



Review of Financial Viability
Assessment in respect of The
Former Lea Castle Hospital Site
Cookley, Kidderminster
(Commercially Confidential)

Prepared for

**Wyre Forest
District Council**

August 17 2017

1.	Introduction	2
2.	Viability Assessment Assumptions	8
3.	Summary Development Appraisals	33

1. Introduction

Background

- 1.1 This viability appraisal relates to an **outline** planning application (Reference: 17/0205/OUTL) by the Homes & Communities Agency, for the erection of up to 600 dwellings at the site of the Former Lea Castle Hospital Site, Cookley, Kidderminster.
- 1.2 The supporting documents to the planning application, included a Financial Viability Assessment (FVA) prepared by Gerald Eve (GE), which concluded that potentially up to 15% (70% Social Rented and 30% Shared Ownership) affordable housing could be contributed alongside a S106 contribution of around £3.4 million.
- 1.3 GE have express concern in its FVA, however, regarding the apparent marginality of the scheme, and that that this scale of contribution might only be deliverable on the basis of 600 dwellings being delivered, which represented the maximum number of units according to the site capacity assessment conducted by Amec Foster Wheeler. Sense testing of the number of dwellings by GE suggested that the scheme would not be able to deliver this Affordable Housing / Section 106 package on the basis if the site capacity was reduced by just 20 units to 580 dwellings.
- 1.4 As a consequence, the GE FVA states that a discussion is needed with the council on appropriate mechanisms to ensure that viability across the site is protected depending on the level of development that may ultimately come forward through Reserved Matters.
- 1.5 This viability appraisal review by Cushman & Wakefield specifically reviews the submitted FVA, to test this assertion, and whether the approach suggested by GE is justified and necessary, when considered in the context of being consistent with the principles set out the in the National Planning Policy Framework regarding sufficient returns for a “willing landowner” and “willing developer” (para 173).

Site Context

- 1.6 The former Lea Castle Hospital occupies a large, undulating (ranging in elevation by 10m AOD), site of some 120.4 acres (48.7 ha), with mature landscaping, set in an attractive semi- rural location, approximately 4km northeast of Kidderminster town centre and 2km from the village of Cookley.
- 1.7 The site is located just off of Wolverhampton Road (A449) which runs through Kidderminster and connects Wolverhampton to Worcester. The nearby A456 provides access to Birmingham and the M5 motorway. The nearest train station is located approximately 5km away in Kidderminster.
- 1.8 The site was originally developed as a psychiatric hospital and comprises a mix of one and two storey buildings. The hospital buildings have an estimated footprint of approx. 270,862 sq. ft. (25,164 sq. m), with a gross floor area of approx. 329,378 sq. ft. (30,600 sq. m). These remaining buildings range from small bungalows to larger three storey buildings, and an 18 metre high fire tower, all of which we understand are now redundant and derelict. The planning pitches to the south of the site, together with an associated clubhouse, remain in use, we understand, by Mostyn Rangers Football Club.

1.9 The nearest schools to the site are as follows:

Primary Schools

- Cookley Sebright Primary School within the village centre, approximately 2.2km from the site,
- St Oswald's CofE Primary School, 2.5km south of the site within North Kidderminster, and,
- Wolverley Sebright VA Primary School, approximately 3km to the west

Secondary Schools

- Holy Trinity School, approximately 3.3km to the south-west, and,
- Wolverley CofE Secondary School approximately 3.7km west of the site.

The Proposal

1.10 The proposal is to seek outline planning permission for residential development of up to 600 dwellings and up to 37,673 sq. ft. (3,500 sq. m) of Class B1 employment uses, 1,614 sq. ft. (150 sq. m) local shop/café, public open space, and associated drainage and infrastructure.

1.11 All matters apart from access will be reserved.

1.12 The net developable area for the residential element is 16.93 ha, with the proposed employment and local centre use occupying 1.19ha. The majority of the remainder of the 48.65ha site will be green infrastructure and open space (27.23ha), together with the retainment of 2.6 ha of formal sports pitches towards the south of the site. An illustrative land use plan, extracted from the Design & Access Statement, is presented below.



1.13 On the basis that up to 600 dwellings are proposed, this works out at the equivalent of 35 dwellings per hectare (35 dph or 14 dw/acre), across the 16.93 hectares proposed for residential development.

- 1.14 As stated above, however, GE have suggested that whilst a maximum of 600 dwellings forms the basis of the planning application, they believe that it is possible that a commercial developer may only build out 580 dwellings across the scheme (i.e. build out across the same net developable area but at a slightly lower density), subject to commercial considerations, which would work out at 34dph (14 dw/acre) across the same 16.93 hectares proposed for residential development.
- 1.15 It is noted that the GE FVA Report states that, assuming 600 dwellings, the density (on a net basis) is around 12-13 dwellings per acre (30 to 32 dph). The basis of how this figure has been calculated is not clear.
- 1.16 GE has calculated an average size for the private dwellings of 1,114sqft, based on the following mix.

Unit Type	Percentage of scheme	Sq. ft. per unit	Number of units	Total sq. ft.
2 bed houses	25%	800	150	120,000
3 bed houses	35%	1000	210	210,000
4 bed houses	34%	1340	204	273,360
5 bed houses	6%	1800	36	64,800
	100%		600	668,160
			Average Size:	1,114

Source: GE

- 1.17 For the record, analysis of the actual viability appraisals, suggests an average size of 1,169sqft. This forms the basis of our analysis and presentation of density and coverage, below.

No. Dwellings	Development Coverage Based on Market Dw – 1,169sqft / Social Rented – 770sqft / Intermediate - 754sqft)	Net Developable (Residential)		Dwellings per hectare (dph)	Development Coverage (sqft) per Acre
		Hectares	Acres		
600dw @ 15% Affordable	665,028sqft	16.93	41.83	35.4 dph	15,898 sqft / acre
580dw @ 15% Affordable	642,954sqft	16.93	41.83	34.2 dph	15,370 sqft / acre

- 1.18 The development coverage figures are slightly on the high side. For this location we would suggest a development coverage of no more than around 15,000sqft/acre. We sense tested an average open

market dwelling size of 1,114sqft, as actually set out in the GE FVA Report. On this basis, the revised coverage figures are as follows.

No. Dwellings	Development Coverage Based on Market Dw – 1,169sqft / Social Rented – 770sqft / Intermediate - 754sqft)	Net Developable (Residential)		Dwellings per hectare (dph)	Development Coverage (sqft) per Acre
		Hectares	Acres		
600dw @ 15% Affordable	637,008 sqft	16.93	41.83	35.4 dph	15,228 sqft / acre
580dw @ 15% Affordable	615,776 sqft	16.93	41.83	34.2 dph	14,721 sqft / acre

- 1.19 This range of figures of 14,721sqft / acre to 15,228sqft/acre is closer to where we would expect the coverage per acre to be.

Site Condition

Contamination

- 1.20 Phase 1B Geo-Environmental Report was prepared in January 2016, which follows a preliminary ground investigation and contamination assessment undertaken in 2013. The conceptual model identified fourteen potentially significant contaminant linkages on-site for receptors including current site users, future property and controlled waters (principal aquifer). The identified potential contaminant linkages mostly relate to sources in the west of the site including the historical laundry, workshop/ garage, waste area and heating infrastructure. Identified pathways include inhalation of gases, vapours and fibres, dermal contact and ingestion. Pathways to water resources are via migration and leaching.
- 1.21 The majority of the site has been investigated, and limited contamination has been encountered. However, further investigation is, we understand, recommended in the vicinity of the historical laundry, workshop/garage, waste area and heating infrastructure in the west of the site.
- 1.22 Further testing of soils beneath the building footprints is, we understand, recommended once buildings have been demolished. It is known that asbestos is present in current buildings on-site and potentially within service tunnels.
- 1.23 Based on the previous investigations carried out at the site and the identified potentially significant pollutant linkages, we understand that it is considered that the site can be made suitable for a range of uses including for the most sensitive of uses, i.e. residential. This does not specifically impact on the design of the scheme.

Utilities

- 1.24 We understand from the D&A statement that being a former hospital, there are a number of existing services on the site, and that these services will be utilised as part of the development where possible, but will be removed where this cannot be achieved. A summary description of existing services is set out below

Services	Description
Gas Supply	<p>A low pressure gas main is present across much of the north, east and west of the site, largely present beneath road infrastructure with branches off to buildings.</p> <p>A medium pressure gas main is present in the south of the site, largely parallel to Lea Castle Drive orientated north south, veering eastward toward a gas governor station in the centre of the site. A further gas governor station is present in the north of the site.</p>
Electrical supply	High voltage overhead electrical cables are present in a central band across the site orientated in multiple directions, leading to three electrical substations located in the centre, north and in proximity to the laundry in the west of the site.
Water supply	A private water main is present in the south and north of the site and as a series of branches to buildings within the centre of the site. A public water main is present across the north of the site, largely orientated east west.
Foul drainage	Private foul and surface water sewers are present across the site leading to the majority of buildings and orientated in multiple directions.
Surface Water Drainage	We understand from the Drainage Strategy, that the existing development incorporates an existing surface water drainage system that connects the on-site road network and buildings. This drainage system heads southwest towards the existing playing fields before turning due south and exiting the site across Wolverhampton Road. The results of the assessment show that the preferred solutions for accommodating the surface water run-off from the proposed site will incorporate source control, filtration and retention by the means of swales, retention ponds, filter strips, permeable paving and bio-retention areas.
Communications	A BT Communication cable is located in the north west of the site, in two branches orientated east west and north south. A small section of BT Cable is also present in proximity to the Park Gate Centre, location on the southern edge of buildings in the centre of the site.
Service tunnels	<p>Service tunnels that connected various facilities to deliver district heating systems and to allow the conveyance of other services are present on the site. The service tunnels link buildings on the site and in places there are access covers into the duct. A Ground Penetrating Radar (GPR) survey was undertaken in September 2016 to establish the exact location of these.</p> <p>No structural condition or asbestos surveys have been undertaken for the tunnels. Given the age of construction and the prevalence of asbestos containing materials in construction during the 1960s, it is reasonable to assume that pipe gaskets and insulation contained asbestos is present in the tunnel. This will affect how they are removed prior to development. The location of the tunnels does not however affect the design of the scheme.</p>

- 1.25 With regard to the presence of existing utilities/services already on-site, it is established that this is a key benefit for the scheme. The Design & Access reports that discussions have taken place with the Utility

Providers to establish the capacity of existing utilities to serve the additional demand from the site once it is developed. Where additional capacity/upgrades are required, the developer will pay for these upgrades.

