Technical Note – Proposed Land Allocations at Lea Castle & Blakedown

Introduction

1.1 This Technical Note has been prepared on behalf of Churchill and Blakedown Parish Council in respect of the proposed allocation of land adjacent to Lea Castle, which is intended to accommodate residential and employment development, and land adjacent to Blakedown rail station, which is intended to accommodate residential development and a car park.

1.2 The Parish Council and local residents have raised significant and valid concerns regarding the suitability of local roads and infrastructure to accommodate an inevitable increase in traffic flows and increased rail patronage at the station.

1.3 This Technical Note presents a brief examination of the highway and transport issues associated with the proposed allocations.

Site Location

1.4 Appendix A presents a plan that identifies the locations of the proposed land allocations at Lea Castle and in Blakedown. The plan also shows the proximity of the sites in relation to Kidderminster town, Blakedown Village and Kidderminster and Blakedown rail stations.

Lea Castle Village

Proposed Allocation

1.5 The proposed allocation of land adjacent to the existing Lea Castle development has been identified as being able to accommodate circa 1,400 residential dwellings and commercial land uses, including a significant area identified as potential B1 office use.

1.6 Figure 1.1. shows the approximate outline of the proposed land allocation at Lea Castle.

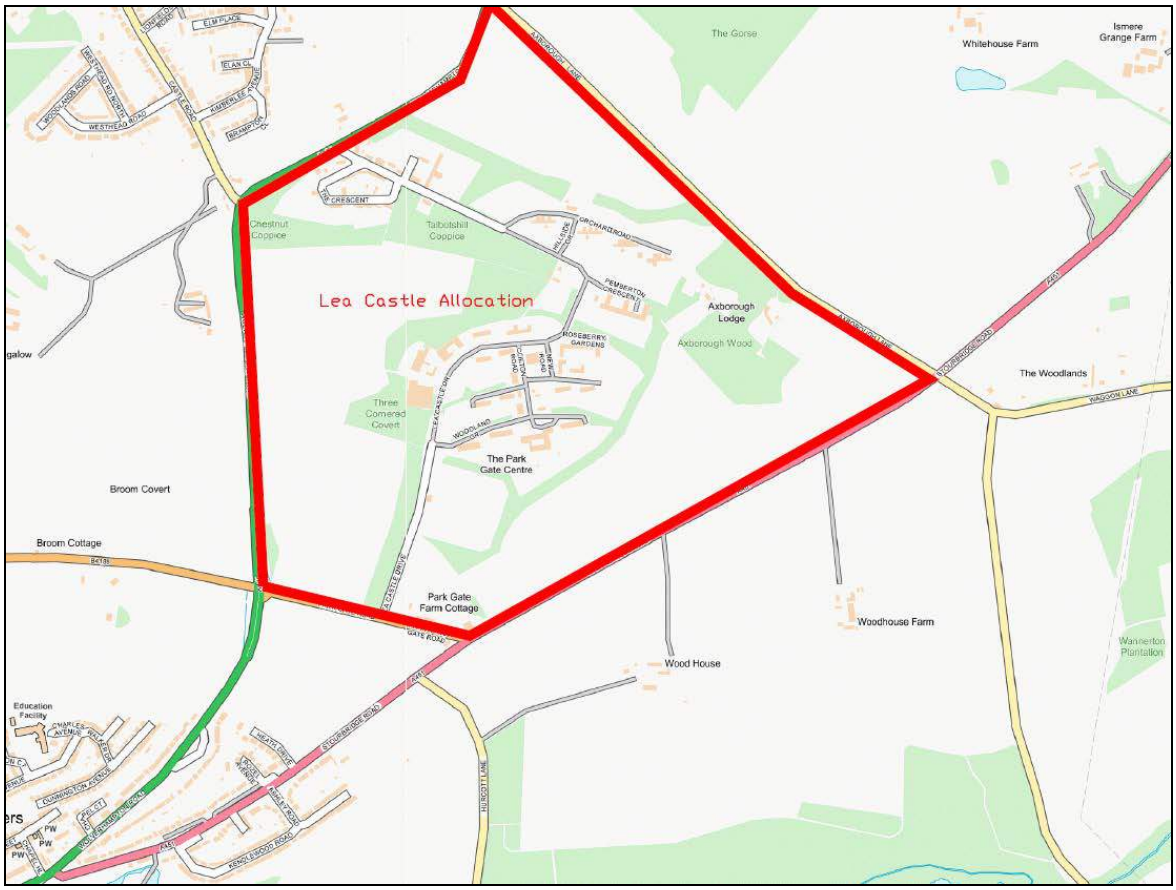

Figure 1.1: Location of Lea Castle Proposed Land Allocation (Contains Ordnance Survey data © Crown copyright and database right 2013)

Accessibility / Sustainability

1.7 The proposal for the allocation at Lea Castle incorporates key amenities and opportunities. However, without significant improvement to public transport provision and cycle facilities, potential future residents of the development will be car dependent; for reasons identified within this note, it is apparent that such improvements will unlikely be achievable.

1.8 Kidderminster is the nearest settlement with significant local amenities and opportunities. The nearest section of the site to Kidderminster is beyond 2.5km walking distance; this being beyond a reasonable walk distance, but within a reasonable cycle distance. However, cycle facilities would need significant improvement, which would unlikely be feasible given the apparent significant highway constraints.

1.9 Existing bus service provision is currently very limited. Whilst it is likely that improvement to service provision will be feasible, the journey times, facilities and infrastructure will need to be attractive to residents. It is likely that the creation of a new bus service to incorporate the development or diversion of an existing service would need to be

