

ED.4.2.1

Stratford-on-Avon District Council Viability and deliverability of strategic sites

Final Report

On behalf of **Stratford-on-Avon District Council**



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1 Introduction and approach

- 1.1.1 The focus of this report is to assess viability and deliverability issues associated with taking forward potential strategic allocations to deliver residential development in Stratford-on-Avon District. This report builds on an earlier report 'Large scale new settlement assessment', June 2013, which looked at options for new strategic sites within the District.
- 1.1.2 The report will assess the key issues and constraints associated with potential strategic allocations identified by the Council for testing. This has involved desk based research including policy analysis and a market assessment, alongside extensive consultation with each of the promoters and infrastructure providers.
- 1.1.3 The sites being considered within this report are as follows:
- Gaydon/Lighthorne Heath
 - Long Marston Airfield
 - Lower Farm, Stoneythorpe
 - Southam North
 - South East Stratford
- 1.1.4 These sites were previously assessed in the 'Large scale new settlements assessment' report with the exception of Stoneythorpe. To address the omission of Stoneythorpe from that report we have undertaken an assessment of Stoneythorpe on the same basis as those completed previously and this is included in **Appendix C**.
- 1.1.5 It is anticipated that the Council will identify at least one of these sites to contribute to housing supply in Stratford-on-Avon District. The site sizes range from 800 to 2,500 dwellings to be delivered within the Plan period. Whichever site is chosen to bring forward the Council need to provide evidence that their housing supply is deliverable (first five years) and developable (six to fifteen years) to meet the requirements set out in the National Planning Policy Framework (NPPF).
- 1.1.6 The report and the accompanying appraisals have been prepared in line with RICS valuation guidance. However, it is first and foremost a supporting document to inform the Core Strategy evidence base and planning policy, in particular policy concerned with the planning, funding and delivery of infrastructure needed to support delivery of the plan.
- 1.1.7 As per Professional Standards 1 of the RICS Valuation Standards – Global and UK Edition¹, the advice expressly given in the preparation for, or during the course of negotiations or possible litigation does not form part of a formal "Red Book" valuation and should not be relied upon as such. No responsibility whatsoever is accepted to any third party who may seek to rely on the content of the report for such purposes.

¹ RICS (January 2014) Valuation – Professional Standards, PS1 Compliance with standards and practice statements where a written valuation is provided

1.2 Approach

- 1.2.1 PBA has sought to establish whether the potential strategic sites identified by the Council can deliver the required number of dwellings within the Plan period, taking into account the local market and infrastructure requirements necessary to enable development. A brief summary of our approach is set out as follows:
- 1.2.2 **Site research** – this has established the baseline evidence on each of the sites in terms of the scale and mix of development, pace of development, infrastructure requirements, constraints and mitigation, building on previous work where possible. In particular and for each of the sites we have:
- Undertaken consultation/interviews with each of the landowners/promoters – this has established work done to date in identifying infrastructure requirements and constraints, marketing and anticipated sales rates and values and land values
 - Reviewed the transport and utilities work and established from this likely costs and timing of delivery
 - Updated population increase related infrastructure requirements, costs and timings (e.g. education)
 - Market assessment – we have set out achieved values for the types of developments likely to come forward and tested these with local agents through telephone consultation as to the likelihood of achieving suggested values and the pace of development.
- 1.2.3 **Task 2 Delivery plan** – for each site we have set out a schedule for the delivery of the site which will include a housing trajectory and triggers for key infrastructure. This has been used to inform the viability testing.
- 1.2.4 **Task 3 Viability testing** – for each site a viability assessment has been undertaken. This includes a cashflow analysis that will take into account the pace of development and payments for key infrastructure items. The viability assessment sets out what contributions development could make through CIL, taking into account development costs and S106 requirements including affordable housing.

2 Policy context

2.1 Introduction

2.1.1 The NPPF promotes sustainable development and encourages planning authorities to plan positively for their area. The Local Plan is the key document delivering this sustainable development and reflects the vision and aspirations of local communities.

2.1.2 The setting of strategic priorities within the Local Plan (Core Strategy) is set out within the NPPF (para 156). This advocates strategic policies to deliver the homes and jobs needed in the local authority and broad locations for strategic development as well as additional specific site allocations for promoting development (para 157). In addition, the NPPF requires a proportionate evidence base to be submitted to support the plan (para 158). In particular, the NPPF requires that Local Plans' pay careful attention to viability to ensure that the plan is deliverable. With regards to this, paragraph 173 of the NPPF states:

'The sites and the scale of development identified in the plan should not be subject to such a scale of obligations and policy burdens that their ability to be developed viably is threatened. To ensure viability, the costs of any requirements likely to be applied to development, such as requirements for affordable housing standards, infrastructure contributions or other requirements should when taking account of the normal cost of development and mitigation, provide competitive returns to a willing land owner and willing developer to enable the development to be deliverable.'

2.1.3 Specifically in relation to housing, NPPF (para. 47) requires local planning authorities to:

- identify and update annually a supply of specific deliverable sites sufficient to provide five years worth of housing against their housing requirements and
- identify a supply of specific, developable sites or broad locations for growth, for years 6-10 and, where possible, for years 11-15;

2.1.4 To be considered deliverable, sites should be available now, offer a suitable location for development now, and be achievable with a realistic prospect that housing will be delivered on the site within five years and in particular that development of the site is viable. Sites with planning permission should be considered deliverable until permission expires, unless there is clear evidence that schemes will not be implemented within five years, for example they will not be viable, there is no longer a demand for the type of units or sites have long term phasing plans.

2.1.5 To be considered developable, sites should be in a suitable location for housing development and there should be a reasonable prospect that the site is available and could be viably developed at the point envisaged.

2.1.6 It is within this context that we set our findings as to the deliverability of the proposed strategic sites in Stratford-on-Avon District.

2.2 Guidance

2.2.1 The NPPF provides no further guidance as to delivery and in particular the viability aspects should be approached. However the recently published National Planning Practice Guidance (NPPG), does provide some further explanations about the government's view on viability and delivery in respect of plan making.

2.2.2 It states that "Development of plan policies should be iterative – with draft policies tested against evidence of the likely ability of the market to deliver the plan's policies, and revised as

part of a dynamic process” and that “Evidence should be proportionate to ensure plans are underpinned by a broad understanding of viability. Greater detail may be necessary in areas of known marginal viability or where the evidence suggests that viability might be an issue – for example in relation to policies for strategic sites which require high infrastructure investment”

- 2.2.3 In respect of delivering land for housing development the GPPG sets out what should be considered deliverable and developable. In particular it states that assessments should identify:
- the potential type and quantity of development that could be delivered on each site/broad location
 - reasonable estimate of build out rates
 - how any barriers to delivery could be overcome and when
 - an indicative trajectory of anticipated development and consideration of associated risks.
- 2.2.4 CLG have also produced guidance on implementing the CIL, recently updated in February 2014 to reflect the amended regulations which came in at the same time. This guidance sets out advice on the evidence required to inform levy rates. This includes identifying the cost of infrastructure they wish to fund wholly or partly through the levy and the impact of the levy on strategic sites.
- 2.2.5 It should also be noted that there are two other main guidance reports of relevance to viability and Local Plans. They are:
- Viability Testing in Local Plans, Advice for Planning Practitioners. (LGA/HBF & Sir John Harman) June 2012 , often referred to as the ‘Harman Report’, and
 - Financial Viability in Planning, RICS guidance note, 1st edition (August 2012), often referred to as the ‘RICS Guidance’.
- 2.2.6 Whilst not statutory or formal guidance or endorsed by CLG there is a general appreciation of the principles toward assessing viability set out in these reports and they are often quoted at Examinations. Therefore it is reasonable to consider their approaches in undertaking this work.

3 Potential strategic site profiles

- 3.1.1 The council has identified five potential sites that it considers to provide alternative options to contribute to the delivery of housing within the district. The sites are briefly described below, with more detailed descriptions of the sites and proposals set out in the council document 'Focused Consultation: 2011-2031 Housing Requirement and Strategic Site Options February/March 2014'.

3.2 Gaydon/Lighthorne Heath

- 3.2.1 Gaydon/Lighthorne Heath is located between the M40 and the settlements of Lighthorne, Lighthorne Heath and Gaydon. It is predominantly greenfield although there is a former quarry within the site. Jaguar Land Rover's (JLR) main base is also adjacent and part of the development proposal is to allow for their expansion.
- 3.2.2 Although the site is adjacent to three small settlements these offer only limited services and facilities and therefore development in this location will require significant investment in suitable infrastructure to meet the needs of the new community.
- 3.2.3 Environmental constraints are limited, although there will need to be a consideration of the impact of the adjacent motorway, local wildlife and historic sites.
- 3.2.4 Gaydon/Lighthorne Heath is largely within control of three landowners and is being jointly promoted. The site is now formally split between the land identified for expansion of JLR and the new settlement. Each have different requirements in terms of infrastructure with neither dependent on the other in terms of delivery, although clearly a joint approach is beneficial.

3.3 Lower Farm, Stoneythorpe

- 3.3.1 The Stoneythorpe site adjoins the A425 to the west of Southam although it does not share a boundary with the urban form of Southam. It is a greenfield site that whilst isolated from residential settlements is adjacent to Codemasters, which is a successful software company employing 500 people.
- 3.3.2 Whilst smaller in scale than the other potential sites, its relatively isolated location means that a range of infrastructure will need to be provided.
- 3.3.3 Part of the site is within an area of floodrisk and the route of HS2 crosses the northern part of the site which will need to be considered in terms of both construction and operation.
- 3.3.4 Lower Farm is within the same ownership as the family who established the neighbouring Codemasters company. It is understood that the owner is not seeking a market return for the land and is self-promoting the scheme as an exemplar development.

3.4 Long Marston Airfield

- 3.4.1 Long Marston Airfield is located approximately 3.5 miles to the south of Stratford-upon-Avon. The nearest settlements are Long Marston and Lower Quinton, although neither adjoins the proposal. It is mixed brownfield and greenfield site given its current use as an airfield although it does have significant greenspace on the site.
- 3.4.2 The nearby settlements do not offer extensive service provision and there are well established issues regarding access to and through Stratford-upon-Avon from the south, therefore provision of infrastructure will be a key consideration.

- 3.4.3 There are limited environmental constraints on site but there is a gas main running through the site which will reduce the developable area and require capping. Also whilst not on site the required road link for south west Stratford-upon-Avon is likely to be close to SSSI (1021874 Racecourse Meadow), although a formal potential route has yet to be agreed.
- 3.4.4 Long Marston Airfield is within the control of a single ownership and is being actively promoted by an experienced land development promoter with established financial backing. It is understood that current users of the site will have agreements terminated upon granting of any outline planning permission or reserved matters, dependant on use and location on the site.

3.5 Southam North

- 3.5.1 The Southam North site extends either side of the A423 Coventry Road between the settlements of Southam to the south and Long Itchingham to the north. The site comprises of both greenfield and former mineral working associated with the cement works which used to operate from the central area of the proposed site. Surrounding land is still being worked and a former railway with unknown ownership runs through the site.
- 3.5.2 The adjoining settlements do offer a range of services which could meet some of the needs of the new settlement, although these may need improvement or expansion as development moves forward.
- 3.5.3 Whilst part of the site is a former cement works there are not any known major constraints to address through the development, although an allowance will be made in testing for viability for land remediation to address any contamination and land stability issues that may be present. The promoter has experience of developing similar sites and considers that its former use does not preclude residential development.
- 3.5.4 Southam North is substantially within the ownership of Cemex who are seeking to dispose of the land as it has no further use to the company. There are some areas within the site that have separate ownership, but it is understood from the promoters that agreements are in place to bring those areas forward should the site be identified for development. These areas are not critical to overall delivery but would reduce the net developable area were they not to come forward.

3.6 South East Stratford

- 3.6.1 South East Stratford area is located between the Banbury and Wellesbourne Roads. It is greenfield site adjacent to Stratford-upon Avon. It is understood that parts of the site have already been submitted through planning applications for residential development, although at the time of writing these were yet to be approved.
- 3.6.2 As the site is adjacent to the urban area it has access to services and facilities within the town. However, there is a limit to the amount of development permissible prior to some form of new road access for south east Stratford-upon-Avon. Also, education is already at or near capacity; so whilst the site is well located in terms of proximity to a settlement there are still some significant infrastructure requirements.
- 3.6.3 Although the site may be sensitive in landscape terms there are no major environmental constraints for the development to overcome.
- 3.6.4 South East Stratford has a more complex ownership pattern from the other strategic sites. Whilst there are two main landowners to the south west part of the site the remaining areas to the north east are more disparate. Whilst two of the landowner's representatives have indicated a willingness to jointly promote, there is no evidence of this having yet happened. It is also clear that small piecemeal applications are coming forward with no indication of how

these would be considered within a wider strategic development and how matters of infrastructure and equalisation would be considered.

3.7 Site proposals

- 3.7.1 A brief profile of the scale and form of each proposed site is provided below in Table 3.1. The site size, proposed number of dwellings and other uses have all been identified following consultation with each of the main promoters of the sites and with the council. In some cases promoters have come forward with higher dwelling numbers in their responses to the Focused Consultation on the Core Strategy as their proposals have evolved since initial discussions. It is not surprising that the numbers are varying as more understanding and information comes forward. As the numbers are not significantly altering for development within the plan period in terms of what has been tested, it is not considered that they would affect the overall findings in this report in respect to delivery.

Table 3.1 Site profile

Site	Site area	Dwellings	Employment
Gaydon/Lighthorne Heath	300 h	2,500 by 2031 (3,000 total)	100 h
Long Marston Airfield	210 h	2,100 by 2031 (3,500 total)	13 h
Lower Farm Stoneythorpe	40 h	800	Not specified in hectares but indication of around 1,000 sq. m of employment space
Southam North	120 h	2,000 by 2031 (2,000-2500 total)	5 h
South East Stratford	220 h	2,500 by 2031 (2,750 total)	8 h

3.8 Delivery rates

- 3.8.1 As well as the quantum and type of development it is important to consider the timing for each infrastructure item in terms of triggers in respect of housing numbers. In order to assist infrastructure providers to identify when infrastructure is required and to assist in assessing cashflow through the life of the development a proposed delivery rate for each site needs to be set out.
- 3.8.2 To inform the delivery rates, as this is a crucial part of understanding the viability of sites and also in showing that sites can come forward at the required rate over the plan period, research has been undertaken on other schemes either recently completed or under construction.
- 3.8.3 These are for a range of sites within the same range in terms of numbers as the proposed strategic sites, although it is recognised that they are in different market areas so some caution does need to be exercised with making direct comparisons.

