



Tower Hamlets Sites and Place Making Development Plan Document – Site Viability Testing

Prepared for
London Borough of Tower Hamlets

February 2011

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1 Introduction

BNP Paribas Real Estate was commissioned by the London Borough of Tower Hamlets ('the Council') to assess the viability of strategic allocation sites within its *Sites and Place Making Development Plan Document*, where infrastructure is to be provided on-site. Our terms of reference are summarised as follows:

- Assess the likely residual land values that could be generated by developments on the sites; and
- Using the outputs of the appraisals, consider the economic viability of developments on the sites and their ability to meet the Council's Core Strategy requirements and on-site community infrastructure objectives.

1.1 BNP Paribas Real Estate

BNP Paribas Real Estate is a leading firm of chartered surveyors, town planning and international property consultants. The practice offers an integrated service from fourteen offices within the United Kingdom and over sixty offices in key commercial centres in Europe, the United States of America and the Asian and Pacific regions.

BNP Paribas Real Estate has a wide ranging client base, acting for international companies and individuals, banks and financial institutions, private companies, public sector corporations, government departments, local authorities and registered social landlords.

The full range of property services includes:

- Planning and development consultancy;
- Affordable housing consultancy;
- Valuation and real estate appraisal;
- Property investment;
- Agency and Brokerage;
- Property management;
- Building and project consultancy; and
- Corporate real estate consultancy.

This report has been prepared by Nicholas Pell under the supervision of Anthony Lee MRTPI, MRICS, RICS Registered Valuer.

The Affordable Housing Consultancy of BNP Paribas Real Estate advises landowners, developers, local authorities and registered social landlords ("RSLs") on the provision of affordable housing.

In 2007, we were appointed by the Greater London Authority ("GLA") to review its 'Development Control Toolkit Model' (commonly referred to as the 'Three Dragons' model). This review included testing the validity of the Three Dragons' approach to appraising the value of residential and mixed use developments; reviewing the variables used in the model; and advising on areas that required amendment in the re-worked toolkit. We have recently been appointed by the GLA to undertake a further review of the toolkit and other available appraisal models and expect to report in October 2011.

Anthony Lee is a member of the RICS 'Experts in Planning Service' panel, which was established in March 2009 to support the Planning Inspectorate on major casework and local development plan work submitted for independent examination. He has assisted the inspectors examining the economic viability of

housing policies within the Core Strategies of Stockton Borough Council; Hinckley and Bosworth Council; and East North Hants District Council.

In addition, we are retained by the Homes and Communities Agency (“HCA”) to advise on better management of procurement of affordable housing through planning obligations.

The firm therefore has extensive experience of advising landowners, developers, local authorities and RSLs on the value of affordable housing and economically and socially sustainable residential developments.

1.2 Report structure

This report is structured as follows:

Section two provides a brief description of the sites identified in the Council’s Sites and Place Making DPD that we have appraised;

Section three describes the methodology that we have adopted;

Section four outlines the assumptions adopted within our appraisals;

Section five sets out the results of the appraisals;

Finally, in **Section six**, we draw conclusions from the analysis.

1.3 The Status of our advice

The contents of this report do not constitute a valuation, in accordance with Valuation Standards 1.1 of the RICS Valuation Standards – Global and UK (May 2011), and should not be relied upon as such. This report is addressed to London Borough of Tower Hamlets only.

2 Background and description of the Sites

The Sites and Placing Making DPD identifies a range of sites that the Council considers to be suitable for redevelopment. Some of the sites incorporate requirements for community infrastructure (schools, open space, idea stores etc) and our appraisals test whether these requirements could be viably provided.

We have run high level appraisals of ten sites with such these requirements. The key features of the sites are summarised in table 2.1 below. Some of the sites require a District Heating System; as this is a requirement for the schemes to meet Code for Sustainable Homes level 4, we have not identified this requirement separately in the table.

Site name	Existing use	Site size (ha)	Infrastructure requirement	Current ownership
Bishopsgate Goods Yard	Shoreditch High Street Overground Station and vacant land	4.24	Local park and Idea Store	Private
Pritchard's Road Gas Works and The Oval	Active gas holders and warehousing	3.75	Local park	Council and private
Goodman's Fields	Vacant buildings and land	3.65	Health facility	Private
Bromley-by-Bow Redevelopment	Supermarket, warehousing and car parking	7.35	Primary school, local park and Idea Store	Private
Ailsa Street (south)	Industrial activities, former primary school and vacant land	3.50 ¹	Primary school and secondary school	Council and private
Leven Road Gas Works	Active gas holders	8.56	Local park and primary school	Private
Westferry Printworks	Offices, printworks and car parking	6.16	Primary school, secondary school and local park	Private
Crossharbour town centre	Supermarket, car parking, offices, health facility and Crossharbour DLR Station	4.89	Idea Store or Leisure Centre	Private
McGrath Site (Fish Island)	Waste storage and transfer	2.67	Primary school and local park	Private
Neptune Wharf (Fish Island)	Industrial activities	2.31	Primary school and local park	Private
News International	Offices and parking	4.28	Secondary and primary school	Private
Bow Common Gas Works	Gas holders	3.94	Primary school	Private

¹ Net of north site (3.5 ha) for Waste facility

Additional information on each site is attached as Appendix 1. This information includes the approximate density anticipated by the Council; abnormal cost issues; number of units and Public Transport Accessibility Level ('PTAL') scores.

3 Methodology

We have used *Argus Developer* (“Argus”) to undertake high level appraisals of developments on the ten sites. Argus is a commercially available development appraisal package in widespread use throughout the development industry. It has been accepted by a number of local planning authorities for the purpose of viability assessments and has also been accepted at planning appeals. Banks also consider Argus to be a reliable tool for secured lending valuations. Further details can be accessed at www.argussoftware.com.

Argus is essentially a cash-flow model. Such models all work on a similar basis:

- Firstly, the value of the completed development is assessed.
- Secondly, the development costs are calculated, including either the profit margin required or land costs. In our appraisals we include profit as a development cost.

The difference between the total development value and total costs equates to the residual land value (“RLV”). The model is normally set up to run over a development period from the date of the commencement of the project until the project completion, when the development has been constructed and is occupied.

The cash-flow approach allows the finance charges to be accurately calculated over the development period. This approach can accommodate more complex arrangements where a number of different uses are provided or development is phased.

In order to assess whether a development scheme can be regarded as being economically viable, with a given level of planning obligations, it is necessary to compare the RLV that is produced with a benchmark land value. If a development generates a RLV that is higher than the benchmark it can be regarded as being economically viable and therefore capable of providing a greater quantum of obligations. However, if a development generates a RLV that is lower than the benchmark, it should be deemed economically unviable and the quantum of planning obligations would need to be reduced until viability is achieved.

