

Highgate*Transportation*

Proposed Development of up to 190 dwellings at
Sunnyside, Yapton Road, Barnham

Transport Assessment
(2413/TA/01A)

June 2026

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Contents	Page
1.0 Introduction	1
2.0 Existing Situation	4
3.0 Policy Review	21
4.0 Application Proposals and Parking Provision	26
5.0 Proposed Access Strategy	30
6.0 Calculation of Future Background Traffic	38
7.0 Development Traffic	41
8.0 Vision Led Approach	43
9.0 Junction Capacity Analysis	47
10.0 Summary and Conclusions	61

Figures

Figure 1.1	Site Location and Wider Area
Figure 2.1	Site Location and Local Area
Figure 2.2	Highway Boundary and Public Rights of Way Plan (west)
Figure 2.3	Highway Boundary and Public Rights of Way Plan (east)
Figure 2.4	Site Boundary and PRow (WSCC)
Figure 2.5	Sustainable Transport Facilities
Figure 2.6	PRow Map Extract (WSCC)
Figure 2.7	Personal Injury Collision Area
Figure 2.8	ATC Locations
Figure 4.1	Illustrative Masterplan
Figure 5.1	Proposed Access Arrangement
Figure 5.2	Proposed Tactile Paving on Yapton Road
Figure 5.3	Proposed Tactile Paving at Murrell Arms West Crossing
Figure 5.4	Proposed Widening of Footway at the Village Hall Westbound Bus Stop
Figure 9.1	SRN Junctions (AM Peak Vehicle Trip Distribution)
Figure 9.2	SRN Junctions (PM Peak Vehicle Trip Distribution)

Appendices

- Appendix 1 WSCC Highways Pre-Application Responses
- Appendix 2 Highway Boundary and Public Rights of Way Records
- Appendix 3 Bus Timetable Information
- Appendix 4 Pedestrian/Cycle Audit Technical Note (HTp/2413/TN/02/A)
- Appendix 5 Key Routes Plan
- Appendix 6 WSCC Highways Correspondence to Pedestrian/Cycle Audit
- Appendix 7 Active Travel England Planning Application Assessment Toolkit Appraiser Report
- Appendix 8 DfT Connectivity Tool Report
- Appendix 9 Personal Injury Collision Report
- Appendix 10 Traffic Survey Data
- Appendix 11 Illustrative Masterplan
- Appendix 12 Swept Path Analysis of Illustrative Masterplan
- Appendix 13 Proposed Site Access Arrangement
- Appendix 14 Swept Path Analysis of Site Access
- Appendix 15 SSD Calculations
- Appendix 16 Road Safety Audit and Designer's Response
- Appendix 17 Proposed Off-Site Mitigation Works
- Appendix 18 TEMPro Growth Rates
- Appendix 19 TRICS Output
- Appendix 20 Flow Diagrams
- Appendix 21 Junctions 9 Modelling Outputs (Core and Behavioural)

1.0 Introduction

- 1.1 This Transport Assessment has been prepared by Highgate Transportation (HTp) to support the forthcoming outline planning application for a proposed development of up to 190 dwellings at Sunnyside, Yapton Road, Barnham.
- 1.2 The application site location and wider area are shown in **Figure 1.1**.

Figure 1.1 – Site location and wider area



- 1.3 The site is to the north of Yapton Road, situated between the villages of Barnham and Yapton to the north-west and south-east respectively. The site is located on the outskirts of the West Barnham suburb, where the surrounding land is largely residential and agricultural, and the access currently serves five dwellings, a campsite, caravan storage and nursery.
- 1.4 The site is around 11.0km east of central Chichester, 6.0km north-east of Bognor Regis, and around 7.0km north-west of Littlehampton.
- 1.5 A Technical Note (HTp/2413/TN/01, dated June 2024) was submitted to WSCC Highways requesting pre-application advice, with WSCC Highways providing advice in July 2024 with a written response. Subsequently, further advice was requested to WSCC Highways in August 2025 with regard to a vision-led approach for the capacity assessment.
- 1.6 WSCC Highways pre-application responses are contained in **Appendix 1**. A summary of the advice provided is as follows:
 - i. There are several amenities within walking and cycling distance of the proposed site
 - ii. An informal crossing to the southern side of the carriageway to link from the site into the existing shared use path should be explored

