

Technical Note

Project: Broad Lane, Hawkhurst

Subject: Vision Document - Transport Input

Client:	Barratt David Wilson Mercia	Version:	C
Project No:	04812	Author:	JO
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I Introduction

I.1 Background

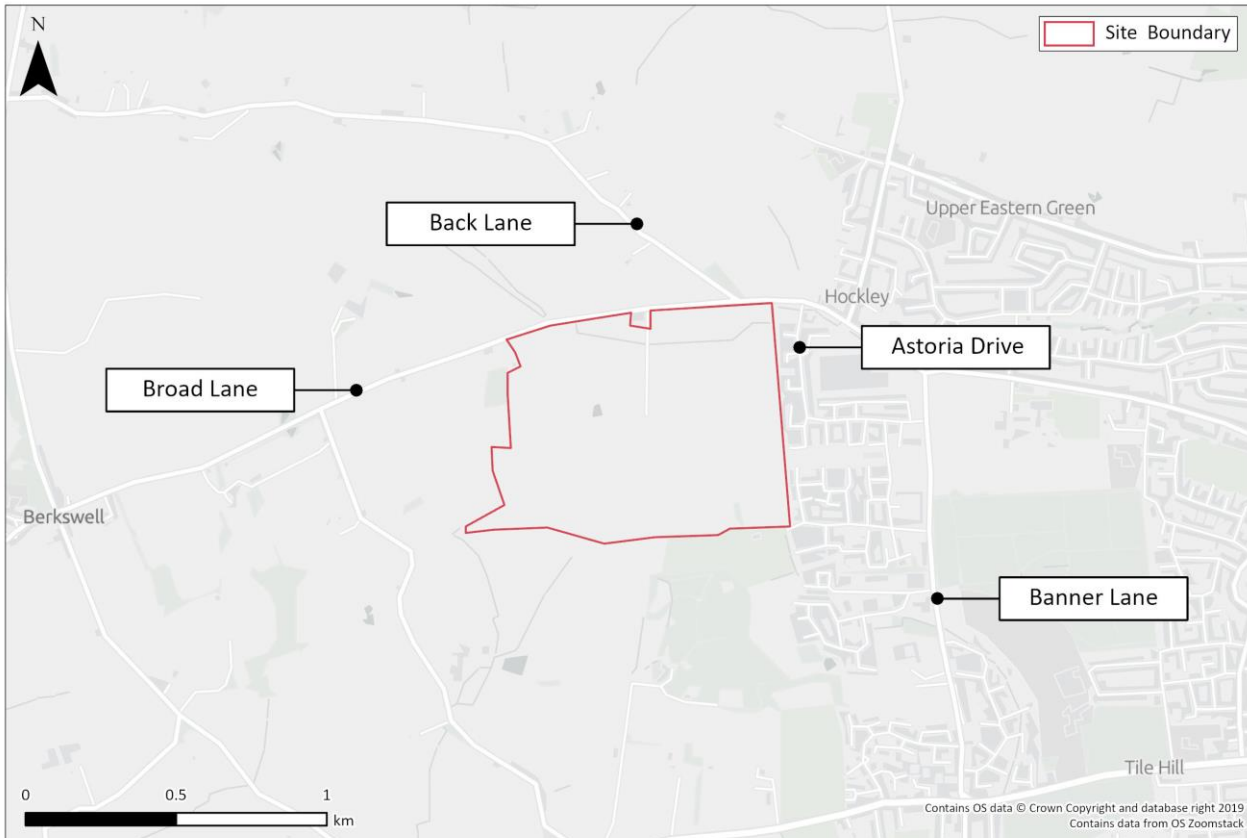
1.1.1 PJA has been commissioned by Barratt David Wilson Mercia to provide transport services in relation to the promotion of a site on Broad Lane in the Solihull Metropolitan Borough Council (SMBC) call for sites. It is proposed for the site to accommodate up to 650 dwellings and a burial ground. The site location is shown in Figure 1.