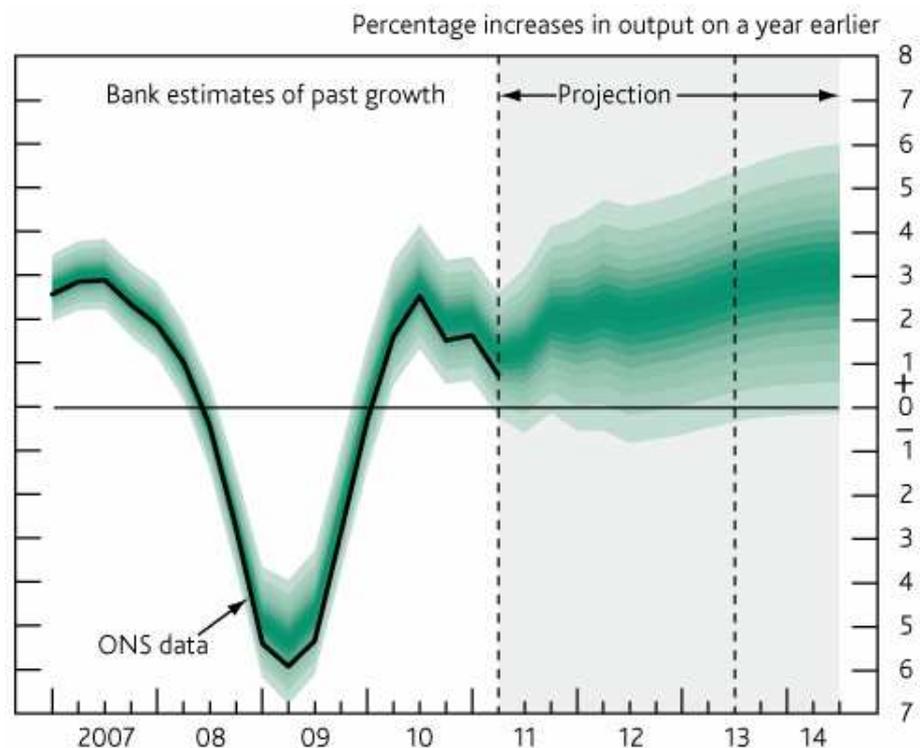
4 Assumptions

This section of the report sets out the general principles and assumptions which we have adopted to undertake appraisals of developments on the ten sites.

4.1 Housing Market Commentary

The historic highs achieved in the UK housing market by mid 2007 followed a prolonged period of real house price growth. However, a period of 'readjustment' began in the second half of 2007, triggered initially by rising interest rates and the emergence of the UK sub prime lending problems in the last quarter of 2007. The subsequent reduction in inter-bank lending led to a general "credit crunch" including a tightening of mortgage availability. The real crisis of confidence, however, followed the collapse of Lehman Brothers in September 2008, which forced the government and the Bank of England to intervene in the market to relieve a liquidity crisis.

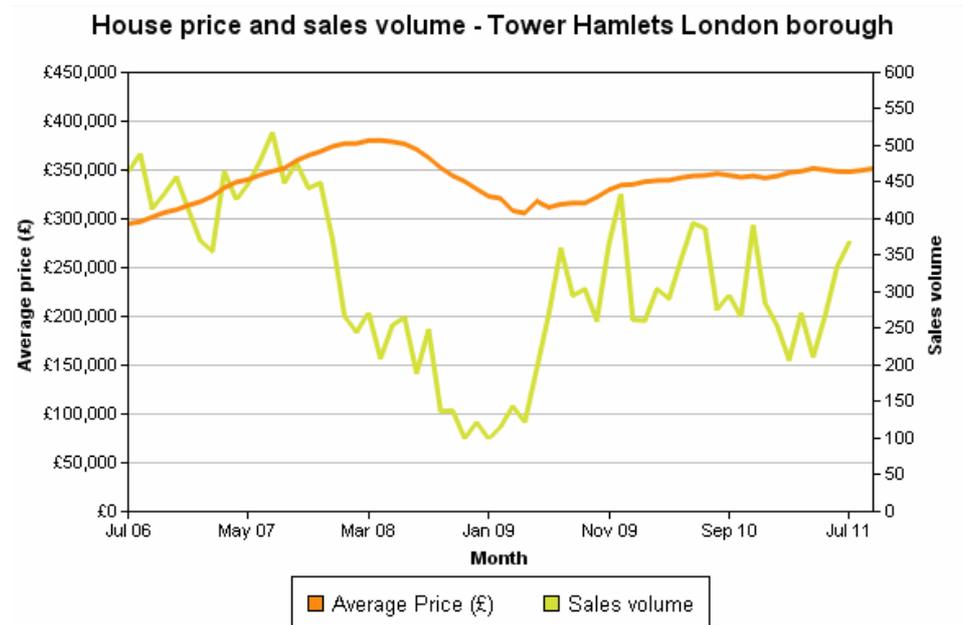
The combination of successive shocks to consumer confidence and the difficulties in obtaining finance led to a sharp reduction in transactions and significant correction in house prices in the UK, which fell to a level some 21% lower than at their peak in August 2007, according to the Halifax House Price Index. Consequently, residential land values fell by some 50% from peak levels. One element of government intervention involved successive interest rate cuts and as the cost of servicing many people's mortgages is linked to the base rate, this financial burden has progressively eased for those still in employment. This, together with a return to economic growth early 2010 (see August 2011 Bank of England GDP fan chart below) meant that consumer confidence started to improve to some extent.



Throughout 2010 there were some tentative indications that improved consumer confidence was feeding through into more positive interest from potential house purchasers. Against the background of a much reduced supply of new housing, this would lead one to expect some recovery in prices. However it is evident

that this brief resurgence has abated, with Nationwide House Price Indices showing house prices were 0.4% higher in October 2011 than in September with the price of a typical home in October being 0.8% higher than one year ago. The Halifax Price Index reported a 1.2% monthly increase between September and October however stated that there has been little change in prices during 2011 overall.

The balance of opinion is that the house price correction has much further to run, with continuing high levels of unemployment likely to result in increased repossessions and increased supply of homes into the market. At the same time, demand is expected to remain subdued, due to the continuing difficulties consumers face in securing mortgages. Robert Gardner, Nationwide's Chief Economist, stated *"the outlook remains uncertain, but with the UK economic recovery expected to remain sluggish, house price growth is likely to remain soft in the period ahead, with prices moving sideways or drifting modestly lower over the next twelve months."*



Source: Land Registry

4.2 Gross Development Value ("GDV")

4.2.1 Residential Sales Values

We have researched the local housing market through discussion with active local agents and through review of online internet resources. It is apparent that residential values vary dependent on location within the Borough, in addition to the aspect, size and specification of the units.

