We based the size of an average affordable housing habitable room on the average size of unit that the Council is pursuing through its planning policies. The average affordable housing unit is 849 sq ft (gross) and consisting of an average of 3 habitable rooms per unit or 283 sq ft (gross) per habitable room. The average floor area of three example student housing schemes where communal space was included was 350 sq ft (gross) per student room. However, the one example which excluded communal areas provided a floor area of 250 sq ft per student room. We therefore assumed that where on site provision is tested, for every 6.5 student rooms built, 3.5 affordable housing habitable rooms would be required. This provides a marginally higher percentage of affordable housing floor area than 35%.

On the basis that the Borough's threshold for affordable housing is 10 units on residential schemes, an indicative minimum for qualifying student housing schemes would be 30 student rooms. In practice, student housing schemes of this size are very rare, with most providers considering the minimum number of rooms for a commercially viable scheme to be 250 to 300 rooms. In practice, it is therefore unlikely that the Council would ever be asked to consider schemes anywhere close to a threshold of 30 student rooms.

4.2 Sequential test

The Council's approach regarding affordable housing is normally a presumption of on-site delivery, with off-site provision and a payment in-lieu normally deemed to be a fall-back solution on sites where on-site delivery would be impractical.

For each student housing scheme, the Council and the Applicant could consider whether delivery on-site would be practicable. The relevant factors that could be considered are as follows:

- Is the scheme capable of accommodating the affordable housing in a separate building on the site?
- If not, can the affordable housing units be accommodated in the student housing building? Does this interrupt the stacking of units of the same type and thus reduce the efficiency of the building?
- Is the building capable of accommodating separate cores for the affordable housing?
- Does the building provide adequate separation of the affordable housing from the facilities that will be provided for the occupants of the student housing?
- Does the design and layout of the building require the acquiring Registered Social Landlord to bear service charge costs?
- Can a shared building be designed to meet the regulatory requirements for affordable housing of the Homes and Communities Agency creating a disproportionate cost burden on the student housing?
- Is the affordable housing within the building capable of separate management by the RSL?

Consideration of these factors will help the Borough and the Applicant to determine whether or not provision of on-site affordable housing is possible. If it is agreed that on-site delivery is not practical, off-site provision is likely to be the Council's next option, as affordable housing is likely to be delivered sooner than where a payment in lieu is provided. If off-site provision is again not practical then a payment in-lieu would be the final option.

4.3 Delivery of an on-site affordable housing requirement

If the Council's requirement is to be satisfied through on-site provision, it will need to be secured through a legal agreement under Section 106 of the 1990 Town and Country Planning Act.

The requirement for on-site delivery would need to be applied subject to financial viability, in the same way that the Council's requirements in general residential schemes operate. Scheme viability is clearly a fundamental factor in ensuring that the Council's requirement does not impede development. In practical terms, the pre-existing tools for assessing viability, such as the GLA Development Control Toolkit, are not set up for dealing with student housing. Given the relatively low volume of student housing schemes, it would not be practical to create a new viability toolkit, so existing commercial packages (such as Circle Developer) would need to be used.

Student housing schemes operate in a very different way from general residential schemes, with almost the entire scheme turning over every year. Students also occupy and use their accommodation in very different ways from occupants of general residential developments. This would need to be carefully considered by the Operator of the student housing and the RSL managing the affordable housing units. Some form of management protocol would be required to ensure harmonious relations between the two groups of residents; as well as addressing how common areas in the scheme are to be managed and maintained.

4.4 Delivery of off-site affordable housing

Where on-site provision is impractical, off-site provision could be secured through a Section 106 agreement and the quantum of affordable housing subject to a test of financial viability using an industry standard commercial cashflow model. However, the affordable housing units would be delivered in an entirely separate building off-site and would therefore be managed and maintained in the same manner as any standard affordable housing scheme. This has practical advantages for both the student housing and the RSL in terms of separation of management and maintenance.

4.5 Securing payments in lieu of affordable housing

In general terms, a payment in lieu of on-site affordable housing is often calculated so that the effect is financially neutral for the Applicant. In other words, the scheme would not increase in value as a result of the removal of on-site affordable housing units. Consequently, it would be difficult to determine a formulaic approach to determining the level at which a payment in-lieu should be set, as the economics of each scheme will be unique.