I.2 Note Purpose

1.2.1 This appraisal considers the key transport issues and opportunities. Based upon this analysis, an outline transport strategy is presented which demonstrates that:

- Vehicular access to the site is deliverable from Broad Lane using land within the developer's control;
- Pedestrian and cycle connections can be provided to enable access to the site by sustainable modes and provide access to existing local facilities in Tile Hill and Bannerbrook Park;
- The site is well located for travel to key commuting destinations of Coventry and Birmingham;
- The site is accessible to regular public transport services; and
- There are no existing road safety concerns within the vicinity of the site.

Figure 1: Site Location



2 Baseline Conditions

2.1 Local Highway Network

- 2.1.1 The site, as shown in Figure 1, is bounded by Broad Lane to the north, existing residential properties to the east and undeveloped land to the west and south.
- 2.1.2 Broad Lane provides access to Berkswell and Balsall Common to the west, and western suburbs of Coventry to the east, including Eastern Green and Tile Hill. A number of local facilities are available in these residential areas including leisure, retail, education, and healthcare facilities. To the west of its junction with Astoria Drive, Broad Lane becomes more rural in nature. Approximately 100m west of Astoria Drive, the speed limit increases to 50mph. To the east of this point, Broad Lane has a speed limit of 30mph.
- 2.1.3 Broad Lane forms a signalised junction with the A45 to the east of the site. The A45 provides a key corridor into Coventry City Centre.

2.1.4 Approximately 650m to the east of the site, Broad Lane forms a three-arm roundabout with Banner Lane. Banner Lane is a single carriageway road with a speed limit of 30mph, that provides access to surrounding local facilities on Bannerbrook Park, Banner Park (Industrial Estate) and Tile Hill Railway Station.

2.2 Walking and Cycling

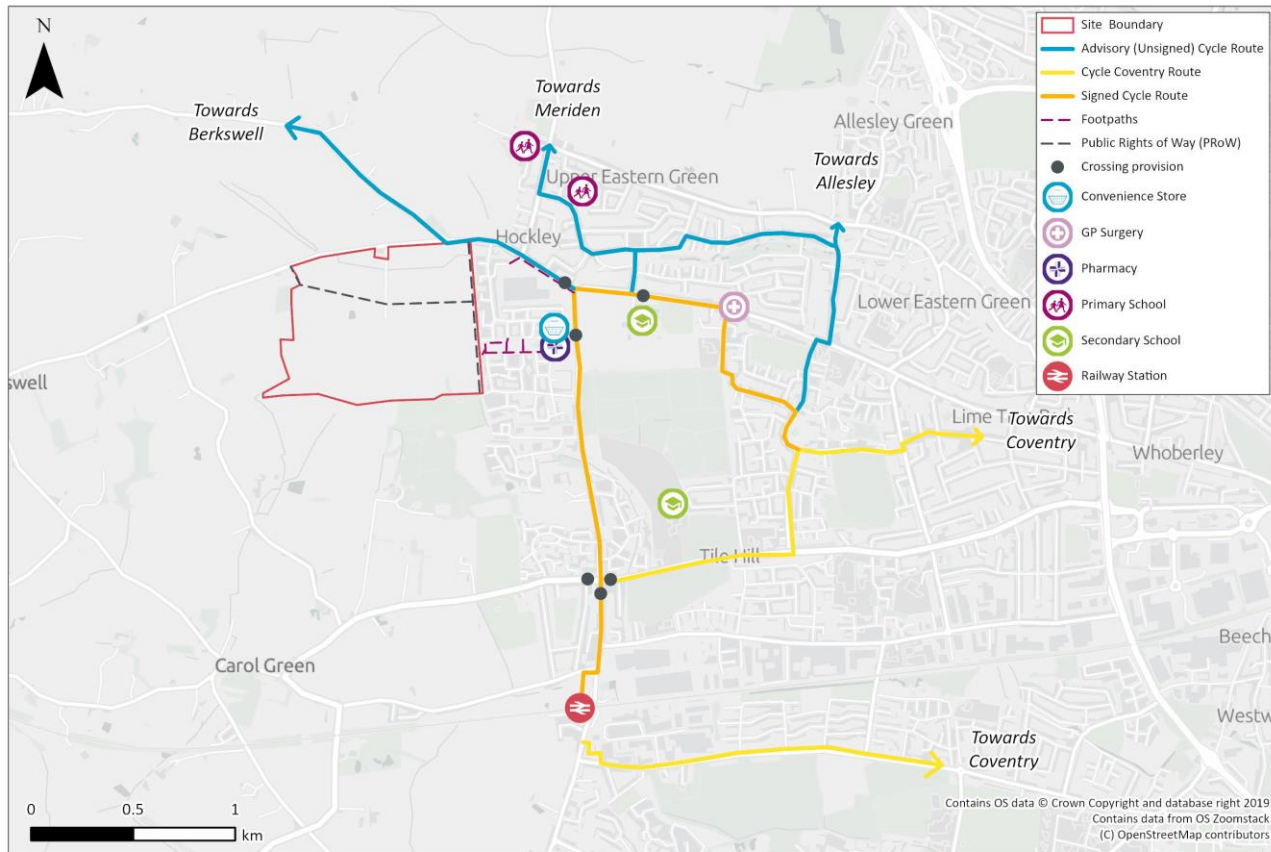
2.2.1 A summary of the walking and cycling provision within the vicinity of the site is provided in Figure 2 (cycle routes, crossing points, public rights of way (PRoW) and footpaths). This provision can be summarised as follows:

- To the east of Astoria Drive, Broad Lane has a footway on the northern side of the carriageway. A footpath is provided on the southern side of Broad Lane, accessed from Delta Lane/the Sports and Social Club and Broad Lane at its junction with Banner Lane;
- A zebra crossing is provided on the western arm of the junction between Broad Lane and Banner Lane;
- No footway or crossing facilities are provided along the frontage of the site on Broad Lane;
- Banner Lane has a footway on both sides of the carriageway, with multiple crossing points for use by pedestrians and cyclists, facilitating access to surrounding local facilities and public transport infrastructure;
- A network of footpaths is provided through Bannerbrook Park to the east of the site, towards local facilities and open spaces;
- Public rights of way (PRoW) are provided through the site, providing east-west connections into adjacent residential areas from Benton Green, Flint's Green and Berkswell, as well as along the eastern boundary of the site. The link between this PRoW and Bannerbrook Park is currently via set of stairs to accommodate the level difference;
- A number of roads within the vicinity of the site are listed as advisory (unsigned) cycle routes by Coventry City Council, including Back Lane, Pickford Green Lane, and Sutton Avenue;
- The site is located within a short cycling distance of Route 12 and 13 of the Cycle Coventry network providing a mixture of on/off road provision to Coventry City Centre, Bannerbrook Park, Coventry Business Park, Westwood Business Park and Tile Hill Village. The site is within approximately 8km of Coventry City Centre (30 minute journey¹), 5.5km of Westwood Business Park (21 minute journey), 5km of Coventry Business Park (19 minute journey) and

¹ A cycling speed of 4.4m/s has been taken from the Sustrans Information Sheet FF11 or 'Cycle Friendly Employers' Information Sheet' and states that "a five mile journey can be comfortably cycled by an adult in 30 minutes".

2.5km of Tile Hill Village (9 minute journey) – which are considered to be reasonable distances for commuting and leisure purposes.