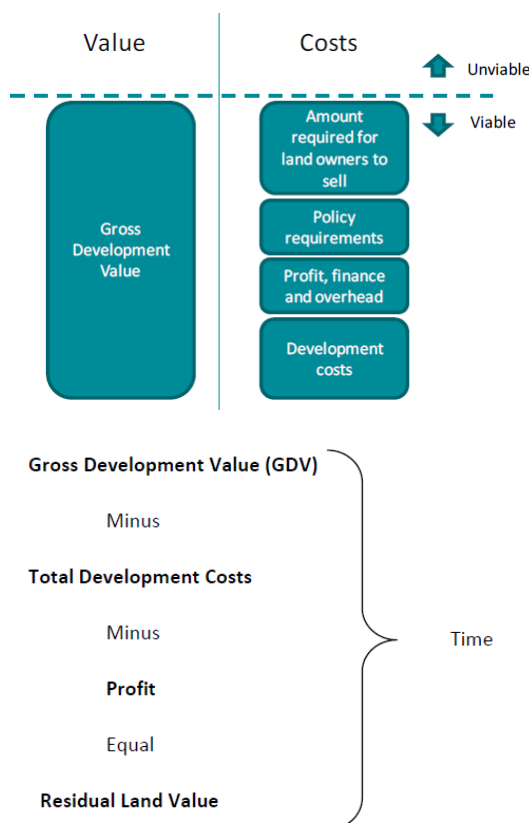
The outcome of discussions is summarised below.

Service	Requirement
Gas Supply	National Grid (Gas) have confirmed that the site can be served from the existing medium pressure gas main that runs along Lea Castle Drive. A point of connection has been identified.
Electrical supply	Western Power Distribution (Electricity) have confirmed that the site can be served and that 3 new substations will be required on-site.
Water supply	Severn Trent has indicated that upgrades are likely with regard to water supply, surface water drainage and foul water drainage.
Foul drainage	
Communications	BT Openreach (telecoms) have confirmed that the site can be served fibre broadband of a maximum anticipated speed of 300 MB.

2. Viability Assessment Assumptions

The Method of Assessment

- 2.1 The applicant provided C&W with a copy of their appraisal summary and assumptions, and C&W recreated the appraisal in Argus Circle Developer format, accepted as the industry standard development appraisal software.
- 2.2 The method of assessment used when assessing development schemes is the residual method, which has the following broad structure:



- 2.3 The key to a development being deemed viable is to ensure that the costs of a scheme do not outweigh the value. The land owner and the developer have to be appropriately rewarded to enable development to proceed but the policy requirements of the Local Authority also have to be met in so far as possible. Any imbalance in the above would result in the scheme being stalled or not delivered. The influence of time and development cashflows in this process can be key to causing an imbalance in cost and value.
- 2.4 Each of the elements stated above will now be considered and the assumptions made by the applicant tested.

Gross Development Value - Residential

- 2.5 Gerald Eve have adopted a figure of £225 psf for anticipated sales vales, across an average unit size of 1,114 sq ft.
- 2.6 We have reviewed recent sales evidence in the local area below:

RESIDENTIAL SALES EVIDENCE

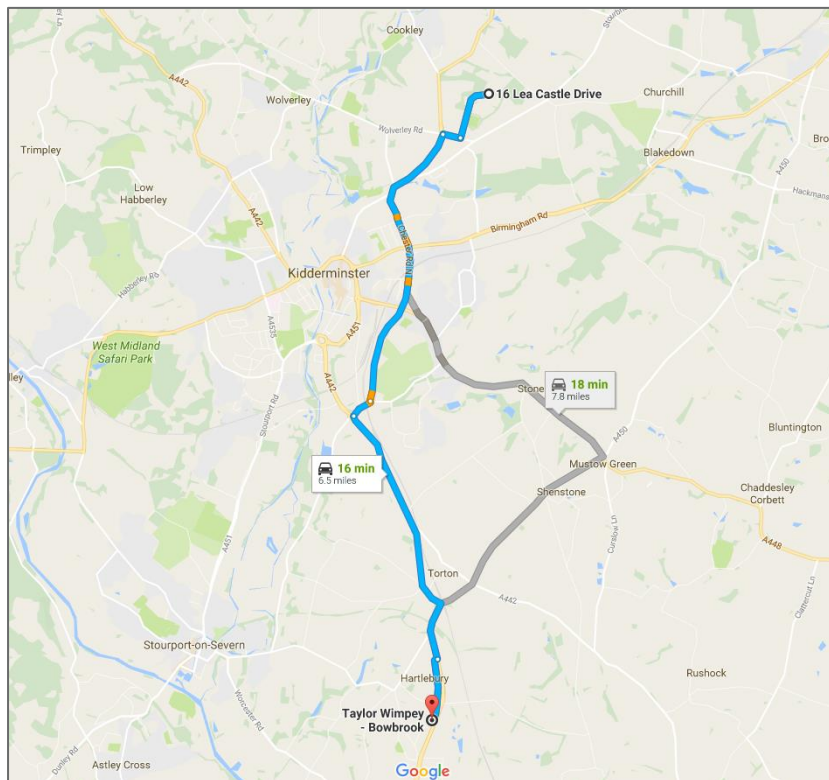
Second-hand sales evidence within 0.5 miles of the site

- 2.7 The sales evidence below shows a price differential of approximately a 10-20% premium being achieved for new-build dwellings above that achieved for good second-hand dwellings within Kidderminster.

Address	House Type	Approx. GIA (sq ft)	Approx. GIA (sq m)	Date Sold	Net Sales Price	£ per sq ft
11 Lionfields Road, Cookley, Kidderminster, DY10 3UG	Semi-Detached (2 Beds)	764	71	03/03/2017	£130,000	£170
32 The Crescent, Cookley, Kidderminster, DY10 3RY	Semi-Detached (3 Beds)	958	89	27/02/2017	£216,500	£226
10 Lionfields Road, Cookley, Kidderminster, DY10 3UG	Terraced (2 Beds)	710	66	24/02/2017	£147,000	£207
5 Staite Terrace, Cookley, Kidderminster, DY10 3UA	Terraced (2 Beds)	484	45	13/02/2017	£119,500	£247
28 Kimberlee Avenue, Cookley, Kidderminster, DY10 3TN	Semi-Detached (3 Beds)	969	90	10/02/2017	£214,000	£221
4 Staite Terrace, Cookley, Kidderminster, DY10 3UA	Semi-Detached (2 Beds)	527	49	02/02/2017	£125,000	£237
14 Portway Place, Cookley, Kidderminster, DY10 3UJ	Terraced (2 Beds)	603	56	06/01/2017	£145,000	£241
21 The Crescent, Cookley, Kidderminster, DY10 3RY	Semi-Detached (3 Beds)	893	83	07/10/2016	£194,000	£217
220 Stourbridge Road, Kidderminster, DY10 2UY	Semi-Detached (3 Beds)	883	82	14/10/2016	£159,000	£180
245 Stourbridge Road, Kidderminster, DY10 2XB	Semi-Detached (3 Beds)	1,152	107	21/10/2016	£212,500	£185
15 Dunnington Avenue, Kidderminster, DY10 2YS	Semi-Detached (4 Beds)	872	81	22/09/2016	£165,000	£189
49 Dunnington Avenue, Kidderminster, DY10 2YT	Semi-Detached (3 Beds)	850	79	19/12/2016	£127,500	£150
51 Dunnington Avenue, Kidderminster, DY10 2YT	Semi-Detached (3 Beds)	743	69	24/02/2017	£138,000	£186
2 Ismere Way, Kidderminster, DY10 2YG	Semi-Detached (2 Beds)	861	80	13/01/2017	£115,000	£134
Average - All						£199
Average - 2 Bed						£206
Average - 3 Bed						£195
Average - 4 Bed						£189

Bowbrook Old Worcester Road, Hartlebury (Taylor Wimpey)

- 2.8 Two, three, four and five bedroom properties located in the village of Hartlebury to the south of Kidderminster.

