

Borough of Wirral

Final Report September 2010



Executive summary

Introduction

- S1 Fordham Research was commissioned by Wirral Council to carry out a study of affordable housing viability. The Viability Study is intended to inform ongoing work on the preparation of the Local Development Framework (LDF).
- S2 Government Guidance in Planning Policy Statement 3: Housing (PPS3, 2006, para 29) requires Councils to set a *'Plan-wide'* affordable housing target, and to test this for *'deliverability'* by means of the *'economic viability of land for housing within the area'*.

Summary findings

- S3 We have taken a strategic approach ensuring in particular that the sites were treated consistently. This is because the analysis is designed to test and demonstrate Plan-wide deliverability in line with the requirements in national guidance. This work is a strategic study designed to inform the development of Plan policy, rather than an exercise to predict as accurately as possible the actual financial outcomes of development on specific sites. The actual sites used in the study should only be regarded as indicating more general patterns of development across the study area.
- 54 The results from the appraisals indicate that at current market values and costs it would be possible to sustain a target of 20% affordable housing, with zero public grant, over most of the area. That is the safe assumption at present, but it is open to the Council to state a 'Plan-long' strategic target including whatever grant assumptions seem reasonable over the longer term. This could, for instance, be the same as the 40% target suggested in the SHMA Update (2009).

The approach to valuation

S5 The study involved preparing financial appraisals for a representative range of sites. These appraisals assessed the capacity of such sites throughout the area to support different levels of affordable housing. The approach was to 'model' viability using a range of variables and our bespoke spreadsheet software.

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S6 It was decided that for Wirral the required guidance on viability would best be achieved by looking at a range of site sizes, and at sites that were actual rather than notional. In discussion with the Council, it was decided that a total of 15 representative sites should be examined. This number included two HMRI programme sites (normally dependent on grant to achieve viability) for completeness, though the results from these were not used to inform policy. The final 15 were distilled from a wider original sample.



Figure S1 Sites used for the broad brush viability assessment

Source: Fordham Research 2010

S7 The key features were:

- A final list of sites was established in discussion with the Council. It was chosen to give a range of typical development situations, an appropriate balance between previous uses, a range of site sizes and to give coverage across the major sub-areas of Wirral.
- The sites ranged in size from 18 to 150 dwellings. The sites came from across the four main sub-areas of Wirral used in the Strategic Housing Market Assessment
- iii) The sites were at various stages in the development process
- iv) All but four (para 2.12) sites had been subject to a planning application



- S8 The inclusion of sites without planning permission within this study report should not be taken as a Council endorsement of their future development
- S9 The site locations are shown in Figure S1. They total just under 1,000 dwellings
- S10 A wide range of data was collected about housing in Wirral: this included prices, rents and land values. The map below illustrates house price variations across the Council area, comparing prices in each postcode sector to the national average level. The map conveys the immediate point that prices in the Housing Market Renewal areas are quite different from those elsewhere in the Borough. This has implications for affordable housing target setting, discussed below.



Figure S2 Postcode price indices

Source: Fordham Research 2010

Note: indices compare prices in each postcode sector to an overall value for England & Wales

Testing sites for viability assessment

- S11 In order to provide reliable evidence on deliverability, the sites were to be examined under a range of assumptions about the key factors affecting viability:
 - i) Affordable housing target levels of 0%, 10%, 20%, 30%, and 40%

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- ii) The base assumption was 'zero grant' but we also included analysis using typical historic levels of grant.
- iii) Affordable housing split: 80% social rented and 20% intermediate
- iv) Land values for alternative uses for the sites: clearly the site viability cannot plausibly fall below the level of alternative use, and so this must be established
- v) The calculations consider levels of developer contributions ('planning gain') consistent with current policy
- vi) Level 3 of the Code for Sustainable Homes (CSH) was assumed
- vii) Abnormal costs were assessed and the figures taken into account where information collected for the sites indicated they were likely.
- S12 The appraisals considered viability for two variant scenarios with regard to future changes in price and cost levels. The first reflected a short-term decline (prices falling 10% relative to build) and the second a return to conditions equivalent to the autumn 2007 market peak (prices rising 18 19% and costs falling by 6 7%). We also considered the impact of different assumptions for tenure split.
- S13 Clearly this range of elements generated a large range of possible outcomes. Those outcomes were assessed through our bespoke valuation methodology to indicate 'residual land values'. This is the standard approach, and assumes that all costs and returns are measured, except for the land value outcome. The latter is the key variable. It can then be compared with other scenarios and with alternative use values. The latter are most commonly agricultural in rural areas and industrial/warehousing in urban locations.



Appraisal outcomes

- S14 To assess viability, the value of the land for the particular residential scheme adopted needs to be compared to the alternative use value to determine if there is another use which would derive more revenue for the landowner. If the assessed value does not exceed the alternative use value then the development is not viable. If the excess above alternative use value (the 'cushion') is sufficiently large the development is judged viable; if not, then it is classed as marginal.
- S15 For the purpose of a strategic study like the present one it is necessary to take a comparatively simplistic approach to determining the alternative use value. In practice a wide range of considerations could influence the precise value that should apply in each case, and at the end of extensive analysis the outcome might still be contentious.
- S16 Our 'model' approach to alternative use value is outlined below:
 - i) For sites previously in agricultural use, then agricultural land represents the existing use value.
 - ii) Where the development is on former industrial, warehousing or similar land, then the alternative use value is considered to be industrial, and an average value of industrial land for the area is adopted as the alternative use value.
 - iii) Where the site is occupied by buildings capable of beneficial use we would estimate their broad value
 - iv) Existing use as garden land would have a value greater than agricultural but significantly less than industrial, unless it could feasibly be developed in an industrial or commercial use.



S17 The level of the 'cushion' was set at £25,000 per acre – some 20% of the industrial/warehousing benchmark value. Applying this approach, the results for the 13 non-HMRI programme sites are shown in the table below:

Table S1 Appraisal outcomes: base appraisals, without grant									
				Value	£k per acre				
No	Site	Alt use value	No affordable	10%	20%	30%	40%		
1	Whitfield Ln	10	604	499	393	286	178		
		35	VIABLE	VIABLE	VIABLE	VIABLE	VIABLE		
2	Leasowe Primary	100	387	287	185	83	-22		
		125	VIABLE	VIABLE	VIABLE	NOT VIAB	NOT VIAB		
3	Hoylake Road	200	215	90	-43	-177	-313		
		225	MARGINAL	NOT VIAB	NOT VIAB	NOT VIAB	NOT VIAB		
4	Beechwood	100	139	76	12	-56	-124		
		125	VIABLE	NOT VIAB	NOT VIAB	NOT VIAB	NOT VIAB		
5	Carlett Park	160	701	558	416	271	127		
		185	VIABLE	VIABLE	VIABLE	VIABLE	NOT VIAB		
6	Lewis Reed	160	128	22	-88	-201	-314		
		185	NOT VIAB	NOT VIAB	NOT VIAB	NOT VIAB	NOT VIAB		
7	Former Primary Sch	100	392	250	108	-41	-191		
		125	VIABLE	VIABLE	MARGINAL	NOT VIAB	NOT VIAB		
9	Marymount Convent	100	126	-6	-142	-281	-421		
		125	VIABLE	NOT VIAB	NOT VIAB	NOT VIAB	NOT VIAB		
10	50-94 Whitford Road	0	271	183	95	4	-90		
		25	VIABLE	VIABLE	VIABLE	MARGINAL	NOT VIAB		
12	Black Horse Hill	180	481	270	50	-176	-405		
		205	VIABLE	VIABLE	NOT VIAB	NOT VIAB	NOT VIAB		
13	Builders Yard	365	794	406	2	-415	-833		
		390	VIABLE	VIABLE	NOT VIAB	NOT VIAB	NOT VIAB		
14	Warren Point	300	357	187	12	-169	-350		
		325	VIABLE	NOT VIAB	NOT VIAB	NOT VIAB	NOT VIAB		
15	Vauxhall Dealership	200	233	-19	-277	-539	-804		
		225	VIABLE	NOT VIAB	NOT VIAB	NOT VIAB	NOT VIAB		

Source: Affordable Housing Viability Study 2010. This table is Table 6.4 of the main report



S18 The results can be summarised as follows:

Table S2 Viability results summary								
	No of sites in category with affordable at:							
	No aff	10%	20%	30%	40%			
Viable	11	7	4	2	1			
Marginal	1	0	1	1	0			
Not viable	1	6	8	10	12			
Total	13	13	13	13	13			

Source: Affordable Housing Viability Study 2010. Table 6.5 of the main report

S19 There are considerable geographical differences that can be seen in the table below that breaks the results down into the RSS Sub-Areas used in the SHMA Update.

Table S3 Viability results summary – By RSS Sub-area										
	N	No of sites of viable sites in category with affordable at:								
	No aff	10%	20%	30%	40%					
Inner Area	3	2	0	0	0					
Outer Area	5	3	3	1	0					
Rural Area	3	2	1	1	1					
Total	11	7	4	23	1					

Source: Affordable Housing Viability Study 2010. Table 6.6 of the main report.

- S20 Sensitivity testing suggests that at conditions much closer to the peak viability level of autumn 2007 four rather than one site would have been viable at 40% of affordable housing. By the same token, a further 10% price drop would make things much worse than at present.
- S21 If typical levels of public subsidy (grant) were to be maintained in future, then a higher target could be considered. But it is not clear at present that this would be a sensible course of action.

Suggested affordable target

- S22 The sharp difference between the Inner (HMRI) area and the rest of Wirral suggests that differential targets should be applied:
 - i) For Rural and Outer parts of Wirral: a target of 20% is feasible without grant
 - ii) For the Inner/HMRI area a target of 10% is feasible without grant

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- S23 Although PPS3 asks for a 'Plan-wide' target, it is not realistic to expect a single target to work across Wirral: a part of the Council area is essentially outside the normal market by the definition of the regeneration programmes carried out in the HMRI areas. Hence we would suggest two targets as feasible for use in planning negotiations now, as broad brush targets. Detailed viability evidence may come forward on particular sites.
- S24 In order to meet the PPS3 requirement, and to address the fact that some grant is likely to be available, we would suggest a third target: a Plan-long aspirational target of 40%, including grant.
- S25 This takes account of the target generated by the housing needs analysis in the original SHMA and Update: 40% as well as the general point that grant is likely to be available, but in currently unforeseeable amounts.

Size thresholds

- S26 The national minimum threshold for site sizes to which affordable targets apply is 15 dwellings (PPS3), but provision is made for lower thresholds where appropriate. None of the 15 sites in the main appraisals was under 15 dwellings and in order to provide guidance on this issue we modelled a suite of notional sites ranging in size from four to 15 dwellings, with characteristics based on one of the larger actual sites.
- S27 The results of the appraisals suggested that there is indeed scope for reducing thresholds. We concluded that a 20% target in line with the area-wide one, could be sustained down to five dwellings.

Dynamic Viability analysis

S28 This is designed to overcome a dilemma created by the economic downturn. During the history of affordable housing targets since their creation in 1991 there had been a broadly rising market. This meant that targets could rise also, and reach their pre-crash level of quite commonly around 40% to 50%. The upper limit for any target in Wirral is given by the SHMA: 40%. This is the upper limit for the range of variation under Dynamic Viability.



- S29 The downturn following the credit crunch meant that targets had to be lowered. It was always a condition of such targets that they should not render the market housing developments to which they applied unviable.
- S30 There has been no practical suggestion for the way in which affordable housing targets should be treated given their fall in the recession. Many alternative scenarios for future price/cost movements can be generated, but that does not point to a single target. PPS3 is quite clear that there should be a Plan-wide target. Targets cannot be substantially changed through supplementary guidance after the Core Strategy Examination. If a high ('normal market') target were set it would be correctly attacked as undeliverable, and thus contradict the Blyth Valley Court of Appeal decision which requires that targets should be deliverable.
- S31 Fordham Research has therefore devised a system which permits deliverable targets to be set, regardless of future fluctuations in the market, using sets of price and cost indices. It means that the Core Strategy Examination can be presented with the full range of possible target outcomes, and once approved (in whatever form) no new policy change is required to alter the target. It is changed only by the movement of published indexes. The intervals at which it is changed must be infrequent enough to permit an orderly land market, thus perhaps annually.
- S32 In order to generate the data below it is necessary to agree a Benchmark Site. This is necessary to permit a reasonably simple outcome. In the case of Wirral the chosen site is a modified version of Site 2: Leasowe Primary. The Benchmark site is intended to be representative of future housing development in Wirral. This site is of about 130 dwellings, and sites around 100 dwellings are expected to be typical of future development. This site could carry nearly 30% of affordable housing, but was 'modelled' so that it could just carry the target level of 20% making the Benchmark site suitably representative.
- S33 The mechanism for producing the target ranges is quite complex. It builds on the viability analysis set out in the summary above. It then examines the full range of possible cost and price changes and generates a matrix of possible affordable targets.
- S34 The 20% cell (in grey) in Figure S3 is the recommended deliverable target for market areas of Wirral. The indexes of cost and price shown in the margins of the table allow future changes in the published indexes to be translated into target changes.



	Price Change HPI											
	%		-20%	-10%	0%	10%	20%	30%	40%	50%	60%	
Х Х			401.4	451.5	501.7	551.9	602.0	652.2	702.4	752.6	802.7	
nge BCIS Inde	-20%	229.8	20%	35%	45%	55%	55%	55%	55%	55%	55%	
	-10%	258.6	0%	20%	35%	45%	50%	55%	55%	55%	55%	
	0%	287.3	0%	0%	20%	30%	40%	45%	50%	55%	55%	
	10%	316.0	0%	0%	0%	20%	30%	35%	45%	50%	50%	
Cha	20%	344.8	0%	0%	0%	5%	20%	25%	35%	40%	45%	
ost	30%	373.5	0%	0%	0%	0%	5%	15%	25%	35%	40%	
ŏ	40%	402.2	0%	0%	0%	0%	0%	10%	15%	25%	30%	
	50%	431.0	0%	0%	0%	0%	0%	0%	10%	15%	25%	

Figure S3 Wirral coarse matrix with base alternative use value

Source: Wirral Affordable Housing Viability Study, Fordham Research 2010

- S35 The Coarse Matrix shows 10% intervals in the indexes. This is useful because it allows a wide range of variation in the indexes to be shown at a convenient scale: a wider range of variation than is expected over the whole Plan period.
- S36 But the target changes in the Coarse Matrix are as a result quite large: 10-15%. This seems too big a jump for what may be an annual change in the target. Hence we have produced a Fine Matrix shown below. This is based on 4% changes in the indexes rather than 10%.

	Figure S4 Wirral fine matrix with base alternative use value										
Price Change HPI											
	%		-8%	-4%	0%	4%	8%	12%	16%	20%	24%
X			461.6	481.6	501.7	521.8	541.8	561.9	582.0	602.0	622.1
SIS Inde	-8%	264.3	20%	25%	30%	35%	40%	40%	45%	50%	50%
	-4%	275.8	10%	20%	25%	30%	35%	35%	40%	45%	45%
BO	0%	287.3	5%	10%	20%	25%	30%	30%	35%	40%	40%
nge	4%	298.8	0%	5%	10%	20%	25%	25%	30%	35%	40%
Cha	8%	310.3	0%	0%	5%	10%	20%	20%	25%	30%	35%
ost	12%	321.8	0%	0%	0%	5%	10%	20%	20%	25%	30%
ŭ	16%	333.3	0%	0%	0%	0%	5%	15%	20%	20%	25%
	20%	344.8	0%	0%	0%	0%	0%	10%	15%	20%	20%

Source: Wirral Affordable Housing Viability Study, Fordham Research 2010



- As can be seen, in the Fine Matrix the target shifts are normally about 5% within the body of the table and represent manageable levels of change. By way of example, the House Price Index (HPI) was 501.7 at the date of the survey, and the buildings cost index (BCIS) was 287.3. If by the next (annual) inspection the BCIS remained nearer to 287.3 than to the figures above and below it, and the HPI had moved to 520, then the target would move to 25%. The figure of 520 is clearly nearer to 521.8 (the next column heading on the right of the base one) than to the original 501.7. Hence the change. The change could, of course, be in any direction depending on the movement of the two indexes.
- S38 The detail of this approach is set out in Chapter 9. The main point is that the Dynamic Viability matrices will ensure that all future changes in the housing market are tracked by deliverable affordable housing targets.



Figure S5 Gain of Affordable Housing from Dynamic Viability

Note: This diagram is illustrative only and does not apply to specifically to Wirral Source: Fordham Research 2010:

- S39 This figure also shows that the landowners/developers will gain from any uplift in the market (the 40% pre-credit crunch target shown is general and not specific to Wirral). The basic viability assessment assures the landowner and the developer of a reasonable return. When the market goes up, the private sector will gain a windfall profit (shown by the blue areas under the viability curve) and the public interest will gain affordable housing as the targets are periodically altered.
- S40 The Dynamic Viability procedure ensures that the maximum of deliverable affordable housing is achieved.

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Stakeholder involvement

S41 A stakeholder event was held at the end of July 2010, prior to finalising the report (more detail is provided in Appendix 6). This is normal practice with such studies. There is not very much point in contacting stakeholders until they can see the results and comment upon them. There was a good turnout of both house builders, RSLs and others, as well as a good detailed discussion. There was comment on the very large Peel Holdings scheme of 15,000 plus dwellings, including a large number of apartments (Wirral Waters). This had not been included in the analysis as it is highly untypical of future development, and would require a much more detailed study than this one to assess its viability. The representative of Peel Holdings stated, in any event, that it was not at present a viable scheme. There was an informed discussion between the participants of the difficulties of both developers and RSLs in producing workable affordable housing schemes. There were no substantial criticisms of the viability study.



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List of abbreviations

£k	thousand pounds
£m	million pounds
dw	dwelling
dwgs	dwellings
ft	foot
ha	hectare
m	metre
sq	square
Q1	Quarter 1
LA	Local Authority



1. Introduction

Introduction

1.1 Fordham Research has been commissioned by Wirral Council to produce guidance on the financial viability implications of alternative targets and site size thresholds for affordable housing provision within the Metropolitan Borough.

Context

1.2 The context for this study consists of the Government guidance and the broad principles of viability analysis which has existed, in some form, since land has been bought and sold.

Guidance

- 1.3 The national guidance in Planning Policy Statement 3: Housing 2006 (PPS3) requires Councils to set a target for the proportion of affordable housing to be delivered through new developments. The recently updated Strategic Housing Market Assessment (SHMA) was intended to provide guidance on the target levels for affordable housing that could be justified by the analysis of the area's housing requirements.
- 1.4 This SHMA was based on an assessment of the balance between the need for market housing and the need for affordable housing but did not take into account the commercial factor i.e. what is viable and what it is realistic to ask developers to provide. Whilst a target of 40% may be the appropriate figure to balance the overall housing market over time it may not be the appropriate deliverable target under current market conditions.
- 1.5 The purpose of the present study is to enable Wirral Council to set a robust affordable housing target in the light of current commercial circumstances in Wirral. This target is just that – a target. The actual amount of affordable housing required on any particular site must be assessed for that actual site and take into account the peculiar factors of developing that site at that point in the economic cycle.
- 1.6 PPS3 has been supplemented by the Homes and Communities Agency (HCA) in a Good Practice Note: *Investment and Planning Obligations: Responding to the Downturn* (July 2009).



1.7 This study is designed to set the percentage target for affordable housing requirements in an informed way. Given the pattern of housing market conditions since late 2007, and more particularly a general expectation that house prices may continue to fall for some time to come, or may rise, it will be necessary for any proposed target to be reviewed regularly so to reflect the resulting changes in the profitability of development.

The land market

1.8 The availability and cost of land are matters at the core of the viability for any development of new houses. The format of a typical valuation is:

Gross Development Value (The combined value of the complete development)

LESS

Cost of creating the asset, including a profit margin (Construction + fees + levies (CIL, s106) + finance charges)

=

RESIDUAL LAND VALUE

1.9 The result of the calculation indicates a land value, which acts as the top limit of what a bidder could offer for that site. In this study we use the procedure in reverse:

Given the likely land values, will a development including an X% target for affordable housing be viable?

- 1.10 The calculation involves the same basic information but is designed for a different purpose. The 'likely land value' is difficult to assess as a landowner will rarely disclose the price that would be acceptable. This is one of the areas where an informed assumption has to be made about the 'cushion': the margin above the 'existing use value' which would make the landowner sell.
- 1.11 This study does not attempt to assess the specific price that could or should be paid for each site. Instead, the appraisal calculates what land on a site may be worth if a range of scenarios were to occur, and then compares that amount with its value in some other use to which it could be put. Nor does this study attempt to predict when a landowner may sell the land, or even if they will sell, since that is a personal and site specific matter.



Reasons for this study

1.12 PPS3: Housing (2006) states that affordable targets should:

"...reflect an assessment of the **likely** economic viability of land for housing within the area, taking account of the risks to delivery and drawing on informed assessments of the likely levels of finance available for affordable housing, including public subsidy and the level of developer contribution that can reasonably be secured." (S29) (Our emphasis)

1.13 Following the Court of Appeal decision of August 2008 over the Blyth Valley Core Strategy Inspector's decision it is now accepted that:

'There is now a duty on every local authority to ensure that any affordable housing target is broadly deliverable within the area.'

- 1.14 The word 'likely' in the above quotation from PPS3 is taken to mean that the duty is 'broad brush', in that a typical site within the local authority area should be able to bear whatever target is set. Some sites within the area will not be able to do so, but developers will still be able to make specific submissions at the planning applications stage.
- 1.15 The date at which this new duty was expounded by the Court coincided with the "credit crunch" downturn. This has had the effect of reducing the profitability of new housing developments, and hence their viability. This situation is shown schematically in the figure below:



Source: Fordham Research 2010



- 1.16 The diagram shows that where once a 40% affordable housing target was easily viable, at the time shown in the diagram only a 15% target is viable. Projected future improvements in viability mean that at various times in the future 25% and 30% targets may be viable.
- 1.17 The situation depicted in Figure 1.1 has caused difficulty in setting targets. The Homes and Communities Agency (HCA) Good Practice Guidance (July 2009) now sets out (in paragraph 19) two alternative bases for target setting:
 - i) Set the target to the minimum (probably current) level of viability: 15% in the example. This would evidently under-provide affordable housing when taken over a Plan period.
 - ii) Set the target for a 'normal' market and treat it as flexible.
- 1.18 The second approach is based on an unpublished note from the Planning Inspectorate. The Good Practice note advises its use. But the resulting target would not be robust:
 - i) The concept of the 'normal' market is unsound. Prices have always varied, and it is not possible to state which of them is 'normal'. Prices rose unevenly for the whole period 1991 to 2007, but no part of the curve can be labelled 'normal'.
 - ii) In the present recession there is no agreement as to how long it will last, and what the curve of viability over time (as illustrated in Figure 1.1) will look like. Falls in prices have steadied however, there is no clear trend with rises and falls being reported from month to month. In short, any 'normal market' target is likely to be undeliverable for much of its life. Some attempts to set a 'normal' target have been based on the 2007 peak. It is, however, now widely accepted that these conditions are unlikely to ever be repeated and that the cost and price environment will be quite different in future (e.g. due to the need to meet increasing environmental requirements and the more limited access to credit (mortgages)). There is on this basis no safe rule for guessing a 'deliverable' target for a 'normal' market.
- 1.19 The 'normal' market target would therefore be vulnerable to S78 appeal, and applicants who went to appeal to argue that it was 'undeliverable' would be likely to succeed, throughout much of the lifetime of the target. Such targets are therefore neither robust nor sensible to set.
- 1.20 A Dynamic Viability model has been constructed by Fordham Research to provide a third option: affordable targets that are both deliverable and provide a reasonable maximum of affordable housing.

What this means for the study

1.21 This study is in two stages: the first is standard viability analysis (Chapters 2-8); the second stage the application of the Dynamic Viability analysis (Chapter 9).



Stage 1 viability methodology

- 1.22 The Stage 1 viability methodology is illustrated in Figure 1.2 below. It involves preparing financial appraisals for a representative range of sites across the study area.
- 1.23 The appraisals tested alternative levels of affordable housing provision: in each case a combination of social rented and intermediate housing. The likely purchase prices RSLs would pay for units in each category were considered. Assumptions were made about the scale of developer contributions that were likely to be sought under other headings such as education and open space.
- 1.24 The local housing market has been surveyed to obtain a picture of typical sales values for market housing. We also surveyed land values for residential development and for other land uses, to calibrate the appraisals and for other uses, to assess alternative use values. Alongside this we considered local development patterns, to arrive at appropriate built form assumptions for sites where information from an extant planning permission or current application was not available. These in turn informed the appropriate build cost figures.





Source: Fordham Research 2010



- 1.25 A number of other technical assumptions were required before appraisals could be produced. The appraisal results are expressed in the form of £ per acre/ha 'residual' land values, showing the maximum value a developer could pay for the site and still return a target profit level.
- 1.26 Finally, the residual value was compared to the benchmark alternative use value for each site. Only where the residual value exceeded the benchmark figure by a satisfactory margin (the 'cushion'), could the scheme be judged to be viable.

Fordham Research

- 1.27 Fordham Research has been providing advice to Councils in respect of planning gain and development viability since the late 1980s. The firm's approach throughout this time has involved the preparation of financial appraisals. Over the last few years in particular Councils have increasingly commissioned the firm to evaluate financial appraisals which have been prepared by developers in order to support a case for a reduced affordable housing contribution, for enabling development and so on.
- 1.28 Since 1993 Fordham Research has become a leading consultancy in carrying out Housing Needs Surveys and more recently the more wide-ranging Strategic Housing Market Assessments that have largely replaced them and advising Councils on affordable housing policy issues.
- 1.29 Since that time the firm has assisted Councils on very many occasions by providing expert witness services at Local Plan and S78 Inquiries successfully supporting housing need and affordable housing policies. Particularly in recent years this has regularly included evidence in respect of viability issues.

Structure of this report

- 1.30 The remainder of the report covers the following topics:
 - Chapter 2 The individual development sites
 - Chapter 3 Affordable housing and developer contributions assumptions
 - Chapter 4 Local market conditions
 - Chapter 5 Assumptions for viability analysis
 - Chapter 6 Results of viability analysis
 - Chapter 7 Implications of viability results
 - Chapter 8 Threshold modelling
 - Chapter 9 Dynamic viability



2. Individual development sites

Introduction

2.1 This chapter deals with the sites identified for appraisal by first outlining the key characteristics of each site and then considering the assumptions made about proposed development upon each site for the purpose of producing a financial appraisal. The individual sites chosen were visited at an early stage in the work.

The Metropolitan Borough

- 2.2 Wirral displays a varied housing market, with a mixture of historic areas and more modern estates. It is the location of historic urban areas such as Hamilton Square which contains the largest collection of Grade 1 listed buildings in the country. However, prosperous areas in the west contrast with the more densely developed and much less prosperous urban areas in the east of the Borough.
- 2.3 The following, edited from the Council's website, describes the main characteristics of the Borough:

WIRRAL is a peninsula of 60.35 square miles which lies between the estuaries of two rivers.

It is an area of contrasts, with sandy beaches, a magnificent coastline, mountain views, country lanes, woodland and the peace of nature reserves, as well as thriving businesses, shopping centres, and a vibrant arts, culture and entertainment scene.

Central Birkenhead is the focus for Wirral's retail trade and has benefited from major regeneration schemes funded by resources from central government and the European Commission.

Liscard Precinct in nearby Wallasey is the other main shopping centre, with local centres in smaller towns such as Upton, Prenton, New Ferry, Moreton, Hoylake, West Kirby, Bebington, Greasby, Heswall and Bromborough, as well as out of centre shopping areas like the South Wirral Retail Park in Bromborough.

Historic locations in Wirral include Birkenhead Priory, the oldest building in Merseyside. It was granted a Royal Charter in 1330 and was the site of the first Mersey Ferry. Port Sunlight is a fascinating example of Victorian industrial philanthropy. The village was built by the first Viscount Leverhulme for his workers, as was much of Thornton Hough.



Industries tend to be in the eastern half of the peninsula, with docklands and a Freeport in Birkenhead and Wallasey. Major industries are also based in Port Sunlight, Bromborough and Eastham. While the western side is famous for its countryside and coastal walks, wildlife, sandy shores, promenades, and water sports.

WIRRAL is home to 312,293 people, (Census 2001) with a total electorate of 248,043. 30.4 per cent of Wirral's population is under the age of 25 and 18.1 per cent are over 65.

The Metropolitan Borough of Wirral was created in the 1974 local government reorganisation when it became part of Merseyside. Before then Wirral was made up of five Boroughs based on the old County Boroughs and was part of Cheshire. Wirral is now the third largest metropolitan authority in the northwest.

It was Cammell Laird and Lever Brothers that were the prime movers of Wirral's industrial heritage, and port-related activities which formed the mainstay of the local economy.

Wirral docks have also seen dramatic changes and international links have established Birkenhead as an important shipping centre. The docks play a vital role in Wirral's economy, where today new enterprise flourishes and businesses prosper in this "peninsula of opportunity".

Context of Wirral within the City Region

2.4 Wirral forms part of the urban core of the Liverpool City Region. The Pathfinder areas (see below) are focused on south Wallasey and Birkenhead that lie at the older urban heart of the Wirral.



Figure 2.1 Summary of the regional context of Wirral

The City Region Authorities Possess Diverse Attributes

The City Region comprises the Core City of Liverpool and local authority districts of St.Helens, Wirral, Knowsley, Sefton, and Halton plus the adjacent areas of Warrington, Chester, Ellesmere Port and Neston (West Cheshire), and North Wales (across to Denbighshire and down to Wrexham) and West Lancashire (beyond Skelmersdale and north to Burscough). The Liverpool City Region has a population of 2 million people. There are also strong economic inter-relationships with the Manchester City Region. Its markets interact over a much wider catchment area; 6.75 million people live within 60 minutes drive time from Liverpool City Centre.

Liverpool

Historically a centre for international trade and manufacturing, the core city is now the key driver for the economy of the City Region. Liverpool is the commercial, retail and transport hub, retaining its role as a key maritime city, offering an outstanding range of cultural and tourism assets, having a strong cultural identity and a growing sense of vibrancy and optimism.

Urban Core of the City Region



North Wales

Flintshire and Wrexham have achieved significant economic success over the past two decades. This has been due to the growth of key large employers, notably Airbus at Broughton, development of a European-scale business park at Deeside and investment by international businesses at Wrexham Industrial Estate. A key factor has been the ability of individuals, businesses and communities in NE Wales and NW Cheshire to take part in and exploit the huge choice of employment opportunities both within NE Wales, Cheshire, Merseyside and the NW of England.

Ellesmere Port and Neston

Have key sector and industrial strengths which add diversity to the City Region economic development portfolio, including automotive and advanced chemicals as well as linkages with North Wales.

West Lancashire

Primarily Skelmersdale provides a key access point into the Liverpool City Region via the M58 corridor, and is important both as a provider of business locations and as contributing to the wider labour market and housing offer. Ormskirk provides a market town level service centre for the LCR with rural parts of West Lancashire providing a key cluster of agricultural, horticultural and environmental assets.

Sefton

As well as being a strong part of the City Region's residential offer, Sefton contains key assets in its unique coastal landscape, habitat and the classic resort of Southport. It is also the location of the Seaforth container base - the primary port of the Mersey.

Knowsley and St. Helens

Provide the City Region with key infrastructure in terms of the labour market, investment locations and business base of the City Region. In recent years the business base is growing, with strong private sector backing, strong investment performance and efforts to drive up both innovation and entrepreneurship.

Halton

Halton's economy is diversifying and Halton is developing a strong foundation in biosciences and new technologies. These sectors readily complement Halton's continuing importance to the national chemical industry.

Chester

At the heart of one of the most productive areas of the North of England, it has an established and balanced knowledge economy, a strong financial services sector and an outstanding retail, tourism and heritage offer. The surrounding areas of north Cheshire provide key housing locations and quality of life that feeds the development of the knowledge economy across LCR and Manchester.

Wirral

Alongside Liverpool as the maritime centre of the North West, Wirral's waterfront location is driving investment, growth and an outstanding quality of life. Wirral also has strong labour market links with economic strengths in the south of the City Region.

Warrington

Grown significantly since its establishment as a new town, it is located midway between Liverpool and Manchester, and positioned well in terms of North/South transport links, it has evolved as a competitive location for the service sector and advanced manufacturing activities.

Source: Liverpool City Region Development Plan Report, 2006: Executive Summary



Housing markets

2.5 The majority of the population live in the more densely developed urban areas in the east of the Borough. While housing markets within the east have shown serious signs of market failure, settlements in the west side of the Borough, including Hoylake, West Kirby and Heswall, are amongst the most affluent in Merseyside. The 2007 SHMA divided the Borough into the four distinct housing markets show on the following plan.