Figure 2: Walking and Cycling Provision

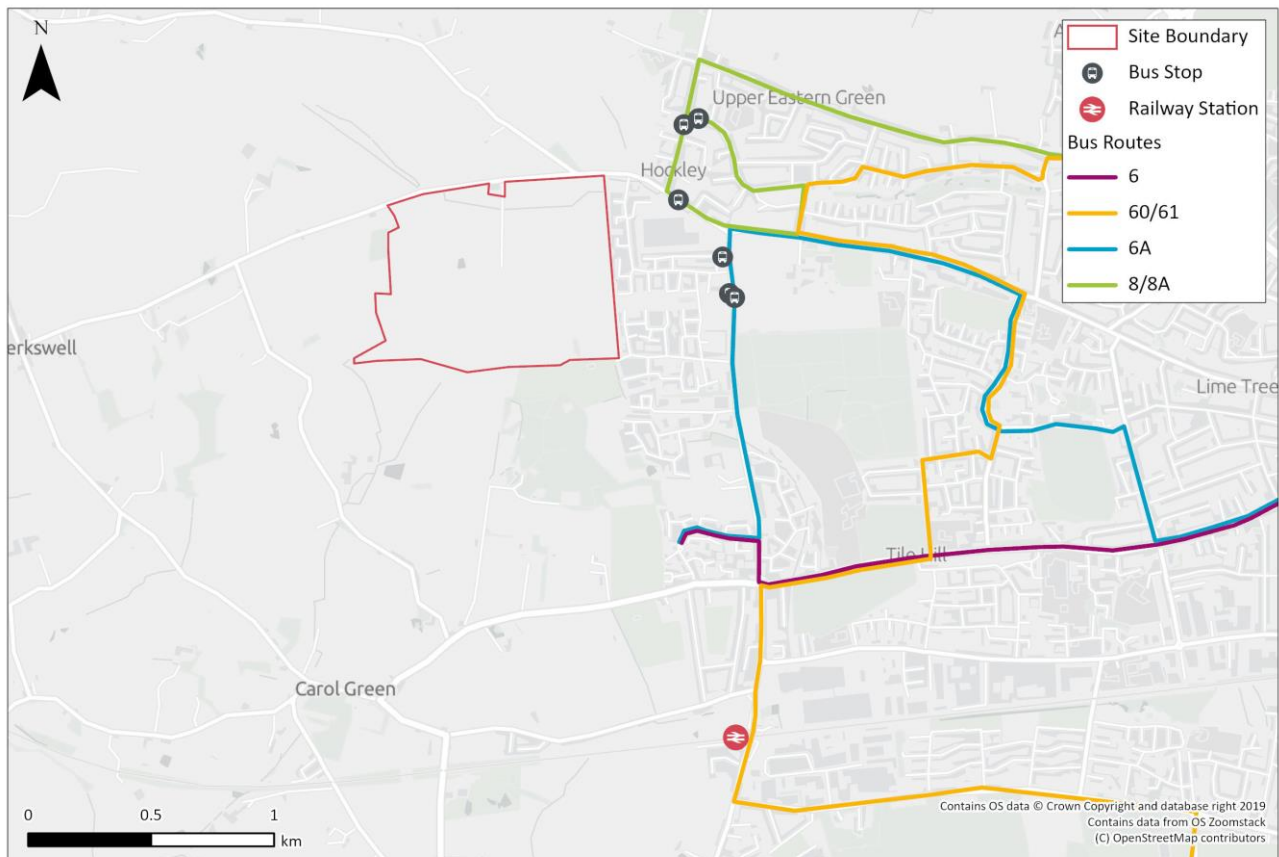


2.3 Public Transport

Bus

2.3.1 The nearest bus stops to the development are shown in Figure 3. These are located on Broad Lane (towards Coventry only), Hockley Lane and Banner Lane. All these bus stops have flag and pole provision, with printed timetable information for passengers.

Figure 3: Public Transport Infrastructure



2.3.2 A summary of the bus services available from these stops is provided in Table 1. This shows that the bus stops nearest to the development are served by two bus routes that operate on regular frequency throughout the day (Monday to Sunday). An additional circular route is available from Sutton Avenue.