- iii. Circa 300 metres east of the site, an informal crossing to the bus stop at Windmill should be explored
 - iv. The site is sustainably located with good access to bus and rail services
 - v. A Pedestrian/Cycle Audit should be carried out, with focus on the routes to the railway station, identifying any potential improvements in terms of pedestrian infrastructure along the route
 - vi. The study area for Personal Injury Collision is accepted
 - vii. The proposed access should demonstrate how the 3.0 metre wide shared use path ties into the existing footways
 - viii. Swept path analysis of cars passing/refuse vehicles/fire appliances of the vehicular access will be required
 - ix. The 85th percentile recorded speeds are noted
 - x. Links to the PRoW and pedestrian/cycle connectivity to the site should be considered; the widths and treatment should be suitable
 - xi. There is not a threshold for when a secondary emergency access would be required – proposals would have to meet building regulations and fire service standards, including looped connectivity rather than cul-de-sacs
 - xii. The car and bicycle parking provision, using ADC adopted standards, is accepted
 - xiii. The provision of a priority bellmouth junction would be workable, with justification as to why a ghost right turn lane cannot be provided, demonstrated through the Stage 1 Road Safety Audit and capacity modelling
 - xiv. It is accepted that the peak hours should be modelled
 - xv. The 2024 traffic survey baseline data is accepted
 - xvi. The committed development to be included within the capacity assessment has been agreed to include
 - a. BN/142/20/OUT - Land South of Barnham Station, Church Lane (195 dwellings)
 - b. Y/91/17/OUT - Land at Bilsham Road, Yapton (250 dwellings)
 - c. Y/92/17/OUT - Land East of Drove Lane, Yapton (300 dwellings)
 - d. BN/11/22/OUT - BEW Parcel SC1 (1,250 dwellings)
 - xvii. The future assessment year of 2031 (end of local plan period) should be modelled
 - xviii. The trip rates are accepted
 - xix. Trip generation of the existing uses on site should be provided, with a comparison against the proposed use
 - xx. The site access will be modelled as a staggered crossroad due to the Mill Gate junction being circa 35 metres to the north west of the site access
 - xxi. Any junctions that see an increase of 30 or more movements during any hour may require capacity testing
 - xxii. A Travel Plan Monitoring fee will be secured by s106
- 1.7 A modified access arrangement for the site is proposed, whereby the existing access on Yapton Road is widened from 3.3 metres to create a 5.5 metre simple priority junction and ensuring appropriate visibility splays are provided.

1.8 This Transport Assessment will include the following:

- i. A review of the most recently available 5-years of personal injury road traffic collision records for the assessment area set out by the highway officer
- ii. A review of the proximity of the site to local services and facilities
- iii. Pedestrian and cycle linkage to the wider network
- iv. A review of the relevant national and local transport policy documents
- v. The proposed site access arrangement, including a Stage 1 Road Safety Audit of the proposals
- vi. The trip generation potential of the proposed dwellings and impact on the local road network including proposed and existing junctions
- vii. Confirmation of the impact on the SRN
- viii. Swept path analysis of the internal layout, including refuse vehicle access and fire tender access
- ix. Ensuring the development is in accordance with the Active Travel England checklist, including for the Pedestrian and Cycle audit
- x. The car and cycle parking provision
- xi. The strategy for the collection of waste and recycling

