

POSSIBLE GARDEN VILLAGE SITES

Preliminary Accessibility Appraisal



RT113816-05

November 2019

Prepared by WYG Environment Planning Transport Limited.

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1.0 Introduction

1.1 Preamble

1.1.1 WYG has been appointed by Bassetlaw District Council (BDC) to prepare a preliminary Accessibility Appraisal for two potential allocation sites being considered for Garden Village (GV) developments, to help advise preparation of the new Bassetlaw Local Plan.

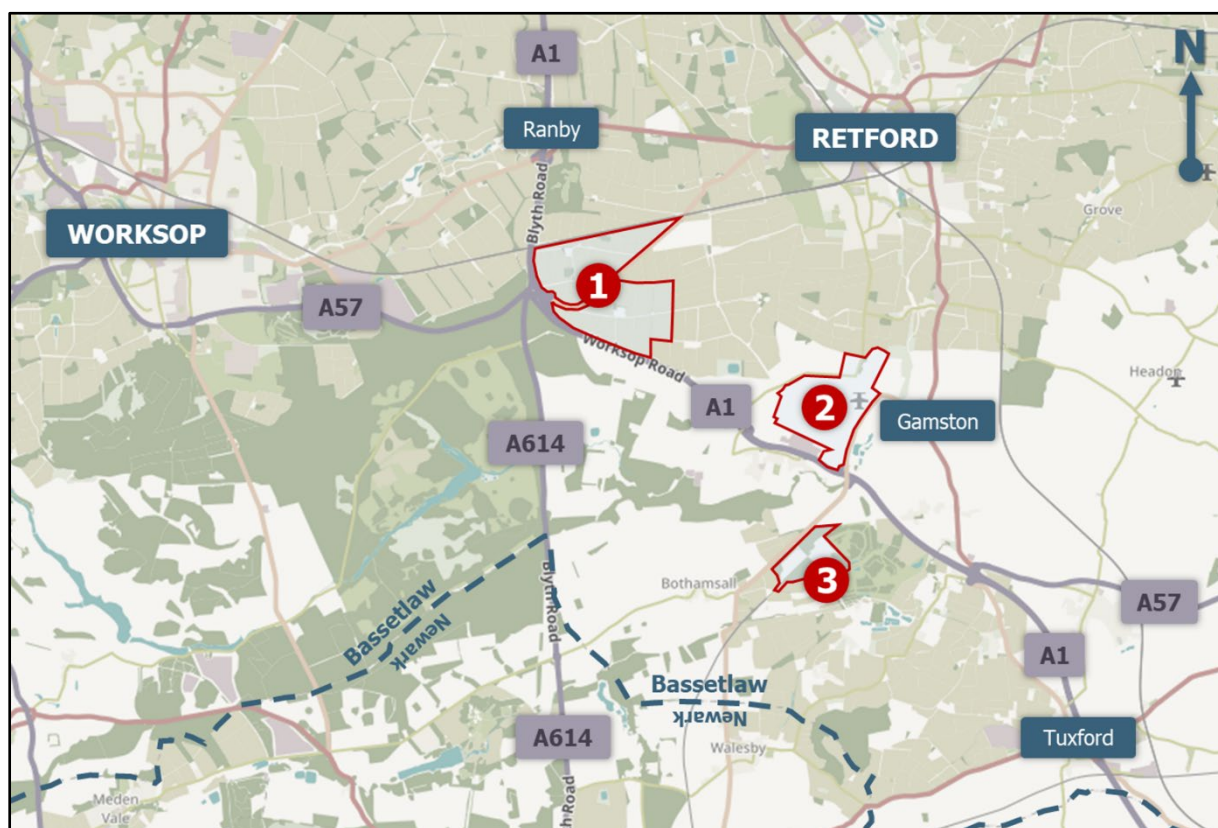
1.2 Potential Garden Village Locations

1.2.1 The two potential allocation sites are known as:

- Morton Garden Village – Site 1 below
- Gamston Airport Garden Village – Sites 2 & 3 below combined

1.2.2 The allocation locations are shown in **Figure 1** below:

Figure 1: Potential GV Allocation Locations



1.3 Gamston Airport GV

- 1.3.1 The Gamston Airport GV allocation comprises two parcels of land situated either side of the A1(T) on land at Retford (Gamston) Airport and the former Bevercotes Colliery. These two parcels of land are collectively being promoted as the Gamston Airport GV. The land boundaries are shown in **Figure 2** and **Figure 3** below.

Figure 2: Gamston Airport Boundary



Image source: Bassetlaw District Council

Figure 3: Bevercotes Boundary

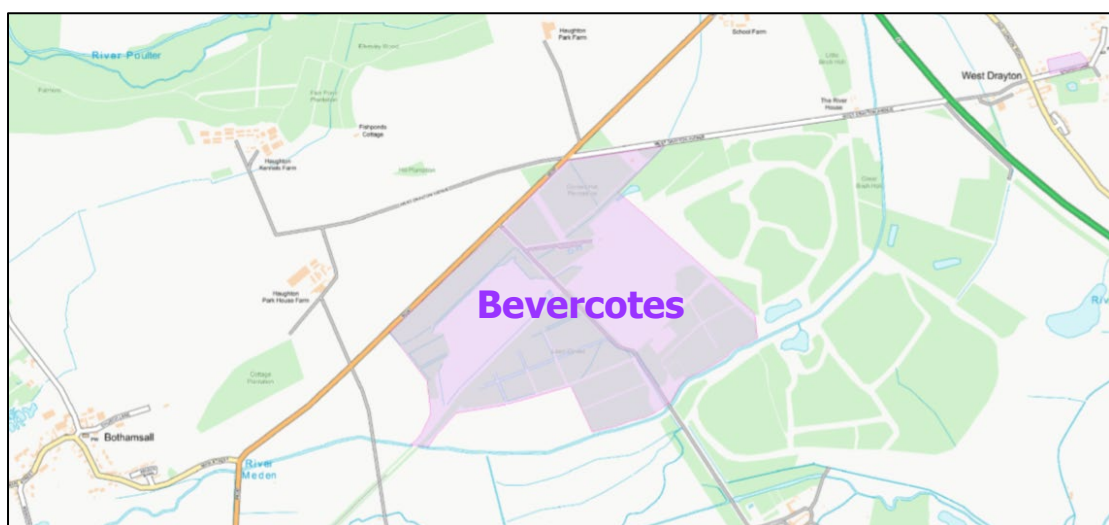


Image source: Bassetlaw District Council

1.4 Morton GV

- 1.4.1 The Morton GV allocation comprises a single parcel of land situated immediately to the northeast of the A1/A57/A614 'Five Lanes End' junction at Apleyhead. The land boundary is shown in **Figure 4** below.

Figure 4: Morton GV

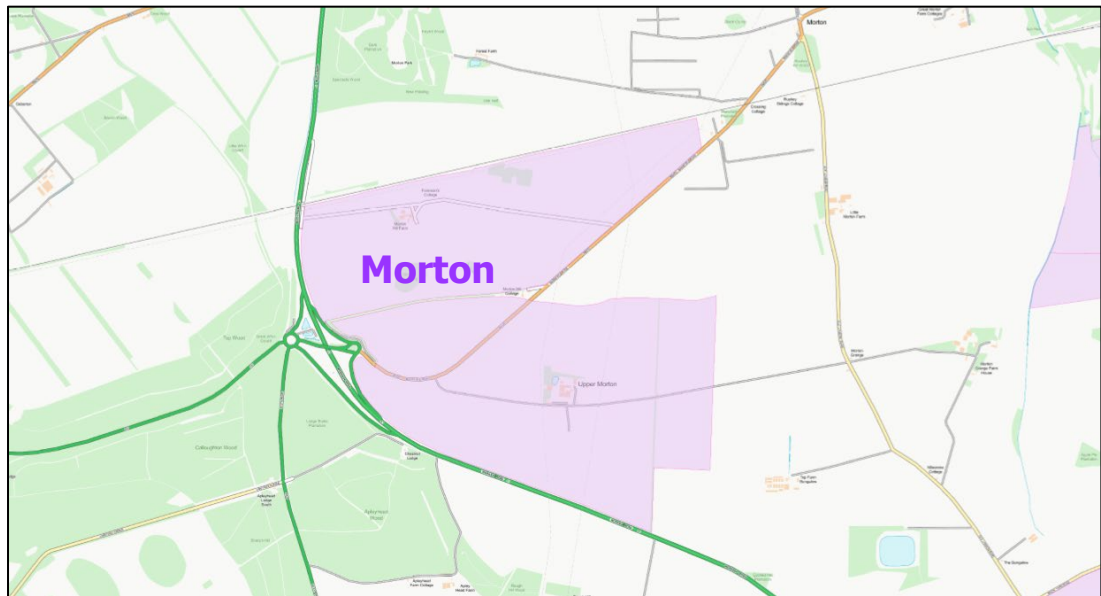


Image source: Bassetlaw District Council

2.0 Policy Context

- 2.1.1 The purpose of this appraisal is to provide a preliminary review of the current accessibility of these sites by sustainable transport modes and to identify opportunities to maximise sustainable transport solutions in accordance with Paragraphs 102 and 103 of the NPPF which state:

"102. Transport issues should be considered from the earliest stages of plan-making and development proposals, so that:

(a) the potential impacts of development on transport networks can be addressed;

(b) opportunities from existing or proposed transport infrastructure, and changing transport technology and usage, are realised – for example in relation to the scale, location or density of development that can be accommodated;

(c) opportunities to promote walking, cycling and public transport use are identified and pursued;

(d) the environmental impacts of traffic and transport infrastructure can be identified, assessed and taken into account – including appropriate opportunities for avoiding and mitigating any adverse effects, and for net environmental gains; and

(e) patterns of movement, streets, parking and other transport considerations are integral to the design of schemes, and contribute to making high quality places."