Through examining the comparable evidence collected we have assumed a blended average value per square foot for each of the sites in this report. Table 4.2.1 below shows the values that we have adopted in our appraisals:

Table 4.2.1: Blended average sales values

Site	Blended average (£ per square foot)	Anticipated delivery period
Bishopsgate Goods Yard	£680	2015-2020
Pritchard's Road Gas Works and The Oval	£505	2015-2020
Goodman's Fields	£600	2012-2015
Bromley by Bow Redevelopment	£441	2012-2015
Ailsa Street	£410	2012-2015
Leven Road Gas Works	£455	2015-2020
Westferry Printworks	£604	2015-2020
Crossharbour Town Centre	£604	2015-2020
McGrath Site (Fish Island)	£403	2015-2020
Neptune Wharf (Fish Island)	£403	2015-2020
News International	£604	2015-2020
Bow Common Gas Works	£403	2015-2020

It should be noted that real sales value growth of 3% per annum has been assumed for the private units in the appraisals for sites due for completion 2015-2020. This reflects the growth forecast by major agents, including Savills and Knight Frank.

4.2.2 Affordable housing revenue

To value the affordable housing elements we have used a bespoke model, specifically created for this purpose. This model takes into account factors such as standard levels for individual RSL's management and maintenance costs; finance rates currently obtainable in the sector; and views on the amount of grant that may be obtainable.

In the recent Comprehensive Spending Review the Government announced that the budget for Social Housing Grant would be reduced from £2.8 billion per annum to £0.55 billion per annum. This is a reduction of over 80%. The recently released '2011-15 Affordable Homes Programme – Framework' document also provides a clear indication that Section 106 schemes are no longer likely to be allocated Grant funding, except in exceptional circumstances.

In light of these announcements it is considered imprudent to assume that Grant will be secured. Therefore our assessment relies upon the assumption that none is provided.

Our model indicates that the following value might be achievable with respect to a blended average of any affordable housing that might be provided within the developments.

London Borough	Revenue (£ / per square foot)
London Borough of Tower Hamlets	£150

It should be noted that a value increase of 0.5% year-on-year has been assumed for the affordable units in the appraisals for sites due for completion

2015-2020. This increase reflects current Homes and Communities Agency policy that permits RSLs to increase rents by RPI plus 0.5% per annum.

4.3 Development Costs

4.3.1 Construction Costs

The RICS Build Cost Information Service ("BCIS") reports that the mean average cost of constructing 'flats (apartments)' in London Borough of Tower Hamlets is currently £1,655 per square metre (£154 per square foot). This cost relates to base construction costs only with no allowance for external works. We have therefore made an additional allowance of 15% of construction costs for external works, bringing the cost rate up to £1,903 per square metre (£177 per square foot).

The BCIS average costs are taken from survey results from developments that comprise a disproportionate number of social housing schemes, which will generally be built to a lower specification than private housing. We have therefore made a further 15% allowance (on the base cost rate) for the market units to account for enhanced quality. This increased the construction rate for the market units to £2,151 per square metre (£200 per square foot).

4.3.2 Professional Fees

We have assumed professional fees at 10% of construction costs.

4.3.3 Contingency

We have assumed a contingency of 3% of construction costs in line with normal market assumptions.

4.3.4 Planning Obligations

We have assumed a financial contribution associated with the developments of £4,000 per unit. Should a higher contribution be required this will have a detrimental impact upon economic viability. Conversely, should the contribution be reduced the viability of the developments will improve.

4.3.5 Ground Rents

We have assumed that the average investment value of ground rents will be £4,500 per market housing unit. No ground rents are assumed on the affordable housing units.

4.3.6 Interest

We have adopted an interest rate of 6.5%, with no additional allowance for fees, which we consider to be an optimistic assumption for a development of this nature in the current market. It should be noted that although a bank would not provide 100% of the funding required for the Development it is conventional to assumed finance on all costs in order to reflect the opportunity cost (or in some cases the actual cost) of committing equity to the project.

4.3.7 Developer's Profit

When considering the changing economic climate, financial institutions have tightened their requirement for profit returns on schemes. Banks have raised their expectations in terms of risk and required returns that new developments offer. Whilst it will ultimately be a matter of judgement, we doubt that any

proposals predicting a return of less than 20% would be considered viable. We have therefore adopted a profit rate of 20% on GDV for the market residential units.

In order to reflect the reduced risk associated with developing affordable housing we have adopted profit at 6% on GDV for the affordable housing units.

4.3.8 Marketing and disposal costs

We have adopted the following costs of sales:

- Marketing at 1.5% of market GDV;
- Agent fees as 1.5% of market GDV; and
- Legal fees at 0.25% of market GDV.

4.3.9 Project timetable

We have adopted the following assumed timings for construction and sales:

- 9 month purchase period;
- 9 month pre-construction period;
- Sales rate of 6 units per month, which results in varied sales periods dependent upon the number of units to be sold in each development;
- Affordable housing revenue received quarterly throughout construction period; and
- Section 106 obligations paid quarterly throughout construction period.

5 Assessment of the outputs of the appraisals

In this section, we consider the outputs of the appraisals and the implications for the provision of affordable housing at the proposed Developments.

5.1 Viability Benchmark

We have estimated the existing use values (“EUVs”) of each of the sites, using pro-rata values from other sites in the same use and published benchmarks (Valuation Office Agency *January 2011 Property Market Report*). In order to encourage the landowners to bring the sites forward for development, we have added a premium of 20% to the value, in addition to a 20% buffer to account for individual site constraints and unknown factors. The benchmark land values that result from this calculation are shown in Table 5.1 below.

Table 5.1: Viability benchmarks

Site	Existing Use Value (£ millions)
Bishopsgate Goods Yard	17.808
Pritchard's Road Gas Works and The Oval	15.750
Goodman's Fields	51.800
Bromley by Bow Redevelopment	30.870
Ailsa Street	4.354
Leven Road Gas Works	17.976
Westferry Printworks	51.744
Crossharbour Town Centre	41.076
McGrath Site (Fish Island)	6.355
Neptune Wharf (Fish Island)	5.498
News International	48.55
Bow Common Gas Works	8.72

5.2 Appraisal results

We have undertaken appraisals on all of the sites incorporating the Council's Core Strategy policy of 35% affordable housing with a tenure split of 70:30 of social rent to shared ownership.

In some cases, the Council has requested that we test a number of scenarios for some of the sites, as follows:

- **Leven Road Gas Works:**
 - Scenario 1 – provision of land for local park (1.2 ha) and primary school (0.4 ha)
 - Scenario 2 – provision of land for local park only (1.2 ha)
- **Westferry Print Works:**
 - Scenario 1 – provision of land for secondary school (1.5 ha)
 - Scenario 2 – provision of land for local park (1.2 ha) and primary school (0.4 ha)

- **McGrath site:**
 - Scenario 1 – provision of land for local park (0.5 ha)
 - Scenario 2 – provision of land for local park (1 ha)
- **Neptune Wharf**
 - Scenario 1 – provision of land for local park (1 ha) and primary school (0.4 ha)
 - Scenario 2 – provision of land for local park (0.6 ha) and primary school (0.4 ha)

Table 5.2.1 below shows the residual land value for each site against the viability benchmark.

