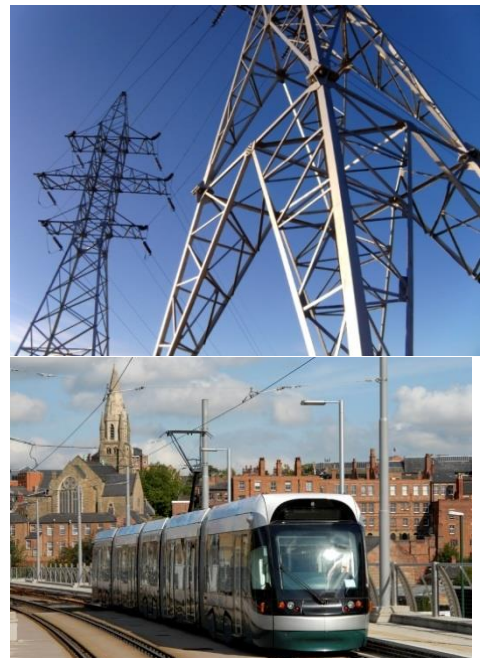


## Birmingham City Council

# Housing delivery on greenbelt options



In Association with:



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## APPENDICES

Appendix 1 - Delivery Rate Calculation Method

Appendix 2 - Viability Testing – High Level Review

Appendix 3 - Local Housing Market Research

# 1 INTRODUCTION

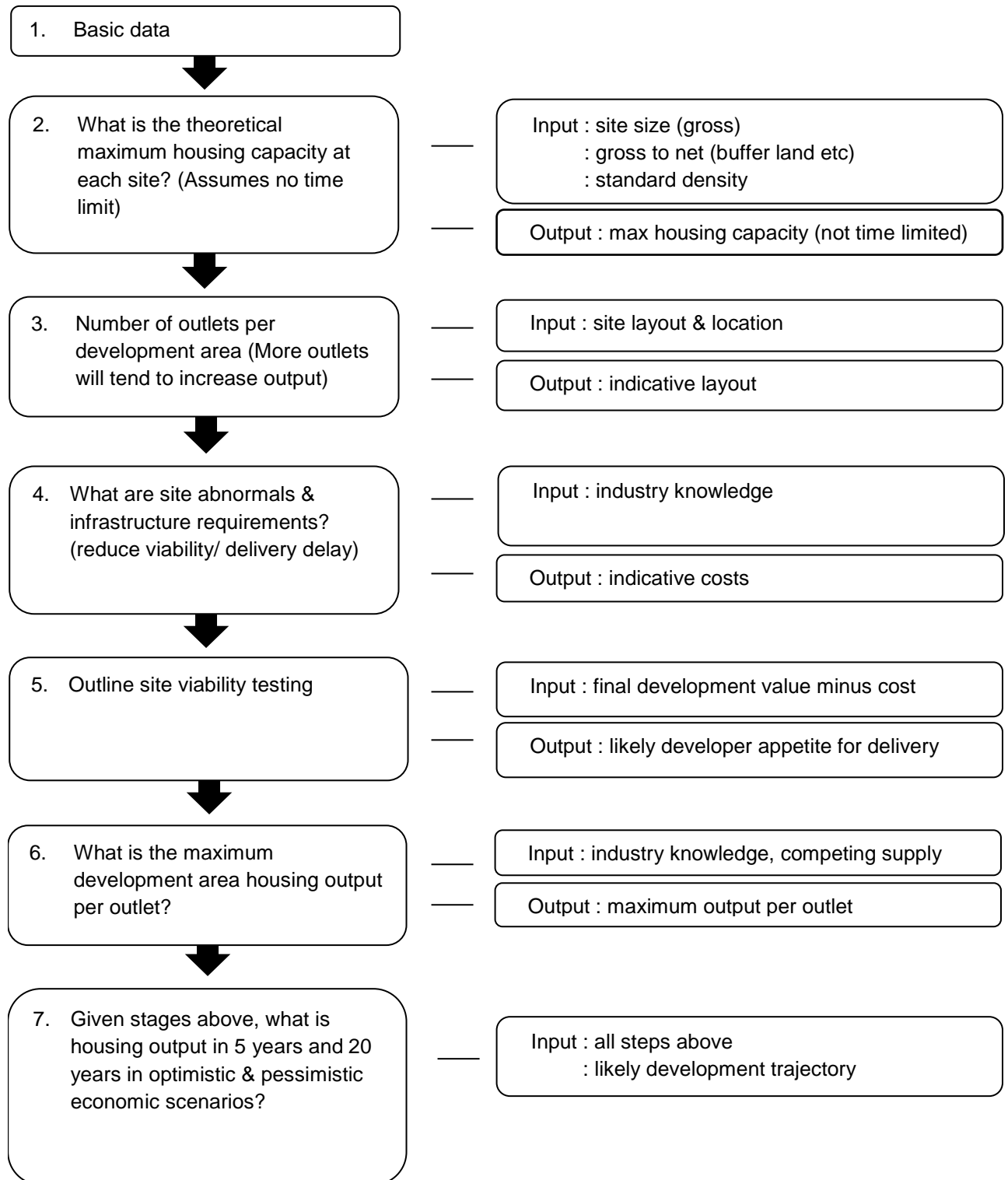
- 1.1 This report has been commissioned to supplement the Strategic Housing Market Assessment report undertaken by Peter Brett Roger Tym with HDH Planning & Development.
- 1.2 The purpose of this report is to advise Birmingham City Council on the numbers of homes that the market might be willing and able to provide on development areas within Birmingham's Green Belt. This information is provided over a) a five year period, and b) a 20 year period.
- 1.3 These numbers will be provided within two economic scenarios. One assumes a stronger housing market recovery. The other assumes a weaker housing market recovery.

## 2 METHOD

### Introduction

- 2.1 In this section, we explain the method we have used to advise the Council on possible housing output on each development area.
- 2.2 We have followed the process set out in the following diagram.
- 2.3 The results are set out in a matrix for each development area in Chapter 3 onwards.

**Figure 2.1 Method process flow**



## Step 1: Basic data

- 2.4 In the first section of the matrix, information on total development area and current proposals was provided by the Council.

## Step 2: Understanding the theoretical maximum development area housing capacity

### *Developable area*

- 2.5 We were provided with maps on the 'red line' development boundary of each development area by the Council.
- 2.6 We broke each development area into a number of different sub-areas. These were not intended to show particular land holdings: they were intended only to give a more accurate view of how many homes might sensibly fit on each site. The sites were visited, but no surveys or land investigations have been carried out. This work should not be used for other purposes.
- 2.7 The layout of the sub-areas was influenced by a number of factors. These are explained below.
- Noise and air quality. At development areas near the A38 and the M6 Toll, a 100 metre setback was put in place in order to reduce the effects of noise and poor air quality on homes nearby.
  - Pylons. Development areas both east and west of the Sutton Coldfield bypass are affected by pylons. For overhead high voltage lines, wayleave is likely to be approximately 40m; if the line is underground, then wayleave of approximately 10m is required. Our indicative development area layout has assumed that pylons are underground.
  - Radio mast. Hill Wood (Development area A) includes areas that are under the radio mast that cannot be developed.
  - Historic monuments. East of Sutton Coldfield (development area D) includes various historic monuments that will be protected.
  - Footpaths. We have assumed that footpaths can be moved, rather than tried to work the sub-area block plan around them.
  - Public Open Space. There is open space within these schemes. We have allowed for open space buffers to be incorporated between housing and the M6 Toll road and the A38 which can be incorporated into the design of the scheme.
  - SUDS. We have assumed that sustainable urban drainage schemes (SUDs) will not require additional land, because SUDS will be able to use areas such as the buffer land as a soakaway.
  - Other uses. It has been assumed that 10% of the developed area is used for other uses, such as neighbourhood shops, pubs and the like.
- 2.8 The table below sets out our findings.

- The 'development area total' in the table is the area within the red line supplied to us by the Council.
- The 'estimated gross development area' is the area that we estimate would have to be bought by a developer to allow a development of the sub-areas. These excludes areas around existing homes and the like, but include those areas that are like to be necessary to design a comprehensive scheme such as wildlife corridors, buffers for the motorways and main roads, flood areas and the like.
- The 'net area' is the area which will see new housing development.

**Table 2.1 Net Development Areas**

Area	Development area total (ha)	Estimated Gross Development Area	Net Area (ha) for housing	Developed proportion (net as % total)	% Gross Development Area (net as % of gross)
A	310	220	177	57%	80%
B	342	225	181	53%	80%
C	273	220	154	56%	70%
D	268	200	146	55%	73%

Source: Planning for Birmingham's Growing Population (October 2012)

### Density

- 2.9 Having calculated the net developable area, we then worked out the number of homes which might be accommodated on each development area.
- 2.10 The Council's policy requires 40 dwellings per ha (dph)<sup>1</sup>, and have used this figure across all development areas. This is a maximum in the current market, and it is our experience that most developers are seeking lower densities on green field development areas - often down to 32/ha. This is for two reasons.
- Firstly, densities of 40 dph are normally achieved through the inclusion of an element of flats, and the constrained mortgage market for first time buyers and for flatted schemes has made the development of small units and flats unattractive to developers in the current market.
  - Secondly, the current market demand is for family homes that can be sold to buyers with equity from an earlier house purchase.
- 2.11 However, market conditions are likely to change over the twenty year plan period and may even have changed by the time the Options would start to deliver housing.

<sup>1</sup> BCC (2012) *Birmingham Development Plan* (6)

### Step 3: Number of outlets per development area

- 2.12 A development area might be said to have different 'outlets' if it was broken into parts, with each part being developed by a separate company. We assume that this is possible if the area allows separate access points for each developer.
- 2.13 This is potentially important because where a single development area is able to be split up and developed by different developers, housing output from the development area overall tends to be higher. This is for the following reasons.
- Separate developers are more likely to be able to finance individual sites, resulting in a higher overall supply; and
  - Separate developers produce different products and appeal to different sections of the market, resulting in a higher overall demand.
  - The presence of separate developers is also likely to introduce an element of competition between sites, further driving up overall output.
- 2.14 However, these are very large development areas, with a large number of outlets possible. The number of likely outlets is not likely to be limited by factors such as highway access, but will instead be limited by developers' judgements about the number of houses that the market can absorb. We assessed this at Step 6.
- 2.15 More information is available in Appendix 1.