Table 3.2 Delivery rates for major schemes

Scheme	Total number of dwellings	Annual achieved delivery rate (completions)
Loves Farm, St Neots	1,200	150 (8yrs)
Broughton Gate, Milton Keynes	1,500	214 (7yrs)
Cranbrook, East Devon	2,900	500 (u/c)
Centenary Quay, Southampton	1,600	160 (10yrs)
Hindmarch Crescent, Hedge End	1,014	60 (u/c)
Camborne, South Cambridgeshire	3,000	110 (u/c)

u/c under construction

- 3.8.4 The range varies considerably from just 60 sales per year to 500 sales – the range can be dependent on a number of factors including the number of outlets/builders involved in a site. For example Cranbrook has five different outlets, whereas Hindmarch is just one outlet. Another determining factor is location, whereby areas such as Milton Keynes have heated property markets and will therefore be able to accommodate higher sales rates. It is apparent from the market in Stratford-upon-Avon, where investment is being made in appealing planning decisions and promoting large sites that there is appetite from the development industry and therefore from the local market for new housing – suggesting sites could accommodate the suggested pace of delivery. It is also of note the general improvement in the market over the past year with volume housebuilders such as Redrow, Persimmon and Barratt reporting average completions at around 40 per year per outlet over the past year with an expectation of rising sales rates.
- 3.8.5 The sales rates described above are largely in common with those put forward by the promoters of schemes on the strategic sites. On this basis of this evidence, we see no reason to alter the proposed rates suggested by the promoters/developers of the strategic sites. Therefore we have tested viability and deliverability on the following suggested average per annum sales rates:

Table 3.3 Delivery rates for proposed strategic sites

Site	Average delivery rate per annum	Number of outlets
Gaydon/Lighthorne Heath	170	4
Long Marston Airfield	140	4
Lower Farm Stoneythorpe	100	2/3
Southam North	135	3/4
South East Stratford	170	4

- 3.8.6 These delivery rates have been used iteratively in discussions with the infrastructure providers to inform the timing of infrastructure and key trigger points to test whether the proposed sites can deliver the required level of infrastructure and development within the Plan period. This is shown in section 4.

4 Infrastructure requirements

- 4.1.1 The proposed strategic sites will require substantial investment in infrastructure to deliver the sustainable communities which are planned. It is important that the main infrastructure requirements are identified and tested in this report. However, it is also important to note that an Infrastructure Delivery Plan (IDP) is being prepared to support the Core Strategy and a subsequent CIL process will provide further guidance on developer contributions for the required infrastructure. Whilst the findings of this report will be inform the latest IDP, it will be the IDP that will be kept up to date through the plan period to reflect any changing circumstances and should be cross referenced when reading this report for the latest position.

4.2 Infrastructure consultation

- 4.2.1 To inform the viability testing and to evidence the assessment of delivery consultation has been undertaken with developers, landowners and Infrastructure Service Providers (ISPs) to identify indicative physical, social and green infrastructure requirements. This information has been supplemented and validated by PBA in conjunction with ISPs identified by the Council.
- 4.2.2 The work has focused on the identification of onsite infrastructure requirements to inform the consideration of development viability. The study has sought to identify what infrastructure is required, its cost, who is responsible for its delivery, when it is likely to be required and potential funding sources. The following infrastructure contacts consulted previously were invited for comments and responses received were used to update this report:

Table 4.1 Infrastructure Service Providers Consulted

Type of Infrastructure	Contact	Organisation
Education	Janet Neale John Harmon	Warwickshire County Council
Transport	Nick Dauncey Dave Neale	Warwickshire County Council
Health/Public Health	Mel Duffy Jayne Blacklay David Goodwin David Rosling Emily Fernandez	South Warwickshire Foundation Trust NHS Property Services, Primary Care, Arden, Herefordshire & Worcestershire Area Team Warwickshire County Council
Leisure Services	Tony Perks Chris Fennell	Stratford-on-Avon District Council
Green infrastructure	David Lowe	Warwickshire County Council
Police	Tim Sanders Andrew Morgan	Warwickshire Police
Fire & Rescue	Greg Pace Andrew Kelly Rachael Dimpleby	Warwickshire Fire and Rescue Service
Culture	Jasbir Kaur Ciaran Power	Warwickshire County Council

	Ayub Khan	
Water/Drainage	Peter Davies	Senior Commercial Development Advisor, Severn Trent Water
Water/Flood Risk	Jane Field Becky Clarke	Environment Agency

4.3 Infrastructure requirements and delivery

4.3.1 Following consultation a range of infrastructure needs have been identified for each site. As well as identifying specific items the following has also been set out:

- Trigger points for infrastructure
- Cost of infrastructure
- Funding options for infrastructure provision

4.3.2 The tables in the following section set out a delivery plan in terms of infrastructure provision and pace of development for each of the potential strategic sites. An indication of the likely source of funding for each of the infrastructure items is also included. However, it is considered that whilst the report does indicate funding sources the decision of what will be identified as site specific mitigation and agreed through S106/S278 and what will be funded through CIL is ultimately a decision for the council and guided through national policy.

4.3.3 Whilst known infrastructure requirements have been identified these do vary from site to site according to the level of detail that has been provided by both site promoters and infrastructure providers. As sites progress through the planning process the level of detail will become more comprehensive. For examples some infrastructure such as leisure and play is an unknown quantity at this stage as this level of detail will become more apparent during an application phase. Therefore this has not been costed in the study. However, there is sufficient contingency throughout the assessment and buffer to take account of these unknown costs.

4.3.4 The site specific costs, housing trajectory and infrastructure triggers are all used to inform the viability assessment which is set out in Section 5 of this report.

Table 4.2 Infrastructure delivery, phasing, cost and funding - Gaydon/ Lighthorne Heath

Gaydon/Lighthorne Heath Infrastructure Trajectory

SCENARIO 1 - JLR extant plus Gaydon Lighthorne Heath housing only - no JLR employment assumed

		Phasing	0	0	120	170	170	170	170	170	170	170	170	170	170	170	170	170	170
		Running Total	0	0	120	290	460	630	800	970	1140	1310	1480	1650	1820	1990	2160	2330	2500
Scheme Reference/Infrastructure Requirement	CIL or S106/S278	Cost (£ million)	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31
1. M40 Junction 12 northbound slip lane	S106/S278	3.00					3.00												
6. Widening of Fosse Way/Southam Road roundabout	S106/S278	0.50								0.50									
7. Contingency for localised impacts in villages only	S106/S278	2.50								2.50									
8. Fosse Way/Chesterton Road/Harbury Lane signals	S106/S278	0.40								0.40									
9. Right turn bay into access road to Meadow Close/Spinney Close off B4100 Chesterton Hill	S106/S278	0.10				0.10													
10. Signalisation of Greys Mallory	S106/S278	0.15								0.15									
13. A452 Banbury Road/Gallows Hill northbound flare/Warwick Technology Park roundabout	S106/S278	0.45										0.45							
15. Relocation and expansion of existing Lighthorne Heath Primary School	S106	2.25				2.25													
16. New primary school (2-3 FE) with co-located nursery x 2	S106	7.00								3.5					3.5				
17. Contribution to Kineton Secondary School	S106	13.00						6.5						6.5					
18. New 4 GP Facility (646 sqm)	S106	2.30							2.3										
19. Safer Neighbour Team Premise (potentially co-located)	S106	0.45										0.45							
20. Provision of public open space, children's play space and leisure.	S106	0.00																	
21. Provision or improvement of libraries and community meeting space	S106	1.90										1.9							
Total S106/278 Cost		34.00																	
12. Public open space and play/recreation and sport	CIL	-																	
23. Police staff recruitment, equipment and custody provision	CIL	0.29																	
Total Cost		34.29	0	0	0	2.35	3	6.5	2.3	7.05	0	2.8	0	6.5	3.5	0	0	0	0
Total S106/278		34.00	0	0	0	2.35	3	6.5	2.3	7.05	0	2.8	0	6.5	3.5	0	0	0	0

Notes:-

- (c) The following estimates of when mitigation would be required are based on a high-level assessment of predicted highway network conditions in relation to the proposed housing trajectory
- (d) Assuming (b), no more than 500 houses could be accommodated without Scheme 1 otherwise this number could potentially rise to 1,500 dwellings
- (e) Scheme 9 would be required with 200 - 500 dwellings
- (f) Schemes 6, 8 and 10 would be required with 1,000 dwellings
- (g) Scheme 7 provides a contingency sum for schemes yet to be identified and is based on a rate of £1,000 per dwelling as adopted at the former Rugby Radio Station site
- (h) Scheme 13 would be required with 1,250 - 1,500 dwellings

Table 4.3 Infrastructure delivery, phasing, cost and funding - Long Marston Airfield

Long Marston Infrastructure Trajectory

		Phasing	0	0	140	140	140	140	140	140	140	140	140	140	140	140	140	140	140
		Running Total	0	0	140	280	420	560	700	840	980	1120	1260	1400	1540	1680	1820	1960	2100
Scheme Reference/Infrastructure Requirement	CIL or S106/S278	Cost (£ million)	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31
1. A4390/B493 Evesham Place Roundabout	S106/S278	0.80								0.80									
2. Stratford Western Relief Road Southern Extension	S106/S278	20.0									20.0								
3. New primary school (2-3 FE) with co-located nursery x 2	S106	7.00						3.5						3.5					
4. Provision of Secondary School on site or expand Shipston	S106	20.00										20							
5. Provision of Sixth Form on Site or at Shipston Secondary School	S106	3.00										3							
6. Development of Meon Medical Centre site	S106	2.40										2.4							
7. Safer Neighbour Team Premise (potentially co-located)	S106	0.45										0.45							
8. Provision of public open space, children’s play space and leisure.	S106	0.00																	
8. Provision or improvement of libraries and community meeting space	S106	1.90										1.9							
Total S106/278 Cost		55.55																	
	Developer /CIL	-																	
12. Public open space and play/recreation and sport	CIL	1.03																	
10. A3400 Alveston Manor and Shipston Road/A422 Banbury Road Roundabout	CIL	0.83																	
11. A3400 Bridgefoot/Bridgeway Gyrratory	CIL	1.10																	
12. A3400 Shipston Road/B4632 Clifford Lane Roundabout	CIL																		
13. A3400 Shipston Road/A4390 Seven Meadows Road Roundabout	CIL	1.70																	
14. A3400 Birmingham Road	CIL	2.50																	
15. A46/A3400 Bishopton Roundabout	CIL	2.50																	
16. A46/A422 Wildmoor Roundabout	CIL	1.00																	
17. Strategic Signing Improvements	CIL	0.20																	
18. Shakespeare Street/Mulberry Street one-way	CIL	0.20																	
19. A3400 Guild Street/Great William Street traffic signals	CIL	0.15																	
20. A46/A4239 Marraway Roundabout	CIL	0.50																	
21. Stratford Western Relief Road/B439 Evesham Road/Luddington Road Roundabout	CIL	0.15																	
22. A46/A4239 Marraway Roundabout	CIL	2.10																	
23. Contingency for unforeseen transport impacts	CIL	0.35																	
24. Police staff recruitment, equipment and custody provision	CIL																		
Total Cost		69.86	0.00	0.00	0.00	0.00	0.00	3.50	0.00	0.80	20.00	27.75	0.00	3.50	0.00	0.00	0.00	0.00	0.00
Total S106/278		55.55	0.00	0.00	0.00	0.00	0.00	3.50	0.00	0.80	20.00	27.75	0.00	3.50	0.00	0.00	0.00	0.00	0.00

Notes:-

- (a) The following estimates of when mitigation would be required are based on a high-level assessment of predicted highway network conditions in relation to the proposed housing trajectory
- (b) Scheme 1 would be required with 250 - 500 dwellings
- (c) Scheme 2 would be required with 500 - 1,000 dwellings
- (d) Scheme 3 is also required to accommodate the effects of change in traffic movements at this junction following the delivery of the Stratford Western Relief Road (SWRR) which will exacerbate issues which are likely to occur as result of the overall growth within the area
- (e) Schemes 4 and 5 are intrinsically linked and should be delivered as a single scheme. Implementation would need to follow the capacity improvements provided by Schemes 1 to 3
- (f) Scheme 6 is required to accommodate the additional vehicle demands released onto the network by Schemes 1 to 5
- (g) Schemes 7 and 8 should be considered for early implementation due to the strategic nature of the trips that are affected by development impact coupled with the need to ensure the operation of the A46 Strategic Road Network is maintained throughout the Core Strategy period
- (h) Scheme 9 would encourage traffic to use the A439 Warwick Road for inbound trips as an alternative to A3400 Birmingham Road where capacity is constrained
- (i) Schemes 10 to 13 would be required with > 1,600 dwellings
- (j) Scheme 15 provides a contingency sum for schemes yet to be identified and is based on a rate of £1,000 per dwelling as adopted at the former Rugby Radio Station site
- (k) Scheme 16 would be required with 1,000 dwellings

Table 4.4 Infrastructure delivery, phasing, cost and funding - Lower Farm Stoneythorpe

