

- *Safeguarding against traffic generated by new development resulting in the capacity of the highway network being exceeded, by including measures to encourage sustainable travel behaviour. Liaising with the rail industry to ensure the best possible service provision to Arun as a result of the evolving Thameslink Programme, and also explore opportunities for the provision of faster services between both Littlehampton and Bognor Regis, and London.*
- *Liaising with the rail industry to encourage the provision of additional modern rail capacity and faster services along the West Coastway while retaining a suitable balance of stopping services, and plan for signalling works along the Arun Valley Line which improve service timings.*
- *Liaising with the rail industry to investigate ways to reduce the delays caused by level crossings.*
- *Working with partners to explore opportunities for improving Bognor Regis Station, and others in the District, to improve access and integration with other modes of transport.*
- *Working with the Sussex CRP through the Arun Valley Line Group to further promote rail travel amongst residents and visitors to Arun.*
- *Discourage HGVs from less suitable local routes while maintaining access to areas which businesses need access to.*
- *Manage any AQMAs that might be declared by Arun District Council through development and implementation of AQAPs, while avoiding potential poor air quality areas in the first place by developing a Low Emissions Strategy.*
- *Encouraging sustainable travel by improving the existing cycle and pedestrian network through improved signing, connecting routes where appropriate and repairing and maintaining surfaces.*
- *Developing and implementing schemes which contribute to the completion of the Bognor Regis and Littlehampton cycle networks, particularly maximising opportunities for seafront cycle routes and enhancing routes which will be of particular interest to tourists.*
- *Improving pedestrian accessibility throughout the District by enhancing existing pedestrian crossings and providing new pedestrian crossing facilities at identified key locations.*
- *Encourage the use of cleaner vehicles such as electric cars, by for example providing electric recharging posts and recharging bays in partnership with the District Council as part of a wider network available to all users of electric vehicles.*
- *Promoting sustainable transport choices through projects such as Safer Routes to School.*
- *Supporting opportunities which will improve and protect the rights of way network throughout the District.*
- *Improving access through the urban rights of way network within the Littlehampton area, to help improve community cohesion, community safety, tourism, access to local shops and services and to change travel modes and habits.*

- *Manage on-street parking in Littlehampton, Bognor Regis and Arundel and introduce controlled parking zones, where appropriate, which balance the needs of residents, visitors and businesses.*
- *Continuing to work with our bus operators and developing quality bus partnerships, to improve the capacity and quality of the bus fleet, and to improve the way services are marketed, particularly supporting the Coastal Transport System major scheme when funding is available to deliver it.*
- *Improving the accessibility and quality of information available through the introduction of RTPI at well used bus stops and where the whole life costs are affordable."*

2.6 Arun District Council Parking Standards Supplementary Planning Document (SPD) (2020)

2.6.1 Arun District Council adopted its own parking standards on the 15th of January 2020. Residential parking requirements for new development are set out within this document.

2.6.2 For the purposes of parking standards Arun is split into 'Parking Behaviour Zones', with Walberton being located within Parking Behaviour Zone 1 - Rural. Accordingly, the below extract has been taken from Table 3.1 of the Parking Standards SPD:

- 1 Bedroom (1 - 3 Habitable Rooms) – 2 parking spaces per dwelling;
- 2 Bedrooms (4 Habitable Rooms) - 2 parking spaces per dwelling;
- 3 Bedrooms (5 – 6 Habitable Rooms) – 2 parking spaces per dwelling; and
- 4 or more Bedrooms (7 or more Habitable Rooms) – 3 parking spaces per dwelling.

2.6.3 In terms of EV parking the parking standards note that 100% of parking spaces provided as driveways or garages should be provided with EV charging points. For other parking spaces not on plot, a phased approach should be taken, with developments proposed to come forward in 2018, 2023, 2028 and 2033 providing 20, 30, 50 and 100% of parking spaces with EV charging facilities, respectively.

2.6.4 It is noted that planning pre – application advice from Arun District Council on 26th January 2021 stated that;

- *"Developers should note the requirement for an EV charge point in all houses with a garage OR driveway (not garage AND driveway as is incorrectly stated in the ADC Parking Standards SPD)."*

2.6.5 Visitor Parking should be provided at a rate of 0.2 spaces per dwelling.

2.6.6 Garages will not count towards parking provision unless they have internal dimensions of at least 6m x 3m, in which case they will count as 0.5 parking spaces. Open car ports / car barns of the same dimensions will count as a full parking space.

2.6.7 Cycle parking should be provided per the below recommended levels:

- 1 – 2 Bedroom House – 1 cycle parking space;
- 3 + Bedroom House – 2 cycle parking spaces;
- 1 – 2 Bedroom Flat – 1 cycle parking space; and

- 3 + Bedroom Flat – 1 cycle parking space.

2.7 Summary

- 2.7.1** This section has reviewed national and local planning policy relevant to the development proposals and compliance is demonstrated where appropriate throughout the remainder of this TA.