Figure 2.2 Map of sub-areas of Wirral used for market balance analysis in the 2007 SHMA

Source: Fordham Research Wirral SHMA 2007

2.6 Whilst the HMRI Pathfinder has recently suffered from low demand with high levels of vacancy and dereliction that have required intervention, the housing market in the west of the Borough has been buoyant, recording some of the highest house prices. The vision and strategic objectives of both Wirral's Sustainable Communities Strategy and Housing Strategy focus on creating sustainable appropriate housing for all which will help to reduce inequalities and create a better balance within the local housing market.



Housing Market Renewal Pathfinder Status

- 2.7 The history of east Wirral has been marked by the end of much of its traditional industry. Change and regeneration has focussed on the Pathfinder area.
- 2.8 The delivery of the Housing Market Renewal Initiative (HMRI) Pathfinder initiative has been given strategic direction in the form of the Strategy for Inner Wirral 2004 2014. The ten year strategy has been designed to directly address failing housing markets and associated measures of deprivation. The New Heartlands HMR Programme for the first five years has enabled Wirral to attract over £45 million, in addition to £28 million from the Council's Housing Capital Programme.

Identifying a range of sites

- 2.9 It was decided that the required guidance on viability would best be achieved by looking at a range of actual rather than notional sites of different sizes and locations. It was decided that a total of 15 representative sites should be examined. It was agreed to settle on 11 actual sites and four notional sites (based on actual sites) to ensure that the full range of possible future development in Wirral was covered.
- 2.10 The final list of 15 sites was chosen to reflect a range of typical development situations: with a balance between previous uses, a range of site sizes, and coverage across each of the main market sub-areas of Wirral.



Table 2.1 Site details								
No.	Site Name	Area ha	No dwgs	Net (dwgs ha)	Туре			
1	Whitfield Ln	4.20	150	35.7	Greenfield / Greenbelt			
2	Leasowe Primary 377-378 Cameron Rd (Scholars Gate)	2.00	131	65.5	Primarily Residential			
3	Hoylake Road/St James Rd	1.26	90	71.4	Primarily Industrial			
4	Beechwood (Lowry) Kingsmead (Hartnup Way) / Fairfield Mews	2.72	90	33.1	Primarily Residential/Part greenfield			
5	Carlett Park, Ferry Rd	1.04	60	57.7	Major Developed Site In The Greenbelt			
6	Lewis Reed, Woodchurch Rd	1.04	60	57.7	Primarily Residential			
7	Former Primary School, Rock Ferry	1.28	67	52.3	Primarily Residential			
8	Milner/Carrington St	1.20	65	54.2				
9	Marymount Convent Love Ln (Church Walk)	0.81	57	70.4	Primarily Residential			
10	Formerly, 50-94 Whitford Road, 45 Whitford Rd to 40 Fountain St	1.12	56	50.0	Primarily Residential			
11	Land rear of 11-25 Mossey Bank, 26-42 Guilford St & Royston Av	0.83	36	43.4	Primarily Residential			
12	Garage, Black Horse Hill	0.25	22	88.0	Primarily Residential			
13	Builders Yard at the junction of Camperdown St and Albion St	0.15	19	126.7	Primarily Commercial			
14	Warren Point, 51A&53 Warren Dv	0.33	18	54.5	Primarily Residential			
15	Vauxhall Dealership, Pensby Rd	0.19	18	92.4	Primarily Residential			
	Total	18.42	939	50.96				

Source: Fordham Research 2010

- 2.11 Site capacity ranged from 18 to up to 150 dwellings. All but two of the sites were on previously developed land reflecting the pattern of development in the area.
- 2.12 All the actual sites had the benefit of a planning consent and some were complete or under construction. The four notional sites did not have planning consent and were not subject to a current scheme. Information available from planning applications was used to inform an appropriate form of development to use in our appraisals. Some additional assumptions about the form and mix of development have also been made as set out below.



2.13 Site 1, for example, is a very large greenfield site – we have assumed that only part of it would be developed so as to reflect the nature and situation of the site. This site was included to test the possible provision of housing over the longer term. It is highly unlikely that a site like this is going to be developed in the short to medium-term as development would currently still be contrary to planning policies.

The sites

2.14 Locations for the sites identified are shown in the map below:



Source: Fordham Research 2010

2.15 The sites total 939 dwellings on a net area of over 18 ha. There is an emphasis on larger sites. No sites are below the national guidance threshold for affordable housing of 15 dwellings. Two of the 15 sites are HMRI programme sites.

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Development assumptions

- 2.16 In arriving at appropriate assumptions for residential development on each site we have assumed that the built form in an extant or current planning application remains the best basis for carrying out appraisals as they have been brought forward by commercial developers who are seeking to develop the site in the most economically viable and profitable way but within the prevailing policy framework.
- 2.17 The volume of floorspace which can be accommodated on a site has a crucial key impact on its profitability and is an amount which developers will normally seek to maximise (within the constraints set by the market). Most Council areas display a range of development situations with a corresponding variety of densities. A typology which responds to that variety, has therefore been used to inform the development assumptions for sites to enable us to form a view about the overall quantum (amount) of development, measured in net floorspace per hectare, to be accommodated upon each site.
- 2.18 The typology uses a benchmark for a typical built form which would provide development at around 15,500 sq ft per acre (3,550 sq m per ha) on a substantial site, or regularly shaped smaller site. A representative density might be 40-45 dwellings per ha. This is a common development format for significant sized brownfield sites and some greenfield sites in most urban areas. It provides for a majority of houses (with perhaps 15-25% flats) in a mixture of two storey and two and a half to three storey form, with a rectangular emphasis to the layout. We have considered whether this is an appropriate form to use in the current difficult housing market where developers are avoiding smaller units and concentrating on larger family houses on lower density sites. Bearing in mind the Council's planning policies, and also that the results of this study will inform the setting of the target over the life of the Core Strategy, we feel that it is correct to work from these assumptions.
- 2.19 Alongside this, there could be some schemes of appreciably higher density development providing largely or wholly apartments (such as those in the early stage of consideration on the Mersey waterfront), in blocks of three storeys or higher, with development densities of 30,000 sq ft per acre (6,900 sq m per ha) and dwelling densities 100 dw/ha, upwards; and schemes of lower density, in sensitive rural or rural edge situations. However, the benchmark has still been used to provide appropriate development assumptions for a majority of the sites in the study.



- 2.20 As a standard typology will often be less reliable in providing model development assumptions for the sites where actual information on planning proposals is not available, we have, wherever possible, been guided by information on development patterns from the sites where application details exist, or by other examples of recent development close to the site in question.
- 2.21 In Wirral's case the market for high density apartment blocks and currently, flats of any kind now appears to be limited. Much of the most recent development appears to have been at the benchmark development density, or only slightly higher say 3,900 m2/ha (17,000 sq ft per acre) with a greater emphasis on larger units, of two and a half or three storeys, rather than flats.
- 2.22 The standard built form typology used in this report is set out in the table below. The short titles used to describe the categories have been adopted for convenience only and must not be taken to imply anything specific about where, or when, they might apply.

Table 2.2 Typology of development form (Property Type)								
	Density							
Category title	Floorspace net sq ft/acre (sq m/ha)	Dwellings dw/acre (typical dw/ha)	Built form characteristics					
Lower density	12,500	8-14	Edge of settlement, less pressured location. Mostly 2					
Lower density	(2,875)	(20-33)	garages.					
Base	15,500	16-19	Mixture of 2 & 2.5/3 storey houses, many					
			torrespect corres (45.250/) flate limited reversion					
	(3,550)	(40-45)	terraced; some (15-25%) hats, limited garaging.					
Urban	(3,550) 19,500	(40-45) 20	20.25% flate, and/or fower 2 storey units than base					
Urban	(3,550) 19,500 (4,480)	(40-45) 20 (50)	30-35% flats, and/or fewer 2 storey units than base					
Urban High	(3,550) 19,500 (4,480) 30,000	(40-45) 20 (50) 40+	30-35% flats, and/or fewer 2 storey units than base					
Urban High	(3,550) 19,500 (4,480) 30,000 (6,900)	(40-45) 20 (50) 40+ (100+)	30-35% flats, and/or fewer 2 storey units than base Flats in small blocks on 3 storeys, parking spaces					
Urban High Very high	(3,550) 19,500 (4,480) 30,000 (6,900) 50,000	(40-45) 20 (50) 40+ (100+) 60+	30-35% flats, and/or fewer 2 storey units than base Flats in small blocks on 3 storeys, parking spaces Flats in larger blocks on 4-6 storeys, parking limited					
Urban High Very high	(3,550) 19,500 (4,480) 30,000 (6,900) 50,000 (11,500)	(40-45) 20 (50) 40+ (100+) 60+ (150+)	 30-35% flats, and/or fewer 2 storey units than base Flats in small blocks on 3 storeys, parking spaces Flats in larger blocks on 4-6 storeys, parking limited or underground 					

2.23 The above typology has been used to develop model development assumptions for the sites where actual information on planning proposals was not available. The resulting assumptions for residential development for each of the 15 sites are set out in the table below.

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Table 2.3 Site development assumptions								
No	Site	Category (see Table _	Net floorspa (roun	Ave dwg				
		2,2)	Sq ft/acre	Sq m/ha	nevna			
1	Whitfield Ln	Low/Base	13,687	33,807	35.7			
2	Leasowe Primary	Base	16,859	41,642	65.5			
3	Hoylake Road	Base/urban	18,992	46,910	71.4			
4	Beechwood	Low	11,663	28,808	33.1			
5	Carlett Park	Base	15,503	38,292	57.7			
6	Lewis Reed	Base+	17,511	43,252	57.7			
7	Former Primary Sch, Rock Ferry	Urban	20,802	51,381	52.3			
8	Milner/Carrington St	Base/urban	19,005	46,942	54.2			
9	Marymount Convent	Urban	21,615	53,389	70.4			
10	50-94 Whitford Road	Urban	17,786	43,931	50.0			
11	11-25 Mossey Bank	Urban	17,184	42,444	43.4			
12	Garage, Black Horse Hill	Urban+	25,000	61,750	88.0			
13	Builders Yard	High	38,959	96,229	126.7			
14	Warren Point	Base	16,975	41,928	54.5			
15	Vauxhall Dealership	High	30,028	74,169	92.4			

Source: Fordham Research 2010


3. Affordable housing and other developer contributions

Introduction

3.1 This chapter considers the assumptions used to test a range of affordable housing scenarios for the individual sites and the developer contributions assumed for each site.

Affordable housing assumptions

3.2 We undertook appraisals for a number of development scenarios involving varying proportions of affordable housing and tenure split. The assumptions in respect of proportions, and the financial terms on which they are to be provided, are considered below.

(i) Affordable proportion

- 3.3 Following discussions with the Council we agreed to test the following options:
 - NO affordable housing
 - 10% affordable
 - 20% affordable
 - 30% affordable
 - 40% affordable
- 3.4 The Council's SHMA recommended a target 40% affordable housing across the Borough to balance the housing market over the Core Strategy period – although a higher requirement was found. The SHMA is in the process of being updated. The 2007 study advised a 40% target with 30% social (75% of 40) and 10% intermediate (25% of 40). The 2009 update still suggests a 40% target but with 85% of that social and 15% intermediate. The 2009 update is yet to be finalised.
- 3.5 New actual targets to be applied in Wirral will be set out in the emerging Local Development Framework Documents, informed by the recent update to the SHMA as well as the present study.



(ii) Tenure split

- 3.6 The Council currently seeks a mixture of social rented and intermediate housing, though with a large majority (85%) provided as social rented. The 2007 SHMA confirmed that the proportion of intermediate housing should be about a fifth of all affordable housing. We considered testing a ratio of 80% social rented housing and 20% intermediate housing however having discussed this with the steering group it was decided that it was appropriate to only test the mix emerging from the SHMA as the difference in the results would be slight.
- 3.7 In principle, intermediate tenure could constitute a wide range of different housing propositions. It was decided that intermediate housing should be assumed to be equivalent to 25% shared ownership with rent at 2% of the unsold equity. While it might be provided in various forms, the outgoings and RSL purchase price would be broadly similar.

(iii) Size profile

- 3.8 We have assumed that the mix of affordable housing on each site should broadly follow the market housing, achieving an average dwelling size (i.e. net sq ft/sq m) in line with the profile of the market housing. As well as providing the maximum integration between market and affordable provision, this assumption also ensures that the affordable housing floorspace density remains constant. It should be noted that the HCA is moving from a grant calculated per bed place to one calculated per home delivered. It is possible that this will have a downward pressure on the size of affordable units over time. Consequently, it is possible that this may lead, in time, to more of the affordable units being smaller units.
- 3.9 Assumptions were also made about the indicative mix of dwellings on each individual site. Collectively these deliver an overall mix profile as set out in the table below. It is stressed that this profile reflects the pattern of development (actual or modelled) on the sites we have appraised, rather than a mix informed by the finding of both the original SHMA and its update, and designed to balance the housing market:



Table 3.1 Aggregate size mix profile			
	No of dwgs	%	
1 bed flat	69	7.3%	
1 bed house	5	0.5%	
2 bed flat	239	25.5%	
2 bed house	198	21.1%	
3 bed flat/house	317	33.8%	
4 bed house	97	10.3%	
4 + bed house	14	1.5%	
Total	939	100.0%	

Source: Fordham Research 2010

3.10 The profile reflects the particular characteristics of the sites chosen for assessment. The largest numbers of dwellings are two bedroom flats and three bedroom houses.

(iv) Financial terms

- 3.11 The viability study must take into account the likely availability of public subsidy. The future availability of affordable housing grant both the total amount of grant, and the amounts forthcoming for different sizes of dwelling and tenure is subject to some uncertainty as the available funding has been cut back and directed towards achieving specific regional or strategic priorities.
- 3.12 An assumption based on a 'default position' of zero Social Housing Grant has become a common starting point in this situation. The zero grant assumption also has the incidental advantage of allowing the requirement for grant in individual cases to be calculated more simply than if a set level were already allowed for. We have carried out our base appraisals on this basis.
- 3.13 After consideration of the initial findings it was decided that further appraisals should be produced with an assumption that Social Housing Grant would be available at £12k per bedspace for social rented dwellings and £6k per bed space for intermediate dwellings
- 3.14 It was necessary to determine the financial terms on which RSLs would be able to purchase properties of various sizes from the developer under this grant scenario. With the national market downturn it became difficult to obtain information from local RSLs on likely purchase prices, and we drew on recent experience from a range of local authority areas across the country to suggest indicative levels of purchase price.



Table 3.2 Selling prices: zero grant basis							
		£ per	sq ft (sq m)	ť (sq m)			
Purchase price -zero grant	Socia	al rented	Interm	Intermediate			
	Flat	House	Flat	House			
Higher priced areas	78 (840)	73 (785)	110 (1,185)	100 (1,076)			
Lower priced areas	76 (820)	70 (755)	100 (1,075)	95 (1,022)			

Source: Wirral Affordable Housing Viability Study, Fordham Research 2010

Other developer contributions

- 3.15 Aside from affordable housing, developer contributions can also potentially be sought by the Council under a number of headings such as highways, education or open space, either in kind or as financial payments. In either case it is necessary to allow for the additional financial cost of such contributions in preparing appraisals for each site.
- 3.16 The Council has a current policy which seeks a contribution from developers, negotiated on a site by site basis for highway works and open space to include an equipped children's play area of 60 square metres per dwelling on sites of 35 or more dwellings for properties further than 400m safe walking distance from an existing larger open space. These criteria mean that not every development site will be required to contribute a standard amount. This approach is, however, likely to change with the enactment of the Community Infrastructure Levy. At this stage an assumption has been made of a contribution of £2k per unit and applied uniformly across the whole Borough and across market and affordable housing.
- 3.17 This approach is simply intended to treat the 15 sites consistently and equitably in order to allow financial appraisals to be produced which provide a strategic overview. The figures do not claim to represent what would actually be sought, offered or negotiated on specific sites.



4. Local market conditions

Introduction

- 4.1 This chapter sets out an assessment of the local housing market in the Borough of Wirral, providing a basis for the assumptions on house prices and costs to be used in financial appraisals for the 15 sites tested in the study.
- 4.2 Land values are also considered to form a view of likely alternative use values for all of the sites. It is these values which will represent a minimum viability threshold when appraisals are prepared for the range of affordable housing scenarios.
- 4.3 Before looking at the results from the market assessments, some general points must be made about the nature of the exercise that has been undertaken.

Issues to consider

- 4.4 It is necessary to assess property market conditions in the study area in order to provide a reasonable guide as to likely values to use in evaluating different development proposals.
- 4.5 Although development schemes have similarities every scheme is unique to some degree, even on neighbouring sites. While market conditions in general will broadly reflect a combination of national economic circumstances and local supply and demand factors, there will be geographical or site specific factors that generate different values and costs even within the same urban area. There are indeed quite significant value variations in different parts of the study area.
- 4.6 Property market forces are in a constant state of flux and assessments of viability can change over relatively short periods of time in response to broader economic fluctuations such as the impact of interest rates on the costs of borrowing, the actual availability of funding and the outlook in the local employment market. Equally significant, sub-area market conditions are often affected by additional local factors.
- 4.7 For example, high value areas can often encourage demand in lower value neighbouring areas where new developments encourage changes in value growth in what perhaps were previously less popular areas.

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The residential market

- 4.8 The local housing market will, to some extent, reflect national trends but local factors also underpin the market in Wirral including:
 - An area of high environmental quality, especially in the west. Over 40% of the Borough is open countryside, with much of the landscape being high quality.
 - There are also a significant number of leisure and cultural facilities in both urban and rural areas, including areas such as New Brighton, West Kirby, Port Sunlight, the facilities in and around Birkenhead and the Borough's country parks.
 - Birkenhead town centre is the main retail and service centre for the Borough and contains a large covered market and the Grange and Pyramids shopping centres.
 - A network of district centres in Wallasey, Moreton, Hoylake, West Kirby, Heswall, Bromborough, New Ferry and Prenton, complemented by a number of local shopping centres and parades.
 - A high number of localities falling within the most deprived in England mainly concentrated in the older urban areas in the east of the Borough.
 - A higher than average proportion of the working age population on key benefits and a quarter of all school children in Wirral qualify for free school meals.
 - Symptoms of low demand, etc, leading to the designation of the Newheartlands Pathfinder area.
 - Key housing challenges facing Wirral over the next few years including increasing homelessness and the condition of homes occupied by some of the more vulnerable members of the community
 - Proximity to transport routes to Liverpool, Chester and North Wales.
- 4.9 We analysed various sources of market information but the most relevant are the prices of units on new developments. A list setting out details of relevant new developments in the area, as at November 2009, is provided in Appendix 1. Analysis of these and other schemes in the study area shows that prices for newbuild homes vary across the area ranging between a little less than £200 and to about £300 per square foot (£2,150-£3,300 per square metre). This is the range for individual properties within the schemes averaged over the complete scheme the degree of variation would, of course, be somewhat less.
- 4.10 Table 4.1 shows average prices in Wirral for the latest quarter available from the Land Registry, Q3 2009. Although the Land Registry data covers both second-hand and newbuild prices, the former will predominate. The average prices in the table are compared to a corresponding England and Wales figure and are expressed as indices.



Table 4.1 Average house prices Q3 2009: comparison with England & Wales average					
Area		Average price (£ & % index)			
Q3 2009		Detached	Semi	Terrace	Flat
Wirral	Average £k	£297,000	£154,000	£103,200	£112,300
Wirral	No of sales	140	328	176	86
	Index (against E & Wales)	104%	88%	69%	87%

Index compares LA's ave £k price figure to the median LA value across England & Wales for house type.

Source: Land Registry data.

- 4.11 Prices for detached houses in the Wirral area are around the national average (median LA Area), although prices for semi-detached, terraced housing and flats are between 10% and 30% below the average. This is particularly the case for terraced housing which is at 69% of the national median prices.
- 4.12 As in the country generally, prices fell back between late 2007 and the third quarter of 2009. However, because Land Registry data reports sales after completion there is a time lag in the figures, which only show the decline to a limited extent. The decline in sales numbers does, however, already show up quite clearly (sales are seasonally low in the first quarter) and has had a dramatic effect on the functioning of the market. As can be seen from the map below the number of transactions in some postcode areas is too low to provide reliable statistics.



	Table 4.2 A	verage house p	rices in previou	is quarters			
4100		Average price £					
Area		Detached	Semi	Terrace	Flat		
Q4 07	Average £k	£308,000	£166,700	£111,000	£130,900		
	No of sales	181	540	414	218		
Q1 08	Average £k	£315,200	£163,700	£109,800	£119,700		
	No of sales	144	363	307	152		
Q2 08	Average £k	£319,400	£157,000	£103,700	£127,700		
	No of sales	158	362	291	162		
Q3 08	Average £k	£335,200	£164,800	£99,900	£132,800		
	No of sales	111	272	188	152		
Q4 08	Average £k	£265,300	£148,800	£103,100	£110,100		
	No of sales	78	209	155	72		
Q1 09	Average £k	£312,100	£141,200	£100,600	£121,600		
	No of sales	101	172	119	58		
Q2 09	Average £k	£256,700	£146,300	£96,400	£109,900		
	No of sales	92	277	178	79		
Q3 09	Average £k	£297,000	£154,000	£103,200	£112,300		
	No of sales	140	328	176	86		

Source: Land Registry data.

- 4.13 Within a Council area there can be considerable variations in price, and Land Registry house price data at postcode sector level helps to illuminate these variations. Because the number of sales in individual postcode areas in a single quarter can be quite small, we looked at information for four separate quarters (Q2 2009, Q4 2008, Q2 2008, and Q4 2007). The data has been expressed as an index as a percentage of the nationwide average price level and standardised, so as to allow for variations in type mix.
- 4.14 Appendix 2 provides a worked example of the index calculation and sets out the resulting price index figures for the four quarters examined.
- 4.15 It can be seen from Appendix 2 that whilst the variations between individual quarters are mostly quite modest, in some postcode areas the variations between the four quarters' indices are more substantial. Such price fluctuations may be due to the relatively small number of sales. Variations also tend to be greater for rural areas, which are mostly numerically smaller and/or more diverse, than for urban areas where postcode sectors are larger numerically and can also often be more uniform.



4.16 The average figures for the four quarters are mapped in Figure 4.1 below. This shows that prices in most postcode sectors are between 65% and 110% of the national average level. One postcode sector – CH48 2 (West Kirby) is substantially more expensive at 315% of national median prices. In contrast, house prices in CH44 3 (Breck Road, Wallasey) are at only 35% of national average level. This is a very wide divergence.



Indices compare prices to in each postcode sector to an overall England & Wales value (median postcode sector)s Source: Land Registry

Price assumptions for financial appraisals

4.17 It is necessary to form a view about the appropriate prices for the 15 individual schemes to be appraised in the study. The preceding analysis suggests that although prices in much of the area will be quite close there will be some areas where prices are appreciably lower or higher than the price 'standard'.



- 4.18 It is also clear that we should allow for differences between apartments, two storey houses and town houses, particularly in locations where flats are going to be attractive. Finally, in drawing on the newbuild price data we have to bear in mind that, particularly in the present market conditions, the prices at which homes are offered may include appreciable discounts such as deposit paid for first-time purchasers or stamp duty.
- 4.19 Taking these points into consideration we considered what sale prices should be for flats, two storeys and town houses on each of the 15 sites. These were then to be combined on the basis of the proportions of each type on each scheme to produce a single composite average price.
- 4.20 We established across the study area a range of current new build schemes and a number of recently completed schemes. The number of new build schemes currently active is limited. The specific details are set out within Appendix 1 of the report. These have, however, provided a useful basis to inform the market assessment and provide a guide for a number of sites.
- 4.21 In addition to this a range of second-hand properties were also researched to provide additional support to the market evidence. As there are very few at present Appendix 1 also provides details of recently developed and completed schemes directly relevant to the sample sites.
- 4.22 As can be seen form the price map at Figure 4.1 values within the area around central Birkenhead and within the pathfinder area were generally cheaper and ranged around a base level of £200 per square foot. The sites tested within the west were subject to a premium commensurate with the particular location, and supported by evidence of schemes or individual properties that were on the market.
- 4.23 The site income figures resulting from our type-specific assumptions and used in our appraisals are set out in the table below.

	Table 4.3 Price bands						
	Site/leastion	Price £ per			Site //acation	Price £ p	ber
	Sile/IOCalion	Sq ft	Sq m				Sq m
1	Whitfield Ln	211	2,271	9	Marymount Convent	185	1,991
2	Leasowe Primary	185	1,991	10	50-94 Whitford Road	160	1,722
3	Hoylake Road	196	2,110	11	11-25 Mossey Bank	160	1,722
4	Beechwood	170	1,830	12	Garage, Black Horse Hill	223	1,884
5	Carlett Park	232	2,497	13	Builders Yard	250	2,691
6	Lewis Reed	185	1,991	14	Warren Point	250	2,691
7	Former Primary School	197	2,120	15	Vauxhall Dealership	220	2,368
8	Milner/Carrington St	150	1,615				

Source: Fordham Research 2010



- 4.24 The figures cover a range from the cheapest at £150 per sq ft (£1,615 per sq m) at Milner/Carrington St., to £250 per sq ft (£2,691 per sq m) at the Builders Yard and Warren Point.
- 4.25 It is necessary to consider whether the presence of affordable housing would have a discernible impact on sales prices. In fact affordable housing will be present on many of the sites whose selling prices have informed our analysis. Our view is that in any case any impact can and should be minimised through an appropriate quality design solution.

Land values

- 4.26 We have considered general figures from the Valuation Office Agency (VOA) relating to residential land values. Land values vary dramatically depending upon the development characteristics (size and nature of the site, density permitted etc.) and any affordable or other development contribution.
- 4.27 The VOA publishes figures for residential land in the Property Market Report. These only cover major centres, areas which generate sufficient activity to discern a market pattern. That means that there are no figures for Wirral and we have used figures for the nearest locations to Wirral.
- 4.28 These values can, in any case, only provide broad guidance because it is likely that the figures will, to some degree, be net of allowances for developer contributions and/or affordable housing requirements. They can therefore be only indicative, and it may be that values for 'oven ready' land with no affordable provision or other contribution, or servicing requirement, are in fact higher.

Table 4.4	Residential Land Value	es half year to July 2	2009
Aree	Land	Value £m per acre (hec	ctare)
Area	Small sites (< 5 dwgs)	Bulk sites (> 2 ha)	Land for apartments
Chester	0.850	0.750	1.135
	(2.100)	(1.900)	(2.800)
Warrington (South Warrington)	0.690	0.670	0.690
	(1.700)	(1.650)	(1.700)
Liverpool (suburbs)	0.365	0.365	0.445
	(0.900)	(0.900)	(1.100)
Sefton (Bootle suburbs)	0.200	0.200	*
	(0.490)	(0.490)	
Knowsley (Prescot/Huyton)	0.405	0.385	0.385
	(1.000)	(0.950)	(0.950)
Wigan	0.630	0.565	0.565
	(1.550)	(1.400)	(1.400)

* No evidence to indicate a separate market for this category of land.

Source: Fordham Research 2010

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- 4.29 With the decline in the market and general economic conditions these values may now be rather historic. We therefore sought information about values from residential land currently on sale in the Borough. Unfortunately we were unable to find any examples of sites for residential development currently available in the Borough area.
- 4.30 The Pathfinder sites within the HMRI area are a particular exception. These are sites that have been assembled through compulsory purchase. They were the least attractive areas and their redevelopment is driven by the need for regeneration rather than the commercial opportunity to develop new housing. Following discussion with the Council's Asset Management Team we have assumed a zero value on these sites.

Current and Alternative Use Values

- 4.31 In order to assess development viability it is necessary to analyse current and alternative use values. Current use values refer to the value of the land in its current use, for example, as agricultural land. Alternative use values refer to any potential use for the site. For example, a brownfield site may have an alternative use as industrial land.
- 4.32 To assess viability, the value of the land for the particular residential scheme adopted needs to be compared to the alternative use value to determine if there is another use which would derive more revenue for the landowner. If the assessed value does not exceed the alternative use value then the development is not viable.
- 4.33 For the purpose of the present study it is necessary to take a comparatively simplistic approach to determining the alternative use value. In practice a wide range of considerations could influence the precise value that should apply in each case, and at the end of extensive analysis the outcome might still be contentious.
- 4.34 Our 'model' approach is outlined below:
 - i) For sites previously in agricultural use, then agricultural land represents the existing use value
 - ii) Where the development is on former industrial, warehousing or similar land, then the alternative use value is considered to be industrial, and an average value of industrial land for the area is adopted as the alternative use value
 - iii) Where the site is occupied by buildings capable of beneficial use we would estimate their broad value
 - iv) Existing use as garden land would have a value greater than agricultural but significantly less than industrial, unless it could feasibly be developed in an industrial or commercial use



4.35 The VOA's typical industrial land values for the region and nearby locations for the first half of 2009 are set out in the table below.

Table 4.5 Industrial land values			
Land Value per acre (hectare)			
Alea	Low	High	Typical
Birkenhead	£75k (£190k)	£100k (£250k)	£90k (£220)
Liverpool	£70k (175k)	£135k (£330k)	£100k (£240k)
Wigan	£100k (£250k)	£160k (£400k)	£130k (£320k)
Warrington	£115k (£280k)	£195k (£475k)	£160k (£390k)

Source: VOA Property Market Report July 2009

- 4.36 Although across the region as a whole there is quite a range of values, the figures for individual locations in the North West region are in the low range of £175-280,000 per acre (£432k-£692,000 per ha). These figures most likely reflect the downturn in values from 2008 closer to the peak of the market, before the full impact of the downturn) to a considerable degree. There is very little market evidence to suggest what current values might be.
- 4.37 Agricultural values rose for a time recently after a long historic period of stability. They are around £5 12k per acre (£15-30k per ha) depending upon the specific use. A benchmark of £10k per acre (£25k per ha) is assumed to apply here.
- 4.38 The value for each individual site that results from the foregoing analysis is summarised in the table below.



	Table 4.6 Alternative Use Value bases			
	Site	Basis	£k per acre	£k per ha
1	Whitfield Ln	Agricultural	10	25
2	Leasowe Primary	Vacant Urban Land	100	247
3	Hoylake Road	Storage	200	494
4	Beechwood	Vacant Urban Land	100	247
5	Carlett Park	Education	160	395
6	Lewis Reed	Car Dealership	160	395
7	Former Primary School	Education	100	247
8	Milner/Carrington St	Pathfinder - Terraces	0	0
9	Marymount Convent	Education	100	247
10	50-94 Whitford Road	Awaiting redevelopment/ Residential	0	0
11	11-25 Mossey Bank	Residential	0	0
12	Garage, Black Horse Hill	Vacant Car Dealership	180	445
13	Builders Yard	Storage	365	902
14	Warren Point	Residential	300	741
15	Vauxhall Dealership	Vacant Car Dealership	200	494
		Source: Fordham Research 2010		

- 4.39 It was noted earlier that brownfield sites may face 'abnormal costs' if they are to be redeveloped for residential use. Some of those costs, but not necessarily all, might also arise if the site were redeveloped for the alternative use. The alternative use value would need to be reduced to allow for those costs that would still arise in that situation.
- 4.40 The costs arising from development or redevelopment of the 15 sites are considered in the next chapter along with the other financial and technical assumptions required to prepare financial appraisals for each of the sites.



5. Assumptions for viability analysis

Introduction

5.1 This chapter considers the costs and other assumptions required to produce financial appraisals for the 15 sites.

Development costs

(i) Construction costs: baseline costs

- 5.2 Drawing upon our own experience, and taking into account published Building Cost Information Service (BCIS) data, we have developed a set of base £ per sq ft construction costs for different built forms of residential development. The costs are specific to different built forms (flats vs. houses; number of storeys). On the basis of these cost figures it is possible to draw up appropriate cost levels for constructing newbuild market housing in Wirral at a base date of September 2009.
- 5.3 The question arises as to what extent the Code for Sustainable Development should impact on build costs in the study. Whilst from April 2008 the Code's Level 3 has been a requirement for all homes commissioned by RSLs, that would not necessarily be the case for affordable homes built by developers for disposal to an RSL (although we understand that this is under review), unless grant is made available from the Homes and Communities Agency. However, the Government indicates that Level 3 will apply to all newbuild housing (i.e. will be incorporated in Building Regulations) from 2010 with higher levels (Level 4 then 6) intended to be triggered from 2013 onwards. Accordingly for the present study we have assumed that Level 3 applies to both market and affordable housing on the sites being appraised. In recent months (before the general election) there has been a move towards requiring affordable housing to be built to Code Level 4. This adds considerably to the costs however historically this is often met through additional grant funding. There is now some doubt as to whether the planned move towards Level 4 will be pursued due the pressure on public expenditure. We have assumed Level 3 in the future.
- 5.4 Guidance on the impact of Level 3 is available from a Report commissioned by the Housing Corporation and English Partnerships (*A Code For Sustainable Development, 2007*) in respect of the impact of Level 3 on construction costs. The guide estimates (Table S2) the increase in costs arising for different house types under various scenarios. On average, to achieve Level 3 current newbuild costs would need to increase by 4.2%, amounting to an additional £4,600 on the build cost for the average dwelling (£110,200) across the 15 sites.