development funded. If the service failed to become commercially viable then it is likely that the service would reduce or stop, as has been experienced with other development funded bus services.

1.10 The nearest rail station to the site is Kidderminster at over 3.2km from the nearest section of the site. This is not within walking distance, but is within cycling distance. However, the route and distance would not be attractive to the majority of residents / employees.

1.11 The next nearest station to the site is Blakedown at over 3.4km to the nearest section of the site. For reasons outlined within this note, the route between the site and the station is not considered appropriate for walking, cycling or by car.

1.12 As identified above, it is evident that the site is not accessible by non-car modes of transport and it will be difficult to improve this situation to a point where residents / employees are not car dependent.

Vehicle Trip Generation and Traffic Impact

1.13 It is understood that the former NHS Lea Castle site has planning permission for up to 600 dwellings and 3,350sqm of managed workspace (assumed B1).

1.14 The proposed land allocation incorporates has been identified as being able to accommodate circa 1,400 residential dwellings and commercial land uses, including a significant area identified as potential B1 office use. For the purpose of this note, it is assumed that the area identified as potential B1 use could accommodate up to 80,000sqm of B1 office accommodation.

1.15 The TRICS database has been used to calculate vehicle trip rates for the residential and B1 office land uses for the peak hour and 12-hour periods; this associated with the proposed land allocation and the development at Lea Castle that already has planning permission. Table 1.1 presents the trip rates calculated and subsequent number of vehicle trips for the corresponding land uses.

Land Use	AM Peak hour trip rate	AM Peak hour vehicle trips	PM Peak hour vehicle trip rate	PM Peak hour vehicle trips	12 hour trip rate	12 hour vehicle trips
1,400 dwellings	0.623	**872**	0.547	**766**	5.089	**7,125**
80,000 sqm	1.658	**1,326**	1.416	**1,133**	7.213	**5,770**
600 dwellings	0.623	**374**	0.547	**328**	5.089	**3,053**
3,350 sqm	1.658	**56**	1.416	**47**	7.213	**242**

Table 1.1: Vehicle Trip Rates and Vehicle Trips

1.16 Trip generation associated with the further ancillary development has not been considered, but vehicle trips would inevitably be generated in addition to the above.