### Step 4: Development area abnormal and infrastructure costs

- 2.16 Development areas may have particular abnormal costs. These might include ground which needs remediation, or costs such as burying electricity cables. Alternatively, development areas might have particular infrastructure requirements (such as connections to the trunk road network).
- 2.17 Understanding these infrastructure and abnormal costs is important for two reasons.
- Firstly, major infrastructure requirements might cause delay to the delivery of a development area (for example, if a new road is needed before development can begin).
  - Secondly, infrastructure and abnormal costs may fall on the landowners and/or developers of the development area. A development area particularly affected by high infrastructure and abnormal costs may suffer from reduced viability, and so might not be developed at the same rate as other development areas which are less affected.
- 2.18 To estimate infrastructure costs, we undertook a very high level review using our local knowledge and broad estimates of infrastructure costs using our industry knowledge.
- 2.19 To estimate abnormal costs, we used information from the Council on known abnormal elements, and applied an estimate of remediation costs using our industry knowledge.
- 2.20 This review is not intended to be comprehensive, and excludes elements such as any necessary education, community and open space provision. We assume that much of this infrastructure will be paid out of CIL, which we have taken account of in our viability numbers.



- 2.21 We are instructed by the Council that utilities providers have given assurances that there are unlikely to be any fundamental difficulties in providing water, sewerage, gas and electricity to the development areas. We have therefore not investigated utilities further.

### Step 5: Outline development area viability testing

- 2.22 Development will not happen when development is not viable. We have therefore undertaken a very high level review of viability, relying on existing work. Our approach is set out in detail in Appendix 2.

### Step 6: Development area output per outlet

- 2.23 Even on highly viable development areas, housing output is limited by developers' willingness and capacity to supply new houses. Their *ability* to build houses will be limited by (amongst other things) their capacity to finance development. Their *willingness* to build homes will be informed by the view of the ability to absorb the homes produced. A developer will not wish to flood a housing market with homes: this will affect prices and cause cashflow problems.
- 2.24 Our views on total housing output possible from these development areas and outlets has been informed by our view of housing market demand to the north and east of Sutton Coldfield. (The SHLAA identifies 1,533 additional dwellings over the plan period, mainly on smaller brownfield sites in the Sutton Coldfield area).
- 2.25 The main sites are less than two miles from end to end and there is less than five miles from the north of B to the south of C. Because the sites are relatively concentrated in one area, this affects the demand for homes. Birmingham City Council believes that the sites provide the opportunity to meet city-wide, strategic housing needs. Even with all major housebuilding companies involved and a strong economic recovery, it is very difficult to see housing output exceeding around 372 units per year for any development area, and some development areas are expected to see fewer than this. (Note that this sum includes projected affordable housing provision at 35%).
- 2.26 For the purposes of this study, in which the development area will be delivered over a substantial period of time, we have assumed a delivery rate of 62 units per year per outlet assuming a stronger housing market recovery, and 47 units per year per outlet under a weaker housing market recovery. We suggest that the most likely outturn is to the bottom of this range, but it is impossible to be certain.
- 2.27 Our approach is set out in detail in Appendix 1, and is informed by local housing market research in Appendix 3.

### Step 7: Viable housing output in five years from adoption and over the 20 years

- 2.28 This step combines each of the previous steps to provide an answer to the core question of housing output from each development area within five years from plan adoption in 2014, and within 20 years of the plan as a whole (the plan period spans from 2011 to 2031).
- 2.29 We combine a view on

- the theoretical development area housing capacity from Step 2;
- the number of housing outlets from Step 3;
- development area abnormals and infrastructure implications in Step 4;
- outline viability testing from Step 5; and
- the likely limits to developer output from Step 6.

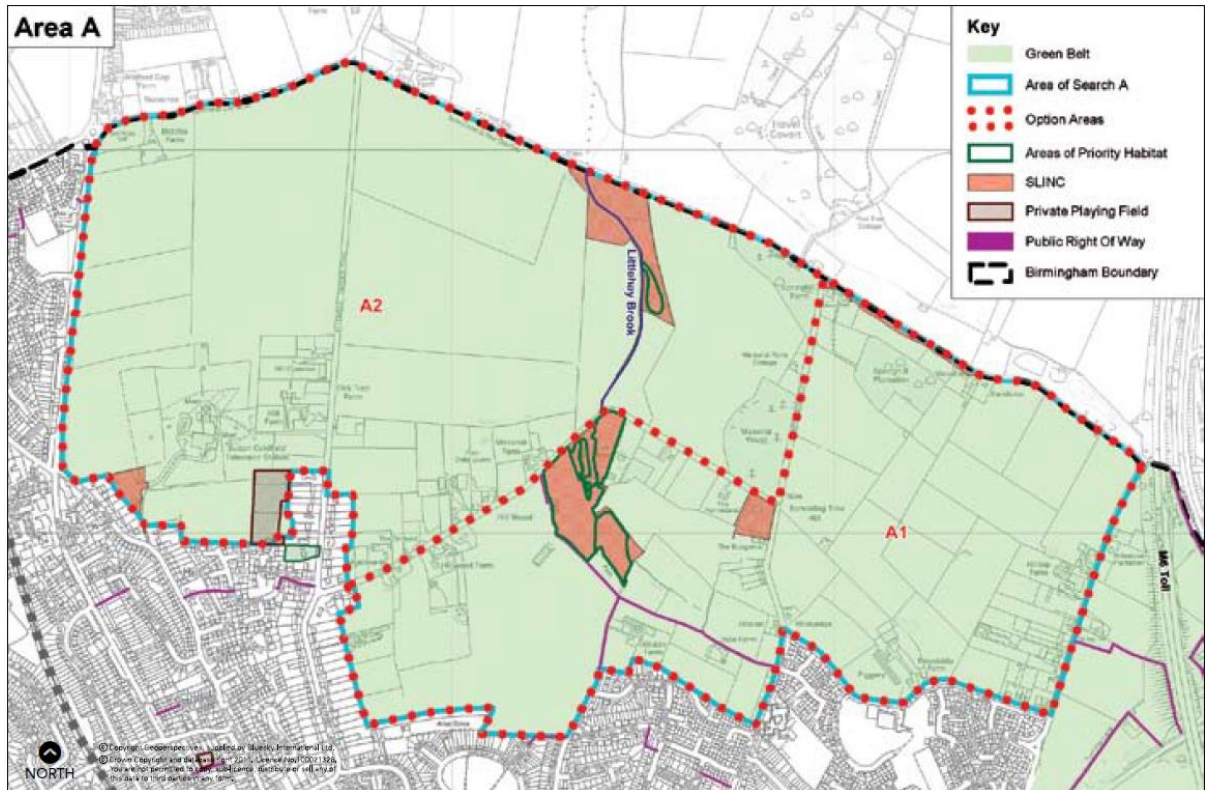
2.30 Each of these factors is combined in our housing trajectory in this stage (step 7).

2.31 This was based on a number of assumptions which are set out in detail in Appendix 1. We have assumed that there will be a delay in delivery to account for development area assembly.

2.32 We have provided housing numbers as a range. The upper end of the range reflects a more rapid recovery in housing markets. The lower end reflects a slower housing market recovery.

### 3 OPTION A1 HILL WOOD

Figure 3.1 Development area map (Options A1 and A2)



Source: Birmingham City Council *Birmingham Development Plan Green Belt Options Appendix*

Table 3.1 Data

<b>1.Basic data</b>	Hill Wood Option 1 and 2 in total cover 311 ha
<b>2.Theoretical maximum housing capacity at each site</b>	
Net area for housing (ha)	92.7
Physical capacity: total units for all area at 40dph	3,708
<b>3.Number of outlets per development</b>	
Outlets developed concurrently	5
<b>4.Site infrastructure costs and abnormals</b>	
<b>Headline Delivery</b>	Short term quick wins. Longer term delivery of strategic site requires access through A2 or B1
<b>Infrastructure needed</b>	
<b>Transport</b>	
High level cost estimate	£1,500,000 + access through A2 or B1 for delivery of full site
Feasible timing	Dependent on longer term infrastructure
Notes	Requires access through A2 Access constrained through local highway network
<b>Power and telecoms masts</b>	
Item	Possible requirements for upgrades/ off site reinforcement works to secure power supplies

High level cost estimate	tbc
Feasible timing	tbc
Notes	From preliminary review, no principal utilities constraints identified. To be confirmed with review of full asset plans.
<b>Potable and waste water</b>	
Item	Possible requirements for upgrades/ off site reinforcement works to secure water supply and sewerage infrastructure/treatment of foul effluent. Foul effluent likely to be discharged to either Shenstone or Langley WWTW.
High level cost estimate	tbc
Feasible timing	tbc
Notes	From preliminary review, no principal utilities constraints identified. To be confirmed with review of full asset plans.
<b>Flood / SUDS</b>	
Item	No flood risk issues. Surface water management strategy will need to include SuDS and restrict rates to the greenfield runoff rate. SuDS features on site to include attenuation measures such as basins or swales etc.
High level cost estimate	No direct 'abnormal' cost but will affect the developable area. In addition, connections to watercourses may cross third party land and be subject to additional costs.
Feasible timing	No significant time implications beyond normal design and approvals.
Notes	Initially, assume 10% of the development area to be set aside for surface water attenuation features
<b>Other</b>	
Item	Noise
High level cost estimate	No direct 'abnormal' cost but will affect the developable area.
Feasible timing	No significant time implications beyond normal design and approvals.
Notes	Initially assume 100m setback from M6 Toll and A38
<b>5.Outline site viability testing</b>	
	Sites are viable
<b>6.Theoretical annual output per outlet</b>	
During first 2 years (strong recovery)	43
During first 2 years (weak recovery)	33
During subsequent years (strong recovery)	62
During subsequent years (weak recovery)	47
<b>7.Housing outputs (market + affordable)</b>	
Delivery by 2031 ( <b>stronger market recovery</b> )	3,708
Delivery by 2031 ( <b>weaker market recovery</b> )	3,149
Delivery 2014-start 2019 ( <b>stronger market recovery</b> )	217
Delivery 2014-start 2019 ( <b>weaker market recovery</b> )	165