Our test of viability calculates that payment in lieu based on the 'surplus' value that each hypothetical scheme generates (after an allowance has been made to secure the land). The result is a range of payment amounts, depending on the type of scheme (direct let or nomination) and the rent levels to be charged. The potential payments in lieu are lower for nomination scheme (as the rents are generally lower than for direct let schemes) and range from zero to £52,371 per student room. Potential payments in lieu for direct lets schemes are considerably higher, ranging from zero to £147,901 per student room.

As demonstrated by the results of our modelling exercises, the ability to vary the level of payments in lieu is likely to result in more schemes being viable than the preferred on site or alternative off-site provision. Where on-site and off-site are both impractical and/or unviable, the Council could require a payment in lieu to be paid, subject to each individual scheme's viability.

In contrast to the Council's current approach to differential payments in-lieu in different areas of the Borough, as set out in the 2008 Affordable Housing SPD, we consider that two levels of payment are most practical for student housing schemes. These would be based on type of scheme (i.e. direct let or nomination), rather than being based on area. This is because our research indicated that rent levels did not vary significantly between areas of the Borough, so capital values and ability to meet a requirement for a payment in-lieu should be fairly consistent across the Borough. However, we found that there is a significant difference in rent between direct let schemes and nomination schemes. Schemes with university nominations have considerably lower rents and the results of our viability testing show that only lower payments in lieu could be afforded. We would suggest that payments in lieu for each type of scheme are set at the highest level indicated by our appraisals and be subject to viability on an individual scheme basis:

- Direct let schemes: payment in lieu of £147,901 per student room; and
- Nomination schemes: payment in lieu of £52,371 per student room.

The Council's requirement for a payment in-lieu would need to be secured through a legal agreement under Section 106 of the 1990 Town and Country Planning Act. Alternatively, the requirement could be secured through a planning condition, but these can be appealed and consequently offer less security for the Council.

5 Conclusions

While there is considerably pressure upon universities to deliver additional student housing, the Borough also needs to balance this need with the wider needs of Southwark's population. This includes a requirement for affordable housing for households who are unable to access market housing. With an increasing number of student housing schemes coming forward (and a commensurate reduction in general residential schemes), the Borough is considering adopting a policy that would require student housing developments to provide an element of affordable housing; either on-site, off-site or as a payment in lieu. Payments in lieu would be paid into the Council's affordable housing fund.

This study has considered the viability of a requirement for student housing schemes to make provision for affordable housing, either on-site, off-site or as a payment in lieu. We have adopted cautious assumptions, including in relation to grant funding availability, so our results might be seen as a 'worst-case' scenario in terms of viability of the options tested. If grant is made available for individual schemes, clearly viability would be much improved in comparison to our results.

Our key findings are as follows:

- When considering a requirement for affordable housing, it is vital to recognise that the type of scheme (i.e. nomination or direct let) will have a considerable impact on ability to make a contribution. Units in nomination schemes are generally charged at significantly lower rents than units in direct let schemes and this reduces their ability to contribute towards affordable housing.
- Many student cluster flats incorporate communal living or dining areas with the flat, which the Council could count as habitable rooms for the purpose of calculating the affordable housing requirement on individual schemes.
- Levels of rent charged within each type of scheme will clearly also have a considerable impact on the ability of a scheme to contribute towards affordable housing;
- The existing use value of the site will also impact on the extent and amount of affordable housing contribution that can be secured;
- 35% on-site and off-site affordable housing can be secured across a range of schemes, while this will not be possible on others.
- The Council should consider setting a threshold of 30 student housing rooms, above which a contribution towards affordable housing would be sought. This would provide consistency with the Council's general threshold of 10 units for other residential schemes; and
- Any on or off-site affordable housing, or payments in lieu, should be secured through a legal agreement under Section 106 of the Town and Country Planning Act 1990.