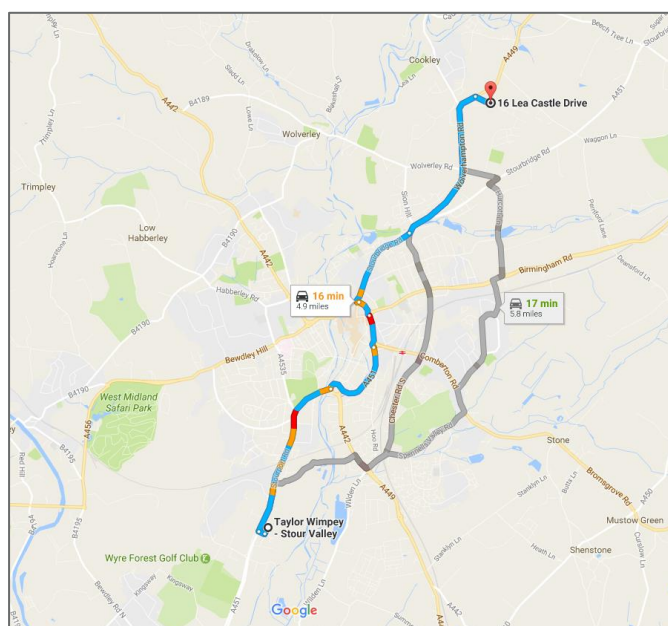


Address	House Type	Approx. GIA (sq ft)	Approx. GIA (sq m)	Date Sold	Net Sales Price	£ per sq ft
3, Bolas Avenue, Hartlebury, Kidderminster, DY11 7TX	Detached (4 Bed)	1,216	113	12/08/2016	£305,000	£251
6, Bolas Avenue, Hartlebury, Kidderminster, DY11 7TX	Detached (4 Bed)	1,345	125	30/09/2016	£340,995	£253
7, Groves Way, Hartlebury, Kidderminster, DY11 7TU	Detached (4 Bed)	1,345	125	06/05/2016	£339,995	£253
16, Bolas Avenue, Hartlebury, Kidderminster, DY11 7TX	Detached (4 Bed)	1,442	134	23/12/2016	£349,995	£243
1, Bolas Avenue, Hartlebury, Kidderminster, DY11 7TX	Detached (4 Bed)	1,442	134	29/07/2016	£364,995	£253
2, Bolas Avenue, Hartlebury, Kidderminster, DY11 7TX	Detached (4 Bed)	1,550	144	01/06/2016	£382,995	£247

Address	House Type	Approx. GIA (sq ft)	Approx. GIA (sq m)	Date Sold	Net Sales Price	£ per sq ft
4, Groves Way, Hartlebury, Kidderminster, DY11 7TU	Detached (4 Bed)	1,550	144	15/04/2016	£379,995	£245
10, Groves Way, Hartlebury, Kidderminster, DY11 7TU	Detached (5 Bed)	1,765	164	21/12/2016	£376,495	£213
9, Groves Way, Hartlebury, Kidderminster, DY11 7TU	Detached (5 Bed)	1,765	164	02/12/2016	£379,995	£215
9, Bolas Avenue, Hartlebury, Kidderminster, DY11 7TX	Detached (5 Bed)	1,765	164	30/09/2016	£419,995	£238
4, Bolas Avenue, Hartlebury, Kidderminster, DY11 7TX	Detached (5 Bed)	1,765	164	12/08/2016	£416,995	£236
18, Bolas Avenue, Hartlebury, Kidderminster, DY11 7TX	Detached (5 Bed)	1,873	174	16/12/2016	£429,995	£230
12, Bolas Avenue, Hartlebury, Kidderminster, DY11 7TX	Detached (5 Bed)	1,873	174	25/11/2016	£439,995	£235
8, Groves Way, Hartlebury, Kidderminster, DY11 7TU	Detached (5 Bed)	1,873	174	30/09/2016	£434,995	£232
14, Bolas Avenue, Hartlebury, Kidderminster, DY11 7TX	Detached (5 Bed)	1,873	174	30/09/2016	£454,995	£243
6, Groves Way, Hartlebury, Kidderminster, DY11 7TU	Detached (5 Bed)	1,873	174	17/06/2016	£435,995	£233
6, Whitley Close, Hartlebury, Kidderminster, DY11 7TY	Detached (5 Bed)	1,959	182	22/12/2016	£481,995	£246
Average - All						£239
Average < 1,200 and < 1,600 sq ft						£249
Average > 1,600 and < 2,000 sq ft						£232
Average - 4 Bed						£249
Average - 5 Bed						£232

Stour Valley, Stourport Road, Kidderminster (Taylor Wimpey / Bovis Homes)

- 2.9 Two, three and four bedroom properties located to the south west of Kidderminster along Stourport Road.
- 2.10 We consider this development to be the best comparison to the subject site because it is a large volume housebuilder development, similar in terms of the scale and the type of developers which would be attracted to the development being proposed at the subject site. However, the subject site is in a superior location to Stour Valley, being to the north east of Kidderminster and providing better access into Stourbridge and Birmingham.

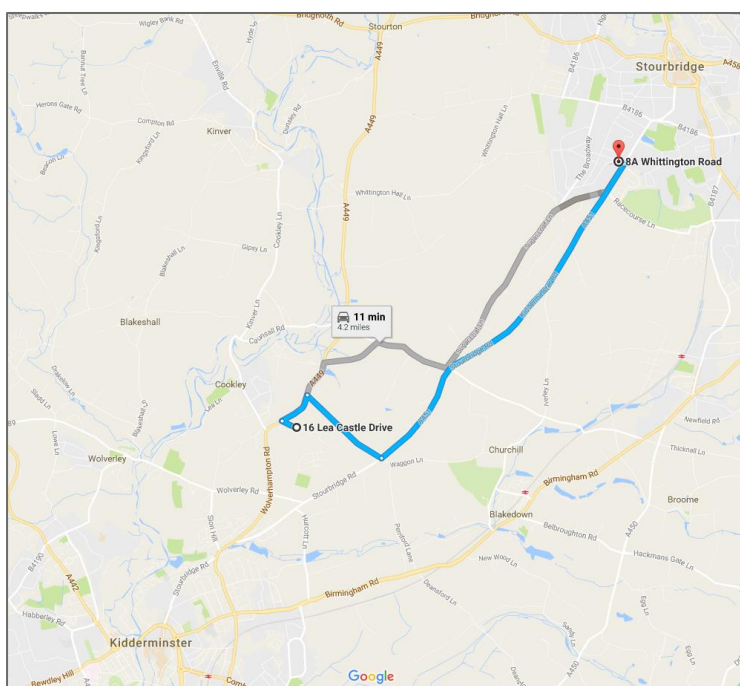


Address	House Type	Approx. GIA (sq ft)	Approx. GIA (sq m)	Date Sold	Net Sales Price	£ per sq ft
7, Wigse Avenue, Kidderminster, DY11 7FD	Detached (3 Bed)	915	85	20/01/2017	£219,995	£240
5, Wigse Avenue, Kidderminster, DY11 7FD	Detached (4 Bed)	1,076	100	07/12/2016	£238,995	£222
9, Wigse Avenue, Kidderminster, DY11 7FD	Detached (4 Bed)	1,076	100	09/12/2016	£233,995	£217
14, Wigse Avenue, Kidderminster, DY11 7FA	Detached (4 Bed)	1,076	100	16/12/2016	£239,500	£223
12, Wigse Avenue, Kidderminster, DY11 7FA	Detached (4 Bed)	1,227	114	21/12/2016	£267,995	£218
6, Falling Sands Close, Kidderminster, DY11 7AT	Detached (4 Bed)	1,324	123	16/12/2016	£299,999	£227
10, Wigse Avenue, Kidderminster, DY11 7FA	Detached (4 Bed)	1,442	134	21/12/2016	£299,995	£208
7, Falling Sands Close, Kidderminster, DY11 7AT	Detached (5 Bed)	1,765	164	21/12/2016	£360,000	£204
Average - All						£220

Address	House Type	Approx. GIA (sq ft)	Approx. GIA (sq m)	Date Sold	Net Sales Price	£ per sq ft
					Average > 900 and < 1,200 sq ft	£226
					Average < 1,200 and < 1,600 sq ft	£218
					Average > 1,600 and < 2,000 sq ft	£204
					Average - 3 Bed	£240
					Average - 4 Bed	£219
					Average - 5 Bed	£204

Oriel, Norton Close, Stourbridge (Kendrick Homes)

- 2.11 A small development of 14 dwellings in Stourbridge, comprising 4 and 5 bedroom detached houses. This development by Kendrick Homes will achieve higher sales values than at the subject site due to its smaller size, higher specification of dwellings and more attractive location within Stourbridge, compared to a development on the outskirts of Kidderminster.