3 BASELINE CONDITIONS

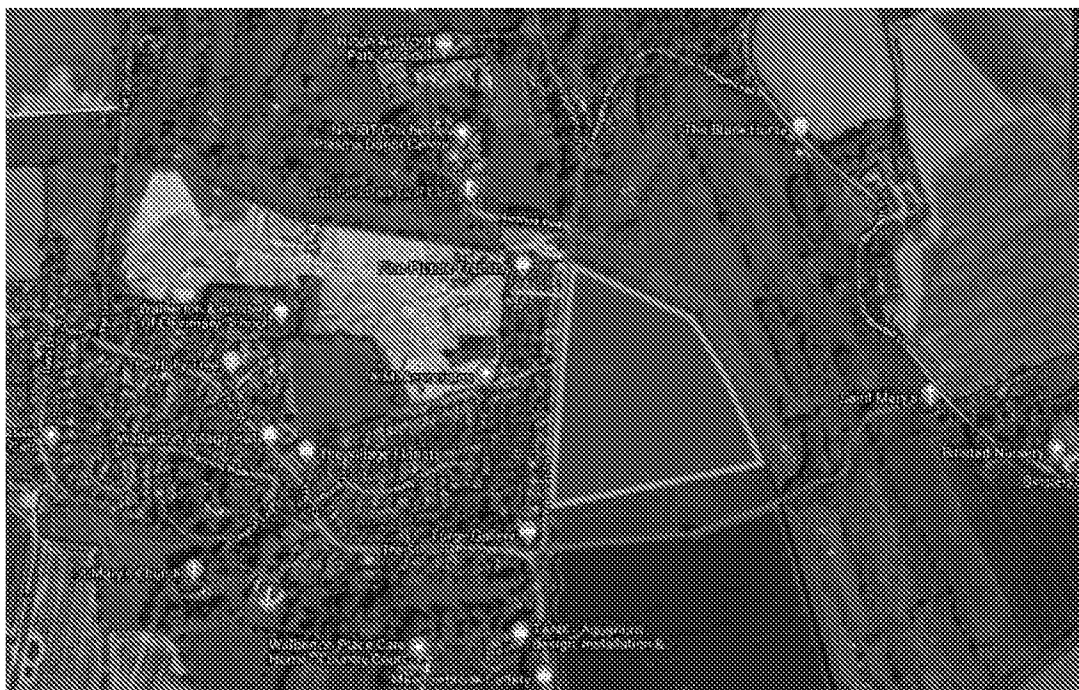
3.1 Introduction

- 3.1.1 This section provides information on the existing Site, providing a baseline in terms of the development proposals. Consideration is made to the accessibility of the Site to local amenities, public transport services, pedestrian and cycle linkages.

3.2 Site Location

- 3.2.1 The site is located east of Walberton, Arun, West Sussex. Walberton village centre (taken to be Maple Parade) is located approximately 500m due west as the crow flies.
- 3.2.2 The site comprises greenfield agricultural land and appears to be served by an informal vehicle crossover close to its north-western corner, opposite Manser Road. The site is bound to the north and east by Avisford Park Golf Club, to the south by another parcel of agricultural land and to the west by the B2132 Yapton Lane. Agricultural land is located along the south-east and north-east boundaries of the site. The site location in relation to the village of Walberton is shown shaded and edged red in Figure 3-1 below.

Figure 3-1 Site Location



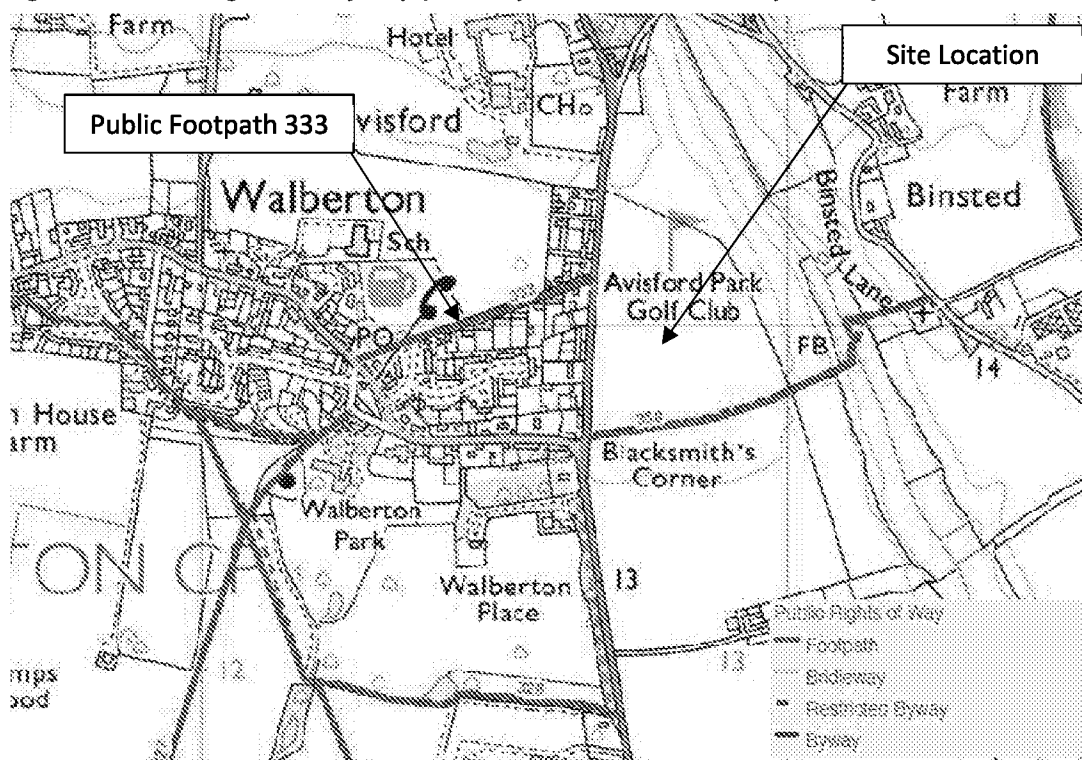
3.3 Local Highway Network

- 3.3.1 Yapton Lane is located immediately adjacent to the western boundary of the site and is a single carriageway road. It is approximately 5.5 metres wide and subject to a speed limit of 30mph along the frontage of the site. The speed limit on Yapton Lane increases to 40mph approximately 10m to the north of the north-western-most point of the site, however it is noted that as part of an adjacent development (Land east of Tye Lane, Walberton

(WA/44/17/OUT) – hereafter referred to as ‘the Tye Lane development), this speed limit is to be moved 60m further north, away from the development site proposed herein.