Stoneythorpe Infrastructure Trajectory

		Phasing	0	0	0	0	0	100	100	100	100	100	100	100	100	0	0	0	0
		Running Total	0	0	0	0	0	100	200	300	400	500	600	700	800	800	800	800	800
Scheme Reference/Infrastructure Requirement	CIL or S106/S278	Cost (£ million)	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31
1. A423/A425 Banbury Road/Learnington Road roundabout widening	S106/S278	0.75												0.75					
2. A425/B4451 roundabout minor widening and signals	S106/S278	0.50													0.5				
3. A425 Southam Road/B4455 Fosse Way roundabout widening	S106/S278	0.50													0.5				
7. New primary school (1 FE)	S106	2.25										2.25							
5. Secondary School contributions	S106	8.00										8.00							
6. Village hall	S106	1.30										1.30							
7. Safer Neighbour Team Premise (potentially co-located)	S106	0.45										0.45							
8. Development of Southam Surgery Site	S106	2.20										2.20							
Total S106/278 Cost		15.95																	
9. Public open space and play/recreation and sport	Developer/CIL	-																	
10. Installation of a new circuit breaker and telecontrol at Harbury Primary and 6 No. 315kVA distribution substations.	Developer	-																	
11. Localised mitigation in respect of acoustic fencing to provide increased noise containment	Developer	-																	
12. Contribution to leisure provision (off site)	CIL	1.00																	
13. Contingency for localised mitigation (e.g. in local villages such as Bishop's Itchington)	CIL	0.80										0.00							
14. Police recruitment, equipment and custody provision	CIL	0.06																	
Total Cost		17.81	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.20	0.00	0.75	1.00	0.00	0.00	0.00	0.00
Total S106/278		15.95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.20	0.00	0.75	1.00	0.00	0.00	0.00	0.00
(a) The following estimates of when mitigation would be required are based on a high-level assessment of predicted highway network conditions in relation to the proposed housing trajectory																			
(b) Schemes 1 and 2 would be required with 500-1,000 dwellings																			
(e) Scheme 3 provides a contingency sum for schemes yet to be identified and is based on a rate of £1,000 per dwelling as adopted at the former Rugby Radio Station site																			

Table 4.5 Infrastructure delivery, phasing, cost and funding - Southam North

Southam Infrastructure Trajectory

		Phasing	0	0	110	135	135	135	135	135	135	135	135	135	135	135	135	135	135
		Running Total	0	0	110	245	380	515	650	785	920	1055	1190	1325	1460	1595	1730	1865	2000
Scheme Reference/Infrastructure Requirement	CIL or S106/S278	Cost (£ million)	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31
1. A3400 Alveston Manor and Shipston Road/A422 Banbury Road Roundabout	S106/S278	0.50								0.50									
2. A423/A425 Daventry Road roundabout widening/reconfiguration	S106/S278	0.50								0.50									
3. A423/A425 Banbury Road/Leamington Road roundabout widening	S106/S278	0.75									0.75								
4. A425/B4451 roundabout minor widening and signals	S106/S278	0.50										0.50							
5. A425 Southam Road/B4455 Fosse Way roundabout widening	S106/S278	0.50										0.50							
6. A425 Radford Road/Wyles Road widening	S106/S278	0.25										0.25							
7. New primary school (2-3 FE) with co-located nursery x 2	S106	7.00						3.5						3.5					
8. Secondary School and Sixth form Contributions	S106	4.00						2						2					
9. Safer Neighbour Team Premise (potentially co-located)	S106	0.45										0.45							
10. Development of Southam Surgery Site	S106	2.20										2.2							
11. Community centre and Library	S106	1.90										1.9							
Total S106/278 Cost		18.55																	
12. Public open space and play/recreation and sport	Developer/CIL	-																	
13. Contamination costs	Developer	-																	
14. Contribution to leisure provision (off site)	CIL	2.40																	
15. Police recruitment and equipment	CIL	0.16																	
16. Contingency for localised mitigation (e.g. in local villages such as Bishop's Itchington)	CIL	2.00																	
Total Cost		23.11	0.00	0.00	0.00	0.00	0.00	5.50	0.00	1.00	0.75	5.80	0.00	5.50	0.00	0.00	0.00	0.00	0.00
Total S106/278		18.55	0.00	0.00	0.00	0.00	0.00	5.50	0.00	1.00	0.75	5.80	0.00	5.50	0.00	0.00	0.00	0.00	0.00

Notes:-

(a) The following estimates of when mitigation would be required are based on a high-level assessment of predicted highway network conditions in relation to the proposed housing trajectory

(b) Schemes 1 and 2 would be required with 500-1,000 dwellings

(c) Scheme 3 would be required with approx. 1,000 dwellings

(d) Schemes 4 to 6 would be required with > 1,000 dwellings

(e) Scheme 7 provides a contingency sum for schemes yet to be identified and is based on a rate of £1,000 per dwelling as adopted at the former Rugby Radio Station site

Table 4.6 Infrastructure delivery, phasing, cost and funding - South East Stratford

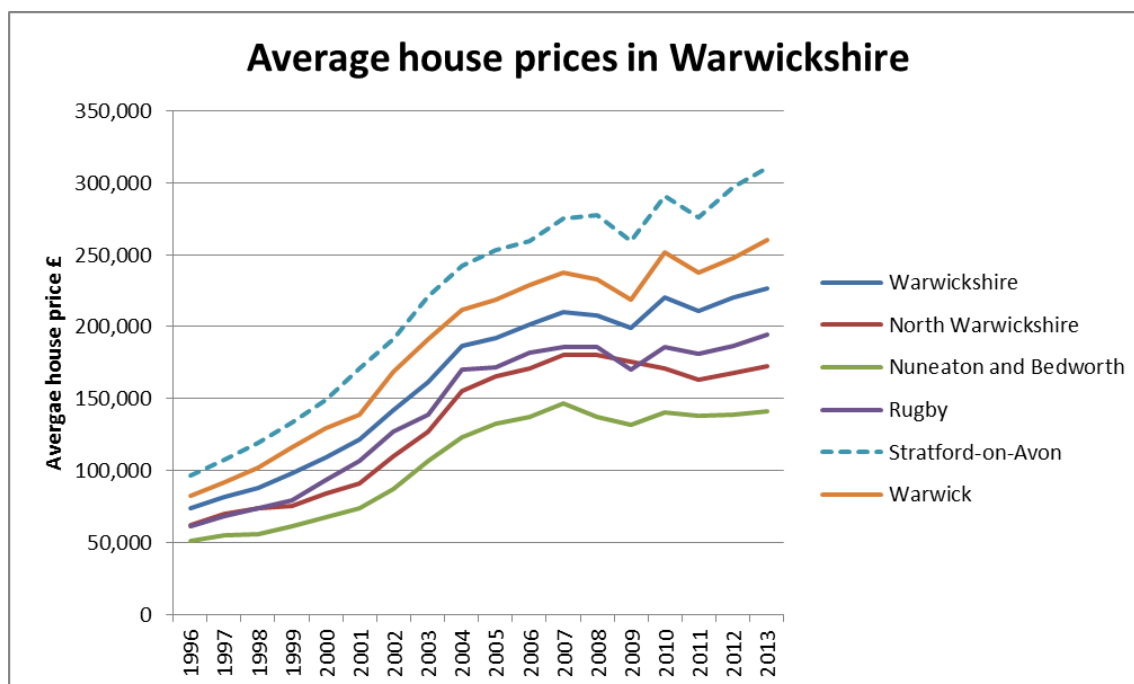
South East Stratford Infrastructure Trajectory																			
		Phasing	0	0	120	170	170	170	170	170	170	170	170	170	170	170	170	170	170
		Running Total	0	0	120	290	460	630	800	970	1140	1310	1480	1650	1820	1990	2160	2330	2500
Scheme Reference/Infrastructure Requirement	CIL or S106/S278	Cost (£ million)/year	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31
1. A3400 Alveston Manor and Shipston Road/A422 Banbury Road Roundabout	S106/S278	1.03				1.03													
2. A3400 Bridgefoot/Bridgeway Gyratory	S106/S278	0.83						0.83											
3. Contingency for unforeseen transport impacts	S106/S278	2.50																	
4. Stratford Eastern Relief Road (Northern Section including bridge)	S106/S278	20.0							10.0	10.0									
5. New primary school (2-3 FE) with co-located nursery x 2	S106	7.00				3.5						3.5							
6. New Secondary School (4 to 5 FE) Several delivery options could be considered.	S106	23.00							11.5						11.5				
7. Contributions to Further education	S106	3.50										3.5							
8. New 4 GP Facility (646 sqm)	S106	2.30										2.3							
9. Provision of public open space, children's play space and leisure.	S106	0.00																	
10. Provision or improvement of libraries and community meeting space	S106	1.90										1.9							
11. Safer Neighbour Team Premise (potentially co-located)	S106	0.45									0.45								
Total S106/278 Cost		62.51																	
12. Stratford Eastern Relief Road (Southern Section)	Other SI	30.0																	
12. Public open space and play/recreation and sport	Developer /CIL	-																	
14. A4390/B493 Evesham Place Roundabout	CIL	0.80																	
15. A3400 Shipston Road/B4632 Clifford Lane Roundabout	CIL	1.10																	
16. A3400 Shipston Road/A4390 Seven Meadows Road Roundabout	CIL																		
17. A3400 Birmingham Road	CIL	1.70																	
18. A46/A3400 Bishopton Roundabout	CIL	2.50																	
19. A46/A422 Wildmoor Roundabout	CIL	2.50																	
20. Strategic Signing Improvements	CIL	1.00																	
21. Shakespeare Street/Mulberry Street one-way	CIL	0.20																	
22. Guild Street/Gt. William Street traffic signals	CIL	0.20																	
23. A46/A4239 Marroway Roundabout	CIL	0.40																	
24. Police recruitment, equipment and custody provision	CIL	0.40																	
Total Cost		103.3	0	0	0	4.53	0	0.83	0	21.5	10.45	11.2	0	0	11.5	0	0	0	0
Total S106/278		62.51	0.00	0.00	0.00	4.53	0.00	0.83	0.00	21.50	10.45	11.20	0.00	0.00	11.50	0.00	0.00	0.00	0.00
Notes:-																			
(a) The following estimates of when mitigation would be required are based on a high-level assessment of predicted highway network conditions in relation to the proposed housing trajectory																			
(b) Scheme 1 would be required with 250 - 500 dwellings																			
(c) Scheme 2 would be required with 500 - 1,000 dwellings																			
(d) Scheme 3 is also required to accommodate the effects of change in traffic movements at this junction following the delivery of the Stratford Western Relief Road (SWRR) which will exacerbate issues which are likely to occur as result of the overall growth within the area																			
(e) Schemes 4 and 5 are intrinsically linked and should be delivered as a single scheme. Implementation would need to follow the capacity improvements provided by Schemes 1 to 3																			
(f) Scheme 6 is required to accommodate the additional vehicle demands released onto the network by Schemes 1 to 5																			
(g) Schemes 7 and 8 should be considered for early implementation due to the strategic nature of the trips that are affected by development impact coupled with the need to ensure the operation of the A46 Strategic Road Network is maintained throughout the Core Strategy period																			
(h) Scheme 9 would encourage traffic to use the A439 Warwick Road for inbound trips as an alternative to A3400 Birmingham Road where capacity is constrained																			
(i) Schemes 10 to 12 would be required with > 1,600 dwellings																			
(j) Scheme 13 provides a contingency sum for schemes yet to be identified and is based on a rate of £1,000 per dwelling as adopted at the former Rugby Radio Station site																			
(k) Scheme 14 would be required with 1,000 dwellings																			

5 Market assessment and viability

5.1 Market overview

- 5.1.1 The housing market in Stratford-on-Avon District continues to outperform its neighbours in Warwickshire, with a widening gap between average house prices as shown in Figure 5.1. This is likely to reflect the typical larger properties associated with this area and its affluent location.
- 5.1.2 The peak of the last market cycle was in December 2007, when the average residential property price in Stratford-on-Avon was £276,000 and £222,000 across England. The impact of the financial crisis and resultant recession is also clear in Figure 5.1, with average values in Stratford-on-Avon falling to £264,000 by April 2009. Since that time, prices have been on a steady (if somewhat erratic) upwards trajectory, peaking in August 2010 before falling back and then up again. The most recent record suggests that average price in Stratford-on-Avon District was just over £300,000.

Figure 5.1 Average house prices in Warwickshire



- 5.1.3 Looking forward, the latest projections of house prices prepared by Savills in their Residential Property Focus (Q1 2014), shows a 23.4% increase in values over the next five years, which is slightly below their expectations for the UK which is at 25.2%. However, based on the characteristics of the local market, there may be some reason to suggest that Stratford-on-Avon will over-perform the regional average.
- 5.1.4 When looking at the markets within Stratford-on-Avon District there are distinctions as highlighted in the CIL Economic Viability Report, September 2013. The table below (5.1) shows average house prices over the last 12 months for 6 settlements in the district.

Table 5.1 Average house prices paid (new and secondhand market)

Settlement	Average price
Alcester	£237,000
Henley-in-Arden	£327,000
Shipston-on-Stour	£290,000
Southam	£248,000
Stratford-upon-Avon	£312,000
Studley	£199,000

Zoopla March 2014

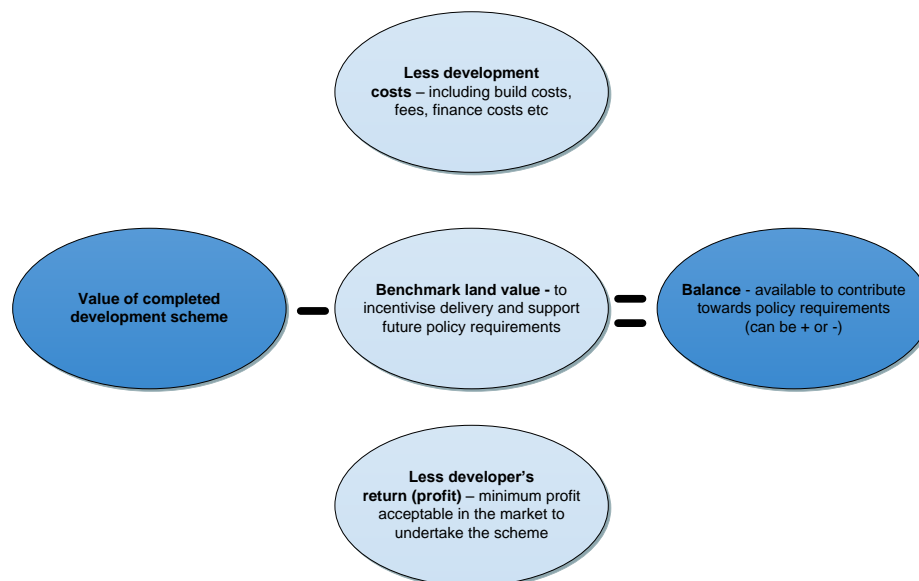
- 5.1.5 In common with the previous work undertaken values to the west in Studley and Alcester are lower than those in the central area around Stratford-upon-Avon, Henley-in-Arden and Shipston-on-Stour. Values to the east, illustrated here with Southam are in between the east and central value areas.
- 5.1.6 The previous work on the local housing market (CIL Economic Viability Report, September 2013) identified a per square metre value of £3,200 for dwellings within the strategic sites. The reasoning for using the same value for the strategic sites, despite the different locations was because the strategic sites would share similar characteristics and would be a different offer to what has previously come forward in the area in recent years in terms of scale in particular.
- 5.1.7 It is considered that the same principles should apply to this updated work for consistency, however as previously described there has been an improvement in values since the £3,200 was established. Therefore having looked at the market data from both Land Registry and property websites it is considered appropriate to add a modest increase of 1.5% to reflect the slight rise in the market. Therefore the value to be used in this assessment will be £3,250 per sq. m for market dwellings.