103. The planning system should actively manage patterns of growth in support of these objectives. Significant development should be focused on locations which are or can be made sustainable, through limiting the need to travel and offering a genuine choice of transport modes. This can help to reduce congestion and emissions, and improve air quality and public health. However, opportunities to maximise sustainable transport solutions will vary between urban and rural areas, and this should be taken into account in both plan-making and decision-making."

3.0 Site Descriptions

3.1 Gamston

- 3.1.1 The land at Gamston Airport is situated approximately 8km south of Retford and 16km south east of Worksop and is located to the west of the village of Gamston and to the north of the village of Elkesley. The site, which is irregular in shape, is bound to the immediate east by the B6387, to the south by commercial properties and the A1(T) and to the north and west by agricultural fields. Brick Yard Road / Jockey Lane are offset to the north / west of the site boundary and run approximately parallel with the boundary.
- 3.1.2 There is one main existing land use on the site, namely the operation of Retford (Gamston) Airport. Several aviation-related businesses operate from the site including a flight school.

3.2 Bevercotes

- 3.2.1 The Bevercotes parcel of land is situated approximately 9.5km south of Retford, approximately 16.75km south east of Worksop. The site is located to the north west of the hamlet of Bevercotes and to the north east of the village of Bothamsall on the site of the former Bevercotes colliery. The site, which is irregular in shape, is bound to the immediate north and west by the B6387 and to the east and south by a mixture of tree plantations and agricultural fields.
- 3.2.2 At present, there is no existing development on the site. However, the site has extant planning permission for a distribution park development of 200 acres comprising of 250,850sqm of warehousing floor space. Construction of this development had not commenced at the date of this report.

3.3 Morton GV

- 3.3.1 The Morton GV site is located 5.5km south west of Retford and 9.0km to the east of Worksop. The site, which is irregular in shape, is bound to the immediate west and south by the A1(T) and encompassed on all other sides by agricultural farmland which also forms the site's main existing land use.
- 3.3.2 The site is bisected by the B420 Mansfield Road, which is aligned approximately north east to south west, joining the A1 at the A1/A57/A614 'Five Lanes End' junction to the south west of the site.

4.0 Proposed Development

4.1 Introduction

- 4.1.1 It is understood that BDC will allocate one Garden Village (GV) site as part of the new Local Plan to deliver a development of circa 4,000 dwellings, 15Ha of employment uses, new education and community facilities.

4.2 Gamston Airport GV

- 4.2.1 The two parcels of land described in the previous chapter are collectively being promoted as the Gamston Airport GV allocation. Details of how these two parcels of land will be developed have yet to be determined however, for the purposes of this report, the following development assumptions have been provided by BDC, if this allocation is the preferred option:

- **Gamston Airport** – up to 2,500 dwellings, 15Ha employment, a new secondary school and ancillary community facilities.
- **Bevercotes** – up to 1,500 dwellings with little or no employment or education facilities.

4.3 Morton GV

- 4.3.1 The entire development of circa 4,000 dwellings, 15Ha of employment uses, a new secondary school and ancillary community facilities would be provided on the Morton GV site, if this allocation is the preferred option.

5.0 Walking

5.1 Introduction

- 5.1.1 This chapter presents a summary of existing walking routes and infrastructure near the possible GV allocation sites and provides initial thoughts on the scope for integration with GV developments.
- 5.1.2 The following chapters present similar overviews of cycling, bus and rail based travel opportunities in relation to the potential GV allocation sites.

5.2 Gamston Airport

- 5.2.1 **Figure 5** below shows a 2km walking distance from the villages of Elkesley and Gamston with all routes utilising the existing footway network. A 2km distance has been shown in accordance with PPS13, as quoted within Manual for Streets, which states that: *'walking offers the greatest potential to replace short car trips, particularly those under 2km'*.

Figure 5: 2km Walking Accessibility Map shown in 1km Catchments

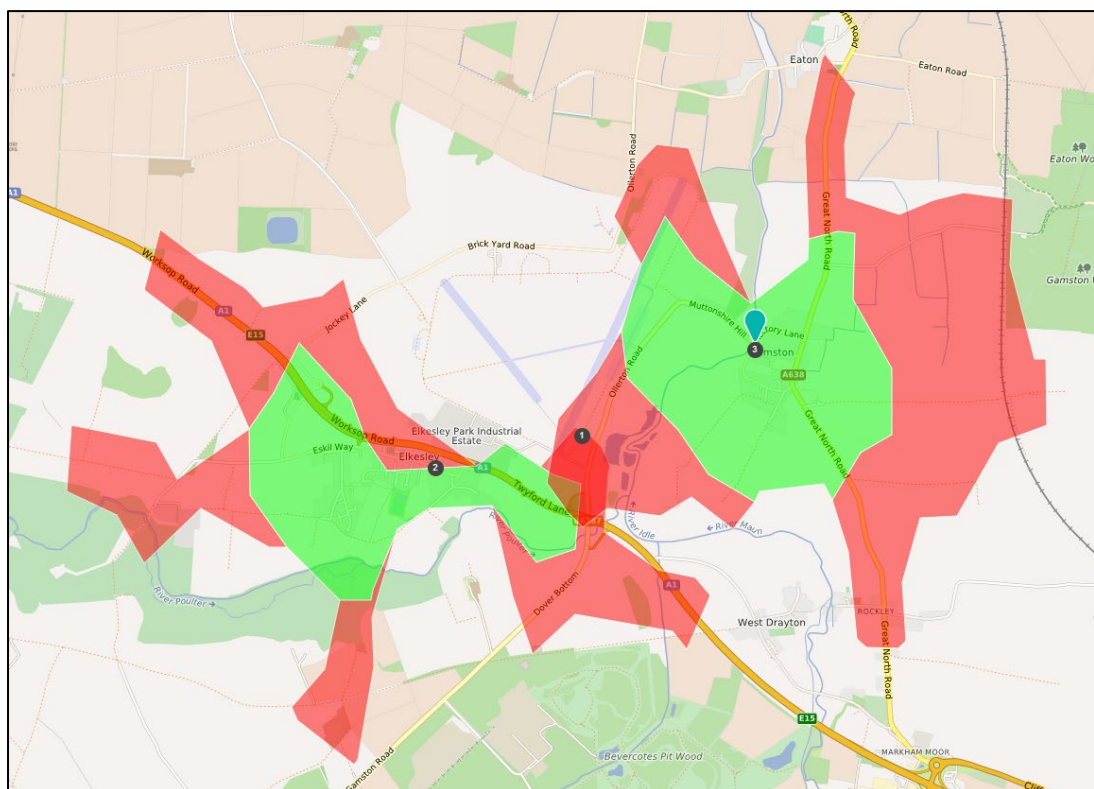


Image source: 'Openrouteservice.org'. Map layer: 'Openstreetmap.org'

- 5.2.2 **Figure 5** shows that there is an overlap of the catchments for the two villages in the south eastern corner of the Gamston Airport site. This area of the allocation site may therefore be a good location for a new 'Local Centre' as part of any GV development as it would maximise accessibility to local services for the GV as well as Elkesley and Gamston.

Existing Facilities

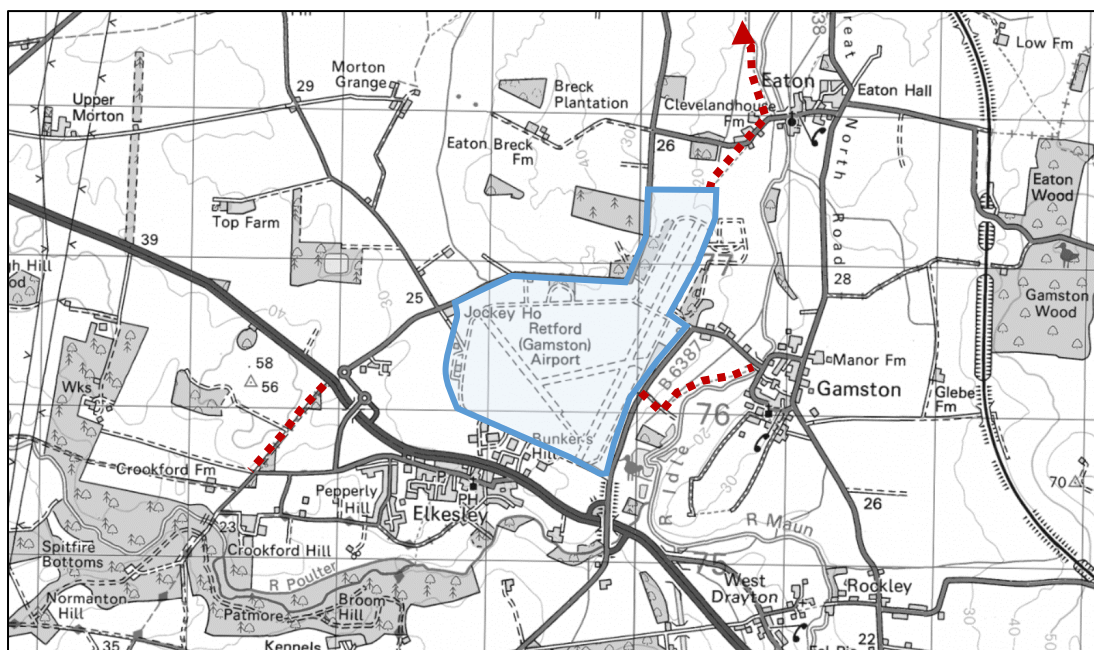
- 5.2.3 Due to the rural nature of the site at present, footpath infrastructure is lacking with no existing footpaths provided along the B6387 or Brick Yard Road along the site boundary. Footways are present within Elkesley village and a footpath exists on the southern side of the A1 from the junction with High Street, but this terminates on the B6837 slip road. Footways are present within Gamston village but do not extend as far as the airport, ending on the northern side of the B6837 on the western most extent of the village, approximately 450m from the existing airport access.