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5.5 In addition to this national requirement Regional Spatial Strategy (RSS) policy ENG 2 also seeks a proportion of 10% of energy costs of new residential building to be from renewable sources. This requirement will add to baseline building costs although it is possible that there would be some overlap with the Level 3 specification. For the purpose of the study we assumed a 3.5% increase in costs representing an average premium of about £3,900 per dwelling.

(ii) Construction costs: site specific adjustments

- 5.6 It is necessary to consider whether any site specific factors would suggest adjustments to these baseline cost figures. Two factors need to be considered in particular: small sites and high specification.
- 5.7 Since the mid-1990s planning guidance on affordable housing has been based on a view that construction costs were appreciably higher for <u>smaller sites</u> with the consequence that, as site size declined, an unchanging affordable percentage requirement would eventually render the development uneconomic. Hence the need for a 'site size threshold', below which the requirement would not be sought.
- 5.8 It is not clear to us that this view is completely justified. Whilst, other things held equal, build costs would increase for smaller sites, other things are not normally equal and there are other factors which may offset the increase. The nature of the development will change. The nature of the developer will also change as small local firms with lower central overheads replace the regional and national house builders. Furthermore, very small sites may be able to secure a 'non-estate' price premium which we have not allowed for. In the present study none of the sites are considered to fall into the 'small site' category those with less than 15 dwellings.
- 5.9 In addition, we considered that Sites 1, 5, 12, 13, 14 and 15 would be built to a slightly higher specification than the other sites. An allowance of an additional 2.0% was assumed in order to cover all sites except 13 which attracted a higher allowance of 4.0% due to it being a premium product in a premium location.

(iii) Construction costs: affordable dwellings and final figures

5.10 The procurement route for affordable housing is assumed to be through construction by the developer and disposal to an RSL on completion. In the past, when considering the build cost of affordable housing provided through this route we took the view that it should be possible to make a small saving on the market housing cost figure on the basis that one might expect the affordable housing to be built to a slightly different specification than market housing. However, the pressures of increasingly demanding standards for RSL properties have meant that for conventional schemes of houses at least, it is no longer appropriate to use a reduced build cost; the assumption is of parity.



5.11 Taking all the above into account we arrived at build costs for all (market and affordable) housing which after rounding were as in the table below. To aid understanding, a worked example for Site 2 is provided at Appendix 3.

Та	Table 5.1 Construction costs adjusted and					
		rounded: a	III hous	ing		
	E	Build cost £ p	oer sq ft/s	sq m		
Site	sq ft	(sq m)	Site	sq ft	(sq m)	
1	82.5	888	9	90.5	974	
2	86.0	926	10	79.5	856	
3	88.0	947	11	79.5	856	
4	88.0	947	12	96.0	1,033	
5	84.5	910	13	107.5	1,157	
6	89.0	958	14	99.5	1,071	
7	89.0	958	15	99.5	1,071	
8	92.5	996				

Source: Fordham Research derived from analysis of BCIS cost data

(iv) Other normal development costs

- 5.12 In addition to the per sq ft/m build cost figures described above allowance needs to be made for a range of infrastructure costs (roads, drainage and services within the site, parking, footpaths, landscaping and other external costs), off site costs for drainage and other services and so on. Many of these items will depend on individual site circumstances and can only properly be estimated following a detailed assessment of each site. This is not practical within the present study, and in any case would require at least a design or layout for every site.
- 5.13 Nevertheless it is possible to generalise. Drawing on experience it is possible to determine an allowance related to total build costs. This is normally lower for higher density than for lower density schemes since there is a smaller area of external works and services can be used more efficiently. Large greenfield sites would also be more likely to require substantial expenditure on bringing mains services to the site.
- 5.14 In the light of these considerations we have developed a scale of allowances, ranging from 16% of build costs for the greenfield site at Whitfield Lane, down to 9% for the Builders Yard. The table below sets out the individual site assumptions.



Table 5.2 Development cost allowances				
Ref	Site/location	% of build costs		
1	Whitfield Ln	16.0%		
2	Leasowe Primary	12.0%		
3	Hoylake Road	11.0%		
4	Beechwood	13.5%		
5	Carlett Park	12.0%		
6	Lewis Reed	11.5%		
7	Former Primary School	10.5%		
8	Milner/Carrington St	11.0%		
9	Marymount Convent	10.5%		
10	50-94 Whitford Road	11.5%		
11	11-25 Mossey Bank	12.0%		
12	Garage, Black Horse Hill	10.5%		
13	Builders Yard	9.0%		
14	Warren Point	12.0%		
15	Vauxhall Dealership	10.0%		

Source: Fordham Research 2010

(v) Abnormal development costs

- 5.15 In some cases where the site involves redevelopment of land which was previously developed there is the potential for abnormal costs to be incurred. Abnormal development costs might include demolition of substantial existing structures, piling or flood prevention measures at waterside locations, remediation of any land contamination, remodelling of land levels and so on.
- 5.16 Most of the sites are on previously developed land. On several sites, from the information made available to us and visits to the sites, it appears that exceptional or abnormal development costs need to be taken into account in preparing appraisals. As pointed out in the previous chapter (paragraph 4.39) some abnormal costs could also arise in the event of the site's redevelopment with an alternative use.
- 5.17 The schedule below sets out the abnormal costs considered to apply in each case where they arise:



	Table 5.3 Abnormal development costs				
Dof	Site	ltom	Reside	ntial: cost	Industrial: cost
Rei	Sile	nem –	Total £k	£k per acre	£k per acre
1	Whitfield Ln	Low lying – pumping	150	7	n/a
2	Leasowe Primary		0	0	n/a
3	Hoylake Road	Site clean up	500	161	n/a
4	Beechwood	Access Roads	100	15	n/a
5	Carlett Park	Access	300	106	n/a
6	Lewis Reed	Demolitions	200	78	n/a
7	Former Primary School	Demolitions	400	135	n/a
8	Milner/Carrington St	Demolitions	400	106	n/a
9	Marymount Convent	Site clearance	250	361	n/a
10	50-94 Whitford Road		0	0	n/a
11	11-25 Mossey Bank	Demolitions	300	146	n/a
12	Garage, Black Horse Hill	Demolitions	100	162	n/a
13	Builders Yard	Site Clean Up	50	337	n/a
14	Warren Point	Demolitions	150	138	n/a
15	Vauxhall Dealership	Demolitions	100	208	n/a

Source: Fordham Research 2010

5.18 The table also shows the adjustment needed to ensure that an alternative land value reflects the costs incurred in developing an alternative use, where this is applicable. In fact in no case would abnormal costs arise.

(vi) Fees

5.19 We have assumed professional fees amount to 10% of build costs in each case.

(vii) Contingency

5.20 For previously undeveloped and otherwise straightforward sites we would normally allow a contingency of 2.5% with a higher figure of 5% on more risky types of development, previously developed land and central locations. The 5% figure was used on all the brownfield sites and the 2.5% rate on the two greenfield Sites 1 and 4. Because of its complexity Site 8 attracted a slightly higher contingency rate of 7.5%.



Financial and other appraisal assumptions

(i) VAT

5.21 For simplicity it has been assumed throughout, as with most financial appraisals, that either VAT does not arise, or its effect can be ignored.

(ii) Interest rate

- 5.22 Our appraisals assume 7.5% pa for debits and credits. This may seem high given the very low base rate figure (MLR 0.5% February 2010) but has to reflect banks' view of risk for housing developers in the present situation.
- 5.23 Credit arises in practice only for a short time at the end of the scheme.

(iii) Developers profit

- 5.24 We normally assume that the developer requires a return of 20% on total costs (equivalent to 16.7% of income) to reflect the risk of undertaking the development. That assumes that the costs are estimates of costs, as they are indeed here intended to be, rather than contract prices which would include a profit element.
- 5.25 However, where a guaranteed sale applies the developer's profit margin ought to be reduced in order to reflect the reduction in risk. The affordable units will be sold at an agreed price and programme. With a range of affordable provision being tested it was felt appropriate to reflect the resulting variations in risk with variations in the developer's profit. Consequently a sliding scale of profit margins was used, as shown below. This effectively applies a reduced profit margin to reflect the reduced risks of developing the affordable component relative to the risks of developing the market housing.

Table 5.4 Profit margins		
% affordable	Profit % on costs	
0%	20%	
20%	19%	
30%	18.5%	
40%	18%	
50%	17.5%	

Source: Fordham Research 2010

5.26 It should be noted that residential developers commonly use a slightly more conservative profit margin of 15% on income, which equates to about 17.5% on costs. Bearing in mind the current financial climate, we see no justification for reducing the profit margins from the levels suggested.



(iv) Void

- 5.27 On a scheme comprising mainly individual houses one would normally assume only a nominal void period as the housing would not be progressed if there was no demand. In the case of apartments in blocks this flexibility is reduced. Whilst these may provide scope for early marketing, the ability to tailor construction pace to market demand is more limited.
- 5.28 For the purpose of the present study a three month void period is assumed for all sites.

(v) Phasing & timetable

- 5.29 The appraisals are assumed to have been prepared using prices and costs at a base date of September 2009 with an immediate start on-site.
- 5.30 A pre-construction period of at least six months is assumed for all of the sites.
- 5.31 The phasing programme for an individual site will reflect market take-up and would in practice be carefully estimated taking into account the site characteristics and, in particular, size and the expected level of market demand. We have developed a suite of modelled assumptions to reflect site size and development type, as set out in Table 5.5 below: By taking the size, nature and type of development into account assumptions can be made about the time period over which the site will be developed this has a direct effect on the interest costs on the development.

	Table 5.5 Market pac	ce assu	mptions
	Site		dwgs
	Cho	total	ceiling rate /qtr
1	Whitfield Ln	150	15
2	Leasowe Primary	131	15
3	Hoylake Road	90	15
4	Beechwood	90	12
5	Carlett Park	60	13
6	Lewis Reed	60	18
7	Former Primary School	67	12
8	Milner/Carrington St	65	12
9	Marymount Convent	57	12
10	50-94 Whitford Road	56	12
11	11-25 Mossey Bank	36	12
12	Garage, Black Horse Hill	22	12
13	Builders Yard	19	18
14	Warren Point	18	8
15	Vauxhall Dealership	18	12

Source: Fordham Research 2010



Site acquisition and disposal costs

(i) Site holding costs and receipts

5.32 Each site is assumed to proceed immediately and so, other than interest on the site cost during construction, there is no allowance for holding costs, or indeed income, arising from ownership of the site.

(ii) Acquisition costs

5.33 Acquisition costs include stamp duty at 4% on site values of £0.5 million and above (reduced below this level) together with an allowance of 1.5% for acquisition agents' and legal fees.

(iii) Disposal costs

5.34 For the market housing, sales and promotion and legal fees are assumed to amount to some 3.5% of receipts. For disposals of affordable housing these figures can be reduced significantly depending on the category we have assumed total allowances of 0.5% for social rented housing and 1.5% for shared ownership.

Alternative use value comparison

- 5.35 In the previous chapter we identified alternative use values to be used as benchmarks in determining viability for each site. As we suggested above, these values might need to be adjusted in some cases to allow for abnormal costs that would arise if the alternative use were implemented.
- 5.36 After considering each of the sites with abnormal costs we concluded that on no site would significant costs be incurred to realise the alternative use value. The values set out in Chapter 4 will therefore apply unadjusted.



6. Results of viability analysis

Introduction

6.1 This chapter considers the results of financial appraisals carried out for the identified sites.

Financial appraisal approach and assumptions

- 6.2 On the basis of the assumptions set out in Chapter 5 we prepared financial appraisals for each of the identified sites using a bespoke spreadsheet-based financial analysis package.
- 6.3 The appraisals use the residual valuation approach that is, they are designed to assess the value of the site after taking into account the costs of development, the likely income from sales and/or rents and an appropriate amount of developer's profit. The payment would represent the sum paid in a single upfront transaction. The resulting valuation is commonly expressed in £s per acre (or hectare). In order for the proposed development to be described as viable it is necessary for this value to exceed the value from a valid alternative use. We have already seen that, for a greenfield site where the only alternative use is likely to be agricultural, this figure may be very modest. However, most of the sites have been previously developed and therefore have a more substantial existing or competing alternative use value.
- 6.4 As outlined in Chapter 3, our appraisals considered four options for the amount and type of affordable housing provision plus a zero affordable option.

Appraisal results

- 6.5 We produced financial appraisals based on the stated build, abnormal, and infrastructure costs and financial assumptions for the five options (four affordable options, plus all-market).
- 6.6 Detailed appraisal printouts for all the sites are provided as Appendix 5 to this report. To keep to a manageable sized document only one option, that of 30%, has been provided.
- 6.7 The resulting residual land values for the five options are set out in Table 6.1.

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	Table 6.1 Appraisal results for five affordable options									
	without grant:									
No	Sito	Re	esidual value	£k per acre fo	or affordable op	otion:				
110	Sile	No aff	10%	20%	30%	40%				
1	Whitfield Ln	604	499	393	286	178				
2	Leasowe Primary	387	287	185	83	-22				
3	Hoylake Road	215	90	-43	-177	-313				
4	Beechwood	139	76	12	-56	-124				
5	Carlett Park	701	558	416	271	127				
6	Lewis Reed	128	22	-88	-201	-314				
7	Former Primary School	392	250	108	-41	-191				
8	Milner/Carrington St	-227	-312	-397	-483	-570				
9	Marymount Convent	126	-6	-142	-281	-421				
10	50-94 Whitford Road	271	183	95	4	-90				
11	11-25 Mossey Bank	114	24	-65	-157	-249				
12	Garage, Black Horse Hill	481	270	50	-176	-405				
13	Builders Yard	794	406	2	-415	-833				
14	Warren Point	357	187	12	-169	-350				
15	Vauxhall Dealership	233	-19	-277	-539	-804				

Source: Wirral Affordable Housing Viability Study, Fordham Research 2010

- 6.8 Table 6.1 shows that with no requirement for affordable housing 14 sites deliver a positive land value. Ten of these are broadly in the range £120-£400k per acre (£300k-£1000k per ha). The remainder are higher with values ranging up to £0.794m per acre (£1.5m per ha).
- 6.9 Table 6.1 confirms that, as increasing amounts of affordable housing are introduced, the land value reduces. In each case the impact is progressive, but at a broadly linear rate. At the maximum affordable contribution shown, 40%, only two schemes still deliver a positive land value (Sites 1 and 5) both of which are in the Green Belt.
- 6.10 However, it is clear that land value falls away <u>more quickly</u> for some schemes than for others. It is the most densely developed sites Black Horse Hill, Builders Yard or Vauxhall Dealership where affordable housing would have the greatest negative impact upon land value.
- 6.11 This is because the land value is the primary source of any developer subsidy. With high density schemes land value is a much lower proportion of the total value of the development and is therefore used up more quickly. To put it another way, broadly the same amount of land value is available to subsidise affordable units on a scheme of 120 flats on one hectare as on 35 houses occupying the same land. Clearly, that sum will 'buy' a higher percentage of the houses than of the flats. Similarly the affordable housing 'costs' more on the highest priced sites in terms of the receipts foregone.



6.12 In order to draw out the implications of these results for the Council's proposed affordable housing policy, it will be necessary to consider values from alternative uses for each. This step follows below.

Alternative use benchmarks

- 6.13 The results from Table 6.1 would need to be compared with the alternative use values set out in Table4.6 in order to form a view about the likely viability of the affordable options for each site.
- 6.14 However it does not automatically follow that if the residual value produces a surplus over the alternative use value benchmark that the site is viable. The surplus needs to be sufficiently large to provide an incentive to the landowner to release the site and any other appropriate cost required to bring the site forward for development. We therefore have to consider how large such a 'cushion' should be for our sites.
- 6.15 In practice the size of the element will vary from case to case depending on how many landowners are involved, each landowner's attitude and his degree of involvement in the current property market, the location of the site and so on. A 'cushion' equivalent to, say, £25k per acre might be perfectly sufficient in some cases, whilst in a particular case it might need to be four or five times that figure, or even more.
- 6.16 After consideration we took the view that a broad average figure of £25k per acre (£60k per ha) should be used to provide an incentive to the landowner for all of the sites in the study. This figure for the 'cushion' would represent a mark-up of 20% on the industrial benchmark land value.
- 6.17 The figures are set out below and combined with the net alternative use values from Table 4.6 to show the resulting benchmark thresholds for viability.
- 6.18 It must be emphasised that these figures are simply one view of what it is reasonable to assume as a minimum residual value for the purposes of assessing viability. The figures do not represent what a landowner or promoter might actually receive. This will quite often be rather more; at any given affordable target some sites will generate a higher value and it is not unreasonable to expect at least some of the surplus to benefit the landowner or promoter rather than passing to the developer.



	Table 6.2 Viability cushion & threshold values							
Dof	Site		£ per acre					
Rei	Sile	Alternative use value	Cushion	Viability threshold value				
1	Whitfield Ln	£10k	£25k	£35k				
2	Leasowe Primary	£100k	£25k	£125k				
3	Hoylake Road	£200k	£25k	£225k				
4	Beechwood	£100k	£25k	£125k				
5	Carlett Park	£160k	£25k	£185k				
6	Lewis Reed	£160k	£25k	£185k				
7	Former Primary School	£100k	£25k	£125k				
8	Milner/Carrington St	£0k	£25k	£25k				
9	Marymount Convent	£100k	£25k	£125k				
10	50-94 Whitford Road	£0k	£25k	£25k				
11	11-25 Mossey Bank	£0k	£25k	£25k				
12	Garage, Black Horse Hill	£180k	£25k	£205k				
13	Builders Yard	£365k	£25k	£390k				
14	Warren Point	£300k	£25k	£325k				
15	Vauxhall Dealership	£200k	£25k	£225k				

Source: Affordable Housing Viability Study 2010

6.19 The viability outcomes resulting from applying these threshold values are shown in the table below.



	Table 6.3 Appraisal outcomes: base appraisals, without grant									
				Value	£k per acre					
No	Site	Alt use value	No affordable	10%	20%	30%	40%			
1	Whitfield Ln	10	604	499	393	286	178			
		35	VIABLE	VIABLE	VIABLE	VIABLE	VIABLE			
2	Leasowe Primary	100	387	287	185	83	-22			
		125	VIABLE	VIABLE	VIABLE	NOT VIAB	NOT VIAB			
3	Hoylake Road	200	215	90	-43	-177	-313			
		225	MARGINAL	NOT VIAB	NOT VIAB	NOT VIAB	NOT VIAB			
4	Beechwood	100	139	76	12	-56	-124			
		125	VIABLE	NOT VIAB	NOT VIAB	NOT VIAB	NOT VIAB			
5	Carlett Park	160	701	558	416	271	127			
		185	VIABLE	VIABLE	VIABLE	VIABLE	NOT VIAB			
6	Lewis Reed	160	128	22	-88	-201	-314			
		185	NOT VIAB	NOT VIAB	NOT VIAB	NOT VIAB	NOT VIAB			
7	Former Primary Sch	100	392	250	108	-41	-191			
		125	VIABLE	VIABLE	MARGINAL	NOT VIAB	NOT VIAB			
8	Milner/Carrington St	0	-227	-312	-397	-483	-570			
		25	NOT VIAB	NOT VIAB	NOT VIAB	NOT VIAB	NOT VIAB			
9	Marymount Convent	100	126	-6	-142	-281	-421			
		125	VIABLE	NOT VIAB	NOT VIAB	NOT VIAB	NOT VIAB			
10	50-94 Whitford Road	0	271	183	95	4	-90			
		25	VIABLE	VIABLE	VIABLE	MARGINAL	NOT VIAB			
11	11-25 Mossey Bank	0	114	24	-65	-157	-249			
		25	VIABLE	MARGINAL	NOT VIAB	NOT VIAB	NOT VIAB			
12	Black Horse Hill	180	481	270	50	-176	-405			
		205	VIABLE	VIABLE	NOT VIAB	NOT VIAB	NOT VIAB			
13	Builders Yard	365	794	406	2	-415	-833			
		390	VIABLE	VIABLE	NOT VIAB	NOT VIAB	NOT VIAB			
14	Warren Point	300	357	187	12	-169	-350			
		325	VIABLE	NOT VIAB	NOT VIAB	NOT VIAB	NOT VIAB			
15	Vauxhall Dealership	200	233	-19	-277	-539	-804			
		225	VIABLE	NOT VIAB	NOT VIAB	NOT VIAB	NOT VIAB			

Source: Affordable Housing Viability Study 2010

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Comparison results

- 6.20 With zero affordable housing 12 of the 15 sites are viable, and one marginal. Residential development as 100% market housing is, of course, a relatively profitable development option and in stable market conditions the sites should not be proposed for development otherwise. However market conditions are not stable. House prices have fallen considerably since autumn 2007, and so there are a couple of sites which could not proceed at present.
- 6.21 Two of the 15 sites (8 and 11, Milner/Carrington St and Mossey Bank) are in fact HMR programme sites, which would not normally be expected to achieve viability without subsidy support. In order to derive useful policy guidance the results from these two sites should be excluded.
- 6.22 Accordingly Table 6.4 below repeats the appraisal results we showed in Table 6.3, for the remaining 13 sites.

	Table 6.4 Appraisal outcomes from non HMR sites: base appraisals, without grant									
				Value	£k per acre					
No	Site	Alt use value	No affordable	10%	20%	30%	40%			
1	Whitfield Ln	10	604	499	393	286	178			
		35	VIABLE	VIABLE	VIABLE	VIABLE	VIABLE			
2	Leasowe Primary	100	387	287	185	83	-22			
		125	VIABLE	VIABLE	VIABLE	NOT VIAB	NOT VIAB			
3	Hoylake Road	200	215	90	-43	-177	-313			
		225	MARGINAL	NOT VIAB	NOT VIAB	NOT VIAB	NOT VIAB			
4	Beechwood	100	139	76	12	-56	-124			
		125	VIABLE	NOT VIAB	NOT VIAB	NOT VIAB	NOT VIAB			
5	Carlett Park	160	701	558	416	271	127			
		185	VIABLE	VIABLE	VIABLE	VIABLE	NOT VIAB			
6	Lewis Reed	160	128	22	-88	-201	-314			
		185	NOT VIAB	NOT VIAB	NOT VIAB	NOT VIAB	NOT VIAB			
7	Former Primary Sch	100	392	250	108	-41	-191			
		125	VIABLE	VIABLE	MARGINAL	NOT VIAB	NOT VIAB			
9	Marymount Convent	100	126	-6	-142	-281	-421			
		125	VIABLE	NOT VIAB	NOT VIAB	NOT VIAB	NOT VIAB			
10	50-94 Whitford Road	0	271	183	95	4	-90			
		25	VIABLE	VIABLE	VIABLE	MARGINAL	NOT VIAB			



	Table 6.4 Appraisal outcomes from non HMR sites: base appraisals, without grant									
12	Black Horse Hill	180	481	270	50	-176	-405			
		205	VIABLE	VIABLE	NOT VIAB	NOT VIAB	NOT VIAB			
13	Builders Yard	365	794	406	2	-415	-833			
		390	VIABLE	VIABLE	NOT VIAB	NOT VIAB	NOT VIAB			
14	Warren Point	300	357	187	12	-169	-350			
		325	VIABLE	NOT VIAB	NOT VIAB	NOT VIAB	NOT VIAB			
15	Vauxhall Dealership	200	233	-19	-277	-539	-804			
		225	VIABLE	NOT VIAB	NOT VIAB	NOT VIAB	NOT VIAB			

Source: Affordable Housing Viability Study 2010

- 6.23 Looking at Table 6.4, with no affordable contribution there are now 11 viable sites and one marginal. Turning to the various levels of affordable contribution; at 10% seven sites are still viable. At 20%, four sites remain viable and one is marginal. At 30%, only two sites remain viable with one marginal and at 40%, only one site remains viable. Whilst appraisals have not been prepared for 50%, extrapolation would suggest that the one site would remain viable.
- 6.24 These results are summarised in tabular form below;

	Tabl	e 6.5 Viability	results summa	ry			
	No of sites in category with affordable at:						
	No aff	10%	20%	30%	40%		
Viable	11	7	4	2	1		
Marginal	1	0	1	1	0		
Not viable	1	6	8	10	12		
Total	13	13	13	13	13		

Source: Affordable Housing Viability Study 2010

6.25 There are considerable geographical differences that can be seen in the table below that breaks the results down into the RSS Sub-Areas used in the SHMA Update.

Table 6.6 Viability results summary – By RSS Sub-area								
	N	No of sites of viable sites in category with affordable at:						
	No aff	10%	20%	30%	40%			
Inner Area	3	2	0	0	0			
Outer Area	5	3	3	1	0			
Rural Area	3	2	1	1	1			
Total	11	7	4	2	1			

Source: Affordable Housing Viability Study 2010

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6.26 We will consider the implications of these results for future policy in the next chapter. However before we can do this we should consider how likely future movements in our appraisal assumptions might impact upon our conclusions.

Sensitivity: price and cost levels

- 6.27 Whilst variations in any of the appraisal assumptions will affect the results, the key elements which most dramatically affect the outcome are the price and build cost assumptions. In the present market situation it is future movements in prices which are of greatest interest.
- 6.28 Over the last few months prices appear to have stabilised, and even to have risen slightly. However there is no consensus that the decline in prices is over. One view is that a limited supply of properties onto the market, rather than an increase in demand, has been responsible for the modest upturn, and a number of commentators still expect a further period of price decline in 2010.
- 6.29 Given the continuing uncertainty we considered two additional scenarios in order to illustrate the impact of future price and cost changes. The first took a moderately pessimistic view assuming that prices would fall another 10% relative to costs, before a clear recovery begins.
- 6.30 The second assessed how viability might have looked around the market peak in autumn 2007, essentially reflecting newbuild market prices 15% higher than currently a conservative view and costs 5% lower. The results from this 'market peak' scenario are considered in the next section. The 'short-term fall' scenario results for the 20% affordable option are compared to the base appraisal results in Table 6.7 below. For completeness, in this and the following tables the results for the two HMRI programme sites are shown, but greyed out.



	Table 6.7 Sensitivity test: short-term market fall scenario									
			Value £k per	acre						
No	Site	Alt use value	Base option 20% aff		Prices down costs up 20% aff					
1	Whitfield Ln	10	393		247					
		35	VIABLE		VIABLE					
2	Leasowe Primary	100	185		29					
		125	VIABLE		NOT VIAB					
3	Hoylake Road	200	-43		-249					
		225	NOT VIAB		NOT VIAB					
4	Beechwood	100	12		-94					
		125	NOT VIAB		NOT VIAB					
5	Carlett Park	160	416		229					
		185	VIABLE		VIABLE					
6	Lewis Reed	160	-88		-261					
		185	NOT VIAB		NOT VIAB					
7	Former Primary Sch	100	108		-113					
		125	MARGINAL		NOT VIAB					
8	Milner/Carrington St	0	-397		-551					
		25	NOT VIAB		NOT VIAB					
9	Marymount Convent	100	-142		-355					
		125	NOT VIAB		NOT VIAB					
10	50-94 Whitford Road	0	95		-57					
		25	VIABLE		NOT VIAB					
11	11-25 Mossey Bank	0	-65		-218					
		25	NOT VIAB		NOT VIAB					
12	Black Horse Hill	180	50		-257					
		205	NOT VIAB		NOT VIAB					
13	Builders Yard	365	2		-537					
		390	NOT VIAB		NOT VIAB					
14	Warren Point	300	12		-222					
		325	NOT VIAB		NOT VIAB					
15	Vauxhall Dealership	200	-277		-645					
		225	NOT VIAB		NOT VIAB					

Source: Affordable Housing Viability Study 2010

6.31 It can be seen that with a further price fall/cost increase, only two sites altogether remain viable at 20% affordable.

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Sensitivity: the market peak

- 6.32 The above approach, varying the price level, can also be applied in order to assess retrospectively viability at the peak viability level of October/November 2007. In this case we believe that prices would have been at least 15% higher and costs 5% lower than those assumed in the base appraisals (effectively equivalent to a 20% increase in prices).
- 6.33 The approach was applied with target proportions of 20%, 30% and 40%, and the results are compared with the 20% 'base' option below.



	Table 6.8 Sensitivity test: market peak								
				Value £k per ad	cre				
No	Site	Alt use	Base option	Prices up costs down					
		value	20% aff	20% aff	30% aff	40% aff			
1	Whitfield Ln	10	393	632	490	346			
		35	VIABLE	VIABLE	VIABLE	VIABLE			
2	Leasowe Primary	100	185	433	291	149			
		125	VIABLE	VIABLE	VIABLE	VIABLE			
3	Hoylake Road	200	-43	260	85	-110			
		225	NOT VIAB	VIABLE	NOT VIAB	NOT VIAB			
4	Beechwood	100	12	159	69	-22			
		125	NOT VIAB	VIABLE	NOT VIAB	NOT VIAB			
5	Carlett Park	160	416	720	530	338			
		185	VIABLE	VIABLE	VIABLE	VIABLE			
6	Lewis Reed	160	-88	171	20	-137			
		185	NOT VIAB	MARGINAL	NOT VIAB	NOT VIAB			
7	Former Primary Sch	100	108	442	245	49			
		125	MARGINAL	VIABLE	VIABLE	NOT VIAB			
8	Milner/Carrington St	0	-397	-175	-299	-423			
		25	NOT VIAB	NOT VIAB	NOT VIAB	NOT VIAB			
9	Marymount Convent	100	-142	188	1	-193			
		125	NOT VIAB	VIABLE	NOT VIAB	NOT VIAB			
10	50-94 Whitford Road	0	95	322	196	70			
		25	VIABLE	VIABLE	VIABLE	VIABLE			
11	11-25 Mossey Bank	0	-65	159	34	-96			
		25	NOT VIAB	VIABLE	VIABLE	NOT VIAB			
12	Black Horse Hill	180	50	533	244	-58			
		205	NOT VIAB	VIABLE	VIABLE	NOT VIAB			
13	Builders Yard	365	2	821	292	-256			
		390	NOT VIAB	VIABLE	NOT VIAB	NOT VIAB			
14	Warren Point	300	12	357	128	-110			
		325	NOT VIAB	VIABLE	NOT VIAB	NOT VIAB			
15	Vauxhall Dealership	200	-277	288	-60	-413			
		225	NOT VIAB	VIABLE	NOT VIAB	NOT VIAB			

Source: Affordable Housing Viability Study 2010

6.34 The results confirm that at the market peak level of prices viability would be improved. However whilst the improvement is quite dramatic at 20%, it is less so at the higher affordable options. Even so there are now four viable sites at 40%.

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Sensitivity: with grant

6.35 Viability was also determined using grant levels of £12k per bedspace for social rented dwellings and £6k per bed space for intermediate dwellings. Table 6.9 shows that whilst the introduction of grant improves viability only modestly with a low affordable target, the improvement becomes more pronounced as the target increases. Now there are five sites which remain viable at the 40% level (compared with only one without grant).