1.17 As highlighted by Table 1.1, the strategic development of housing and commercial uses at Lea Castle will generate a significant number of vehicle trips (7,125 vehicle trips over a 12-hour period for the 1,400 dwellings alone). Due to the concentrated area of development and limited opportunity for the distribution of vehicle trips, there will inevitably be a dramatic increase in traffic flows across the immediate highway network. Traffic flows will gradually disperse across the highway network but will still present a significant increase in vehicles along links and at junctions that are already at and over capacity.

1.18 Due to the proximity of the site to the existing major settlements of Kidderminster and Stourbridge, along with the adjacent roads being strategic routes, the local highway network is already over capacity. Furthermore, a significant proportion of residents in Kidderminster and the district commute to employment and other opportunities outside of the district, which contributes to the congestion issues that occur.

1.19 It is recognised that infrastructure improvements are proposed to alleviate certain congestion issues. However, it is apparent that there are not any improvements proposed that would sufficiently support development at the Lea Castle site.

1.20 To highlight the above point, the following presents a brief example of one route that a proportion of future residents and employees would use to access the development to/from the south and east (i.e. towards the A456):

Route Option and associated Issues

A451 Stourbridge Road / Stakenbridge Lane / A456

- Safety and capacity issues at Stakenbridge Lane / A451 Stourbridge Road junction;
- Safety issue at Churchill Lane / Stakenbridge Lane / Iverley Lane junction;
- Safety issue at rail bridge along Stakenbridge Lane; and
- Safety and capacity issues at Stakenbridge Lane / A456 / Thicknall Lane junction.

Alternative Route Options and associated Issues

1.21 To avoid the congestion issues identified above, residents and employees would seek alternative routes; these would inevitably incorporate the rural lanes of Waggon Lane, Perriford Lane and potentially Hurcott Lane. These lanes are not suitable for any increase in traffic flow, as highlighted by photographs presented later within this note; any increase would significantly compromise the safety of pedestrians, cyclists and equestrian users.

1.22 It is understood that there are proposals to change the status of Hurcott Lane; this has been referred to as providing for an active travel corridor and potentially stopping through traffic between A451 Stourbridge Road and the A456. This would inevitably result in traffic diverting to Waggon Lane and Perriford Lane. Given the issues associated with increased traffic flows along Waggon Lane and Churchill Lane, as highlighted within this note, it is considered that a similar measure could be applied to Waggon Lane between Perriford Lane and Churchill Lane.

Blakedown Car Park / Residential

Proposed Allocation

1.23 It has been identified that the proposed allocation of land adjacent to the rail station could accommodate circa 170 car parking spaces for the rail station and 50 residential dwellings. The land is currently greenfield and designated greenbelt.

1.24 It is also a proposed that an area of land adjacent to Blakedown rail station, referred to as Station Yard, be allocated for car parking for the rail station; this being identified as being able to accommodate circa 80 car parking spaces. The land is brownfield and within the village boundary.