Table 5.2.1: Appraisal results

Site/scenario	Residual Land Value (£ millions)	Viability Benchmark (£ millions)	Surplus / deficit against benchmark (£ millions)
Bishopsgate Goods Yard	60.989	17.808	43.18
Pritchard's Road Gas Works and The Oval	20.01	15.750	4.26
Goodman's Fields	68.95	51.8	17.15
Bromley-by-Bow Redevelopment	15.748	30.870	-15.12
Ailsa Street	3.47	4.354	-0.884
Leven Road Gas Works (scenario 1)	17.94	17.976	-0.04
Leven Road Gas Works (scenario 2)	19.13	17.976	1.154
Westferry Printworks (scenario 1)	100.99	51.744	49.25
Westferry Printworks (scenario 2)	84.99	51.744	33.25
Crossharbour Town Centre	56.14	41.076	15.064
McGrath Site (Fish Island) scenario 1	2.95	6.354	-3.404
McGrath Site (Fish Island) scenario 2	2.15	6.354	-4.204
Neptune Wharf (Fish Island) scenario 1	1.05	5.497	-4.447
Neptune Wharf (Fish Island) scenario 2	1.69	5.497	-3.807
News International (scenario 1)	42.06	48.55	-6.49
News International (scenario 2)	46.76	48.55	-1.79
Bow Common Gas Works	7.47	8.274	-0.804

5.2.1 Sensitivity analysis

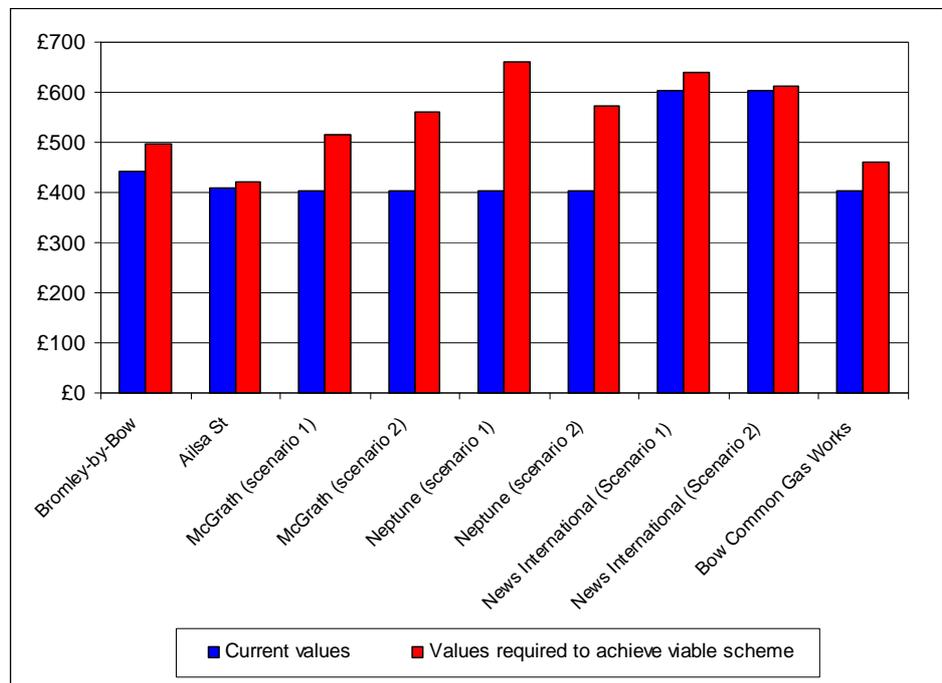
The results of our appraisals indicate that some of the development scenarios will not be viable at the sales values that are achievable in the current market (or where the sites are to be brought forward after 2015 by the values reflecting 3% per annum growth). We have run a sensitivity analysis to determine the real

increase in values required to achieve a viable position in each of the scenarios. The results are set out in Table 5.2.1.1 below and also in chart format in Chart 5.2.1.1.

Table 5.2.1.1: Results of sensitivity analysis

Site/scenario	Current Values (£ psf)	Inflated values (£ psf) to achieve viable scheme	% change
Bromley-by-Bow	£441	£498	13%
Ailsa St	£410	£420	2%
McGrath (scenario 1)	£403	£515	28%
McGrath (scenario 2)	£403	£560	39%
Neptune (scenario 1)	£403	£660	64%
Neptune (scenario 2)	£403	£572	42%
News International (Scenario 1)	£604	£640	6%
News International (Scenario 2)	£604	£612	1%
Bow Common Gas Works	£403	£462	15%

Chart 5.2.1.1: Current values and values required to achieve viable scheme



6 Conclusions

This report considers the viability of a sample of sites in the Council's *Sites and Place Making* DPD, particularly in relation to the provision of land to facilitate the provision of community infrastructure (primary and secondary schools; local parks; and a waste transfer site). Although our appraisals do not assume that the developments will need to carry the costs of constructing the schools and other facilities, they do reflect the opportunity cost of provision of land.

Six of the twelve sites we have appraised would be viable if the land for community infrastructure is provided at nil cost. The other six sites would be viable following varying degrees of sales value growth. In some cases, the extent to which value inflation is required would be relatively modest and well within the scope of likely increases over the next five years². The least viable sites are located in Fish Island, where values are considerably lower than most other parts of the Borough. However, these sites are currently predominantly industrial in nature, with very little residential accommodation. As is commensurate with their industrial nature, the public realm is relatively unattractive which has a significant impact on potential sales values. As the redevelopment of the area gathers pace and the area develops into a new urban quarter, there is likely to be a step-change in values. Evidence from other sites in London indicates that expectations for such a step-change can be regarded as realistic. Consequently, the current viability position should not preclude the allocation of infrastructure to these sites. Indeed, this infrastructure would be essential in attracting potential residents into the area.

² The November 2011 Savills *Residential Property Focus Quarter 4 2011*, for example, forecasts that market values in mainstream London markets will increase by 19.1% over the 5 years to 2016.