- 3.3.2 Approximately 700 metres to the north of the site, Yapton Lane meets the A27 Arundel Road at a left turn only priority junction. The A27 Arundel Bypass takes a general east – west alignment in this area, towards Chichester, Portsmouth and Southampton in the west and Arundel, Worthing and Brighton in the east. From its junction with A27 Arundel Bypass at Fontwell East roundabout, the A29 takes a general north east – south west alignment, towards Bognor Regis in the south west and towards Horsham, Guildford, Crawley and onwards towards London in the north east.
- 3.3.3 A footway is provided on the western side of Yapton Lane between Avisford Park Golf Club in the north and the three-arm roundabout junction between Yapton Lane and The Street in the south. Footways continue from this point to the west along The Street for a short distance on the north side of the carriageway and to the south a short distance along Yapton Lane on the east side of the carriageway. Some street lighting is provided along Yapton Lane, including at the three-arm roundabout junction with The Street.
- 3.3.4 A range of Public Rights of Way are present in close vicinity of the site, providing pleasant off – carriageway access to many nearby villages and the surrounding countryside. A map of these routes is provided in Figure 3-2 below.

Figure 3-2: Public Rights of Way Map (Courtesy of West Sussex County Council)



- 3.3.5 Most notably Public Footpath 333 follows the alignment of Avisford Park Road for approximately two thirds of its length and provides pedestrian connectivity towards the centre of Walberton. While it is noted that Avisford Park Road serves as a vehicular access for several residential dwellings with no separate footway provision, the routes status as a public footpath highlights its suitability for use as a pedestrian route.

3.4 Public Transport – Bus

- 3.4.1 The CIHT's 'Buses in Urban Developments' (2018) publication considers 400m as a maximum walking distance to bus stops. It recognises that in some instances it may be appropriate to increase this distance to 500m in order to access services on core bus corridors. For bus stops served by lower frequency routes, the recommended maximum walking distance reduces to 300m.
- 3.4.2 The nearest bus stops to this site are located on Yapton Lane, immediately adjacent to the primary site access with the 85 and 85A services calling at these stops.
- 3.4.3 Approximately 150m to the south of the proposed site access location, access to the 66a, 66C and 665 services is provided from stops to the south of Yapton Lane's junction with The Street (Walberton Blacksmith's Corner).
- 3.4.4 Table 3-1 below details the services available from this stop and their respective frequencies.

Table 3-1: Bus Services and Frequencies

Service and Operator	Route	Frequency			Approx. Journey Times
		Weekday	Saturday	Sunday	
85 – Compass Travel	Arundel – Walberton – Fontwell - Chichester	4 Daily Services	No Service	No Service	Arundel – 12 minutes Fontwell – 6 minutes Chichester – 43 minutes
85A – Compass Travel	Arundel – Walberton – Barnham - Chichester	2 Daily Services	No Service	No Service	Arundel – 14 minutes Barnham (Railway Station) – 6 minutes Chichester – 43 minutes
66A – Compass Travel	Bognor Regis – Barnham – Yapton – Walberton – Bognor Regis	3 Daily Services	3 Daily Services	No Service	Barnham (Railway Station) – 9 minutes Bognor Regis – 32 minutes
66C – Compass Travel	Bognor Regis – Barnham – Walberton – Yapton - Bognor Regis	3 Daily Services	3 Daily Services	No Service	Yapton – 7 minutes Barnham (Railway Station) – 16 minutes Bognor Regis – 36 minutes

665 – Stagecoach South	Wickbourne – Littlehampton – Yapton – Walberton – Barnham – Westergate	1 Daily Service (School Service)	No Service	No Service	Yapton – 7 minutes Littlehampton – 20 minutes Barnham (Railway Station) – 6 minutes Westergate – 14 minutes
------------------------	---	-------------------------------------	------------	------------	--

3.4.5 The above routes provide a service to other local villages and larger towns across the week, including towards Barnham Railway Station, which may be suitable for commuters. Route 665 provides a service to local schools.

3.5 Public Transport – Rail

3.5.1 The nearest railway station to the site is Barnham, approximately 3.8km to the south by road equating to a journey time of approximately 6 minutes by car, 9 minutes by bus or 12 minutes by bicycle. Barnham railway station is managed by Southern and is located on the West Coastway Line between Brighton and Southampton.

3.5.2 Table 3-2 below summarises the services operating from Barnham railway station during a typical AM peak hour (08:00-09:00) of a weekday.

Table 3-2 Existing Rail Services at Barnham Railway Station (08:00-09:00)

Destination	AM Peak Departures
London Victoria	3
Southampton Central	2
Bognor Regis	4
Portsmouth & Southsea	3
Brighton	2