1.25 Figure 1.2 shows the location of the proposed land allocations in Blakedown.

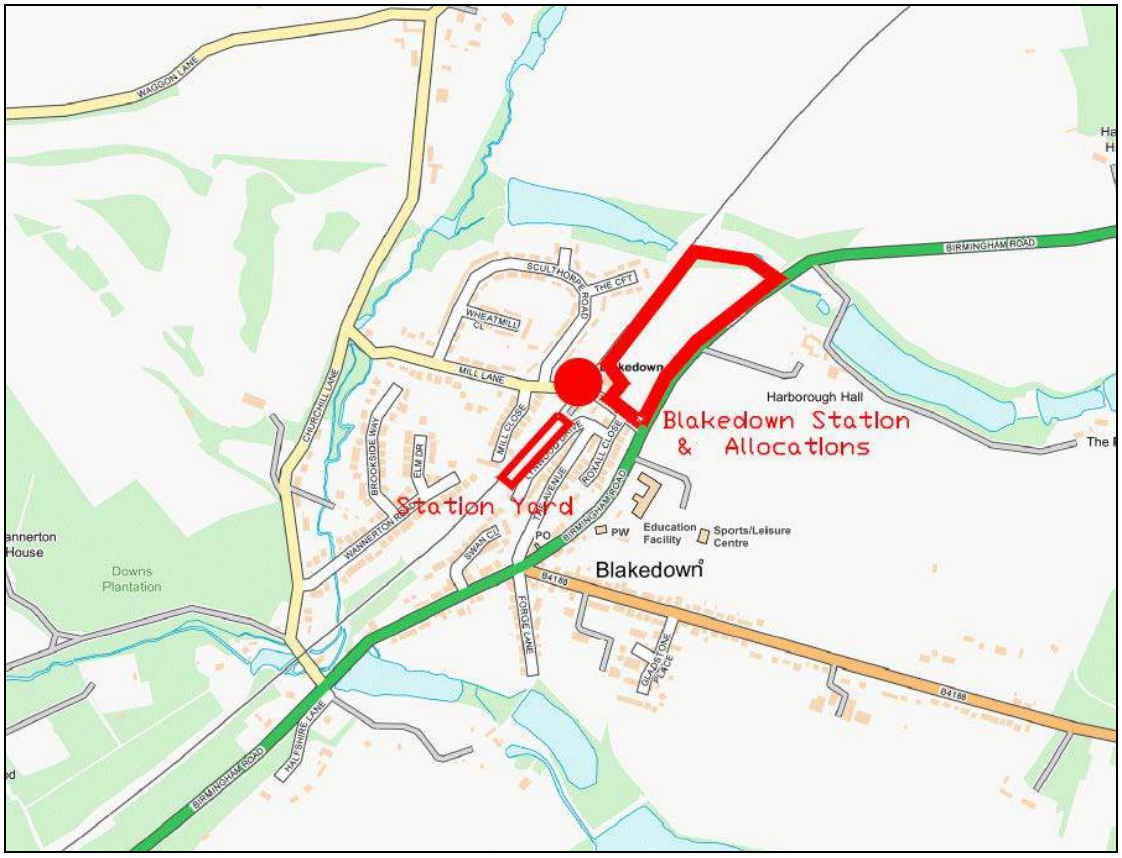

Figure 1.2: Location of Proposed Allocations for further Station Car Parking and Residential Development **(Contains Ordnance Survey data © Crown copyright and database right 2013)**

Accessibility / Sustainability

1.26 The proximity of the rail station to the proposed residential development site is such that potential future residents will be within short walking distance of the rail station. However, in the absence of a pedestrian footbridge, residents will be required to cross at the level crossing to access Platform 2 (Birmingham bound).

1.27 One very limited bus service (192) travels along the A456 between Kidderminster and Halesowen at a frequency of one bus per hour during the day.

1.28 There are limited local amenities in Blakedown; these include a primary school, convenience store with post office and two public houses.

1.29 On the basis of the above, unless residents travel regularly by rail, the majority of trips be undertaken by car.

Trip generation

1.30 The trip rates calculated for the proposed land allocation at Lea Castle have been used to forecast vehicle trip generation associated with 50 residential dwellings for the peak hour and 12-hour periods.

Land Use	AM Peak hour trip rate	AM Peak hour vehicle trips	PM Peak hour vehicle trip rate	PM Peak hour vehicle trips	12 hour trip rate	12 hour vehicle trips
50 dwellings	0.623	**31**	0.547	**27**	5.089	**254**

Table 1.2: Vehicle Trip Rates and Vehicle Trips

1.31 In regard to the rail station car parking provision of 170 spaces, based on local experience of other rail station car parks and on the assumption that there is a demand, it can be assumed that vehicles will begin to park from around 0700 and reach capacity by the end of the peak hour period (0900) at the latest. On this basis, approximately 85 vehicles would access the car park during the morning peak hour period (0800-0900). However, arrivals would significantly concentrate around scheduled departure times of rail services.

1.32 Again, based on experience at other local rail stations, the majority of vehicles would be expected to depart the car park between 1630 and 1830. Therefore, approximately 85 vehicles would be expected to exit the car park during the afternoon peak hour period (1700-1800). However, again, departures would significantly concentrate following the scheduled arrival times of rail services.