Appendix 1 - RLV results – payment in lieu

LONDON BOROUGH OF SOUTHWARK - STUDENT HOUSING
INCORPORATING SECTION 106 FINANCIAL CONTRIBUTIONS

DIRECT LETS

Density -->	400 rph	1000 rph	1500 rph	2000 rph	2500 rph
Rents (cluster/enuite/studio)					
£170 / £190 / £255	£9,271,053	£24,657,091	£36,985,636	£49,314,181	£61,642,727
£190 / £210 / £295	£13,538,626	£33,846,565	£50,769,848	£67,693,131	£84,616,413
£210 / £230 / £335	£17,214,416	£43,036,040	£64,554,060	£86,072,080	£107,590,100
£230 / £250 / £375	£20,890,206	£52,225,515	£78,338,272	£104,451,029	£130,563,787

£26,000,000

VIABILITY BASED ON EXISTING USE VALUE 1:

Density -->	400 rph	1000 rph	1500 rph	2000 rph	2500 rph
Rents (cluster/enuite/studio)					
£170 / £190 / £255	n/a	n/a	£13,496	£27,735	£36,277
£190 / £210 / £295	n/a	£11,276	£39,752	£53,990	£62,533
£210 / £230 / £335	n/a	£37,532	£66,008	£80,246	£88,789
£230 / £250 / £375	n/a	£63,787	£92,263	£106,501	£115,044

£5,000,000

VIABILITY BASED ON EXISTING USE VALUE 2:

Density -->	400 rph	1000 rph	1500 rph	2000 rph	2500 rph
Rents (cluster/enuite/studio)					
£170 / £190 / £255	£25,150	£54,020	£59,496	£62,235	£63,877
£190 / £210 / £295	£55,633	£80,276	£85,752	£88,490	£90,133
£210 / £230 / £335	£81,889	£106,532	£112,008	£114,746	£116,389
£230 / £250 / £375	£108,144	£132,787	£138,263	£141,001	£142,644

£1,000,000

VIABILITY BASED ON EXISTING USE VALUE 3:

Density -->	400 rph	1000 rph	1500 rph	2000 rph	2500 rph
Rents (cluster/enuite/studio)					
£170 / £190 / £255	£58,008	£67,163	£68,258	£68,806	£69,135
£190 / £210 / £295	£88,490	£93,419	£94,514	£95,062	£95,390
£210 / £230 / £335	£114,746	£119,674	£120,770	£121,317	£121,646
£230 / £250 / £375	£141,001	£145,930	£147,025	£147,573	£147,901

NOMINATION SCHEMES

Density -->	400 rph	1000 rph	1500 rph	2000 rph	2500 rph
Rents (cluster/enuite/studio)					
£120 / £130 / £155	-£138,401	-£346,003	-£519,005	-£692,007	-£865,008
£135 / £145 / £180	£2,426,431	£6,066,077	£9,099,115	£12,132,153	£15,165,191
£150 / £160 / £205	£4,971,208	£12,428,021	£18,642,031	£24,856,041	£31,070,051
£165 / £175 / £230	£7,515,986	£18,789,965	£28,184,947	£37,579,929	£46,974,911

£26,000,000

VIABILITY BASED ON EXISTING USE VALUE 1:

Density -->	400 rph	1000 rph	1500 rph	2000 rph	2500 rph
Rents (cluster/enuite/studio)					
£120 / £130 / £155	n/a	n/a	n/a	n/a	n/a
£135 / £145 / £180	n/a	n/a	n/a	n/a	n/a
£150 / £160 / £205	n/a	n/a	n/a	n/a	£1,337
£165 / £175 / £230	n/a	n/a	n/a	£10,971	£19,514

£5,000,000

VIABILITY BASED ON EXISTING USE VALUE 2:

Density -->	400 rph	1000 rph	1500 rph	2000 rph	2500 rph
Rents (cluster/enuite/studio)					
£120 / £130 / £155	n/a	n/a	n/a	n/a	n/a
£135 / £145 / £180	n/a	£903	£6,379	£9,117	£10,760
£150 / £160 / £205	n/a	£19,080	£24,556	£27,294	£28,937
£165 / £175 / £230	£12,614	£37,257	£42,733	£45,471	£47,114

£1,000,000

VIABILITY BASED ON EXISTING USE VALUE 3:

Density -->	400 rph	1000 rph	1500 rph	2000 rph	2500 rph
Rents (cluster/enuite/studio)					
£120 / £130 / £155	n/a	n/a	n/a	n/a	n/a
£135 / £145 / £180	£9,117	£14,046	£15,141	£15,689	£16,017
£150 / £160 / £205	£27,294	£32,223	£33,318	£33,866	£34,194
£165 / £175 / £230	£45,471	£50,400	£51,495	£52,043	£52,371