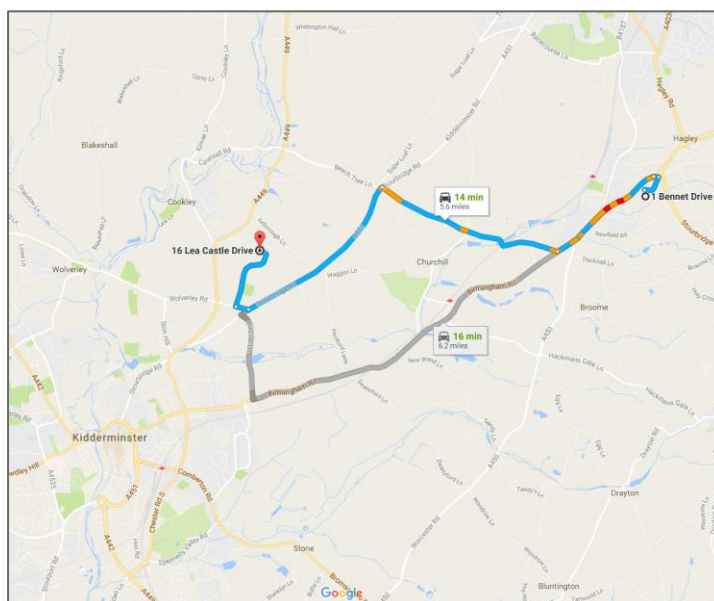


Address	House Type	Approx. GIA (sq ft)	Approx. GIA (sq m)	Date Sold	Net Sales Price	£ per sq ft
1, Whittington Road, Stourbridge, DY8 3BL	Detached (4 Bed)	1,313	122	06/10/2015	£395,000	£301
7, Whittington Road, Stourbridge, DY8 3BL	Detached (4 Bed)	1,625	151	14/03/2017	£465,000	£286
5, Whittington Road, Stourbridge, DY8 3BL	Detached (4 Bed)	1,625	151	22/04/2016	£437,000	£269

Address	House Type	Approx. GIA (sq ft)	Approx. GIA (sq m)	Date Sold	Net Sales Price	£ per sq ft
8, Norton Close, Stourbridge, DY8 3DF	Detached (5 Bed)	2,045	190	14/10/2016	£552,000	£270
2, Norton Close, Stourbridge, DY8 3DF	Detached (5 Bed)	2,045	190	01/07/2016	£545,000	£266
7, Norton Close, Stourbridge, DY8 3DF	Detached (5 Bed)	2,045	190	20/05/2016	£555,000	£271
3, Norton Close, Stourbridge, DY8 3DF	Detached (5 Bed)	2,045	190	14/04/2016	£545,000	£266
10, Norton Close, Stourbridge, DY8 3DF	Detached (5 Bed)	2,045	190	02/02/2016	£575,000	£281
6, Norton Close, Stourbridge, DY8 3DF	Detached (5 Bed)	2,045	190	30/09/2015	£575,000	£281
5, Norton Close, Stourbridge, DY8 3DF	Detached (5 Bed)	2,110	196	22/06/2016	£549,500	£260
9, Norton Close, Stourbridge, DY8 3DF	Detached (5 Bed)	2,110	196	17/06/2016	£557,000	£264
Average - All						£274
Average < 1,200 and < 1,600 sq ft						£301
Average > 1,600 and < 2,200 sq ft						£272
Average - 4 Bed						£285
Average - 5 Bed						£270

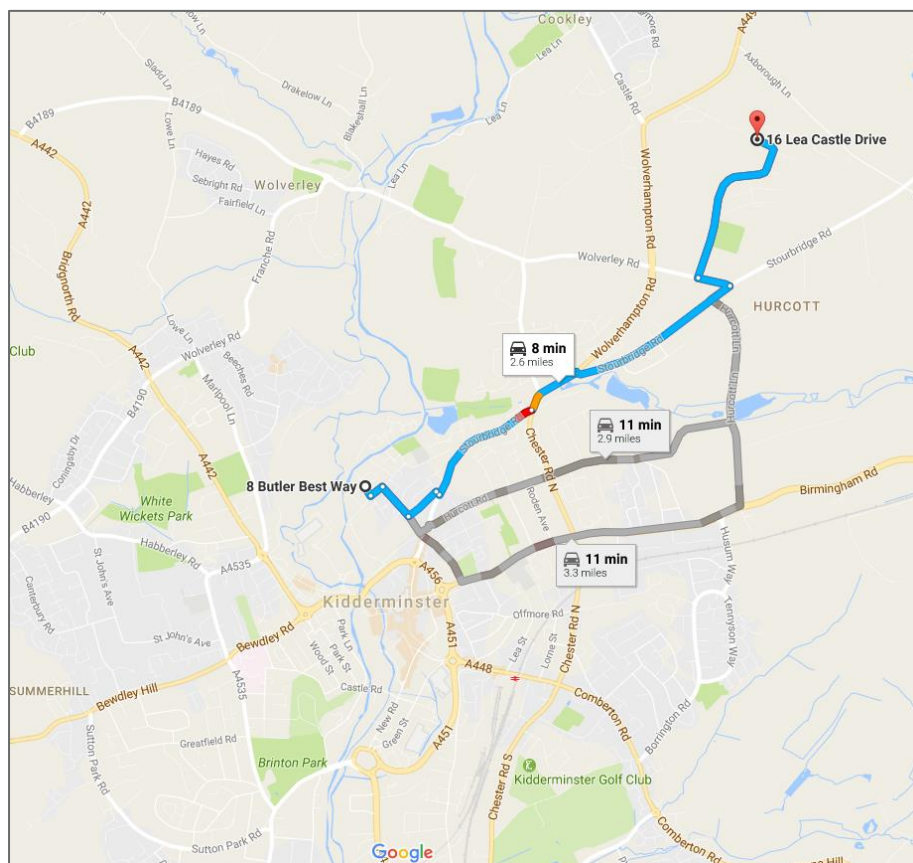
Wychbury Fields, Hagley (Cala Homes and Bromford Homes)

- 2.12 A large development to the south of Hagley, we would expect that this location, as a more desirable and sought after area, to achieve higher sales values than a development within Kidderminster.



Address	House Type	Approx. GIA (sq ft)	Approx. GIA (sq m)	Date Sold	Net Sales Price	£ per sq ft
19, Dugdale Close, Hagley, Stourbridge, DY9 0WD	Detached (3/4 Bed)	1,033	96	01/06/2016	£337,000	£326
15, Dugdale Close, Hagley, Stourbridge, DY9 0WD	Detached (4 Bed)	1,389	129	10/05/2016	£410,000	£295
19, Bennett Drive, Hagley, Stourbridge, DY9 0WA	Detached (4 Bed)	1,389	129	06/05/2015	£400,000	£288
18, Dugdale Close, Hagley, Stourbridge, DY9 0WD	Detached (4 Bed)	1,582	147	29/06/2016	£484,950	£306
12, Dugdale Close, Hagley, Stourbridge, DY9 0WD	Detached (4 Bed)	1,582	147	27/05/2016	£493,950	£312
6 Dugdale Close, Hagley, Stourbridge, DY9 0WD	Detached (4 Bed)	1,658	154	26/05/2016	£432,500	£261
11, Dugdale Close, Hagley, Stourbridge, DY9 0WD	Detached (4 Bed)	1,658	154	16/05/2016	£506,000	£305
17, Dugdale Close, Hagley, Stourbridge, DY9 0WD	Detached (5 Bed)	2,120	197	16/12/2016	£599,950	£283
29, Bennett Drive, Hagley, Stourbridge, DY9 0WA	Detached (5 Bed)	2,120	197	25/11/2016	£589,950	£278
21, Bennett Drive, Hagley, Stourbridge, DY9 0WA	Detached (5 Bed)	2,120	197	30/06/2016	£554,950	£262
22, Dugdale Close, Hagley, Stourbridge, DY9 0WD	Detached (5 Bed)	2,228	207	29/06/2016	£600,000	£269
21, Dugdale Close, Hagley, Stourbridge, DY9 0WD	Detached (5 Bed)	2,540	236	29/09/2016	£600,000	£236
Average - All						£285
Average > 900 and < 1,200 sq ft						£326
Average < 1,200 and < 1,600 sq ft						£301
Average > 1,600 and < 2,700 sq ft						£271
Average - 3 Bed						£326
Average - 4 Bed						£295
Average - 5 Bed						£266

Goodwin Park / Keepers Lock, Stoney Lane, Kidderminster (Barratt Homes and Bellway)



Address	House Type	Approx. GIA (sq ft)	Approx. GIA (sq m)	Date Sold	Net Sales Price	£ per sq ft
4, Limekiln Court, Clensmore Street, Kidderminster, DY10 2AL	Flat (2 Bed)	560	52	11/04/2016	£110,245	£197
10, Limekiln Court, Clensmore Street, Kidderminster, DY10 2AL	Flat (2 Bed)	560	52	24/03/2016	£107,500	£192
63, Clensmore Street, Kidderminster, DY10 2AF	Semi-Detached (3 Bed)	753	70	22/04/2016	£169,995	£226
7 Stoney Lane, Kidderminster, DY10 2LR	Terraced (3 Bed)	753	70	23/10/2015	£158,000	£210
25, Westcott Road, Kidderminster, DY10 2GE	Terraced (3 Bed)	829	77	26/06/2015	£139,950	£169
2, Westcott Road, Kidderminster, DY10 2GE	Terraced (3 Bed)	829	77	24/06/2015	£164,450	£198