	Table 6.9 Appraisal outcomes: base appraisals, with grant								
				Value	£k per acre				
No	Site	Alt use value	No Affordable	10%	20%	30%	40%		
1	Whitfield Ln	10	604	550	494	439	382		
		35	VIABLE	VIABLE	VIABLE	VIABLE	VIABLE		
2	Leasowe Primary	100	387	348	307	266	225		
		125	VIABLE	VIABLE	VIABLE	VIABLE	VIABLE		
3	Hoylake Road	200	215	158	98	38	-24		
		225	MARGINAL	NOT VIAB	NOT VIAB	NOT VIAB	NOT VIAB		
4	Beechwood	100	139	119	99	79	59		
		125	VIABLE	MARGINAL	NOT VIAB	NOT VIAB	NOT VIAB		
5	Carlett Park	160	701	616	533	447	362		
		185	VIABLE	VIABLE	VIABLE	VIABLE	VIABLE		
6	Lewis Reed	160	128	88	45	0	-45		
		185	NOT VIAB	NOT VIAB	NOT VIAB	NOT VIAB	NOT VIAB		
7	Former Primary Sch	100	392	326	261	194	128		
		125	VIABLE	VIABLE	VIABLE	VIABLE	VIABLE		
8	Milner/Carrington St	0	-227	-237	-248	-259	-269		
		25	NOT VIAB	NOT VIAB	NOT VIAB	NOT VIAB	NOT VIAB		
9	Marymount Convent	100	126	76	22	-33	-89		
		125	VIABLE	NOT VIAB	NOT VIAB	NOT VIAB	NOT VIAB		
10	50-94 Whitford Road	0	271	251	232	212	193		
		25	VIABLE	VIABLE	VIABLE	VIABLE	VIABLE		



	Table 6.9 Appraisal outcomes: base appraisals, with grant									
11	11-25 Mossey Bank	0	114	94	75	55	35			
		25	VIABLE	VIABLE	VIABLE	VIABLE	VIABLE			
12	Black Horse Hill	180	481	364	239	110	-17			
		205	VIABLE	VIABLE	VIABLE	NOT VIAB	NOT VIAB			
13	Builders Yard	365	794	553	290	25	-247			
		390	VIABLE	VIABLE	NOT VIAB	NOT VIAB	NOT VIAB			
14	Warren Point	300	357	251	137	22	-96			
		325	VIABLE	NOT VIAB	NOT VIAB	NOT VIAB	NOT VIAB			
15	Vauxhall Dealership	200	233	93	-52	-199	-348			
		225	VIABLE	NOT VIAB	NOT VIAB	NOT VIAB	NOT VIAB			

Source: Affordable Housing Viability Study 2010

6.36 The results (excluding the two HMRI sites) with grant are summarised in tabular form below;

Table 6.10 Viability results with grant summary							
	No of sites in category with affordable at:						
	No aff	10%	20%	30%	40%		
Viable	11	7	6	5	5		
Marginal	1	1	0	0	0		
Not viable	1	5	7	8	8		
Total	13	13	13	13	13		

Source: Affordable Housing Viability Study 2010

Sensitivity: tenure split

- 6.37 The appraisals were prepared using an assumed 80/20 tenure split. At a late stage in the study the parallel SHMA update study suggested that a more appropriate tenure split would be 85/15. Accordingly we have provided a sensitivity test for the variant tenure split.
- 6.38 A small 5% switch towards social rented units would be expected to reduce land values, though only by a very a modest amount. Table 6.11 shows that that is indeed the case; land values drop back by typically about £3k per acre, not sufficient to alter the viability status of any site at 20% affordable. Where grant was available the differences would be even less because the availability of grant very considerably reduces the differential in purchase prices between social rented and intermediate dwellings.

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Table 6.11 Sensitivity test: tenure split 85/15								
			Value £k per acre					
No	Site		Base option		Tenure split 85/15			
		Alt use value	20% aff		20% aff			
1	Whitfield Ln	10	393		391			
		35	VIABLE		VIABLE			
2	Leasowe Primary	100	185		182			
		125	VIABLE		VIABLE			
3	Hoylake Road	200	-43		-46			
		225	NOT VIAB		NOT VIAB			
4	Beechwood	100	12		10			
		125	NOT VIAB		NOT VIAB			
5	Carlett Park	160	416		413			
		185	VIABLE		VIABLE			
6	Lewis Reed	160	-88		-92			
		185	NOT VIAB		NOT VIAB			
7	Former Primary Sch	100	108		105			
		125	MARGINAL		MARGINAL			
8	Milner/Carrington St	0	-397		-400			
		25	NOT VIAB		NOT VIAB			
9	Marymount Convent	100	-142		-147			
		125	NOT VIAB		NOT VIAB			
10	50-94 Whitford Road	0	95		92			
		25	VIABLE		VIABle			
11	11-25 Mossey Bank	0	-65		-68			
		25	NOT VIAB		NOT VIAB			
12	Black Horse Hill	180	50		44			
		205	NOT VIAB		NOT VIAB			
13	Builders Yard	365	2		-7			
		390	NOT VIAB		NOT VIAB			
14	Warren Point	300	12		8			
		325	NOT VIAB		NOT VIAB			
15	Vauxhall Dealership	200	-277		-284			
		225	NOT VIAB		NOT VIAB			

Source: Affordable Housing Viability Study 2010


7. Implications of results

Our approach

- 7.1 The purpose of the Affordable Housing Viability Study was to assess the impact of alternative affordable housing requirements upon development viability. In order to provide appropriate guidance, we have produced financial appraisals in respect of residential developments on a range of sites selected. Our approach has involved the use of the actual development proposals for the sites with recent planning permissions and 'model' developments for sites for which detailed information is not available. A bespoke financial appraisal package has been used to produce residual valuations for each site under a series of affordable housing options.
- 7.2 In order to prepare financial appraisals, whether for a general study like this or on behalf of a landowner or developer proposing a specific development, it is necessary to make a considerable number of assumptions. We believe that, in general, the assumptions we have made are fair and reasonable. They reflect considerable experience drawn from a variety of development situations and are designed to reflect the circumstances of each site which, even in a relatively compact area like Wirral, in practice display a certain amount of diversity. The appraisal results would produce open market land values which are consistent and if anything somewhat lower than the limited information we have about recent values and prices currently sought for small sites in the area,. This suggests that the package of development assumptions is not unduly optimistic.
- 7.3 The relatively low land values emerging also reflect three other factors which will need to be taken into account when reflecting on the appraisal results:
 - The combined effect of a serious restriction on credit availability from the early autumn of 2007 and the consequential, more general, business downturn which became increasingly established from the last quarter of 2008
 - The impact of relatively challenging new requirements in respect of sustainability, without any offsetting uplift in values
- 7.4 The financial appraisals produce a series of residual values showing the value generated for each site for 100% market housing, further tested under a range of affordable housing scenarios. The figures must be interpreted to draw conclusions for Development Plan policies. We have suggested an interpretation which draws on indicative alternative use values, and sets a standard 'cushion' over alternative use value to provide an incentive for the landowner to bring the site forward. As a strategic approach, we believe this to be reasonable. Producing detailed assessments and valuations for each site would involve resources well beyond the scope of the current exercise and we suspect would still leave room for argument.

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- 7.5 There are substantial variations in house prices between different parts of the study area. The sites covered include locations in which viability is (other things being equal) likely to be worst. The range of sites includes both smaller and larger sites, straightforward and complex development situations and a range of previous uses for previously developed land.
- 7.6 The appraisals tested various proportions of affordable housing combined with a proposed tenure split of 80:20 social rented: intermediate housing, with intermediate housing represented by shared ownership at 25% share. Initially it was decided to carry out the appraisals assuming grant would not be available. In order to reflect the reality of the current market we have also run the appraisals assuming grant is available to assist the delivery of affordable housing. In estimating the values which, under those terms, developers would be likely to achieve from affordable housing of the above types we have used information on estimated purchase prices drawn from our experience elsewhere.
- 7.7 We have taken a strategic approach to ensure that the sites were treated consistently. This is because the analysis is designed to test and demonstrate Borough-wide deliverability in line with the requirements in national guidance. This work is a strategic study designed to inform Development Plan policy, rather than an exercise to predict as accurately as possible the actual financial outcomes of development on specific sites. The actual sites used in the study are therefore regarded as indicating more general patterns of development across the study area.

Basis for the affordable housing target

- 7.8 The results from the appraisals indicate that at current market values and costs it would be possible to sustain a target of 20% affordable housing, <u>without the assumed grant levels</u>, across the study area as a whole. Due to the nature of some of the sites within the area (i.e. in need of clearing) there will be sites that are not going to be viable without grant. There are, however, considerable variations between the Outer urban and Rural areas and the Inner/HMRI area so we recommend consideration is given to setting different targets in different areas.
- 7.9 With our base assumptions, under present market conditions the majority of the 15 sites could produce 100% market housing and remain viable. However four of the 11 sites in the Outer and Rural areas would remain viable at 20% affordable, and at 30% two out of 11 would remain viable with the other two being marginal. Only one would be viable at 40%.
- 7.10 On a 'with grant' basis, four of the nine Outer/Rural sites, plus an Inner/HMRI site, remain viable at 40%.



Affordable target suggestion

- 7.11 The recent SHMA Update concludes a need for about 40% of new housing to be affordable housing if the market is to be balanced over time. Although negotiated, little affordable housing has yet been delivered via s106 undertakings since 2007. This will continue to be the case while the market is slow and in the most deprived parts of the Borough (i.e. those with market failure).
- 7.12 Sensitivity tests show how responsive viability can be to changes in present market conditions. If price and cost levels were the same as in autumn 2007 almost all sites – even within the HMRI area – could sustain 20% affordable housing (although we have to acknowledge that in practice some alternative use values might then have been a little higher).
- 7.13 In view of the divergence in viability between different parts of the Wirral area it is not practical to put forward a single district-wide target. Instead we suggest targets of 20% for the Outer and Rural subareas, and 10% for the Inner area. These are the highest figures that could reasonably be proposed in present (December 2009) market circumstances. Since these could change quite quickly if the market does continue to recover, we would recommend the use of our dynamic viability model.
- 7.14 Nevertheless the SHMA update showed that a target of 40% would be justified by the level of need in Wirral. If viability improved, which in due course is likely, or otherwise if substantial amounts of grant became available, it would be reasonable to seek a higher proportion of affordable housing than the December 2009 market conditions permit. The 40% SHMA update figure should be retained as a longer term aspirational Plan-wide target as required by PPS3.





8. Threshold modelling: results

Introduction

8.1 This chapter is intended to provide guidance on the threshold issue. It considers the target proposals and carries out additional analysis using model sites designed to provide further guidance.

Policy context

8.2 PPS3 encourages local authorities to undertake such analysis:

'Local Planning Authorities can set lower minimum thresholds, where viable and practicable, including in rural areas. This could include setting different proportions of affordable housing to be sought for a series of site-size thresholds over the plan area. Local Planning Authorities will need to undertake an informed assessment of the economic viability of [this]' (PPS3: Housing (2010) para 29)

Modelling variations in scheme size

- 8.3 The main appraisals did not include any sites below the national guidance threshold of 15 dwellings. The smallest Sites 13 to 15 were of 19, 18 and 18 dwellings respectively.
- 8.4 Accordingly further guidance is required on the threshold issue. This has been provided by preparing appraisals for a suite of model sites based upon an actual site Site 5, Carlett Park Ferry Road Eastham. Carlett Place was chosen because it was a smaller site (some 60 dwellings (ref Table 2.21)) as compared with the Benchmark site (Site 2) which is about 130 dwellings. We would have preferred a smaller site, but all the sites smaller than this were located in high value areas and so were not a suitable base for testing the sensitivity of viability to thresholds. Carlett Place is not so high priced, and so was judged the most suitable one for this purpose. In order to provide a full picture of how viability varied down to three dwellings, we created a suite of model sites.
- 8.5 Site 5 falls within the RSS Outer Area as part of a Major Developed Site in the Green Belt. It is a former education site, of some 1.04 ha. Clearly such sites have a minimum size, and in practice would not arise with sizes of say ten or fewer dwellings. For the purpose of the exercise we assumed that such sites would have some other alternative use of similar value. Apart from this, it was felt that assumptions from the actual Site 5 could reasonably be carried over to the model sites with only two exceptions.

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- 8.6 Firstly we recognised that as site size declines it may be increasingly difficult to achieve the same site utilisation efficiency. Therefore as site size varied we allowed the development density (sq ft floorspace per acre/sq m per ha) to vary slightly, reducing as dwelling numbers reduced. Since the average floor area of the dwellings remained constant this was achieved by adjusting the site area (i.e. so that it did not vary fully pro rata with dwelling numbers).
- 8.7 Secondly, we built in loadings for the build cost for sites of less than 15 dwellings, in line with those explained at paragraph 5.11 of this report.

	Table 8.1 Variant assumptions for model threshold sites							
	Model sites from Site 5							
floorspace density variations build cost variations								
No of dwgs	sq ft per acre	site area ha	scale premium	build cost per sq ft				
15	15,500	0.260	0.00%	84.50				
14	15,480	0.243	1.00%	85.50				
13	15,455	0.226	2.00%	86.00				
12	15,425	0.209	3.00%	87.00				
11	15,390	0.192	4.00%	88.00				
10	15,350	0.175	5.00%	88.50				
9	15,305	0.158	6.00%	89.50				
8	15,255	0.141	7.25%	90.50				
7	15,195	0.124	8.50%	91.50				
6	15,125	0.107	10.00%	93.00				
5	15,045	0.089	12.00%	94.50				
4	14,955	0.072	14.00%	96.50				

8.8 The variant floorspace densities and build costs are set out in the table below.

Source: Fordham Research derived from analysis of BCIS cost data

8.9 There are two other areas where it would be possible to argue that holding assumptions constant with size would understate viability in practice. Firstly, holding market prices unchanged as site size declined would ignore the scope for a 'non estate' premium on very small sites, of say six to seven or fewer dwellings. Similarly, one might expect that the typical £ per dwelling developer contribution would decline as sites fell below the thresholds for specific contributions, or were otherwise held to be de minimis. In each case we have left the assumptions unchanged.



Viability results

8.10 Using the above assumptions, and deriving otherwise from the 'actual site' appraisal for Site 5, appraisals were prepared for the suite of model sites. The results are set out below:

	Table 8.2 A	opraisal outc	omes: thresho	ld sites	
			Value £k per a	cre	
Site No dwgs	Alt use value	10%	20%	30%	40%
Model site 15 dwgs	100	564	419	278	128
	125	VIABLE	VIABLE	VIABLE	VIABLE
Model 14	100	541	405	256	107
	125	VIABLE	VIABLE	VIABLE	MARGINAL
Model 13	100	528	391	244	96
	125	VIABLE	VIABLE	VIABLE	NOT VIAB
Model 12	100	517	379	230	80
	125	VIABLE	VIABLE	VIABLE	NOT VIAB
Model 11	100	504	357	208	59
	125	VIABLE	VIABLE	VIABLE	NOT VIAB
Model 11	100	490	344	196	47
	125	VIABLE	VIABLE	VIABLE	NOT VIAB
Model 9	100	478	330	181	31
	125	VIABLE	VIABLE	VIABLE	NOT VIAB
Model 8	100	454	307	161	10
	125	VIABLE	VIABLE	VIABLE	NOT VIAB
Model 7	100	430	284	139	-11
	125	VIABLE	VIABLE	VIABLE	NOT VIAB
Model 6	100	407	260	113	-38
	125	VIABLE	VIABLE	MARGINAL	NOT VIAB
Model 5	100	375	231	83	-67
	125	VIABLE	VIABLE	MARGINAL	NOT VIAB
Model 4	100	336	190	43	-107
	125	VIABLE	VIABLE	NOT VIAB	NOT VIAB

Source: Affordable Housing Viability Study 2010

8.11 At 10% and 20% affordable, all of the model sites are viable down to four dwellings; we estimate that three dwellings would be viable at 20%, but not two dwellings. A 30% requirement would be viable down to seven dwellings; six dwellings is marginal. A 40% requirement becomes unachievable as soon as site size drops below 15 dwellings.

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Implications

- 8.12 The appraisal results for the main sites suggested that it would be possible to seek a target of 20% affordable housing on sites of 15 or more dwellings in the Outer and Rural parts of the Council area.
- 8.13 The results for our model sites, based upon Site 5, suggest that there is scope for extending the size threshold downwards from the national guidance position of 15 dwellings. Sites down to four, and in our view three, dwellings, can produce 20% without becoming unviable.
- 8.14 The appraisals have of course been carried out using fractions of a dwelling, with no rounding. They justify a target of 20% for sites from four dwellings upwards. However a 20% target would only deliver 0.8 of a dwelling, which is what was tested. It would be possible to propose a size threshold on this basis, with fractions of a dwelling being provided through a commuted sum contribution.
- 8.15 Most Councils, however, seem to prefer an approach based on rounding. Alternatively therefore we would propose a size threshold of five, which at 20% would produce a whole dwelling. Rounding would come into play at eight dwellings, where presumably a theoretical requirement of 1.6 dwellings would be rounded up to two dwellings, or a higher, 25% requirement. Since Table 8.2 showed that a site of eight dwellings would be viable at 30%, we can safely conclude that rounding to 25% for sites of eight dwellings would not challenge the viability of the development. The subsequent rounding at 13 dwellings (2.6 dwgs at 20%) would be less onerous.
- 8.16 Were the percentage target to increase, in accordance with the discussion of Dynamic Viability in the next and final chapter, then these consequences of rounding might need to be re-examined, whilst an unrounded target for small sites would not.
- 8.17 The national minimum threshold for site sizes to which affordable targets apply is 15 dwellings (PPS3), but provision is made for lower thresholds where appropriate. None of the 15 sites in the main appraisals was under 15 dwellings and in order to provide guidance on this issue we modelled a suite of notional sites ranging in size from four to 15 dwellings, with characteristics based on one of the larger actual sites.
- 8.18 The results of the appraisals suggested that there is indeed scope for reducing thresholds. We concluded that a 20% target in line with the area-wide one, could be sustained down to five dwellings.



9. Dynamic Viability results

9.1 This chapter takes the results of the viability analysis, the first stage, and provides a basis for policy by providing deliverable affordable housing targets throughout the whole of the Plan period.

What Dynamic Viability Does

- 9.2 The Dynamic Viability model begins with the viability assessment, based on the residual valuations carried out as part of the main viability study.
- 9.3 The model is designed to provide robust targets at all phases of the housing market during the Plan period. This is taken to mean that the full range of possibilities must be set out to the Core Strategy Examination, so that the Inspector can consider and decide on the level of target setting for the whole Plan period. The target cannot be left to supplementary guidance. The alternative would be a costly re-opening of the Core Strategy Examination at each change in the housing market.

Benchmark Site

9.4 The Dynamic Viability approach requires that a single Benchmark site, or a synthetic site, is identified that currently reflects the affordable target level that is deliverable in that area. In the case of Wirral, a modified version of Site 2: Leasowe Primary (Scholars Gate) was used. The site was slightly 'modelled' to make it more fully representative of future sites in Wirral. This involved adjusting the target down to the Wirral-wide one of 20%. As can be seen from Table 6.3, the Leasowe Primary school site is one of the few sample sites that can nearly bear a 30% target, so the modelling exercise involved putting it into a somewhat lower priced area that is more representative of the likely flow of future sites. The Benchmark site is intended to be representative of future housing developments in Wirral. This site is of about 130 dwellings, and sites around 100 dwellings are expected to be typical of future development.

Key indexes

9.5 The model then takes the key factors affecting future viability and builds their future change into the model. Future change in target levels is purely dependent on published indexes. This means that the process of target setting through the plan period is entirely transparent. The model is set up prior to the Core Strategy Examination, is assessed and approved in whatever form during that Examination, and afterwards is entirely dependent on three published indexes:

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- **Price change**: We use the Halifax Price Index but others are available.
- **Building costs change**: The RICS building cost index based on tenders (BCIS) provides a general index of building costs.
- Alternative use value: The appropriate measure would depend on the specific alternative use applying to the Benchmark site but usually it is the Valuation Office Agency's Industrial Land index.
- 9.6 Each of the indexes is taken as a range, to produce a reasonably limited number of tabulations. The set of indices is based on the assumption that price and cost are the key changes that affect the viability of a Benchmark site, and that alternative use value must be checked in case it has risen above newbuild housing value and thus limits the target in itself.

Table 9.1 Update indices						
Variable	Proposed index	Starting Value				
House Price	Halifax House Price Index for North West region	Nov 2009 = 501.7				
http://www.lloydsbankinggroup.com/media1/research/halifax_hpi.asp						
Build cost	BCIS General Building Cost Index	Dec 2009 = 287.3				
http://www.bcis.co.uk/on	line					
Alternative use value	Property Market Report (VOA) Value of Industrial/Warehousing Land for Liverpool	Jan 2010 = figure is £450k per ha				
http://www.voa.gov.uk/publications/property_market_report/pmr-jan-2010/index.htm						
This table is also shown as A4.1 in the appendixes						

9.7 The following table, taken from Appendix 4, shows the initial values of the three indexes:

- 9.8 There are some specific points to make on the indices:
 - The **HPI** is taken from the North West quarterly series. The national HPI figures are published monthly but the regional figures only quarterly. This reduces the flexibility to short-term changes in the market, but increases its local value. Hence we use the regional HPI.
 - The **BCIS** figure is a national index. In the valuation process we apply a 'local adjustment' to make the figure more representative. But for updating it is better just to use the national figures, since the main effect on future cost change is national trends. The BCIS is a published figure from the RICS, but is available only to subscribers.



• The **VOA** figure has recently (July 2010) been published in a new format. Previously the series was published six monthly and contained a 'North West' figure. In the new format it is published annually in July with a base of January. The two industrial land figures given for the North West are Liverpool and Manchester. Clearly Liverpool is the more representative for Wirral. The value for the Benchmark site is £125k per acre. The value in the table above is per hectare, but that is of no consequence for updating. If the value for Liverpool industrial land in a year's time is, for instance, £500k per ha, the calculation for updating is simply £125 x 500/450 = £138.9k (rounded). This value can then be checked against the next step up in the Fine Matrix tables to see whether a move of Alternative Use value base is justified.

Details of the outputs

9.9 The model generates the full plausible range of target variations based on the above three indexes. The following illustration is one of a set of eight (one for each of the values for the alternative use values). In the example below it is the 'base' alternative use value. The full set of Dynamic Viability tables is presented in Appendix 4.

	Figure 9.1 Coarse matrix with base alternative use value										
					Pric	e Change	e HPI				
	%		-20%	-10%	0%	10%	20%	30%	40%	50%	60%
ex			401.4	451.5	501.7	551.9	602.0	652.2	702.4	752.6	802.7
pul	-20%	229.8	20%	35%	45%	55%	55%	55%	55%	55%	55%
S	-10%	258.6	0%	20%	35%	45%	50%	55%	55%	55%	55%
В Ю	0%	287.3	0%	0%	20%	30%	40%	45%	50%	55%	55%
ang	10%	316.0	0%	0%	0%	20%	30%	35%	45%	50%	50%
Ch	20%	344.8	0%	0%	0%	5%	20%	25%	35%	40%	45%
ost	30%	373.5	0%	0%	0%	0%	5%	15%	25%	35%	40%
C	40%	402.2	0%	0%	0%	0%	0%	10%	15%	25%	30%
	50%	431.0	0%	0%	0%	0%	0%	0%	10%	15%	25%

9.10 The table below focuses upon the 20% target discussed as being deliverable in the three previous chapters (6, 7 and 8): the zero/zero point when looking at the percentage version of the indexes.

Note that the figure shows proposed % target for each cost/price combination, with 0% change in alternative use value. The table also provides, inside the percentages, the actual values of the indexes, so that they can be read off in future Source: Affordable Housing Viability Study 2010



- 9.11 In effect, once the Core Strategy Examination has approved a starting target, the rest follows automatically from the index changes. Since the array of possible index changes over the longer term is extremely large, the work is done in two stages:
 - Coarse Matrix: shows the big picture and is calculated in 10% intervals of the indexes (all three). The result provides broad coverage, but the change from one cell to another can produce large changes in targets: e.g. from 25% to 40%, in jumps which can be too large to apply in practice.
 - Fine Matrix: is the operational level, which takes the area around the chosen target in the Coarse Matrix and uses 4% intervals in the indexes (the intervals can be varied). This produces results for the area around the chosen target that yield much smaller target changes: mostly in 5% intervals and sometimes 10%, which can be easier to accommodate.
- 9.12 Figure 9.2 shows the Fine Matrix outputs that relate to the Figure 9.1 Coarse Matrix. Again a full set of tables can be found in Appendix 4. As will be seen from Figure 9.2, the intervals in the targets around the base case of 20% are smaller than in Figure 9.1. The Fine Matrices therefore permit more sensitive adjustments of the target as the index numbers change over time.

	Figure 9.2 Fine matrix with base alternative use value							ve use	value		
					Pric	e Chang	e HPI				
	%		-8%	-4%	0%	4%	8%	12%	16%	20%	24%
X			461.6	481.6	501.7	521.8	541.8	561.9	582.0	602.0	622.1
Inde	-8%	264.3	20%	25%	30%	35%	40%	40%	45%	50%	50%
S	-4%	275.8	10%	20%	25%	30%	35%	35%	40%	45%	45%
e B(0%	287.3	5%	10%	20%	25%	30%	30%	35%	40%	40%
ange	4%	298.8	0%	5%	10%	20%	25%	25%	30%	35%	40%
Cha	8%	310.3	0%	0%	5%	10%	20%	20%	25%	30%	35%
ost	12%	321.8	0%	0%	0%	5%	10%	20%	20%	25%	30%
Ō	16%	333.3	0%	0%	0%	0%	5%	15%	20%	20%	25%
	20%	344.8	0%	0%	0%	0%	0%	10%	15%	20%	20%

Source: Affordable Housing Viability Study 2010

Figure 9.3 below shows how the close-up Fine Matrices relate to each other within the bigger Coarse 9.13 Matrix. The trajectory shown in Fine Matrix 1 moves from the initial deliverable target of 20%, through various changes in cost and price towards a 30% deliverable target at some time in the future. At that point the trajectory has reached the edge of Fine Matrix 1 and has begun to move into Fine Matrix 2. The index base is then re-set to Fine Matrix 2 which includes the 30% target, which allows for further movement to the right as the market continues to improve.





Figure 9.3 Coarse and Fine Matrices related



9.14 The following figure provides an additional "mini-manual":

Figure 9.4 Updating the affordable target

Step 1

The starting point is the Alternative Use Value Fine Matrix Table F1. Does the current value of the Alternative Use index mean that another matrix table should be used? If so this is the reference for the further steps.

Step 2

Using the appropriate Fine Matrix table, decided by Step 1, check the changes in the HPI and the BCIS. If either or both of these has changed by more than half the interval to the next step, then the target cell should change. This may or may not involve a target change, since some of the targets will be the same in several cells.

Step 3

Publish the change in target in a suitable format such as the Council's statutory Annual Monitoring Report.

Source: Fordham Research 2010

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Implementing Dynamic Viability

9.15 This baseline Viability study which underpins the Dynamic Viability approach will need to be periodically updated alongside the accompanying SHMA to reflect any wider changes in the market over time.

Conclusion

- 9.16 The Dynamic Viability approach provides a process, which can be established in the Council's Core Strategy, whereby deliverable targets for affordable housing can be adjusted to reflect future changes in the strength of the housing market.
- 9.17 The Matrix tables in Appendix 4 provide the detailed background to Figure 9.1 and Figure 9.2 above. Together they allow for the Core Strategy Examination to set the basis for deliverable affordable housing targets over the whole of the Plan period. They should achieve the practical maximum of affordable housing without prejudicing the delivery of market housing. As shown below, there will be points in the process where, if land is given planning permission, there will be a windfall land profit, and others where the enhancement of viability is largely or fully converted into increased affordable housing. In practice, the opportunity for any windfall profit will be directly related to the interval between which the targets are re-set.
- 9.18 For smaller developments the Dynamic Viability target current at the time of granting full permission or when reserved matters are determined will be applicable throughout the development process. On larger developments, which contain more than one phase, an updating process will need to be inserted into a section 106 legal agreement, to provide an automatic updating of the affordable target (up or down) as the development proceeds.



Figure 9.5 Gain of Affordable housing through Dynamic Viability

Note: This diagram is schematic and does not apply to Wirral

Source: Fordham Research 2010



Stakeholder involvement

9.19 A stakeholder event was held at the end of July 2010, prior to finalising the report (more detail is provided in Appendix 6). This is normal practice with such studies. There is not very much point in contacting stakeholders until they can see the results and comment upon them. There was a good turnout of both house builders, RSLs and others, as well as a good detailed discussion. There was comment on the very large Peel Holdings scheme of 20,000 plus flats (Wirral Waters). This had not been included in the analysis as it is highly untypical of future development, and would require a much more detailed study than this one to assess its viability. The representative of Peel Holdings stated, in any event, that it was not at present a viable scheme. There was an informed discussion between the participants of the difficulties of both developers and RSLs in producing workable affordable housing schemes. There were no substantial criticisms of the viability study.





Appendices





Appendix 1: Newbuild schemes

A1.1 The schedule below provides details of a number of current newbuild developments and other comparable housing in the Borough.

Table A1.1 Newbuild schemes details							
Site / location	Builder	No. of dwgs	Range of dwgs	Prices			
Newbuild							
Scholars Gate Leasowe (CH46)	Barratt	131	1&2 bed flats 2&3 bed houses	£110k- £145k			
Beechwood Drive Beechwood (CH43)	Lowry	90	2,3&4 bed houses				
Church Walk Wallasey (CH44)	Bovis		1&2 bed flats	£130k - £165k			
Woodlands Grange Bromborough	Podrow		3&4 bed houses	£169k -			
(CH62)	Neurow		Flats all sold	£239k			





Appendix 2: House price variations

- A2.1 The indices in the table which follows compare prices in each postcode sector in the study area with an England and Wales 'average' figure actually the median postcode value.
- A2.2 The indices are standardised, to eliminate the effect of variations in type and mix. Separate indices for each house type are also combined with weightings based on the mix of overall sales.

	Table A2.1	Price variatior	ns by postcode	sector	
Postcode sector	Q2 09	Q4 08	Q2 08	Q4 07	Ave
CH41 0	63.36%	58.21%	61.14%	67.07%	62.45%
CH41 1	83.86%	83.73%	83.58%	105.81%	89.25%
CH41 2	41.63%		42.98%	61.15%	48.59%
CH41 3				44.25%	44.25%
CH41 4	86.18%	60.73%	51.42%	39.86%	59.55%
CH41 6				94.93%	94.93%
CH41 7		48.89%		51.49%	50.19%
CH41 8	45.17%	50.11%	46.87%	45.24%	46.85%
CH41 9		58.64%	51.29%	49.16%	53.03%
CH42 0	43.33%	58.21%	48.30%	55.97%	51.45%
CH42 1	47.20%	32.04%	51.90%	66.67%	49.45%
CH42 2		50.45%	49.50%	69.65%	56.53%
CH42 3			54.88%	49.95%	52.42%
CH42 4	65.96%	102.33%	67.98%	61.57%	74.46%
CH42 5	50.76%		59.82%	52.25%	54.28%
CH42 6	73.98%	78.02%	83.97%	90.97%	81.74%
CH42 7			42.01%	57.50%	49.75%
CH42 8	81.05%		114.16%	125.47%	106.89%
CH42 9	83.93%	66.63%	61.07%	82.62%	73.56%
CH43 0	86.84%	91.20%	101.03%	93.36%	93.11%
CH43 1		97.88%	133.06%	91.96%	107.63%
CH43 2	90.88%		158.55%	98.61%	116.01%
CH43 3			78.86%	71.79%	75.32%
CH43 4		65.41%	48.29%	71.14%	61.61%
CH43 5		119.69%	95.89%	89.61%	101.73%
CH43 6		84.33%	106.46%		95.40%
CH43 7	104.20%		86.78%	61.98%	84.32%
CH43 8	80.00%	117.21%			98.60%

	Table A2. ⁻	1 Price variatio	ons by postcod	e sector	
Postcode sector	Q2 09	Q4 08	Q2 08	Q4 07	Ave
CH43 9	88.40%		85.40%	89.45%	87.75%
CH44 0	50.68%	70.68%	88.06%	61.50%	67.73%
CH44 1	66.71%		62.71%	63.76%	64.39%
CH44 2			80.03%	88.61%	84.32%
CH44 3		83.41%	91.37%	75.91%	83.56%
CH44 4	60.43%	70.21%	69.83%	50.52%	62.75%
CH44 5	66.79%	59.97%	76.62%	63.26%	66.66%
CH44 6	66.45%		65.80%	55.16%	62.47%
CH44 7	28.80%	41.85%	27.65%	43.42%	35.43%
CH44 8	40.90%			65.22%	53.06%
CH44 9	53.62%	55.88%	50.81%	62.37%	55.67%
CH45 0			101.47%	108.36%	104.91%
CH45 1	90.83%	100.00%	99.79%	70.80%	90.35%
CH45 2			94.30%	89.35%	91.82%
CH45 3	97.22%	74.40%		105.99%	92.54%
CH45 4	54.11%	73.89%	71.25%	77.23%	69.12%
CH45 5	98.37%	72.18%	81.81%	78.63%	82.75%
CH45 6	105.47%			118.05%	111.76%
CH45 7	46.58%		79.74%	83.30%	69.87%
CH45 8	75.95%	54.16%	78.51%	88.23%	74.21%
CH45 9			98.69%	96.13%	97.41%
CH46 0	79.54%			70.23%	74.89%
CH46 1		64.36%	61.55%	74.14%	66.68%
CH46 2		70.21%	84.19%	65.78%	73.39%
CH46 3	62.74%	82.48%		77.81%	74.34%
CH46 6	70.84%	70.27%	74.15%	66.32%	70.40%
CH46 7		66.67%	63.40%	64.50%	64.86%
CH46 8			64.88%	64.93%	64.91%
CH46 9			75.73%		75.73%
CH47 0	100.47%			98.26%	99.36%
CH47 1	92.41%			153.69%	123.05%
CH47 2	98.78%	85.50%	106.77%	130.63%	105.42%
CH47 3	131.84%	114.73%	119.61%		122.06%
CH47 5			78.53%		78.53%
CH47 9			101.78%		101.78%
CH48 0	99.04%	115.40%	89.46%	97.37%	100.32%
CH48 2			315.93%		315.93%



	Table A2.1	Price variatio	าร by postcode	sector	
Postcode sector	Q2 09	Q4 08	Q2 08	Q4 07	Ave
CH48 3	98.55%		104.43%	117.79%	106.92%
CH48 4		78.41%		140.16%	109.28%
CH48 5	110.40%	114.94%	82.83%	93.75%	100.48%
CH48 6	92.80%		108.67%	100.42%	100.63%
CH48 8	120.60%	91.68%	138.35%		116.88%
CH48 9	105.82%	99.22%	101.32%		102.12%
CH49 0	69.58%		69.60%		69.59%
CH49 1		111.94%	86.06%	98.11%	98.70%
CH49 2	87.32%	90.39%	79.99%	88.54%	86.56%
CH49 3		83.04%	88.96%	78.84%	83.61%
CH49 4	67.01%	88.47%	67.58%	72.84%	73.97%
CH49 5				78.88%	78.88%
CH49 6	95.76%		87.33%	95.55%	92.88%
CH49 7	62.81%			61.69%	62.25%
CH49 9			68.20%	64.38%	66.29%
CH60 1				147.97%	147.97%
CH60 2				116.44%	116.44%
CH60 3	130.44%	107.65%	125.03%	138.40%	125.38%
CH60 4			210.48%		210.48%
CH60 5	103.89%		92.61%	113.72%	103.41%
CH60 6				189.93%	189.93%
CH60 7	93.79%			116.37%	105.08%
CH60 9	166.24%			174.24%	170.24%
CH61 1				129.44%	129.44%
CH61 3			87.21%	122.40%	104.80%
CH61 4	115.25%		108.77%	92.99%	105.67%
CH61 5	103.89%		82.83%	91.55%	92.76%
CH61 6	116.84%	103.41%		106.26%	108.84%
CH61 7	68.06%		95.56%	100.31%	87.97%
CH61 8	77.05%		82.63%	87.00%	82.23%
CH61 9	78.55%		102.06%	101.15%	93.92%
CH62 0			102.56%	60.82%	81.69%
CH62 1	49.30%	56.06%	59.63%	94.44%	64.86%
CH62 2	79.48%		90.98%	66.34%	78.93%
CH62 4	106.78%	103.68%		88.19%	99.55%
CH62 5	73.77%			78.35%	76.06%
CH62 6	75.47%	104.52%	89.88%	90.21%	90.02%

	Table A2.	1 Price variation	ons by postcod	e sector	
Postcode sector	Q2 09	Q4 08	Q2 08	Q4 07	Ave
CH62 7	97.33%	92.14%	100.47%	76.07%	91.50%
CH62 8	77.05%	76.47%	82.28%	83.29%	79.77%
CH63 9	79.63%	93.02%	88.84%	80.80%	85.57%

Source: Analysis of Land Registry data

Notes

1. Data has been mix adjusted to remove differences in house type mix between postcode sectors; individual indices have been calculated for each house type, and combined using weights reflecting the nation-wide type mix. A worked example is provided below.