Table 1: Bus Service Summary

Bus Route		Nearest Bus Stop Location	Distance from nearest access point (approx.)	Monday to Saturday Frequency	Sunday Frequency
Number	Route				
8/8A ²	Eastern Green to Walsgrave/Wood End <i>via Coventry City Centre and Ansty Road</i>	Inbound – Broad Lane (approx. 400m) Outbound – Hockley Lane (approx. 630m)	370m (inbound) 650m (outbound)	Every 30 minutes	Every 30 minutes
6/6A ³	Victoria Farm to Tile Hill <i>via Hearsall Common, Coventry City Centre and Stoke Heath</i>	Banner Lane	720m	Hourly	Hourly
60/61 ⁴	Coventry Outer Circle	Sutton Avenue	1km	Hourly	Hourly

Rail

2.3.3 The nearest railway station is Tile Hill, approximately 3km south of the development site (36 minute walk, 11 minute cycle⁵), accessed either via Broad Lane and Banner Lane, or the PRow along the eastern border of the site, Nailcote Avenue and Duggins Lane.

2.3.4 Tile Hill Railway Station is served by three trains per hour in each direction (Monday to Saturday) towards Birmingham New Street Station (northbound) and London Euston (southbound). The station provides 25 cycle parking spaces and 129 free car parking spaces.

2.4 Road Safety

2.4.1 Road safety data within the vicinity of the site has been provided by Transport for West Midlands (TfWM) for the latest three year period. A summary, by location, is provided in Table 2.

² [https://nxbus.co.uk/routes/coventry/C008A/?timetable\[day\]=monday - friday&timetable\[direction\]=Coventry+Station+-+Henley+Green+via+Coventry&](https://nxbus.co.uk/routes/coventry/C008A/?timetable[day]=monday - friday&timetable[direction]=Coventry+Station+-+Henley+Green+via+Coventry&) (Timetable from 30th March 2020)

³ [https://nxbus.co.uk/routes/coventry/C006A/?timetable\[day\]=&](https://nxbus.co.uk/routes/coventry/C006A/?timetable[day]=&) (Timetable from 30th March 2020)

⁴ https://www.traveldecourcey.com/userfiles/routea/60_61_covid19_special_timetable-1.pdf (Timetable from 23rd March 2020)

⁵ Paragraph 3.30 in the IHT's publication "Guidelines for Providing for Journeys on Foot" which states: "An average walking speed of 1.4m/s can be assumed which equates to approximately 400m in five minutes or three miles per hour". A cycling speed of 4.4m/s has been taken from the Sustrans Information Sheet FF11 or 'Cycle Friendly Employers' Information Sheet' and states that "a five mile journey can be comfortably cycled by an adult in 30 minutes".

2.4.2 Table 2 shows that there has been a total of 20 collisions within the latest three year period, of which 14 were classified as slight and six as serious. No fatal collisions have been recorded in the study area over the latest three years of data available. At junctions where there has been more than one collision recorded, there were no common movements between these collisions. On links with more than one collision recorded, these were not isolated to a single location. Across these 20 collisions, 13 sensitive road user casualties have been recorded. All of these casualties were classified as slight, with the exception of four (three cyclists, one pedestrian). These collisions occurred in different locations.

2.4.3 On the basis of the above, it is not considered that there are any existing road safety issues that would need to be addressed as part of the development.

Table 2: Road safety summary

Location	Recorded Collisions				Sensitive Road User Casualties		
	Slight	Serious	Fatal	Total	Pedestrian	Cyclist	Motorcyclist
Junctions							
Meriden Road / Coventry Road / Spencer's Lane / Lavender Hall Lane	2	1	0	3	0	0	0
Broad Lane / Hockley Lane	1	0	0	1	0	1	0
Broad Lane / Nova Croft	1	0	0	1	1	0	0
Broad Lane / Banner Lane	1	0	0	1	0	1	0
Banner Lane / Astoria Drive	4	0	0	4	0	1	1
Banner Lane / Jefferson Way	1	0	0	1	0	0	1
Banner Lane / Ashfield Avenue	1	0	0	1	0	1	0
Banner Lane / Tile Hill Lane / Tanners Lane / Station Avenue	1	2	0	3	0	1	0
Links							
Broad Lane (west)	0	1	0	1	0	1	0
Broad Lane (east)	0	1	0	1	1	0	0
Banner Lane	2	1	0	3	2	1	0
Total	14	6	0	20	4	7	2