Address	House Type	Approx. GIA (sq ft)	Approx. GIA (sq m)	Date Sold	Net Sales Price	£ per sq ft
35, Westcott Road, Kidderminster, DY10 2GE	Terraced (3 Bed)	829	77	18/06/2015	£159,950	£193
38, Westcott Road, Kidderminster, DY10 2GE	Terraced (3 Bed)	829	77	08/06/2015	£149,950	£181
44, Westcott Road, Kidderminster, DY10 2GE	Terraced (3 Bed)	829	77	29/05/2015	£159,950	£193
61 Clensmore Street, Kidderminster, DY10 2AF	Semi-Detached (3 Bed)	861	80	24/03/2016	£176,000	£204
79, Clensmore Street, Kidderminster, DY10 2AF	Terraced (3 Bed)	861	80	02/07/2015	£176,500	£205
87, Clensmore Street, Kidderminster, DY10 2AF	Terraced (3 Bed)	861	80	19/06/2015	£178,500	£207
11, Stoney Lane, Kidderminster, DY10 2LR	Detached (4 Bed)	1,163	108	05/04/2016	£210,000	£181
89, Clensmore Street, Kidderminster, DY10 2AF	Detached (4 Bed)	1,163	108	18/03/2016	£210,000	£181
3 Stoney Lane, Kidderminster, DY10 2LR	Detached (4 Bed)	1,163	108	04/03/2016	£210,000	£181
17, Butler Best Way, Kidderminster, DY10 2GA	Detached (4 Bed)	1,163	108	17/07/2015	£219,995	£189
46, Westcott Road, Kidderminster, DY10 2GE	Detached (4 Bed)	1,216	113	26/06/2015	£229,950	£189
11, Butler Best Way, Kidderminster, DY10 2GA	Detached (4 Bed)	1,249	116	10/12/2015	£232,000	£186
1, Stoney Lane, Kidderminster, DY10 2LR	Detached (4 Bed)	1,292	120	04/09/2015	£240,000	£186
Average - All						£193
Average < 900 sq ft						£198
Average > 900 and < 1,200 sq ft						£183
Average < 1,200 and < 1,600 sq ft						£187
Average - 2 Bed						£195

APPROPRIATE £/SQFT (OPEN MARKET SALES)

2.13 Based on the above analysis, it is our view that the following values are achievable.

Unit Type	Percentage of Scheme	Sq Ft Per Unit	Number of Units	Total Sq Ft	£ per Sq Ft	Value Per Unit	Total Value
2 Bed Houses	25%	800	150	120,000	£250	£200,000	£30,000,000
3 Bed Houses	35%	1,000	210	210,000	£230	£230,000	£48,300,000
4 Bed Houses	34%	1,340	204	273,360	£223	£299,000	£60,996,000
5 Bed Houses	6%	1,800	36	64,800	£205	£369,000	£13,284,000
		Total	600	668,160			£152,580,000
		Average		1,114	£228	£254,300	

AFFORDABLE HOUSING TRANSFER VALUES

2.14 GE approached a number of Registered Providers regarding affordable housing transfer values, and of these, Oakleaf commercial responded. Assuming average sized units of 802sqft, and an open market value (OMV) of £220/sqft, Oakleaf commercial provided the following transfer values.

- Social Rented, £126/sqft (equivalent to 57% OMV)
- Shared Ownership, £166/sqft (equivalent to 76% OMV)

2.15 GE applied these £/sqft transfer value rates to the submitted financial viability appraisal. These £/sqft transfer rates were applied to average house sizes by tenure, calculated by applying a housing mix based on housing needs data:

- Social Rented tenure, assuming an average size of 766sqft
- Shared Ownership, assuming an average size of 754sqft

2.16 Expressed against the OMV rate adopted by GE (for open market dwellings with a larger average size of 1,114/sqft), the transfer values expressed as a % of the OMV rate adopted of £225/sqft, is as follows

- Social Rented tenure (average size of 766sqft) : 56% of OMV
- Shared Ownership (average size of 754sqft): 74% OMV.

2.17 On the face of it, these transfer value rates seem quite high. Notwithstanding this, the average size of the affordable units (around 760sqft) are clearly smaller than the average size of the open market units (1,114sqft), which will have an upward bearing on the £/rate in this location. It is appropriate when benchmarking transfer values to adopt a like for like rate, considering units of comparable size.

2.18 Assuming the unit sizes and mix adopted by GE, and applying the equivalent open market rates adopted by C&W, we present the following analysis:

ANALYSIS OF SOCIAL RENT TRANSFER VALUES											
		SR sqft	Open Market £/sqft	OMV/dw	Gerald Eve number (Social Rent)	OMV Equiv. Aggregate	Gerald Eve Social Rent Rate	% OMV by size	Agg Social Rent Value	Agg sqft	Mean £/sqft
2 bed		731.68	£250	£182,920	92	£16,828,640	£126.23	50%	£8,497,117	67,315	
3 bed		871.56	£230	£200,459	20	£4,009,176	£126.23	55%	£2,200,340	17,431	
4 bed		1011.44	£223	£225,551	3	£676,653	£126.23	57%	£383,022	3,034	
5 bed		1258.92	£205	£258,079	2	£516,157	£126.23	62%	£317,827	2,518	
					117	£22,030,627			£11,398,306	90,298	£126.23
							% of OMV	52%			

2.19 This analysis suggests that the transfer value adopted by GE for the Social Rented tenure housing is around 52% of the open market value of the equivalent open market product. This may seem on the high side, however:

- the Open Market £/sqft rates with which the affordable £/sqft rates are compared with, assume larger dwellings for 2 and 3 bedroom homes. If the £/sqft OMV rate was adjusted upwards to account for dwellings of same size as the affordable homes, then the OMV £/sqft rate would increase. By implication the transfer value for the Social Rented homes as a % of OMV, would decrease from the current apparent % of 52%.
- Also, it should be noted that the Oakleaf values for Social Rented, at £126/sqft for a 802sqft dwelling (broadly similar to the 770sqft that GE have assumed in the FVA), represent 57% of the Oakleaf assumed open market value of the same dwelling)

ANALYSIS OF SHARED OWNERSHIP TRANSFER VALUES											
		SO sqft	Open Market £/sqft	OMV/dw	GE number (S/O)	OMV Equiv. Aggregate	GE S/O Rate	% OMV by size	Agg S/O Value	Agg sqft	Mean £/sqft
2 bed		731.68	£250	£182,920	34	£6,219,280	£165.83	66%	£4,125,373	24,877	
3 bed		871.56	£230	£200,459	2	£400,918	£165.83	72%	£289,062	1,743	
4 bed		1011.44	£223	£225,551	2	£451,102	£165.83	74%	£335,454	2,023	
5 bed		1258.92	£205	£258,079	0	£0	£165.83	81%	£0	0	
					38	£7,071,300			£4,749,889	28,643	£165.83
							% of OMV	67%			

2.20 This analysis suggests that the transfer value adopted by GE for the Shared Ownership tenure housing is around 67% of the open market value of the equivalent open market product. This falls within the bracket we would expect, which is up to 70% of OMV. Notwithstanding this, it must be considered that the Open Market £/sqft rates they are compared with assume larger dwellings for 2 and 3 bedroom homes – if the £/sqft OMV rate was adjusted upwards to account for dwellings the same size as the affordable homes, then the OMV £/sqft rate would increase, and by implication the transfer value for the Shared Ownership homes as a % of OMV, would decrease from the current apparent % of 67%.

Gross Development Value – Commercial / Community Land

- 2.21 Provision is made in the planning application for up to 3,350sqm of Class B1 employment uses, and 150sqm of Class A1/A3/D1 uses (local shop/café/community space i.e. a small local centre). The proposed land use budget included within the Planning Statement allows for 1.19 hectares (2.94 acres) for this commercial land.
- 2.22 On the basis of the proposed 3,350sm of B1 space, our estimate is that up to some 2 acres (of the 2.94 acres of commercial / community land) will be for B1 space, with the balance accommodating a small local centre (A1/A3/D1).
- 2.23 For the purposes of the FVA, GE have assumed a blended value for this commercial land of just over £50,000 / acre. Assuming the notional, circa 0.94 acre local centre (A1/A3/D1) would be cost neutral at best, this rate, at just over five times likely agricultural value is reasonable given the peripheral location of the proposed employment land.

Total Development Costs

BUILD COSTS

- 2.24 GE have applied a house build cost of £83.43/sqft, which it refers to as the lower quartile rate (for new build estate housing) from the BCIS. Added to this, a 10% allowance for external costs has been applied, bringing the apparent, normal (i.e. excluding abnormals) build costs to £91.77/sqft.

	£/sqft
House Build	£83.43
External Works @ 10%	£8.34
Build Costs	£91.77

- 2.25 On a prima facie basis, this build cost of just under £92/sqft, is reasonable for a scheme of this scale, which would attract a national housebuilder and where on site economies of scale will also be achievable.
- 2.26 Notwithstanding this, the detailed cost review undertaken by G&T suggested that the AMEC costings (which are classified as abnormal costs in the GE FVA) also include ordinary development costs associated with residential development plots including internal (estate) roads, footpaths and street lighting, and associated utility connections.
- 2.27 On this basis, the apparent “normal” build cost of £91.77/sqft, stated by GE in the FVA, is an underrepresentation of the true “normal” residential plot costs contained in the GE FVA, these apparently being spread, incorrectly, between the “normal” build costs (£91.77/sqft proposed by GE) and the abnormal build costs (Estimated by AMEC, see below). The implications of this are further considered at paragraph 2.32, onwards.

ABNORMAL DEVELOPMENT COSTS

2.28 AMEC Foster Wheeler prepared a cost report in support of the viability assessment, which Gardiner & Theobald have reviewed. A first iteration of this review was published in April 2017, based on the AMEC Cost Plan dated January 2017. Following the provision of additional information by AMEC, a second iteration of the review was published in May 2017. This process is summarised in the table below.