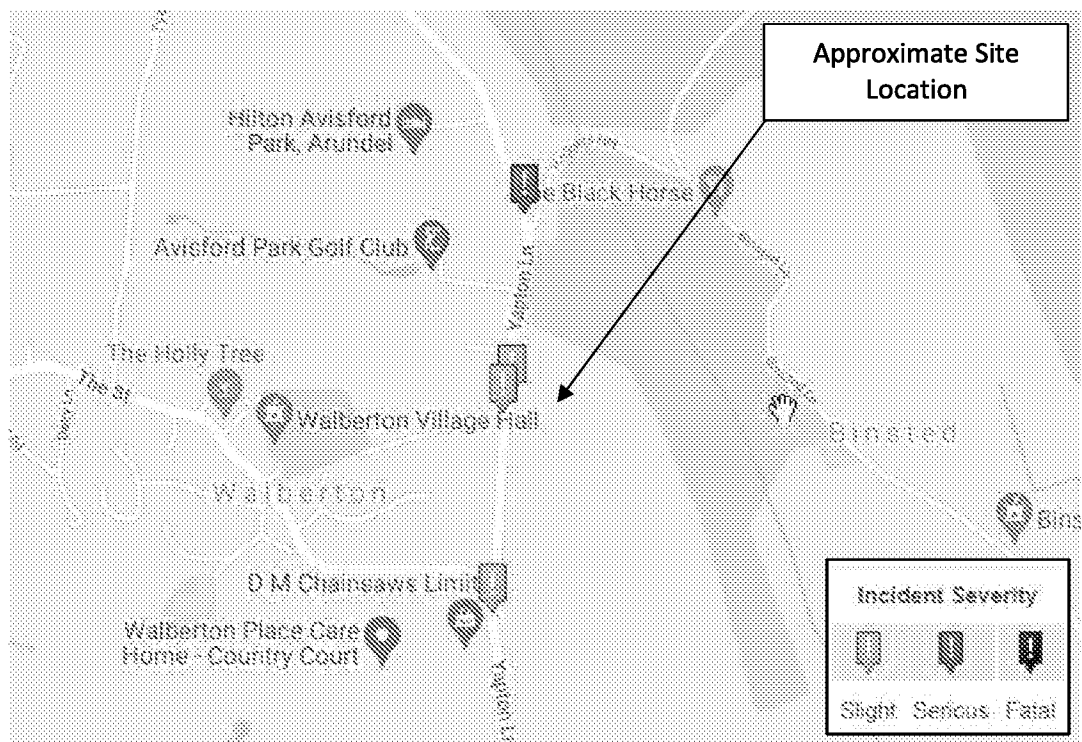
Source: <https://ojp.nationalrail.co.uk/service/pockettimetable/search>

3.5.3 There are 62 bicycle parking spaces at the station and 130 car parking spaces. A staffed ticket office and ticket machines are also available for passengers.

3.6 Analysis of Personal Injury Accident Data

3.6.1 A review of the CrashMap database has been undertaken to determine the amount and frequency of collisions resulting in personal injury which have occurred in the vicinity of the site. Data has been reviewed for the latest available five-year period, which covers 2016 - 2020. An extract of the map is provided overleaf in Figure 3-3.

Figure 3-3 Collisions in the Vicinity of the Proposed Development



- 3.6.2 As shown above, four collisions occurred in the last five years in the vicinity of the proposed development. A serious collision involving two goods vehicles occurred on Yapton Lane, approximately 400 metres from the site access location as measured along the carriageway.
- 3.6.3 Two slight collisions occurred on Yapton Lane in the vicinity of its junction with Avisford Park Road, approximately 35m and 75m to the north of the proposed site access location. One involved a collision between a goods vehicle and a car, and the other involved a collision between two cars and a motorcycle.
- 3.6.4 A further slight collision involving a car and a goods vehicle occurred on Yapton Lane, to the south of its junction with The Street, approximately 350m to the south of the proposed site access location.
- 3.6.5 The frequency of collisions on the highway network surrounding the site averages less than one collision per year. The development proposals are therefore not expected to have a detrimental impact on the safety and operation of the existing highway network.