3 Transport Strategy

3.1 Opportunities and Constraints

3.1.1 An outline transport strategy has been developed based on the baseline conditions and the following key opportunities:

- The site is well located for travel to key commuting destinations of Coventry and Birmingham;

- There are a number of bus routes operating within close proximity of the site, providing opportunities for diversion of existing services or creation of new services to accommodate additional demand;
- There are a number of dedicated cycle routes within the vicinity of the site which provide access to key local facilities, employment opportunities and public transport infrastructure; and
- There is a good network of walking and cycling routes, as well as PRoW, providing access to key local facilities in Tile Hill and Bannerbrook Park.

3.1.2 The development transport strategy has also been prepared with regard to the following constraints:

- Limited footway provision on Broad Lane;
- Level difference between the site and the Bannerbrook Park site; and
- Congestion on key corridors into Coventry City Centre during peak periods.

3.2 Vehicle Access

3.2.1 Access to the residential element of the site is proposed to be taken from two priority junctions onto Broad Lane as shown in Drawing 04812-SK-0001-P01. The easternmost of these two points would form the primary access.

3.2.2 It is proposed to retain the existing access from Broad Lane to the recycling centre in the centre of the site.

3.2.3 Access to the burial ground would be provided from a separate priority junction onto Broad Lane as also shown in Drawing 04812-SK-0001-P01.

3.2.4 Visibility splays based on the posted speed limit (50mph) can be achieved in both directions at all access points, without use of third party land.

3.2.5 It is recommended however that observed speed data (85th percentile) is collected prior to submission of a planning application for the site, to inform visibility splays. Furthermore, it may be logical to consider reducing the 30mph speed limit further to cover the site frontage. These are both likely to reduce the visibility requirements.