Table A2.2	Worked exa	ample for Cl	H63 3 at Q2 2	2009			
	Land Registry data Q2 2009						
	Detached	Semi	Terraced	Flat	Total		
England & Wales - median price	£256,666	£158,333	£136,927	£142,266			
England & Wales - no of sales	28,017	35,283	34,299	19,660	117,259		
CH63 3 – ave price	£221,666	£167,250	£121,333	£0			
CH63 3 price as % E & W median							
value	86.7%	105.6%	88.6%	0%			
Weighted average index for CH63	[28,017	x 86.7%)+(35 88.6%)+(19,6	,283 x 105.6% 60 x 0% /117,2)+(34,299x 259			
3 =		=	78.4%				

Source: Analysis of Land Registry data



Appendix 3: Construction cost calculation

- A3.1 The table below shows stage by stage how unit construction cost is calculated consistent with the explanation in Chapter 5.
- A3.2 The starting point is the Fordham data base as indexed to the fourth quarter 2009 using BCIS General Cost Index value of 287.3.

Table A4.1 Example of construction cost calculation – Site 2							
	Adjustment	Build co	ost £ per				
	Aujustinent —	sq ft	sq m				
Base cost England & Wales at Sept 2009 for scheme of 44% storey houses and 22% 3 storey houses	Base cost	92.29	993				
Rebase to Wirral	-9.0%	83.99	904				
Level 3	+4.2%	87.51	942				
10% non renewable	+3.5%	90.58	975				
Higher spec	+2.0%	92.39	994				
Small site loading	+0.0%	92.39	994				
Rounded figure	round to £0.50 per sq ft, £5.0 per sq m	92.50	996				

Source: Fordham Research data & BCIS indices





Appendix 4: Dynamic Viability tables

- A4.1 It is proposed that the Benchmark site appraisal should be based upon an amended version of site 2, Leasowe Primary. The amendment is necessary to ensure it is viable at the proposed target level of 20%. This enables the Benchmark site to be more representative of future sites across Wirral.
- A4.2 The alternative use value for Site 2 is industrial/warehousing land.
- A4.3 The updating period is proposed to be a year, although this issue is one for decision at a Local Development Framework Examination.
- A4.4 The initial values of the three indexes (discussed in Chapter 9) are as follows:

Table A5.1 Update indices									
Variable	Proposed index	Starting Value							
House Price	Halifax House Price Index for North West region	Nov 2009 = 501.7							
http://www.lloydsbanking	group.com/media1/research/halifax hpi.asp								
Build cost	BCIS General Building Cost Index	Dec 2009 = 287.3							
http://www.bcis.co.uk/on	<u>line</u>								
Alternative use value	Property Market Report (VOA) Value of Industrial/Warehousing Land for Liverpool	Jan 2010 = figure is £450k per ha							
http://www.voa.gov.uk/pu	ublications/property_market_report/pmr-jan-2010	/index.htm							
5	This table is also shown as Table 9.1.								

A4.5 The following are two sets of eight tabulations of the Coarse and Fine Matrices described in Chapter9. They provide for the full range of possible targets and also the Alternative Use value check in eight bands of alternative use value indexes.



Wirral MBC Benchmark Site Appraisal

Coarse Matrix

	Table C1 Base alternative use value: - 0% Change - £100,000 Per Acre												
					Pric	e Change	e HPI						
	%		-20%	-10%	0%	10%	20%	30%	40%	50%	60%		
ex			401.4	451.5	501.7	551.9	602.0	652.2	702.4	752.6	802.7		
Ind	-20%	229.8	20%	35%	45%	55%	55%	55%	55%	55%	55%		
SIS	-10%	258.6	0%	20%	35%	45%	50%	55%	55%	55%	55%		
BC	0%	287.3	0%	0%	20%	30%	40%	45%	50%	55%	55%		
inge	10%	316.0	0%	0%	0%	20%	30%	35%	45%	50%	50%		
Che	20%	344.8	0%	0%	0%	5%	20%	25%	35%	40%	45%		
ost	30%	373.5	0%	0%	0%	0%	5%	15%	25%	35%	40%		
ŏ	40%	402.2	0%	0%	0%	0%	0%	10%	15%	25%	30%		
	50%	431.0	0%	0%	0%	0%	0%	0%	10%	15%	25%		

	Table C2 Base alternative use value: - 60% Change - £40,000 Per Acre												
					Pric	e Chang	e HPI						
	%		-20%	-10%	0%	10%	20%	30%	40%	50%	60%		
ex			401.4	451.5	501.7	551.9	602.0	652.2	702.4	752.6	802.7		
Ind	-20%	229.8	25%	40%	55%	55%	55%	55%	55%	55%	55%		
S S	-10%	258.6	0%	25%	40%	45%	55%	55%	55%	55%	55%		
BO	0%	287.3	0%	5%	25%	35%	45%	50%	55%	55%	55%		
inge	10%	316.0	0%	0%	10%	20%	30%	40%	45%	50%	55%		
Cha	20%	344.8	0%	0%	0%	10%	20%	30%	35%	45%	50%		
ost (30%	373.5	0%	0%	0%	0%	10%	20%	30%	35%	40%		
ŏ	40%	402.2	0%	0%	0%	0%	0%	10%	20%	30%	35%		
	50%	431.0	0%	0%	0%	0%	0%	0%	10%	20%	25%		



20%

10%

25%

20%

10%

0%

	Tal	ole C3 E	Base alte	ernative	use val	ue: - 40	% Chan	ige - £60),000 Pe	r Acre	
					Pric	e Change	e HPI				
	%		-20%	-10%	0%	10%	20%	30%	40%	50%	60%
ex			401.4	451.5	501.7	551.9	602.0	652.2	702.4	752.6	802.7
Ind	-20%	229.8	25%	40%	50%	55%	55%	55%	55%	55%	55%
S S	-10%	258.6	0%	20%	35%	45%	50%	55%	55%	55%	55%
BC	0%	287.3	0%	5%	20%	35%	40%	50%	55%	55%	55%
inge	10%	316.0	0%	0%	5%	20%	30%	40%	45%	50%	55%
Cha	20%	344.8	0%	0%	0%	10%	20%	30%	35%	40%	45%
ost	30%	373.5	0%	0%	0%	0%	10%	20%	30%	35%	40%
ŏ	40%	402.2	0%	0%	0%	0%	0%	10%	20%	25%	35%
	50%	431.0	0%	0%	0%	0%	0%	0%	10%	20%	25%

Table C4 Base alternative use value: - 20% Change - £80,000 Per Acre Price Change HPI % -20% -10% 0% 10% 30% 40% 50% 60% 20% 451.5 501.7 551.9 602.0 652.2 702.4 752.6 802.7 401.4 Cost Change BCIS Index -20% 229.8 20% 40% 50% 55% 55% 55% 55% 55% 55% -10% 258.6 0% 20% 35% 45% 50% 55% 55% 55% 55% 287.3 0% 0% 0% 20% 30% 40% 45% 50% 55% 55% 10% 316.0 0% 0% 20% 30% 40% 45% 50% 55% 5% 20% 344.8 0% 0% 45% 0% 5% 20% 30% 35% 40% 30% 373.5 0% 0% 10% 20% 25% 35% 40% 0% 0%

Table C5 Base alternative use value:	20% Change - £120 000	Per Acre

0%

0%

0%

0%

0%

0%

					Pric	e Change	e HPI				
	%		-20%	-10%	0%	10%	20%	30%	40%	50%	60%
X			401.4	451.5	501.7	551.9	602.0	652.2	702.4	752.6	802.7
Ind	-20%	229.8	15%	35%	45%	55%	55%	55%	55%	55%	55%
SIS	-10%	258.6	0%	15%	30%	40%	50%	55%	55%	55%	55%
BO	0%	287.3	0%	0%	15%	30%	40%	45%	50%	55%	55%
nge	10%	316.0	0%	0%	0%	15%	25%	35%	40%	45%	50%
Cha	20%	344.8	0%	0%	0%	5%	15%	25%	35%	40%	45%
ost (30%	373.5	0%	0%	0%	0%	5%	15%	25%	30%	40%
ö	40%	402.2	0%	0%	0%	0%	0%	5%	15%	25%	30%
	50%	431.0	0%	0%	0%	0%	0%	0%	10%	15%	25%



40%

50%

402.2

431.0

0%

0%

0%

0%

30%

25%

	Table C6 Base alternative use value: 40% Change - £140,000 Per Acre												
					Pric	e Change	e HPI						
	%		-20%	-10%	0%	10%	20%	30%	40%	50%	60%		
ка			401.4	451.5	501.7	551.9	602.0	652.2	702.4	752.6	802.7		
Ind	-20%	229.8	15%	30%	45%	55%	55%	55%	55%	55%	55%		
S	-10%	258.6	0%	15%	30%	40%	50%	55%	55%	55%	55%		
e BC	0%	287.3	0%	0%	15%	25%	35%	45%	50%	55%	55%		
inge	10%	316.0	0%	0%	0%	15%	25%	35%	40%	45%	50%		
Cha	20%	344.8	0%	0%	0%	0%	15%	25%	35%	40%	45%		
ost	30%	373.5	0%	0%	0%	0%	5%	15%	25%	30%	35%		
ŭ	40%	402.2	0%	0%	0%	0%	0%	5%	15%	25%	30%		
	50%	431.0	0%	0%	0%	0%	0%	0%	5%	15%	25%		

	Table C7 Base alternative use value: 60% Change - £160,000 Per Acre												
					Pric	e Change	e HPI						
	%		-20%	-10%	0%	10%	20%	30%	40%	50%	60%		
ex			401.4	451.5	501.7	551.9	602.0	652.2	702.4	752.6	802.7		
Ind	-20%	229.8	10%	30%	45%	50%	55%	55%	55%	55%	55%		
SIS	-10%	258.6	0%	10%	30%	40%	45%	50%	55%	55%	55%		
e B(0%	287.3	0%	0%	15%	25%	35%	45%	50%	55%	55%		
inge	10%	316.0	0%	0%	0%	15%	25%	35%	40%	45%	50%		
Cha	20%	344.8	0%	0%	0%	0%	15%	25%	30%	40%	45%		
ost (30%	373.5	0%	0%	0%	0%	5%	15%	25%	30%	35%		
ŏ	40%	402.2	0%	0%	0%	0%	0%	5%	15%	25%	30%		
	50%	431.0	0%	0%	0%	0%	0%	0%	5%	15%	20%		

Table C8 Base alternative use value: 80% Change - £180,000 Per Acre

					Pric	e Change	e HPI				
	%		-20%	-10%	0%	10%	20%	30%	40%	50%	60%
éX			401.4	451.5	501.7	551.9	602.0	652.2	702.4	752.6	802.7
Ind	-20%	229.8	5%	30%	40%	50%	55%	55%	55%	55%	55%
SIS	-10%	258.6	0%	10%	25%	35%	45%	50%	55%	55%	55%
BO	0%	287.3	0%	0%	10%	25%	35%	40%	50%	50%	55%
nge	10%	316.0	0%	0%	0%	10%	25%	30%	40%	45%	50%
Cha	20%	344.8	0%	0%	0%	0%	15%	25%	30%	35%	40%
ost (30%	373.5	0%	0%	0%	0%	0%	15%	20%	30%	35%
ŏ	40%	402.2	0%	0%	0%	0%	0%	5%	15%	20%	30%
	50%	431.0	0%	0%	0%	0%	0%	0%	5%	15%	20%



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Fine Matrix

	Table F1 Base alternative use value: 0% Change - £100,000 Per Acre												
					Pric	e Change	e HPI						
	%		-8%	-4%	0%	4%	8%	12%	16%	20%	24%		
X			461.6	481.6	501.7	521.8	541.8	561.9	582.0	602.0	622.1		
Inde	-8%	264.3	20%	25%	30%	35%	40%	40%	45%	50%	50%		
SIS	-4%	275.8	10%	20%	25%	30%	35%	35%	40%	45%	45%		
B B C	0%	287.3	5%	10%	20%	25%	30%	30%	35%	40%	40%		
ange	4%	298.8	0%	5%	10%	20%	25%	25%	30%	35%	40%		
Chê	8%	310.3	0%	0%	5%	10%	20%	20%	25%	30%	35%		
ost	12%	321.8	0%	0%	0%	5%	10%	20%	20%	25%	30%		
Ŏ	16%	333.3	0%	0%	0%	0%	5%	15%	20%	20%	25%		
	20%	344.8	0%	0%	0%	0%	0%	10%	15%	20%	20%		

	Tat	ole F2 B	ase alte	ernative	use val	ue: - 30)% Char	nge - £7(),000 Pe	r Acre	
					Pric	e Change	e HPI				
	%		-8%	-4%	0%	4%	8%	12%	16%	20%	24%
Хa			461.6	481.6	501.7	521.8	541.8	561.9	582.0	602.0	622.1
Ind	-8%	264.3	20%	25%	30%	35%	40%	45%	45%	50%	50%
S S	-4%	275.8	15%	20%	25%	30%	35%	40%	40%	45%	50%
BO	0%	287.3	5%	15%	20%	25%	30%	35%	40%	40%	45%
inge	4%	298.8	0%	5%	15%	20%	25%	30%	35%	35%	40%
Cha	8%	310.3	0%	0%	10%	15%	20%	25%	30%	30%	35%
ost (12%	321.8	0%	0%	0%	10%	15%	20%	25%	30%	30%
ŭ	16%	333.3	0%	0%	0%	5%	10%	15%	20%	25%	30%
	20%	344.8	0%	0%	0%	0%	5%	10%	15%	20%	25%

FORDHAM RESEARCH

	Tat	ole F3 B	ase alte	rnative	use valı	ue: - 20)% Char	ıge - £8(),000 Pe	r Acre	
					Pric	e Change	e HPI				
	%		-8%	-4%	0%	4%	8%	12%	16%	20%	24%
ex			461.6	481.6	501.7	521.8	541.8	561.9	582.0	602.0	622.1
Inc	-8%	264.3	20%	25%	30%	35%	40%	45%	45%	50%	50%
CIS	-4%	275.8	15%	20%	25%	30%	35%	40%	40%	45%	45%
е Ю	0%	287.3	5%	15%	20%	25%	30%	35%	35%	40%	45%
ang	4%	298.8	0%	5%	15%	20%	25%	30%	35%	35%	40%
Ch	8%	310.3	0%	0%	5%	15%	20%	25%	30%	30%	35%
ost	12%	321.8	0%	0%	0%	10%	15%	20%	25%	25%	30%
C	16%	333.3	0%	0%	0%	0%	10%	15%	20%	25%	25%
	20%	344.8	0%	0%	0%	0%	5%	10%	15%	20%	25%

 Table F4 Base alternative use value:
 - 10% Change - £90,000 Per Acre

 Price Change HPI

						0					
	%		-8%	-4%	0%	4%	8%	12%	16%	20%	24%
Cost Change BCIS Index			461.6	481.6	501.7	521.8	541.8	561.9	582.0	602.0	622.1
	-8%	264.3	20%	25%	30%	35%	40%	45%	45%	50%	50%
	-4%	275.8	10%	20%	25%	30%	35%	40%	40%	45%	45%
	0%	287.3	5%	10%	20%	25%	30%	35%	35%	40%	45%
	4%	298.8	0%	5%	10%	20%	25%	30%	30%	35%	40%
	8%	310.3	0%	0%	5%	15%	20%	25%	25%	30%	35%
	12%	321.8	0%	0%	0%	5%	15%	20%	25%	25%	30%
	16%	333.3	0%	0%	0%	0%	10%	15%	20%	20%	25%
	20%	344.8	0%	0%	0%	0%	5%	10%	15%	20%	20%

 Table F5 Base alternative use value:
 10% Change - £110,000 Per Acre

		Price Change HPI										
	%		-8%	-4%	0%	4%	8%	12%	16%	20%	24%	
ex			461.6	481.6	501.7	521.8	541.8	561.9	582.0	602.0	622.1	
nge BCIS Ind	-8%	264.3	15%	25%	30%	35%	40%	40%	45%	45%	50%	
	-4%	275.8	10%	15%	25%	30%	30%	35%	40%	45%	45%	
	0%	287.3	0%	10%	15%	20%	25%	30%	35%	40%	40%	
	4%	298.8	0%	5%	10%	15%	20%	25%	30%	35%	35%	
Cha	8%	310.3	0%	0%	5%	10%	15%	20%	25%	30%	35%	
ost (12%	321.8	0%	0%	0%	5%	10%	15%	20%	25%	30%	
ŏ	16%	333.3	0%	0%	0%	0%	5%	10%	15%	20%	25%	
	20%	344.8	0%	0%	0%	0%	0%	5%	10%	15%	20%	



Table F6 Base alternative use value: 20% Change - £120,000 Per Acre											
	%		-8%	-4%	0%	4%	8%	12%	16%	20%	24%
CIS Index			461.6	481.6	501.7	521.8	541.8	561.9	582.0	602.0	622.1
	-8%	264.3	15%	20%	30%	35%	35%	40%	45%	45%	50%
	-4%	275.8	10%	15%	20%	25%	30%	35%	40%	40%	45%
B	0%	287.3	0%	10%	15%	20%	25%	30%	35%	40%	40%
ange	4%	298.8	0%	5%	10%	15%	20%	25%	30%	35%	35%
Cha	8%	310.3	0%	0%	5%	10%	15%	20%	25%	30%	35%
ost	12%	321.8	0%	0%	0%	5%	10%	15%	20%	25%	30%
ŭ	16%	333.3	0%	0%	0%	0%	5%	10%	15%	20%	25%
	20%	344.8	0%	0%	0%	0%	0%	5%	10%	15%	20%

Table F7 Base alternative use value: 30% Change - £130,000 Per Acre Price Change HPI 24% % -8% -4% 0% 4% 12% 8% 16% 20% 481.6 582.0 602.0 622.1 461.6 501.7 521.8 541.8 561.9 Cost Change BCIS Index -8% 264.3 15% 20% 25% 30% 35% 40% 45% 45% 50% -4% 275.8 10% 15% 20% 25% 30% 35% 40% 40% 45% 0% 287.3 0% 10% 15% 20% 25% 30% 35% 35% 40% 4% 298.8 0% 0% 30% 35% 35% 10% 15% 20% 25% 8% 310.3 0% 30% 0% 5% 10% 15% 20% 25% 30% 321.8 30% 12% 0% 0% 0% 5% 10% 15% 20% 25% 16% 333.3 0% 25% 0% 0% 0% 5% 10% 15% 20% 20% 344.8 0% 0% 0% 0% 0% 5% 10% 15% 20%

 Table F8 Base alternative use value:
 40% Change - £140,000 Per Acre

		Price Change HPI									
	%		-8%	-4%	0%	4%	8%	12%	16%	20%	24%
X			461.6	481.6	501.7	521.8	541.8	561.9	582.0	602.0	622.1
Inde	-8%	264.3	15%	20%	25%	30%	35%	40%	40%	45%	50%
e BCIS	-4%	275.8	5%	15%	20%	25%	30%	35%	40%	40%	45%
	0%	287.3	0%	10%	15%	20%	25%	30%	35%	35%	40%
nge	4%	298.8	0%	0%	10%	15%	20%	25%	30%	35%	35%
Cha	8%	310.3	0%	0%	0%	10%	15%	20%	25%	30%	30%
ost (12%	321.8	0%	0%	0%	5%	10%	15%	20%	25%	30%
ö	16%	333.3	0%	0%	0%	0%	5%	10%	15%	20%	25%
	20%	344.8	0%	0%	0%	0%	0%	5%	10%	15%	20%





Appendix 5: Stakeholder Meeting of 29th July 2010

Meeting to discuss Wirral Affordable Housing Viability Study 29th July 2010

- 1. The meeting began with a presentation by Richard Fordham summarising the results of the recent Strategic Housing Market Assessment update, and the results of the AHVA.
- The meeting was attended by a good range of developers, property people, RSL's and both a Planning and Housing officer. A detailed list of attendees was kept by Andrew Fraser, the Planning Officer present.
- 3. The following is my notes on the discussion.
- 4. I referred to Peel Holdings site which we had not included in the study as it was not typical of future developments and was a very large one-off development requiring an independent viability study. The representative from Turley Associates (Peel's planning consultants) confirmed that the long-term nature of the delivery of this development set it aside from the current viability study and further detailed assessment would be required as proposals came forward.
- 5. Requiring RSLs to pay their share of S106 obligations stops them from buying housing from the developers (assertion by one developer). Nobody denied this.
- 6. There was a discussion of long term leasing by RSL's from house builders. How to get over the deposit problem for those who wanted to buy. One RSL officer was resentful of having bought a flat and found himself surrounded by social tenants. This was a case of Buy to Let gone wrong. The model for funding shared ownership and other shared equity products needs to be changed: it does not work. This point was generally agreed.
- 7. There was a discussion of the need for landlord regulation, and again there was general agreement as between RSLs and developers that this was desirable/necessary. Someone said that the Government had rejected it now, but that it would come back. It would require legislation. Somebody was looking at Savill's model 'Great Places' in Manchester.



- 8. Developers give blocks of flats to RSL's but they are not very attractive financially. In Liverpool 1 ten year leases have worked. But this has not worked in Wirral, which is a different market. Risky for the RSLs. They are taking on a substantial void risk. The Liverpool 1 flats are very poor: they are empty for a reason.
- 9. Developers are building for lease. Selling on leasehold makes financial sense. Most RSLs can get better rates for borrowing and hence can make leasing work where developers could not.
- 10. Questions were asked about the report. My first response was that some councils wish to circulate the draft report, while others do not. Andrew Fraser said that Wirral would want to finalise the report and sign it off before any wider circulation. The relevant meeting was on 23rd September. It was currently expected that the draft policies and the evidence base, including the viability report, would be put out for consultation on 18th October for 6 weeks. The Core Strategy would be published 5 days before 18th October.

Richard Fordham 3rd August 2010

PS I was most impressed by the general level of expertise among the RSL's as regards financial models that would work in the Wirral housing market. It is most unusual to find RSL's that can maintain an informed discussion with developers on this topic. Obviously RSL's buy from developers, but one does not normally hear such a good level of expertise in judging the terms of the deal from RSL's. I am afraid that these notes only sketch the discussion because I was involved in encouraging the debate as well as noting it down.


Appendix 6: Financial appraisal summaries

A6.1 The development viability **summaries** contained in the following pages set out the assumptions and outputs of the viability appraisals.





SITE 1 Whitfield Lane Barnston



Input assumptions	Scenario & option	Affordable 10% = 80% social rented 20% intermediate WITH GRANT	
•	_		
Wirral site viability st	ndy	Dwellings	
Site details		ave floor space build build sales	ales
Site	hitfield Lane	Dwellings % of % of gross net cost index = value duant unite cost cost for cost cost </th <th>alue r co #</th>	alue r co #
Area ha 4	20	Umits Sylic Sylic Sylic Sylic Sylic Town Per Sylic Troug Per Sylic Sylic Troug Per Sylic S	11.00
acres 10			
No dwgs	50	Affordable soc rent 12.0 8.00% 8.0% 955 947 82.50 82.50 73.00	3.00
Density dw/na 3	J.G	Affordable sh oship 3.0 2.0% 2.0% 955 947 82.50 101.00	01.00
		Total dwas 150.0 100.00% 100.0%	
	fk		000
Contingency	á	0.00 0.00 0.00 0.00	00.0
allowance 2.4	20% 295	Total units [£11,818,125] £28,091,80 [143,250] 142,050 [£11,818,125] £28,091,80	091,808
		Floorspace density = $13,687$ net sq ft per acre	
Development costs standard % build 12.	1,454		
		Other costs	
plue abnormale	70%	Planning £ per dwelling	
	2	Survey 500 £ per dwelling	
Total	202		
	0,0	Marketing 2 E per dwelling	
Design fees on build costs 10	.0% 1,211	Interest % ner annum	
on dev costs	3%		
		Notes	
Planning gain & Grant co PG £ per dwg	000 300		
Grant £ per dwg	0		
PG ALL			

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	_	-and																
								E	terate to	achie	ve 20.(0% prot	Ŀ		E	Care to		
		and pur	chase	price				ц Ц	Afford 5,178,	able 774	Z	o afford 6,270,3	lable 363	Affor	dable	No ai	fordab	ele
	L	3V per a	Icre					ч	499,(05		604,1	86	£1,23	3,041	£1,4	92,94	4
		Jev prof	it					ц	4,585,	779		4,996,2	234					
	ι- ι	Total cos	sts % of c	octe te				ц Ц	23,507 19 5	,229		20.00	516					
Programm	e	Year 1				Year 2				Year 3				Year 4				1
5		Q1	Q2	Q3	Q4	01	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	TOTA
Units tarted	Market housing			13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	0.0	0.0	0.0	0.0	135.
	Affordable soc rent Affordable sh oship			1.2 0.3	1.2 0.3	1.2 0.3	1.2	1.2	1.2 0.3	1.2 0.3	1.2	1.2 0.3	1.2 0.3	0.0	0.0	0.0	0.0	3.0
	0 TOTAL	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0 0.0 150.
Units built'	Market housing					14	4	4	14	4	4	14	14	14	14	0	0	13
+20	Affordable soc rent Affordable sh oship 0					-00	- 0 0	- 0 0	- 0 0	-00	-00	-00	- 0 0	-00	- 0 0	000	000	0 3 17
Units	u Market housing					5	0 4	14 0	14 0	14	04	14	0 4	0 ₽	04	14		136
ompreted +3Q	Affordable soc rent Affordable sh oship						- 0 0	- 0 0	- 0 0	, 0 0	- 0 0	, 0 0	- O (- 0 0	- O (- 0 0	000	3 T2
	0 0						00	00	0 0	0 0	00	0 0	0 0	00	0 0	0 0	0 0	00
Units	Market housing							14	14	14	14	14	14	14	14	41	41	13
+4Q	Affordable soc rent Affordable sh oship							- 0	- 0	- 0	- 0	- 0	- 0	- 0	- 0	- 0	- 0	φ 12 το
	0							00	00	00	00	0	00	00	0	0	00	00
	0							0	0	0	0	0	0	0	0	0	0	0

		rate	Year 1 Q1	Q2	Q 3	Q4	Year 2 Q1	Q2	Q 3	Q4	Year 3 Q1	Q2	0 3	Q4	Year 4 Q1	Q2	Q 3	Q4	TOTALS
INCOME																			
Housing sales	Market housing Affordable soc rent Affordable sh oship		000	000	000	000	000	000	2,698 83 29	26,975 830 287									
	00		00	0 0	00	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
	Sales fees		0	0	0	0	0	0	-95	-95	-95	-95	-95	-95	-95	-95	-95	-95	-953
Total income			0	0	0	0	0	0	2,809	2,809	2,809	2,809	2,809	2,809	2,809	2,809	2,809	2,809	28,092
COSTS																			
Land	Land acquisition Stamp dutv		5,179 207																5,179 207
	Purchase fees Total		142																142 5.528
Build costs	Market housing		0	0	0	0	1,064	1,064	1,064	1,064	1,064	1,064	1,064	1,064	1,064	1,064	0	0	10,636
	Affordable soc rent		00	0 0	0 0	0 0	95	95	95	95	95	95	95	95	95	95	0 0	0 0	945 226
	Arroraable sn osnip 0		00	00	00	00	²⁴	⁷⁴	4 ⁷ 0	²⁴	4 O	²⁴	⁴	⁴ 0	²⁴ 0	⁴	00	00	0
	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Build contingency Total	2.5%	0	0	0	0	30	30	30	30	30	30	30	30	30	30	0	0	295 12.114
Dev costs	Upfront	6.0%	182	182	182	182													727
	Build related	6.0%	0 75	0 75	73	73	73	73	73	73	73	73	73	73	0	0	0	0	727 150
	Total	2	2	2															1,604
Fees	Fees on build costs	10.0% 8.0%	0 5	0 5	0 0	0 6	121 6	121 e	121 6	121 6	121 6	121 6	121 6	121 6	121	121	00	00	1,211 128
	Total	0.0.0	7	7	07	Ŋ	D	D	þ	þ	þ	D	D	þ	5	5	5	>	1,340
PG	Planning gain				30	30	30	30	30	30	30	30	30	30	0	0	0	0	300
Grant	Grant Total				0	0	0	0	0	0	0	0	0	0	0	0	0	0	9 o c
Other	Planning	£480	24 76	24	24														72
	Marketing	03 7007	2		0	0	0	0	0	0	0	0	0	0	0	0	0	0	20
Sales fees	b/forward from above		0	0	0	0	0	0	95	95	95	95	95	95	95	95	95	95	953
Total costs			5,905	301	329	305	1,441	1,441	1,536	1,536	1,536	1,536	1,536	1,536	1,428	1,428	95	95	21,985
Net profit/loss	from quarter		-5,905	-301	-329	-305	-1,441	-1,441	1,273	1,273	1,273	1,273	1,273	1,273	1,381	1,381	2,714	2,714	6,107
Profit/loss bf fro	m last quarter		0	-6,015	-6,435	-6,891	-7,330	-8,935	-10,571	-9,472	-8,353	-7,213	-6,051	-4,868	-3,662	-2,323	096-	1,787	
Cumulative profi	it/loss		-5,905	-6,317	-6,764	-7,195	-8,771	-10,376	-9,298	-8,199	-7,080	-5,940	4,778	-3,595	-2,281	-942	1,754	4,501	
Interest	Charged at Total	7.50%	7.50% -111	7.50% -118	7.50% -127	7.50% -135	7.50% -164	7.50% -195	7.50% -174	7.50% -154	7.50% -133	7.50% -111	7.50% -90	7.50% -67	7.50% -43	7.50% -18	7.50% 33	7.50% 84	-1.522
Cumulative de carried forward	veloper profit d to RV calc		-6,015	-6,435	-6,891	-7,330	-8,935	-10,571	-9,472	-8,353	-7,213	-6,051	-4,868	-3,662	-2,323	096-	1,787	4,586	4,585

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SITE 1A CASH FLOW AFFORDABLE