1.33 The proposed allocation to accommodate circa 170 car parking spaces is in addition to the allocation of Station Yard to accommodate circa 80 car parking spaces. On the basis of the application of the same assumptions made for the 170 space car park, 80 spaces equates to approximately 27 movements per hour during the morning and afternoon peak hour periods.

1.34 Table 1.3 presents the total vehicle trip generations associated with the proposed land allocations:

Land Use	AM Peak hour vehicle trips	PM Peak hour vehicle trips	12 hour vehicle trips
50 dwellings	31	27	254
170 Car Parking Spaces	57	57	340
80 Car Parking Spaces	27	27	160
Total	**115**	**111**	**754**

Table 1.3: Peak Hour Vehicle Trip Generation for Proposed Land Allocations

Issues

1.35 The following sets out several potentially fundamental issues associated with the proposed allocation.

1.36 Figure 1.1 presents a photograph of the level crossing adjacent to Blakedown rail station.

Figure 1.3: Photograph of Level Crossing in Blakedown

1.37 The level crossing presents potentially fundamental issues in respect of the proposed allocation, as follows:

- Vehicles currently queue whilst the barriers are down. The proposed allocation will inevitably exacerbate the issue of queuing at the level crossing, this being particularly intensified around scheduled arrival and departure times of rail services. Figure 1.4 presents a photograph of queuing that occurs at the level crossing. On the basis that the vehicle access to the station car parking will be located along Station Drive then it is realistic to assume that significant queuing will occur within the car park, along Station Drive and potentially along the A456.
- There is no pedestrian footbridge at the rail station. Therefore, people parking within the car park would need to use the level crossing to access Platform 2. The pedestrian facilities incorporated within the level crossing are considered to be

inadequate for an increase in pedestrian flow (the level crossing is narrow and therefore the footway and carriageway are narrow and unsuitable for increased traffic flow or pedestrian footfall).

- The intensified use of the level crossing will inevitably increase the risk of an incident occurring at the crossing.

Figure 1.4: Photograph of Queuing at the Level Crossing

1.38 During the peak morning and afternoon periods the station is used primarily by commuters and school pupils. Platform 2 (Birmingham bound) is busy and Platform 1 (Worcester bound) less so. Based on observation, there is limited spare capacity on platform 2 during the morning peak period. Additional people using the station during peak hour periods may present safety issues at and around the station.

1.39 Further to the above, a significant increase in capacity on the rail services will be required, particularly for Birmingham bound services.

1.40 There are currently no working ticket machines at the station. There is one ticket machine located on Platform 1, but this was not working at the time of examination.
Furthermore, there is very limited shelter with seating and no cycle parking facilities.

1.41 There is limited evidence to suggest that demand will exist to warrant up to 250 car parking spaces (170 + 80 spaces) at Blakedown rail station. Furthermore, in consideration of the location of Blakedown rail station, there is no evidence to suggest that rail users will not travel to Stourbridge Junction where parking is free and rail services cheaper for Birmingham bound services.

1.42 Parking charges have recently been introduced at Hagley rail station. Prior to the implementation of parking charges the car park was at/over capacity. However, following implementation of charges the small station car park has plenty of spare capacity.

1.43 If the car parking at Blakedown rail station were to be charged, as per the car parks at Kidderminster and Hagley stations, then appropriate parking restrictions will need to be implemented along the local highway to prevent car parking; a proportion of people travelling to the station by car will inevitably seek to avoid the charge. The implementation of parking restrictions will be subject of a Traffic Regulation Order which will be subject to public consultation.

1.44 An increase in traffic flows associated with parking at the station will inevitably result in amenity issues to local residents, particularly those living in close proximity to the rail station. Noise and air quality will be the most significant likely issues associated with an increase in traffic and queuing vehicles.

1.45 It is anticipated that a high proportion of vehicles accessing the station will travel along the A456 or from Station Drive and Mill Lane. Both routes are of considerable concern to the Parish Council and local residents for reasons identified below.