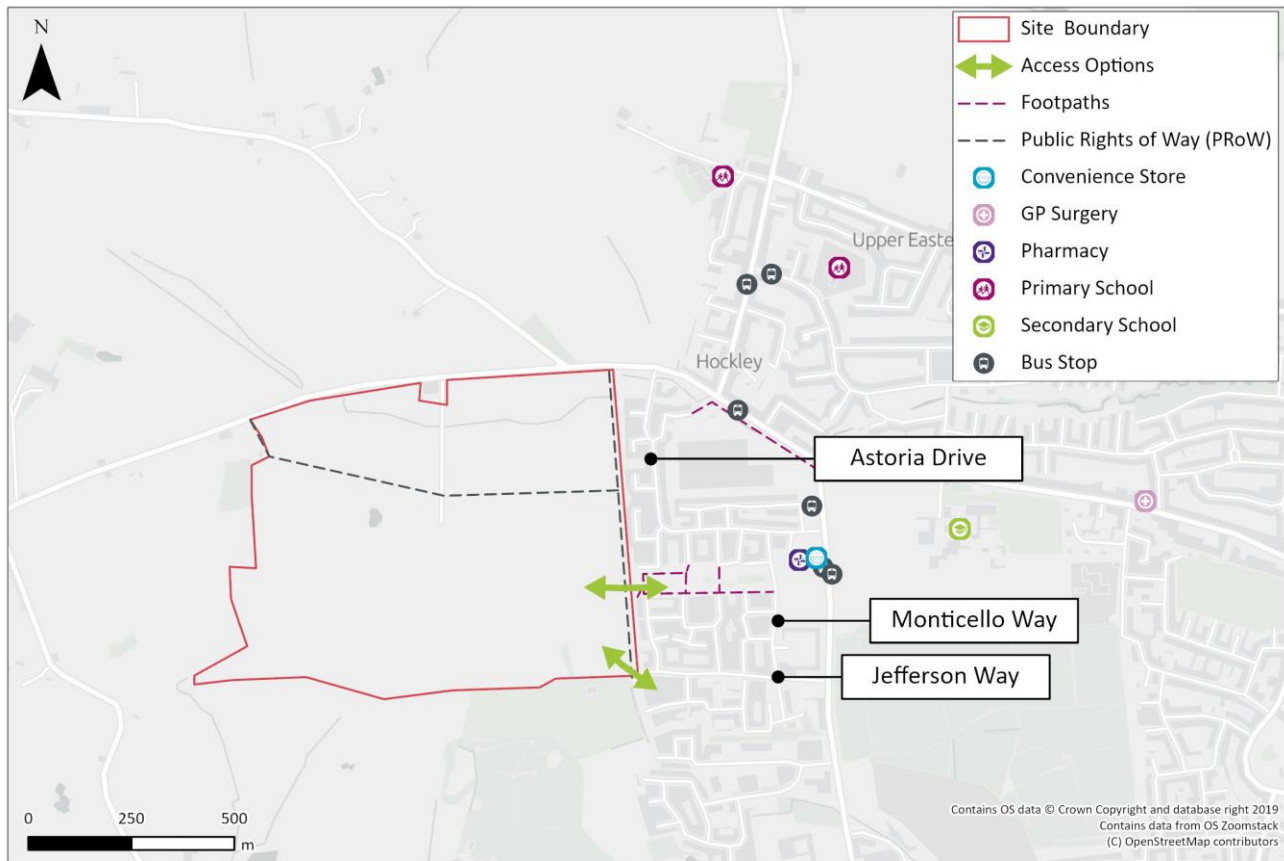
3.2.6 An indicative 3m footway/cycleway has been shown on the south side of Broad lane, connecting to the existing footway adjacent to Astoria Drive. This could be provided inside or through the development as an alternative in order to preserve existing boundary hedgerows and vegetation and to provide connections towards the burial ground.

3.3 Pedestrian and Cycle Access

- 3.3.1 Manual for Streets (MfS) sets out that walkable residential neighbourhoods are characterised by having a range of facilities within 10 minutes' (up to about 800m), but that this does not necessarily represent an upper limit. It goes on to state that walking can indeed replace short distance car trips up to approximately 2km. MfS encourages development of mixed-use neighbourhoods with interconnected street patterns and linkages between housing, local facilities, and community infrastructure, to reduce the reliance on the private car.
- 3.3.2 As part of this development, it is proposed to provide a well connected network and community facilities on-site, and there are multiple opportunities to maximise access between the site and the existing neighbourhoods for pedestrians and cyclists, according to principles set out in MfS. These opportunities are summarised in Figure 4.
- 3.3.3 It is recommended that high quality links are provided in the following locations to facilitate access for pedestrians and cyclists:
- Retention and potential improvement of existing PRoW through the centre of the site to facilitate access to surrounding local facilities, rural settlements, and existing residential areas;
 - Provision of pedestrian link into Bannerbrook Park to facilitate a link to the existing local centre on Astoria Drive/Monticello Way; and
 - Provision of pedestrian/cycle access at south of eastern boundary of the site onto Jefferson Way to facilitate access towards Tile Hill Railway Station and local facilities.
- 3.3.4 The feasibility of providing these high-quality links would be dependent on land ownership and the extent of land within the highway boundary. There are also level differences between the site and the Bannerbrook Park site which would be addressed as part of any future development.
- 3.3.5 As shown in Figure 4, the nearest local facilities are provided in Bannerbrook Park which subject to the provision of the above links could be accessed via good quality footpaths through the open space in the centre of Bannerbrook Park, Monticello Way and Astoria Drive. These facilities are approximately 520m from the access point into Bannerbrook Park, bringing the majority of the residential element of the site to within 1km of the facilities. This is in line with guidance on walkable neighbourhoods set out in MfS. Consideration should be given to ensure that this access (which is currently stepped) is available for use by all pedestrians, including those with impaired mobility.