Appendix 2 - RLV results – 35% on-site affordable

LONDON BOROUGH OF SOUTHWARK - STUDENT HOUSING
INCORPORATING SECTION 106 FINANCIAL CONTRIBUTIONS
RESIDUAL VALUES INCORPORATING 35% ON-SITE AFFORABLE

V	Scheme is viable with given level of onsite affordable or financial contribution
n	Scheme is not viable with given level of onsite affordable or financial contribution

DIRECT LETS

Density -->	400 rph	1000 rph	1500 rph	2000 rph	2500 rph
Rents (cluster/enuite/studio)					
£170 / £190 / £255	£4,169,180	£10,422,950	£15,634,426	£20,845,901	£26,057,376
£190 / £210 / £295	£6,558,444	£16,396,109	£24,594,163	£32,792,218	£40,990,272
£210 / £230 / £335	£8,947,707	£22,369,267	£33,553,901	£44,738,535	£55,923,169
£230 / £250 / £375	£11,336,970	£28,342,426	£42,513,639	£56,684,852	£70,856,065

£26,000,000

VIABILITY BASED ON EXISTING USE VALUE 1:

Density -->	400 rph	1000 rph	1500 rph	2000 rph	2500 rph
Rents (cluster/enuite/studio)					
£170 / £190 / £255	n	n	n	n	n
£190 / £210 / £295	n	n	n	V	V
£210 / £230 / £335	n	n	V	V	V
£230 / £250 / £375	n	n	V	V	V

£5,000,000

VIABILITY BASED ON EXISTING USE VALUE 2:

Density -->	400 rph	1000 rph	1500 rph	2000 rph	2500 rph
Rents (cluster/enuite/studio)					
£170 / £190 / £255	n	V	V	V	V
£190 / £210 / £295	V	V	V	V	V
£210 / £230 / £335	V	V	V	V	V
£230 / £250 / £375	V	V	V	V	V

£1,000,000

VIABILITY BASED ON EXISTING USE VALUE 3:

Density -->	400 rph	1000 rph	1500 rph	2000 rph	2500 rph
Rents (cluster/enuite/studio)					
£170 / £190 / £255	V	V	V	V	V
£190 / £210 / £295	V	V	V	V	V
£210 / £230 / £335	V	V	V	V	V
£230 / £250 / £375	V	V	V	V	V

NOMINATION SCHEMES

Density -->	400 rph	1000 rph	1500 rph	2000 rph	2500 rph
Rents (cluster/enuite/studio)					
£120 / £130 / £155	-£2,711,483	-£6,778,707	-£10,168,061	-£13,557,414	-£16,946,768
£135 / £145 / £180	-£777,083	-£1,942,707	-£2,914,061	-£3,885,414	-£4,856,768
£150 / £160 / £205	£989,622	£2,474,055	£3,711,082	£4,948,110	£6,185,137
£165 / £175 / £230	£2,643,727	£6,609,318	£9,913,978	£13,218,637	£16,523,296

£26,000,000

VIABILITY BASED ON EXISTING USE VALUE 1:

Density -->	400 rph	1000 rph	1500 rph	2000 rph	2500 rph
Rents (cluster/enuite/studio)					
£120 / £130 / £155	n	n	n	n	n
£135 / £145 / £180	n	n	n	n	n
£150 / £160 / £205	n	n	n	n	n
£165 / £175 / £230	n	n	n	n	n

£5,000,000

VIABILITY BASED ON EXISTING USE VALUE 2:

Density -->	400 rph	1000 rph	1500 rph	2000 rph	2500 rph
Rents (cluster/enuite/studio)					
£120 / £130 / £155	n	n	n	n	n
£135 / £145 / £180	n	n	n	n	n
£150 / £160 / £205	n	n	n	n	V
£165 / £175 / £230	n	V	V	V	V

£1,000,000

VIABILITY BASED ON EXISTING USE VALUE 3:

Density -->	400 rph	1000 rph	1500 rph	2000 rph	2500 rph
Rents (cluster/enuite/studio)					
£120 / £130 / £155	n	n	n	n	n
£135 / £145 / £180	n	n	n	n	n
£150 / £160 / £205	n	V	V	V	V
£165 / £175 / £230	V	V	V	V	V