Ref	Cost Item	Total Cost (£)	Back-up provided?	G&T agree with cost? (April 2017)	Observations – April 2017	Observations – May 23 2017
1	Site Clearance and Demolition	2,273,923	Yes	?	Unclear what has been priced. Further breakdown required.	Update 23/05/17: A detailed breakdown of the quote has been provided, and shows the basis of how inflation has been added. We have only received a plan of the service tunnel and no other drawings of the existing building. Therefore, due to no other drawings being issued we are unable to comment on overall scope and completeness of the quote. We are also unsure of the demolition scope of works. Although the demolition quote is well broken down in terms of items, it would be useful to review the tender documentation to ensure all the scope has been captured and priced. As previously requested, a revised quote from the demolition contractors using current day prices would be more suitable than adding on an inflation allowance. It is understood that this is in the process of being obtained, including more detailed phasing assumptions
2	Ground Remediation	1,700,000	No	?	Further information required to provide robust cost i.e. SI.	Geoenvironmental Report has been received though the breakdown of costs has not been provided. What is the estimate of £1,700,000 based on? It is understood that further site investigation works are being undertaken.
3	Additional Foundation Costs	277,055	Yes	No	Rates used are not comparable.	AFW have provided an extra over cost for changing strip foundations to raft foundations, based on 15% of building area, however they have stated that they are 'additional' foundations which is incorrect and confusing. A breakdown of the costs has been provided to show how the revised costs are built up. AFW have used SPONS 2016 for their costs, these costs are not comparable as the pricing methods are different. AFW raft foundation rate is based on a rate for the GIFA and the strip foundations are based on a rate for the ground floor area. Furthermore, these costs have not been updated with the location factor that is required. AFW have also omitted the gas membrane cost which was originally included at an allowance of 40%.

Ref	Cost Item	Total Cost (£)	Back-up provided?	G&T agree with cost? (April 2017)	Observations – April 2017	Observations – May 23 2017									
4	Internal Road, Footpaths and Street Lighting	4,941,150	Yes	Yes	Comprehensive breakdown of rates.	<p>It appears that AFW cost includes for all internal roads, footpaths and street lighting for the site. If we had undertaken this exercise we would generally include the internal roads, footpaths and street lighting costs for secondary / tertiary as part of the individual plot costs. Therefore, once the costs for the housing have been estimated there needs to be consideration to ensure these costs have not been included for twice.</p> <p>Update 23/05/17: The costs reflect an inflation allowance up to 3Q16, this will need to be revised to 2Q17 to reflect current day rates. Also, no allowance has been made for the location factor. No further information has been received from AFW. Clarification is still required to ensure there has been no double accounting of the external works. GE have made an allowance of 10% to the housing costs to include for externals. Clarification is required from AFW to ensure that this allowance for externals is not already included within the internal roads, footpaths and street lighting costs. We have undertaken the following measurements using the masterplan drawing and have found some discrepancies between our quantities and AFW quantities, these are as follows:</p> <table><tr><th>Road Type</th><th>AFW</th><th>G&T</th></tr><tr><td>Grey Road</td><td>3,535m</td><td>3,101m</td></tr><tr><td>Brown Road</td><td>3,215m</td><td>2,888m</td></tr></table> <p>This could be down to our interpretation of the drawing but it would be useful to understand AFW measurements.</p>	Road Type	AFW	G&T	Grey Road	3,535m	3,101m	Brown Road	3,215m	2,888m
Road Type	AFW	G&T													
Grey Road	3,535m	3,101m													
Brown Road	3,215m	2,888m													
5	Site Access Works	245,000	Yes	?	Unable to comment on costs. We are unsure what this figure covers.	We note the previous figure of £245,000 was an estimate, which has now been reduced to £204,039 . Some details have been provided for the upgrade works though no quotes have been received from AFW for these works; therefore we are unable to confirm the cost. It is understood that the applicant is still awaiting confirmation on mitigation schemes from the County Council									
6	Off-site services reinforcement	2,839,972	Yes	?	Agree with rates for majority of items. Further clarification required for lump sum items.	We have received a budget estimate quote from Western Power Distribution for the works which confirms the cost provide by AFW. We have no further comments.									

Ref	Cost Item	Total Cost (£)	Back-up provided?	G&T agree with cost? (April 2017)	Observations – April 2017	Observations – May 23 2017
7	On site services/utilities/connections	7,324,374	Yes	?	Agree with rates for majority of items. Further clarification required for lump sum items.	<p>The previous queries remain i.e.</p> <p><i>Oil water interceptor – is one interceptor sufficient, could this cope with heavy rainfall? What is the capacity?</i></p> <p>- Tank – What capacity is the tank? What is the tank used for?</p> <p>- Pumping station to industrial estate – What capacity is the pumping station?</p> <p>- Pumping station to housing – What capacity is the pumping station?</p> <p>- Gas governor – How has the number of gas governors been calculated?</p> <p><i>The information is not clear what the onsite services cover but from looking at some of the items within the AFW build up we assume that it excludes plot related Services/Utilities/Connections.</i></p> <p><i>We have reviewed the general rates that have been used and can report that they appear reasonable and in line with current market rates. The assumptions that have been made are reasonable and typical of assumptions that are usually made for this type of work.</i></p> <p>In addition, still require drawings if you would like us to undertake quantity checks and we still require clarification on lump sum figures.</p> <p>There has been a reduction in cost from £7.3m to £7.1m which is associated with the omission of the grubbing out of the existing drainage (£100k) and the reduction in the quantity of disposal off site and tipping (£100k).</p>
8	SuDs	1,606,343	Yes	?	Not clear how the cost for the pond was calculated.	<p>Update 23/05/17: AFW have provided literature to support their cost allowances. However, the costs provided are sourced from information dated between 2005 and 2007 and therefore are not based on current day prices.</p> <p>It is unclear where the area of the pond (11,467 m²) has come from as we are unable to identify/locate a pond/ponds on the masterplan of this size</p> <p>With regard to permeable paving, no new information received in response to our previous comments therefore, we are unable to comment further.</p>

Ref	Cost Item	Total Cost (£)	Back-up provided?	G&T agree with cost? (April 2017)	Observations – April 2017	Observations – May 23 2017
9	Landscaping and public open space	1,893,494	Yes	?	Unclear what the rates used covers.	<p>Natural and Semi Natural Green Space: No new information received so unable to comment further. What does the £5/m² include?</p> <p>Amenity Green Space: AFW have provided the area and rate used to formulate the cost for amenity green space. They have stated 75% new and 25% existing, is this correct? They have used a rate of £10/m². Clarification is required on what this includes for?</p> <p>Local Park: No new information received in response to our previous comments therefore, we are unable to comment further.</p> <p>Childrens Play: It is not clear on the drawing how many play areas there are. Has the quantity provided by AFW been advised by the local authority or is this an allowance?</p> <p>Provision for young people LAPs: No new information received in response to our previous comments therefore, we are unable to comment further.</p>
10	Ecological mitigation	100,000	Yes	Yes	Allowance by AFW informed by ecologists.	No further comments. It is understood that internal bat surveys are being undertaken and then summer bat surveys.
	Site Access Works	350,000			Appears reasonable, though require drawings and a breakdown of costs for full analysis	Drawings received, but no breakdown of cost
	Fees & Other Charges		No	?	More information required	Additional information not provided

2.29 From analysis of this information, as of May 2017, a number of key issues remained outstanding, particularly, but not limited to:

- Additional foundations – These aren't actually 'additional' foundations, it is a change in foundation type from strip to pad/pile and therefore just an add/omit exercise. The approach of AFW seemed incorrect as the rates that they are using are not comparable, as the pricing methods are different. AFW raft foundation rate is based on a rate for the GIFA and the strip foundations are based on a rate for the ground floor area.
- Internal roads, footpaths and street lighting, utilities –
 - It appeared that AFW included for all primary, secondary and tertiary roads within their cost for this item. However, as part of the house build costs, GE included a 10% allowance to include for externals which we would assume includes for internal roads, footpaths and street lighting to secondary and tertiary roads.
 - Clarification was subsequently sought from AFW to ensure there was no double counting these items.

PROFESSIONAL FEES, & BUILD CONTINGENCY

- 2.30 GE have made an allowance of 7.5% for professional fees, which on a prima facie basis, is reasonable for a scheme of this nature. The allowance does, however, require to be considered in the round alongside the build costs (above) as part of an overall view on total construction costs. Applied to the £92/sqft build (house build and external works) cost, this would work out at £98.9/sqft.
- 2.31 Build contingency, for which GE have allowed a reasonable 2.5% on build costs, also needs to be considered as part of this total construction cost. Applied to the £92/sqft build (house build and external works) cost, this would be the equivalent of around £2.30/sqft, which added to the £98.9/sqft (build and fees), above, would work out at £101/sqft.