Scope for Improvement

- 5.2.4 It is recommended that, subject to available verge space, the existing footway network serving Elkesley and Gamston should be extended to provide continuous, safe walking routes between these existing settlements and any GV development at Gamston airport. Ideally these routes should also be street lit and vehicle speed limits should be reduced on the B6837 in the vicinity of the GV site.
- 5.2.5 Journeys to/from Elkesley would still be unlikely to be made on foot due to the quality of the route adjacent to the A1. It is therefore suggested that the viability of providing a pedestrian/cycle bridge over the A1 should be investigated to provide a safe, direct, high quality route between the GV site and Elkesley.
- 5.2.6 The above footway improvements would help to create a cohesive local network. This is further supplemented by several nearby Public Rights of Way (PRoW), which are shown in **Figure 3** on the following page.

Public Rights of Way (PRoW)

Figure 6: PRoW Routes close to Gamston Airport



Source: Bing Maps

- 5.2.7 A Public Right of Way (PRoW) Ref: Eaton FP3 appears to abut the northern-most point of the site. The footpath which runs mostly north to south, joins with footpath Eaton FP2 in order to provide an alternative route towards Ordsall and Retford. Use of PRoW FP3 and FP2 should be investigated further to potentially enhance pedestrian and cyclist connectivity.
- 5.2.8 A second PRoW adjoins the site's eastern boundary. The footpath, Gamston (B)FP1, which connects the village of Gamston with the B6387. The potential for connection with the footway enhancements mentioned earlier should be explored to provide an alternative route between the site and Gamston.
- 5.2.9 A third PRoW is close to the site, extending south from the A1 on Cross Lane and connecting to Coalpit Lane (which later forms part of Elkesley High Street to the east). This should be investigated to see whether there is potential to provide a route over the A1 (via the new Elkesley Bridge) into the southern end of Jockey Lane. Further improvements could include:
- Surfacing PRoWs with bound materials to facilitate 'all-weather' use.
 - Provision of shared cycle/pedestrian routes where possible.
 - Lighting pedestrian and cycle routes.
 - Providing dropped kerbs and tactile paving at junctions.
 - Controlled pedestrian crossing points.

5.3 Bevercotes

Existing Facilities

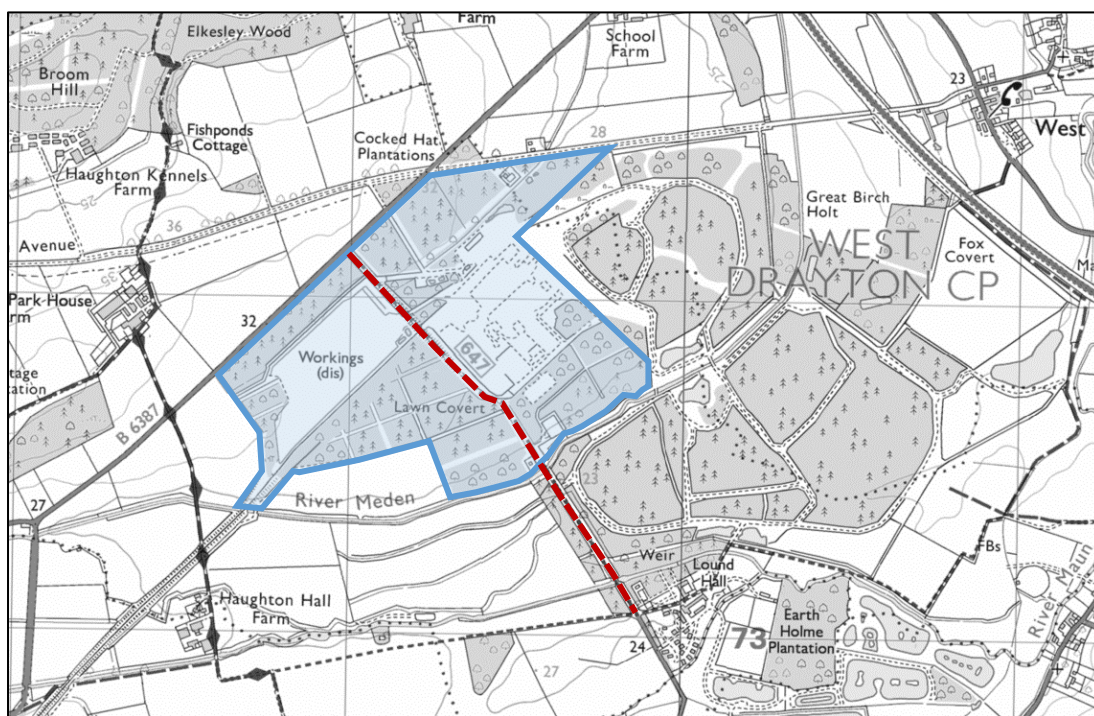
- 5.3.1 Due to the rural nature of the site at present, footpath infrastructure is lacking with no existing footpaths provided along the B6387 near the site.

Scope for Improvement

- 5.3.2 Subject to available verge width a footway should be provided along the B6387 to Elkesley. Approximately 1,500m of new footway would have to be provided in order to connect into the existing provision adjacent to the southern side of the A1. The existing footway adjacent to the A1 would also require improvement to bring it up to a suitable standard. However, as previously mentioned, this may remain an unattractive walking route, due to the high traffic volumes on the A1. Therefore, it is considered that an emphasis should be made on improving bus infrastructure as an alternative mode of transportation.

Public Rights of Way (PRoW)

Figure 7: PRoW Routes close to Bevercotes



Source: Bing Maps

- 5.3.3 Several PRow exist near the site but only one connects to the site boundary. The bridleway BW14 bisects the site, facilitating NCN Route 647. The route which runs approximately north west to south east, joins with further rights of way to provide a shortened route towards the villages of West Drayton, Haughton, Bevercotes, Bothamsall and Elkesley. Consideration should therefore be given to connecting into and enhancing this existing network of PRow as part of any site access strategy, using the types of improvements mentioned earlier.

5.4 Morton GV

Existing Facilities

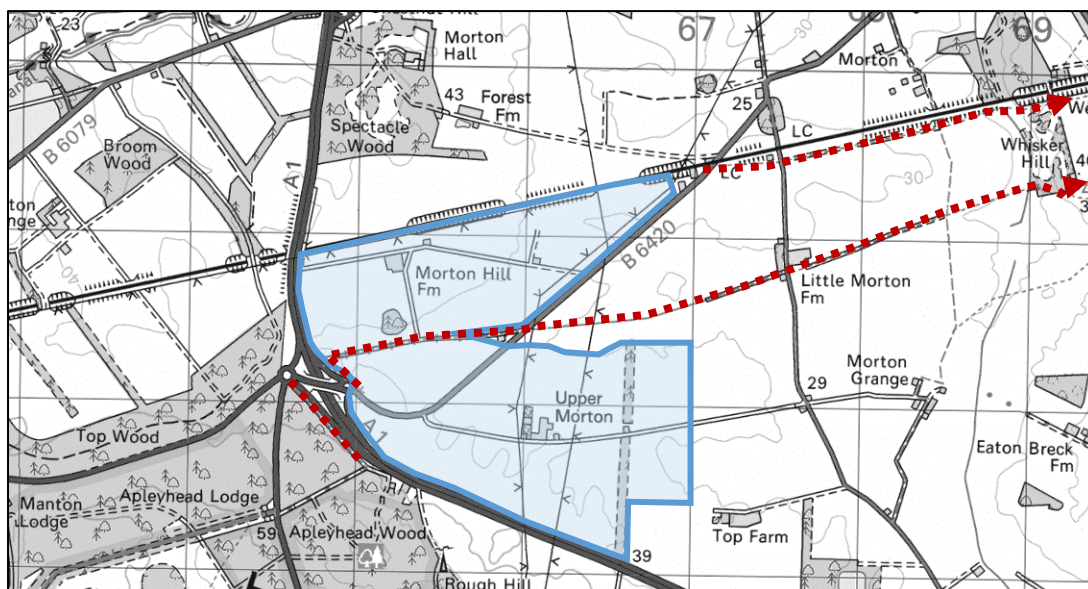
- 5.4.1 Due to the rural nature of the site at present, footway infrastructure is lacking with no existing footways provided along the B6420 where it bisects the site. From Retford, a footway exists on the northern side of Babworth Road extending west towards Ranby and Worksop. There is also evidence of an overgrown hard-surfaced footway on the western side of the B6420 (Mansfield Road) near its junction with Babworth Road but this soon reverts to an unsurfaced track further south.
- 5.4.2 From Worksop, a shared footway/cycleway exists along the northern side of the A57 until Roebuck Way, the entrance to the Wilkinson Distribution Centre. A second section of shared footway/cycleway exists over the A1, connecting into nearby PRow routes.