## 4 OPTION A2 HILL WOOD

Table 4.1 Data

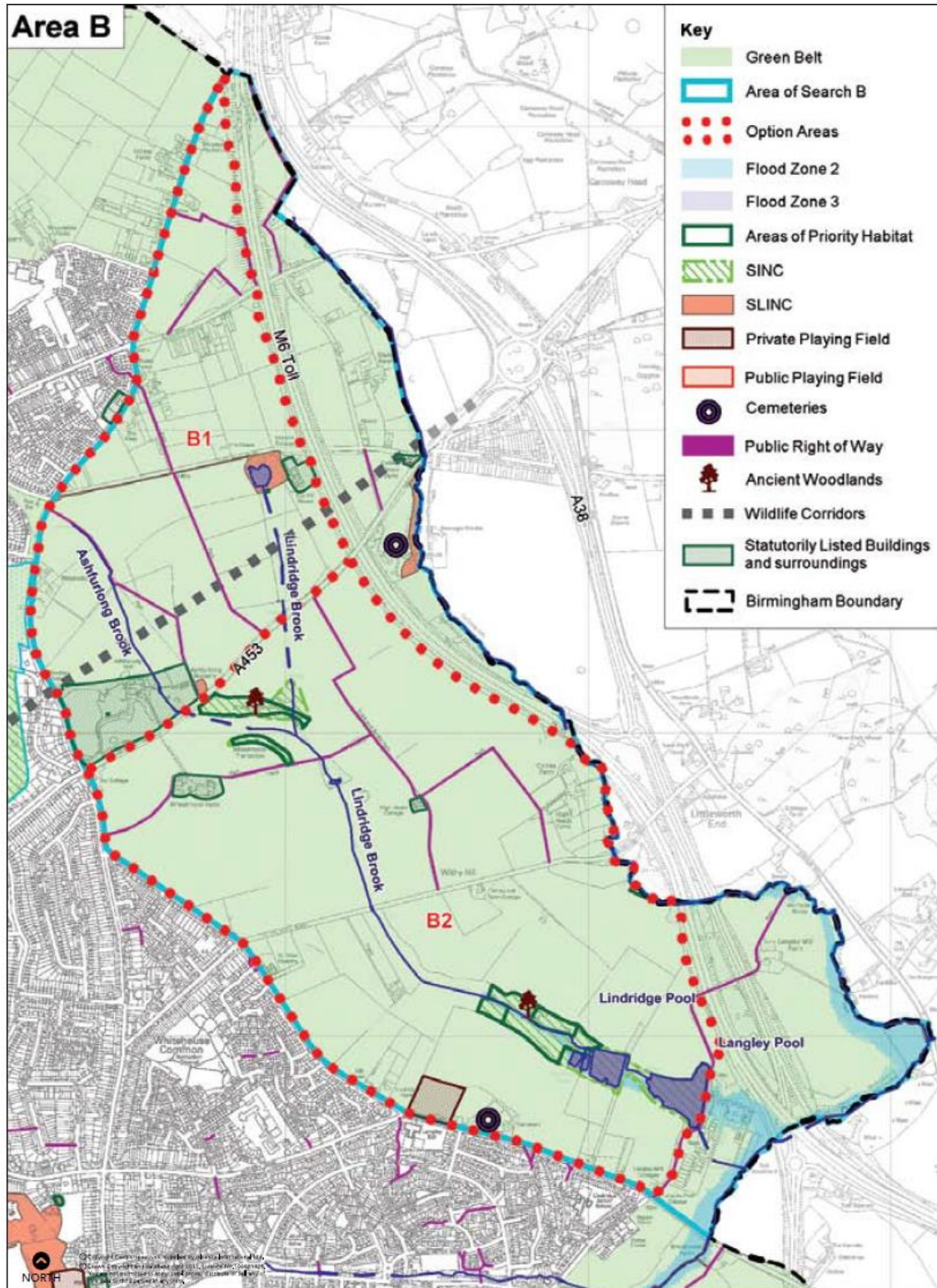
<b>1.Basic data</b>	
	Hill Wood Option 1 and 2 in total cover 311 ha
<b>2.Theoretical maximum housing capacity at each site</b>	
Net area for housing (ha)	83.8
Physical capacity: total units for all area at 40dph	3,352
<b>3.Number of outlets per development</b>	
Outlets developed concurrently	5
<b>4.Site infrastructure costs and abnormals</b>	
<b>Headline Delivery</b>	Long Term option, based on the limited access opportunities and constrained local highway network
<b>Infrastructure needed</b>	
<b>Transport</b>	
High level cost estimate	£1,250,000
Feasible timing	No abnormal timescales for delivery of small scale development, larger strategic development requires more substantial highway infrastructure which would increase timescales
Notes	Access constrained through local highway network
<b>Power and telecoms masts</b>	
Item	Possible requirements for upgrades/ off site reinforcement works to secure power supplies. Telecommunications base station at Hill Farm.
High level cost estimate	tbc
Feasible timing	tbc
Notes	Assume that development would avoid the area around the telecommunications base station. From preliminary review, no further principal utilities constraints identified. To be confirmed with review of full asset plans.
<b>Potable and waste water</b>	
Item	Possible requirements for upgrades/ off site reinforcement works to secure water supply and sewerage infrastructure/treatment of foul effluent. Foul effluent likely to be discharged to Shenstone WWTW.
High level cost estimate	tbc
Feasible timing	tbc
Notes	From preliminary review, no principal utilities constraints identified. To be confirmed with review of full asset plans.
<b>Flood / SUDS</b>	
Item	Floodplain associated with Littlehay Brook- extent to be confirmed; buffer zone to be provided alongside Littlehay Brook (no built development within this buffer zone); Surface water management strategy will need to include SuDS and restrict rates to the greenfield runoff rate. SuDS features on site to include attenuation measures such as basins or swales etc.
High level cost estimate	No direct 'abnormal' cost but will affect the developable area.
Feasible timing	No significant time implications beyond normal design and approvals.
Notes	Initially, assume 10% of the development area to be set aside for surface water attenuation features; Assume floodplain/buffer zone is restricted to a corridor of approximately 20m centred around the watercourse (this may be reduced with further information and agreement with the EA etc.)
<b>Other</b>	
Item	
High level cost estimate	
Feasible timing	
Notes	
<b>5.Outline site viability testing</b>	

	Sites appear viable over the plan period
<b>6.Theoretical annual output per outlet</b>	
During first 2 years (strong recovery)	43
During first 2 years (weak recovery)	33
During subsequent years (strong recovery)	62
During subsequent years (weak recovery)	47
<b>7.Housing outputs (market + affordable)</b>	
Delivery by 2031 ( <b>stronger market recovery</b> )	3,352
Delivery by 2031 ( <b>weaker market recovery</b> )	3,149
Delivery 2014-start 2019( <b>stronger market recovery</b> )	217
Delivery 2014-start 2019 ( <b>weaker market recovery</b> )	165



## 5 OPTION B1 WEST OF M6 TOLL

Figure 5.1 Development area map



Source: Birmingham City Council *Birmingham Development Plan Green Belt Options Appendix*

**Table 5.1 Data**

<b>1.Basic data</b>	
	Area B Option 1 and 2 cover 353 ha in total
<b>2.Theoretical maximum housing capacity at each site</b>	
Net area for housing (ha)	78
Physical capacity: total units for all area at 40dph	3,134
<b>3.Number of outlets per development</b>	
Outlets developed concurrently	6
<b>4.Site infrastructure costs and abnormals</b>	
<b>Headline Delivery</b>	Short term (5 year Plan period) delivery based on three good access points on to the existing highway network
<b>Infrastructure needed</b>	
<b>Transport</b>	
High level cost estimate	£750,000
Feasible timing	No abnormal time implications beyond normal design and approvals
Notes	Good access to existing highway network to support delivery of the site in the next 5 years
<b>Power and telecoms masts</b>	
Item	Possible requirements for upgrades/ off site reinforcement works to secure power supplies
High level cost estimate	tbc
Feasible timing	tbc
Notes	From preliminary review, no principal utilities constraints identified. To be confirmed with review of full asset plans.
<b>Potable and waste water</b>	
Item	Possible requirements for upgrades/ off site reinforcement works to secure water supply and sewerage infrastructure/treatment of foul effluent. Foul effluent likely to be discharged to Langley WWTW.
High level cost estimate	tbc
Feasible timing	tbc
Notes	From preliminary review, no principal utilities constraints identified. To be confirmed with review of full asset plans.
<b>Flood / SUDS</b>	
Item	Floodplain associated with Ashfurlong Brook and Lindridge Brook- extent to be confirmed; buffer zone to be provided alongside both brooks (no built development within this buffer zone); Surface water management strategy will need to include SuDS and restrict rates to the greenfield runoff rate. SuDS features on site to include attenuation measures such as basins or swales etc.
High level cost estimate	No direct 'abnormal' cost but will affect the developable area.
Feasible timing	No significant time implications beyond normal design and approvals.
Notes	Initially, assume 10% of the development area to be set aside for surface water attenuation features; Assume floodplain/buffer zone is restricted to a corridor of approximately 20m centred around the watercourses and a 8m strip around the pond at Fox Hill House (this may be reduced with further information and agreement with the EA etc.)
<b>Other</b>	
Item	Noise
High level cost estimate	No direct 'abnormal' cost but will affect the developable area.
Feasible timing	No significant time implications beyond normal design and approvals.
Notes	Initially assume 100m setback from M6 Toll. However, it may be suitable for employment or other less noise sensitive uses. NB subject to topography and layout, this area may be used for providing surface water attenuation measures
<b>5.Outline site viability testing</b>	
	Sites appear viable over the plan period
<b>6.Theoretical annual</b>	



<b>output per outlet</b>	
During first 2 years (strong recovery)	43
During first 2 years (weak recovery)	33
During subsequent years (strong recovery)	62
During subsequent years (weak recovery)	47
<b>7.Housing outputs (market + affordable)</b>	
Delivery by 2031 ( <b>stronger market recovery</b> )	3,135
Delivery by 2031 ( <b>weaker market recovery</b> )	3,135
Delivery 2014-start 2019 ( <b>stronger market recovery</b> )	260
Delivery 2014-start 2019 ( <b>weaker market recovery</b> )	197