1.9 The remainder of this report comprises:

- **Section 2.0** of this report sets out the connectivity to the local area as well as describing the existing site
- **Section 3.0** sets out the national and local planning policy
- **Section 4.0** considers the application proposals including car and cycle parking provision
- **Section 5.0** considers the proposed site access arrangements for which planning permission is being sought
- **Section 6.0** considers the calculation of background traffic, including traffic survey information that will form the basis of the impact assessment, as well as the methodology for calculating the expected background traffic based on TEMPRO growth rates and trips arising from committed developments
- **Section 7.0** sets out the methodology for calculating the development trips arising from the application proposals
- **Section 8.0** sets out the methodology for undertaking the junction capacity analysis and appraising the results of the models
- **Section 9.0** sets out the methodology for undertaking the junction capacity analysis and appraising the results of the models
- **Section 10.0** provides a summary and lists the conclusions made

1.10 This report will conclude that there will not be an unacceptable impact on highway safety or a severe residual cumulative impact on the local highway network arising from the proposed development and therefore is acceptable in highway terms.

2.0 Existing Situation

- 2.1 The site is located to the north of Yapton Road. Yapton Road is a single carriageway road subject to a speed limit of 30mph with street lighting and is typically 6.1 metres wide in the vicinity of the existing access. **Figure 2.1** shows the site location and the local area.

Figure 2.1 – Site location and local area



- 2.2 Yapton Road (looking north-west) is shown in **Photograph 1**.

Photograph 1 – Yapton Road (looking north-west)



- 2.3 Yapton Road serves a number of existing dwellings including the relatively new Mill Gate and Windmill View housing developments south of Yapton Road.
- 2.4 The simple priority junction access of Edward Tompkins Lane with Yapton Road, leading to the Mill Gate development, is around 35 metres to the north-west of the existing access to the site.
- 2.5 Presently, there is a 1.0 metre wide footway on the northern side of Yapton Road, connecting to the A259 in the south-east and Barnham to the north-west.
- 2.6 On the southern side of the carriageway, a shared path of around 2.2 metres wide with tactile paving begins at the access to the Mill Gate housing development and continues north-west for around 160 metres, past the Redrow Mill View development.
- 2.7 The shared path then splits into an on-road cycleway and a separated footway with tactile paving, as can be seen in **Photograph 2**.

Photograph 2 – End of shared path on Yapton Road



- 2.8 **Photograph 2** also shows that a bus cage with clearway markings is provided in the north-westbound lane of Yapton Road. A flag and pole bus stop with a timetable is situated opposite, serving the south-eastbound lane.

Existing Site Access

2.9 The existing site access is shown in **Photograph 3**.

Photograph 3 – Existing site access junction



Google Maps image (2022)

2.10 The existing site access is a dropped kerb crossover with a 3.3 metre wide access road which serves the existing land uses: Sunnyside Campsite, caravan storage, five dwellings and a nursery. It can be noted that visibility from the existing access is currently constrained.

Highway Boundary and Public Right of Way (PRoW)

2.11 The highway boundary and PRoW records have been obtained from WSCC and are provided as **Appendix 2**. An extract of these records is provided as **Figures 2.2** and **2.3**.

Figure 2.2 – Highway boundary and Public Rights of Way Plan (west)