1.46 The A456 through the village becomes congested during peak hour periods, this having knock-on effect to Belbroughton Road, Churchill Lane and Station Drive. On the basis that access to the car park and residential development would be located along Station Drive, it is anticipated that there will be capacity issues at the Station Drive / A456 junction during the peak morning and afternoon periods.

1.47 The alternative route for vehicles accessing the station from Mill Lane is of considerable concern. Vehicles travelling to/from the east of Kidderminster, including Lea Castle, and from other areas to the east and north, including Cookley, will likely travel along rural lanes and village roads to access the station. There are a number of road safety issues, which cannot be rectified, that will be exacerbated if traffic flows increase. The following presents examples of the local highway safety issues (the examples identified are also applicable to the issues identified in respect of an increase in traffic associated with the allocation of land at Lea Castle):

Figure 1.5: Photograph of Mill Lane

1.48 Figure 1.5 shows a section of Mill Lane. Mill Lane is narrow (single lane carriageway) and a residential property is located directly adjacent to the carriageway. Furthermore, there is very limited forward visibility.

Figure 1.6: Photograph of Mill Lane

1.49 Figure 1.6 shows a damaged highway verge along Mill Lane. Cars regularly damage grass verges and private hard stand along local roads and lanes when having to negotiate other vehicles travelling in the opposite direction.

Figure 1.7: Photograph of Churchill Lane at junction with Waggon Lane

1.50 Figure 1.7 demonstrates limited visibility at the junction of Churchill Lane with Waggon Lane. The limited visibility is caused by the adjacent crest along Churchill Lane.

Figure 1.8: Photograph of Churchill Lane adjacent to Grade Listed Cottages

1.51 Figure 1.8 presents a further example of a very narrow carriageway and limited forward visibility. Also properties are located directly adjacent to the carriageway and regularly experience damaged property.

Figure 1.9: Photograph of Churchill Lane adjacent to Golf Course

1.52 Figure 1.9 presents another example of a very narrow carriageway and limited forward visibility due to the crest along Churchill Lane.

Figure 1.10: Photograph of Churchill Lane / A456 junction

1.53 Figure 1.10 demonstrates limited visibility at the critical junction of Churchill Lane with the A456. The carriageway gradient also falls from the junction along the minor arm which provides a further challenge to drivers at the junction when entering the A456.

Figure 1.11: Photograph of Waggon Lane

1.54 Figure 1.11 demonstrates limited forward visibility and narrow carriageway along Waggon Lane. The lane is subject to national speed limit (60mph), but is also used by a relatively high number of cyclists, pedestrians and equestrian.

Figure 1.12: Photograph of Waggon Lane

1.55 Figure 1.12 presents another view along Waggon Lane. The carriageway is narrow and the trees form a canopy that limits light.

Summary and Conclusion

1.56 This Technical Note has presented an outline of some of the significant, and potentially fundamental, highway and transport issues associated with the proposed land allocations at Lea Castle and adjacent to Blakedown rail station.

1.57 The location of Lea Castle and local congestion issues will inevitably result in future residents and employees travelling along local rural lanes and village roads within Churchill and Blakedown when travelling between the A456 and A451. Furthermore, this situation will be exacerbated by the proposed allocation of land adjacent to the rail station to accommodate 50 residential dwellings and a 170 space car park; this being in addition to the proposed allocation of land to accommodate 80 car park spaces at Station Yard.

1.58 Significant issues associated with the above have been identified, a number of which will likely cause and/or exacerbate road and general safety issues.

1.59 It is apparent that the proposed land allocations do not accord with the principles of NPPF and it is anticipated that future more detailed assessments associated with planning applications for development at the proposed sites will identify significant issues. On this basis, it is questionable whether the intended development at the proposed allocated sites will be deliverable.