5.2 Approach used for the development viability appraisals

- 5.2.1 The PBA development viability model uses the residual approach to development viability. The approach takes the difference between the development values and costs and compares the 'residual land value' with a threshold land value to determine the balance that could be available to support policy costs such as affordable housing and infrastructure.
- 5.2.2 In the case of the strategic sites, the model has been adapted to test for a range of different infrastructure requirements and when they are required. This is then built into the cashflow modelling to assess viability through the lifetime of the development, where costs and returns will be flowing through the development cycle.
- 5.2.3 Where appropriate assumptions that were used in the CIL Economic Viability Report, September 2013 have been utilised as a baseline for consistency but these have been updated to reflect latest position on costs and values. It should also be noted that this report should be read in conjunction with the 2014 report on Plan Viability, including affordable housing, although the reports are consistent in terms of both approach and baseline assumptions.

5.2.4 The broad method is illustrated in the figure 5.2.

Figure 5.2 Approach to residual land value assessment for whole plan viability



5.2.5 The purpose of the assessment is to identify the balance available to pay for policy costs at which each of the potential strategic sites is financially viable.

5.2.6 Work in the previous stages provides an understanding of each of the sites and the required infrastructure to bring forward sustainable development. When added to a set of locally based assumptions on new-build sales values, threshold land values and developer profits, a set of potential strategic sites development viability assessments are produced.

5.3 Viability assumptions

5.3.1 Given that there has been little development in Stratford-on-Avon District at the scales proposed in the strategic sites, it is not always possible to get a perfect fit between a site, the site profile and cost/revenue categories. But a best fit in the spirit of the Harman Report guide has been attempted. For this, the viability testing requires a series of assumptions about the site coverage and floorspace mix to generate an overall sales turnover and value of land, which are discussed here. In addition, there are a number of residential cost assumptions that have been used, which are set out in detail in **Appendix A**. Residential appraisal summary sheets are set out in **Appendix B**.

Site coverage

5.3.2 The net (developable) area of the site informs the likely land value of a residential site. Typically, residential land values are normally reported on a per net hectare basis, since it is only this area which delivers a saleable return.

5.3.3 The net developable area has been arrived at through discussion with the council and the strategic site promoters representing these sites.

Sales area

5.3.4 In addition to density, the type and size of units is important because this informs overall revenue based on saleable floorspace, to generate an overall sales turnover. To derive saleable floorspace, the type of unit and size of these units need to be defined.

5.3.5 The type of unit has been based on assumptions that have been used and approved in other studies we have been involved. Details are shown in **Appendix A**.

5.3.6 Two floor areas are used for flatted schemes: the Gross Internal Area (GIA), including circulation space, is used to calculate build costs and Net Internal Area (NIA) is applied to calculate the sales revenue.

Sales values

5.3.7 Current residential revenues and other viability variables are obtained from a range of sources, including:

- Generic websites, such as the RightMove and the Land Registry
- Direct research with developers and agents operating in the area.

5.3.8 The details for these assumptions have been discussed in the market assessment section of this report and are shown below:

- Houses - £3,250 per sqm
- Flats - £2,143 per sqm

5.3.9 The appraisal assumes that variable levels of affordable housing, which will command a transfer value to a Registered Provider at the going rates:

- Social rent 45%
- Affordable rent 55%
- Intermediate 65%

5.3.10 The current policy requirements of 60% social rented, 20% affordable rent and 20% intermediate (e.g. shared ownership) are assumed. The details for these assumptions are set out in a separate report on Affordable Housing Viability.

Threshold land values

5.3.11 To assess viability, the residual value generated by a scheme is compared with a threshold land value, which reflects 'a competitive return for a landowner' (as stated in Harman). The threshold land value is important in our calculations of the residual balance to pay for other policy and infrastructure costs to support a sustainable development. The difference between the threshold land value and the residual land value represents the amount of money available to contribute to affordable housing policy, S106/278 contributions or CIL.

5.3.12 The approach used to arrive at the threshold land value is based on a review of recent viability evidence of sites that are currently on the market, viability appraisal submissions, published data on land values and discussions with various stakeholders. The approach has been based on a top down approach of current market value and bottom up approach of existing use / alternative use values. Account has been taken of current and future policy requirements. This approach is in line with the Harman report and recent CIL examination reports which accept that authorities should work on the basis of future policy and its effects on land values and well as ensuring a reasonable return to a willing landowner and developer.

5.3.13 In collecting evidence on residential land values, a distinction has been made for sites that might reflect extra costs for 'opening up, abnormalities and securing planning permission' from those which are clean or 'oven-ready' residential sites. Following discussion with the

promoters of the strategic sites a figure of £600,000 per net hectare is suggested as an appropriate figure at which to test viability, whilst providing a competitive return to a willing landowner.

- 5.3.14 It is important to appreciate that assumptions on threshold land values can only be broad approximations, subject to wide variations. This is taken account of in drawing conclusions and recommendations on whether sites are viable. For example it is acknowledged that the landowner at Stoneythorpe has indicated that a less than market value would be an acceptable return on the land, so this will be considered when drawing any conclusions on viability and deliverability of the site.

Build costs

- 5.3.15 The sources used for typical development costs include Build Cost Information Service (BCIS) build cost data rebased to the location. Approximations to represent the average over a range of scheme types have been used for costs such as external works, fees, finance and developers' margins and previously tested with the development sector.
- 5.3.16 Building costs are based on BCIS data for new builds over a 15 year period, which have been rebased to Stratford-on-Avon and first quarter 2014 prices using BCIS defined adjustments. This identified the following unit build costs:
- Flats – £993 sqm
 - Houses (general estate) - £891sqm

The Council has policy towards improved building standards, these are considered below. Further associated development costs applied to the unit build costs for the potential strategic sites are shown in Table 5.2, and discussed below.

Table 5.2 Cost summary

Cost	Rate	Unit
External costs	10.0%	build cost
Extra over for Lifetime Homes	£500	per unit
Professional fees	12.0%	development costs
Contingency	5.0%	development costs
Sales costs	3.0%	GDV
Developers' profit on OM dwgs	20.0%	OM GDV
Developers' profit on AH dwgs	6.0%	AH GDV
Development costs finance (pa)	7.0%	-ve cashflow gap

External Works

- 5.3.17 This input incorporates all additional costs associated with the site curtilage of the built area, including circulation space in flatted areas and garden space with the housing units,

landscaping costs comprises Highway trees and public open space, permeable paving, estate roads, and connections to the strategic infrastructure such as sewers and utilities.

- 5.3.18 The external works variable had been set at a rate of 10% of build cost in the absence of no detail costings data being available at this time.

Sustainability and building standards

- 5.3.19 In England, Building Regulations (Part L, 2013 – effective from April 2014) have recently been amended to require emission reductions, to give an overall 6% improvement to 2010 standards. This standard is estimated to add approximately £450 in costs per home above the 2010 Building Regulation standards (this is based on the Government's Regulatory Impact Assessment findings). This increase is taken into account in the viability assessments.
- 5.3.20 Building Regulations are different to the requirements set out in the Code for Sustainable Homes (CfSH). The Code outlines a staged framework to improve the overall sustainability of new homes. In the past, there has been an intention to incorporate the requirements of the code with the Building Regulations. The government has recently intimated in the Building Standards Review that it wishes to simplify national standards and proposes to move away from the CfSH to a single system of standards.
- 5.3.21 Whilst the Government is no longer intending to support a range of standards in the future, they have indicated that they will allow local authorities, through planning policy, to seek improved building standards in their locations until revised regulations are place. For authorities wishing to incorporate this into planning policy, such as Stratford-on-Avon, this will have cost implications that will need to be considered. Further details in respect of the regulation change are anticipated in summer 2014.
- 5.3.22 A review of Government research on cost impacts of changes in building regulations and CfSH suggests that past forecasts of price changes (such as that predicted in the original Cyril Sweet work, 2010) have never affected costs to the extent forecast. In order to incorporate the cost into the model, we have used the latest advice on the additional cost of moving to CfSH 4 from Building Regulations Part L 2013 in an update from autumn 2013, by Davis Langdon to their original 2011 estimates that were published by DCLG. The CfSH sets standards above Part L. The increased requirements for Part L that come into force in April 2014 will still mean that an increase is required in standards to meet CfSH Level 4. The update shows an increase on build costs of 2.5%, which is a substantial reduction on previous estimates.
- 5.3.23 Similar to the Building Regulations the Government is also reviewing space standards and is currently considering a national voluntary policy on space standards. The details of this have yet to be published. The emerging Core Strategy policy also requires improved space standards and until such a time as a national policy is in place will apply a requirement for new dwelling to be compliant with Lifetime Homes standards. The extra over cost of new buildings meeting Lifetime Homes standards will range widely according to housing type, although typically the average cost is around £300 to £500 per dwelling. Based on a level of uncertainty, the high end value is assumed.
- 5.3.24 It is recognised that building standards are under constant review both in terms of resource reduction and space. However the guidance is quite clear that unless there is a clear policy framework for future changes, assumptions should be based on current costs and values. Therefore, the assessments take into account Council policy on implementing CfSH 4 and Lifetimes homes but not beyond as there is no certainty in respect of the future regulations at this time.

Professional Fees

- 5.3.25 For a scheme of this nature, significant professional fees will be required. This input incorporates all professional fees associated with the build, including: architect fees, planner fees, surveyor fees, project manager fees at 12% of build cost.

Contingency

- 5.3.26 For schemes of this nature and at this early planning stage, it is normal to build in contingency based on the risk associated with each site and has been calculated based on industry standards. They are applied as a percentage of build costs at 5%.

Marketing Fees

- 5.3.27 The Gross Development Value needs to reflect additional sales cost assumptions, which have been set out in Section 5. These costs relate to the costs incurred for disposing the completed residential units, including legal, agents and marketing fees, and are based on the average cost of marketing for a major new build development site. These are based on industry accepted scales established from discussions with developers and agents at the rate of 3% of open market GDV.

Developers' Profit

- 5.3.28 The developers' profit is the expected and reasonable level of return that a private developer would expect to achieve from a specific development scheme. In relation to these sites the open market residential dwellings elements are assumed to achieve a profit of 20%, which is applied to their Gross Development Value (GDV). This also allows for internal overheads. For the Affordable Housing element, because they will have some, albeit lower, risks to the developer a lower 6% profit margin is assumed for the private house builders on a nil grant basis. This is applied to the below market GDV of the AH residential dwelling development.

Finance

- 5.3.29 A monthly cashflow based on a finance cost of 7% has been used throughout the sites appraisals, as identified in the above costs assumptions. This is used to account for the cost of borrowing and the risk associated with the current economic climate and near term outlook and associated implications for the housing market. This is a typical rate which is being applied by developers to schemes of this nature

S106 infrastructure costs, site opening costs and abnormal costs

- 5.3.30 For each strategic site, a different approach has been adopted for s106. In consultation with infrastructure providers, the council and the promoters we have estimated the likely site specific s106 or s278 infrastructure requirements necessary for each of the strategic sites (to allow for onsite infrastructure such as education and transport costs). These S106 costs assumptions have been factored into the viability assessment as a cost input for each site. The amount of S106/S278 for each site is shown in Table 5.3

Table 5.3 S106/S278 contributions applied for the potential strategic sites

Site	S106/S278	Affordable housing
Gaydon/Lighthorne Heath	£13,600	35% (60%SR, 20%AR, 20%IM)
Long Marston Airfield	£26,452	35% (60%SR, 20%AR, 20%IM)
Lower Farm Stoneythorpe	£19,937	35% (60%SR, 20%AR, 20%IM)
Southam North	£9,275	35% (60%SR, 20%AR, 20%IM)
South East Stratford	£25,004	35% (60%SR, 20%AR, 20%IM)

SR – Social rent; AR – Affordable rent; IM – Intermediate

- 5.3.31 The viability appraisals for the strategic sites includes an allowance for site opening costs to allow for costs such as spine roads, utilities, strategic landscaping/green infrastructure, drainage systems and the like. Also included are costs associated with demolitions and land remediation. In consultation with the site promoters and infrastructure providers the following costs have been identified in Table 5.4.

Table 5.4 Opening up contributions applied for the potential strategic sites

Site	Opening up costs per dwelling
Gaydon/Lighthorne Heath	£17,849
Long Marston Airfield	£7,143
Lower Farm Stoneythorpe	£18,000
Southam North	£15,000
South East Stratford	£12,000

- 5.3.32 The figures for S106/S278 and opening up costs are indicative at this stage as none of the sites have reached a detailed planning stage. Once detailed master-planning is undertaken

there will be a better understanding of these various costs (site opening costs, site abnormalities, and strategic infrastructure such as schools, highways etc.) to inform site specific assessments. However, they are considered to be sufficiently detailed to demonstrate plan wide viability.