SITE 2 Leasowe Primary Cameron Rd



	Input assumptions	Scene	rrio & option	Affordable 10% = 80% s	social rented 20% inte	ermediate V	VITH GRANT					
]		
	Wirral site viability st	udy		Dwellings								
	Site details Site Site Schr Location Leas	olars Gate sowe		Dwellings	% of 5	% of units	ave floor spa gross sq ft	ace net sa ft	build cost per sa ft	build index = 1.000	sales value per sq ft	
	Area ha 2.	00.		Market housing	117.9 90.00% 90	%00.0	651	636	86.00	86.00	185.00	_
	No dwgs	31		Affordable soc rent	10.5 8.00% 8	.0%	651	636	86.00	86.00	75.00	—
	Density dw/ha 6:	5.5		Affordable sh oship	2.6 2.00% 2	.0%	651	636	0.0% 86.00	86.00	103.00	
				Total dwgs	131.0 100.00% 10	%0.0						
			ō			.0%	0	0	0.00	0.00	00.0	
	Contingency	[X			.0%	0	0	0.00	00.0	0.00	-
	allowance 2.5	50%	183	Total units	131.0	%0.00	85,281	83,316		£7,334,166	£14,543,641	_
				Floorspace density	= 16,859 ne	t sq ft per a	cre					
	Development costs standard % build 12.	%00	902									
				Other costs								
		760	c	Planning	463.3	£ pei	r dwelling					
		2	D	Survey	200	£ pei	r dwelling					
	- 0(al	067		Marketing	0	£ pei	r dwelling					
1	Design tees on build costs 10	·0%	752	Interest % per annum	7.50%							
\sim	on dev costs	%										
1	Planning gain & Grant cor	ntributions		Notes						Γ		
	PG £ per dwg	000	262									
	Grant £ per dwg		0									
	PG ALL											

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		Land																
									lterate	to ach.	ieve 2	0.0% p	rofit				a	
		Land pur	rchase	price				પ	Affo 1,41	rdable 6,891		1,91	ordable 0,976	Aff	fordable	Ň	o afforc	able
		RV per a	acre					પ્ત	286	3,704	1	386	,681	<u>ل</u> ئ ا	08,44		E955,4	88
		Dev prof	Ę					£	2,37	5,052		2,57	7,927					
		Total co:	sts	, oete				ы 	12,1	69,714 52%		12,83	86,658 D8%					
Programme	0	Year 1 Q1	Q2	d 3	Q4	Year 2 Q1	Q2	Q 3	Q4	Year 3 Q1	Q2	d 3	Q4	Year 4 Q1	Q2	Q 3	Q4	TOTALS
Units	Market housing			9.9	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	0.0	0.0	0.0	0.0	0.0	117.9
Started	Affordable soc rent Affordable sh oship			0.9	1:2 0.3 0.0	1:2 0:3 0:0	1:2 0.3 0.0	1:2 0:3 0:0	1.2 0.0 0.0	1.2 0.3 0.0	1.2 0.3 0.0	1.2 0.3 0.0	0.0.0	0.0.0	0.0	0.0	0.0	10.5 2.6 0.0
	U TOTAL	0	0	11	15	15	15	15	15	15	15	15	0.0	0.0	0.0	0.0	0.0	0.0 131.0
Units 'huilt'	Market housing					10	14	14	14	14	14	14	14	14	0	0	0	118
+20	Affordable soc rent Affordable sh oship					-000	-000	-000	-000	-000	-000	-000	-000	-000	0000	0000	0000	0 m 0 0
Units	Market housing						10	14	14	14	14	14	14	14	14	0	0	118
+30	Affordable soc rent Affordable sh oship						-000	-000	-000	-000	-000	-000	-000	-000	-000	0000	0000	0 o o 4
Units purchased	Market housing							10	14	14	14	14	14	14	14	14	0	118
04+ Q	Affordable soc rent Affordable sh oship							-000	-000	-000	-000	-000	-000	-000	-000	-000	0000	£∞00

SITE 2A LAND COST & PHASING

		rate	Year 1 Q1	Q2	Q 3	Q4	Year 2 Q1	Q2	0 3	Q4	Year 3 Q1	Q2	0 3	Q4	Year 4 Q1	Q2	63	Q4	TOTALS
INCOME																			
Housing sales	Market housing		0 0	00	00	0 0	00	0 0	1,165	1,588	1,588	1,588	1,588	1,588	1,588	1,588	1,588	0 0	13,872
	Affordable soc rent Affordable sh oshin								44	20	100	/6	20	20	200	6 00	20	- c	000 172
	0		00	000	000	000	000	000	00	00	00	00	00	00	00	00	00	000	00
	o Sales fees								-41	-56	-56	-56	-56	-56	-56	-56	-26		-491
																		•	
Total income			0	0	0	0	0	0	1,221	1,665	1,665	1,665	1,665	1,665	1,665	1,665	1,665	0	14,544
COSTS																			
Land	Land acquisition		1,417																1,417
	Stamp duty Purchase fees		57 39																57 39
:	Total						i		-		1		1		-				1,513
Build costs	Market housing Affordable soc rent		0 0	0 0	0 0	0 0	554 49	756	756	756	756 67	756	756 67	756	756 67	0 0	0 0	0 0	6,601 587
	Affordable sh oship		00	00	00	00	5 61	17	17	14	17	17	17	17	17	00	00	00	147
	0.0		00	00	00	0 0	00	00	00	0 0	00	00	0 0	0 0	00	00	00	0 0	0 0
	u Build contingency	2.5%		00	00	0 0	о (2	5 C	2 C	o 12	21 o	51 O	21 21	- 12	51 C	0 0	0 0	- 0	0 183
	Total					, .	2	i	i	i	i	i	i	i	i	,		,	7,518
Dev costs	Uptront Build related	6.0% 6.0%	113	113	113 38	113	52	52	52	50	52	52	52	c	c	C	C	c	451 451
	Abnormals	%0	0	0		;	;	ļ	;		ļ	ļ	;	,		,		,	0
Foor	Fees on build costs	10.0%	C	c	c	C	63	86	86	gg	86	86 B	86	86	86 A6	C	c	c	902 752
	Fees on dev costs	8.0%	ຉຉ	00	5	5.6	84	84	34	3 4	84	84	34	30	30	00	00	0	72
Űd	Total Planning gain				22	30	30	30	30	30	30	30	30	c	C	C	c	c	824 262
2	Total				4	3	3	3	3	3	8	8	3	>	>	>	>	>	262 262
Grant	Grant Total				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 c
Other	Planning	£463	50	20	20														61
	survey Marketing	£0	07		0	0	0	0	0	0	0	0	0	0	0	0	0	0	07 07
Sales fees	Total h/forward from above		C	C	C	C	C	C	41	56	56	56	56	56	56	56	56	c	87 491
Total costs			1,681	142	205	208	780	1,033	1,074	1,089	1,089	1,089	1,089	1,003	1,003	56	56	0	11,596
Net profit/loss	from quarter		-1,681	-142	-205	-208	-780	-1,033	147	576	576	576	576	662	662	1,609	1,609	0	2,948
Profit/loss bf fro	m last quarter		0	-1,712	-1,889	-2,133	-2,384	-3,224	-4,336	-4,267	-3,760	-3,243	-2,716	-2,180	-1,546	-900	722	2,375	
Cumulative profi	tiloss		-1,681	-1,854	-2,094	-2,341	-3,165	-4,256	4,189	-3,691	-3,183	-2,667	-2,140	-1,518	-884	602	2,331	2,375	
) 001																,000 0	
Interest	Cnarged at Total	%nc.1	/.50% -32	/ .bU%	/.uc./	/.50% -44	/.50%	%0c.7	%.nc; /	%ng:/	%ng: /	/ .50%	/	/.50% -28	71- 17	7.50%	44 %	0 0	-574
Cumulative dev	veloper profit		-1,712	-1,889	-2,133	-2,384	-3,224	-4,336	-4,267	-3,760	-3,243	-2,716	-2,180	-1,546	006-	722	2,375	2,375	2,374
carried forward	d to RV calc																		

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SITE 2A CASH FLOW AFFORDABLE

SITE 3 Hoylake Rd/St James Rd Bidstone



Input assumptions	Scenar	io & ontion	Affordable $10\% = 80\%$	social rented 20%	6 intermediate	WITH GRANT					
]		
Wirral site viability stu	udy		Dwellings								
Site details						ave floor soe	80	build	build	sales	
Site	ake Rd/St Ja	mes Rd	Dwellings	% of	% of	gross	net	cost	index =	value	
Location	tone			dwgs	units	sq ft	sq ft	per sq ft	1.000	per sq ft	
 Area ha 1.	26		Market housing	81.0 90.00%	80.00%	720	657	88.00	88.00	196.00	
acres 3.	11							0.0%			
No dwgs			Affordable soc rent	7.2 8.00%	8.0%	720	657	88.00	88.00	76.00	
Density dw/na	4.		Affordable sh oship	1.8 2.00%	2.0%	720	657	0.0% 88.00	88.00	106.00	
				100 000	100 001						
			I otal dwgs	90.0 100.00%	100.0%						
					0.0%	0	0	0.00	0.00	0.00	
Contingency		£K		ſ	V 0%	c	C	000	00.0	000	
allowance 5.0	% 0	285			0000	Ņ	>	000	0000	2000	
			Total units	90.0	100.0%	64,800	59,130		£5,702,400	£10,915,398	
			Floorspace density	= 18,992	net sq ft per	acre					
Development costs standard % build 11.0	%00	659									
]										
			Other costs Planning	403.3	ξD	er dwelling					
plus abnormals 8.4	4%	500	Survey	500		er dwelling					
			6		1						
Total 15	%6		Marketing	-	4 4	er dwelling					
Design fees	ſ				- ↓ ┨						
on build costs 10.	%0.	599	Interest % per annum	7.50%							
on dev costs 8	%										
Planning gain & Grant con	tributions		Notes								
PG £ per dwg 2,0	000	180									
Grant £ per dwg		0									
PG ALL											
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		rate	Year 1 Q1	Q2	Q3	Q4	Year 2 Q1	Q2	Q 3	Q4	Year 3 Q1	Q2	Q3	Q4	Year 4 Q1	Q2	Q 3	Q4	TOTALS
INCOME																			
Housing sales	Market housing		0 0	00	00	00	0 0	0 0	1,738	1,738	1,738	1,738	1,738	1,738	0 0	0 0	0 0	0 0	10,431
	Affordable sh oship		00	00	00	00	00	00	21 00	21 00	21	21 00	21	21 00	00	00	00	00	30U 125
	00		00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
	Sales fees		0	0	0	0	0	0	-61	-61	-61	-61	-61	-61	0	0	0	0	-369
Total income			0	0	0	0	0	0	1,819	1,819	1,819	1,819	1,819	1,819	0	0	0	0	10,915
COSTS																			
Land	Land acquisition		280																280
	Stamp duty		œ																ω
	Purchase fees Total		ω																8 296
Build costs	Market housing		0	0	0	0	855	855	855	855	855	855	0	0	0	0	0	0	5,132
	Affordable soc rent		0 0	0 0	0 0	0 0	26 26	26	26	76	76	26	0 0	0 0	0 0	0 0	0 0	0 0	456
	Affordable sh oship		0 0	0 0	0 0	0 0	6	6	6 0	6	6	19	0 0	0 0	0 0	0 0	0 0	0 0	114
	5 0				5 0			5 0	5 0			- -			5 0	5 0	5 0		
	Build contingency	5.0%	00	00	00	00	48	48	48	48	48	48	0 0	0 0	00	0	0 0	0	285
Dev costs	l otal	5 50%	82	82	83	83													5,988
	Build related	5.5%	30	90	55	55	55	55	55	55	0	0	0	0	0	0	0	0	329
	Abnormals	8%	250	250															500
Fees	Total Fees on build costs	10.0%	C	C	c	c	100	100	100	100	100	100	C	C	c	c	c	c	1,159 500
	Fees on dev costs	8.0%	27	27	÷ 1	- -	4	4	4	4	0	0	0 0	0 0	0 0	0 0	0 0	0 0	8
BG	Total Planning gain				30	30	30	30	30	30	C	C	C	C	C	C	c	c	691
2	Total				3	3	3	3	3	3	5	5	>	>	5	þ	5	>	180
Grant	Grant				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other	Planning	£403	12	12	12														- %
	Survey	£500	45		c	c	c	c	c	c	c	c	c	c	c	c	c	c	45
	markeung Total	77			5	5	5	5	5	5	5	5	5	5	5	5	D	5	⊃ <u>2</u> 6
Sales fees	b/forward from above		0	0	0	0	0	0	61	61	61	61	61	61	0	0	0	0	369
Total costs			712	371	190	178	1,187	1,187	1,248	1,248	1,159	1,159	61	61	0	0	0	•	8,763
Net profit/los	s from quarter		-712	-371	-190	-178	-1,187	-1,187	571	571	660	660	1,758	1,758	0	0	0	0	2,152
Profit/loss bf fi	rom last quarter		0	-725	-1,117	-1,331	-1,538	-2,776	-4,037	-3,531	-3,016	-2,400	-1,772	-15	1,776	1,776	1,776	1,776	
Cumulative pre	ofit/loss		-712	-1,096	-1,307	-1,509	-2,725	-3,963	-3,466	-2,960	-2,356	-1,740	47-	1,743	1,776	1,776	1,776	1,776	
Interest	Charged at Total	7.50%	7.50% -13	7.50% -21	7.50% -25	7.50% -28	7.50% -51	7.50% -74	7.50% -65	7.50% -56	7.50% -44	7.50% -33	7.50% 0	7.50% 33	0.00% 0	0.00% 0	0.00% 0	0.00% 0	-377
Cumulative d	leveloper profit		-725	-1.117	-1.331	-1.538	-2.776	-4.037	-3.531	-3.016	-2.400	-1.772	-15	1.776	1.776	1.776	1.776	1.776	1.775
carried forwa	ard to RV calc		l			2	2 T				Ì		2	2	2	2	2	2	2



SITE 4 Beechwood (Lowry)



Innut assumption	5	scanario & ontion	Affordable 10% = 80% social r	antad 20% intarm	Adiate WITH GBA	NT			
	2								
Wirral site viabili	ity study		Dwellings						
Site details Site Location Area ha	Beechwood Beechwood 2.72	d (Lowry)	Dwellings Market housing 81.0	% of % o dwgs unit 90.00% 90.00	f ave floor f gross sq ft 871	space net sq ft 871	build cost per sq ft 88.00	buid index = 1.000 88.00	sales value per sq ft 170.00
No dwgs	s 6.72 90		Affordable soc rent 7.2	8.00% 8.0%	871	871	0.0% 88.00	88.00	70.00
			Affordable sh oship	2.00% 2.0%	871	871	88.00	88.00	95.00
			Total dwgs	100.00% 100.0	%				
		£k		0.0%	0	0	0.00	0.00	0.00
Contingency allowance	e 2.50%	172		0.0%	0	0	0.00	0.00	0.00
			Total units 90.0	100.0	% 78,390	78,390		£6,898,320	£12,581,595
			Floorspace density	= 11,663 net sq	ft per acre				
Development costs standard % build	d 13.50%	955							
siemnonde auto	707	4 00	Other costs Planning	403.3	${f E}$ per dwelling				
	0,4	8	Survey	200	${\mathfrak E}$ per dwelling				
Total	15%		Marketing	0	£ per dwelling				
Design fees on build costs	s 10.0%	707	Interest % per annum	7.50%					
on dev costs	8%		Notoo						
Planning gain & Gra PG £ per dwg	Int contributi 2,000	ons 180	SBION						
Grant £ per dwg	0	0							
PG ALL									

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							terate	to ach	ieve 2(<u>10% pi</u>	rofit	_	_	Hectar	Q	
						L	Affor	dable	L	No affe	ordable	Αff	ordable	Ž	o affor	dable
	Land purchas	e price				ч	512	,146		935	,913					
	RV per acre					ч	76,	200		139	,250	£	88,289	-	E344,(086
	Dev profit					ц	2,040	6,982		2.22	1,305					
	Total costs					ŝ	10,53	5,663		11,10	6,045					
	profit as % of	f costs					19.4	43%		20.0	%00					
	Year 1 Q1 Q2	Q 3	Q4	Year 2 Q1	Q2	Q 3	Q4	Year 3 Q1	Q2	Q3	Q4	Year 4 Q1	Q2	Q3	Q4	TOTALS
Market housing		5.4	10.8	10.8	10.8	10.8	10.8	10.8	10.8	0.0	0.0	0.0	0.0	0.0	0.0	81.0
Affordable soc rent Affordable sh oship		0.5 0.1 0.0	1.0 0.0 0.0	1.0 0.2 0.0	1.0 0.2 0.0	1.0 0.2 0.0	1.0 0.2 0.0	1.0 0.2 0.0	1.0 0.2 0.0	0.0	0.0	0.0	0.0 0.0 0.0	0.0 0.0	0.0	7.2 1.8 0.0
TOTAL	0	0.0 6	12	12	0.0	0.0	0.0 12	0.0	0.0 12	0.0	0.0	0.0	0.0	0.0	0.0	0.0 90.0
Market housing				5	11	11	11	11	11	11	11	0	0	0	0	81
Affordable soc rent Affordable sh oship				0000	-000	-000	-000	-000	-000	-000	-000	0000	0000	0000	0000	000
Market housing					5	11	11	11	11	11	11	11	0	0	0	81
Affordable soc rent Affordable sh oship					0000	-000	-000	-000	-000	-000	-000	-000	0000	0000	0000	0054
Market housing						2	11	11	11	7	11	1	11	0	0	81
tfordable soc rent ffordable sh oship						0000	-000	- 0 0 0	-000	- o o c	-000	-000	- o o c	0000	0000	~ ~ o o

SITE 4A LAND COST & PHASING

		rate	Year 1 Q1	Q2	Q 3	Q4	Year 2 Q1	Q2	Q 3	Q4	Year 3 Q1	Q2	Q 3	Q4	Year 4 Q1	Q2	Q 3	Q4	TOTALS
INCOME																			
Housing sales	Market housing		0	0	0	0	0	0	800	1.599	1.599	1.599	1.599	1.599	1.599	1.599	0	0	11.994
	Affordable soc rent		0	0	0	0	0	0	29	59	59	29	59	59	29	59	0	0	439
	Affordable sh oship		0	0	0	0	0	0	10	20	20	20	20	20	20	20	0	0	149
	0		0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
	0		0	0 0	0 0	0	0 0	0 0	0	- I	- I	0	0	- I	0	о!	-		0
	Sales tees		D	Э	0	0	0	0	-28	/q-	/9-	/q-	/q-	/ -	/ G -	/9/	0	5	-424
Total income			0	0	0	0	0	0	839	1,678	1,678	1,678	1,678	1,678	1,678	1,678	0	0	12,582
COCTC																			
2000																			
Land	Land acquisition		512																512
	Stamp duty		20							_				_					20
	Purchase fees		14																14
	Total									_				_					547
Build costs	Market housing		0	0	0	0	414	828	828	828	828	828	828	828	0	0	0	0	6,208
	Affordable soc rent		0	0	0	0	37	74	74	74	74	74	74	74	0	0	0	0	552
	Affordable sh oship		0	0	0	0	6	18	18	18	18	18	18	18	0	0	0	0	138
	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Build contingency	2.5%	0	0	0	0	11	23	23	23	23	23	23	23	0	0	0	0	172
	Total																		7,071
Dev costs	Upfront	6.8%	119	119	119	119													477
	Build related	6.8%	0	0	32	64	64	64	64	64	64	64	0	0	0	0	0	0	477
	Abnormals	1%	50	50															100
	Total						!	i	į			i	į	į					1,055
rees	rees on build costs	10.0%		⇒;	о ;	- Ļ	4 r	4 ⁰ 1	49 r	49 r	9 r 4	4 ² r	45 c	94 4	5 0	5 0	5 0		20
	Fees on dev costs	8.0%	44	14	71	15	ß	ß	ß	۵	ß	Q	Э	5	Э	Ð	Ð	0	2 g
U	Planning dain				10	24	PC	74	74	24	74	24	c	c	c	C	c	c	180
2	Total				4	5	5	ţ	t v	5	1	5	>	>	>	5	5	>	180
Grant	Grant				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total																		0
Other	Planning	£403	5 5	12	12														36
	Survey	£200	2		c	c	c	c	c		c	c	c	c	c	c	c		2 0
	warkeung	ru r			D	>	5	Э	Э	5	5	Ð	5	5	D	D	5	5	- 2
Sales fees	b/forward from above		0	0	0	0	0	0	28	57	57	57	57	57	57	57	0	0	424
Total costs			760	195	187	222	611	1,130	1.158	1,186	1,186	1,186	1.094	1.094	57	57	0	0	10,122
Not nrofit/loce	from allartar		760	-105	-187	666-	£11	4 120	310	101	101	101	58.4	5RA	1 634	4 634	c	- -	2 459
Net pronuose			-100	-190	-101	777-		-1,130	210	- 64	121	- 64	104	104	1,021	1,021	>	>	2,400
Profit/loss bf fro	m last quarter		0	-774	-987	-1,197	-1,445	-2,094	-3,285	-3,671	-3,240	-2,800	-2,352	-1,801	-1,240	388	2,047	2,047	
																		!	
Cumulative prot	fit/loss		-760	-969	-1,175	-1,418	-2,056	-3,224	-3,604	-3,180	-2,749	-2,309	-1,768	-1,217	381	2,009	2,047	2,047	
Interest	Charged at	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	0.00%	0.00%	
	Total		-14	-18	-22	-27	-39	-60	-68	-60	-52	43	-33	-23	7	38	0	0	-413
Cumulative dev	veloper profit		-774	-987	-1,197	-1,445	-2,094	-3,285	-3,671	-3,240	-2,800	-2,352	-1,801	-1,240	388	2,047	2,047	2,047	2,046
carried forward	d to RV calc																		



SITE 5 Carlett Park/Ferry Rd Eastham



	Innut assumptions	Scenario & ontion	Affordable 10% = 80% socia	l rented 20% interme	diate WITH GE	ANT				
			Alloluable 10 /0 - 00 /0 Souda							
	Wirral site viability study		Dwellings							
	Site details Site Carlett Par	rk, Ferry Rd	Dwellings	% of % of	ave floo gross	r space net	build cost	build index =	sales value	
	Area ha 1.04]	Market housing 54.0	dwgs units 90.00% 90.00%	5 <i>9 π</i> 682	<u>sq π</u> 664	per sq 11 84.50	1.000 84.50	рег sq π 232.00	
	acres 2.57 No dwgs 60		Affordable soc rent 4.8	8.00% 8.0%	682	664	0.0% 84.50	84.50	74.00	
	Density dw/ha 57.7		Affordable sh oship 1.2	2.00% 2.0%	682	664	0.0% 84.50	84.50	102.00	
			Total dwgs	100.00% 100.0%						
		ā		0.0		0	0.00	0.00	0.00	
	Contingency	ž		0.0%		0	0.00	0.00	00.0	
	allowance 5.00%	173	Total units	100.09	6 40,92	39,840		£3,457,740	£8,635,718	
			Floorspace density	= 15,503 net sq f	t per acre					
	Development costs standard % build 12.00%	436								
			Other costs Planning	307.5	f ner dwelling					
	plus abnormals 8.3%	300	Survey	500	£ per dwelling					
	Total 20%									
	Design fees		Marketing	0	£ per dwelling	D				
1	on build costs 10.0%	363	Interest % per annum	7.50%						
\sim	on dev costs 8%									
1	Planning gain & Grant contribut PG £ per dwg 2,000	tions 120	Notes							
	Grant £ per dwg	0								
	PG ALL									

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FORDHAM RESEARCH



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		rate	Q1	Q2	0 3	Q4	Q1	Q2	0 3	Q4	Q1 01	Q2	d 3	Q4	Q1	Q2	0 3	Q4	TOTALS
INCOME																			
Housing sales	Market housing		0	0	0	0	0	0	1,109	1,802	1,802	1,802	1,802	0	0	0	0	0	8,319
	Affordable soc rent		0 0	0 0	0 0	0 0	0 0	0 0		51	51	51	51	0 0	0 0	0 0	0 0	0 0	236
	Attordable sh oship		5 0	- -	-		5 0	5 0	Ξ <	<u>»</u> c	<u>∞</u> ⊂	<u>×</u> c	° ⊂	-	5 0	5 0	5 0	5 0	χ
	0		00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
	Sales fees		0	0	0	0	0	0	-39	-64	-64	-64	-64	0	0	0	0	0	-294
Total income			0	0	0	0	0	0	1,151	1,871	1,871	1,871	1,871	0	0	0	0	0	8,636
COSTS	_																		
Land	Land acquisition		1,435																1,435
	Stamp duty		57																57
	Purchase fees		30																39 1 537
Build costs	Market housing		0	0	0	0	415	674	674	674	674	0	0	0	0	0	0	0	3.112
	Affordable soc rent		0	0	0	0	37	60	60	60	60	0	0	0	0	0	0	0	277
	Affordable sh oship		0 0	0 0	0 0	0 0	o 0	15	15	15	15	0	0 0	0 0	0 0	0	0	0 0	69 9
	0 0		5 0	ə c	ə c	э с	0 0	5 0	ə c	ə c	5 0	0 0	ə c		0 0	5 0	5 0	5 0	- -
	Build contingency	5.0%	0 0	0 0	0 0	0 0	23	37	37	37	37	0 0	0 0	0 0	0 0	0 0	0 0	0 0	173
	Total	/a0 9	, L	, u	, L	, L													3,631
Nev costs	Upironi Ruild related	0.0% 6.0%	t c	ţ ⊂	4 g	£ 4	47	47	47	c	C	C	C	c	C	C	c	c	218 218
	Abnormals	8%	150	150	3	÷	;	;	÷	,)	b)	,	,	þ	þ	>	300
see	Total Fees on build costs	10.0%	0	0	0	0	48	79	29	79	29	0	0	0	0	0	0	0	7 35 363
	Fees on dev costs	8.0%	16	16	7	ø	4	4	4	0	0	0	0	0	0	0	0	0	59
g	Total Planning gain				16	26	26	26	26	0	0	0	0	0	0	0	0	0	422 120
	Total																		120
Grant	Grant Total				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0
Other	Planning	£308	9 00	9	9														18
	Marketing	03	00		0	0	0	0	0	0	0	0	0	0	0	0	0	0	2 O
Sales foos	Total		c	c	C	c	C	c	30	64	64	64	64	c	C	c	c	c	48 294
Total costs			1,788	227	112	136	609	942	981	929	929	64	64	0	0	0	0	0	6,781
Net profit/loss	trom quarter		-1,788	-227	-112	-136	609-	-942	170	942	942	1,807	1,807	0	0	0	0	0	1,854
Profit/loss bf fro	om last quarter		0	-1,822	-2,087	-2,240	-2,421	-3,087	-4,105	-4,008	-3,124	-2,222	-423	1,411	1,411	1,411	1,411	1,411	
Cumulative pro	fit/loss		-1,788	-2,049	-2,199	-2,376	-3,030	4,029	-3,935	-3,066	-2,181	-415	1,385	1,411	1,411	1,411	1,411	1,411	
nterest	Charged at	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	%00.0	0.00%	0.00%	0.00%	%00.0	
	Total		-34	-38	-41	45	-57	-76	-74	-57	4	φ	26	0	0	0	0	0	444



1,410

1,411

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-423

-2,222

-3,124

-4,008

-4,105

-3,087

-2,421

-2,240

-2,087

-1,822

Cumulative developer profit carried forward to RV calc

SITE 6 Lewis Rd/Woodchurch Rd Prenton



Input assumption	Scal	nario & ontion	$\Delta ffordable 10\% = 80\% \text{ soc}$	ial rented 20% interr	mediate W/ITH	CPANT			
	anc			ומו ובוורבת דה 10 ווורבו]	
Wirral site viabilit	ty study		Dwellings						
Site details Site Location Area ha	Lewis Reed Prenton 1.04		Dwellings Market housing 54	% of % dwgs un .0 <u>90.00% 90.0</u>	ave f ave f gr its sc 00%	oor space sss net ft sq.ft 18 750	build cost per sq ft 89.00	build index = 1.000 89.00	sales value per sq ft 185.00
acres No dwgs Density dw/ha	60 57.7		Affordable soc rent 4.	8 8.00% 8.0	8	18 750	0.0% 89.00 0.0%	89.00	76.00
			Affordable sh oship 1. Total dwgs 60	2 2.00% 2.0 .0 100.00% 100.	8 %0.	18 750	89.00	89.00	105.00
		ž		0	%	0	0.00	0.00	00.0
Contingency	5 00%	218			%	0	00.0	0.00	0.00
		2	Total units	0.	.0%	080 45,000	_	£4,368,120	£7,860,600
Development costs standard % build	11.50%	527	Floorspace density	= 17,511 net s	sq ft per acre				
plus abnormals.	4.4%	200	Other costs Planning	307.5	£ per dwe	ling			
Total	160/		Survey	nne	Ł per awe	£ ⊑			
Design fees	% <u>0</u>		Marketing	0	£ per dwe	ling			
on build costs	10.0%	459	Interest % per annum	7.50%					
on dev costs	8%		Notoe						
Planning gain & Grar PG £ per dwg	nt contributions 2,000	s 120							
Grant £ per dwg	0	0							
PG ALL									

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mete i			Year 1				Year 2				Year 3				Year 4				
Maximum transmert Solution Solution <th></th> <th>rate</th> <th>01 01</th> <th>Q2</th> <th>03</th> <th>Q4</th> <th>91</th> <th>Q2</th> <th>03</th> <th>Q4</th> <th>Q1</th> <th>02</th> <th>03</th> <th>Q4</th> <th>Q1</th> <th>Q2</th> <th>03</th> <th>Q4 1</th> <th>OTALS</th>		rate	01 01	Q2	0 3	Q4	91	Q2	0 3	Q4	Q1	02	0 3	Q4	Q1	Q2	0 3	Q4 1	OTALS
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oss -272 -462 -589 -792 -1,433 -3,095 -3,215 -997 1,264 1,287 1,2	last quarter		0	-277	-471	-600	-807	-1,460	-3,153	-3,980	-3,275	-1,015	1,287	1,287	1,287	1,287	1,287	,287	
oss -272 -462 -589 -792 -1,433 -3,015 -3,215 -997 1,264 1,287 <th1,287< th=""> 1,287 <th1,287< th=""><th></th><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></th1,287<></th1,287<>																			
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al -5 -9 -11 -15 -27 -58 -73 -60 -19 24 0 0 0 0 0 0 0 22 -22 -28 -73 -50 -19 -10 -12 -1287 -1,287 -1	arged at	7.50	% 7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	0.00%	%00.0	0.00%	0.00%	0.00% 0	%00	
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	eloper protit to RV calc		112-	4/1	-900	108-	-1,460	-3,153	-3,980	-3,2/5	-1,015	1,287	1,287	1,287	1,287	1,287	1,287 1	,287	1,287

SITE 6A CASH FLOW AFFORDABLE

SITE 7 Former Primary School Rock Ferry



Innut secumptions	Consti	io 8 ontion	Affordablo 100/ - 200/ 2	ontal rantad 200	V. intermediate						
	ocella						_				
Wirral site viability s	tudy		Dwellings								
Site details Site	rmer Primary S	chool	Dwellings	% of	% of	ave floor sp gross	ace net	build cost	build index =	sales value	
Location Ro	ck Ferry 1.28]	Market housing	60.3 90.00%	units 90.00%	sq ft 1.034	sq ft 982	per sq ft 89.00	1.000 89.00	per sq ft 197.00	
acres	3.16		5					0.0%			
No dwgs Density dw/ha	67 52 3		Affordable soc rent	5.4 8.00%	8.0%	1,034	982	89.00 0.0%	89.00	75.00	
	0.40		Affordable sh oship	1.3 2.00%	2.0%	1,034	982	89.00	89.00	103.00	
			Total dwgs	67.0 100.00%	% 100.0%						
					0.0%	0	0	0.00	0.00	0.00	
Contingency		£K			0.0%	0	0	0.00	0.00	0.00	
allowance 5	.00%	308	Total units	67.0	100 0%	69 278	65 794		F6 165 742	£12 195 576	
				2	020-00-		10,000	_	1	~ (2) (2) (2)	
			Floorspace density	= 20,802	net sq ft per	acre					
Development costs standard % build 10	0.50%	380									
	100		Other costs Planning	337.5	ξb	ber dwelling					
	9.7%	00	Survey	500	E p	ber dwelling					
Total	17%		Marketing	0	£p	ber dwelling					
Design fees on build costs 1	0.0%	347	Interest								
			% per annum	7.50%							
on dev costs	8%								ſ		
Planning gain & Grant co PG £ per dwg	ontributions 000	134	Notes								
Grant £ per dwg	0	0									
PG ALL											