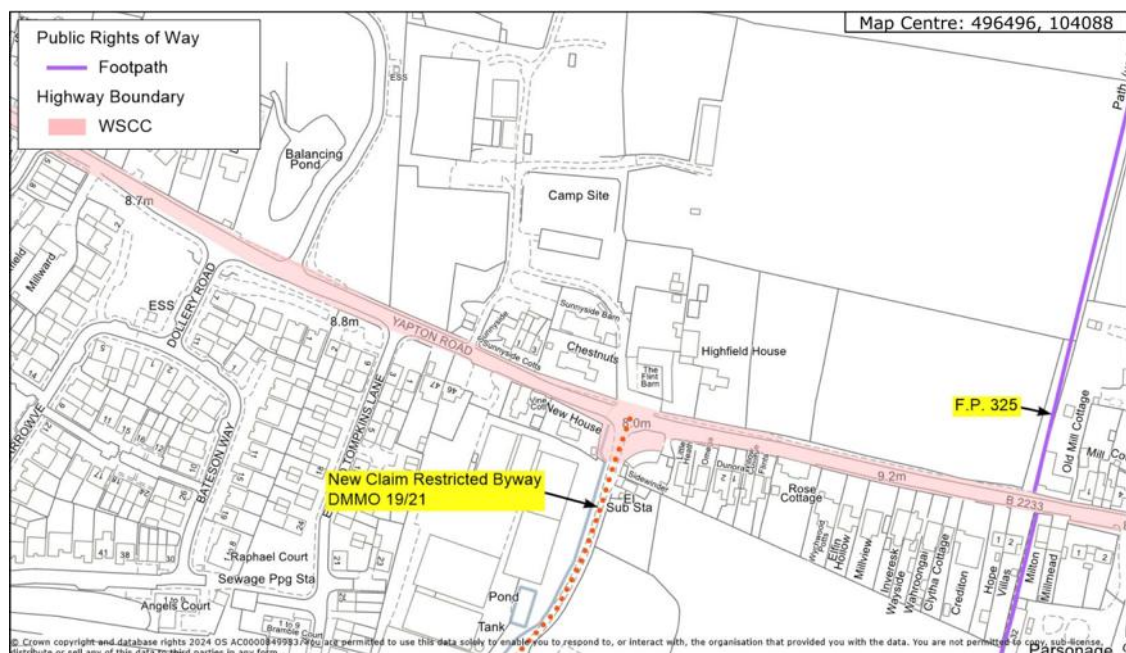
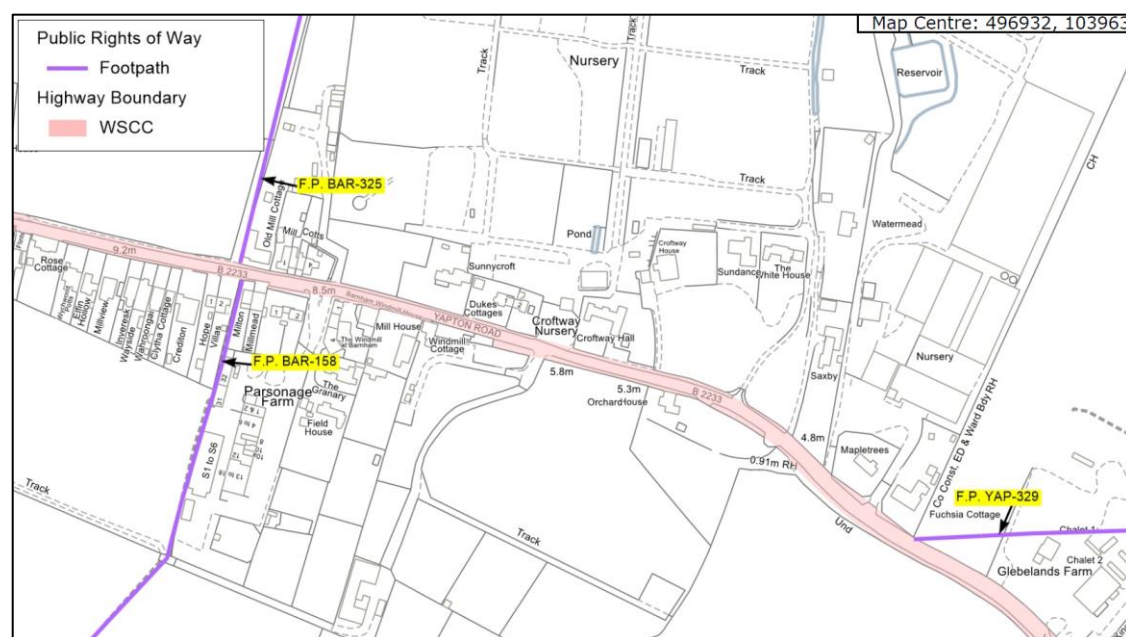