## 6 OPTION B2 WEST OF M6 TOLL

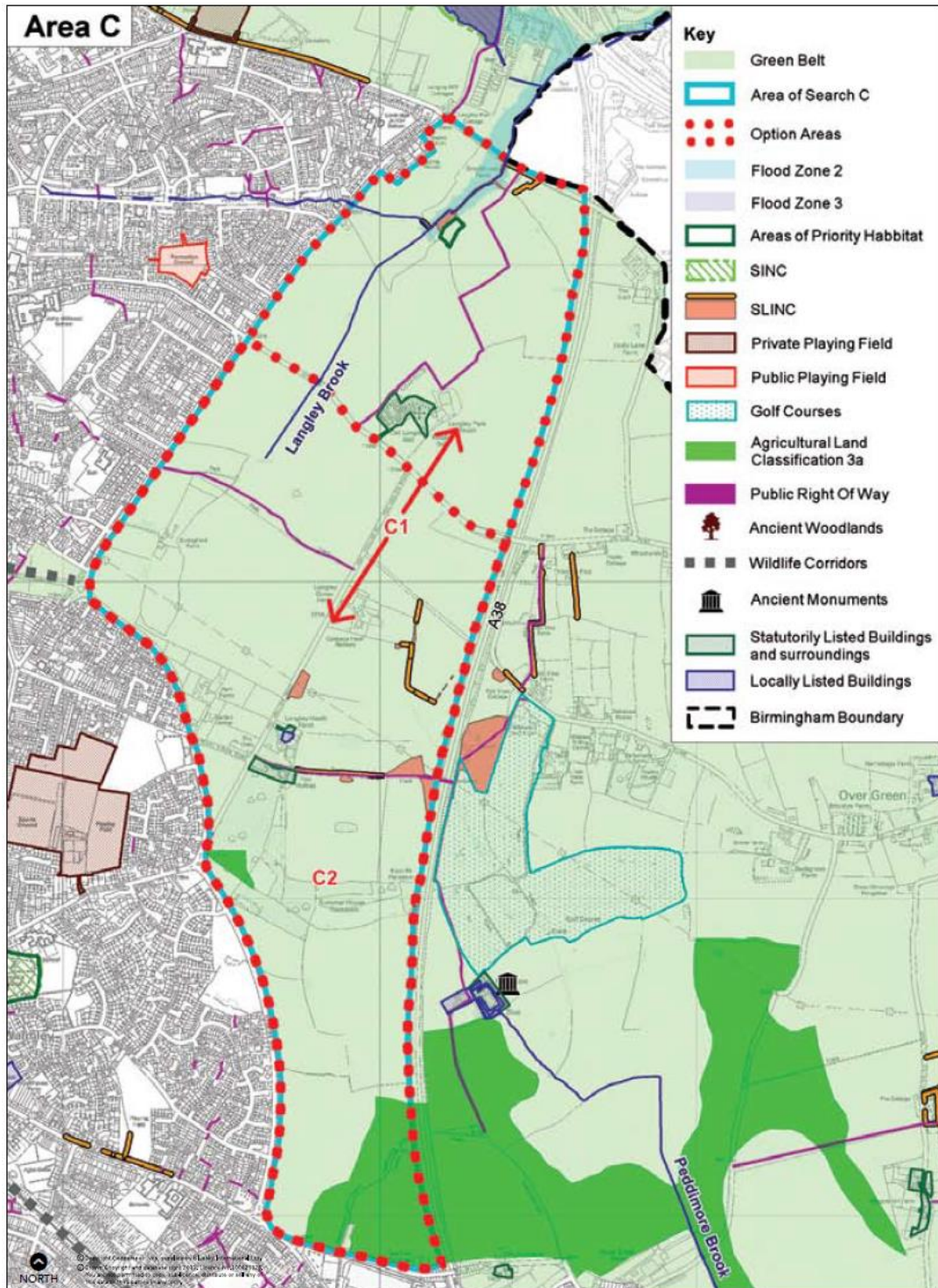
Table 6.1 Data

<b>1.Basic data</b>	
	Area B Option 1 and 2 cover 353 ha in total
<b>2.Theoretical maximum housing capacity at each site</b>	
Net area for housing (ha)	103
Physical capacity: total units for all area at 40dph	4,108
<b>3.Number of outlets per development</b>	
Outlets developed concurrently	6
<b>4.Site infrastructure costs and abnormals</b>	
<b>Headline Delivery</b>	Longer term delivery based on the need for improved accesses and local highway constraints
<b>Infrastructure needed</b>	
<b>Transport</b>	
High level cost estimate	£2,000,000 likely that off-site highway works required, and could tie in to access for B1 off Tamworth Road
Feasible timing	Requires off site highway works and access improvements which would delay implementation of the site
Notes	Improvements to local highway, and A446, to achieve access could limit number of dwellings that can be achieved on the site
<b>Power and telecoms masts</b>	
Item	Possible requirements for upgrades/ off site reinforcement works to secure power supplies. Telecommunications base around Langley Pool.
High level cost estimate	tbc
Feasible timing	tbc
Notes	Development to avoid the area around the telecommunications base station. From preliminary review, no further principal utilities constraints identified. To be confirmed with review of full asset plans.
<b>Potable and waste water</b>	
Item	Langley WWTW adjacent to the site. Possible requirements for upgrades/ off site reinforcement works to secure water supply and sewerage infrastructure/treatment of foul effluent. Foul effluent likely to be discharged to Langley WWTW.
High level cost estimate	tbc
Feasible timing	tbc
Notes	Development to adhere to the cordon sanitaire from the WWTW. From preliminary review, no principal utilities constraints identified. To be confirmed with review of full asset plans.
<b>Flood / SUDS</b>	
Item	Floodplain associated with Lindridge Brook and Langley Pool- extent to be confirmed; buffer zone to be provided alongside brook and pools (no built development within this buffer zone); Surface water management strategy will need to include SuDS and restrict rates to the greenfield runoff rate. SuDS features on site to include attenuation measures such as basins or swales etc.
High level cost estimate	No direct 'abnormal' cost but will affect the developable area.
Feasible timing	No significant time implications beyond normal design and approvals.
Notes	Initially, assume 10% of the development area to be set aside for surface water attenuation features; Assume floodplain/buffer zone is restricted to a corridor of approximately 20m centred around the watercourses and a 10m strip around the pools (this may be reduced with further information and agreement with the EA etc.)
<b>Other</b>	
Item	Noise
High level cost estimate	No direct 'abnormal' cost but will affect the developable area.

Feasible timing	No significant time implications beyond normal design and approvals.
Notes	Initially assume 100m setback from M6 Toll. However, it may be suitable for employment or other less noise sensitive uses. NB subject to topography and layout, this area may be used for providing surface water attenuation measures
<b>5.Outline site viability testing</b>	
	Sites appear viable over the plan period
<b>6.Theoretical annual output per outlet</b>	
During first 2 years (strong recovery)	43
During first 2 years (weak recovery)	33
During subsequent years (strong recovery)	62
During subsequent years (weak recovery)	47
<b>7.Housing outputs (market + affordable)</b>	
Delivery by 2031 ( <b>stronger market recovery</b> )	4,108
Delivery by 2031 ( <b>weaker market recovery</b> )	3,779
Delivery 2014-start 2019 ( <b>stronger market recovery</b> )	260
Delivery 2014-start 2019 ( <b>weaker market recovery</b> )	197

## 7 OPTION C1 WEST OF SUTTON COLDFIELD BYPASS

Figure 7.1 Development area map



Source: Birmingham City Council *Birmingham Development Plan Green Belt Options Appendix*

Table 7.1 Data

1.Basic data	
	Area C Option 1 and 2 covers 273 ha

<b>2.Theoretical maximum housing capacity at each site</b>	
Net area for housing (ha)	154
Physical capacity: total units for all area at 40dph	6,152
<b>3.Number of outlets per development</b>	
Outlets developed concurrently	6
<b>4.Site infrastructure costs and abnormals</b>	
<b>Headline Delivery</b>	Opportunity for short term delivery through good access to existing highway network
<b>Infrastructure needed</b>	
<b>Transport</b>	
High level cost estimate	£1,250,000
Feasible timing	Assumed that one roundabout on the A38 is included in the high level cost estimate
Notes	Excellent connections to existing highway network. Discussed that new roundabout(s) required off A38
<b>Power and telecoms masts</b>	
Item	OH HV electricity line runs across the southern part of the site. Possible requirements for upgrades/ off site reinforcement works to secure power supplies
High level cost estimate	Indicative £1M per span for undergrounding of OH HV line if required.
Feasible timing	tbc
Notes	For OH HV lines, wayleave likely to be approx 40m; if the line is undergrounded then wayleave of approx 10m- both tbc. From preliminary review, no further principal utilities constraints identified. To be confirmed with review of full asset plans.
<b>Potable and waste water</b>	
Item	Possible requirements for upgrades/ off site reinforcement works to secure water supply and sewerage infrastructure/treatment of foul effluent. Foul effluent likely to be discharged to Langley or Minworth WWTW.
High level cost estimate	tbc
Feasible timing	tbc
Notes	From preliminary review, no principal utilities constraints identified. To be confirmed with review of full asset plans.
<b>Flood / SUDS</b>	
Item	Floodplain associated with Langley Brook- extent to be confirmed; buffer zone to be provided alongside brook and pools (no built development within this buffer zone); Surface water management strategy will need to include SuDS and restrict rates to the greenfield runoff rate. SuDS features on site to include attenuation measures such as basins or swales etc.
High level cost estimate	No direct 'abnormal' cost but will affect the developable area.
Feasible timing	No significant time implications beyond normal design and approvals.
Notes	Initially, assume 10% of the development area to be set aside for surface water attenuation features; Assume floodplain/buffer zone is restricted to a corridor of approximately 20m centred around the watercourse (this may be reduced with further information and agreement with the EA etc.)
<b>Other</b>	
Item	Noise
High level cost estimate	No direct 'abnormal' cost but will affect the developable area.
Feasible timing	No significant time implications beyond normal design and approvals.
Notes	Initially assume 100m setback from A38. However, it may be suitable for employment or other less noise sensitive uses. NB subject to topography and layout, this area may be used for providing surface water attenuation measures
<b>5.Outline site viability testing</b>	
	Sites are viable
<b>6.Theoretical annual</b>	

<b>output per outlet</b>	
During first 2 years (strong recovery)	43
During first 2 years (weak recovery)	33
During subsequent years (strong recovery)	62
During subsequent years (weak recovery)	47
<b>7.Housing outputs (market + affordable)</b>	
Delivery by 2031 ( <b>stronger market recovery</b> )	4,985
Delivery by 2031 ( <b>weaker market recovery</b> )	3,779
Delivery 2014-start 2019 ( <b>stronger market recovery</b> )	260
Delivery 2014-start 2019 ( <b>weaker market recovery</b> )	197