Appendix 1 Appraisal summaries and outputs

Scheme	1	Bishopsgate Goods Yard				
Total Units	756			Gross Site Area	4.24	
Total Floor Area (GIA)	560,804			less		
Total Floor Area (NIA)	476,684			local park	1.8	
				viaduct		
Average Unit Size (GIA)	742			Net site area	2.44	
Average Unit Size (NIA)	631			Density	310 u.p.ha	
Total Site Area	4.24			total units	756	
AH Assumptions	35% of NIA		166839	19% 1 bed		144
				47% 2 bed		356
				34% 3 bed		257
Appraisal Reference VMP Appraisal v3. Site 1 2.11						
Development and Sales Period Assumptions - driven by total number of market units						
	Total Resi	AH	Market	Sales per month	sales period	years
Scheme (area)	476684	166839	309844			
Scheme (units)	756	265	491	6	82	6.83
Purchase	9 months					
Pre-construction	9 months					
Sales start	9 months	after start of construction				
REVENUE				private spaces	value per space	
Car park Spaces	10%	of total units	76	49	£15,000	
Ground Rent Market units	£ 4,500	491	£2,211,300			
Private Sales Rate	680	per sq ft				
Affordable Sales Rate	150	per sq ft (blended rate)				
COSTS						
S.106 Assumptions	£4,000	per unit	£3,024,000			
Decontamination	£5,000	per unit	at pre-constru	£ 3,780,000		
Additional abnormal factors	£3,000	per unit	at pre-constru	£2,268,000		
Build Rate	15% plus		148	170.2	30	200.2
Contingency	3%					
Profit	20%	Private				
Profit	6%	Affordable				
Marketing	1.50%					
Sales agent	1.50%					
Sales legal fees	0.25%					
Professional fees	10%					
Finance	6.50%					
Residual Land Value	£ 60,989,393					
RLV per hectare	£ 14,384,291					

Scheme	2	Pritchard's Road Gas Works and The Oval		Gross Site Area	3.75
Total Units	485			less	
Total Floor Area (GIA)	363,877			local park	1.2
Total Floor Area (NIA)	309,295			Net site area	2.55
Average Unit Size (GIA)	750			Density	190 u.p.ha
Average Unit Size (NIA)	638			total units	485
Total Site Area	3.75			27% 1 bed	131
AH Assumptions	35% of NIA	108253		43% 2 bed	208
				16% 3 bed	78
				14% 4 bed	68
Appraisal Reference	VMP Appraisal v3. Site 2 2.11				
Development and Sales Period Assumptions - driven by total number of market units					
	Total Resi	AH	Market	Sales per month sales per years	
Scheme (area)	309295	108253	201042		
Scheme (units)	485	170	315	6	53 4.38
Purchase	9 months				
Pre-construction	9 months				
Sales start	9 months	after start of construction			
REVENUE					
Car park Spaces	20%	of total units	97	private spaces	value per space
				63	£15,000
Ground Rent Market units	£ 4,500		315	£	1,418,625
Private Sales Rate	505	per sq ft			
Affordable Sales Rate	150	per sq ft (blended rate)			
COSTS					
S.106 Assumptions	£4,000	per unit	£	1,940,000	
Decontamination	£5,000	per unit	at pre-construction	£	2,425,000
Build Rate	15% plus		148	170.2	30 200.2
Contingency	3%				
Profit	20%	Private			
Profit	6%	Affordable			
Marketing	1.50%				
Sales agent	1.50%				
Sales legal fees	0.25%				
Professional fees	10%				
Finance	6.50%				
Residual Land Value	£	20,010,403			
RLV per hectare	£	5,336,107			

Scheme		3	Goodman's Fields			
Total Units		1,478				
Total Floor Area (GIA)		1,143,890				
Total Floor Area (NIA)		972,307				
Average Unit Size (GIA)		774				
Average Unit Size (NIA)		658				
Total Site Area		3.65				
AH Assumptions		35% of NIA		340307		
Appraisal Reference VMP Appraisal v3. Site 3 2.11						
Development and Sales Period Assumptions - driven by total number of market units						
	Total Resi	AH	Market	Sales per month	sales period	years
Scheme (area)	972307	340307		631999		
Scheme (units)	1478	517		961	6	160
						13
Purchase	9 months					
Pre-construction	9 months					
Sales start	9 months	after start of construction				
REVENUE						
Car park Spaces	10%	of total units		148	private spaces	value per space
					96	£15,000
Ground Rent Market units	£ 4,500		961	£ 4,323,150		
Private Sales Rate	600	per sq ft				
Affordable Sales Rate	150	per sq ft (blended rate)				
COSTS						
S.106 Assumptions	£8,000	per unit		£ 11,824,000		
Build Rate	15% plus		148	170.2	30	200.2
Contingency	3%					
Profit	20%	Private				
Profit	6%	Affordable				
Marketing	1.50%					
Sales agent	1.50%					
Sales legal fees	0.25%					
Professional fees	10%					
Finance	6.50%					
Residual Land Value	£ 68,946,271					
RLV per hectare	£ 18,889,389					

Scheme		4	Bromley by Bow Redevelopment		Gross Site Area	7.35	
Total Units	1,222				less		
Total Floor Area (GIA)	942,550				local park	0.52	
Total Floor Area (NIA)	801,167				primary school	0.4	
					Net site area	6.43	
Average Unit Size (GIA)	771				Density	190 u.p.ha	
Average Unit Size (NIA)	656				total units	1222	
Total Site Area	7.35						
AH Assumptions	35% of NIA		280409		26% 1 bed	318	
					42% 2 bed	513	
					11% 3 bed	134	
					21% 4 bed	257	
Appraisal Reference	VMP Appraisal v3. Site 4 2.11						
Development and Sales Period Assumptions - driven by total number of market units							
	Total Resi	AH	Market	Sales per month	sales period	years	
Scheme (area)	801167	280409		520759			
Scheme (units)	1222	428		794	6	132 11	
Purchase	9 months						
Pre-construction	9 months						
Sales start	9 months	after start of construction					
REVENUE					private spaces	value per space	
Car park Spaces	20%	of total units		244	159	£15,000	
Ground Rent Market units	£ 4,500		794	£ 3,574,350			
Private Sales Rate	441	per sq ft					
Affordable Sales Rate	150	per sq ft (blended rate)					
COSTS							
S.106 Assumptions	£4,000	per unit		£ 4,888,000			
Decontamination	£5,000	per unit		at pre-construction	£ 6,110,000		
Build Rate	15% plus		148	170.2	30	200.2	
Contingency	3%						
Profit	20%	Private					
Profit	6%	Affordable					
Marketing	1.50%						
Sales agent	1.50%						
Sales legal fees	0.25%						
Professional fees	10%						
Finance	6.50%						
Residual Land Value	£ 15,747,505						
RLV per hectare	£ 2,142,518						

Scheme		5	Ailsa Street			
Total Units		295			Gross Site Area	3.5
Total Floor Area sq ft (GIA)		290,914			less	
Total Floor Area sq ft (NIA)		247,277			local park	0
Average Unit Size sq ft (GIA)		988			primary school	0.4
Average Unit Size sq ft (NIA)		840			Net site area	3.1
Total Site Area		3.1			Density	95 u.p.ha
AH Assumptions	35% of NIA		86,547		total units	295
Appraisal Reference				ADL Appraisal v1. Site 5 24Feb12	10% 1 bed	29
					25% 2 bed	74
					30% 3 bed	88
					35% 4 bed	103
Development and Sales Period Assumptions - driven by total number of market units						
	Total Resi	AH	Market	Sales per month	sales period	years
Scheme (net area)	247,277		86,547	160,730		
Scheme (units)	295	103		191	6	32 2.66
Purchase	9 months					
Pre-construction	9 months					
Sales start	9 months	after start of construction				
REVENUE						
Car park Spaces	32% of total units		93	private spaces	60	value per space £15,000
Ground Rent Market units	£ 4,500	191	£ 861,413			
Private Sales Rate	£410	per sq ft				
Affordable Sales Rate	£150	per sq ft (blended rate)				
COSTS						
S.106 Assumptions	£4,000	per unit	£ 1,178,000			
Decontamination	£5,000	per unit	at pre-construction	£ 1,472,500	£ 475,000	per ha
Build Rate	15% plus		148	170.2	30	200.2
Contingency	3%					
Profit	20%	Private				
Profit	6%	Affordable				
Marketing	1.50%					
Sales agent	1.50%					
Sales legal fees	0.25%					
Professional fees	10%					
Finance	6.50%					
				Indicative Existing Use Value	£ 48,552,000	
				EUV per hectare	£ 13,872,000	
Residual Land Value	£ 3,468,252					
RLV per hectare	£ 1,118,791					