Land Purchase Costs

- 5.3.33 The land value needs to reflect additional purchase cost assumptions. These are based on surveying costs and legal costs to a developer in the acquisition of land and the development process itself, which have been established from discussions with developers and agents, and are also reflected in the Harman Report (2012) as industry standard rates.
- 5.3.34 A Stamp Duty Land Tax is payable by a developer when acquiring development land. This factor has been recognised and applied to the residual valuation as percentage cost based on the HM Customs & Revenue variable rates against the residual land value.
- 5.3.35 These inputs are incorporated into the residual valuation land value.

Table 5.5 Land Purchase Costs

Land purchase costs	Rate	Unit
Surveyor's fees	1.00%	land value
Legal fees	0.75%	land value
Stamp Duty Land Tax	HMRC rate	land value
Development finance for land purchase (pa)	7.00%	land value

5.4 Strategic site assessment outputs

- 5.4.1 Although the purpose of this report is not to set the level of CIL to apply to the strategic sites, the calculation of a potential CIL it is a useful test by which the strategic sites can be assessed in comparison with each other. The previous work on CIL only tested three of the five potential strategic sites and the level of information to inform assessments at that time was not as detailed.
- 5.4.2 The following is an explanation of how to interpret the information contained in the summary appraisal table. Reading the tables from left to right, successive columns are as follows:
- Site typology
 - Yield – the number of dwellings estimated for the site.
 - The overage or residual value expressed as £per sq.m. The residual site value is the difference between the value of the completed development and the cost of that development (including the developer's profit, policy costs, site servicing costs, etc).
 - The threshold land value is then deducted from the residual land value to arrive at the CIL balance or 'overage' available to contribute towards any infrastructure costs in the form of a possible maximum CIL charge. This CIL balance is an estimate of the CIL 'maximum theoretical CIL' i.e. the maximum CIL that could be charged consistent with the development being financially viable. Given the variations surrounding strategic viability appraisals, this is an approximate indicator, and as such we seek to have a considerable

buffer between the overage and any CIL charge. It is not recommended that this theoretical maximum be directly translated into a CIL charge.

- The traffic light colour coding is used to show if a scheme is considered to be viable (green), marginal (amber is stated as being unviable, but is actually within 20% of the threshold value) or not viable (red). Note it is important to state that a scheme may come out as not viable in this assessment but still deliver depending on the what the landowner and developer are willing to accept, so for instance the threshold land value could be reduced or the developer's return could be adjusted, or actual build costs or other assumption variables maybe be differ from that used here.

5.4.3 Note that the CIL overage is not a direct calculation of deducting the threshold value from the residual land value. As affordable housing is not liable to CIL charge, an allowance for this is included in the analysis. The CIL overage/ or CIL liable figure is calculated from the CIL chargeable floor area (total GIA minus GIA of affordable units).

5.5 The viable position

5.5.1 Based on current development values and costs, including the purchase price for land, the build costs, S106/S278 contributions, and an affordable housing rate of 35%, all the sites are viable, with a varying degree of financial headroom left over for the CIL, which will support the delivery of the wider necessary infrastructure in Stratford-on-Avon and beyond to enable the housing target to be deliverable.

Table 5.6 Viability assessment of potential strategic sites

Site typology	Dwellings	Affordable housing	Residual land value	Benchmark	Headroom		
	No.	%	Per Ha	Per Ha	Per Ha	Per Sqm	CIL liable Sqm
Long Marston Airfield (SS)	2,100	35%	£923,550	£600,000	£323,550	£113	£169
South East Stratford (SS)	2,500	35%	£858,230	£600,000	£258,230	£82	£122
Gaydon-Lighthorne Heath (SS)	2,500	35%	£869,782	£600,000	£269,782	£94	£141
Stoneythorpe (SS)	800	35%	£997,609	£600,000	£397,609	£143	£214
Southam (SS)	2,000	35%	£1,177,668	£600,000	£577,668	£164	£246

Note dwelling numbers are to 2031

5.5.2 The potential site at Southam North shows the most viability, however whilst we have made allowance for some land remediation on this formally worked area there may be further costs associated with development when detailed surveys have been undertaken. The lowest headroom can be found at South East Stratford which is not surprising given the high infrastructure costs associated with bring this forward as a strategic site. Stoneythorpe, Long Marston and Lighthorne Heath are also viable with headroom ranging from £269,000 – £397,000 per net hectare.

6 Delivery

- 6.1.1 Each site has been assessed in respect of its prospects to come forward over the plan period in terms of the market, infrastructure requirements and broad viability to deliver a sustainable development that will meet the supply needs of Stratford-on-Avon. This assessment is drawn together in the following section which sets out, in accordance with the NPPF, the delivery prospects of each potential strategic site in terms of whether it is 'deliverable' and 'developable'. For each site the anticipated numbers of dwellings which are deliverable and developable are set out. For the purposes of this report deliverable, i.e. first five years is considered from the anticipated adoption of the Plan in 2015.
- 6.1.2 This report does not seek to recommend one potential site over another as this is a decision for the council and will include a number of factors in addition to aspects around delivery. Instead we set out delivery in the context of the NPPF and the risks associated with identifying each of the sites to contribute to the delivery the council's required housing numbers.

6.2 Gaydon/Lighthorne Heath

- 6.2.1 Gaydon/Lighthorne Heath has reduced in size in respect of the number of dwelling anticipated to come forward as a result of JLR requiring a substantial part of the site for expansion. However, the site is still of sufficient size to significantly contribute in meeting the council's supply.
- 6.2.2 The council and the promoter both consider that 2,500 dwellings can be delivered within the plan period. This requires an annual average delivery rate of around 170 dwellings per year or 14 per month. Given the relatively buoyant market in Stratford-on-Avon District and the demand for new dwellings in the local market, this is considered as realistic and achievable, especially when compared to other areas, which have matched and exceeded this pace of development.
- 6.2.3 The reduction in the number of dwellings has meant that the infrastructure requirements associated with population growth have reduced. However, some infrastructure is required to enable the development to commence and the costs of these will have risen on a per dwelling basis. Whilst there is substantial infrastructure requirements these are not as significant as some of the other potential strategic sites. The timing of any infrastructure should not hold up the pace of development and should be provided in a timely fashion to support the phases of development. Potentially one of the largest costs would have been the junction improvements to Junction 12 on the M40. However, most of the costs associated with the improvements are being funded through the 'Pinchpoint' funding, which has been granted, with work due to start shortly – thus not effecting delivery of the new community.
- 6.2.4 Therefore infrastructure provision is not considered a risk on this site and in terms of timing or funding the required infrastructure. The viability assessment shows that there is sufficient value in the development to provide the entire required infrastructure, affordable housing at 35% and a contribution to CIL to help fund wider infrastructure needs for Stratford-on-Avon.
- 6.2.5 The site is being actively promoted and our understanding is that agreements are in place with the landowners to bring forward the site for development. It is considered that there is sufficient evidence to suggest the potential strategic site at Gaydon Lighthorne Heath can contribute around 2,500 dwellings of which:
- 600 dwellings in the first five years (assuming first completions in 2016)
 - 1900 dwellings year 6 to the end of the plan period
- 6.2.6 Therefore, Gaydon/Lighthorne Heath is both deliverable and developable over the plan period.

6.3 Long Marston Airfield

- 6.3.1 The council consider that 2,100 dwellings can be delivered within the plan period, although the promoter has indicated a scheme of up to 3,500 could eventually come forward. The promoter suggests that 3,500 dwelling could be built out over 20 years with a start date of 2017, which would mean approximately 1,000 dwellings to come forward beyond the plan period. At this pace of development it would mean around the same delivery in terms of the number of dwellings at 2,500 by 2031 as Gaydon/Lighthorne Heath. In market terms this is considered realistic, given the Stratford-on-Avon buoyant market and the existing demand for new dwellings. However, this will need to be considered in terms of infrastructure provision.
- 6.3.2 The infrastructure requirements for Long Marston Airfield are more significant than Gaydon/Lighthorne Heath as the completed development will need both a southern bypass for Stratford-upon-Avon and a new secondary school. These items alone have significant costs attached in excess of £20m each. However it is the south west bypass in particular that has the largest potential impact on delivery. The county council have indicated that the need for the bypass is triggered at 1,000 dwellings. At the proposed pace of development this would mean that the road will need to be in place by around 2022. However, this is reliant on the completion of the Western Relief Road in order to provide the necessary link to the A46. The promoter has indicated that it is in discussions with landowners in respect of a potential route for the scheme, although these are at an early stage. Assuming the plan is adopted in 2015 there will be around 7 years to agree alignment, secure the necessary land agreements and construct the road. The County Council have indicated that this timetable is challenging albeit achievable but with any road scheme of this scale, particularly as it requires completion of a road outside of the control of both the council and promoter, a river crossing and is potentially in close proximity to an ecologically sensitive site (Racecourse SSSI) there is uncertainty over delivery until the relevant permissions and finances are in place. If the road is not delivered then only 1,000 dwellings will come forward, meaning the council will be short of its supply requirements.
- 6.3.3 Therefore whilst it is considered that the infrastructure requirements are not insurmountable there is a risk to the council in terms of delivery. In terms of viability, the assessment shows that there is sufficient value in the development to provide the entire required infrastructure, affordable housing at 35% and a contribution to CIL to help fund wider infrastructure needs for Stratford-on-Avon.
- 6.3.4 The site is in single ownership with an active promoter and it is considered that there is sufficient evidence to suggest the potential strategic site at Long Marston can contribute 2,100 - 2,500 dwellings over the plan period, subject to the construction of both the Shottery Road and the south west bypass. However, as at least 1,000 dwelling can come forward this is not an issue in terms of demonstrating a deliverable supply of which:
- 400 - 600 dwellings in the first five years (assuming first completions in 2016)
 - 1,600 - 1900 dwellings year 6 to the end of the plan period, subject to bypass construction
- 6.3.5 Therefore, Long Marston is deliverable but there is uncertainty as to whether it is developable over the longer period.

6.4 Lower Farm, Stoneythorpe

- 6.4.1 Lower Farm, Stoneythorpe is substantially smaller than the other potential strategic sites and would therefore have to come forward either with another site or as a reserve site if there are issues with delivery elsewhere that delay their implementation.

- 6.4.2 The council and the promoter both consider that 800 dwellings can be delivered on the proposed site within the plan period. This can be comfortably delivered within the plan period and a variety of rates of delivery, however for the purposes of this assessment it has been assumed that the development could come forward at an annual average of around 100 dwellings per year assuming two outlets. Given the relatively buoyant market in Stratford-on-Avon District and the existing demand for new dwellings, this is considered as realistic and achievable.
- 6.4.3 As a relatively small site the infrastructure requirements are not significant when compared to the other potential strategic sites; however it will require a new primary school. There is an area of flood risk in the eastern part of the site which reduces the developable area; however this is not significant enough to reduce the number of dwellings. Whilst there are no show stoppers in terms of infrastructure requirements to bring the site forward for development there is uncertainty in respect of the construction of the High Speed Two (HS2) railway network. The route of HS2 is on the northern boundary of the site and would effectively sever the development from its access. Whilst the promoter has indicated there are solutions to any access issues in terms of both the construction phases of Lower Farm and HS2, no agreements are yet in place. Due to the uncertainty of HS2 and the construction period for Lower Farm it is suggested that the council do not rely on Lower Farm in terms of a deliverable supply in the first five years of the Plan.
- 6.4.4 Therefore whilst it is considered that the construction issues are not insurmountable there is a risk to the council in terms of delivery. However, in terms of viability, the assessment shows that there is sufficient value in the development to provide the entire required infrastructure, affordable housing at 35% and a contribution to CIL to help fund wider infrastructure needs for Stratford-on-Avon.
- 6.4.5 The site is being actively promoted by the landowner, and there is no evidence to suggest that there would be any difficulty in attracting a developer. It is also noted that the landowner is not seeking a housing market return for the land, therefore there is considerable scope within the viability to promote a high quality development and overcome any site issues. It is considered that there is sufficient evidence to suggest the potential strategic site at Lower Farm, Stoneythorpe can contribute around 800 dwellings, subject to satisfactory access arrangements with HS2, of which:
- 800 dwellings from year 6 to the end of the plan period
- 6.4.6 Therefore, Lower Farm, Stoneythorpe is developable over the plan period.

6.5 Southam North

- 6.5.1 Southam North is smaller than the other potential strategic sites, apart from Stoneythorpe and therefore may not deliver the required amount of development unless a wider area is considered or it could come forward either with another site or as reserve site if there are issues with delivery elsewhere that delay their implementation.
- 6.5.2 The council and the promoter initially considered that 1,700 - 2,000 dwellings can be delivered on the proposed site within the plan period. The higher figure has been used for testing and shown that this can be delivered within the plan period with a variety of rates of delivery, however for the purposes of this assessment it has been assumed that the development could come forward at an annual average of around 135 dwellings per year assuming three or four outlets. Given the relatively buoyant market in Stratford-on-Avon District and the existing demand for new dwellings, this is considered as realistic and achievable.
- 6.5.3 As the site is located between two existing settlements the infrastructure requirements on the site are not significant. Whilst the promoters do not envisage any issues with delivery, as a former worked area there is always a risk in bringing forward development, but until detailed investigations are undertaken these will not be known. However given the experience of the

promoter in bringing forward similar sites elsewhere we are assured that development is feasible on this type of site.

- 6.5.4 Infrastructure provision is not considered a risk on this site in terms of timing or funding the required infrastructure. The viability assessment shows that there is sufficient value in the development to provide the entire required infrastructure, affordable housing at 35% and a contribution to CIL to help fund wider infrastructure needs for Stratford-on-Avon. As there is substantial overage it is considered that this de-risks the element of the unknown if construction costs are higher than tested because of any required unforeseen remediation.
- 6.5.5 The site is being actively promoted and our understanding is that agreements are in place with the other landowner to bring forward the site for development. It is considered that there is sufficient evidence to suggest the potential strategic site at Southam North can contribute around 1,700 dwellings of which around:
- 350 dwellings in the first five years
 - 1600 plus dwelling year 6 to the end of the plan period
- 6.5.6 Therefore, Southam North is both deliverable and developable over the plan period.