## 8 OPTION C2 WEST OF SUTTON COLDFIELD BYPASS

8.1 Option C2 is a subset of Option C1.

**Table 8.1 Data**

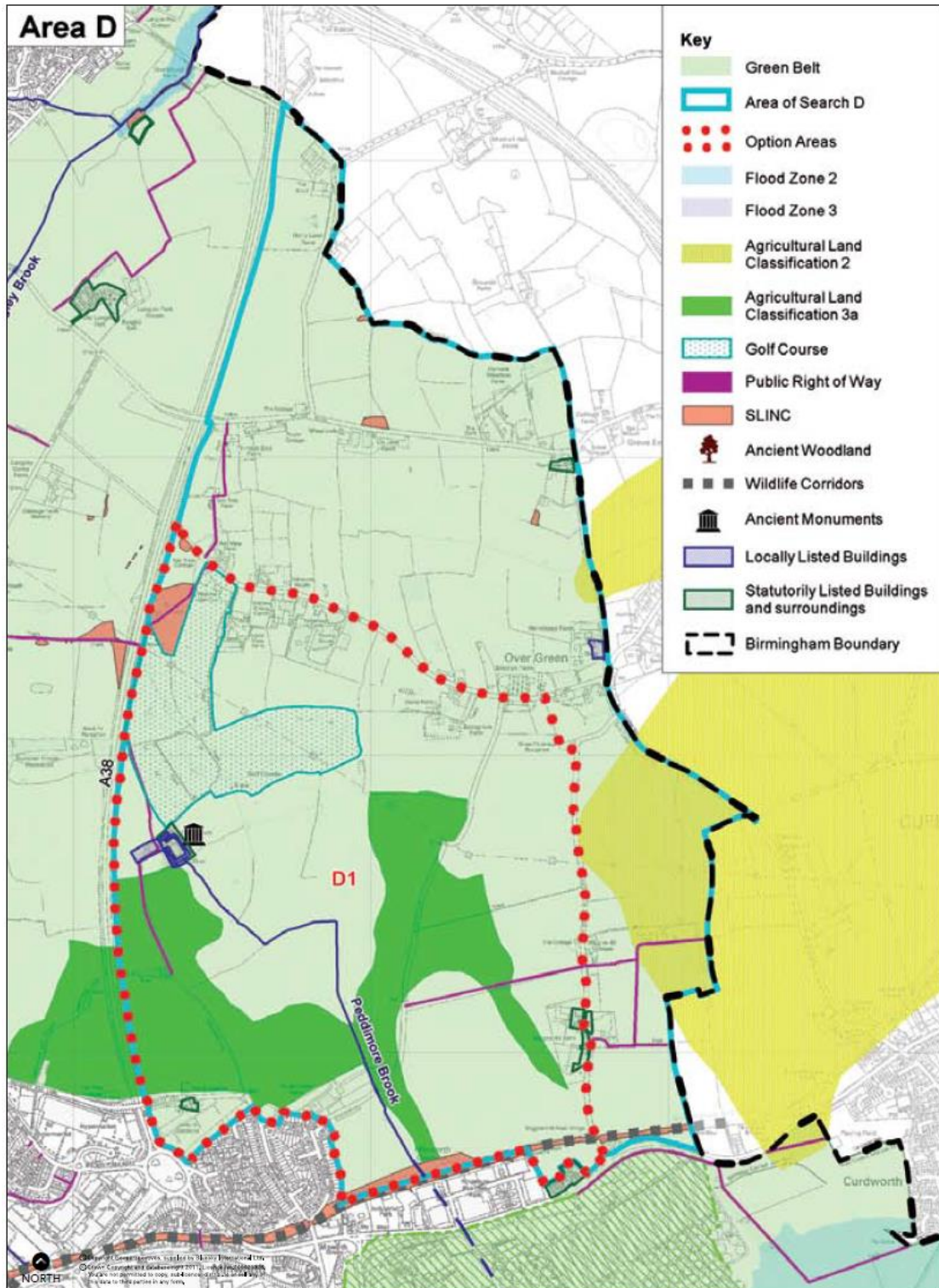
<b>1.Basic data</b>	
	Area C Option 1 and 2 covers 273 ha
<b>2.Theoretical maximum housing capacity at each site</b>	
Net area for housing (ha)	112
Physical capacity: total units for all area at 40dph	4,466
<b>3.Number of outlets per development</b>	
Outlets developed concurrently	6
<b>4.Site infrastructure costs and abnormals</b>	
<b>Headline Delivery</b>	Opportunity for short term delivery through good access to existing highway network
<b>Infrastructure needed</b>	
<b>Transport</b>	
High level cost estimate	£1,250,000 Assumed that one roundabout on the A38 is included in the high level cost estimate
Feasible timing	No abnormal time implications beyond normal design and approvals, subject to the need to provide access off the A38
Notes	Excellent connections to existing highway network. Discussed that new roundabout(s) required off A38
<b>Power and telecoms masts</b>	
Item	OH HV electricity line runs across the southern part of the site. Possible requirements for upgrades/ off site reinforcement works to secure power supplies
High level cost estimate	Indicative £1M per span for undergrounding of OH HV line if required.
Feasible timing	tbc
Notes	For OH HV lines, wayleave likely to be approx 40m; if the line is undergrounded then wayleave of approx 10m- both tbc. From preliminary review, no further principal utilities constraints identified. To be confirmed with review of full asset plans.
<b>Potable and waste water</b>	
Item	Possible requirements for upgrades/ off site reinforcement works to secure water supply and sewerage infrastructure/treatment of foul effluent. Foul effluent likely to be discharged to Minworth WWTW.
High level cost estimate	tbc
Feasible timing	tbc
Notes	From preliminary review, no principal utilities constraints identified. To be confirmed with review of full asset plans.
<b>Flood / SUDS</b>	
Item	Floodplain associated with Langley Brook- extent to be confirmed; buffer zone to be provided alongside brook and pools (no built development within this buffer zone); Surface water management strategy will need to include SuDS and restrict rates to the greenfield runoff rate. SuDS features on site to include attenuation measures such as basins or swales etc.
High level cost estimate	No direct 'abnormal' cost but will affect the developable area.
Feasible timing	No significant time implications beyond normal design and approvals.
Notes	Initially, assume 10% of the development area to be set aside for surface water attenuation features; Assume floodplain/buffer zone is restricted to a corridor of approximately 20m centred around the watercourse (this may be reduced with further information and agreement with the EA etc.)
<b>Other</b>	
Item	Noise

High level cost estimate	No direct 'abnormal' cost but will affect the developable area.
Feasible timing	No significant time implications beyond normal design and approvals.
Notes	Initially assume 100m setback from A38. However, it may be suitable for employment or other less noise sensitive uses. NB subject to topography and layout, this area may be used for providing surface water attenuation measures
<b>5.Outline site viability testing</b>	
	Sites appear viable over the plan period
<b>6.Theoretical annual output per outlet</b>	
During first 2 years (strong recovery)	43
During first 2 years (weak recovery)	33
During subsequent years (strong recovery)	62
During subsequent years (weak recovery)	47
<b>7.Housing outputs (market + affordable)</b>	
Delivery by 2031 ( <b>stronger market recovery</b> )	4,466
Delivery by 2031 ( <b>weaker market recovery</b> )	3,779
Delivery 2014-start 2019 ( <b>stronger market recovery</b> )	260
Delivery 2014-start 2019 ( <b>weaker market recovery</b> )	197



## 9 OPTION D EAST OF SUTTON COLDFIELD BYPASS

Figure 9.1 Development area map



Source: Birmingham City Council *Birmingham Development Plan Green Belt Options Appendix*

**Table 9.1 Data**

<b>1.Basic data</b>	
	Area D covers 473 ha. Area D 1 is a subset of D.
<b>2.Theoretical maximum housing capacity at each site</b>	
Net area for housing (ha)	146.2
Physical capacity: total units for all area at 40dph	5,848
<b>3.Number of outlets per development</b>	
Outlets developed concurrently	6
<b>4.Site infrastructure costs and abnormals</b>	
<b>Headline Delivery</b>	Longer term option for delivery, based on the requirement for strategic access of A38 for residential development
<b>Infrastructure needed</b>	
<b>Transport</b>	
High level cost estimate	n/a
Feasible timing	Potentially constrained access to the existing highway network, subject to site boundary and existing land-uses/ buildings
Notes	Dependent on new access off A38 and changes to golf course. Constrained access to the south of the site
<b>Power and telecoms masts</b>	
Item	OH HV electricity line runs across the southern part of the site. Possible requirements for upgrades/ off site reinforcement works to secure power supplies
High level cost estimate	Indicative £1M per span for undergrounding of OH HV line if required.
Feasible timing	tbc
Notes	For OH HV lines, wayleave likely to be approx 40m; if the line is undergrounded then wayleave of approx 10m- both tbc. From preliminary review, no further principal utilities constraints identified. To be confirmed with review of full asset plans.
<b>Potable and waste water</b>	
Item	Possible requirements for upgrades/ off site reinforcement works to secure water supply and sewerage infrastructure/treatment of foul effluent. Foul effluent likely to be discharged to Minworth WWTW.
High level cost estimate	tbc
Feasible timing	tbc
Notes	From preliminary review, no principal utilities constraints identified. To be confirmed with review of full asset plans.
<b>Flood / SUDS</b>	
Item	Floodplain associated with Peddimore Brook- extent to be confirmed; buffer zone to be provided alongside brook and pools (no built development within this buffer zone); Surface water management strategy will need to include SuDS and restrict rates to the greenfield runoff rate. SuDS features on site to include attenuation measures such as basins or swales etc.
High level cost estimate	No direct 'abnormal' cost but will affect the developable area.
Feasible timing	No significant time implications beyond normal design and approvals.
Notes	Initially, assume 10% of the development area to be set aside for surface water attenuation features; Assume floodplain/buffer zone is restricted to a corridor of approximately 20m centred around the watercourse (this may be reduced with further information and agreement with the EA etc.)
<b>Other</b>	
Item	Noise
High level cost estimate	No direct 'abnormal' cost but will affect the developable area.
Feasible timing	No significant time implications beyond normal design and approvals.
Notes	Initially assume 100m setback from A38. However, development of this

	area is already restricted (golf course or agricultural land). Otherwise, may be suitable for employment or other less noise sensitive uses. NB subject to topography and layout, this area may be used for providing surface water attenuation measures
<b>5.Outline site viability testing</b>	
	Sites are viable
<b>6.Theoretical annual output per outlet</b>	
During first 2 years (strong recovery)	43
During first 2 years (weak recovery)	33
During subsequent years (strong recovery)	62
During subsequent years (weak recovery)	47
<b>7.Housing outputs (market + affordable)</b>	
Delivery by 2031 ( <b>stronger market recovery</b> )	4,985
Delivery by 2031 ( <b>weaker market recovery</b> )	3,779
Delivery 2014-start 2019 ( <b>stronger market recovery</b> )	260
Delivery 2014-start 2019 ( <b>weaker market recovery</b> )	197

## 10 SUMMARY

10.1 This chapter pulls together the findings of our study.

### *Development areas are viable*

10.2 It is important to check the basic point whether developments are viable – because development viability is not a foregone conclusion. Our outline view suggests that the development areas are viable after CIL is paid and affordable housing contributions made. They therefore clear this basic hurdle.