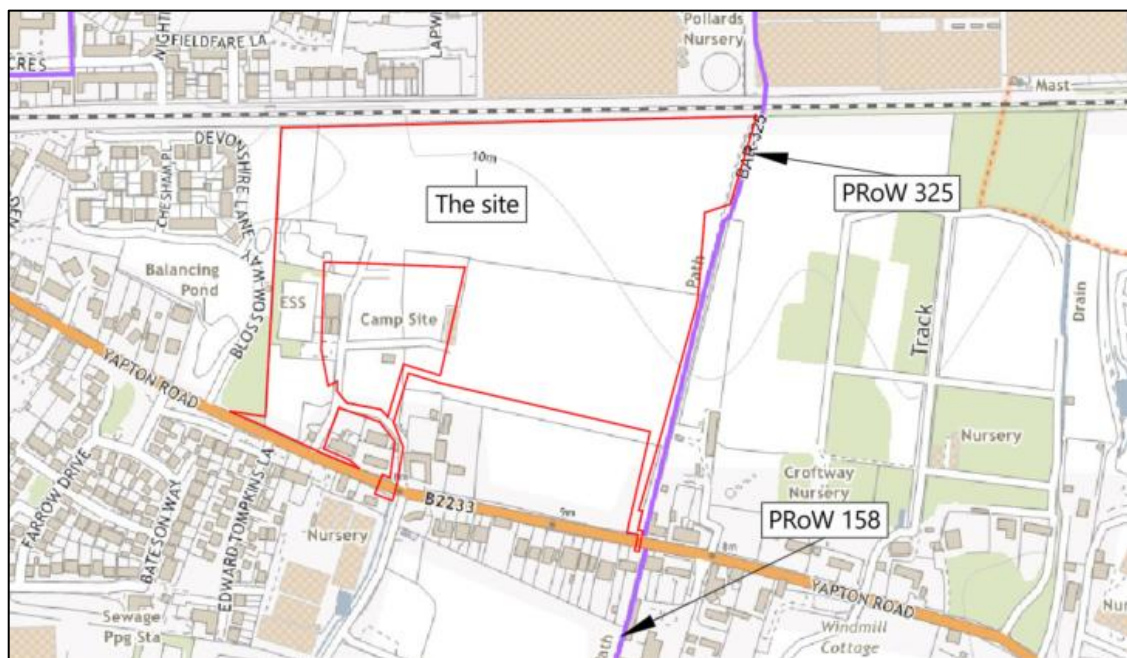
Figure 2.3 – Highway boundary and Public Rights of Way Plan (east)



2.12 **Figures 2.2 and 2.3** demonstrate adopted roads in pink and PRoW in purple. It can be seen that Yapton Road is publicly maintainable in the vicinity of the site and that the extent of the public highway boundary includes the full carriageway and footpaths along the site frontage. The highway boundary information also demonstrates that there is a New Claim Restricted Byway DMMO 19/21 on Hill Lane, to the south of Yapton Road.

- 2.13 WSCC has confirmed that an application has been received (2025) for the addition of a Restricted Byway to the Definitive Map, under Section 53 of the Wildlife and Countryside Act 1981. This PRoW application is relevant to Hill Lane and is shown in **Figure 2.2** as an orange dotted line.
- 2.14 The highway records show that PRoW footpath 325 is located on the eastern boundary of the site. PRoW 325 connects Lake Lane to the north of the site with PRoW footpath 158, south of Yapton Road. **Figure 2.4** provides an extract of the online WSCC PRoW map, with PRoW shown in purple.