Scheme	6	Leven Road Gas Works (Scenario 1)		Gross Site Area	8.56	
Total Units	592			less		
Total Floor Area (GIA)	466,888			local park	1.2	
Total Floor Area (NIA)	396,855			primary school	0.4	
				Net site area	6.96	
Average Unit Size (GIA)	789			Density	85 u.p.ha	
Average Unit Size (NIA)	670			total units	592	
Total Site Area	8.56			10% 1 bed	59	
AH Assumptions	35% of NIA	138899		59% 2 bed	349	
				13% 3 bed	77	
				18% 4 bed	106	
Appraisal Reference	VMP appraisal v.3 site 6 2.11 scenario 1				592	
Development and Sales Period Assumptions - driven by total number of market units						
	Total Resi	AH	Market	Sales per month	sales period	years
Scheme (area)	396855	138899	257956			
Scheme (units)	592	207	385	6	64	5
Purchase	9 months					
Pre-construction	9 months					
Sales start	9 months	after start of construction				
REVENUE				private spaces	value per space	
Car park Spaces	40% of total units		237	154	£15,000	
Ground Rent Market units	£ 4,500	385	£ 1,731,600			
Private Sales Rate	455	per sq ft				
Affordable Sales Rate	150	per sq ft (blended rate)				
COSTS						
S.106 Assumptions	£4,000	per unit	£ 2,368,000			
Decontamination	£5,000	per unit	at pre-construction	£ 2,960,000		
SUDS Cost	£1,000	per unit				
Build Rate	15% plus		148	170.2	30	200.2
Contingency	3%					
Profit	20%	Private				
Profit	6%	Affordable				
Marketing	1.50%					
Sales agent	1.50%					
Sales legal fees	0.25%					
Professional fees	10%					
Finance	6.50%					
Residual Land Value	£ 17,941,794					
RLV per hectare	£ 2,096,004					

Scheme	6	Leven Road Gas Works (Scenario 2)		Gross Site Area	8.56	
Total Units	626			less		
Total Floor Area (GIA)	493,906			local park	1.2	
Total Floor Area (NIA)	419,820			Net site area	7.36	
Average Unit Size (GIA)	789			Density	85 u.p.ha	
Average Unit Size (NIA)	671			total units	626	
Total Site Area	8.56			10% 1 bed	63	
AH Assumptions	35% of NIA	146937		59% 2 bed	369	
				13% 3 bed	81	
				18% 4 bed	113	
Appraisal Reference	VMP appraisal v.3 site 6 2.11 scenario 2					
Development and Sales Period Assumptions - driven by total number of market units						
	Total Resi	AH	Market	Sales per month	sales period	years
Scheme (area)	419820	146937	272883			
Scheme (units)	626	219	407	6	68	6
Purchase	9 months					
Pre-construction	9 months					
Sales start	9 months	after start of construction				
REVENUE				private spaces	value per space	
Car park Spaces	40%	of total units	250	163	£15,000	
Ground Rent Market units	£ 4,500		407	£ 1,831,050		
Private Sales Rate	455	per sq ft				
Affordable Sales Rate	150	per sq ft (blended rate)				
COSTS						
S.106 Assumptions	£4,000	per unit	£ 2,504,000			
Decontamination	£5,000	per unit	at pre-construction	£ 3,130,000		
SUDS Cost	£1,000	per unit				
Build Rate	15% plus		148	170.2	30	200.2
Contingency	3%					
Profit	20%	Private				
Profit	6%	Affordable				
Marketing	1.50%					
Sales agent	1.50%					
Sales legal fees	0.25%					
Professional fees	10%					
Finance	6.50%					
Residual Land Value	£ 19,131,763					
RLV per hectare	£ 2,235,019					

Scheme		7	Westferry (Scenario 1)		Gross Site Area		6.16
					less		
Total Units		1,212			Secondary school		1.5
Total Floor Area sq ft (GIA)		1,196,847			Net site area		4.66
Total Floor Area sq ft (NIA)		1,017,320			Density		260
Average Unit Size sq ft (GIA)		988			total units		1212
Average Unit Size sq ft (NIA)		840					121
Total Site Area		4.66					303
AH Assumptions		35% of NIA	356,062				363
							424
Appraisal Reference					ADL Appraisal v1. Site 7 24Feb12 scenario 2		
					10% 1 bed		121
					25% 2 bed		303
					30% 3 bed		363
					35% 4 bed		424
Development and Sales Period Assumptions - driven by total number of market units							
	Total Resi	AH	Market	Sales per month	sales period	years	
Scheme (net area)	1,017,320		356,062	661,258			
Scheme (units)	1,212	424		788	6	131	10.94
Purchase	9 months						
Pre-construction	9 months						
Sales start	9 months	after start of construction					
REVENUE							
Car park Spaces	40%	of total units		485	private spaces	315	value per space £15,000
Ground Rent Market units	£ 4,500		788	£ 3,543,930			
Private Sales Rate	£604	per sq ft					
Affordable Sales Rate	£150	per sq ft (blended rate)					
COSTS							
S.106 Assumptions	£4,000	per unit		£ 4,846,400			
Decontamination	£5,000	per unit	at pre-construction	£ 6,058,000	£ 1,300,000	per ha	
Build Rate	15% plus		148	170.2	30	200.2	
Contingency	3%						
Profit	20%	Private					
Profit	6%	Affordable					
Marketing	1.50%						
Sales agent	1.50%						
Sales legal fees	0.25%						
Professional fees	10%						
Finance	6.50%						
					Indicative Existing Use Value		#####
					EUV per hectare		£ 8,400,000
Residual Land Value	£ 100,992,232						
RLV per hectare	£ 21,672,153						