Scope for Improvement

- 5.4.3 Consideration should be given to providing a shared footway/cycleway route between the existing route on the A57 and over the A1 thereby providing a continuous route between the site and Worksop. Ideally this route should also be lit with reduced speed limits on appropriate sections to maximise its attractiveness for walking and cycling.
- 5.4.4 Consideration should also be given to either connecting into and upgrading the existing substandard footway along the B6420 or utilising existing PRow routes to provide a walking/cycling route to Retford.

Public Rights of Way (PRoW)

Figure 8: PRoW Routes Within Close Proximity of the Site



Source: Bing Maps

- 5.4.5 The first PRoW route is located just east of the Morton GV site. The footpath, Babworth FP6, connects into footpaths FP6A and FP9 to connect to Ordsall and Retford. The route proceeds along the southern side of the Retford to Worksop railway line through agricultural fields and Retford Golf Club.
- 5.4.6 A second PRoW adjoins the site's eastern boundary. The bridleway, Babworth BW7A, connects with footpaths FP7 and FP61 to connect to Ordsall and Retford. The route again proceeds through agricultural fields.
- 5.4.7 A third PRoW is located within the GV site boundary, connecting the eastern, western and southern boundaries. The byway, Babworth BOAT7B, connects into the bridleway, Babworth BW7A in the east and the footway/cycleway over the A1 to the west. After crossing the A1, the cycleway connects into a fourth PRoW route. The bridleway, Babworth BW14, extends south adjacent to the A1 facilitating access to Clumber Park.
- 5.4.8 Consideration should be given to hard surfacing these PRoW to make them suitable for 'all weather' use, with lighting and pedestrian/cyclist crossing facilities provided at appropriate locations.
- 5.4.9 Cycling, as discussed in the next chapter, is considered more in the context of a leisure activity, rather than commuting due to the distances involved. However, any GV development should provide a comprehensive internal network of walking and cycle routes, due to the site size.

6.0 Cycling

6.1 Introduction

- 6.1.1 Local Transport Note 2/08 'Cycle Infrastructure Design' (DfT, 2008) states that "many utility cycle journeys are under three miles... although, for commuter journeys, a trip distance of over five miles is not uncommon". It can therefore be concluded that 3 miles, which is equivalent to approximately 5km, represents a reasonable typical cycling distance.

6.2 Gamston Airport

- 6.2.1 **Figure 9** below shows that the areas of Gamston, Elkesley, West Drayton, Rockley, Eaton, Markham Moor and the outer reaches of Ordsall are all accessible within a 5km cycling distance.

Figure 9: 5km Cycling Accessibility Map shown in 1km Catchments

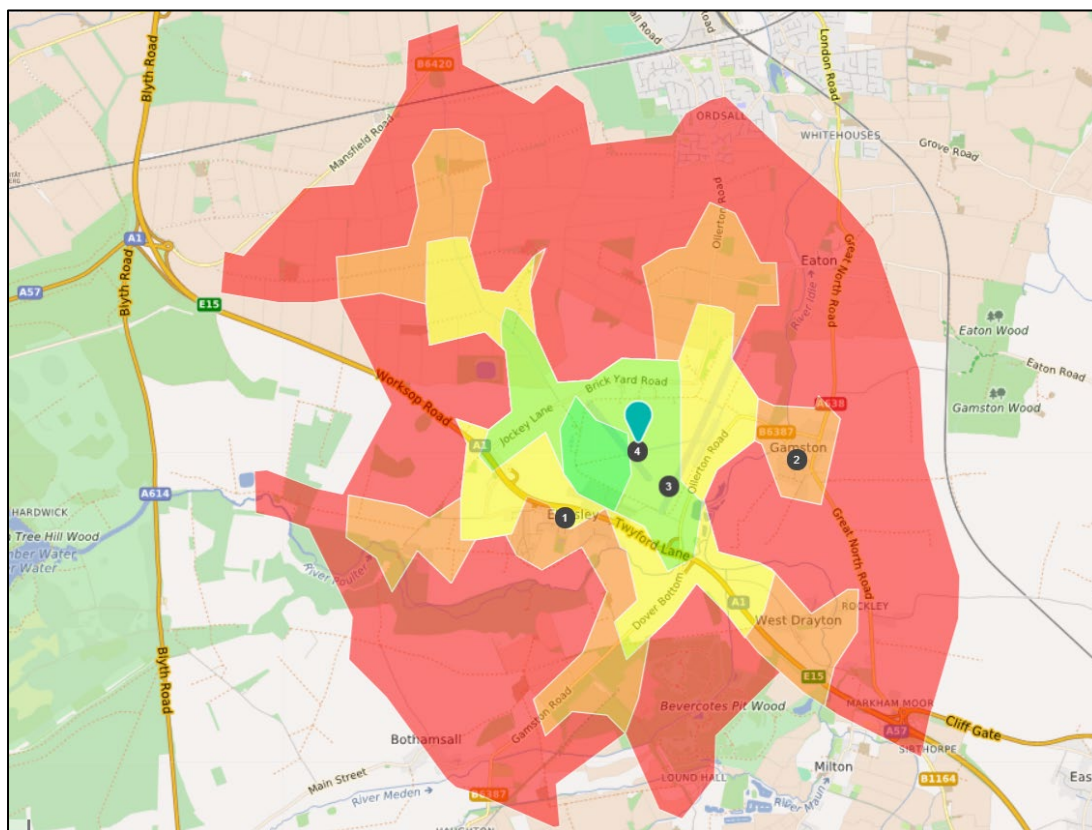


Image source: 'Openrouteservice.org'. Map layer: 'Openstreetmap.org'

- 6.2.2 A review of the [sustrans.org.uk](https://www.sustrans.org.uk) website highlights that there is one major cycle route near the site (within 5km). The route, National Cycle Network Route 647, shown in **Figure 10** on the next page, is within 3.75km of the site and provides a route between Lincoln and Worksop via Tuxford. The route, whilst not necessarily practical for commuting to work, does provide an ideal leisure route for future residents.

Figure 10: NCN 647 Route Map

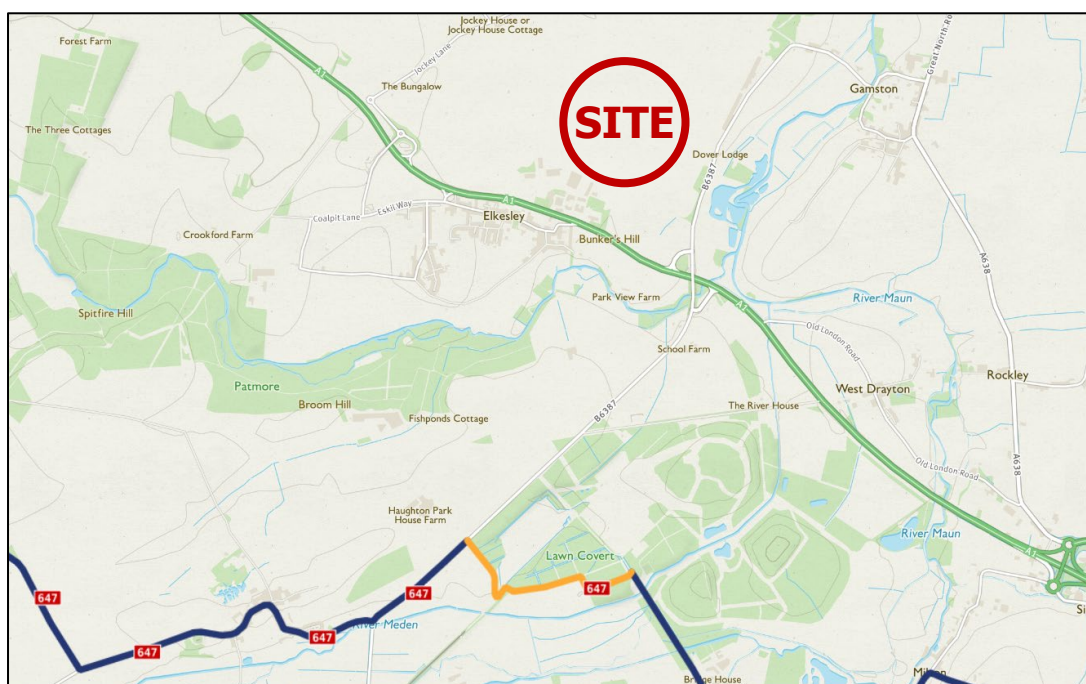


Image source: [Sustrans.org](https://www.sustrans.org)

- 6.2.3 Cycling will otherwise, be conducted on the local highway network. The roads which immediately bound the site, the B6387 and Brick Yard Road are relatively quiet. Vehicle speed limits of 40mph and the national speed limit (60mph) are noted on Brick Yard Road and the B6387 respectively directly past the site and cycling would therefore be recommended to individuals with moderate experience. It is also noted that there are busier roads in the immediate vicinity where cycling is either not permitted (A1); or only recommended for more experienced cyclists (A638).

6.3 Bevercotes

- 6.3.1 **Figure 11** on the next page shows that the areas of Gamston, Elkesley, West Drayton, Bothamsall, Walesby, Markham Moor and West Markham are all accessible within a 5km cycling distance.