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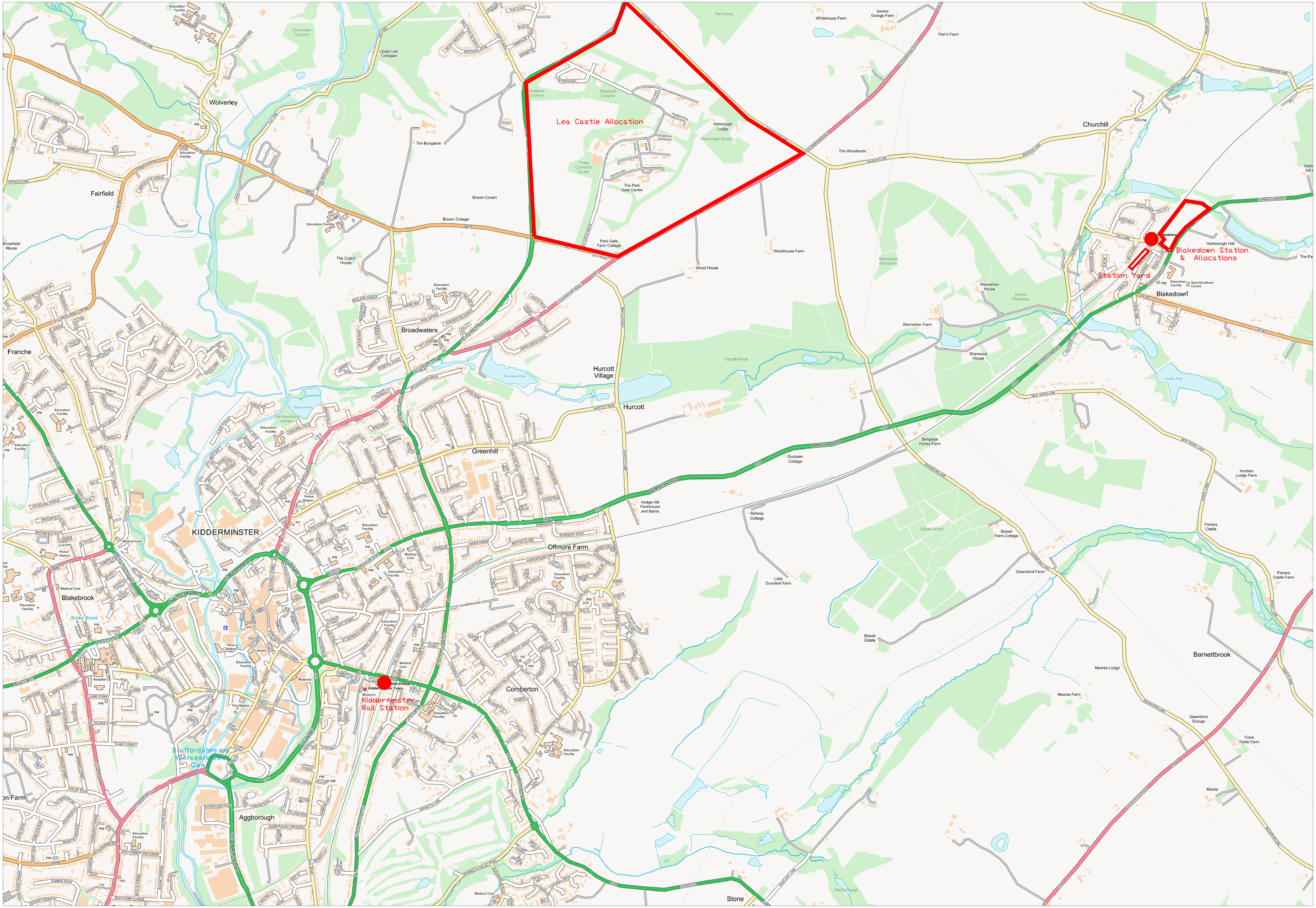
Date: 08/10/2019

Appendix A: Proposed Land Allocation Location Plan



Lea Castle Allocation
Blakedown Station & Allocations
Station Yard
Kidderminster Rail Station
Wolverley
Fairfield
Franche
Broadwaters
Hurcott Village
Hurcott
Greenhill
KIDDERMINSTER
Offmore Farm
Blakebrook
Comberton
Aggborough
Stone
Churchill
Blakedown
Barnettbrook
Staffordshire and Worcestershire Canal