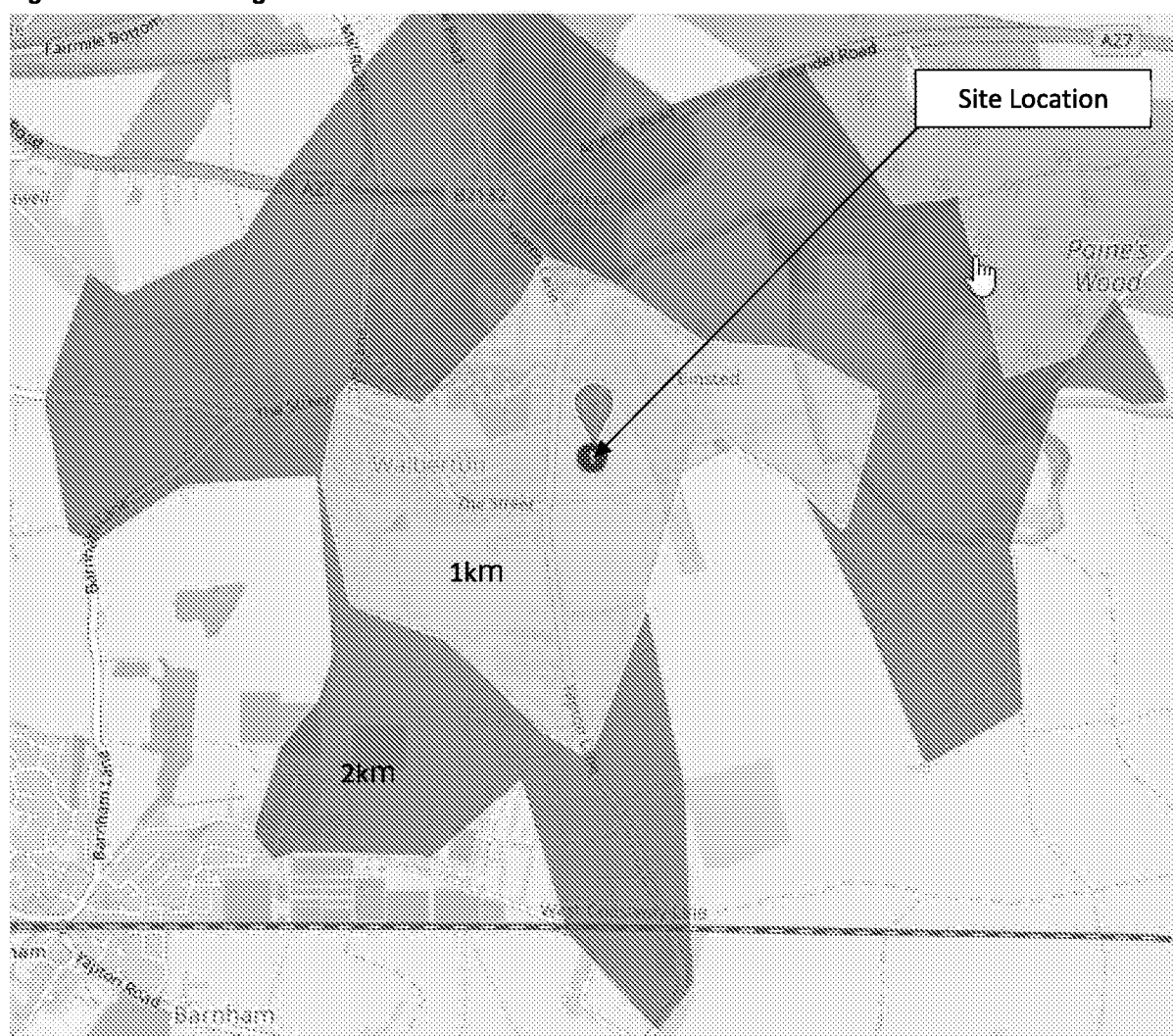
3.7 Walking and Cycling Facilities

Walking

- 3.7.1 Walking is traditionally recognised as a sustainable mode of travel which can replace shorter trips that are often made by car, particularly those under 2km. This was reflected in the now withdrawn 'PPG:13 Transport' guidance. Although the guidance has been superseded, it provides a useful indication of the walking distances that are considered reasonable for pedestrians.

- 3.7.2 CIHT's 'Planning for Walking' (2015) guidance document recognises that most short journeys are made wholly on foot, however walking also forms part of longer, multi-modal journeys. The guidance states that people will choose to walk if the length of their journey is less than one mile (1.6km). A typical catchment area is around half this distance at 800m or a 10-minute walk.
- 3.7.3 The IHT document 'Guidelines for Providing Journeys on Foot' (2000) provides preferred maximum walking distances for the purposes of commuting and other journeys. The distances are as follows:
- a) Town centres: 800m;
 - b) Commuting/school/sightseeing: 2,000m; and
 - c) Elsewhere: 1,200km.
- 3.7.4 Figure 3-4 overleaf shows the areas which fall within a 2km walking distance of the site.

Figure 3-4 2km Walking Isochrone



- 3.7.5 The walking isochrone in Figure 3-4 above (as with the cycling isochrone in Figure 3-5 below) has been generated utilising the software available at <https://maps.openrouteservice.org>.
- 3.7.6 There are several local amenities and facilities located within a reasonable walking distance. As noted above, public transport is accessible from the site, providing connectivity to a wider range of amenities in nearby larger settlements. Facilities within walking distance include a Pre School, Primary School, Convenience store, Post Office, Church, GP Surgery and Dental Surgery.
- 3.7.7 Walking distances have measured from the dedicated pedestrian access adjacent to Avisford Park Road, briefly north along Yapton Lane and then south west along Public Footpath 333 which uses the alignment of Avisford Park Road, and onwards into the village. A summary of distances to local amenities, measured along walking routes from the site and not taken 'as the crow flies', is provided in Table 3-3 overleaf.

Table 3-3: Site Accessibility to Local Services

Facility	Walking Distance (m)	Walking Time (Minutes)
Nearest Local Bus Stops	Adjacent to site access	1
Church	380	5
Pre School	440	6
Convenience Store	440	6
Dental Surgery	460	6
Launderette	460	6
Hairdresser	460	6
Post Office	480	6
Estate Agent	480	6
Village Hall	480	6
GP Surgery	520	7
Public House	600	8
Walberton & Binsted C of E Primary School	800	10

Cycling

- 3.7.8 CIHT's 'Planning for Cycling' (2014) guidance document states that the majority of cycling trips are made over short distances, with 80% being less than 5 miles (8km) and 40% being less than 2 miles (3.2km). Similarly, 'Chapter 10 – Cycling in New Developments' of the Sustrans Design Manual (draft, 2015) advises that distances up to five miles (8km) represents a reasonable cycling commute for most users.
- 3.7.9 The Department for Transport's 'Walking and Cycling Statistics, England: 2016' statistical release was published in January 2018. It states that shorter cycling trips under five miles (8km) made up 79% of all cycling trips in 2016, with 43% of all trips being under two miles (3.2km). The most common purpose for cycling trips is commuting, which accounts for an average of 36% of trips made by this mode.
- 3.7.10 The consensus among recent guidance and statistics is that 8km represents the maximum reasonable cycling distance, however a significant proportion of cycling trips are likely to be around 3km. Figure 3-5 overleaf shows the destinations within an 8km cycling distance of the site.