Figure 11: 5km Cycling Accessibility Map shown in 1km Catchments

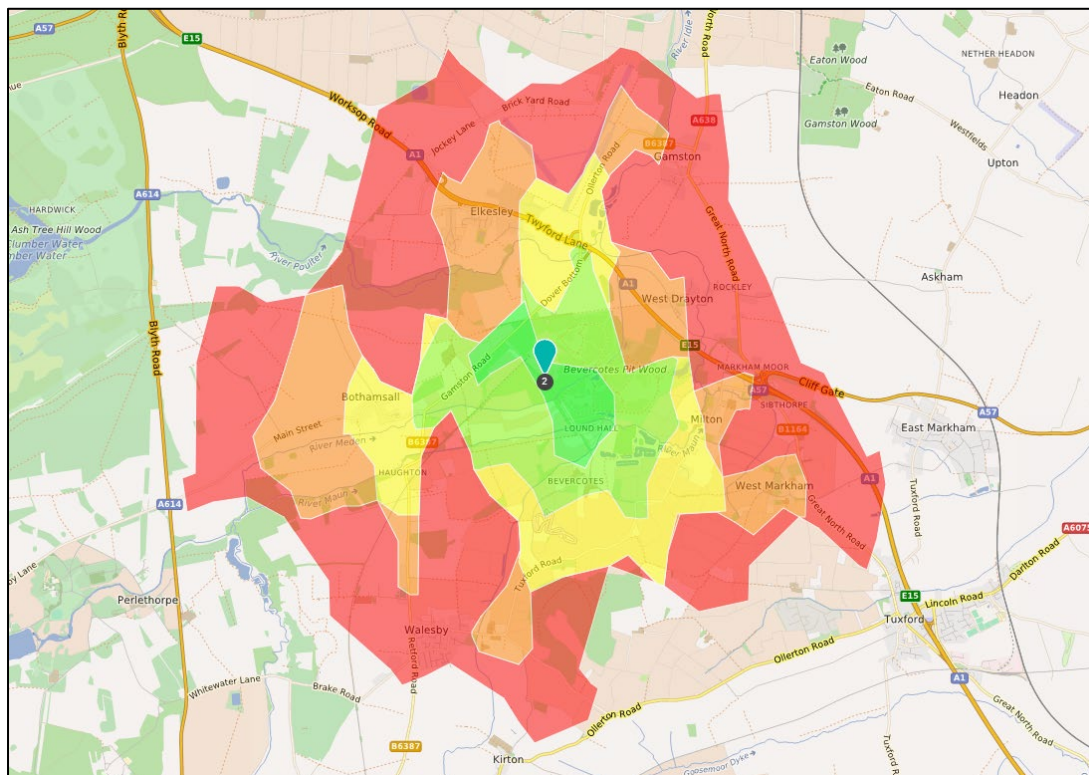


Image source: 'Openrouteservice.org'. Map layer: 'Openstreetmap.org'

- 6.3.2 A review of the sustrans.org.uk website highlights that there is one major cycle route near the site (within 5km). National Cycle Network Route 647, previously mentioned for the Gamston Airport site, shown in **Figure 12** on the next page, passes through the site providing a route between Lincoln and Worksop via Tuxford. The route, which is a mixture of surfaced and unsurfaced paths as well as on-road cycling could, in good weather, be used as a route towards Markham Moor and Tuxford.
- 6.3.3 Cycling will otherwise, be conducted on the local highway network. The B6387, which is immediately adjacent to the site, is relatively quiet. However, the B6387 past the site is currently subject to the national vehicle speed limit (60mph for single carriageways) and cycling would therefore only be recommended to more experienced cyclists. It is also noted that there are busier roads in the immediate vicinity where cycling is either not permitted (A1); or only recommended for more experienced cyclists (A638).
- 6.3.4 Alternatively, the provision of a shared pedestrian/cycle route, or on-carriageway cycle lanes along the B6387 to the southwest to link into NCN Route 647 could be considered as part of any GV development.

Figure 12: NCN 647 Route Map



Image source: Sustrans.org

6.4 Morton GV

- 6.4.1 **Figure 13** on the next page shows that there are few local areas which are accessible within a 5km cycling distance.
- 6.4.2 A review of the sustrans.org.uk website highlights that there is one major cycle route near the site (within 5km). The route, National Cycle Network Route 647, is approximately 4.9km to the south of the site providing a route between Lincoln and Worksop via Tuxford. The route, whilst not practical for commuting to work, does provide an ideal leisure route for future residents.
- 6.4.3 Cycling will otherwise, be conducted on the local highway network. The road which immediately bounds the site, the B6420 is relatively quiet but is currently subject to the national vehicle speed limit (60mph for single carriageways). However, it is likely the speed limit would be reduced as part of any GV development which would help to facilitate its use by cyclists.

Figure 13: 5km Cycling Accessibility Map shown in 1km Catchments

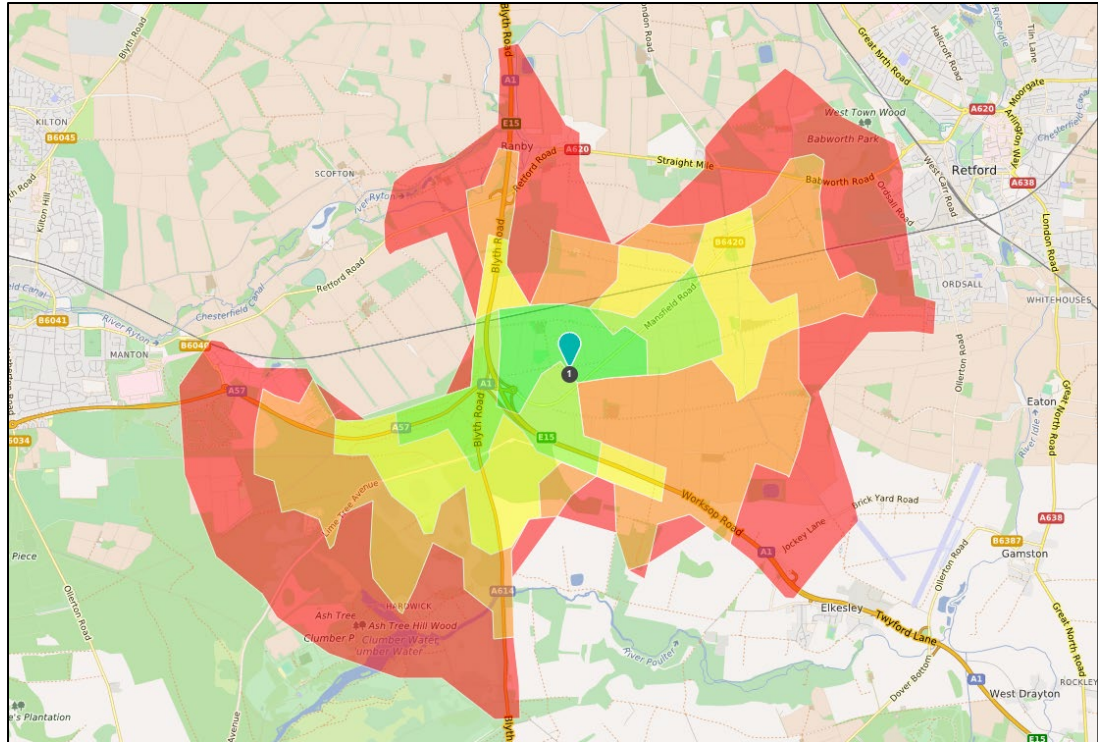


Image source: 'Openrouteservice.org'. Map layer: 'Openstreetmap.org'

7.0 Public Transport - Bus

7.1 Gamston Airport

- 7.1.1 There are four noteworthy bus stop locations near the site, two within Gamston and two within Elkesley. There are no existing stops within a suitable walking distance of the site, as set out by The Chartered Institution of Highways and Transportation' (CIHT's) 'Buses in Urban Developments' document which recommends a 300m walking distance for routes which are served less frequently than every 12 minutes.

Gamston

- 7.1.2 Both sets of stops are located on the A638, on the eastern side of Gamston. The first set of stops, titled 'Yew Tree Close', are located centrally between the B6837, which proceeds west to the Garden Village site and Rectory Lane. The second set of stops, titled 'Rectory Lane', are located on the northern boundary of the village, north of the B6837.
- 7.1.3 The northbound 'Yew Tree Close' stop comprises of a flag-and-pole feature with signposted timetable information alongside a seated shelter and a layby feature. The southbound stop comprises of a flag-and-pole feature with signposted timetable information and a layby feature only.
- 7.1.4 The northbound 'Rectory Lane' stop comprises of a standing shelter with signposted timetable information with a flag feature to mark its location. The southbound stop can be classed as a 'ghost' stop, with no physical feature indicating its location.
- 7.1.5 Both sets of stops are served by the frequent Service 37 as well as the Lincoln Shopper service. The services are summarised in **Table 1** on the next page.

Elkesley

- 7.1.6 Both sets of stops are located along High Street, on the northern side of Elkesley. The first set of stops, titled 'Holly Bush Close', are located centrally whilst the second set of stops, titled 'Blacksmith Cottages', are located on the western edge of the village.
- 7.1.7 Both the east and westbound 'Holly Bush Close' stops comprise of a flag-and-pole design with signposted timetable information. Both the east and westbound 'Blacksmith Cottages' stops also comprise of a flag-and-pole design with signposted timetable information however, it should be noted that the westbound stop also has a seated shelter.