Scheme		7	Westferry (Scenario 2)		Gross Site Area		6.16
					less		
Total Units		1,186			local park		1.2
Total Floor Area sq ft (GIA)		1,171,164			Primary school		0.4
Total Floor Area sq ft (NIA)		995,489			Net site area		4.56
Average Unit Size sq ft (GIA)		988			Density		260
Average Unit Size sq ft (NIA)		840			total units		1186
Total Site Area		4.56					119
AH Assumptions		35% of NIA		348,421			10% 1 bed 296
							25% 2 bed 356
							30% 3 bed 415
							35% 4 bed
Appraisal Reference		ADL Appraisal v1. Site 7 24Feb12 scenario 2					
Development and Sales Period Assumptions - driven by total number of market units							
	Total Resi	AH	Market	Sales per month	sales period	years	
Scheme (net area)	995,489		348,421	647,068			
Scheme (units)	1,186	415		771	6	128	10.70
Purchase	9 months						
Pre-construction	9 months						
Sales start	9 months	after start of construction					
REVENUE				private spaces	value per space		
Car park Spaces	40%	of total units		474	308	£15,000	
Ground Rent Market units	£ 4,500		771	£ 3,467,880			
Private Sales Rate	£604	per sq ft					
Affordable Sales Rate	£150	per sq ft (blended rate)					
COSTS							
S.106 Assumptions	£4,000	per unit		£ 4,742,400			
Decontamination	£5,000	per unit	at pre-construction	£ 5,928,000	£ 1,300,000	per ha	
Build Rate	15% plus		148	170.2	30	200.2	
Contingency	3%						
Profit	20%	Private					
Profit	6%	Affordable					
Marketing	1.50%						
Sales agent	1.50%						
Sales legal fees	0.25%						
Professional fees	10%						
Finance	6.50%						
				Indicative Existing Use Value	#####		
				EUV per hectare	£ 8,400,000		
Residual Land Value	£ 84,990,571						
RLV per hectare	£ 18,638,283						

Scheme	8	Crossharbour town centre				
			Gross Site Area less	4.89		
Total Units	831					
Total Floor Area (GIA)	656,389					
Total Floor Area (NIA)	557,930		Net site area	4.89		
Average Unit Size (GIA)	790		Density	170 u.p.ha		
Average Unit Size (NIA)	671		total units	831		
Total Site Area	4.89					
AH Assumptions	35% of NIA	195276	16% 1 bed	133		
			54% 2 bed	449		
			6% 3 bed	50		
			24% 4 bed	200		
Appraisal Reference	VMP Appraisal v3. Site 8 2.11					
Development and Sales Period Assumptions - driven by total number of market units						
	Total Resi	AH	Market	Sales per month	sales period	years
Scheme (area)	557930	195276	362655			
Scheme (units)	831	291	540	6	90	8
Purchase	9 months					
Pre-construction	9 months					
Sales start	9 months	after start of construction				
REVENUE						
Car park Spaces	30%	of total units	249	private spaces	162	value per space £15,000
Ground Rent Market units	£ 4,500		540	£ 2,430,675		
Private Sales Rate	604	per sq ft				
Affordable Sales Rate	150	per sq ft (blended rate)				
COSTS						
S.106 Assumptions	£6,000	per unit	£ 4,986,000			
Decontamination	£5,000	per unit	at pre-construction	£ 4,155,000		
Build Rate	15% plus		148	170.2	30	200.2
Contingency	3%					
Profit	20%	Private				
Profit	6%	Affordable				
Marketing	1.50%					
Sales agent	1.50%					
Sales legal fees	0.25%					
Professional fees	10%					
Finance	6.50%					
Residual Land Value	£ 56,141,997					
RLV per hectare	£ 11,480,981					

Scheme	9	McGrath Site (Scenario 1)				
Total Units	152				Gross Site Area	2.67
Total Floor Area (GIA)	136,057				less	
Total Floor Area (NIA)	115,648				local park	0.5
Average Unit Size (GIA)	895				Net site area	2.17
Average Unit Size (NIA)	761				Density	70 u.p.ha
Total Site Area	2.67				total units	152
AH Assumptions	35% of NIA		40477		8% 1 bed	12
					30% 2 bed	46
					28% 3 bed	43
					34% 4 bed	52
Appraisal Reference		VMP appraisal v.2 site 9	7.10.2011			
Development and Sales Period Assumptions - driven by total number of market units						
	Total Resi	AH	Market	Sales per month	sales period	years
Scheme (area)	115648	40477	75171			
Scheme (units)	152	53	99	6	16	1
Purchase	9 months					
Pre-construction	9 months					
Sales start	9 months	after start of construction				
REVENUE						
Car park Spaces	40%	of total units	61	private spaces	40	value per space £15,000
Ground Rent Market units	£ 4,500		99	£ 444,600		
Private Sales Rate	403	per sq ft				
Affordable Sales Rate	150	per sq ft (blended rate)				
COSTS						
S.106 Assumptions	£4,000	per unit	£ 608,000			
Decontamination	£5,000	per unit	at pre-construction	£ 760,000		
Build Rate	15% plus		148	170.2	30	200.2
Contingency	3%					
Profit	20%	Private				
Profit	6%	Affordable				
Marketing	1.50%					
Sales agent	1.50%					
Sales legal fees	0.25%					
Professional fees	10%					
Finance	6.50%					
Residual Land Value	£ 2,947,644					
RLV per hectare	£ 1,103,987					

Scheme		9	McGrath Site (Scenario 2)			Gross Site Area	2.67	
Total Units		117				less		
Total Floor Area (GIA)		104,734				local park	1	
Total Floor Area (NIA)		89,024				Net site area	1.67	
Average Unit Size (GIA)		895				Density	70 u.p.ha	
Average Unit Size (NIA)		761				total units	117	
Total Site Area		2.67				8% 1 bed	9	
AH Assumptions	35% of NIA			31158		30% 2 bed	35	
						28% 3 bed	33	
						34% 4 bed	40	
Appraisal Reference		VMP appraisal v.2 site 9 7.10.2011						
Development and Sales Period Assumptions - driven by total number of market units								
	Total Resi	AH	Market	Sales per month	sales period	years		
Scheme (area)	89024	31158		57865				
Scheme (units)	117	41		76	6	13	1	
Purchase	9 months							
Pre-construction	9 months							
Sales start	9 months	after start of construction						
REVENUE				private spaces	value per space			
Car park Spaces	40%	of total units		47	30	£15,000		
Ground Rent Market units	£ 4,500		76	£ 342,225				
Private Sales Rate	403	per sq ft						
Affordable Sales Rate	150	per sq ft (blended rate)						
COSTS								
S.106 Assumptions	£4,000	per unit		£ 468,000				
Sales agent	1.50%							
Sales legal fees	0.25%							
Professional fees	10%							
Finance	6.50%							
Residual Land Value	£ 2,145,153							
RLV per hectare	£ 803,428							