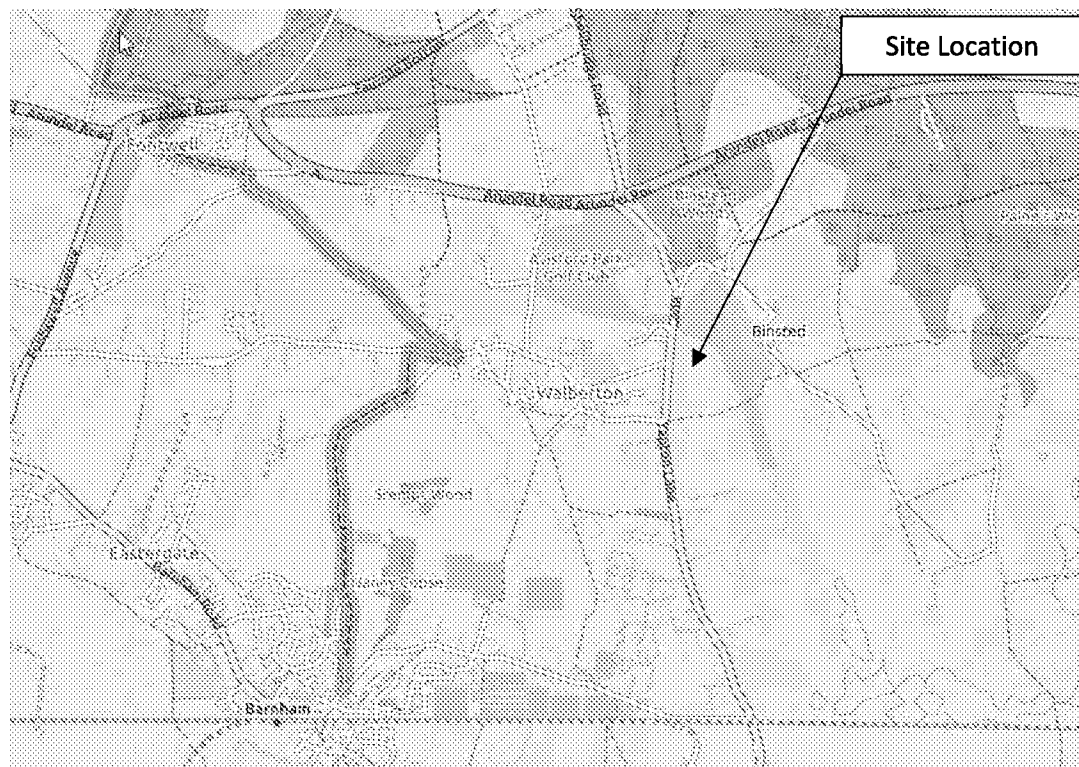
Figure 3-5 8km Cycling Isochrone



- 3.7.11 As shown in Figure 3-5 a range of destinations are within an 8km cycling distance of the site. This includes Walberton itself, Yapton, Barnham, Eastergate, Westergate and Arundel.

- 3.7.12 A Local Cycle Route between Gumber Corner and Barnham (via Fontwell and Slindon Wood) takes a general north to south alignment, running just to the west of Walberton. Its route in the vicinity of Walberton can be seen in Figure 3-6 below.

Figure 3-6 Local Cycle Route Map



- 3.7.13 The distance between the proposed site access location and the closest point of this cycle route (at the junction between Walberton Lane and Eastergate Lane) is approximately 1.4km, as measured by the shortest cycling route, equating to a journey time of approximately 4 minutes. A further 2km cycle south via this local route brings the user into Barnham, in the vicinity of the Barnham Railway Station. A one-way cycle journey to Barnham Railway Station utilising this route would equate to a total distance of 3.4km (approximately 1.4km of which would be off – carriageway) and a total journey time of 11 minutes.

3.8 Summary

- 3.8.1 A review of the existing walking, cycling and public transport provision has confirmed that there are several opportunities to travel by sustainable modes in the vicinity of the proposed development.

4 DEVELOPMENT PROPOSALS

4.1 Introduction

4.1.1 This section discusses the development proposals for the site, which will form part of an outline planning application. The proposed access and servicing arrangements will also be discussed in this section of the report.

4.1.2 It is further noted that as this application is in outline, with all matters reserved except access, the proposed internal layout of the development is purely indicative at this stage. While this TA discusses the development, it should be noted that the internal layout and associated reserved matters will be addressed at a later stage in the planning process.

4.2 Development Proposals

4.2.1 The development proposals comprise the construction of up to 75 dwellings on a greenfield site on land east of Yapton Lane, Walberton. The proposals will be submitted as part of an outline planning application, with all matters reserved except access. The Indicative Site Layout 'CAL020920.MP.Ind05' is provided within **Appendix A** at the rear of this report.

4.2.2 Given that the application seeks outline permission only, certain aspects of the indicative layout may be subject to change as part of a future reserved matters application. As a result, matters such as the dwelling mix have not been considered at this stage.

4.3 Site Access

4.3.1 The site access general arrangement can be seen attached at the rear of this report as 'C86484-NE-66-XX-DR-C-2001 P02 - Site Access GA'.

4.3.2 The proposed development will be served by one point of access onto Yapton Lane which will take the form of a priority junction. It is proposed that the site access is located approximately 120 metres north of the roundabout junction between Yapton Lane and The Street.

4.3.3 The site access has been located to reduce the risk of conflict with the potentially forthcoming A27 Arundel Bypass Upgrade (Option 5BV1) which routes generally east to west, skirting the northern boundary of the site. An overbridge carrying Yapton Lane over the new alignment of the A27 is also proposed, with the extent of the works on the southern side of the bypass ending approximately 30m to the north of Avisford Park Road, or approximately 210m north of the proposed site access location.

4.3.4 It is proposed that the site access is 5.5m wide, with 6m kerb radii to accommodate large vehicle movements.

4.3.5 An existing bus stop (opposite The Street) is located immediately to the south of the proposed site access location on the eastern side of Yapton Lane, and it is proposed that the existing stop (consisting of a flag and post within the grass verge) is upgraded, with a new flag and post, bus shelter raised kerb arrangement and new road markings provided in this location. The bus stop further to the south on the western side of Yapton Lane (adjacent The Street) will also be upgraded with new road markings and a raised kerb arrangement.