10.3 Although different sites have different levels of viability, this is not likely to make a great difference to rates of delivery. Sites are generally viable, and we think would tend to be built at roughly the same rate irrespective of which sites gain permission.

### *Infrastructure is unlikely to cause significant delay. Road infrastructure is required for all options*

10.4 Build out can start, but road infrastructure will be required during the build period at each of the development areas. It is difficult to say precisely when the infrastructure is needed without detailed traffic modelling.

10.5 The costs of road infrastructure are unlikely to be an insurmountable obstacle to the development of these areas, given the scale of the housing development involved. Table 10.1 provides a simple view of how much off-site highways infrastructure would cost on a per-house basis; in each case costs are relatively modest.

10.6 Clearly, this table excludes other infrastructure which may prove to be necessary, such as schools provision.

**Table 10.1 Offsite highways infrastructure costs**

	Total housing capacity (entire scheme)	Off-site highways infrastructure	Road infrastructure cost per home
A1 Hill Wood	3,708	£1,500,000	£405
A2 Hill Wood	3,352	£1,250,000	£373
B1 West of M6 toll	3,134	£750,000	£239
B2 West of M6 toll	4,108	£2,000,000	£487
C1 West of Sutton Coldfield Bypass	6,152	£1,250,000	£203
C2 (subset of C1) West of Sutton Coldfield Bypass	4,466	£1,250,000	£280
D East of Sutton Coldfield Bypass	5,848	£2,500,000	£427

### *The rate of housing production*

10.7 Developers' ability and willingness to build is an important factor to consider.

- 10.8 Much will depend on the rate of economic recovery, and the related ability for developers and consumers to raise finance. The rate of economic recovery is very difficult to judge. The Bank of England predicts an uneven 'zigzag' recovery.<sup>2</sup>
- 10.9 We have provided two housing market scenarios to provide a very general guide to the possible rate of housing output. Note that no great precision is possible with these forecasts.
- The weak housing market recovery scenario works on the basis that there will be little recovery in housing markets over the plan period.
  - A stronger housing market recovery scenario would see a return to levels of demand and output which resemble – though do not match - the stronger housing markets of pre-2008. We have not assumed a re-run of the pre-crash economic conditions, however, because the level of debt-fuelled expansion seen during this pre-2008 period might not be replicable in future.
- 10.10 Of course, the plan period to 2031 can expect to see a number of cycles of the property market. A major unknown, though, is the trend rate of growth that sits behind those cyclical movements.
- 10.11 Having looked at the size of the area involved, and past housing production, we assumed that developers are likely to be unwilling to deliver more than 372 units per year in total (including affordable housing) across any of the development areas considered. At an individual developer would be willing to deliver around 62 units per annum per outlet (including affordable housing) in a strong housing market.
- 10.12 Assuming usual site start delays such as assembling sites and getting permissions, little housing is provided within a 5 year time period.
- 10.13 Table 10.2 sets out possible housing delivery. It is important to point out that the table shows housing delivery in each Development Area and Option. It is not possible to add these delivery numbers to arrive at a cumulative output total. This is because the simultaneous release of more development areas (or indeed sub-areas) will not increase delivery to a significant degree. As discussed above and in Appendix 1, this is because there are limits to the willingness of developers to build. This is in turn determined by developers' calculations about the ability of the market to absorb the houses they build.
- 10.14 We could expect to see the following delivery:
- Either 5 outlets at Option A1 Hill Wood, or 5 at Option A2; **OR**
  - Either 6 outlets at Option B1 West of M6 toll, or 6 at Option B2; **OR**
  - Either 6 outlets at Option C1 West of Sutton Coldfield bypass, or 6 at C2; **OR**
  - Six outlets at Option D1 East of Sutton Coldfield bypass.
- 10.15 The release of a second site, irrespective of size, would only increase overall delivery of housing by a relatively small amount, even if it were geographically distinct from the primary

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<sup>2</sup> <http://www.guardian.co.uk/business/2012/nov/14/uk-risks-triple-dip-recession-mervyn-king?INTCMP=SRCH>



option site and was appealing to a different sector of the market. It may make some contribution to overall housing provision in Sutton Coldfield along with other sites within the urban area, but it would not deliver significant numbers of new dwellings when set in the overall context of growth.

- 10.16 Individual elements of these development areas could be allocated, but total output would be unlikely to rise significantly beyond the ceiling housing output numbers below.

**Table 10.2 Housing output over 5 and 20 years (showing weaker/stronger market scenarios)**

	Total housing capacity (entire scheme)	Weaker market recovery		Stronger market recovery	
		Delivery 2014-start 2019	Delivery by 2031	Delivery 2014-start 2019	Delivery by 2031
A1 Hill Wood	3,708	165	3,149	217	3,708
A2 Hill Wood	3,352	165	3,149	217	3,352
B1 West of M6 toll	3,134	197	3,135	260	3,135
B2 West of M6 toll	4,108	197	3,779	260	4,108
C1 West of Sutton Coldfield Bypass	6,152	197	3,779	260	4,985
C2 (subset of C1) West of Sutton Coldfield Bypass	4,466	197	3,779	260	4,466
D East of Sutton Coldfield Bypass	5,848	197	3,779	260	4,985

- 10.17 Depending on the option chosen, then, Table 10.2 suggests that 20 year output under a weaker market might range from 3,135 to 3,779 units (including affordable housing). Under a stronger market scenario, the output might be from 3,135 to 4,985 units (including affordable housing).

## **APPENDIX 1**

### Delivery Rate estimation method

## Development area start delays

### *We have assumed that the first homes will be delivered during 2018*

1. If these development areas appeared in an approved Birmingham Development Plan tomorrow, we could expect around a year to be taken up with land deals between developers and landowners. However, this may be optimistic, particularly on development areas with complex patterns of development area ownership.
2. Then development areas would require masterplanning, EIA, and planning approval. We have assumed a three year time between application submission and first year on development area.
3. Combining development area assembly and planning times, we assume that the first homes will be delivered during the fourth year after Core Strategy approval. Assuming that the new Birmingham Development Plan arrives in 2014, this puts first delivery at some time during 2018.<sup>3</sup>
4. This is a relatively optimistic assumption, as suggested by the research in Table A1, which was carried out by Colin Buchanan & Partners. This suggests that the average time between application submission and first build year for sites of up to around 2000 dwellings is around 4.7 years.

**Table A1 Time between application submission and first year on development area of 36 strategic development areas (1980-2004)**

	All strategic development areas	1000-1,999 dwellings	2,000 to 2,999 dwellings	3000+ dwellings
Shortest lag time	1yr	1yr	1yr	3yrs
Longest lag time	13yrs	13yrs	11yrs	10yrs
Average time between application submission and first build year	5yrs	4.7yrs	5yrs	5.5yrs

Source: Colin Buchanan

## Delivery rates

5. There are no hard and fast rules as how to predict how many houses can be delivered from a single development area or from a multiple number of development areas that may be competing.
6. Below, we explain the range of factors we have used to help us arrive at an estimate of likely delivery rate. In the end, this is a process of triangulating the different sources of evidence and using judgement to arrive at an estimate.

<sup>3</sup> <http://www.birmingham.gov.uk/corestrategy>



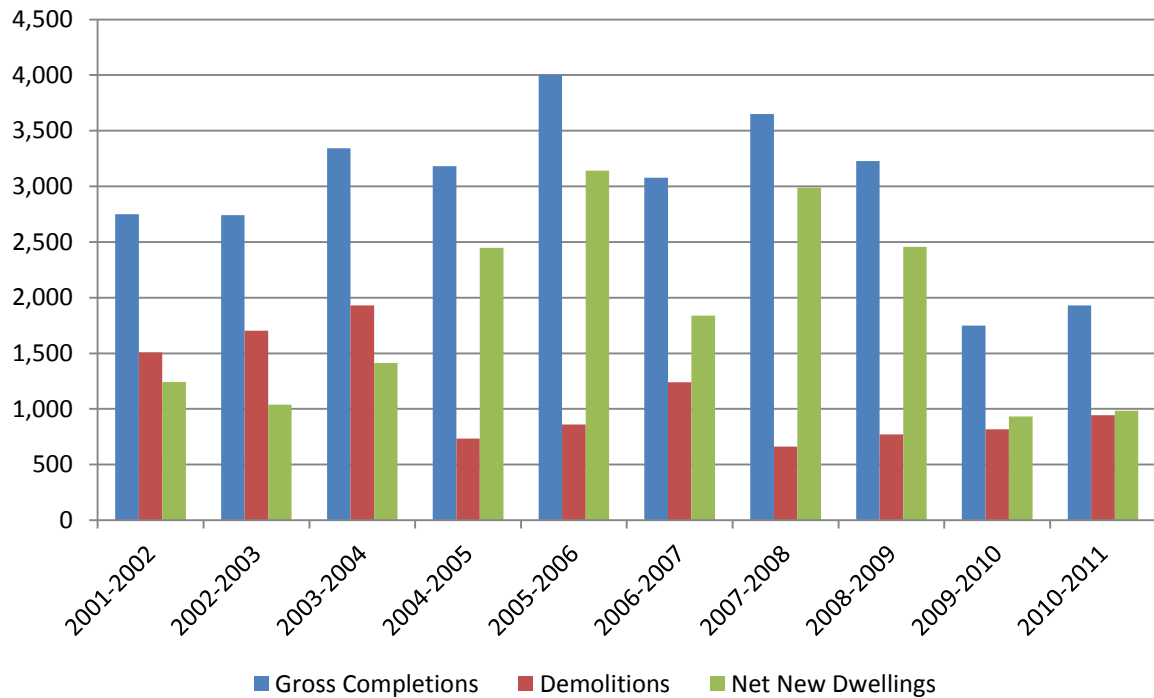
### ***Economic scenarios used***

7. We have provided two housing market scenarios to provide a very general context for our delivery rate calculations. Note that no great precision is possible with these forecasts. The forecasts work on the following general basis.
  - The weak housing market recovery scenario works on the basis that there will be little recovery in housing markets over the plan period. Unfortunately, this scenario is not particularly far-fetched. Financial Times commentator Martin Wolf states that 'the sources of future growth are obscure, while the challenges of needed economic rebalancing are daunting.' The IFS has suggested that the planned era of austerity could run for eight years from 2010-11 to 2017-18. And looking to 2060, OECD says growth in Europe, including the UK, will be much less robust, and will often actually decline.
  - A stronger housing market recovery scenario would see a return to levels of demand and output which resemble the stronger housing markets of pre-2008. We have not assumed that these levels of activity can be matched or exceeded, however, because the level of debt-fuelled expansion seen during this pre-2008 period might not be replicable in future.
8. Of course, the plan period to 2031 can expect to see a number of cycles of the property market. A major unknown, though, is the trend rate of growth that sits behind those cyclical movements.