Figure 2.4 – Site boundary and PRoW (WSCC)



- 2.15 As it can be seen from **Figure 2.4**, a section of PRoW 325 is partially within the site boundary. It is proposed to maintain a footway connection to Yapton Road in this location within the red line boundary.
- 2.16 It is understood that PRoW 325 will be closed between Lake Lane and Yapton Road, which would result in an increase in safety by removing the pedestrian level crossing over the railway line to the north. The existing pedestrian level crossing (known as Cox's level crossing) is subject to a Temporary Traffic Regulation Order until 4th June 2026¹. This is due to the high level of risk caused by trains being held at a signal whilst positioned directly over the crossing, therefore obstructing any visibility of oncoming trains.
- 2.17 Network Rail have carried out optioneering, however, there is no other option than closing the level crossing to make the crossing safe. Therefore, it is highly likely that FP325 will be closed from its junction with Lake Lane to the junction with Yapton Road, including the level crossing.

¹ www.westsussex.gov.uk/land-waste-and-housing/public-paths-and-the-countryside/public-rights-of-way/unavailable-public-rights-of-way-routes/

Local Services and Facilities

- 2.18 The site is located between the villages of Barnham and Yapton, which are in turn located between the larger towns of Bognor Regis, Chichester, and Littlehampton.
- 2.19 **Table 2.1** sets out a range of local services and facilities that are accessible within reasonable walking or cycling distance from the site access. It was confirmed by WSCC Highways as part of the pre-application discussions that there are several amenities within walking and cycling distance.

Table 2.1 – Local services and facilities

Service/Facility	Distance from site (m)	Travel time (mins)	
		Walking*	Cycling**
Schools and childcare facilities			
St Philip Howard Catholic School (secondary)	1,400	18	4
Barnham Primary School	1,400	18	4
Ormiston Six Villages Academy (secondary)	3,200	40	10
Healthcare			
Prescription Footwear Associates (Orthopaedic surgeon)	700	9	2
The Hearing Care Partnership (Audiologists)	800	10	3
Five Villages Pharmacy	850	11	3
Commercial facilities and services			
Ziggy's Dog Cabin (Pet services)	300	4	1
Windmill Shopping Village	450	6	1
Yappy Days Doggy Daycare (Pet services)	450	6	1
Barnham Trading Post (Supermarket)	650	8	2
Cedar Kitchen (takeaway)	650	8	2
Barnham Station Taxis	700	9	2
Tesco Express	700	9	2
Barnham Railway Station	700	9	2
Co-op Food (Groceries)	800	10	3
Passage to India (restaurant)	800	10	3
Gio's Espresso Bar (coffee)	800	10	3
Barnham Health and Beauty	800	10	3
Bella Autos (mechanic)	900	11	3
Public areas and Leisure			
Barnham Community Hall and Play Park	300	4	1
Basketball Courts	300	4	1
The Murrell Arms (pub)	350	4	1
Aldingbourne Barnham & Eastergate C Of E Parish	800	10	3

*Assuming a typical walking speed of 80 metres per minute, rounded to the nearest whole minute (CIHT guidance document, 'Providing for Journeys on Foot', 1950)