4.4 Pedestrian Access

- 4.4.1 Direct pedestrian access will be provided from three points onto Yapton Lane; to the north of the primary vehicular access, adjacent to Avisford Park Road and in the north – western corner of the site in the vicinity of Manser Road. At the site access and adjacent to Avisford Park Road, new uncontrolled pedestrian crossings will be provided in the form of simple dropped kerb arrangements with tactile paving, to facilitate connectivity to the existing footway on the western side of Yapton Lane. A bus stop and an uncontrolled pedestrian crossing point are already located in the vicinity of Manser Road, and a footway link to these existing facilities will be made at this point.
- 4.4.2 These connections can be seen within the Layout Design Concept **CAL020920.MP.05.A.** provided within **Appendix A** at the rear of this report.
- 4.4.3 It is proposed that cyclists will also access the site via the main vehicular access on Yapton Lane, linking in with the carriageway. Routing south a short distance along Yapton Lane and then west through the village connects users with a local off – carriageway route that leads to Barnham in the south. Existing local cycle infrastructure is described in detail in Section 3.7.
- 4.4.4 A Stage 1 Road Safety Audit and Designer's Response pertaining to the proposed arrangements will follow as an addendum to this Transport Assessment.

4.5 Visibility

- 4.5.1 An Automatic Traffic Count Survey was undertaken on Yapton Lane between the 7th of June and the 13th of June 2021, with full results attached at **Appendix B**. 85th percentile speeds of **37.7mph** and **39.8mph** in the northbound and southbound directions, respectively.
- 4.5.2 2.4m x 120m visibility can be achieved in both directions along Yapton Lane at the site access. This is in accordance with the Stopping Sight Distances (SSD's) stipulated within the Design Manual for Roads and Bridges and the Local Design Guide for the recorded 85th percentile speeds.
- 4.5.3 Pedestrian visibility splays of 2m x 80m can be achieved in both directions from the new proposed pedestrian crossing points to the north of the site access and in the vicinity of Avisford Park Road, in accordance with Chapter 6 of the Traffic Signs Manual.

4.6 Swept Path Analysis

- 4.6.1 Vehicle servicing will be accommodated within the site, with sufficient space at the access provided for the required refuse vehicle (a Phoenix 2-18W with Elite 2 6x2RS chassis) and a fire tender to enter and exit the site in a forward gear.
- 4.6.2 Swept Path Analysis at the site access has been provided within drawings '**C86484-NE-66-XX-DR-C-2002 – Refuse SPA**' and '**C86484-NE-66-XX-DR-C-2003 – Fire Tender SPA**'.

4.7 Residential Parking

- 4.7.1 Arun District Council adopted its own parking standards on the 15th of January 2020. Residential parking requirements for new development are set out within this document – "Arun District Council Parking Standards Supplementary Planning Document (SPD) (2020)".

4.7.2 For the purposes of parking standards Arun is split into 'Parking Behaviour Zones', with Walberton being located within Parking Behaviour Zone 1 - Rural. Accordingly, the below extract has been taken from Table 3.1 of the Parking Standards SPD:

- 1 Bedroom (1 - 3 Habitable Rooms) – 2 parking spaces per dwelling;
- 2 Bedrooms (4 Habitable Rooms) - 2 parking spaces per dwelling;
- 3 Bedrooms (5 – 6 Habitable Rooms) – 2 parking spaces per dwelling; and
- 4 or more Bedrooms (7 or more Habitable Rooms) – 3 parking spaces per dwelling.

4.7.3 Unallocated / visitor parking spaces should be provided at a rate of 0.2 spaces per dwelling, which for this development of up to 75 dwellings would equate to 15 spaces.

4.7.4 On plot EV charging points will also be provided in line with the required standards.

4.7.5 Consideration will be given to providing one of the visitor parking space as an EV charging point.

4.7.6 It is noted that a rapid charging point is available at the nearby Shell service station at Fontwell, while two fast charging points are also available at Barnham railway station.

4.8 Cycle Parking

4.8.1 Cycle parking will be provided to the Arun District Council standards, within the residential curtilage of each dwelling.

4.9 Summary

4.9.1 It is reiterated that the layout is indicative at this stage and as such an in-depth assessment of the parking requirements of the site should be undertaken at the reserved matters stage.

5 TRIP GENERATION

5.1 Trip Generation

5.1.1 This section of the TA outlines the trip generation associated with the proposed development of up to 75 dwellings. The trip rates have been obtained from the TRICS (Version 7.7.4) database.

5.2 Existing Trip Generation

5.2.1 The existing site is greenfield and has therefore been assumed to generate no trips other than occasional access for agricultural purposes.

5.3 Proposed Trip Generation

5.3.1 To determine the trip generation associated with the proposed development, vehicle trip rates have been obtained from the TRICS database. The following criteria was used to ascertain the trip rates:

- d) Category '03 – Residential – A – Houses Privately Owned';
- e) Sites in England, excluding Greater London;
- f) Mid - week surveys only;
- g) Sites of up to 200 dwellings; and
- h) Sites in 'Suburban' and 'Edge of Town' areas.

5.3.2 Based on the above search criteria, 39 sites were deemed suitable for comparison to the proposed development. The TRICS output data is provided in **Appendix C** of this report. The vehicular trip rates are shown in Table 5-1 below:

Table 5-1 Vehicular Trip Rates (per dwelling)

Time Range	Inbound Vehicle Trip Rate	Outbound Vehicle Rate	Two-way Vehicle Trip Rate
08:00-09:00	0.138	0.372	0.510
17:00-18:00	0.341	0.16	0.501

5.3.3 The above trip rates have been factored against the proposed dwelling quantum of up to 75 dwellings, and the resultant proposed vehicle trip generation is shown in Table 5-2 below.