### ***How many new houses can the market absorb?***

9. Estimates of likely delivery rates may be informed looking at the past ability of the local housing market to absorb new housing.
  10. We understand that the city has not in recent times (since the huge Council Housing building projects of the 20<sup>th</sup> Century) actually managed to build more than 4,000 homes per year.
  11. As shown in the following table and figure, many of the houses built since 2001 were actually replacing homes lost to demolitions – so it is likely that they were occupied by those households moved from demolished houses. Over the last 10 years net completions has averaged 1,850 per year and peaked at just over 3,000 units in 2005-2006. This was the period at the height of the housing boom.
-

**Figure A1 Housing Completions 2001 to 2011**



Source: Birmingham AMR 2011

**Proportions of new build sales**

- In the 12 months to July 2012 the land registry reported just over 9,000 sales in Birmingham. At the height of the market the rate of sales peaked at 20,000 per year. As shown in the table below, the proportion of newbuild sales has been around 10% of all sales.

**Table A2 Newbuild sales as a percentage of all sales**

	All sales	Newbuild	Newbuild as a % of all sales
2006 - 2007	20,263	1,839	9%
2007 - 2008	17,510	2,988	17%
2008 - 2009	48,466	2,456	5%
2009 - 2010	9,069	933	10%
2010 - 2011	9,115	985	11%
	<b>104,423</b>	<b>9,201</b>	<b>9%</b>

- It is important to note that during the period of these completions statistics the land supply has not been constrained – there has been plenty of land available for development – although it is important to note that much of it has been brownfield land with significant cost associated with it and often not in areas attractive to developers. There is no particular evidence to suggest that over the longer term that new homes could take a larger part of the market.

**Determining the number of outlets**

- 14. This is potentially important because where a single development area is able to be split up and developed by different developers, housing output from the development area overall tends to be higher.
- 15. The development areas discussed in this document are very large, with good highway access and a large number of outlets possible.
- 16. In practice, the number of likely outlets at each development area is not likely to be limited by factors such as highway access, but will instead be limited by developers' judgements about the number of housing sites which could be built out simultaneously.

**Build rates**

- 17. Our estimate of delivery rates may be informed by looking at delivery rates elsewhere.
- 18. Prior to the 2007 downturn, the rule of thumb was that a typical housebuilder producing estate-type housing under a 'normal' mix of houses and flats could produce and sell one house a week (about 50 per year). Experience from the market found that it was very difficult to increase this sales rate from a single development area. However, multiple outlets competing with each other on adjacent development areas could each sell near to 50 units per year. This was part of the reason that some national developers trade under multiple brands. For example Barratt Development PLC trade as Barratt Homes, David Wilson Homes, Ward Homes and Wilson Bowden Homes.
- 19. More recently scheme delivery rates have fallen to between 30 and 35 units per year, but much will depend on the local market.
- 20. We have considered delivery rates achieved on other large greenfield sites. The Council have provided us with details of the rates of completions on land removed from the greenbelt since 1990. This data is shown below.

**Table A3 Annual completions on 'land removed from the green belt' in Sutton Coldfield**

Annual Completions on "land removed from the Green Belt" in Sutton Coldfield																													
UDP Ref	Site Location/name	Phase	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	TOTAL	Developer						
H1	Dutton's Lane (Former Green Belt)	1								28	107	32	3									170	Barratt Homes						
		2										26	59	77									162	Barratt Homes/Bryant Homes					
		3										83	3	1										87	Barratt Homes/Bryant Homes				
		4										29	3	5										37	Westbury Homes				
		5																				7		65	Crest Nicholson				
H2	Slade Road (Former Green Belt)	1	46	14																				60	Bryant Homes				
		2				24	29	6																	59	Bryant Homes			
H6	Off Sir Alfred's way (Former Green Belt)	1						39	17																56	Newhall Valley consortium			
		2						5	14																	19	Newhall Valley consortium		
H7	Warrenhouse Farm (Former Green Belt)	1							32																32	Bovis Homes			
		2							38	1	2															41	Bryant Homes		
		3								48																	48	Bryant Homes	
		4							36				4														40	Bovis Homes	
		5							6	32																		38	Bovis Homes
		6						6	31																			37	Bryant Homes
		7							31	99	29																	159	David Wilson Homes
		8								30	95	35	4															164	Bovis/Bryant
TOTAL			46	14	0	24	29	56	205	238	345	99	70	83	0	0	0	0	0	0	0	7	1274						

- 21. Over this period the average rate of delivery from a single site has been 30 units per site per year. The 18 sites/phases have delivered units and there are 41 returns. Only in 6 instances has delivery exceeded 50 units per year – and in 4 of those there have been two developers running concurrent schemes.

22. If we look a bit further afield, at its peak, Cambourne (a new settlement outside Cambridge) was selling at a rate of six units per week (312 pa). This was in a very strong housing and jobs market with no nearby competing supply. We suggest that assuming that quicker build out than this could be achieved is unrealistic.
23. At Bradley Stoke (to the North East of Bristol), the average annual output was 7.5 units per week (although it is worth noting that the “record” annual output in the best year was 22 per week, when 15 housebuilders were competing on site). However, we do not believe housebuilders not want to produce housing at anything like this rate for long, as it may erode values.
24. For the purpose of this study, in which the development area will be delivered over a substantial period of time, we have assumed that a market delivery rate of 40 units per year per outlet assuming a stronger housing market recovery.
25. We assume that a slower recovery will see 75% of this output delivered.
26. Under each economic recovery scenario, affordable housing at 35% must be added to this open market delivery. Policy states that this requirement is made up of the following components:
  - 25% of houses produced are going to be delivered through bodies such as Registered Providers (RPs).
  - 10% will be housing for purchase or rent at below market rates. This is likely to be pre-sold to an RP. The RP will market it and may help the buyer with finance, and we can generally assume that this demand is additional to the market demand dealt with above.
27. Under each scenario, we have assumed that delivery in first two years on site is slightly slower, at 70% of normal yearly output. This is to reflect the fact that sites take around two years to get up to full speed.
28. These assumptions need to be treated with caution.

## **Maximum delivery from each development area**

### ***Determining housing output in each area***

#### ***A. Land to the north of Mere Green between the A5127 and the Slade Road (310ha)***

29. This development area is well served by existing highways that cross the development area dividing it up into several parcels. There are three principle access points being from the Lichfield road, Worcester Lane and Weeford Road. There is the possibility of further access to likely outlets from both Hillwood Road and Grange Lane. The topography and existing pattern of woods and hedgerows would give developers scope to create their own individual schemes. We have assumed that five concurrent schemes each delivering a maximum of 40 houses a year to the market (62 houses including both market and affordable housing) could be accommodated on this development area. This projection is on the basis of a stronger housing market recovery.
  30. If outlets to the south of the area were developed alone then we believe that the sub-area could deliver 3 schemes concurrently.
-

*B. Land to the northeast of Sutton Coldfield to the south of the Slade Road and to the north of Langley Brook (342ha)*

31. This development area is also well served by existing highways that cross the development area dividing it up into several parcels. There are 3 principle access points being the from the Weeford Road at the North Lichfield road, the B4151 and Fox Hill Road running east to the A453 and the Tamworth Road running to the large A36 roundabout and Weeford Road.
32. We believe that a maximum of 6 concurrent schemes delivering a maximum of 40 houses a year to the market (62 houses including both market and affordable housing) could be accommodated on this development area. This projection is on the basis of a stronger housing market recovery.

*C. Land to the east of Sutton Coldfield and west of the A36 (273 ha)*

33. The development area is closer to the lower value areas. This development area is crossed by roads but unlike development areas A and B they are very minor roads and would not accommodate large amounts of additional traffic. Having said this the development area is well served by the roads that form the western boundary to the development area (Springfield Road, Thimble End Road and Webster Way) provide plenty of scope for multiple development areas. The development area is flat with relatively few features such as woods and hedgerows. Development would most likely work its way out from the four main access points. There would be scope to have 2 schemes at each of the three northern access points and just one at the southern one. We do however feel that it would be unrealistically optimistic to expect 7 phases to come forward on this development area at one time – particularly in the early stages of development, so have assumed six schemes could take place concurrently. Each would deliver 40 houses per year to the market (62 houses including both market and affordable housing). This projection is on the basis of a stronger housing market recovery.