Appendix 3 - 35% off-site affordable housing

LONDON BOROUGH OF SOUTHWARK - STUDENT HOUSING
INCORPORATING SECTION 106 FINANCIAL CONTRIBUTIONS
RESIDUAL VALUES INCORPORATING 35% OFF-SITE AFFORABLE

V	Scheme is viable with given level of onsite affordable or financial contribution
n	Scheme is not viable with given level of onsite affordable or financial contribution

DIRECT LETS

Density -->	400 rph	1000 rph	1500 rph	2000 rph	2500 rph
Rents (cluster/enuite/studio)					
£170 / £190 / £255	£7,402,261	£18,505,653	£27,758,480	£37,011,306	£46,264,133
£190 / £210 / £295	£11,078,051	£27,695,128	£41,542,692	£55,390,256	£69,237,819
£210 / £230 / £335	£14,753,841	£36,884,602	£55,326,907	£73,769,205	£92,211,506
£230 / £250 / £375	£18,429,631	£46,074,077	£69,111,116	£92,148,154	£115,185,193

£26,000,000

VIABILITY BASED ON EXISTING USE VALUE 1:

Density -->	400 rph	1000 rph	1500 rph	2000 rph	2500 rph
Rents (cluster/enuite/studio)					
£170 / £190 / £255	n	n	n	n	V
£190 / £210 / £295	n	n	V	V	V
£210 / £230 / £335	n	n	V	V	V
£230 / £250 / £375	n	V	V	V	V

£5,000,000

VIABILITY BASED ON EXISTING USE VALUE 2:

Density -->	400 rph	1000 rph	1500 rph	2000 rph	2500 rph
Rents (cluster/enuite/studio)					
£170 / £190 / £255	n	V	V	V	V
£190 / £210 / £295	V	V	V	V	V
£210 / £230 / £335	V	V	V	V	V
£230 / £250 / £375	V	V	V	V	V

£1,000,000

VIABILITY BASED ON EXISTING USE VALUE 3:

Density -->	400 rph	1000 rph	1500 rph	2000 rph	2500 rph
Rents (cluster/enuite/studio)					
£170 / £190 / £255	V	V	V	V	V
£190 / £210 / £295	V	V	V	V	V
£210 / £230 / £335	V	V	V	V	V
£230 / £250 / £375	V	V	V	V	V

NOMINATION SCHEMES

Density -->	400 rph	1000 rph	1500 rph	2000 rph	2500 rph
Rents (cluster/enuite/studio)					
£120 / £130 / £155	-£3,015,930	-£7,539,826	-£11,309,739	-£15,079,652	-£18,849,564
£135 / £145 / £180	-£39,930	-£99,826	-£149,739	-£199,652	-£249,564
£150 / £160 / £205	£2,510,633	£6,276,583	£9,414,874	£12,553,166	£15,691,459
£165 / £175 / £230	£5,055,411	£12,638,527	£18,957,790	£25,277,054	£31,596,317

£26,000,000

VIABILITY BASED ON EXISTING USE VALUE 1:

Density -->	400 rph	1000 rph	1500 rph	2000 rph	2500 rph
Rents (cluster/enuite/studio)					
£120 / £130 / £155	n	n	n	n	n
£135 / £145 / £180	n	n	n	n	n
£150 / £160 / £205	n	n	n	n	n
£165 / £175 / £230	n	n	n	n	n

£5,000,000

VIABILITY BASED ON EXISTING USE VALUE 2:

Density -->	400 rph	1000 rph	1500 rph	2000 rph	2500 rph
Rents (cluster/enuite/studio)					
£120 / £130 / £155	n	n	n	n	n
£135 / £145 / £180	n	n	n	n	n
£150 / £160 / £205	n	n	V	V	V
£165 / £175 / £230	n	V	V	V	V

£1,000,000

VIABILITY BASED ON EXISTING USE VALUE 3:

Density -->	400 rph	1000 rph	1500 rph	2000 rph	2500 rph
Rents (cluster/enuite/studio)					
£120 / £130 / £155	n	n	n	n	n
£135 / £145 / £180	n	n	n	n	n
£150 / £160 / £205	V	V	V	V	V
£165 / £175 / £230	V	V	V	V	V