7.1.8 Both sets of stops are served by the frequent 'Sherwood Arrow' service as well as the Doncaster and Edwinstowe Shopper services. Timetable information is summarised in **Table 1**, below.

Table 1: Summary of Public Bus Services – Gamston & Elkesley

Location	Service	Operating Days	Operating Times	Frequency (up to)	Route	Provider
Gamston	37 (37A/X37)	Mon – Fri	08:47 – 19:02*	60 mins	Newark to Retford	Marshall's Coaches
		Saturday	08:47 – 19:02*			
	Lincoln Shopper	Friday	09:52 / 14:42	Once E/W	Retford to Lincoln	Ketwells Coaches
Elkesley	Sherwood Arrow	Mon – Fri	06:29 – 18:39	120 mins	Retford to Nottingham	Stagecoach
		Saturday	06:29 – 18:39	120 mins		
		Sunday	10:59 – 14:59	Twice E/W		
	Doncaster Shopper	Tuesday	09:40	Once E/W	Tuxford to Doncaster	Ketwells Coaches
	Edwinst. Shopper	Friday	09:45	Once E/W	Edwinstowe to Lincoln	Ketwells Coaches

*Returns upon request, E/W = Each Way, Timetable data taken from 'traveline.info'

7.1.9 It is noted that the nearest available bus stops are located beyond the CIHT recommended walking distance. As shown in **Table 1**, there are two frequent bus services that have the potential to be diverted through the site. It is suggested that a potential diversion of the 'Sherwood Arrow' service is preferred to a diversion of the '37' service, as any diversion to the 37 service would prevent it from serving the 'Yew Tree Close' stops due to the unsuitability of 'Rectory Lane' for handling a bus service.

7.1.10 As the site will likely require two points of access, it may be possible to divert the existing 'Sherwood Arrow' bus service through the site, along the spine road of the development. If this was to be the case, it is recommended that two points of access are provided along the B6837, one in close proximity to the existing Airport access and a second towards the south east corner of the site¹ to minimise disruption to journey times and increase the likelihood of Stagecoach agreeing to a potential diversion.

¹ Identified as potentially a good location for a local centre in paragraph 6.1.2

- 7.1.11 The proposed diversion would likely head north through Markham Moor, serving Rockley and Gamston before utilising the spine road of the development and returning to the A1 before serving Elkesley. This diversion would greatly improve interconnectivity between the existing villages and present both existing and future residents with a real choice of transport modes when travelling to local amenities and facilities.
- 7.1.12 With a bus diversion, new stops should also be provided along the route with adequate spacing to ensure that all new dwellings are located within 300m of a stop. Ideally stops should include seated shelters and real-time passenger information displays (RTPI) to maximise potential uptake of bus provision.
- 7.1.13 Increasing bus service frequency should also be investigated, with the potential to make the service at least hourly off-peak with additional services at peak times in order to improve the viability of the bus as an alternative to private car trips.

7.2 Bevercotes

- 7.2.1 There are three noteworthy bus stop locations near the site, two towards Bothamsall and one towards Elkesley. No stops are located within the recommended 300m walking distance for routes which are served less frequently than every 12 minutes.

Bothamsall

- 7.2.2 The first set of stops, titled 'Sports Ground', are located on the B6837, which proceeds northeast to the site and Elkesley. The second set of stops, titled 'Meden Bank', are located on Main Street, just to the west of the B6837.
- 7.2.3 Both 'Sports Ground' stops can be classed as 'ghost' stops, with no physical features indicating their location. The stops are served by the Edwinstowe Shopper service summarised in **Table 2** on the following page.
- 7.2.4 The eastbound Meden Bank stop comprises of a flag-and-pole design with signposted timetable information. The westbound stop can be classed as a 'ghost' stop, with no physical feature indicating its location. The stops are served by the 335 service summarised in **Table 2** on the following page.

Elkesley

- 7.2.5 The stops, titled 'School Farm', are located on the B6387, near to the Farm Shop at School Farm. The southbound stop comprises of a flag-and-pole design with signposted timetable information whilst the northbound stop can be classed as a 'ghost' stop, with no physical feature indicating its location. The stops are served by the frequent Edwinstowe Shopper and 335 services. As summarised in **Table 2** below.

Table 2: Summary of Public Bus Services - Bevercotes

Service	Operating Days	Operating Times	Frequency (up to)	Route	Provider
335	Mon – Sat	08:00* / 16:38*	Once E/W	Retford to Newark	Travel Wright
Edwinstowe Shopper	Friday	09:39	Once E/W	Edwinstowe to Lincoln	Ketwells Coaches

*Upon request, E/W = Each Way, Timetable data taken from 'traveline.info'

- 7.2.6 It is noted that the nearest available bus stops are located beyond the CIHT recommended walking distance. As shown in **Table 2**, there is one existing bus service that has the potential to be diverted through the site. It is suggested that a potential diversion of the 335 service is plausible with an increase in service frequency.
- 7.2.7 As the site will likely require two points of access, it may be possible to divert the existing 335 bus service through the site, along the spine road of the development. If this was to be the case, it is recommended two points of access should be provided on the B6837, in order to minimise disruption to journey times and increase the likelihood of Nottinghamshire and Travel Wright agreeing to a potential diversion.
- 7.2.8 The service diversion should also consider continuing to the Gamston Airport site to further improve accessibility before continuing back to Elkesley via the A1.
- 7.2.9 With a bus diversion, the provision of new stops should also be provided along the route with adequate to ensure that all new dwellings are located within 300m of a stop. Ideally stops should include seated shelters and real-time passenger information displays (RTPI) to maximise potential uptake of bus provision.
- 7.2.10 Increasing bus service frequency should also be investigated, with the potential to make the service at least hourly off-peak with additional services at peak times in order to improve the viability of the bus as an alternative to private car trips.

7.3 Morton GV

7.3.1 There are currently no noteworthy bus stops located near the site, within the recommended 300m walking distance for routes which are served less frequently than every 12 minutes.

7.3.2 There are two frequent bus services that have the potential to be diverted through the site. These are the 42 and 43 services between Worksop and Manton, and Worksop and Retford respectively. Timetable information for these services is summarised in **Table 3**, below.

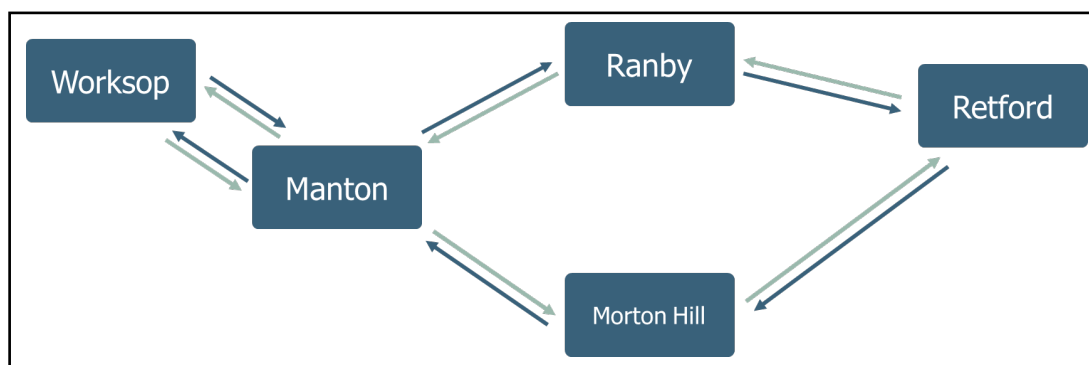
Table 3: Summary of Public Bus Services - Morton

Service	Operating Days	Operating Times	Frequency (up to)	Route	Provider
42	Mon – Fri	04:45 – 17:27 05:51 – 17:35	60 mins	Worksop – Manton Manton – Worksop	Stagecoach
	Saturday	04:45 – 17:27 05:51 – 17:35			
43	Mon – Fri	05:30 – 18:31 05:56 – 19:15	60 mins	Worksop – Retford Retford – Worksop	Stagecoach
	Saturday	05:30 – 18:31 05:56 – 19:15			

Timetable data taken from 'stagecoachbus.com'

7.3.3 Any diversion of the 43 service should also include an increase in bus frequency. In order to not detract from the accessibility of Ranby when diverting the service, a second bus could be provided running in the opposite direction in order to create two looped routes as shown in **Figure 7** below. The addition of a second bus would maintain the 60-minute frequency at Ranby whilst also serving the Morton GV site.

Figure 14: Potential Diverted 43 Bus Service



8.0 Public Transport – Rail

8.1 Gamston Airport GV

- 8.1.1 Retford Railway Station is the closest train station to the site, located approximately 4.5km to the north. The station, which is managed by London North Eastern Rail, is situated on the East Coast Main Line.
- 8.1.2 The Station, which operates from Monday to Sunday, is within cycling distance and provides a total of 38 cycle parking spaces. The Sherwood Arrow bus service stops directly outside the station, with a journey from Elkesley taking circa 11 minutes. Vehicle parking is available at the station with a total of 101 spaces. A taxi rank is also located within the station forecourt.
- 8.1.3 **Table 4** below provides a summary of rail services to the major destinations from Retford Railway Station.