*D. Land to the east of Sutton Coldfield and to the east of the A36 (268ha)*

34. Area D is unlikely to come forward until C is substantially complete. Based on the assumption above that is unlikely to be within 10 years.
  35. We have assumed that this development area could accommodate 6 concurrent projects, each delivering a maximum of 40 units per year to the market (62 houses including both market and affordable housing). This projection is on the basis of a stronger housing market recovery.
-

## **APPENDIX 2**

### Viability Testing – High Level Review

## **Viability testing review**

1. This is a high level study and we are not attempting to complete detailed development appraisals. Instead, we are simply trying to generally assess whether the development areas are or are not viable and the rate that they may come forward.
  2. We have undertaken a number of steps in this process.
    - We have reviewed sales prices in the area (attached below as Appendix 3).
    - We have applied our experience from sites elsewhere, and note that the infrastructure requirements identified at this early stage appear do not appear to be especially onerous.
    - We have visited the Development Areas. The Development Areas are generally greenfield sites on clean land. Site preparation costs are therefore likely to be relatively low.
    - We have reviewed existing evidence. GVA's CIL evidence base study did not address these sites specifically. However, it suggests that brownfield sites in the City Council area remain viable, even when a range of policy costs such as affordable housing and CIL are applied.
  3. Overall, this process of review suggests that site viability will not be a barrier to development, when sites are seen individually.
  4. A more significant barrier to development is likely to be the ability of the local market to absorb the numbers of homes that could in theory be produced given the scale of each site, and the willingness of developers to supply them.
-

## **APPENDIX 3**

### Local Housing Market Research

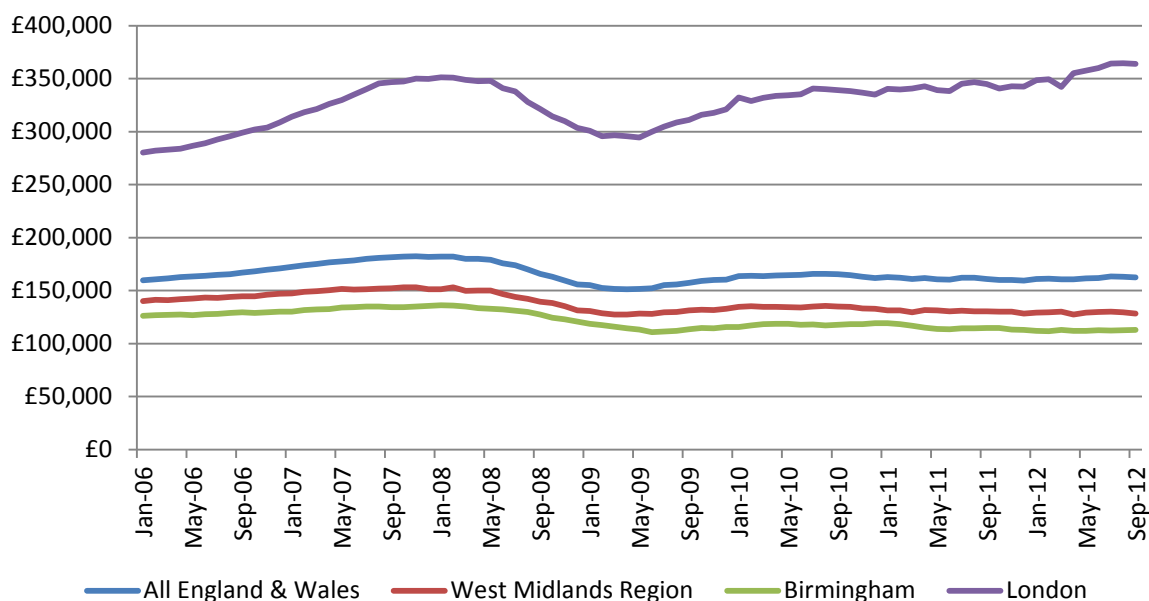


1. We have carried out a brief survey of the local housing market to establish the current worth of development. We have investigated the general market and also new build units that are currently for sale in the locality.

### The state of the housing market

2. The housing market is in the ‘doldrums’. The SHMA contains some analysis but for the purpose of this study it is interesting to consider the Birmingham market in a wider context. The following two figures show the change in house prices and the change in the numbers of units sold.

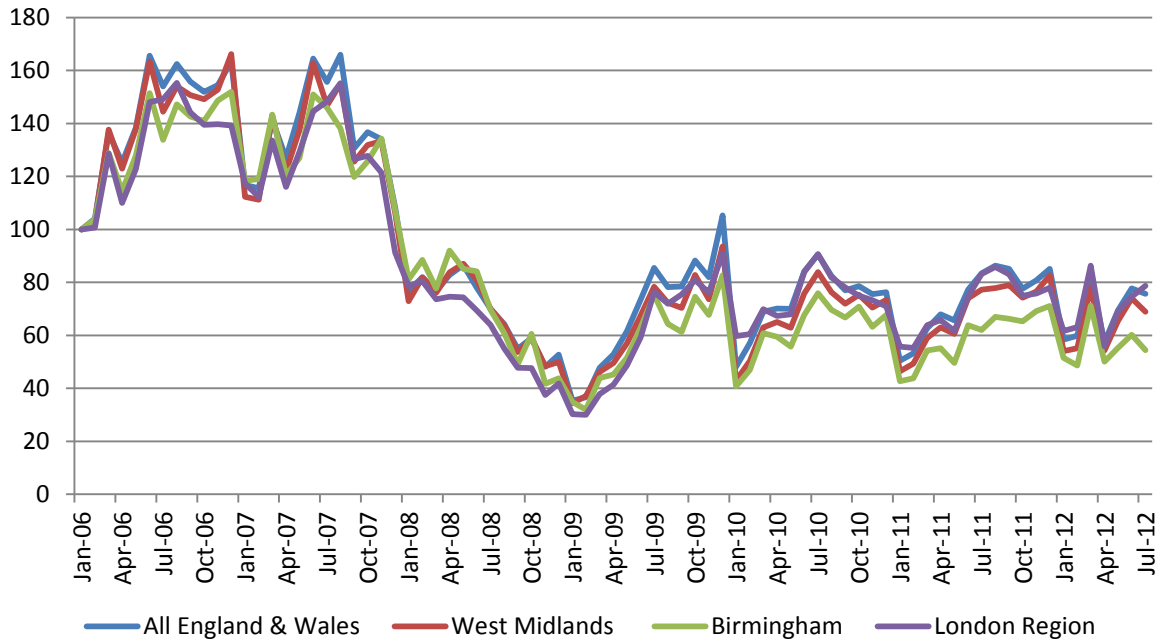
**Figure A2 Price change by price level in Birmingham since 2006**



Source: Land Registry

3. The direction of the current housing market is unclear. Whilst there are various commentators talking about a recovery in house prices, generally there is very little actual evidence to support such a view outside London and the South East. The figure shows that generally prices in Birmingham have seen some recovery since the bottom of the market in mid-2009, however there is no clear trend up or down in the current market so it must be appropriate to take a cautious view.

**Figure A3 Indexed numbers of sales in Birmingham since 2006**



Source: Land Registry

- It is clear that the amount of activity in the whole of the market, including London and the Southeast is far below the peak in 2007. There is little or no current sign of this level of activity increasing, although some estate agents were more positive reporting and increase in enquiries from first time buyers.

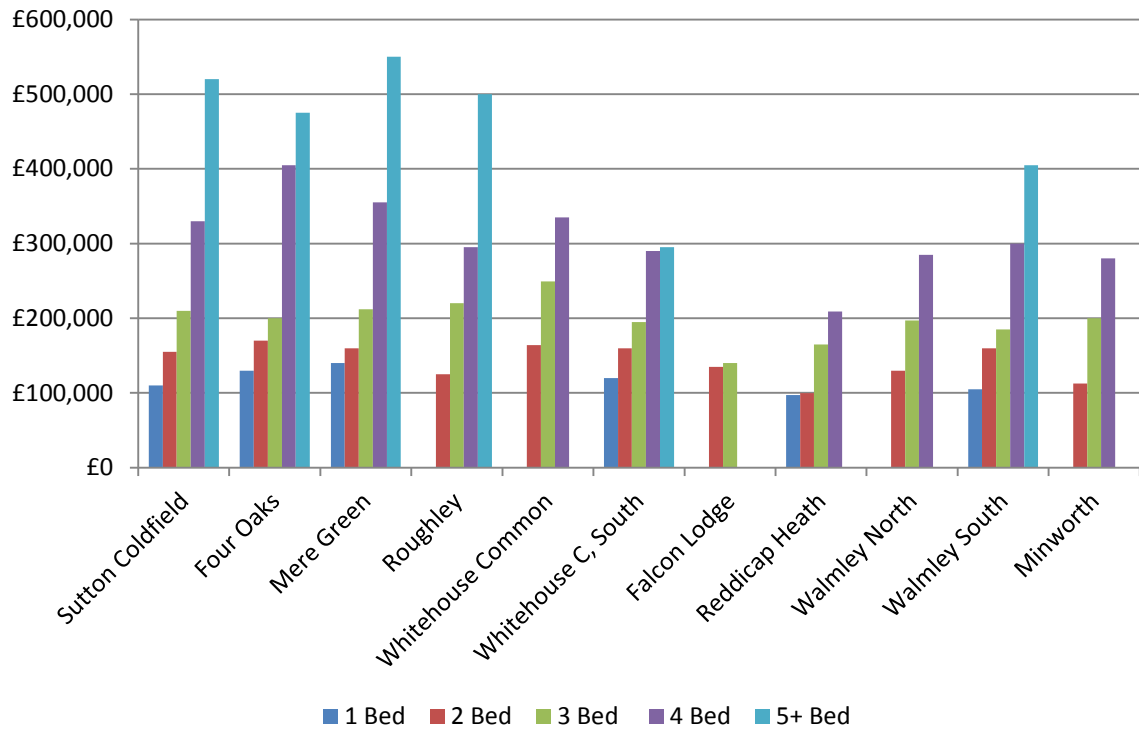
**Asking Prices**

- It is never straight forward estimating the value of new build units as so few newbuild units are for sale relative to the wider market. We have undertaken a survey of asking prices of both whole market and new build homes.

***The whole market***

- Following a quick overview we have collected asking prices in the vicinity of the different possible sub areas and based on the principle access points. This is important as generally the price of new units across a wide geographical area is more influenced by the nature of the scheme and the immediate vicinity rather than the general location or postcode.
- We have analysed houses currently advertised for sale on Rightmove.com. The following figure shows medial asking prices for the areas adjacent to the potential development areas.

**Figure A4 Median Asking Prices**



Source: Rightmove

- The above areas are arranged from north to south down the east side of Sutton Coldfield. As can be seen, the asking prices of nearby homes varies – with those around the Reddicap area markedly lower and generally those to south lower than those to the north.

***Newbuild sales***

- We have surveyed the current development areas in the area and have listed the asking prices of currently available units in Appendix 2. These vary from about £1,500 /m<sup>2</sup> to £3,400 /m<sup>2</sup>. It is difficult to draw much from these prices in a high level report of this type, it would seem that the differences are more closely linked to the nature of the scheme and the development area specific situation of the project rather than the general location.