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	rate	Year 1 Q1	Q2	Q 3	Q4	Year 2 Q1	Q2	0 3	Q4	Year 3 Q1	Q2	0 3	Q4	Year 4 Q1	Q2	Q 3	Q4 T	OTALS
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	000		0000	0000	0000	000	0000	: 4 0 0	5 0 5	5 0 5	5 0 5	0 54	5 0 5		000	0000	0000	136 0
	00		0	00	- 0	00	00	-43	-74	-74	-74	-74	-74	0		0 0		412
0	0		0	0	0	0	0	1,274	2,184	2,184	2,184	2,184	2,184	0	0	0	0	12,196
32	32	0.																790 32
53	8																	22
0	0		0	0	0	580	994	994	994	994	994	0	0	0	0	0	0	5,549
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5.0%	J	-	0	0	0	32	55	55	22	55	55	0	0	0	0	0	0	308 6,474
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10.0%	Ū	0	0	0	0	68	116	116	116	116	116	0	0	0	0	0	0	1,080 647
8.0%		53	23	10	12	сл	Ŋ	Ŋ	ى ع	0	0	0	0	0	0	0	0	86 734
				41	24	24	24	24	24	0	0	0	0	0	0	0	0	134
				0	0	0	0	0	0	0	0	0	0	0	0	0	0	500
£338		œ :	ω	œ														5 3
£003		4		0	0	0	0	0	0	0	0	0	0	0	0	0	0	<u>¥</u> 0
		0	0	0	0	0	0	43	74	74	74	74	74	0	0	0	0	56 412
1,	τ,	192	315	152	182	834	1,365	1,408	1,439	1,349	1,349	74	74	0	0	0	0	9,734
-1,	7	192	-315	-152	-182	-834	-1,365	-134	745	835	835	2,110	2,110	0	0	0	0	2,462
		0	-1,215	-1,559	-1,742	-1,960	-2,846	4,290	4,507	-3,832	-3,053	-2,260	-152	1,995	1,995	1,995 1	,995	
5	7	192	-1,530	-1,710	-1,924	-2,794	4,211	-4,424	-3,762	-2,997	-2,219	-150	1,958	1,995	1,995	1,995 1	,995	
7.50% 7.5	7.5	22	7.50% -29	7.50% -32	7.50% -36	7.50% -52	7.50% -79	7.50% -83	7.50% -71	7.50% -56	7.50% -42	7.50% -3	7.50% 37	0.00% 0	0.00% 0	0 %00.0	%00. 0	-468
7	÷	215	-1,559	-1,742	-1,960	-2,846	-4,290	-4,507	-3,832	-3,053	-2,260	-152	1,995	1,995	1,995	1,995 1	,995	1,994

SITE 7A CASH FLOW AFFORDABLE

SITE 8 Milner/Carrington St Birkenhead



Input assumptions Scenari	o & option	Affordable 10% = 80%	social rented 20%	intermediate	WITH GRAN					
]		
Wirral site viability study		Dwellings								
Site details Site 	ŭ	Dwellings	% of	% of	ave floor spa gross	net	build cost	build index =	sales value	
Area ha 1.20]	Market housing	dwgs 58.5 90.00%	units 90.00%	<u>sq π</u> 867	867	90.50	1.000 90.50	150.00	
acres 2.97		0			3	5	0.0%			
No dwgs		Affordable soc rent	5.2 8.00%	8.0%	867	867	90.50	90.50	70.00	
		Affordable sh oship	1.3 2.00%	2.0%	867	867	90.50	90.50	95.00	
		Total dwgs	65.0 100.00%	100.0%						
			Π	0.0%	0	0	0.00	00.00	0.00	
Contingency	X			0.0%	0	0	0.00	0.00	0.00	
allowance 7.00%	57	Total units	65.0	100.0%	56,355	56,355		£5,100,128	£8,030,588	
		Floorspace density	= 19,005	net sq ft per	acre					
Development costs standard % build 11.00% 6	00									
		Other costs Planning	329.6	£p	er dwelling					
plus abnormals 7.2%	101	Survey	500	ξp	er dwelling					
Total 18%		Markating	c	د بر	ar dwolling					
Design fees on build costs 10.0%	46	Interest		4						
		% per annum	7.50%							
on dev costs 8%		Notes								
PG £ per dwg 2,000 1	30									
Grant £ per dwg 0	0									
PG ALL										

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Index Market /nusing 1	sing also Almothe socret functions i	NCOME		rate	Year 1 Q1	Q2	d 3	Q4	Year 2 Q1	Q2	d 3	Q4	Year 3 Q1	Q2	d 3		Q4	Q4 Year 4 Q1	Q4 Year 4 Q1 Q2	Q4 Year 4 Q1 Q2 Q3
Sales frees 0 0 0 0 21 -50 -50 Income 1 0 0 0 0 0 -21 -50 -50 Is income 1 1 0 0 0 0 0 -21 -50 -50 Is income Land acquisition -925 -935		fousing sales	Market housing Affordable soc rent Affordable sh oship 0		00000	00000	00000	00000	00000	00000	585 24 0	1,405 58 20 0		1,405 58 20 0	1,405 1,405 58 58 20 20 0 0 0 0 0	1,405 1,405 1,405 58 58 58 20 20 20 0 0 0 0 0	1,405 1,405 1,405 1,405 58 58 58 58 58 58 58 58 58 58 58 58 58	1,405 1,405 1,405 1,405 0 58 58 58 58 58 58 20 20 20 20 0 0 0 0 0 0	1,405 1,405 1,405 1,405 0 0 58 58 58 58 58 0 0 20 20 20 20 0 0 0 0 0 0 0 0 0	1,405 1,405 1,405 1,405 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Interme Interme <t< td=""><td>Illincome I 0 0 0 0 0 618 1433</td><td></td><th>Sales fees</th><th></th><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>-21</td><td>-50</td><td>-20</td><td></td><td>-50</td><td>-50 -50</td><td>-50 -50 -50</td><td>-50 -50 0</td><td>-50 -50 -50 0 0</td><td>-50 -50 0 0</td></t<>	Illincome I 0 0 0 0 0 618 1433		Sales fees		0	0	0	0	0	0	-21	-50	-20		-50	-50 -50	-50 -50 -50	-50 -50 0	-50 -50 -50 0 0	-50 -50 0 0
TS Indicator -925 Stamp duty Turnase fees -925 Stamp duty Total -924 Stamp duty Total	Simp division Functions of the Promises fees -25 Samp division -27 Samp division -28 Samp	otal income			0	0	0	0	0	0	618	1,483	1,483		1,483	1,483 1,483	1,483 1,483 1,483	1,483 1,483 1,483 0	1,483 1,483 1,483 0 0	1,483 1,483 1,483 0 0 0
Land acquisition Earny acquisition -525 25 -525 76 -525 76 -525 76 -525 75 -527 75 -66 67	a Tange degraded -2.5 Tange degrade -2.5 Purrhase fees -2.5 Affordable sh oship 0 <td>DSTS</td> <th></th> <th></th> <td>100</td> <td></td>	DSTS			100															
Total Total 0.14 </td <td></td> <td>P</td> <th>Land acquisition Stamp duty Purchase fees</th> <th></th> <td>-925 -25</td> <td></td>		P	Land acquisition Stamp duty Purchase fees		-925 -25															
Affordable socrent 0 0 0 0 0 0 0 1 75	Affordable socrent fordable socrent 0 0 0 31 75	d costs	Total Market housing		0	0	0	0	353	847	847	847	847	œ	47	47 0	47 0 0	47 0 0 0 0	47 0 0 0 0	47 0 0 0 0 0 0
0 0	0 0		Affordable soc rent Affordable sh oship		00	00	00	00	8 3	75 19	75 19	75 19	75 19	75 19		00	00	0 0 0 0	0 0 0 0 0 0	0 0 0 0 0 0 0 0
Build contingency 7.0% 0 0 0 27 66	Build contingency total 70% 1000 0 <		0 0		00	00	00	00	0 0	00	00	0 0	0 0	00		00	00			
oots Up/out 5.5% 75 75 75 75 75 75 75 75 75 75 76 90 0 <td>osts Upfort 5.5% 75 76 77 77 77 77 77 74 74 74 74 70 101</td> <td></td> <th>Build contingency Total</th> <th>7.0%</th> <td>00</td> <td>00</td> <td>00</td> <td>0</td> <td>27</td> <td>66</td> <td>66</td> <td>, 66</td> <td>66</td> <td>66</td> <td></td> <td>0</td> <td>0</td> <td></td> <td></td> <td>, o , o , o</td>	osts Upfort 5.5% 75 76 77 77 77 77 77 74 74 74 74 70 101		Build contingency Total	7.0%	00	00	00	0	27	66	66	, 66	66	66		0	0			, o , o , o
Total 100 0 0 0 42 101	Total Total 101	osts	Upfront Build related Abnormals	5.5% 5.5% 7%	75 0 196	75 0 196	75 23	75 55	55	55	55	55	0	0		0	0	0	0	0
Planning gain 10 24 24 24 0 0 t Total 10 24 24 24 24 0 </td <td>Planning gain 10 24 24 24 24 0 0 I total Total Cant 0 <</td> <td></td> <th>Fees on build costs Fees on dev costs</th> <th>10.0% 8.0%</th> <td>0 22</td> <td>0 22</td> <td>0 00</td> <td>0</td> <td>42</td> <td>101 4</td> <td>101</td> <td>101 4</td> <td>101 0</td> <td>101 0</td> <td></td> <td>00</td> <td>00</td> <td>•••</td> <td>• • • •</td> <td>• • • •</td>	Planning gain 10 24 24 24 24 0 0 I total Total Cant 0 <		Fees on build costs Fees on dev costs	10.0% 8.0%	0 22	0 22	0 00	0	42	101 4	101	101 4	101 0	101 0		00	00	•••	• • • •	• • • •
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r Planning £330 7 7 7 Survey £500 33 7 7 7 0	r Flaming £30 7 7 7 Survey £500 33 7 7 0	_	Grant Total				0	0	0	0	0	0	0	0		0	0 0	0 0 0	0 0 0	0 0 0
Marketing £0 50 50	Marketing E0 550 510 513 1,132 1,142 1,158 1,158 1,151		Planning	£330 £500	7	7	7													
fees b/forward from above 0 0 0 0 50	fees b/forward from above 0 0 0 0 0 50 70 713 7,242 7,158 1,15 7,15 1,15 7,15 1,15 <th< td=""><td></td><th>Marketing Total</th><th>£0</th><td>3</td><td></td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td></td><td>0</td><td>0</td><td>0</td><td>0</td><td>0 0 0</td></th<>		Marketing Total	£0	3		0	0	0	0	0	0	0	0		0	0	0	0	0 0 0
		s fees I costs	b/forward from above		- 618	0 299	0 123	0 165	0 546	0 1.192	21 1.213	50 1.242	50 1.158	1.15	~	20 20	50 50 50	8 50 50 0	8 50 50 0 0	3 5 0 0 0 0 0 0
profit/loss from quarter 618 -299 -123 -165 -546 -1,192 -595 241 325 32		it/loss bf fro	om last quarter		0	630	337	218	54	-501	-1,725	-2,363	-2,162	-1,872	~ .	-1,576	-1,576 -146	-1,576 -146 1,311	2 -1,576 -146 1,311 1,311	2 -1,576 -146 1,311 1,311 1,311
profit/loss from quarter 618 -299 -123 -165 -546 -1,192 -595 241 325 32! Viloss bf from last quarter 0 630 337 218 54 -5,152 -2,363 -2,162 -1,87	Vloss bf from last quarter 0 630 337 218 54 -501 -1,725 -2,363 -2,162 -1,87	ulative prot	fit/loss		618	331	214	53	-492	-1,693	-2,320	-2,122	-1,837	-1,547		-143	-143 1,287	-143 1,287 1,311	-143 1,287 1,311 1,311	-143 1,287 1,311 1,311 1,311
profit/loss from quarter 618 -299 -123 -165 -546 -1,192 -595 241 325 321 Vloss bf from last quarter 0 630 337 218 54 -501 -1,725 -2,363 -2,162 -1,81 vloss bf from last quarter 0 630 337 218 54 -501 -1,725 -2,363 -2,162 -1,81 ulative profit/loss 618 331 214 53 -492 -1,693 -2,122 -1,837 -1,55	It/loss bf from last quarter 0 630 337 218 54 -501 -1,725 -2,363 -2,162 -1,87 ulative profit/loss 618 331 214 53 -492 -1,693 -2,122 -1,637 -1,54	est	Charged at Total	7.50%	7.50% 12	7.50% 6	7.50% 4	7.50% 1	7.50% -9	7.50% -32	7.50% -43	7.50% -40	7.50% -34	7.50% -29		-3 -3	7.50% 7.50% -3 24	7.50% 7.50% 0.00% -3 24 0	7.50% 7.50% 0.00% 0.00%	7.50% 7.50% 0.00% 0.00% 0.00% -3 24 0 0 0 0
rrofit/loss from quarter 618 -299 -123 -165 -546 -1,192 -595 241 325 321 <th< td=""><td>Viloss bf from last quarter 0 630 337 218 54 -501 -1,725 -2,363 -2,162 -1,51 Jlative profituloss 618 331 214 53 -492 -1,693 -2,122 -1,837 -1,54 sist Charged at 7.50%<td>ulative de ed forwar</td><th>eveloper profit rd to RV calc</th><th></th><td>630</td><td>337</td><td>218</td><td>54</td><td>-501</td><td>-1,725</td><td>-2,363</td><td>-2,162</td><td>-1,872</td><td>-1,57</td><td>76</td><td>76 -146</td><td>76 -146 1,311</td><td>76 -146 1,311 1,311</td><td>76 -146 1,311 1,311 1,311</td><td>76 -146 1,311 1,311 1,311 1,311</td></td></th<>	Viloss bf from last quarter 0 630 337 218 54 -501 -1,725 -2,363 -2,162 -1,51 Jlative profituloss 618 331 214 53 -492 -1,693 -2,122 -1,837 -1,54 sist Charged at 7.50% <td>ulative de ed forwar</td> <th>eveloper profit rd to RV calc</th> <th></th> <td>630</td> <td>337</td> <td>218</td> <td>54</td> <td>-501</td> <td>-1,725</td> <td>-2,363</td> <td>-2,162</td> <td>-1,872</td> <td>-1,57</td> <td>76</td> <td>76 -146</td> <td>76 -146 1,311</td> <td>76 -146 1,311 1,311</td> <td>76 -146 1,311 1,311 1,311</td> <td>76 -146 1,311 1,311 1,311 1,311</td>	ulative de ed forwar	eveloper profit rd to RV calc		630	337	218	54	-501	-1,725	-2,363	-2,162	-1,872	-1,57	76	76 -146	76 -146 1,311	76 -146 1,311 1,311	76 -146 1,311 1,311 1,311	76 -146 1,311 1,311 1,311 1,311

SITE 8A CASH FLOW AFFORDABLE

FORDHAM RESEARCH

SITE 9 Marymount Convent Wallasey



Input assumptions	Scen	ario & option	Affordable 10% = 80% so	ocial rented 20%	intermediate	WITH GRANT				
	J	-								
Wirral site viability	study		Dwellings							
Site details Site Location	larymount Co	invent	Dwellings	% of dwns	% of	ave floor spa gross so ff	net son ff	build cost ner sa #	build index = 1 000	sales value per so ff
Area ha	0.81		Market housing	51.3 90.00%	90.00%	825	759	90.50	90.50	185.00
Acres No dwas	2.00 57		Affordable soc rent	4.6 8.00%	8.0%	825	759	0.0% 90.50	90.50	76.00
Density dw/ha	70.4							0.0%		
			Affordable sh oship	1.1 2.00%	2.0%	825	759	90.50	90.50	105.00
			Total dwgs	57.0 100.00%	100.0%					
		ō			0.0%	0	0	0.00	00.0	0.00
Contingency		тК			0.0%	0	0	0.00	0.00	0.00
allowance	5.00%	213	Total units	57.0	100.0%	47,025	43,263		£4,255,763	£7,557,181
			Floorspace density	= 21,615	net sq ft per s	acre				
Development costs standard % build	10.50%	469								
	1 1 1 1		Other costs Planning	292.4	τ Έρ	er dwelling				
	%0.C	007	Survey	500	£ þ	er dwelling				
Total	16%		Marketing	C	£	er dwelling				
Design fees on build costs	10.0%	447	Interest % per annum	7.50%		0				
on dev costs	8%									
Planning gain & Grant o PG £ per dwg	contributions 2,000	114	Notes							
Grant £ per dwg	0	0								
PG ALL										

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	,040		TOTALS	51.3	4.6 1.1 0.0	57.0	51	v ← o o	51	v - o o	5 7 2
are	No affo £324 ,		Q4	0.0	0.0 0.0 0.0	0	0	0000	0	0000	0 000
Hect	ble 27		d 3	0.0	0.0 0.0 0.0	0	0	0000	0	0000	0 000
	Afforda -£14,1		62	0.0	0.0 0.0 0.0	0	0	0000	0	0000	0 000
П	e	4 o	Year 4 Q1	0.0	0.0.0.0	0	0	0000	0	0000	0 000
profit	1137 81,137	34,35 70,12 0.00%	Q4	0.0	0.0 0.0 0.0	0	0	0000	0	0000	0 000
20.0%	13 13	1,3 6,6 2(d 3	0.0	0.0 0.0 0.0	0	0	0000	0	0000	f -oc
hieve		۰ «۲	Q2	0.0	0.0 0.0 0.0	0	0	0000	11	-000	7 - oc
e to ac	1,443	35,06(22,94(Year 3 Q1	0.0	0.0 0.0	0	1	-000	11	-000	7 - 00
Iterat	Affe	1,2 6,3 19	Q	0.0	0.0 0.0 0.0	0	11	-000	11	-000	7 -00
	લ્મ ભ	ы ы	0 3	10.8	1.0 0.2 0.0	12	1	-000	11	-000	∞ +००
			Q2	10.8	1.0 0.2 0.0	12	1	-000	œ	-000	
			Year 2 Q1	10.8	1.0 0.2 0.0	12	œ	-000			
			Q4	10.8	1.0 0.2 0.0	12					
	e price	costs	ď3	8.1	0.7 0.0 0.0	ი					
	urchase acre	ofit osts is % of	Q2			0					
Land	Land pi RV per	Dev pro Total co profit a	Year 1 Q1			0					
				Market housing	Affordable soc rent Affordable sh oship	TOTAL	Market housing	Affordable soc rent Affordable sh oship	Market housing	Affordable soc rent Affordable sh oship	Market housing Affordable soc rent Affordable sh oship
			Programme	Units started	**00		Units 'huilt'	+2Q	Units completed	+30 +	Units purchased +4Q A A

SITE 9A LAND COST & PHASING

		rate	Year 1 Q1	Q2	Q 3	Q4	Year 2 Q1	Q2	Q3	Q4	Year 3 Q1	Q2	Q 3	Q4	Year 4 Q1	Q2	Q 3	Q4	FOTALS
INCOME																			
Housing sales Market housi	70		0	0	0	0	0	0	1.137	1.516	1.516	1.516	1.516	0	0	0	0	0	7.203
Affordable so	c rent		0	0	0	0	0	0	42	55	55	55	55	0	0	0	0	0	263
Affordable sh	oship		0	0	0	0	0	0	14	19	19	19	19	0	0	0	0	0	91
00			0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
Sales fees			0	0	0	0	0	0	-40	-54	-54	-54	-54	0	0	0	0	0	-255
Total income			0	0	0	0	0	0	1,193	1,591	1,591	1,591	1,591	0	0	0	0	0	7,557
COSTS																			
Land acquisit	ion		-1 1																-11
Stamp duty			0																0
Purchase fee	S		0																- ;
lotal Build costs Market housi	20		C	C	C	c	ROF	RUR	ROG	ROR	ROG	C	c	c	c	c	c	c	3 830
Affordable so	c rent		0 0	0 0	0 0	0 0	3 2	22	22	22	22	0 0	0 0	0 0	00	0 0	00	0 0	340
Affordable sh	oship		00	00	00	0	13	18	. 6	18	18	00	0	0	00	0	0	0	85
0			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Build conting	ency	5.0%	0	0	0	0	34	45	45	45	45	0	0	0	0	0	0	0	213
Dev costs Unfront		5.3%	59	59	59	59													4,469 235
Build related		5.3%	0	0	37	49	49	49	49	0	0	0	0	0	0	0	0	0	235
Abnormals		6%	125	125															250
Foos on huild	, cnete	10.0%	c	c	C	c	74	04	04	04	04	C	c	c	c	C	c	c	447
Fees on dev	costs	8.0%	15	15	οœ	ით	4	24	24	ţo	50	00	00	00	00	00	00	00	58
Total					ç	2	2	2	č	c	c	c	c	c	c	c	c	0	504
Total					Ø	24	24	24	24 4	5	5	5	5	>	5	þ	Ð	5	114
Grant Grant					0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Planning		£292	9	9	9														17
Survey		£500	29	,															29
Marketing		£0			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sales fees b/forward from	n above		0	0	0	0	0	0	40	54	54	54	54	0	0	0	0	0	45 255
Total costs			221	204	127	141	853	1,112	1,152	1,088	1,088	54	54	0	0	0	0	0	6,095
Net profit/loss from quarte	er.		-221	-204	-127	-141	-853	-1,112	41	503	503	1,537	1,537	0	0	0	0	0	1,463
Profit/loss bf from last quarte	ar		0	-225	-437	-574	-728	-1,611	-2,774	-2,785	-2,325	-1,857	-325	1,235	1,235	1,235	1,235	1,235	
						:													
Cumulative profit/loss			-221	-429	-564	-715	-1,582	-2,723	-2,734	-2,282	-1,822	-319	1,212	1,235	1,235	1,235	1,235	1,235	
Interest Charged at		7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	%00.0	0.00%	0.00%	0.00%	0.00%	
Total			4	ထု	<u>-</u>	-13	-30	-51	-51	-43	-34	9-	23	0	0	0	0	0	-228
Cumulative developer pro	fit		-225	-437	-574	-728	-1,611	-2,774	-2,785	-2,325	-1,857	-325	1,235	1,235	1,235	1,235	1,235	1,235	1,234
carried forward to KV cald																			

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SITE 9A CASH FLOW AFFORDABLE

SITE 10 50-94 Whitford Rd Tranmere



Innut accumption	ne o	Constin & ontion	Affordable 10% – 80% social rents	ad 2004 intermedia	TITH CDAN				
	2					_			
Wirral site viabili	ity study		Dwellings						
Site details Site Location Area ha	50-94 Whitt Tranmere	ford Road	Dwellings Market housing 50.4	% of % of dwgs units 0.00% 90.00%	ave floor sp gross sq ft 879	ace net sq ft 879	build cost 79.50	build index = 1.000 79.50	sales value per sq ft 160.00
acre: No dwgs Density dw/ha	s 2.77 56 50.0		Affordable soc rent 4.5	8.00% 8.0%	879	879	0.0% 79.50 0.0%	79.50	70.00
			Affordable sh oship 1.1 2 Total dwgs 56.0 10	2.00% 2.0% 00.00% 100.0%	879	879	79.50	79.50	95.00
Contingency		ŭ		0.0% 0.0%	0 0	0 0	0.00	0.00	0.00
allowance	e 5.00%	196	Total units 56.0	100.0%	49,224	49,224		£3,913,308	£7,457,436
Development costs standard % built	d 11.50%	473	Floorspace density = 1	17,786 net sq ft p	er acre				
plus abnormals	%0.0 8	o	Other costs Planning Survey	500 £	2 per dwelling 2 per dwelling				
Total	12%		Marketing	0	E per dwelling				
Uesign tees on build cost	s 10.0%	411	Interest % per annum	7.50%					
on dev costs Planning gain & Gra PG £ per dwg	8% Int contributi 2,000	ons 112	Notes						
Grant £ per dwg	0	0							
PG ALL									

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		Land															
							E	terate t	to achie	eve 20	.0% pr	ofiit					
							L	Afforc	dable	ľ	No affo	rdable	Aff	r ordable		afford	able
		Land purchas	se price				ц	506,	891		748,	460					
		RV per acre					ц	183,	157		270,	444	£4	52,582	4	668,2	68
		Dev profit					Ċ,	1.215	.338		1.314	.206					
		Total costs					4	6,242	0.923		6,562	,459					
		profit as % o	f costs					19.4	17%		20.0	3%					
Programm	Ð	Year 1 Q1 Q2	Q 3	Q4	Year 2 Q1	Q2	0 3	Q4	Year 3 Q1	Q2	Q 3	Q4	Year 4 Q1	Q2	Q 3	Q4	TOTALS
Units	Market housing		7.2	10.8	10.8	10.8	10.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50.4
	Affordable soc rent Affordable sh oship		0.6	0.2	0.2	1.0	1.0	0.0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.0	0.0	4.5 1.1
	0 TOTAL	0	0.0 ∞	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0 56.0
Units 'bit*'	Market housing				2	11	11	11	11	0	0	0	0	0	0	0	50
+20	Affordable soc rent Affordable sh oship 0				-000	- 0 0 0	- 0 0 0	- 0 0 0	- 0 0 0	000	000	0000	000	000	000	000	4 - 0 (
Units	u Market housing				5	0 2	- 1	10	11 0	11 0	00	0	00	00	00		50
	Affordable soc rent Affordable sh oship 0 0					-000	-000	-000	-000	-000	0000	0000	0000	0000	0000	0000	4 - 0 0
Units purchased	Market housing						2	11	11	11	11	0	0	0	0	0	50
+4Q	Affordable soc rent Affordable sh oship						- 0 0	- 0 0	- 0	- 0	- 0	00	00	00	000	00	4 - 0
	0						0 0	0 0	0 0	00	0 0	00	0 0	00	0 0	0 0	0 0

SITE 10A LAND COST & PHASING

			Year 1				Year 2				Year 3				Year 4				
		rate	Q1	Q2	Q 3	Q4	Q1	Q2	Q 3	Q4	Q1	62	6 3	Q4	ą	6 2	6 3		Q
INCOME																			
Housing sales	Market housing		0	0	0	0	0	0	1,013	1,519	1,519	1,519	1,519	0	0	0	0	0	
	Affordable soc rent		0	0	0	0	0	0	39	59	59	59	59	0	0	0	0	0	
	Affordable sh oship		0 0	0 0	0 0	0 0	0 0	0 0	0	50	50	50	50	0 0	0 0	0 0	0 0	0 0	
	0 0						- c		- c										
	Sales fees		0	0	0	0	0	0	-36	-54	-54	-54	-54	0	0	0	0	0	
Total income			0	0	0	•	0	0	1.065	1.598	1.598	1.598	1.598	•	0	0	0	0	
COCTC			,		,	,	,	,				-		ľ	,			ľ	
2000	-																		
Land	Land acquisition		507																
	Stamp duty		20																
	Purchase fees		4																
	Total																		
Build costs	Market housing		0	0	0	0	503	755	755	755	755	0	0	0	0	0	0	0	
	Affordable soc rent		0	0	0	0	45	67	67	67	67	0	0	0	0	0	0	0	
	Affordable sh oship		0	0	0	0	1	17	17	17	17	0	0	0	0	0	0	0	
	. 0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0		- c				- C	- C	- C			• c	- C	• c		• c			
	Build contingency	5.0%	0 0	00	00	0	28	42	42	42	42	0 0	00	0 0	0 0	0 0	0 0	0	
	Total									!									
Dev costs	Upfront	5.8%	59	20	59	20													
	Build related	5.8%	0	0	34	51	51	51	51	0	0	0	0	0	0	0	0	0	
	Abnormals	%0	0	0						,									
	Total																		
Fees	Fees on build costs	10.0%	0	0	0	0	59	88	88	88	88	0	0	0	0	0	0	0	
	Fees on dev costs	8.0%	5	5	7	6	4	4	4	0	0	0	0	0	0	0	0	0	
	Total																		
PG	Planning gain				16	24	24	24	24	0	0	0	0	0	0	0	0	0	
	Total																		
Grant	Grant				0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Total		I		1														
Other	Planning	£287 CEOD	ы С	S	S														
	survey	00G.2	87		c	c	c	c	c	c	c	c	c	c	c	c	c	c	
	Total	202			5	>	5	5	5	>	5	5	5	>	5	5	5	5	
Sales fees	b/forward from above		0	0	0	0	0	0	36	54	54	54	54	0	0	0	0	0	
Total costs			638	69	122	142	724	1,047	1,083	1,022	1,022	54	54	0	0	0	0	0	
				1		1				i				•		•	•	ľ	
Net profit/los	s from quarter		-638	œ	-122	-142	-724	-1,047	-18	576	576	1,544	1,544	•	•	•	•	•	
Profit/loss bf fr	rom last quarter		0	-650	-733	-870	-1,032	-1,789	-2,889	-2,961	-2,430	-1,889	-351	1,215	1,215	1,215	1,215	1,21	10
Cumulative pro	ofit/loss		-638	-719	-854	-1,013	-1,756	-2,836	-2,907	-2,386	-1,855	-345	1,193	1,215	1,215	1,215	1,215	1,21	10
	Channel of	1 500/	1 500/	7 500/	7 600/	1 100/	1000	7 500/	1000/	7 500/	7 6007	7 500/	1000/	/0000	/000/0	/0000	/000 0	00	2
Interest	Charged at Total	/.50%	7.50% -12	7.50% -13	7.50% -16	/ .50% -19	/ .bu% -33	/ .50% -53	/ .5U%	/.50% -45	/.90% -35	%0G.7	7.50% 22	%00.0	%00.0	%00.0	%00.0	00.00 0	0
					į														
Cumulative d	eveloper profit rd to RV calc		-650	-733	-870	-1,032	-1,789	-2,889	-2,961	-2,430	-1,889	-351	1,215	1,215	1,215	1,215	1,215	1,215	10

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SITE 10A CASH FLOW AFFORDABLE

SITE 11 11-25 Mossey Bank, Egremont



Input assumptions Sce	enario & option	Affordable 10% = 80% social	I rented 20% inter	mediate WITH 0	BRANT			
]							Ī	
Wirral site viability study		Dwellings						
Site details Site 11-25 Mossey	/ Bank	Dwellings	% of %	ave fl of gro	oor space ss net	build cost	build index =	sales value
Location Egremont			dwgs ur	its sq	ft sq ft	per sq ft	1.000	per sq ft
Area na <u>0.83</u> acres 2.05		Iviarket nousing	80.00% 80.0	16 %.Or	9/9	00°0	0C.67	00.001
No dwgs		Affordable soc rent 2.9	8.00% 8.0	97 97	9 979	79.50	79.50	70.00
Density dw/ha 43.4		Affordable ab achin	2 C /800 C	04	020	0.0%	70.60	05 00
			Z.00%	18 010	9/9	00.67	00.87	00.02
		Total dwgs 36.0	100.00% 100	.0%				
	ā			0	0	0.00	0.00	0.00
Contingency	ŁK		i i	0 %	0	0.00	0.00	0.00
allowance 5.00%	140	Total units	100	.0%	44 35,244		£2,801,898	£5,339,466
		Floorspace density	= 17,184 net :	sq ft per acre				
Development costs standard % huild 12 00%	353							
		Other costs Planning	515.0	£ per dwell	bu			
plus apnormals 10.2%	200	Survey	500	£ per dwell	bu			
		Marketing	0	£ per dwell	bu			
on build costs 10.0%	294	Interest % per annum	7.50%					
on dev costs 8%								
Planning gain & Grant contribution PG £ per dwg 2,000	s 72	Notes						
Grant £ per dwg	0							
PG ALL								

		Land																
									terate	to ach	ieve 2	0.0% pi	rofit			Hectar	ġ	
									Affor	dable	ſ	No affe	ordable	Ą	fordable	Z U	o affor	dable
		Land purch RV per acre	ase pric	e				ы т	24, 24,	210	_	115	, <mark>196</mark>	ټن ا	59,824	_	£284,{	574
		Dev profit						(h	874	814		940	791					
		Total costs						ા બ	4,46	5,327	ſ	4,69	8,924	Г				
		profit as %	of cos	ts					19.	59%		20.(02%					
Programm	Ð	Year 1 Q1 Q2	2	ß	Q4	Year 2 Q1	Q2	Q 3	Q4	Year 3 Q1	Q2	Q 3	Q4	Year 4 Q1	Q2	Q 3	Q4	TOTALS
Units started	Market housing		1(. 8.0	10.8	10.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	32.4
	Affordable soc rent Affordable sh oship 0		- 0 0	0,0,0	1.0 0.2 0.0	1.0 0.2 0.0	0.0	0.0 0.0	0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0 0.0	0.0	0.0	0.0 0.0	0.0 0.0	2.9 0.7 0.0
	0 TOTAL	0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0 36.0
Units 'huilt'	Market housing					11	11	11	0	0	0	0	0	0	0	0	0	32
+20	Affordable soc rent Affordable sh oship 0 0					-000	-000	-000	0000	0000	0000	0000	0000	0000	0000	0000	0000	∞ - ο ο
Units	Market housing						11	11	11	0	0	0	0	0	0	0	0	32
	Affordable soc rent Affordable sh oship 0						-000	-000	-000	0000	0000	0000	0000	0000	0000	0000	0000	∞ - ο ο
Units	Market housing							11	11	11	0	0	0	0	0	0	0	32
purcnaseo +4Q	Affordable soc rent Affordable sh oship 0							-000	-000	-000	0000	0000	0000	0000	0000	0000	0000	∞ - ο c