Table 4: Summary of Services Operating from Retford Railway Station

Route	Frequency (Outward journeys at peak periods)	Travel time
to Leeds	Up to 2 Services Per Hour	48 – 108 minutes
to Sheffield	Up to 2 Services Per Hour	~45 minutes
to York	Up to 1 Service Per Hour	~35 minutes
to Lincoln	Up to 1 Services Per Hour	~40 minutes
to Gainsborough	Up to 1 Service Per Hour	~15 minutes
to Hull	Up to 1 Service Per Hour	~75 minutes
to London (Kings Cross)	Up to 1 Service Per Hour	90 – 105 minutes

8.2 Morton GV

- 8.2.1 Retford Railway Station is also the closest existing train station to the Morton GV site being situated approximately 6.3km north east of the site.
- 8.2.2 However, the Morton GV site is bound to the north by the Lincoln to Sheffield railway line and the potential therefore exists to create a new railway station to directly serve a GV development at this location².

² The site was previously the location of a station called Checker House which was closed in 1931 to passengers, and in 1963 to freight.

8.2.3 The feasibility of providing a new station on the site has been explored separately in **Technical Note Ref: A113816-01**. This identified the following potential strategic benefits of a new station:

- **Commuter Link** – The station would provide access to existing train services operating between Sheffield and Lincoln via Worksop and Retford ensuring the new settlement is within easy reach of the major employment centres in the sub-region.

Connecting services available at Retford would also open the possibility of longer distance rail-based commuting to Doncaster and Leeds in the north and London to the south, whilst Nottingham could be reached via the Robin Hood Line at Worksop. It could also improve access to employment opportunities east of Worksop and in Ranby.

These services would offer a realistic alternative to the car for many, which bus-based public transport provision couldn't provide.

- **Parkway Station** – The proposed location, adjacent to the A1/A57 Apleyhead junction, also suggests that it could function as a Parkway Station for commuters wanting to travel into Sheffield, and to a lesser extent Worksop. This would help to reduce the volume of traffic, and supplement local demand for rail travel, thereby increasing the viability of investment in a new facility.
- **Gateway to Clumber Park** – The station would also provide scope to encourage more sustainable access to Clumber Park. At present the park is only realistically accessible by car. The new station could provide the opportunity for it to be served more sustainably with the additional provision of cycle hire facilities and a shuttle bus service, to coincide with major events for example.
- **Viability of Services** – Given that the station would also take advantage of existing train services operating on the line, it would reduce both the cost and risk of intervention, whilst the additional passenger numbers the station could generate may help to support long-term viability of the rail service, benefiting the wider community, and could generate the case for increasing the frequency of current rail services.
- **Density of Development** – The station could reduce reliance on the car and therefore potential levels of car ownership within the new community. This may enable the provision of housing at higher densities and ensure that general traffic does not dominate the public realm.

- 8.2.4 The Technical Note presents a high level review of the feasibility of delivering a new station in terms of the physical infrastructure, rail service scheduling, patronage and revenue generation and concludes that there is a strong case for the provision of a new station to serve a new GV at Morton.
- 8.2.5 There are few obvious barriers in terms of providing the physical infrastructure, whilst timetable changes can be made to ensure that it is served by regular trains, without disruption to the wider network. The anticipated level of demand also points towards a revenue stream which could make the station a viable and attractive public transport option to support growth in the local area.
- 8.2.6 On this basis a GV at Morton served by a new railway station would have clear benefits in terms of encouraging rail travel to help reduce trips by private car.

9.0 Accessibility Scoring

9.1 Methodology

9.1.1 A high-level accessibility scoring process has been undertaken for the potential GV allocations. A summary of the results is presented in **Table 5** on the following page. Details of the assessment criteria used can be found in **Appendix A**. The findings are discussed in the subsequent paragraphs.

9.1.2 To evaluate the relative accessibility of each site the following factors have been considered:

- Proximity to nearest rail, bus, cycle and walking routes/services
- Proximity to education and employment
- Proximity to nearest district and neighbourhood centres
- Proximity to the Strategic Road Network (SRN)
- Potential to deliver day-to-day amenity and service requirements on-site
- Potential to deliver local employment on-site
- Potential to improve accessibility to rail, bus, cycle and walking routes/services
- Potential to improve access to the SRN

9.1.3 The accessibility assessment examines key criteria only and is therefore a relatively simplistic assessment of the existing characteristics of the potential GV locations. The assessment also includes a basic interpretation of how feasible it would be for accessibility to be enhanced through the delivery of new/improved services and infrastructure.

9.1.4 It should be noted that, at this stage no GV masterplans have yet been produced. Approximate distances have therefore been measured using perceived site centres and existing access locations. Distances may therefore vary depending upon the final site layouts and the available routes/accesses³. In addition, the appraisal of accessibility to existing education facilities only considers travel distance and does not consider whether there is any available spare capacity at the nearest schools to accommodate additional pupils.

³ **Note:** Distances are measured using available routes by mode, not straight line distances.

9.2 Accessibility Scoring Results

Table 5: Accessibility Scoring Matrix

Ref	Scoring Criteria	Gamston Airport GV	Morton GV
	Assumed Residential Dwellings by end of Plan Period (2037)	4,000	4,000
	Number of Jobs	1,564	1,564
	Jobs per Dwelling	0.4	0.4
Distance Criteria (assessed as per the existing situation):			
1	Distance to nearest Rail Station served by at least 4 peak period trains per hour (Mon – Fri)	1	1
2	Distance to nearest bus stop served by at least 1 bus service at a frequency of 'every 60 minutes' or better (Mon – Fri)	2	2
3	Distance to nearest main cycle route (NCR, Sustrans)	2	2
4	Distance to nearest Primary School	2	1
5	Distance to nearest Secondary School	1	2
6	Distance to nearest key employment site	1	2
7	Distance to nearest District Centre (Worksop, Retford)	1	1
8	Distance to nearest local/neighbourhood centre	1	1
9	Distance to first point of entry to the Strategic Road Network (SRN) - i.e. first point of entry used by development trips	3	4
10	Standard of existing access to Strategic Road Network (SRN) - i.e. SRN access(es) used by development trips	4	5
Demand Management Potential (assessed as per the situation with development complete at the end of Plan Period):			
11	Potential to provide for day-to-day service and amenity requirements (e.g. education, retail, GP surgery etc)	5	5
12	Potential of development to deliver local jobs - number of jobs per household created on the site	5	5
Modal Shift Potential (assessed as per the situation with development complete at the Plan Period):			
13	Potential to improve accessibility to nearest existing Rail Services	2	5
14	Distance to nearest bus stop served by at least 4 buses per hour between 0700 - 1900hrs (Mon – Fri)	5	5
15	Potential to integrate with/enhance bus services on a corridor serving key employment destinations	2	5
16	Potential to deliver bus priority infrastructure	2	2
17	Pedestrian/Cycle Accessibility to nearest District Centre (Worksop, Retford)	1	1
18	Pedestrian/Cycle Accessibility to nearest local/neighbourhood centre	5	5
Potential to Improve Highway Access (assessed as per the situation with development complete at the end of Plan Period):			
19	Potential to improve access to Strategic Road Network (SRN) - i.e. SRN access(es) used by development trips	5	5
Total Score		50	59
Rank		2	1

9.3 Key Assumptions

9.3.1 Key assumptions applied for the purposes of the preliminary accessibility appraisal are summarised as follows:

Existing Situation:

- The quantum of development at each GV is assumed to be the same (as per Section 4).
- Housing numbers assume full build-out at the end of the Local Plan period (2037).
- Numbers of jobs are estimated using the HCA Employment Density Guide 2015.
- Assumed site centres have been applied in the absence of masterplan layouts.
- Travel distances are actual journey distances by available routes, by mode.
- Nearest employment taken as:
 - Mantonwood Business Park – Morton.
 - North Ordsall/West Retford Industrial area – Airport.
 - Walkers Industrial Estate – Bevercotes.
- Nearest district centre – Retford.
- Nearest local centre – Ordsall.
- No allowance made for the availability of school places.

Future Situation:

- GV assumed to provide new education, health and retail facilities on site.
- GV assumed to provide new local centres on site.
- GV assumed to deliver frequent bus services that enter and circulate site.

10.0 Summary

10.1 Introduction

- 10.1.1 This preliminary Accessibility Appraisal has been produced to consider two potential allocation sites being considered for a Garden Village (GV) development, to help advise preparation of the new Bassetlaw Local Plan.
- 10.1.2 The two potential allocation sites are known as:
- Morton GV
 - Gamston Airport GV
- 10.1.3 The Gamston Airport GV allocation comprises two parcels of land situated either side of the A1(T) on land at Gamston Airport and the former Bevercotes Colliery. These two parcels of land are collectively being promoted as Gamston Airport GV. The Morton GV allocation comprises a single parcel of land situated immediately to the northeast of the A1/A57/A614 'Five Lanes End' junction at Apleyhead.
- 10.1.4 Both potential allocations are situated in rural areas of the district and are relatively remote from the nearest district centre. Both sites have excellent accessibility to the Strategic Road Network (SRN) being located immediately adjacent to the A1(T).
- 10.1.5 There is either very little, or no existing local facilities (e.g. retail, healthcare, education, community facilities etc) situated close to either GV allocation site. It is therefore assumed that any GV development will need to deliver new facilities on-site in order to be 'self-sufficient' in this regard.
- 10.1.6 The potential allocation site at Gamston is split either side of the A1(T) which would potentially increase the need for travel across the A1(T) between residential, employment, education and community uses on either site. The A1(T) would potentially act as a barrier to these movements being made by sustainable modes unless safe, direct crossings were provided (e.g. pedestrian/cycle bridge, and/or an enhanced road bridge) as part of any GV development.
- 10.1.7 The potential exists to improve accessibility to both GV allocation sites for walking and cycling through enhancements to existing infrastructure. However, given the distances involved it is unlikely that these modes will be used significantly for commuting to employment situated in Retford, Worksop or beyond. However, there is good potential to encourage recreational use.