“ALL IN” NORMAL CONSTRUCTION COST (I.E. EXCLUDING ABNORMALS)

- 2.32 Whilst this circa £101/sqft “all in” “normal” construction cost figure seemed reasonable, C&W could not conclude on this point on the basis that it appeared that a number of “normal construction costs” also appeared in the abnormal costs schedule prepared by AMEC. For example:
- AMEC have included for all primary, secondary and tertiary roads within their cost heading termed “Internal roads, footpaths and street lighting” (Refer to table after 2.28, above). This element is included within the “abnormal” cost heading in the GE Viability Assessment, even though a significant element of these costs would be “normal”, plot related build costs and hence and there is the risk of double counting in the GE Viability Assessment, as the GE Viability Assessment also makes an external cost allowance (Refer to 2.24) of 10% on base build costs.
 - Likewise, an allowance for on-site Services/Utilities/Connections is also made by AMEC, and factored in, by GE, to the FVA as an “abnormal cost”, even though we would expect an element of these costs to be included within “normal” build costs.
- 2.33 As a result of this approach there are also inconsistencies on the fees and contingencies applied to such “normal” costs,
- Fees: GE applying @ 7.5%, and AMEC @ 5%
 - Contingency: GE applying @ 2.5%, and AMEC @ 5%
- 2.34 ***On July 13, 2017 an update position regarding costs was received from AMEC (e-mail and attachment from Nigel Budge, 13/7/2017 addressed to Gardiner & Theobald). Gardiner & Theobald (G&T) reviewed the additional information but G&T continued concerns regarding the above.***
- 2.35 On this basis C&W then asked AMEC and GE to represent the construction costs under the following headings, which are standard for strategic sites such as this (over the page).

Strategic Servicing (off and on site)	On Plot / Serviced Residential Land
	House Construction Costs
	External Works <i>"associated with individual plots"</i>
Spine or "Grey" Roads (<u>not fronted by housing</u>), and associated street lighting, footpaths,	Estate or "Brown" Roads, and "Grey" roads <u>fronted by housing</u> , and associated street lighting, footpaths,
On site Utilities / Drainage associated with: <ul style="list-style-type: none"> - "Grey" roads <u>fronted by housing</u>, and, - Other requirements that are not "on plot" / serviced residential landcostings 	On site Utilities / Drainage associated with: <ul style="list-style-type: none"> - Estate or "Brown" Roads, and, - "Grey" roads <u>fronted by housing</u>,
Strategic Landscaping and Public Open Space	
On site Strategic Services (Water, Electricity Gas etc) required to service residential land	Associated Contingency – 2.5%
Environmental/Ecological etc	Associated Fees – 7.5%
Site Access	
Off Site Highways	
Off Site Utilities	
Associated Contingency – 2.5%	Associated Contingency – 2.5%
Associated Fees – 7.5%	Associated Fees – 7.5%

2.36 The result of this exercise is set out in the following table.

	sqm	sqft
Scheme GIA (Residential)	GIA	
	59,180	637,014

ADJUSTED AMEC AND GERALD EVE COSTS

Basic Build	£ 53,146,038	£ 83.43
House Build	£ 53,146,038	£ 83.43
Externals	£ 15,645,172	£ 24.56
External works @ 10%	£ 5,314,604	£ 8.34
On site utilities	£ 5,814,468	£ 9.13
Roads and lighting	£ 4,516,100	£ 7.09
		£ -
CONSTRUCTION SUB TOTAL	£ 68,791,210	£ 107.99
Fees @ 7.5%	£ 5,159,341	£ 8.10
Sub Total	£ 73,950,551	
Contingency @ 2.5%	£ 1,848,764	£ 2.90
ALL IN NORMAL CONSTRUCTION	£ 75,799,314	£ 118.99
Other / Abnormals (Using AFW Costs)	£ 13,542,440	£ 21.26
Site clearance & demo	£ 2,273,923	£ 3.57
Ground remediation	£ 1,700,000	£ 2.67
Extra Over Standard foundation costs	£ 259,314	£ 0.41
Landscaping (incl undevelopable areas)	£ 1,901,776	£ 2.99
Site Access Works	£ 204,039	£ 0.32
SuDS	£ 1,726,411	£ 2.71
Ecological mitigation	£ 400,000	£ 0.63
Off site utilities	£ 2,754,640	£ 4.32
Strategic Highways (Roads and Lighting)	£ 1,015,230	£ 1.59
Strategic On Site Utilities	£ 1,307,106	£ 2.05
ABNORMALS SUB TOTAL	£ 13,542,440	£ 21.26
Fees @ 5%	£ 677,122	
Sub Total	£ 14,219,562	
Contingency @ 5%	£ 710,978	
Sub Total	£ 14,930,540	
TOTAL ABNORMALS	£ 14,930,540	£ 23.44
GRAND TOTAL	£ 90,729,854	£142

Infrastructure Cost per dwelling (ex foundations, clearance/demo, and remediation; assumes 600dw)

£ 17,829 per dw

Reconciliation		
Less House Build & Externals (Gerald Eve Cost Assumptions)	£ 53,146,038	
	£ 5,314,604	
Sub Total (including contingency and fees)	£ 64,416,319.65	
GRAND TOTAL (AMEC COSTS ex S106)	£ 26,313,534	("Lost" £9k)

- 2.37 The “All In” normal, residential, construction cost (i.e. excluding abnormal foundations), according to the above analysis is around £119/sqft.
- 2.38 By way of benchmarking, the BCIS (Estate Housing Generally, Lower Quartile, for the West Midlands region, as April 1, 2017), with a 12.5% allowance for externals, and allowances of 7.5% for professional fees and 2.5% for contingency, would result in a figure of £107/sqft. This rate has been tested for the purposes of the appraisal analysis in Section 3.

SALES & MARKETING FEES

- 2.39 Within the submitted development appraisal, GE have allowed for total sales and marketing costs equivalent to 2% on Gross Development Value. In the appraisal report, however, an allowance equivalent to 3.5% is presented (marketing, sales agent and legals). For sales and marketing fees, “in the round”, we would usually allow for the equivalent of 3% to 3.5% of the GDV of the open market dwellings. In this case we have allowed 3.5%.

INTEREST & BORROWING COSTS (FINANCE COSTS)

- 2.40 GE have applied a debit rate of 7.5%. Whilst the UK lending market is analysed at length within the GE FVA Report, no site specific justification of the proposed rate of 7.5% is put forward. C&W is of the view that a rate of no more than 6.5% would be appropriate given the nature of the site, which will attract a national housebuilder.
- 2.41 Assumptions regarding development phasing are particularly pertinent to the overall cost of finance for a scheme as large and complex as that proposed for Lea Castle, due to the long development and sales period and exposure to notable upfront development costs. We have reviewed the assumptions of GE, in the Programme section, below (after consideration of Profit).

PROFIT

- 2.42 GE have allowed for a 20% return on GDV for the open market dwellings, and 6% for the affordable dwellings, both of which are reasonable. An “in-house blended viability target rate calculator” has then been used to calculate the appropriate blended profit target.
- 2.43 For example, assuming 30% affordable housing, where the GDV of the private units is assumed to be £116.6m and the GDV of the affordable units is £19 million, GE has calculated a blended target return rate of 18.04%. By the same token, GE have calculated a profit target of 19.07% assuming affordable housing of 15% (70% Social Rented and 30% Shared Ownership). The principle of this is acceptable.

Programme

- 2.44 The applicant has suggested a development programme, as below. We have made observations regarding this proposed development programme, and highlighting where we may disagree.
- 2.45 We have also highlighted instances where the stated cashflow assumptions do not match the appraisal cashflows sent to C&W, as part of the *Argus Developer* files. In each of these instances of variation, highlighted below, the actual cashflow timing is more optimistic than the stated assumptions, which has the effect of “improving the performance” of the cashflow, and so reducing finance costs. It is possible that these variations may account for the difference in finance costs¹ apparent between the residual appraisals (for the two “VBC” scenarios @ 15% affordable for 600dw and 580dw) sent to C&W in Argus format, and those that appeared in the appendix to the GE FVA.

Stage	Start Date	Duration (Months)	GE Assumptions	C&W Observations
Land Acquisition	1	1	Full payment	A developer would not purchase the entire site upfront. Rather, we have allowed for four payments, in two year intervals, across a period of 73 months, the first payment in month 1, the second in month 25, the third in month 49, and the fourth in month 73. Loosely, this is the equivalent of land being drawn down in 120 dwelling phases
Pre-construction works	1	3		Actually 8 months according to cashflow submitted to C&W, which is more in line with what we would expect, and which we have adopted.