6.6 South East Stratford

- 6.6.1 The council consider that 2,500 dwellings could potentially be delivered within the plan period in terms of the size of the proposed area. This requires an annual average delivery rate of around 170 dwellings per year or 14 per month. Given the relatively buoyant market in Stratford-on-Avon District and the existing demand for new dwellings, this is considered as realistic and achievable, especially when compared to other areas, which have matched and exceeded this pace of development.
- 6.6.2 South East Stratford is subject to the highest infrastructure costs of all the strategic sites as it will have to be able to bring forward a south east bypass and a new secondary school, which are expensive items of infrastructure. The south east bypass in particular has the largest potential impact on delivery. The county council have indicated that the need for the bypass is triggered at 1,000 dwellings. At the proposed pace of development this would mean that the road will need to be in place by around 2022. The proposed route is significantly longer than the south west bypass option and there is no evidence that any of the promoters of the South East Stratford area have undertaken any preparatory work as to the feasibility of such a scheme including any landowner constraints. Assuming the plan is adopted in 2015 there will be around 7 years to agree alignment, secure the necessary land agreements and construct the road. The county council have indicated that this timetable is challenging albeit achievable but with any road scheme of this scale, particularly as it requires a river crossing and third party land agreements, there is uncertainty over delivery until the relevant permissions and finances are in place. If the road is not delivered then only 1,000 dwellings will come forward, meaning the council will be short of its supply requirements.
- 6.6.3 Therefore whilst it is considered that the infrastructure requirements are not insurmountable there is a risk to the council in terms of delivery. In terms of viability, the assessment shows that there is sufficient value in the development to provide the entire required infrastructure, affordable housing at 35% and a contribution to CIL to help fund wider infrastructure needs for Stratford-on-Avon.
- 6.6.4 Unlike the other potential strategic sites, where there is evidence of agreed positions in terms of promotion and landownership, there does not seem to be any joint promotion of South East Stratford. Whilst two of the promoters have indicated a willingness to work together there is no evidence to suggest that this has happened or that the other land owners are on board. It is also of note that planning applications are being pursued within the strategic site so whilst

there is an appetite for development in this location this is not being done comprehensively. Whilst viability is not an apparent issue, if all the site is considered the situation may change if piecemeal development comes forward without any contributions to the strategic infrastructure and thus make per dwelling requirements greater.

6.6.5 Therefore, whilst there is potential for South East Stratford to be both deliverable and developable, the council should be mindful that piecemeal development and uncertainties over delivery of the south east bypass mean that there is some uncertainty. Subject to a comprehensive approach and the road being deliverable it is considered that South East Stratford could contribute around 2,500 dwellings of which:

- 600 dwellings in the first five years (assuming first completions in 2016)
- 1900 dwellings year 6 to the end of the plan period

6.6.6 Therefore, subject to the caveats identified South East Stratford is both deliverable and developable over the plan period.

Appendix A Viability assumptions

Assumption	Source	ID	Notes								
Scenarios											
Residential development typology	Consultation with client	This mix of schemes was selected in discussion with the client group, making use of									
		Ref	Typology								
		18	Long Marston Airfield (SS)								
		19	South East Stratford (SS)								
		20	Gaydon-Lighthorne Heath (SS)								
		21	Stoneythorpe (SS)								
		22	Southam (SS)								
		Averages									
		56%									
		37									
Mix type	Assumed	Except for the CQ sites, unit size distribution is taken from the GL Heme Coventry and Warwickshire SHMA (Nov 2013), Tables 98 & 99.									
OM dwelling type (%)											
AH dwelling type (%)											
Ref	Typology	1-2 bed Flats	2 bed house	3 bed house	4+ bed house	1-2 bed Flats	2 bed house	3 bed house	4+ bed house		
		5.00%	35.00%	40.00%	20.00%	17.5%	37.5%	37.5%	7.5%		
18	Long Marston Airfield (SS)	5.0%	35.0%	40.0%	20.0%	17.5%	37.5%	37.5%	7.5%		
19	South East Stratford (SS)	5.0%	35.0%	40.0%	20.0%	17.5%	37.5%	37.5%	7.5%		
20	Gaydon-Lighthorne Heath (SS)	5.0%	35.0%	40.0%	20.0%	17.5%	37.5%	37.5%	7.5%		
21	Stoneythorpe (SS)	5.0%	35.0%	40.0%	20.0%	17.5%	37.5%	37.5%	7.5%		
22	Southern (SS)	5.0%	35.0%	40.0%	20.0%	17.5%	37.5%	37.5%	7.5%		
Unit sizes	Industry standard	Residential floorspace is based upon industry standards of new build schemes. Two floor areas are displayed for flattened schemes: The Gross Internal Area (GIA) is used to calculate build costs and Net Internal Area (NIA) is applied to calculate the sales revenue. For the small housing sites (up to 5 units) larger dwellings are delivered in the borough, with medium and larger sites delivering more 'standard' unit sizes, we have									
		Private									
		Private sale	Flats (NIA)	55 sq m							
		Private sale	Flats (GIA)	65 sq m							
		Private sale	2 bed house	70 sq.m							
		Private sale	3 bed house	80 sq.m							
		Private sale	4+ bed house	120 sq m							
		Affordable units									
		Social rent	Flats (NIA)	55 sq m							
		Social rent	Flats (GIA)	65 sq m							
		Social rent	2 bed house	70 sq.m							
		Social rent	3 bed house	80 sq m							
		Social rent	4+ bed house	120 sq m							
		Affordable rent	Flats (NIA)	55 sq m							
		Affordable rent	Flats (GIA)	65 sq m							
		Affordable rent	2 bed house	70 sq m							
		Affordable rent	3 bed house	80 sq m							
		Affordable rent	4+ bed house	120 sq m							
		Intermediate	Flats (NIA)	55 sq m							
		Intermediate	Flats (GIA)	65 sq m							
		Intermediate	2 bed house	70 sq m							
		Intermediate	3 bed house	80 sq m							
		Intermediate	4+ bed house	120 sq m							
		Residential scenarios	Council policy	The Council targets an affordable housing rate of 35% on schemes of 5 dwellings or more. The policy also states an overall balance of 60% social rent, 20% affordable rent and 20% for intermediate affordable tenures.							
				Threshold 10 Units							
				Type							
				Private Affordable Affordable tenure split Social rent affordable rent Intermediate							
Ref	Typology										
18	Long Marston Airfield (SS)			2,100 Units	65%	35%	60%	20%	20%		
19	South East Stratford (SS)			2,500 Units	65%	35%	60%	20%	20%		
20	Gaydon-Lighthorne Heath (SS)			2,500 Units	65%	35%	60%	20%	20%		
21	Stoneythorpe (SS)			800 Units	65%	35%	60%	20%	20%		
22	Southam (SS)			2,000 Units	65%	35%	60%	20%	20%		
Policy costs		CSH Level 4 (applies to sites >0.3ha or with 10+ units, Lifetime homes + BR2013)	Apply?	2.5% build cost							
			Yes	£953 per unit	Calculate						
			Yes								


Assumption	Source	Notes
Construction Costs		
Build costs	BCIS Quarterly Review of Building Prices online version accessed March 2013. Prices rebased to the district.	Residential build costs are based upon industry data from the Build Cost Information Service (BCIS) which is published by the Royal Institution of Chartered Surveyors (RICS). The data is published by RICS on a quarterly basis. BCIS offers a range of prices dependent on the final specification.
		<div> <div>Small housebuilder</div> <div>Large house builder</div> </div> <div> <div><</div> <div>4</div> <div>dwgs</div> </div>
		Private Flats – £993 Houses (general estate) – £1,257
		Affordable Flats – £993 Houses (general estate) – £1,257
Plot external	Industry standards	Plot externals relate to costs for internal access roads, hard and soft landscaping. This will vary from site to site, but we have allowed for this at the following rate: 10% Build cost
Site abnormals		Developing greenfield, brownfield and mixed sites represent different risk and costs. These costs can vary significantly depending on the site's Land type Brownfield £200,000 per net ha Mixed £100,000 per net ha Greenfield £0 per net ha
Professional fees	Industry standards	Professional fees relate to the costs incurred to bring the development forward and cover items such as; surveys, architects, quantity surveyors, 12% Build cost
Contingency	Industry standards	Contingency is based upon the risk associated with each site and has been calculated as a percentage of build costs at 5% Build cost
Sale costs	Industry standards	Sale costs relate to the costs incurred for disposing of the completed residential units, including legal, agents and marketing fees. These are based on industry accepted scales at the following rates: 3% Gross Development Value
Finance costs	Industry standards	When testing for development viability it is common practice to assume development is 100% debt financed (Viability Testing Local Plans - Advice for planning practitioners and RICS Financial viability in planning guidance note GN94/2012. Within our cashflow we used a finance rate based upon market rates of interest as follows: 7% Development costs
Professional fees on land purchase	Industry standards	In addition to SDLT the purchaser of land will incur professional fees relating to the purchase. Fees associated with the land purchase are based upon the following industry standards: Surveyor - 1.00% Legals - 0.75%
Stamp duty on land purchase	HMRC	Stamp Duty Land Tax (SDLT) is generally payable on the purchase or transfer of property or land in the UK where the amount paid is above a certain threshold. The SDLT rates are by Treasury, the following rates current rates have been applied: ≤ £150,000 0.00% > £150,000 1.00% > £250,000 3.00% > £500,000 4.00%
Profit		
Developer's return	Industry standards	A developer's return is based upon their attitude to risk. A developer's attitude to risk will depend on many factors that include but not exclusive to, development type (e.g. Greenfield, Brownfield, refurbishment, new build etc), development proposal (uses, mix and quantum), credit worthiness of developer, and current market conditions. The Harman Report states that "residential developer margin expressed as a percentage of GDV - should be the default methodology" and E.2.3.8.1 of the RICS Financial viability in planning report states "The residential sector seeks a return on the GDV". We have applied a rate that is acceptable to both developers and financial institutions in the current market. The developer return is a Gross Margin and therefore includes overheads. The developer return is calculated as a percentage of Gross Development Value at the following rate: Developer return on market housing 20% Gross development value Return on affordable housing 6% Gross development value A lower margin has been applied to the affordable units as these represent less development risk as the end user is known at point of construction. This approach is also typical with industry standards. The Homes and Community Agency (HCA) state 'Conventional practice is to allow for developer's margin at a lower rate for affordable housing developed as part of a Section 106 agreement, as the risks are low relative to development of open market housing. The user manual for the Economic Appraisal Tool states that a typical figure may be in the region of 6% of
Revenue		
Sales value of completed scheme	Land Registry/Rightmove Brochures	Property values are derived from different sources, depending on land use. For housing, Land Registry and Rightmove data forms a basis for analysis. This provides a full record of all individual transactions. Values used <div> <div>House</div> <div>Flats</div> </div> <div> <div>Private sale</div> <div>West</div> <div>£2,650</div> <div>£2,143 sqm</div> </div> <div> <div>Private sale</div> <div>East</div> <div>£2,850</div> <div>£2,143 sqm</div> </div> <div> <div>Private sale</div> <div>Central</div> <div>£3,250</div> <div>£2,143 sqm</div> </div>
Affordable housing (Section 106)	Industry standards	The current percentage requirement for affordable housing is X% on sites with X+ new dwellings. The impact of residential tenure can affect the impact of this policy, and we have assumed a blended average of intermediate and affordable rented accommodation as follows: Transfer value 45% Social rent West £1,193 £964 sqm Social rent East £1,283 £964 sqm Social rent Central £1,463 £964 sqm Transfer value 55% Affordable rent West £1,458 £1,179 sqm Affordable rent East £1,568 £1,179 sqm Affordable rent Central £1,788 £1,179 sqm Transfer value 65% Intermediate West £1,723 £1,393 sqm Intermediate East £1,853 £1,393 sqm Intermediate Central £2,113 £1,393 sqm
Benchmark land value per ha		
Residential land values	Land Registry & UK Land Directory website	It is important to appreciate that assumptions on benchmark land values can only be broad approximations, subject to a wide margin of uncertainty. We take account of this uncertainty in drawing conclusions and recommendations from our analysis. We have examined a cross section of residential land comparables across Swale. These comparable recent transactions generally relate to urban, brownfield sites, which were fully serviced with roads and major utilities to the site boundary. In collecting evidence on residential land values, we aimed to distinguish between sites that deliver flats and housing sites - this is due to development densities, and sites values that might reflect extra costs for opening up and planning permission from those which are clean residential sites. The figure we use reflect a fairly clean residential site (although it may not yet be permitted) We would expect that land values for smaller sites with less than 10 dwellings to be higher because of being under the affordable housing
		Residential values Strategic site £600,000 per ha Supported by Brookbanks

Appendix B Viability assessments


Viability and Deliverability of Strategic Sites Stratford-on-Avon District Council