- 10.1.8 There are existing bus services close to both GV allocation sites and the potential exists to divert/extend existing services into both to serve any GV development. The increased 'critical mass' of patronage that would result would also enable service frequency to be increased to encourage bus use by future residents.
- 10.1.9 The nearest railway station to both GV allocation sites is Retford Station. However, the Morton site is bound to the north by the Lincoln to Sheffield railway line and the potential therefore exists to create a new railway station to directly serve a GV development at this location.
- 10.1.10 A high level review of the feasibility of delivering a new station in terms of the physical infrastructure, rail service scheduling, patronage and revenue generation has been undertaken and this concludes that there is a strong case for the provision of a new station to serve a new GV at Morton, which would have clear benefits in terms of encouraging rail travel to help reduce trips by private car.
- 10.1.11 A high-level accessibility scoring process has been undertaken for the potential GV allocations that evaluates the relative accessibility of each site and the potential for accessibility to be enhanced through the delivery of new/improved services and infrastructure.
- 10.1.12 The findings from the high-level accessibility scoring process suggests that the allocation site at Morton is favourable particularly considering the potential to create a new railway station on the site and the potential to enhance existing bus services serving key employment destinations.



Appendix A – Accessibility Scoring Criteria

Bassetlaw Local Plan - Site Accessibility Scoring Matrix Scoring Criteria

Distance Criteria (assessed as per the existing situation):

1 Distance to nearest Rail Station served by at least 4 peak period trains per hour (Mon – Fri)

Score	Description
5	Within 400m of the site centre
4	Within 800m of the site centre
3	Within 2km of the site centre
2	Within 5km of the site centre
1	More than 5km from the site centre

2 Distance to nearest bus stop served by at least 1 bus service at a frequency of 'every 60 minutes' or better (Mon – Fri)

Score	Description
5	Within 400m of the site centre
4	Within 800m of the site centre
3	Within 2km of the site centre
2	Within 5km of the site centre
1	More than 5km from the site centre

3 Distance to nearest main cycle route (NCR, Sustrans)

Score	Description
5	Within 400m of the site centre
4	Within 800m of the site centre
3	Within 2km of the site centre
2	Within 5km of the site centre
1	More than 5km from the site centre

4 Distance to nearest Primary School

Score	Description
5	Within 400m of the site centre
4	Within 800m of the site centre
3	Within 2km of the site centre
2	Within 5km of the site centre
1	More than 5km from the site centre

5 Distance to nearest Secondary School

Score	Description
5	Within 400m of the site centre
4	Within 800m of the site centre
3	Within 2km of the site centre
2	Within 5km of the site centre
1	More than 5km from the site centre

6 Distance to nearest key employment site

Score	Description
5	Within 400m of the site centre
4	Within 800m of the site centre
3	Within 2km of the site centre
2	Within 5km of the site centre
1	More than 5km from the site centre

7 Distance to nearest District Centre (Worksop, Retford)

Score	Description
5	Within 400m of the site centre and centre of the District
4	Within 800m of the site centre and centre of the District
3	Within 2km of the site centre and centre of the District
2	Within 5km of the site centre and centre of the District
1	More than 5km from the site centre and centre of the District

8 Distance to nearest local/neighbourhood centre

Score	Description
5	Within 400m of the site centre
4	Within 800m of the site centre
3	Within 2km of the site centre
2	Within 5km of the site centre
1	More than 5km from the site centre

- 9** Distance to first point of entry to the Strategic Road Network (SRN) - i.e. first point of entry used by development trips

Score	Description
5	Within 400m of the site centre
4	Within 800m of the site centre
3	Within 2km of the site centre
2	Within 5km of the site centre
1	More than 5km from the site centre

- 10** Standard of existing access to Strategic Road Network (SRN) - i.e. SRN access(es) used by development trips

Score	Description
5	Direct access available onto the Strategic Road Network (SRN).
4	All routes between site and SRN less than 5km using suitable roads avoiding sensitive areas.
3	One or more routes between site and SRN greater than 5km using suitable roads avoiding sensitive areas.
2	All routes between site and SRN less than 5km with one or more via sensitive areas/unsuitable local roads.
1	One or more routes between site and SRN greater than 5km with one or more via sensitive areas/unsuitable local roads.

Demand Management Potential (assessed as per the situation with development complete at the end of Plan Period):

- 11** Potential of development to provide for day-to-day service and amenity requirements (e.g. education, retail, GP surgery etc)

Score	Description
5	Provides for all
4	Provides for most
3	Provides for some - larger requirements located off-site (e.g. supermarkets, secondary school)
2	Reliant upon off-site services and amenities for all but minor day to day requirements
1	Entirely reliant upon off-site services and amenities

- 12** Potential of development to deliver local jobs - number of jobs per household created on the site

Score	Description
5	>0.3 jobs per household created on the site
4	0.2 - 0.3 jobs per household created on the site
3	0.1 - 0.2 jobs per household created on the site
2	0 - 0.1 jobs per household created on the site
1	0 jobs per household created on the site

Modal Shift Potential (assessed as per the situation with development complete at the Plan Period):

- 13** Potential to improve accessibility to nearest existing Rail Services

Score	Description
5	Nearest station within 2km and safe walking and cycling route from the site deliverable over whole distance
4	Nearest station within 2km and safe walking and cycling route from the site deliverable over part of distance
3	Nearest station >2km and new frequent direct/dedicated bus service deliverable and viable in long term
2	Nearest station >2km and frequent existing bus service rerouted/extended and viable in long term
1	Enhanced car parking facilities deliverable at nearest station (land available?)

- 14** Distance to nearest bus stop served by at least 4 buses per hour between 0700 - 1900hrs (Mon – Fri)

Score	Description
5	Within 400m of the whole site
4	Within 800m of the whole site
3	Within 2km of the whole site
2	Within 5km of the whole site
1	More than 5km from the whole site

- 15** Potential to integrate with/enhance bus services on a corridor serving key employment destinations

Score	Description
5	Enhances existing services along a corridor serving 4 or more key travel to work origin-destination pairs
4	Enhances existing services along a corridor serving 3 or more key travel to work origin-destination pairs
3	Enhances existing services along a corridor serving 2 or more key travel to work origin-destination pairs
2	Enhances existing services along a corridor serving 1 or more key travel to work origin-destination pairs
1	Not on a corridor serving key employment destinations

- 16** Potential to deliver bus priority infrastructure

Score	Description
5	Delivery of bus priority infrastructure that will also benefit existing bus services along a corridor
4	Delivery of bus priority infrastructure at one or more junctions that will also benefit existing bus services
3	Delivery of bus priority infrastructure that will only benefit development-related bus services along a corridor
2	Delivery of bus priority infrastructure that will only benefit development-related bus services
1	No bus priority infrastructure

17 Pedestrian/Cycle Accessibility to nearest District Centre (Worksop, Retford)

Score	Description
5	Within 800m and a safe walking and cycling route from the site deliverable over whole distance
4	Within 800m and a safe walking and cycling route from the site deliverable over part of distance
3	Within 2km and a safe walking and cycling route from the site deliverable over whole distance
2	Within 2km and a safe walking and cycling route from the site deliverable over part of distance
1	More than 2km from the site

18 Pedestrian/Cycle Accessibility to nearest local/neighbourhood centre

Score	Description
5	Within 800m and a safe walking and cycling route from the site deliverable over whole distance
4	Within 800m and a safe walking and cycling route from the site deliverable over part of distance
3	Within 2km and a safe walking and cycling route from the site deliverable over whole distance
2	Within 2km and a safe walking and cycling route from the site deliverable over part of distance
1	More than 2km from the site

Potential to Improve Highway Access (assessed as per the situation with development complete at the end of Plan Period):

19 Potential to improve access to Strategic Road Network (SRN) - i.e. SRN access(es) used by development trips

Score	Description
5	Direct access available onto the Strategic Road Network (SRN).
4	All routes between site and SRN less than 5km using suitable roads avoiding sensitive areas.
3	One or more routes between site and SRN greater than 5km using suitable roads avoiding sensitive areas.
2	All routes between site and SRN less than 5km with one or more via sensitive areas/unsuitable local roads.
1	One or more routes between site and SRN greater than 5km with one or more via sensitive areas/unsuitable local roads.

Estimation of Number of Jobs

Name	Assumed Use-Class	No. of Use-Classes	GFA (sqm)	GFA (sqm) by Use-Class			Number of Jobs
				B1	B2	B8	
Gamston Airport Garden Village	B1 / B8	3	60,000	7,500	22,500	30,000	1,564
Morton Garden Village	B1 / B8	3	60,000	7,500	22,500	30,000	1,564
			120,000	15,000	45,000	60,000	3,127

Notes:

1. Employment areas advised by BDC

ASSUMPTIONS

GIA = GFA

NIA = 80% GIA

GEA = GIA / 95%

80%

95%

Employment Density Table (FTE)

B1 (R&D) =	30	sqm (NIA)
B1 (Office) =	12	sqm (NIA)
B2 =	36	sqm (GIA=GFA)
B8 =	72	sqm (GEA)