¹ This is after C&W “put back” the professional fees line in the Argus appraisal received from GE, such that the appraisal direct cost and revenue inputs matched with the assumptions set out in the Argus Appraisal summaries featured in the GE FVA Appendix

Stage	Start Date	Duration (Months)	GE Assumptions	C&W Observations
Site Clearance & Demolition	1	9	Equal distribution from the start of development for the first nine months	Included within abnormal costs in GE submitted appraisal cashflow (Months 10 to 159), which we would presume is incorrect, and we would adopt the distribution set out in the assumptions (also set out in the AMEC report)
Additional Revenue (Employment Land, £150,000)	3	1	Full Instalment at the end of pre-construction	Appears (Month 9) after the end of pre-construction
Construction	4	120	The construction period estimated to build all 600 units in 120 months, as shown in. This is based on a sale period of 5 units per month,	<p>Appears at month 10, after pre-construction period, for 120 months</p> <p>C&W have analysed this rate (see Section 2.51, below), and find it reasonable.</p> <p>We note that the distribution is “S-curved” in the cashflow sent to C&W, an unconventional approach for modelling estate housing schemes, as it will spuriously depress the early phase build cost cashflow relative to the sales revenue cashflow.</p>
Abnormals	4	120	“S-curved” over construction period	<p>Actually overshoots the construction period, completing in month 159, some 29 months after the end of the construction period.</p> <p>Without further detail regarding phasing, C&W would distribute monthly rather than using an “S-Curve” distribution as S-Curve approach</p>

Stage	Start Date	Duration (Months)	GE Assumptions	C&W Observations
				<p>risks “under weighting” the initial early development infrastructure costs.</p> <p>We note the AMEC report setting out that ground remediation costs relating to the laundry building will be required in the pre-construction phase, as would ecological mitigation, which we would expect, and which contradicts the GE assumption.</p>
Fees	4	120	“S-curved” over construction period	The “S-curve” approach is an unconventional approach for modelling estate housing schemes, as it will spuriously depress the early phase build cost cashflow relative to the sales revenue cashflow.
Sales & Marketing Costs	4	120	“S-curved” over construction period	We have applied this over the sales period, and used a flat line distribution to better account for early marketing costs (the “S-Curve” approach may underestimate this)
Section 106 Payments	30	120	Equal payments every 30 months or four instalments spread out over the Construction Period	We would await confirmation from WFDC as to the timing requirements
Sale	16	120		The start of the sales phase in month 16 represents a six month lag from the start of the residential construction period (Month 10, see above), which we agree with

Completions Rate Analysis

EVIDENCE OF LOCAL COMPLETIONS RATES

- 2.46 Gerald Eve have proposed a sales rate on site of 5 units per month, which we have assumed accounts for the presence of 2 volume housebuilders on site building out at the same time.
- 2.47 We have referenced this rate with that for the most recent scheme of similarly large size, which is the scheme at the former British Sugar Site on Stourport Road, Kidderminster, being developed by Taylor Wimpey and Bovis Homes.

Stour Valley, Stourport Road, Kidderminster (Taylor Wimpey / Bovis Homes)

- 2.48 The development rates below include the construction of affordable dwellings.

Year	2 Bed Flat	2 Bed House	3 Bed House	4 Bed House	5 Bed House	Total Dwellings
2013 - 2014	0	4	3	1	0	8
2014 - 2015	2	2	41	16	0	61
2015 - 2016	2	4	47	18	1	72
2016 - 2017	0	4	5	37	15	61

Year	Bovis Completions Per Annum	Bovis Completions Per Month	Taylor Wimpey Completions Per Annum	Taylor Wimpey Completions Per Month	Average Completions Per Month
2013 - 2014	8.0	0.7	-	-	0.7
2014 - 2015	29.0	2.4	32.0	2.7	2.5
2015 - 2016	38.0	3.2	34.0	2.8	3.0
2016 - 2017	28.0	2.3	30.0	2.5	2.4
Average (2014 – 2017)	31.7	2.6	32.0	2.7	2.7

- 2.49 The completions data for the site at the former British Sugar factory in Stour Valley show Bovis having completed an average of 2.6 completions per month for the period 2014 – 2017 and Taylor Wimpey having completed an average of 2.7 completions per month for the period 2014 – 2017, equating to a total of approximately 5 completions per month when considering both developers.
- 2.50 Gerald Eve report that Taylor Wimpey have achieved sales rate of 2.5 houses per month at Stour Valley, while Bovis have achieved sales rate of 2.0 houses per month. This would accord with the completion rate data given above.

C&W VIEW OF COMPLETIONS RATE

- 2.51 Gerald Eve have proposed a sales rate on site of 5 units per month, which we have assumed accounts for the presence of 2 volume housebuilders on site building out at the same time.
- 2.52 Having regard to the build rate of comparable large development sites in the area we consider that a completions rate of 5 units per month would be appropriate for the subject site.

3. Summary Development Appraisals

- 3.1 Based on the assumptions above, the summary C&W appraisals (one assuming 600 dwellings (all houses), and one assuming 580 dwellings (all houses)) are set out below.
- 3.2 Both appraisals include for 15% affordable housing (70% Social Rented and 30% Shared Ownership), and S106 payments of £4.8 million
- 3.3 Assuming a benchmark land value of £12.5 million, the profit on value of both appraisal scenarios, exceed the profit target for the scheme of 19.07% (refer to 2.42), so are deliverable.

	600 dwellings 15% Affordable Housing (70% SR / 30% Shared) S106: £4.8 million	580 dwellings 15% Affordable Housing (70% SR / 30% Shared) S106: £4.8 million
Target Profit on Value	19.07%	19.07%
Actual Profit on Value	22.7%	21.9%

- 3.4 The appraisal summaries for the scenarios (the 600 dwelling scenario, followed by the 580 dwelling scenario) are set out over the page.

APPRAISAL SUMMARY**CUSHMAN & WAKEFIELD**

Lea Castle Kidderminster

Summary Appraisal for Phase 1 14. VBC 15% AH social rented/intermediate

Currency in £

REVENUE

Sales Valuation	Units	ft ²	Rate ft ²	Unit Price
Open Market	510	568,140	228.00	253,992
Social Rented	63	48,510	126.00	97,020
Intermediate	27	20,358	168.00	125,164
Totals	600	637,008		

Additional Revenue

Additional Revenue	150,000	
		150,000

NET REALISATION**139,177,608****OUTLAY****ACQUISITION COSTS**

Fixed Price (120.00 Acres 104,166.67 pAcre)	12,500,000	
		12,500,000
Stamp Duty	614,500	
Agent Fee	1.00%	125,000
Legal Fee	0.50%	62,500
Town Planning	729,703	
		1,531,703

CONSTRUCTION COSTS

Construction	ft ²	Rate ft ²	Cost	
Open Market	568,140 ft ²	97.00 pF ²	55,109,580	
Social Rented	48,510 ft ²	97.00 pF ²	4,705,470	
Intermediate	20,358 ft ²	97.00 pF ²	1,974,728	
Totals	637,008 ft ²		61,789,776	61,789,776

Build Contingency	2.50%	1,661,086	
S106 inc School abnormals		4,808,774	
		12,137,645	
Site Clearance & Demolition		2,273,923	
			20,881,428

Other Construction

Foundation Abnormals	259,314	
		259,314

PROFESSIONAL FEES

Prof Fees	7.50%	4,653,682	
			4,653,682

MARKETING & LETTING

Marketing	2.00%	2,590,718	
			2,590,718

DISPOSAL FEES

Sales Agent	1.00%	1,295,359	
Sales Legal Fee	0.50%	647,680	
			1,943,039

FINANCE

Debit Rate 6.500%, Credit Rate 0.000% (Nominal)			
Land		1,006,189	
Construction		443,618	
Total Finance Cost			1,449,806

TOTAL COSTS**107,599,467****PROFIT****31,578,141****Performance Measures**

Profit on Cost%	29.35%
Profit on GDV%	22.71%
Profit on NDV%	22.71%

IRR	31.36%
-----	--------

Profit Erosion (finance rate 6.500%)	3 yrs 12 mths
--------------------------------------	---------------

APPRAISAL SUMMARY**CUSHMAN & WAKEFIELD****Lea Castle Kidderminster****Summary Appraisal for Phase 2 15. VBC - 580 units 15% AH**

Currency in £

REVENUE

Sales Valuation	Units	ft ²	Rate ft ²	Unit Price
Open Market	493	549,202	228.00	253,992
Social Rented	61	46,970	126.00	97,020
Intermediate	26	19,604	166.00	125,164
Totals	580	615,776		

Additional Revenue

Additional Revenue	150,000	150,000
--------------------	---------	---------

NET REALISATION**134,540,540****OUTLAY****ACQUISITION COSTS**

Fixed Price (120.00 Acres 104,166.67 pAcre)	12,500,000	12,500,000
Stamp Duty	614,500	
Agent Fee	1.00%	125,000
Legal Fee	0.50%	62,500
Town Planning	729,703	
		1,531,703

CONSTRUCTION COSTS

Construction	ft ²	Rate ft ²	Cost
Open Market	549,202 ft ²	97.00 pF	53,272,594
Social Rented	46,970 ft ²	97.00 pF	4,556,090
Intermediate	19,604 ft ²	97.00 pF	1,901,588
Totals	615,776 ft²		59,730,272

Build Contingency	2.50%	1,605,737
Statutory / LA / S106		4,808,774
abnormals		12,137,645
Site Clearance & Demolition		2,273,923
		20,826,079

Other Construction

Foundation Abnormals	259,314	259,314
----------------------	---------	---------

PROFESSIONAL FEES

Prof Fees	7.50%	4,499,219	4,499,219
-----------	-------	-----------	-----------

MARKETING & LETTING

Marketing	2.00%	2,504,361	2,504,361
-----------	-------	-----------	-----------

DISPOSAL FEES

Sales Agent	1.00%	1,252,181
Sales Legal Fee	0.50%	626,090
		1,878,271

FINANCE

Debit Rate 6.500%, Credit Rate 0.000% (Nominal)		
Land	1,004,813	
Construction	443,166	
Total Finance Cost		1,447,979

TOTAL COSTS**105,177,198****PROFIT****29,363,342****Performance Measures**

Profit on Cost%	27.92%
Profit on GDV%	21.85%
Profit on NDV%	21.85%
IRR	30.46%
Profit Erosion (finance rate 6.500%)	3 yrs 10 mths