Table 5-2 Vehicular Trip Generation (75 dwellings)

Time Range	Inbound Vehicle Trip Generation	Outbound Vehicle Generation	Two-way Vehicle Trip Generation
08:00-09:00	10	28	38
17:00-18:00	26	12	38

5.3.4 Table 5-2 demonstrates that the proposed development is expected to generate 38 two-way vehicle trips in the AM Peak and 38 two-way vehicle trips in the PM Peak. This equates

to an average of just over one vehicle arriving or departing once every two minutes in each peak period.

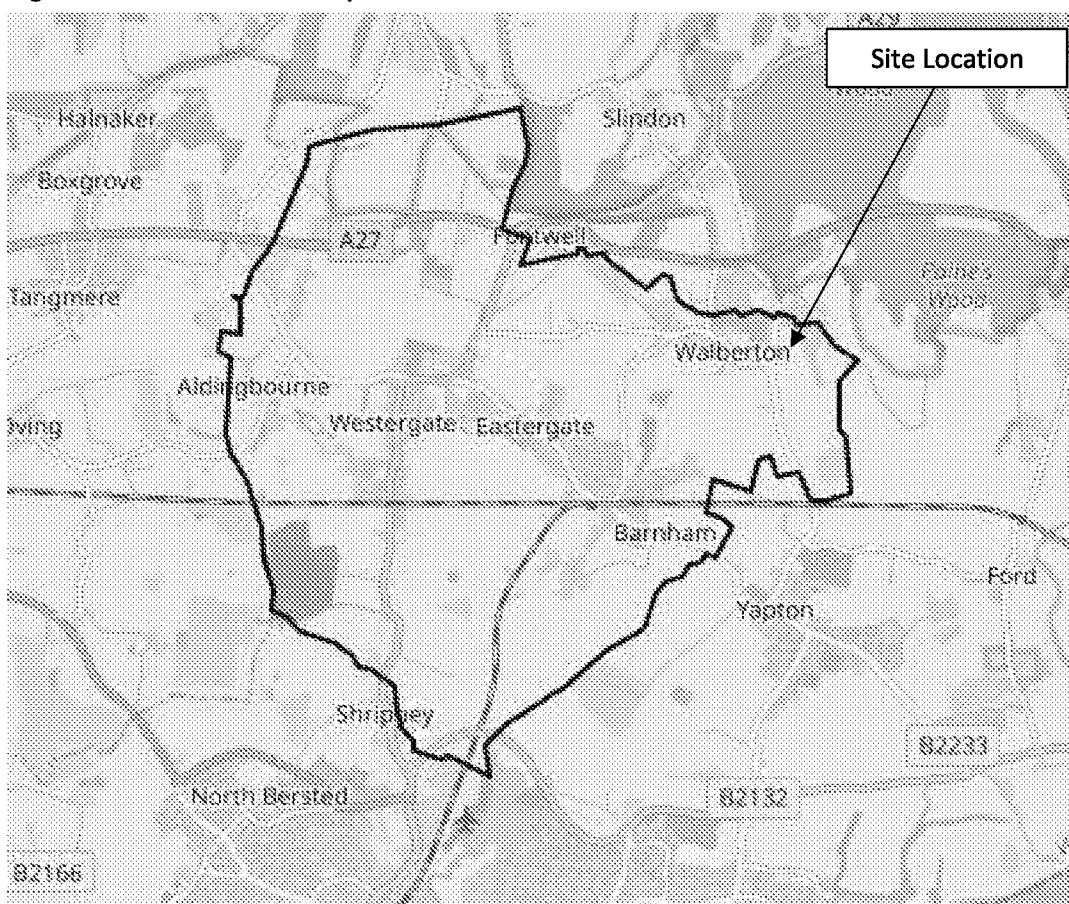
- 5.3.5 This is not expected to have a detrimental impact on the safety and operation of the surrounding highway network.

5.4 Vehicle Trip Distribution

- 5.4.1 Vehicular trips have been distributed across the local highway network using a methodology centred around the 2011 census dataset 'WU03EW – Location of usual residence and place of work by method of travel to work (MSOA level) (Driving a car or van)'. The dataset reports on the number of journeys made between a start and end destination and the mode of travel used between the two.

- 5.4.2 The site is located within Arun Middle Super Output Area (MSOA) 003 as shown below in Figure 5-1.

Figure 5-1 Arun 003 MSOA Map



- 5.4.3 Online journey planning software has been used to examine the likely routes to access each of the MSOA's during peak hour periods and in instances with similar journey times, a split has been applied or preference given to the most direct route. The complete results of the distribution assessment are included at **Appendix D**.

5.4.4 The routes taken in accessing each of the above destinations were carefully assessed using online routing tools (Google Maps and Bing Maps) during AM and PM peak hours. WSCC and Highways England were both invited to review the distribution methodology and were satisfied in its robustness.

5.4.5 Following the assessment above the below trip distribution was decided upon:

- 72% of traffic would route to/from the north (right out of the site access)
- 28% of traffic would route to/from the south (left out of the site access)

5.4.6 The north / south split in terms of both percentage distribution and peak hour vehicle trips is included in Table 5-3 below.

Table 5-3 Trip Distribution from Site Access

Route	Percentage of Trips	AM Inbound Trips	AM Outbound Trips	AM Total Trips	PM Inbound Trips	PM Outbound Trips	PM Total Trips
North	72%	8	21	29	20	9	29
South	28%	3	8	12	8	4	11

**Errors in arithmetic are due to rounding.*