Scheme		10	Neptune Wharf (Scenario 1)			
Total Units		64			Gross Site Area	2.31
Total Floor Area (GIA)		57,857			less	
Total Floor Area (NIA)		49,178			local park	1
					primary school	0.4
					Net site area	0.91
Average Unit Size (GIA)		904			Density	70 u.p.ha
Average Unit Size (NIA)		768				
Total Site Area		2.31			total units	64
AH Assumptions	35% of NIA			17212	10% 1 bed	6
					24% 2 bed	15
					29% 3 bed	18
					37% 4 bed	24
Appraisal Reference					VMP Appraisal v3. Site 10 2.11 scenario 1	
Development and Sales Period Assumptions - driven by total number of market units						
	Total Resi	AH	Market	Sales per month	sales period	years
Scheme (area)	49178	17212		31966		
Scheme (units)	64	22		42	6	7 0.58
Purchase	9 months					
Pre-construction	9 months					
Sales start	9 months	after start of construction				
REVENUE				private spaces	value per space	
Car park Spaces	40%	of total units		26	17	£15,000
Ground Rent Market units	£ 4,500		42	£ 187,200		
Private Sales Rate	403	per sq ft				
Affordable Sales Rate	150	per sq ft (blended rate)				
COSTS						
S.106 Assumptions	£4,000	per unit		£ 256,000		
Decontamination	£5,000	per unit		at pre-construction	£ 320,000	
Build Rate	15% plus		148	170.2	30	200.2
Contingency	3%					
Profit	20%	Private				
Profit	6%	Affordable				
Marketing	1.50%					
Sales agent	1.50%					
Sales legal fees	0.25%					
Professional fees	10%					
Finance	6.50%					
Residual Land Value	£ 1,050,868					
RLV per hectare	£ 454,921					

Scheme		10	Neptune Wharf (Scenario 2)				
Total Units		92			Gross Site Area	2.31	
Total Floor Area (GIA)		83,367			less		
Total Floor Area (NIA)		70,862			local park	0.6	
					primary school	0.4	
					Net site area	1.31	
Average Unit Size (GIA)		906			Density	70 u.p.ha	
Average Unit Size (NIA)		770					
Total Site Area		2.31			total units	92	
AH Assumptions		35% of NIA		24802	10% 1 bed	9	
					24% 2 bed	22	
					29% 3 bed	27	
					37% 4 bed	34	
Appraisal Reference		VMP appraisal v.2 site 10 7.10.2011					
Development and Sales Period Assumptions - driven by total number of market units							
	Total Resi	AH	Market	Sales per month	sales period	years	
Scheme (area)	70862	24802		46060			
Scheme (units)	92	32		60	6	10 0.83	
Purchase	9 months						
Pre-construction	9 months						
Sales start	9 months	after start of construction					
REVENUE				private spaces	value per space		
Car park Spaces	40%	of total units		37	24	£15,000	
Ground Rent Market units	£ 4,500		60	£ 269,100			
Private Sales Rate	403	per sq ft					
Affordable Sales Rate	150	per sq ft (blended rate)					
COSTS							
S.106 Assumptions	£4,000	per unit		£ 368,000			
Decontamination	£5,000	per unit		at pre-construction	£ 460,000		
Build Rate	15% plus		148	170.2	30	200.2	
Contingency	3%						
Profit	20%	Private					
Profit	6%	Affordable					
Marketing	1.50%						
Sales agent	1.50%						
Sales legal fees	0.25%						
Professional fees	10%						
Finance	6.50%						
Residual Land Value	£ 1,686,332						
RLV per hectare	£ 730,014						

Scheme		11	News International (Option 2)			
Total Units	868				Gross Site Area	5.78
Total Floor Area sq ft (GIA)	857,858				less	
Total Floor Area sq ft (NIA)	729,179				local park	0
					primary school	0.4
					Net site area	5.38
Average Unit Size sq ft (GIA)	988				Density	161 u.p.ha
Average Unit Size sq ft (NIA)	840				total units	868
Total Site Area	5.38				10% 1 bed	87
AH Assumptions	35% of NIA		255,213		25% 2 bed	217
					30% 3 bed	261
					35% 4 bed	304
Appraisal Reference		ADL Appraisal v1. Site 11 12Feb12 Option2				
Development and Sales Period Assumptions - driven by total number of market units						
	Total Resi	AH	Market	Sales per month	sales period	years
Scheme (net area)	729,179		255,213	473,967		
Scheme (units)	868	304		564	6	94 7.84
Purchase	9 months					
Pre-construction	9 months					
Sales start	9 months	after start of construction				
REVENUE				private spaces	value per space	
Car park Spaces	32%	of total units		274	178	£15,000
Ground Rent Market units	£ 4,500		564	£ 2,540,165		
Private Sales Rate	£604	per sq ft				
Affordable Sales Rate	£150	per sq ft (blended rate)				
COSTS						
S.106 Assumptions	£4,000	per unit		£ 3,473,730		
Decontamination	£0	per unit		at pre-construction	£ -	£ - per ha
Build Rate	15% plus		148	170.2	30	200.2
Contingency	3%					
Profit	20%	Private				
Profit	6%	Affordable				
Marketing	1.50%					
Sales agent	1.50%					
Sales legal fees	0.25%					
Professional fees	10%					
Finance	6.50%					
				Indicative Existing Use Value	£ 48,552,000	
				EUV per hectare	£ 8,400,000	
Residual Land Value	£ 46,759,901					
RLV per hectare	£ 8,691,431					

Scheme		12	Bow Common Gas Works			
Total Units		390			Gross Site Area	3.94
Total Floor Area sq ft (GIA)		385,191			less	
Total Floor Area sq ft (NIA)		327,412			local park	0
					primary school	0.4
					Net site area	3.54
Average Unit Size sq ft (GIA)		988			Density	110 u.p.ha
Average Unit Size sq ft (NIA)		840				
Total Site Area		3.54			total units	390
AH Assumptions	35% of NIA		114,594		10% 1 bed	39
					25% 2 bed	97
					30% 3 bed	117
					35% 4 bed	136
Appraisal Reference		ADL Appraisal v1. Site 12 12Feb12				
Development and Sales Period Assumptions - driven by total number of market units						
	Total Resi	AH	Market	Sales per month	sales period	years
Scheme (net area)	327,412		114,594	212,818		
Scheme (units)	390	136		253	6	42 3.52
Purchase	9 months					
Pre-construction	9 months					
Sales start	9 months	after start of construction				
REVENUE						
Car park Spaces	32%	of total units		123	private spaces	80 value per space £15,000
Ground Rent Market units	£ 4,500		253	£ 1,140,572		
Private Sales Rate	£403	per sq ft				
Affordable Sales Rate	£150	per sq ft (blended rate)				
COSTS						
S.106 Assumptions	£4,000	per unit		£ 1,559,756		
Decontamination	£2,727	per unit		at pre-construction	£ 1,063,225	£ 300,346 per ha
Build Rate	15% plus		148	170.2	30	200.2
Contingency	3%					
Profit	20%	Private				
Profit	6%	Affordable				
Marketing	1.50%					
Sales agent	1.50%					
Sales legal fees	0.25%					
Professional fees	10%					
Finance	6.50%					
					Indicative Existing Use Value	£ 8,274,000
					EUV per hectare	£ 2,100,000
Residual Land Value	£ 7,470,004					
RLV per hectare	£ 2,110,171					