SITE 11A LAND COST & PHASING

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	TOTALS		5,075	197	67	- 0	-180	5.339		50	0	- 2	רכז ר רכז ר	224	56	0	0	140	2,942	177	300	653	294	346	72	72	ə e	19	, 18	37	180	4,281	1,059				-185	8	874
	Q4		0	0 0	0 0	00	0	0					c	00	0	0	0	0		0		c	0 0	5	0	¢	Ð		¢	0	0	0	0	875	875	5	0.00%	>	875
	0 3		0	0 0	0 0	- - -	0	0					c	00	0	0	0	0		0		c	ə c	2	0	¢	Ð		c	Ð	0	0	0	875	875	000	0.00%	>	875
	Q2		0	0 0	0 0	00	0	0					c	00	0	0	0	0		0		c	0 0	5	0	¢	0		c	0	0	0	0	875	875	5	0.00%	>	875
Year 4	Q1		0	0 0	0 0	00	0	0					c	00	0	0	0	0		0		c	5 0	þ	0	c	0		c	0	0	0	0	875	875	000	0.00% 0	þ	875
	Q4		0	0 0	0 0	0 0	0	0					c	00	0	0	0	0		0		c	0 0	>	0	¢	0		c	0	0	0	0	875	875	222	0.00% 0	>	875
	Q3		0	0 0	0 0	00	0	0					c	00	0	0	0	0		0		c	5 0	>	0	¢	Ð		c	Ð	0	0	0	875	87.5	5	0.00% 0	>	875
	Q2		0	0 0	0 0	- - -	0	0					c	00	0	0	0	0		0		c	2 0	5	0	¢	Ð		c	Ð	0	0	0	875	875	200	0.00%	>	875
Year 3	Q1		1,692	66 20	22 0	0 0	-60	1.780					c	00	0	0	0	0		0		c	0 0	5	0	¢	0		c	0	60	60	1,720	-861	REG	2	7.50% 16	2	875
	Q4		1,692	66 20	2	0 0	-60	1.780					c	00	0	0	0	0		0		c	- -	5	0	¢	Ð		¢	Ð	60	60	1,720	-2,565	-846	P	7.50% -16	2	-861
	0 3		1,692	90	22	00	-60	1.780					844	75	19	0	0	47		0		00	86 C	þ	0	¢	0		c	þ	60	1,139	641	-3,160	-2518	0 0 0	7.50%	÷	-2,565
	Q2		0	0 0	0 0	0 0	0	0					844	75	19	0	0	47		0		00	86 C	5	0	¢	Ð		¢	Ð	0	1,079	-1,079	-2,023	-3 101	- 	7.50% -58	8	-3,160
Year 2	Q1		0	0 0	2 0	00	0	0					844	75	19	0	0	47		59		00	8 2 2	2	24	¢	Ð		c	þ	0	1,166	-1,166	-819	-1 986	000-1-	7.50% -37	5	-2,023
	Q4		0	0 0	2 0	00	0	0					c	00	0	0	0	0	44	59		c	⊃ «	5	24	¢	0		c	þ	0	135	-135	-669	-804	5	7.50% -15	2	-819
	0 3		0	0 0	0 0	0 0	0	0					c	00	0	0	0	0	44	59		c	⊃ ∝	þ	24	¢	Ð	9	¢	Ð	0	141	-141	-515	-657	2	7.50% -12	ł	699-
	Q2		0	0 0	0 0	00	0	0					c	00	0	0	0	0	44	: 0	150	c	о 4	2				9			0	216	-216	-290	-506	2	7.50% -9	>	-515
Year 1	Q1		0	0 0	0 0	0 0	0	0		50	0		c	00	0	0	0	0	44	0	150	c	0 (2				9	18		0	285	-285	0	-285	007-	7.50% -5	þ	-290
	rate																	5.0%	6 0%	6.0%	10%	, 00 O F	7 U. U% 8 0%	0.0				£515	£500	£0							7.50%		
			Market housing	Affordable soc rent	Attordable sh oship	0 0	Sales fees			Land acquisition	Stamp duty	Purchase fees	l otal Market housing	Affordable soc rent	Affordable sh oship	0	0	Build contingency	Linfront	Build related	Abnormals	Total	Fees on build costs	Total	Planning gain	Total	Grant Total	Planning	Survey	Marketing Total	b/forward from above		from quarter	m last quarter	itloce	66010	Charged at Total		veloper profit d to RV calc
		INCOME	Housing sales					Total income	COSTS	Land			Build coete						Dev costs				rees		PG		Grant	Other			Sales fees	Total costs	Net profit/loss	Profit/loss bf fro	Gumulative prof		Interest		Cumulative de carried forwarı

SITE 12 Garage, Black Horse, West Kirby/Thurst



Input assumptior	1S Sc	enario & option	Affordable 10% = 80% soc	cial rented 20%	intermediate	WITH GRANT				
•	J									
Wirral site viabili	ty study		Dwellings							
Site details Site Location	Garage, Blac	k Horse hurst	Dwellings	% of	% of	ave floor spa gross so ft	ace net so ft	build cost ner sa ff	build index = 1 000	sales value per so ff
Area ha	0.25		Market housing 19	90.00% B.6	80.00%	794	702	96.00	96.00	223.00
acres No dwgs	22		Affordable soc rent 1.	.8 8.00%	8.0%	794	702	0.0% 96.00	96.00	135.00
Density dw/ha	88.0		Affordable sh oship 0.	.4 2.00%	2.0%	794	702	0.0% 96.00	96.00	141.00
			Total dwgs	2.0 100.00%	100.0%					
		ċ		Π	0.0%	0	0	00.0	0.00	0.00
Contingency		۲K X			0.0%	0	0	0.00	0.00	0.00
allowance	5.00%	84	Total units	0	100.0%	17,468	15,444		£1,676,928	£3,309,958
			Floorspace density	= 25,000	net sq ft per a	acre				
Development costs standard % build	1 10.00%	176								
	707	55	Other costs Planning	515.0	ъ Б	er dwelling				
	9.7%	8	Survey	500	μ	er dwelling				
Total	16%		Marketing	0	E E	er dwelling				
Design fees on build costs	10.0%	176	Interest % per annum	7.50%		5				
on dev costs	8%								ſ	
Planning gain & Gra PG £ per dwg	nt contributior 2,000	ns 44	NOUES							
Grant £ per dwg	0	0								
PG ALL										



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		rate	Year 1 Q1	Q2	Q 3	Q4	Year 2 Q1	Q2	0 3	Q4	Year 3 Q1	Q2	Q 3	Q4	/ear 4 Q1	Q2	Q 3	Q4 7	OTALS
INCOME																			
Housing sales	Market housing		C	C	C	С	c	C	1 409	1691	c	C	C	c	C	C	c	c	3 100
,	Affordable soc rent		0	0	0	0	0	0	76	91	0	0	0	0	0	0	0	0	167
	Affordable sh oship		0	0	0	0	0	0	20	24	0	0	0	0	0	0	0	0	4
	0 0		00	0 0	00	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	00
	Sales fees		0	0	0	0	0	0	-50	-60	0	0	0	0	0	0	0	0	-110
Total income			0	0	0	0	0	0	1,505	1,805	0	0	0	0	0	0	0	0	3,310
COSTS																			
Land	Land acquisition		225																225
	Stamp duty		N (4)																2 10
	Total		>																233
Build costs	Market housing		0	0	0	0	686	823	0	0	0	0	0	0	0	0	0	0	1,509
	Affordable soc rent		0 0	0 0	0 0	0 0	61	73	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	134
	Arrordable sn osnip 0		0 0	0 0	- -	- o	<u>ဂ</u> ဝ	<u>8</u> 0	0 0	0 0	0 0	2 0	0 0		5 0	5 0		. 0	\$ 0
	0		0 0	0 0	0 0	0 0	0 0	0 0	0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0
	Build contingency	5.0%	0	0	0	0	38	46	0	0	0	0	0	0	0	0	0	0	84
Dev costs	Undront	5.0%	22	22	22	22													1,7 61 88
	Build related	5.0%	0	0	40	48	0	0	0	0	0	0	0	0	0	0	0	0	88
	Abnormals	%9	50	50															100 776
Fees	Fees on build costs	10.0%	0	0	0	0	80	96	0	0	0	0	0	0	0	0	0	0	176
	Fees on dev costs	8.0%	9	9	£	9	0	0	0	0	0	0	0	0	0	0	0	0	22
PG	Planning gain				20	24	0	0	0	0	0	0	0	0	0	0	0	0	8 1 4
	Total															,			4
Grant	Grant Total				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0
Other	Planning	£515	4 ;	4	4														; ;
	Survey Marketing	003 £0	E		0	0	0	0	0	0	0	0	0	0	0	0	0	0	E 0
Calae faae	Total		c	c	c	c	c	c	ĘŪ	U9	c	c	c	c	c	c	c	c	52 11 23
Total costs			326	82	91	100	880	1,056	20	6 0	• •	• •	• •	• •	0	• •	• •	• •	2,645
Net profit/loss	from quarter		-326	-82	-91	-100	-880	-1,056	1,455	1,745	0	0	0	0	0	0	0	0	665
Profit/loss bf fro	m last cuarter		C	-332	422	-522	-633	-1 542	-2.647	-1 215	541	541	541	541	541	541	541	541	
			,		1	;	~~~~			2			5	5	5	5	5		
Cumulative profi	it/loss		-326	-414	-512	-622	-1,514	-2,598	-1,192	531	541	541	541	541	541	541	541	541	
Interest	Charged at	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	0.00%	0.00%	0 %00.(.00% C	00% 0) %00.0	0.00%	0.00%	
	Total		9 ₋	ထု	-10	-12	-28	-49	-22	10	0	0	0	0	0	0	0	0	-125
Cumulative dev carried forward	veloper profit 1 to RV calc		-332	-422	-522	-633	-1,542	-2,647	-1,215	541	541	541	541	541	541	541	541	541	540



SITE 13 Builders Yard, Birkenhead



1	Input assumptions s	Scenario & option	Affordable 10% = 80%	social rented 20% int	termediate /	WITH GRAN	L I			
\sim	-									
 ر	Wirral site viability study		Dwellings							
\sim	Site details					ave floor sp	ace	build	build	sales
•	Site Builders Ye I ocation Birkenhead	ard	Dwellings	% of dwas	% of units	gross sa ft	net sa ft	cost per sa ft	index = 1.000	value per so ft
	Area ha 0.15		Market housing	17.1 90.00% 9	0.00%	894	760	107.50	107.50	250.00
	acres 0.37							0.0%		
	No dwgs Density dw/ha 126 7		Affordable soc rent	1.5 8.00%	8.0%	894	760	107.50	107.50	78.00
			Affordable sh oship	0.4 2.00%	2.0%	894	760	107.50	107.50	110.00
			Total dwgs	19.0 100.00% 1	%0.00					
					0.0%	0	0	00.0	0.00	0.00
	Contingency	ă			0.0%	0	0	0.00	0.00	0.00
	allowance 5.00%	91	Total units	19.0	%0.00	16,986	14,440		£1,825,995	£3,370,874
			Floorspace density	= 38,959 ne	et sq ft per e	licre				
	Development costs standard % build 10.00%	192								
			Other costs Planning	515.0	£	ir dwelling				
	plus abnormals 2.6%	50	Survey	500	£ be	er dwelling				
	Total 13%		Marketing	0	£ pe	sr dwelling				
	Design fees on build costs 10.0%	192	Interest % per annum	7.50%						
	on dev costs 8%									
	Planning gain & Grant contributi PG £ per dwg 2,000	ons 38	Notes							
	Grant £ per dwg	0								
	PG ALL									

									Iterate	to ach	ieve 2(0.0% pi	rofit					
									Affo	rdable		No aff	ordable	Aff	H ordable	Hectar No	e o afforc	lable
		Land pu	Irchase	price				£	15(),482		301	,069					
		RV per a	acre					Ъ	406	5,994]	812	,273	£1,(03,21	ίμ N	2,007,	127
		Dev pro	fit					દ્મ	551	1,600		602	,245					
		Total co	sts					£	2,81	9,874		3,00	8,355					
		profit a	s % of	costs					19.	56%		20.	02%					
Programme		Year 1				Year 2				Year 3				Year 4				
1		Q1	Q2	0 3	Q4	Q1	Q2	0 3	Q4	Q1	Q2	0 3	Q4	Q1	Q2	Q3	Q4	TOTALS
Units started	Market housing			0.9	16.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	17.1
	Affordable soc rent			0.1	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5
	Affordable sh oship			0.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0
				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	TOTAL	0	0	-	18	0	0	0	0	0	0	0	0	0	0	0	0	19.0
Units	Market housing					-	16	0	0	0	0	0	0	0	0	0	0	17
-2Q +2Q	Affordable soc rent					0	~	0	0	0	0	0	0	0	0	0	0	2
	Affordable sh oship					00	00	00	00	00	00	00	00	00	00	00	00	00
						00	00	00	00	0 0	00	0 0	00	0 0	0 0	0 0	0 0	0 0
Units	Market housing						-	16	0	0	0	0	0	0	0	0	0	17
+30	Affordable soc rent						0 0	← 0	00	00	00	0 0	0 0	0 0	0 0	0 0	0 0	0 0
	Arroraable sh oship						000				000		000		000		000	000
Units	Market housing							-	16	0	0	0	0	0	0	0	0	17
purchased +4Q	Affordable soc rent							0	-	0	0	0	0	0	0	0	0	2
,	Affordable sh oship							0 0	00	00	0 0	0 0	00	0 0	0 0	0 0	0 0	0 0
								> 0	> O	, o	> 0	, 0	> 0	, o	, o	, o	, o	, o

SITE 13A LAND COST & PHASING



TOTALS		3,249	32	00	-115		3,371		150	N 4	156	1,643 146	37	0	0 2	917 1,917	96	96	50 242	192	19	38	38	.	10	20	19 115	2,698	673			-122	551
Q4		00	00	000			0					00	00	0	00	Þ		0		0	0	0	c	Ð		0	c	• •	0	552	552	0.00% 0	552
0 3		00		000		1	0					00	00	0	00	5		0		0	0	0	c	5		0	c	• •	0	552	552	0.00% 0	552
Q2		00					0					00	00	0	00	5		0		0	0	0	c	5		0	c	• •	0	552	552	0.00% 0	552
Year 4 Q1		00				I.	0					00	00	0	00	5		0		0	0	0	c	5		0	c	• •	0	552	552	0.00% 0	552
Q4		00	00			,	•					00	0 0	0	0 0	>		0		0	0	0	c	>		0	c	• •	0	552	552	0.00% 0	552
0 3		00	00				0					00	00	0	00	5		0		0	0	0	c	5		0	c	• •	0	552	552	0.00% 0	552
Q 2		00	00				0					00	00	0	00	5		0		0	0	0	c	5		0	c	• •	0	552	552	0.00% 0	552
Year 3 Q1		00	00				0					00	00	0	00	5		0		0	0	0	c	5		0	c	• •	0	552	552	0.00% 0	552
Q4		3,078	00 00	300	-109		3,193					00	0 0	0	0 0	5		0		0	0	0	c	5		0	100	109	3,085	-2,543	541	7.50% 10	552
Q3		171	0 0	100	ې د	1	177					00	00	0	00	5		0		0	0	0	c	5		0	u	9	171	-2,668	-2,497	7.50% -47	-2,543
Q2		00				I.	0					1,557 138	35	0	0	8		0		182	0	0	c	5		0	c	1,998	-1,998	-621	-2,619	7.50% -49	-2,668
Year 2 Q1		00				I.	0					86 86	0 CI	0	0 4	n		0		10	0	0	c	5		0	c	111	-111	-499	-610	7.50% -11	-621
Q4		00					•					00	0 0	0	0 0	>	24	91		0	6	36	c	5		0	c	160	-160	-330	490	7.50% -9	-499
Q 3		00	00				0					00	00	0	0 0	5	24	Q		0	2	0	c	5	e	0	c	37	-37	-287	-324	7.50% -6	-330
Q2		00					0					00	0 0	0	0 0	5	24	0 2	07 N	0	4				e		c	26	-56	-226	-282	7.50% -5	-287
Year 1 Q1		00					0		150 î	N 4		00	00	0	00	5	24	0 2	ŝ	0	4				с ў	₽	c	222	-222	0	-222	7.50% -4	-226
rate															200/2	2.U%	5.0%	5.0%	3%	10.0%	8.0%				£515	£00 £0						7.50%	
		Market housing	Affordable sho ship	0	o Sales fees				Land acquisition	Stamp duty Purchase fees	Total	Market housing	Affordable sh oship	0	0 Build continuous	Dulla conungency	Upfront	Build related	Abnormais	Fees on build costs	Fees on dev costs	l otal Planning gain	Total	Total	Planning	Survey Marketing	Total		s from quarter	rom last quarter	ofit/loss	Charged at Total	eveloper profit rd to RV calc
	INCOME	Housing sales					Total income	COSTS	Land			Build costs					Dev costs			Fees		PG	1	Grant	Other		Calor foor	Total costs	Net profit/los	Profit/loss bf fr	Cumulative pro	Interest	Cumulative d carried forwa
1		1	\sim																													 	

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SITE 14 Warren Point, New Brighton



	Input assumptions	0	cenario & option	Affordable 10% = 80%	6 social rented 20% int	ermediate \	VITH GRAN	Т			
\sim	Wirral site viability	study		Dwellings							
	Site details			Duralline	9- V0	90, JE	ave floor sp	ace	build	build	sales
		<u>varren Pol</u> Vew Bright		Dwellings	10 %	% or units	gross sa ft	sa ft	cost ber sa ft	1.000	value per so ft
	Area ha	0.33		Market housing	16.2 90.00% 90	0.00%	905	769	99.50	99.50	250.00
	acres	0.82)]			0.0%		
	No dwgs	18		Affordable soc rent	1.4 8.00% 8	8.0%	905	769	<u>99.50</u>	99.50	78.00
	Density dw/na	0.4c		Affordable sh oshin	0.4 2.00%	2 0%	905	769	0.0% 99.50	99 50	110.00
						0.07	200	202	00.00	00.00	00.01
				Total dwgs	18.0 100.00% 10	%0.00					
						0.0%	0	0	00.0	00.00	0.00
	Contingoney		ĘK			700	c	c			
	allowance	5.00%	81			0,000		>	0.0	000	00.0
]		Total units	18.0	%0.00	16,290	13,842		£1,620,855	£3,231,276
				Floorspace density	= 16,975 ne	et sq ft per a	Icre				
	Development costs standard % build	12.00%	204								
				Other costs Planning	515.0	£ pe	er dwelling				
	plus abnormals	8.8%	150	Survey	200	f ne	r dwalling				
						4					
	Total	21%			[
	Desirin fees			Marketing	0	£ pe	er dwelling				
	on build costs	10.0%	170	Interest % per annum	7.50%						
	on dev costs	8%									
	Planning gain & Grant	contributi	suo	Notes							
	PG £ per dwg	2,000	36								
	Grant £ per dwg	0	0								
	PG ALL										

		Land																
									terate	to achi	eve 20	ıd %0.0	ofit			цо 1 01	c	
									Affor	dable		No affo	ordable	Afi	fordable	nectar P	e o afforc	dable
		Land pur	rchase	price				£	152	,412		296	,315					
		RV per a	ncre					ц	186	,910		363	,385	£4	61,854	4	E897,9	24
		Dev prof	ij					ц	529	,259		577	,663					
		Total cos	sts					ц Ч	2,70	2,692	с С	2,88;	3,512	Г				
		profit as	, % of (costs					19.6	58%		20.(J 3%					
Programm	Φ	Year 1 Q1	Q2	Q 3	Q4	Year 2 Q1	Q2	Q 3	Q4	Year 3 Q1	Q2	Q 3	Q4	Year 4 Q1	Q2	Q 3	Q4	TOTALS
Units	Market housing			1.8	7.2	7.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.2
started	Affordable soc rent Affordable sh oship			0.2	0.6 0.2	0.6 0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4 4.0
	0			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	TOTAL	0	0	2	80	ø	0	0	0	0	0	0	0	0	0	0	0	18.0
Units 'huilt'	Market housing					2	7	7	0	0	0	0	0	0	0	0	0	16
+20	Affordable soc rent Affordable sh oship					0000	-000	-000	0000	0000	0000	0000	0000	0000	0000	0000	0000	- 0 0 0
Units	o Market housing					Þ	0 0	0 -	7	00	0	0	0	00	00	00	0	0 16
+3Q	Affordable soc rent Affordable sh oship						00	- 0	, 0	00	00	00	00	00	00	00	00	- 0
	0 0						00	00	0 0	00	0 0	00	00	00	00	00	00	00
Units	Market housing							2	7	7	0	0	0	0	0	0	0	16
+4Q	Affordable soc rent Affordable sh oship							00	- 0	- 0	00	00	00	00	00	00	00	- 0
	0							00	00	00	00	00	00	00	0 0	0 0	00	00

SITE 14A LAND COST & PHASING

		rate	Year 1 Q1	Q2	g	Q4	Year 2 Q1	Q2	0 3	Q4	Year 3 Q1	Q2	Q3	Q4	/ear 4 Q1	Q2	Q 3	Q4 7	OTALS
INCOME																			
			c	c	c		c	c	910	100 1	100 1	c	c	c	c	c	c	c	
nousing sales	Market nousing Affordable soc rent								9 7 0	38	400,1 38								3, 114 86
	Affordable sh oship		00	00	00	0 0	00	00	? ო	8 4	8 4	00	00	0 0	00	0 0	0 0	0 0	300
	0 0		00	00	00	0 0	00	00	00	00	00	00	00	0 0	00	00	0 0	0 0	00
	Sales fees		0	0	0	0	00	0	-12	49	-49	00	00	0	00	0	00	0	-110
Total income			0	0	0	0	0	0	359	1.436	1.436	0	0	0	0	0	0	0	3.231
COSTS			,	,	,	,	,	,						,		,	,	,	
	1																		
Land	Land acquisition		152																152
	Starrip uuty Purchase fees		14																и 4
	Total																		158
Build costs	Market housing		0	0	0	0	162	648	648	0	0	0	0	0	0	0	0	0	1,459
	Affordable soc rent		0 0	0 0	0 0	0 0	4.	58	28	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	130 22
	Attordable sh oship		0 0	0 0	0 0	0 0	4 0	4	4	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	32
	5 0		5 0	0 0	5 0	5 0	2 0	2 0	5 0	5 0	5 0	2 0	5 0	- -	5 0	5 0	5 0	2 0	э с
	Build contingency	5.0%	00	00	00	0 0	ວດ	36	36	0 0	0 0	00	0 0	0 0	0 0	0 0	00	0 0	9 8
	Total		. :	. :	. :					,									1,702
Dev costs	Upfront	6.0%	56	50	26	26 4 F	70	c	c	- -	c	c	c		c	c	c	c	102
	Abnormals	0.0% 9%	0 75	0 75	=	64	6 1	þ	Þ	>	Ð	Ð	Ð	5	Ð	Ð	Þ	5	150
	Total	2	2	2															354
Fees	Fees on build costs	10.0%	0	0	0	0	19	76	76	0	0	0	0	0	0	0	0	0	170
	Fees on dev costs	8.0%	œ	œ	m	9	4	0	0	0	0	0	0	0	0	0	0	0	28 199
PG	Planning gain				4	16	16	0	0	0	0	0	0	0	0	0	0	0	36
Grant	Total				c	0	c	c	c	- -	c	c	c	c	c	c	c	c	8 ⊂
Ciair	Total				þ		5	5	5	>	>	5	5	>	5	5	þ	>	• •
Other	Planning	£515	ю	ю	ю														Ø
	Survey	£500	ი		c	0	c	c	c		c	c	c		c	c	c		റ
	Total	502			5	>	þ	þ	Þ	>	Þ	Þ	Þ	5	Þ	Þ	5	5	- 8
Sales fees	b/forward from above		0	0	0	0	0	0	12	49	49	0	0	0	0	0	0	0	110
Total costs			279	112	47	93	273	832	844	49	49	0	0	0	0	0	0	0	2,577
Net profit/los	s from quarter		-279	-112	-47	-93	-273	-832	-485	1,387	1,387	0	0	0	0	0	0	0	655
Profit/loss bf fr	rom last quarter		0	-284	-403	-458	-561	-849	-1.713	-2.239	-868	529	529	529	529	529	529	529	
Cumulative pro	ofit/loss		-279	-395	450	-551	-834	-1,681	-2,198	-852	519	529	529	529	529	529	529	529	
Interest	Charged at	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	0.00%	00% 0) %00%	00%	%00.0	0.00% (%00.0	
	Total		'n	L-	φ	-10	-16	-32	-41	-16	10	0	0	0	0	0	0	0	-126
Cumulative d carried forwa	eveloper profit ird to RV calc		-284	-403	-458	-561	-849	-1,713	-2,239	-868	529	529	529	529	529	529	529	529	529

SITE 15 Vauxhall Dealership, Heswall



	Input assumptions	Scenar	rio & option	Affordable 10% = 80%	social rented 20% ii	ntermediate	WITH GRAN	F			
7.	Wirral site viability stu	dy		Dwellings							
\sim	Site details						ave floor sp	ace	build	build	sales
•	Site Vauxh	hall Dealers	hip	Dwellings	% of	% of units	gross	net so ff	cost ner so ft	index =	value ner sn ft
	Area ha 0.20	0		Market housing	16.2 90.00%	90.00%	945	803	99.50	99.50	220.00
	acres 0.4	φ							0.0%		
	No dwgs			Affordable soc rent	1.4 8.00%	8.0%	945	803	99.50	99.50	78.00
		2		Affordable sh oship	0.4 2.00%	2.0%	945	803	99.50 99.50	99.50	110.00
				Total dwgs	18.0 100.00%	100.0%					
						0.0%	0	0	00.0	00.0	0.00
	Contingency		Ę			%0.0	0	0	0.00	0.00	0.00
	allowance 5.00	%(85	Total units	18.0	100.0%	17,010	14,454		£1,692,495	£2,983,884
				Floorspace density	= 29,997 r	net sq ft per s	acre				
	Development costs standard % build 10.00	%0	178								
				Other costs							
	nlue abnormale 6 70	×		Planning	515.0	£D	er dwelling				
		٩	8	Survey	500	£ p	er dwelling				
	Total 16%	%		Marketing	0	£P	er dwelling				
	Design rees on build costs 10.0	%(178	Interest % per annum	7.50%						
	on dev costs 8%	.0									
	Planning gain & Grant conti PG £ per dwg	0 0	36	Notes							
	Grant £ per dwg	Π	0								
	PG ALL										

									terate	to achi	eve 2(d %0.0	rofit					
									Affor	dable		No aff	ordable	Aff	l ordable	Hectar	e) afforc	lable
		Land purc	chase	price				£	-9,	342		113	,976					
		RV per ac	cre					ε	-19	,388		236	,541	ц.	47,908	~	E584,4	1 9 4
		Dev profit						с л	487	,517		530	,967					
		Total cost	ts					ц	2,49(6,967	ľ	2,64	9,513	Г				
		profit as	% of	costs					19.	52%		20.	04%					
Programn	e	Year 1 Q1	Q2	Q 3	Q4	Year 2 Q1	Q2	0 3	Q4	Year 3 Q1	Q2	Q3	Q4	Year 4 Q1	Q2	Q 3	Q4	TOTALS
Units	Market housing			5.4	10.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.2
Statied	Affordable soc rent Affordable sh oship			0.5 0.1	1.0 0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0 0.0	0.0	1.4 0.4
	00			0.0 0.0	0.0 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0 0.0	0.0	0.0	0.0	0.0	0.0	0.0
	TOTAL	0	0	9	12	0	0	0	0	0	0	0	0	0	0	0	0	18.0
Units 'built'	Market housing					S	11	0	0	0	0	0	0	0	0	0	0	16
+20	Affordable soc rent Affordable sh oship					00	- 0	00	00	00	00	00	00	00	00	00	00	- 0
	0					00	00	0 0	00	0 0	0 0	0 0	00	00	00	00	00	0 0
Units completed	Market housing						ъ	11	0	0	0	0	0	0	0	0	0	16
+30	Affordable soc rent Affordable sh oship						00	- 0	00	00	00	00	00	00	00	00	00	- 0
	0 0						00	00	00	00	00	00	00	00	00	00	00	00
Units	Market housing							2ı	11	0	0	0	0	0	0	0	0	16
+4Q	Affordable soc rent Affordable sh oship							000	- 0 0	000	000	000	000	000	000	000	000	- 0 0
1	0 0							00	00	00	00	00	00	00	00	00	00	00

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SITE 15A LAND COST & PHASING

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TOTALS		2,862	32 8	0	104	101-	 2,984		م ر	- 0	-9	1,523	130 24	ţ 0	0	85	89 89	89	100 278	178	22 20	98	% 0	0	ກດ	0	101 101	2,401	583				96-	487
Q4		00	00	0	5 0	5	-					00	- -	00	0	0		0		0	0	0	0			0	0	0	0	488	488	/0000	%00.0 0	488
63		00	00	00	5	5	-					0 0	- -	0 0	0	0		0		0	0	0	0			0	0	0	0	488	488	/000/0	%00.0	488
Q2		00	00	0	50	5	-					0 0	- -	00	0	0		0		0	0	0	0			0	0	0	0	488	488	/000/0	%00.0	488
Year 4 Q1		00	00	0	5 0	5	-					0 0	- -	00	0	0		0		0	0	0	0			0	0	0	0	488	488	/000.0	% 0	488
Q4		00	00	0	5 0	5	-					0 0	5 0	00	0	0		0		0	0	0	0			0	0	0	0	488	488	70000	0.00	488
ď3		00	00	0	00	5	-					0 0	5 0	00	0	0		0		0	0	0	0			0	0	0	0	488	488	70000	0.00	488
62		00	00	0	00	5	-					0 0	5 0	00	0	0		0		0	0	0	0			0	0	0	0	488	488	/000/0	0.0	488
Year 3 Q1		00	00	0	00	5	-					0 0	5 0	00	0	0		0		0	0	0	0			0	0	0	0	488	488	70000	0.00	488
Q4		1,908 60	5 2	0	0	ò	1,989					0 0	5 0	00	0	0		0		0	0	0	0			0	67	67	1,922	-1,443	478	7 600/	% nc. /	488
Q 3		954 30	3 5	0	0 6	ţ	 995					0 0	5 0	00	0	0		0		0	0	0	0			0	34	34	961	-2,378	-1,417	7 600/	-27	-1,443
Q2		00	00	0	0 0	5	-					1,015	96 K	30	0	56		0		118	0	0	0			0	0	1,303	-1,303	-1,031	-2,334	7 500/	-44	-2,378
Year 2 Q1		00	00	0	5 0	5	-					508	4 1 1	: 0	0	28		0		59	0	0	0			0	0	652	-652	-360	-1,012	7 500/	-19	-1,031
Q4		00	00	0	5 0	5	-					0 0	- -	0	0	0	22	59		0	7	24	0			0	0	112	-112	-242	-354	7 600/	% DC: 1	-360
Q 3		00	00	0	0 0	5	-					0 0	5 0	00	0	0	22	30		0	4	12	0	¢	n	0	0	71	-71	-166	-238	7 500/	% 7	-242
Q2		00	00	0	0 0	5	-					0 0	0 0	00	0	0	22	0	50	0	9			¢	n		0	81	-81	-82	-163	7 500/		-166
Year 1 Q1		00	00	0	0 0	5	-		ი ი	0 0)	0 0	5 0	00	0	0	22	0	50	0	9			¢	ოთ		0	81	-81	0	8 1	7 600/	2- 2-	-82
rate																5.0%	5.0%	5.0%	%9	10.0%	8.0%			1710	£103 £500	£0						7 500/	ø/ nc. /	
		Market housing	Affordable sh oship	0	U Salac faac	Jaies lees			Land acquisition	Stamp duty Purchase fees	Total	Market housing	Affordable soc rent Affordable sh oshin		0	Build contingency	Upfront	Build related	Abnormals Total	Fees on build costs	Fees on dev costs	Planning gain	l otal Grant	Total	Planning Survey	Marketing	l otal b/forward from above		from quarter	om last quarter	fit/loss	to bound of	Unarged at Total	veloper profit d to RV calc
	INCOME	Housing sales					 I otal income	COSTS	Land			Build costs					Dev costs			Fees		PG	Grant		Other		Sales fees	Total costs	Net profit/loss	Profit/loss bf fro	Cumulative prof	Interact		Cumulative de carried forward
1	\mathbf{r}	1	\sim	\mathbf{r}																														