Gaydon-Lighthor	Central	2,500 Units												
ITEM														
Net Site Area		71 Greenfield		Residual Value 869782.389 per net ha										
Yield	Units	Private	Affordable	Social rent	Intermediate	Shared ownership								
	2,500	1625.00	875.00	525.00	175.00	175.00								
1.0 Development Value														
1.1	Private units		No. of units	Size sq.m	Total sq.m	Epsm	Total Value							
		Flats (N/A)	81.25	55	4,469	E2,143	£9,576,531							
		2 bed house	568.75	70	39,813	E3,250	£129,390,625							
		3 bed house	650.00	80	52,000	E3,250	£169,000,000							
		4+ bed house	325.00	120	39,000	E3,250	£126,750,000							
		1,625.0			135,281									
1.2	Social rent		No. of units	Size sq.m	Total sq.m	Epsm	Total Value							
		Flats (N/A)	91.88	55	5,053	E364	£4,872,981							
		2 bed house	196.88	70	13,781	E1,463	£20,155,078							
		3 bed house	196.88	80	15,750	E1,463	£23,034,375							
		4+ bed house	39.38	120	4,725	E1,463	£6,910,313							
		525.0			39,309									
1.3	Affordable rent		No. of units	Size sq.m	Total sq.m	Epsm	Total Value							
		Flats (N/A)	30.63	55	1,684	E1,179	£1,985,289							
		2 bed house	65.63	70	4,594	E1,788	£8,211,328							
		3 bed house	65.63	80	5,250	E1,788	£9,384,375							
		4+ bed house	13.13	120	1,575	E1,788	£2,815,313							
		175.0			13,103									
1.3	Intermediate		No. of units	Size sq.m	Total sq.m	Epsm	Total Value							
		Flats (N/A)	30.63	55	1,684	E1,393	£2,346,250							
		2 bed house	65.63	70	4,594	E2,113	£9,704,297							
		3 bed house	65.63	80	5,250	E2,113	£11,090,625							
		4+ bed house	13.13	120	1,575	E2,113	£3,327,188							
		175.0			13,103									
Gross Development value							£538,554,567							
2.0 Development Cost														
2.1 Site Acquisition														
2.1.1	Site value (residual land value)						£61,862,441							
							Purchaser Costs							5.7500%
							£65,419,531							
2.3 Build Costs														
2.3.1	Private units		No. of units	Size sq.m	Total sq.m	Cost per sq.m	Total Costs							
		Flats (GIA)	81.25	65	5,281	E993	£5,244,281.25							
		2 bed house	568.75	70	39,813	E891	£35,472,937.50							
		3 bed house	650.00	80	52,000	E891	£46,332,000.00							
		4+ bed house	325.00	120	39,000	E891	£34,749,000							
		1,625			136,094									
2.3.2	Affordable units		No. of units	Size sq.m	Total sq.m	Cost per sq.m	Total Costs							
		Flats (GIA)	153.13	65	9,953	E993	£9,883,453.13							
		2 bed house	328.13	70	22,969	E891	£20,465,156.25							
		3 bed house	328.13	80	26,250	E891	£23,388,750.00							
		4+ bed house	65.63	120	7,875	E891	£7,016,625.00							
		875			67,047									
2500.00							£182,552,203							
2.4 Construction Costs														
2.4.1	External works as a percentage of build costs			10%		£18,255,220.31								
2.4.2	Site opening up costs			SI - Remainder of Brookbank costings		£17,849 per unit		£44,623,000						
				S106/S278		£13,600 per unit		£34,000,080						
						£96,878,300								
2.5 Professional Fees														
2.5.1	as percentage of build costs			12%		£21,906,264								
2.6 Contingency														
2.6.1	as percentage of build costs			5%		£9,127,610								
2.7 Developer contributions														
2.7.3	CSH Level 4 (applies to sites >0.3ha or with 10+ units, whichever is the higher)			2.5% build cost		£4,563,805								
2.7.5	Lifetime homes + BR2013			£953 per unit		£2,382,500								
2.8 Sale cost														
2.8.1	as percentage of GDV			3.00%		£16,156,637								
TOTAL DEVELOPMENT COSTS (including land)														
£398,986,851														
3.0 Developers' Profit														
3.1	Private units			20% Gross development value		£86,943,431								
3.2	Affordable units			6% Gross development value		£6,230,245								
£93,173,676														
TOTAL PROJECT COSTS [EXCLUDING INTEREST]														
£492,160,527														
TOTAL INCOME - TOTAL COSTS [EXCLUDING INTEREST]														
£46,394,040														
4.0 Finance Costs														
4.1	Finance			APR 7.00%		PCM 0.565%		£46,394,040						
TOTAL PROJECT COSTS [INCLUDING INTEREST]														
£538,554,567														
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Viability and Deliverability of Strategic Sites Stratford-on-Avon District Council


Long Marston All	Central	2,100 Units										
ITEM												
Net Site Area	59.65	Greenfield	Residual Value									
			£923,550	per net ha								
Yield	Units	Private	Affordable	Social rent	Intermediate	Shared ownership						
	2,100	1365.00	735.00	441.00	147.00	147.00						
1.0 Development Value												
1.1	Private units			No. of units	Size sq.m	Total sq.m	Epsm	Total Value				
	Flats (NIA)			68.25	55	3,754	£2,143	£8,044,286				
	2 bed house			477.75	70	33,443	£3,250	£108,688,125				
	3 bed house			546.00	80	43,680	£3,250	£141,960,000				
	4+ bed house			273.00	120	32,760	£3,250	£106,470,000				
				1,365.0		113,636						
1.2	Social rent			No. of units	Size sq.m	Total sq.m	Epsm	Total Value				
	Flats (NIA)			77.18	55	4,245	£964	£4,093,304				
	2 bed house			165.38	70	11,576	£1,463	£16,930,266				
	3 bed house			165.38	80	13,230	£1,463	£19,348,875				
	4+ bed house			33.08	120	3,969	£1,463	£5,804,663				
				441.0		33,020						
1.3	Affordable rent			No. of units	Size sq.m	Total sq.m	Epsm	Total Value				
	Flats (NIA)			25.73	55	1,415	£1,179	£1,667,642				
	2 bed house			55.13	70	3,859	£1,788	£6,897,516				
	3 bed house			55.13	80	4,410	£1,788	£7,882,875				
	4+ bed house			11.03	120	1,323	£1,788	£2,364,863				
				147.0		11,007						
1.3	Intermediate			No. of units	Size sq.m	Total sq.m	Epsm	Total Value				
	Flats (NIA)			25.73	55	1,415	£1,393	£1,970,850				
	2 bed house			55.13	70	3,859	£2,113	£8,151,609				
	3 bed house			55.13	80	4,410	£2,113	£9,316,125				
	4+ bed house			11.03	120	1,323	£2,113	£2,794,838				
				147.0		11,007						
Gross Development value								£452,385,836				
2.0 Development Cost												
2.1 Site Acquisition												
2.1.1	Site value (residual land value)							£55,090,339				
								Purchaser Costs				
								5.7500%				
								58,258,033				
2.3 Build Costs												
2.3.1	Private units			No. of units	Size sq.m	Total sq.m	Cost per sq.m	Total Costs				
	Flats (GIA)			68.25	65	4,436	£993	£4,405,196.25				
	2 bed house			477.75	70	33,443	£891	£29,797,267.50				
	3 bed house			546.00	80	43,680	£891	£38,918,880.00				
	4+ bed house			273.00	120	32,760	£891	£29,189,160				
				1,365		114,319						
2.3.2	Affordable units			No. of units	Size sq.m	Total sq.m	Cost per sq.m	Total Costs				
	Flats (GIA)			128.63	65	8,361	£993	£8,302,100.63				
	2 bed house			275.63	70	19,294	£891	£17,190,731.25				
	3 bed house			275.63	80	22,050	£891	£19,646,550.00				
	4+ bed house			55.13	120	6,615	£891	£5,893,965.00				
				735		56,319						
				2100.00				£153,343,851				
2.4 Construction Costs												
2.4.1	External works as a percentage of build costs			10%			£15,334,385.06					
2.4.2	Site opening up costs			SI - Remainder of Cala Homes costings for V			£7,143 per unit			£15,000,000		
				S106/S278			£26,452 per unit			£55,550,016		
										£85,884,401		
2.5 Professional Fees												
2.5.1	as percentage of build costs			12%			£18,401,262					
							£18,401,262					
2.6 Contingency												
2.6.1	as percentage of build costs			5%			£7,667,193					
							£7,667,193					
2.7 Developer contributions												
2.7.3	CSH Level 4 (applies to sites >0.3ha or with 10+ units, whichever is the higher)			2.5%			build cost			£3,833,596		
2.7.5	Lifetime homes + BR2013			£953			per unit			£2,001,300		
										£5,834,896		
2.8 Sale cost												
2.8.1	as percentage of GDV			3.00%			£13,571,575					
							£13,571,575					
TOTAL DEVELOPMENT COSTS (including land)								£342,961,211				
3.0 Developers' Profit												
3.1	Private units			20%			Gross development value			£73,032,482		
3.2	Affordable units			6%			Gross development value			£5,233,405		
										£78,265,888		
TOTAL PROJECT COSTS [EXCLUDING INTEREST]								£421,227,099				
TOTAL INCOME - TOTAL COSTS [EXCLUDING INTEREST]								£31,158,737				
4.0 Finance Costs												
4.1	Finance			APR 7.00%			PCM 0.565%			-£31,158,737		
TOTAL PROJECT COSTS [INCLUDING INTEREST]								£452,385,836				
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Viability and Deliverability of Strategic Sites Stratford-on-Avon District Council

Stoneythorpe (S) Central 800 Units											
ITEM											
Net Site Area		23.4 Greenfield		Residual Value							
				£997,609 per net ha							
Yield		Units 800		Private 520.00		Affordable 280.00		Social rent 168.00		Intermediate 56.00 Shared ownership 56.00	
1.0 Development Value											
1.1 Private units				No. of units		Size sq.m		Total sq.m		£psm Total Value	
		Flats (N/A)		26.00		55		1,430		£2,143 £3,064,490	
		2 bed house		182.00		70		12,740		£3,250 £41,405,000	
		3 bed house		208.00		80		16,640		£3,250 £54,080,000	
		4+ bed house		104.00		120		12,480		£3,250 £40,560,000	
				520.0				43,290			
1.2 Social rent				No. of units		Size sq.m		Total sq.m		£psm Total Value	
		Flats (N/A)		29.40		55		1,617		£964 £1,559,354	
		2 bed house		63.00		70		4,410		£1,463 £6,449,625	
		3 bed house		63.00		80		5,040		£1,463 £7,371,000	
		4+ bed house		12.60		120		1,512		£1,463 £2,211,300	
				168.0				12,579			
1.3 Affordable rent				No. of units		Size sq.m		Total sq.m		£psm Total Value	
		Flats (N/A)		9.80		55		539		£1,179 £635,292	
		2 bed house		21.00		70		1,470		£1,788 £2,627,625	
		3 bed house		21.00		80		1,680		£1,788 £3,003,000	
		4+ bed house		4.20		120		504		£1,788 £900,900	
				56.0				4,193			
1.3 Intermediate				No. of units		Size sq.m		Total sq.m		£psm Total Value	
		Flats (N/A)		9.80		55		539		£1,393 £750,800	
		2 bed house		21.00		70		1,470		£2,113 £3,105,375	
		3 bed house		21.00		80		1,680		£2,113 £3,549,000	
		4+ bed house		4.20		120		504		£2,113 £1,064,700	
				56.0				4,193			
Gross Development value										£172,337,461	
2.0 Development Cost											
2.1 Site Acquisition											
2.1.1 Site value (residual land value)		£23,376,153									
										Purchaser Costs 5.7500%	
										24,720,282	
2.3 Build Costs											
2.3.1 Private units				No. of units		Size sq.m		Total sq.m		Cost per sq.m Total Costs	
		Flats (G/A)		26.00		55		1,430		£993 £1,678,170.00	
		2 bed house		182.00		70		12,740		£891 £11,351,340.00	
		3 bed house		208.00		80		16,640		£891 £14,826,240.00	
		4+ bed house		104.00		120		12,480		£891 £11,119,680	
				520				43,550			
2.3.2 Affordable units				No. of units		Size sq.m		Total sq.m		Cost per sq.m Total Costs	
		Flats (G/A)		49.00		55		2,695		£893 £3,162,705.00	
		2 bed house		105.00		70		7,350		£891 £6,548,850.00	
		3 bed house		105.00		80		8,400		£891 £7,484,400.00	
		4+ bed house		21.00		120		2,520		£891 £2,245,320.00	
				280				21,455			
800.00										£58,416,705	
2.4 Construction Costs											
2.4.1 External works as a percentage of build costs		10% £5,841,670.50									
2.4.2 Site opening up costs		SI - Remainder of EC Harris costings		£18,000 per unit		£14,400,000					
		S106/S278		£19,937 per unit		£15,949,992					
										£36,191,663	
2.5 Professional Fees											
2.5.1 as percentage of build costs		12% £7,010,005									
										£7,010,005	
2.6 Contingency											
2.6.1 as percentage of build costs		5% £2,920,835									
										£2,920,835	
2.7 Developer contributions											
2.7.3 CSH Level 4 (applies to sites >0.3ha or with 10+ units, whichever is the higher)		2.5% build cost £1,460,418									
2.7.5 Lifetime homes + BR2013		£953 per unit £762,400									
										£2,222,818	
2.8 Sale cost											
2.8.1 as percentage of GDV		3.00% £5,170,124									
										£5,170,124	
TOTAL DEVELOPMENT COSTS (including land)										£136,652,431	
3.0 Developers' Profit											
3.1 Private units		20% Gross development value £27,821,898									
3.2 Affordable units		6% Gross development value £1,993,678									
										£29,815,576	
TOTAL PROJECT COSTS [EXCLUDING INTEREST]										£166,468,007	
TOTAL INCOME - TOTAL COSTS [EXCLUDING INTEREST]										£5,869,454	
4.0 Finance Costs											
4.1 Finance		APR 7.00%		PCM 0.565%		-£5,869,454					
TOTAL PROJECT COSTS [INCLUDING INTEREST]										£172,337,461	
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Viability and Deliverability of Strategic Sites Stratford-on-Avon District Council