3.3.6 Access to the site by cyclists will primarily be provided from the vehicular site access onto Broad Lane. It is considered that Broad Lane is suitable for use by cyclists given that the section to the east of the site it is designated as an advisory cycle route by CCC.

Figure 4: Pedestrian/Cycle Access Options



3.4 Public Transport

3.4.1 The provision of the above pedestrian links would bring existing bus stops on Banner Lane to within 720m of the access point, and approximately 1.2km of the whole residential site, in line with guidance on walkable neighbourhoods set out in MfS.

3.4.2 To maximise use of public transport, it may be feasible to extend existing bus services into the site to improve access to/from the site by public transport. If direct access for buses is required, then the site roads would need to be designed accordingly to accommodate these movements.

3.4.3 It is likely the most viable proposal would be to divert the 8 or 8A route to the site. These routes serve the City Centre and Walsgrave Hospital and therefore provide access to key destinations.

The 8 and 8A operate as two separate services (as opposed to the 6/6A which operate a combined service) and as they cover the same route around Eastern Green, a diversion of either would therefore still ensure that current routes are served by at least one service.

3.4.4 It is possible that the diversion of either the 8 or 8A may require an additional vehicle to operate the service. Discussions would be had with bus operators and the local highway authorities to determine the most appropriate strategy.

3.5 Highway Infrastructure

3.5.1 It is likely that the majority of vehicle trips generated by the development would route towards the following destinations:

- *Coventry* – via Broad Lane and A45;
- *Solihull* – via Hampton in Arden and Catherine-de-Barnes;
- *Birmingham* – via Meriden and A45; and
- *Kenilworth, Warwick, and Royal Leamington Spa* – via Banner Lane and A452, or Broad Lane, A45 and A46.

3.5.2 The key junctions along these routes are as follows:

- Broad Lane / Back Lane (Priority);
- Broad Lane / Banner Lane (Roundabout);
- A45 Dunchurch Highway / Broad Lane (Signalised Roundabout);
- Tile Hill Gyratory (Signalised Crossroads); and
- Banner Lane / B4100 Tanners' Lane / Station Avenue (Signalised Crossroads).

3.5.3 Further consideration of the requirement for off-site mitigation at these key junctions on the highway network would need to be considered at the planning application stage in consultation with the local highway authority (SMBC) and CCC. This would likely include modelling these junctions to demonstrate the impact of the development and the requirement for any improvements.

4 Summary

4.1.1 PJA has been commissioned by Barratt David Wilson Mercia to provide transport advice in relation to a site on Broad Lane. It is understood that the site is being promoted for between 550 and 650 dwellings in the Solihull Metropolitan Borough Council (SMBC) call for sites. In

addition, it is understood that a burial ground will be incorporated in the development proposals on land to the west of residential site.

4.1.2 This appraisal demonstrates that the proposed site allocation is suitable for development as part of a comprehensive masterplan in that:

- The site benefits from being in close proximity to key radial routes into Coventry City Centre, as well as towards Birmingham, Warwick, and Solihull;
- Safe and suitable vehicular access to both elements of the site can be delivered from Broad Lane, within land in the developer's control;
- No existing road safety concerns on the local highway network have been identified within the vicinity of the site;
- The site benefits from being in close proximity to existing walking and cycle routes, including advisory (unsigned) cycle routes and signed cycle routes, providing access to surrounding residential areas, Coventry City Centre, Business Parks, Tile Hill Railway Station, and local facilities; and
- Through provision of high quality pedestrian links through Bannerbrook Park, the site is accessible by public transport which could be further enhanced by diversion of existing bus services into the site.