Southam (SS)		Central		2,000 Units													
ITEM																	
Net Site Area		46.27		Brownfield		Residual Value		£1,177,668		per net ha							
Yield		Units		Private		Affordable		Social rent		Intermediate		Shared ownership					
		2,000		1300.00		700.00		420.00		140.00		140.00					
1.0 Development Value																	
1.1		Private units				No. of units		Size sq.m		Total sq.m		Epsm		Total Value			
		Flats (NIA)				65.00		55		3,575		£2,143		£7,661,225			
		2 bed house				455.00		70		31,850		£3,250		£103,512,500			
		3 bed house				520.00		80		41,600		£3,250		£135,200,000			
		4+ bed house				260.00		120		31,200		£3,250		£101,400,000			
						1,300.0				108,225							
1.2		Social rent				No. of units		Size sq.m		Total sq.m		Epsm		Total Value			
		Flats (NIA)				73.50		55		4,043		£964		£3,898,385			
		2 bed house				157.50		70		11,025		£1,463		£16,124,063			
		3 bed house				157.50		80		12,600		£1,463		£18,427,500			
		4+ bed house				31.50		120		3,780		£1,463		£5,528,250			
						420.0				31,448							
1.3		Affordable rent				No. of units		Size sq.m		Total sq.m		Epsm		Total Value			
		Flats (NIA)				24.50		55		1,348		£1,179		£1,588,231			
		2 bed house				52.50		70		3,675		£1,788		£6,569,063			
		3 bed house				52.50		80		4,200		£1,788		£7,507,500			
		4+ bed house				10.50		120		1,260		£1,788		£2,252,250			
						140.0				10,483							
1.3		Intermediate				No. of units		Size sq.m		Total sq.m		Epsm		Total Value			
		Flats (NIA)				24.50		55		1,348		£1,393		£1,877,000			
		2 bed house				52.50		70		3,675		£2,113		£7,763,438			
		3 bed house				52.50		80		4,200		£2,113		£8,872,500			
		4+ bed house				10.50		120		1,260		£2,113		£2,661,750			
						140.0				10,483							
Gross Development value														£430,843,653			
2.0 Development Cost																	
2.1		Site Acquisition															
2.1.1		Site value (residual land value)												£54,495,342			
														Purchaser Costs			
														5.7500%			
														£7,628,824			
2.3 Build Costs																	
2.3.1		Private units				No. of units		Size sq.m		Total sq.m		Cost per sq.m		Total Costs			
		Flats (GIA)				65.00		65		4,225		£993		£4,195,425.00			
		2 bed house				455.00		70		31,850		£891		£28,378,350.00			
		3 bed house				520.00		80		41,600		£891		£37,065,600.00			
		4+ bed house				260.00		120		31,200		£891		£27,799,200			
						1,300				108,875							
2.3.2		Affordable units				No. of units		Size sq.m		Total sq.m		Cost per sq.m		Total Costs			
		Flats (GIA)				122.50		65		7,963		£993		£7,906,762.50			
		2 bed house				262.50		70		18,375		£891		£16,372,125.00			
		3 bed house				262.50		80		21,000		£891		£18,711,000.00			
		4+ bed house				52.50		120		6,300		£891		£5,613,300.00			
						700				53,638							
2000.00														£146,041,763			
2.4		Construction Costs															
2.4.1		External works as a percentage of build costs												10%			
														£14,604,176.25			
2.4.2		Site abnormals (remediation/demolition)												£200,000			
														per net ha			
														£9,254,789			
2.4.2		Site opening up costs		SI - utilities												£15,000	
														per unit			
														£30,000,000			
				S106/S278												£9,275	
														per unit			
														£18,549,984			
														£72,408,949			
2.5		Professional Fees															
2.5.1		as percentage of build costs												12%			
														£17,525,012			
														£17,525,012			
2.6		Contingency															
2.6.1		as percentage of build costs												5%			
														£7,302,088			
														£7,302,088			
2.7		Developer contributions															
2.7.3		CSH Level 4 (applies to sites >0.3ha or with 10+ units, whichever is the higher)												2.5%			
														build cost			
														£3,651,044			
2.7.5		Lifetime homes + BR2013												£953			
														per unit			
														£1,906,000			
														£5,557,044			
2.8		Sale cost															
2.8.1		as percentage of GDV												3.00%			
														£12,925,310			
														£12,925,310			
TOTAL DEVELOPMENT COSTS (including land)														£319,388,989			
3.0		Developers' Profit															
3.1		Private units												20%			
														Gross development value			
														£69,554,745			
3.2		Affordable units												6%			
														Gross development value			
														£4,984,196			
														£74,538,941			
TOTAL PROJECT COSTS (EXCLUDING INTEREST)														£393,927,930			
TOTAL INCOME - TOTAL COSTS (EXCLUDING INTEREST)														£36,915,723			
4.0		Finance Costs															
4.1		Finance												APR			
														7.00%			
														PCM			
														0.565%			
														-£36,915,723			
TOTAL PROJECT COSTS (INCLUDING INTEREST)														£430,843,653			

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Viability and Deliverability of Strategic Sites Stratford-on-Avon District Council

South East Stratford Central		2,500 Units								
ITEM										
Net Site Area		64 Greenfield		Residual Value						
				£858,230 per net ha						
Units		Private	Affordable	Social rent	Intermediate	Shared ownership				
Yield	2,500	1625.00	875.00	525.00	175.00	175.00				
1.0 Development Value										
1.1 Private units				No. of units	Size sq.m	Total sq.m	Epsm	Total Value		
		Flats (NIA)		81.25	55	4,469	£2,143	£9,576,531		
		2 bed house		568.75	70	39,813	£3,250	£129,390,625		
		3 bed house		650.00	80	52,000	£3,250	£169,000,000		
		4+ bed house		325.00	120	39,000	£3,250	£126,750,000		
				1,625.0		135,281				
1.2 Social rent				No. of units	Size sq.m	Total sq.m	Epsm	Total Value		
		Flats (NIA)		91.88	55	5,053	£964	£4,872,981		
		2 bed house		196.88	70	13,781	£1,463	£20,155,078		
		3 bed house		196.88	80	15,750	£1,463	£23,034,375		
		4+ bed house		39.38	120	4,725	£1,463	£6,910,313		
				525.0		39,309				
1.3 Affordable rent				No. of units	Size sq.m	Total sq.m	Epsm	Total Value		
		Flats (NIA)		30.63	55	1,684	£1,179	£1,985,289		
		2 bed house		65.63	70	4,594	£1,788	£8,211,328		
		3 bed house		65.63	80	5,250	£1,788	£9,384,375		
		4+ bed house		13.13	120	1,575	£1,788	£2,815,313		
				175.0		13,103				
1.3 Intermediate				No. of units	Size sq.m	Total sq.m	Epsm	Total Value		
		Flats (NIA)		30.63	55	1,684	£1,393	£2,346,250		
		2 bed house		65.63	70	4,594	£2,113	£9,704,297		
		3 bed house		65.63	80	5,250	£2,113	£11,090,625		
		4+ bed house		13.13	120	1,575	£2,113	£3,327,188		
				175.0		13,103				
Gross Development value								£538,554,567		
2.0 Development Cost										
2.1 Site Acquisition										
2.1.1 Site value (residual land value)								£55,074,374		
		Purchaser Costs						5.7500%		
								58,241,151		
2.3 Build Costs										
2.3.1 Private units				No. of units	Size sq.m	Total sq.m	Cost per sq.m	Total Costs		
		Flats (GIA)		81.25	65	5,281	£993	£5,244,281.25		
		2 bed house		568.75	70	39,813	£891	£35,472,937.50		
		3 bed house		650.00	80	52,000	£891	£46,332,000.00		
		4+ bed house		325.00	120	39,000	£891	£34,749,000		
				1,625		136,094				
2.3.2 Affordable units				No. of units	Size sq.m	Total sq.m	Cost per sq.m	Total Costs		
		Flats (GIA)		153.13	65	9,953	£993	£9,883,453.13		
		2 bed house		328.13	70	22,969	£891	£20,465,156.25		
		3 bed house		328.13	80	26,250	£891	£23,388,750.00		
		4+ bed house		65.63	120	7,875	£891	£7,016,625.00		
				875		67,047				
				2500.00				£182,552,203		
2.4 Construction Costs										
2.4.1 External works as a percentage of build costs				10%		£18,255,220.31				
2.4.2 Site abnormals (remediation/demolition)				£0 per net ha		£0				
2.4.2 Site opening up costs		SI - utilities		£12,000 per unit		£30,000,000				
		S106/S278		£25,004 per unit		£62,509,992				
								£110,765,212		
2.5 Professional Fees										
2.5.1 as percentage of build costs				12%		£21,906,264				
								£21,906,264		
2.6 Contingency										
2.6.1 as percentage of build costs				5%		£9,127,610				
								£9,127,610		
2.7 Developer contributions										
2.7.1 CIL				£0 per unit		£0				
2.7.2 Affordable housing contribution				£0 per unit		£0				
2.7.3 CSH Level 4 (applies to sites >0.3ha or with 10+ units, whichever is the higher)				2.5% build cost		£4,563,805				
2.7.5 Lifetime homes + BR2013				£953 per unit		£2,382,500				
2.7.4 -				£0 -						
								£6,946,305		
2.8 Sale cost										
2.8.1 as percentage of GDV				3.00%		£16,156,637				
								£16,156,637		
TOTAL DEVELOPMENT COSTS (including land)								£405,695,383		
3.0 Developers' Profit										
3.1 Private units				20%		Gross development value		£86,943,431		
3.2 Affordable units				6%		Gross development value		£6,230,245		
								£93,173,676		
TOTAL PROJECT COSTS (EXCLUDING INTEREST)								£498,869,059		
TOTAL INCOME - TOTAL COSTS (EXCLUDING INTEREST)								£39,685,508		
4.0 Finance Costs										
4.1 Finance				APR		PCM				
				7.00%		0.565%		-£39,685,508		
TOTAL PROJECT COSTS (INCLUDING INTEREST)								£538,554,567		
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Appendix C Lower Farm, Stoneythorpe

Site ref	Settlement	Size (ha)
Lower Farm, Stoneythorpe	Southam	37ha
Site Address	Type of site	
Land near Lower Farm, Stoneythorpe, Southam, CV47 2DL	Greenfield	
Current/previous land use	Planning status	
Agriculture	No planning history	
Description of site		
<p>The site is located approximately 1.2km outside of Southam centre along the A425 that connects Southam to Royal Leamington Spa. It comprises predominantly of agriculture land to the south of Lower Farm, which is currently the headquarters for the software producers Codemasters. The land is owned by the founder of the software company that currently exists adjacent to the site, who proposes to create a new, self-sufficient settlement in the vicinity to the company building in the surrounding farmland. The proposed village centre would include a mix of shops and services to local residents including bars, cafés and restaurants. The promoted opportunity would also provide other infrastructure such a primary school and pre-school facility. Neighbouring the proposal there is currently a landfill site owned by Biffa located towards the south west which is separated by a woodland area. The woodland area is exempt from the proposal however much of the landfill site has been remediated with a view to creating a country park near to the south and south west of the proposed development.</p>		
Planning history		
There is no planning history for the proposed site.		
Policy context/ Restrictions		
<p>The site is on previously undeveloped land, containing grade 3 agricultural land which would be lost if developed. The site is located in the open countryside and would currently contravene policy as it is outside the development boundary.</p>		
Physical constraints		
<p>The site is constrained in the north by the A425, and in the West by woodland that separates the site from a landfill site that has ceased operation. The site is also dissected by a public right of way spanning diagonally from the North through to the West of the site. The River Itchen dissects the site North to South and a proportion of the land either side of the river is within the Flood Risk zone 2. A potential constraint on the site is the proposed line of the HS2 that is planned to tunnel along the north of the site south of the A425. This therefore is likely to have an impact on access to the site as direct access to the A425 will require careful consideration.</p>		
Potential impacts		
<p>The ‘Feasibility Study – Air and Noise’, carried out by Mayer Brown, assessed the suitability of the site given the proximity of the A425 and found that noise levels would not adversely affect the site. The study indicated that as baseline noise data are not yet available for HS2 the precise effect cannot yet be calculated however the masterplan for development intends to be designed in such a way as to mitigate these potential impacts. According to the ‘Archaeology and Cultural Heritage Note’, the site does not contain any designated heritage assets. There is only very limited evidence to suggest Prehistoric or Roman activity in the wider area. The Landscape Sensitivity Study states that the site is well contained visually within its landscape context due it’s topography and the surrounding hedgerows and woodland. There are limited to no views into the site from a south or south-westerly direction due to existing woodland. The Ecological Study (2012) identifies the presence of a number of important species and habitats on the site that would necessitate further specie/habitat specific studies.</p>		
Suitability summary		
<p>The site benefits from being located next to an important employer in the district and would therefore offer some degree of sustainability in terms of job provision. The site is considered to be located away from existing services located in Southam, so provision would need to be made on site to address these issues. It is considered that the site is capable of careful design to address, HS2, flood impacts and site access and that the site is in principle a suitable option.</p>		
Availability summary		

The owner has confirmed that the land is available immediately for development. The proposed HS2 offers a potential concern to availability. Site access to the proposal directly crosses the line of HS2 and requires provision of a temporary access and careful timing of delivery. From communication with HS2, the promoter states that access arrangements for the site are acceptable to HS2 Ltd in principle, however HS2 Ltd have requested that the current scheme be redesigned in a manner that takes into account their plans. If achieved, HS2 Ltd have stated that they would be unlikely to object to the site.

Market appraisal / Achievability

The site is a greenfield location that is attractive for private developers. The market for housing in this area is relatively buoyant, underpinned by high sales values of between £2700/sq.m - £3800/sq.m. Land values range from about £2.5m/ha (before deductions for planning obligations and abnormal costs), which is high enough to ensure that planning obligations packages, including affordable housing, as well as abnormal development costs, can be delivered without either threatening the viability of the scheme, or falling below any existing use value. Land values have fallen from the 2007-peak, as a result of the current economic downturn, with many schemes being delayed, but market conditions have improved, and most sites in Stratford-on-Avon District are viable. In the case of this site the owner has stated that he is not seeking to profit from offering this land for redevelopment.

Yield summary

The developer intends to provide a development of 800 homes. The site extends to approximately 37 ha and, assuming a typical net to gross ratio of 55% and an indicative density of 30 dwellings per hectare would indicate a potential number of dwellings in the order of 610 dwellings. The indicative land budget includes 45% for landscaping, transport infrastructure, open space and associated community, education facilities.

Conclusion

Development in this location would be outside defined settlement boundaries, but the site is otherwise considered potentially suitable and available for the creation of a new settlement in principle. The site is relatively unconstrained with the exception of HS2 and flood issues, which would need further consideration. The site is available and considered to be a potentially developable option for a strategic development. The site should be considered further.