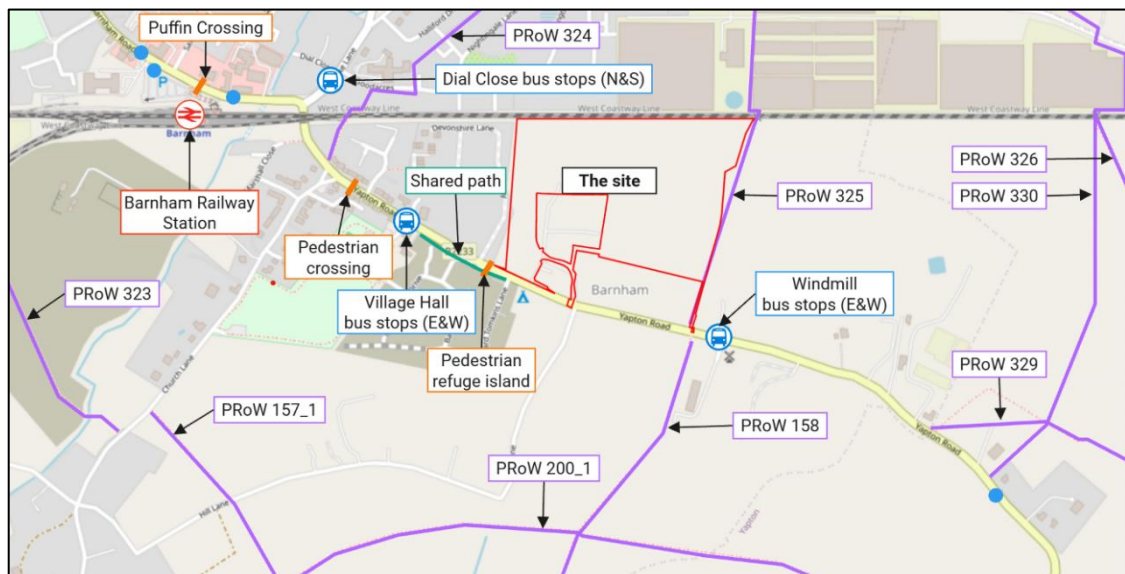
** based on guidance contained within the DfT LTN 1/20 'Cycle Infrastructure Design' and the now withdrawn LTN 2/08 (also titled 'Cycle Infrastructure Design'), which set out typical cycling speeds of 10 to 15mph and 320 metres per minute (12mph), respectively

- 2.20 It is considered that destinations within a 10-minute walk are generally within reasonable walking distance, as per the Chartered Institution of Highways and Transportation (CIHT) guidance provided in the Planning for Walking document.
- 2.21 It is further considered that any destination within 8.0km (five miles) are within reasonable cycling distance, as described in CIHT's Planning for Cycling document.
- 2.22 The Government document 'Travel to school for children of compulsory school age, Statutory guidance for local authorities' dated January 2024, sets out that children under the age of 8 should not have to walk more than 3.2km from their home to their nearest suitable school, and a child aged 8 years or over should not have to walk more than 4.8km from their home.
- 2.23 It can be seen from **Table 2.1** that Barnham Primary School and St Philip Howard Catholic School (secondary) are 1.4km from the application site. Ormiston Six Villages Academy (secondary) is 3.2km from the application site. Therefore, it is considered that there is an acceptable provision of primary and secondary schools within appropriate walking distance of the application site.
- 2.24 In addition, the 2023 National Travel Survey has recorded that walking trips have continued to increase since 2019 levels. In particular, *"most trips to and from school for a trip length of under 1 mile were made by walking (80% for children aged 5 to 10 and 89% for children aged 11 to 16) in 2023"*. Given that both Barnham Primary School and St Philip Howard Catholic School (secondary) are within 1 mile (1.6km) of the application site, it is considered that future residents with children of school age will not be reliant on the private car, with two schools within walking distance.

Sustainable Transport Facilities

- 2.25 The site is located in close proximity to a range of sustainable transport facilities. **Figure 2.5** demonstrates the sustainable transport facilities within the vicinity of the site.

Figure 2.5 – Sustainable transport facilities



2.26 **Figure 2.5** demonstrates the range of facilities accessible from the site and the annotations are colour coded as follows:

- i. The location of the nearest bus stops to the site are identified with blue bus icons, while stops further away are shown as smaller blue dots
- ii. The railway station is marked with a red national rail symbol
- iii. Pedestrian crossings are shown in orange
- iv. The nearby shared cycleway / footway on Yapton Road is shown in green
- v. The location of PRow are shown in purple

Pedestrian Facilities

2.27 As set out in **paragraph 2.5 to 2.7**, there are footways on either side of Yapton Road.

2.28 There are a number of PRow in the local area, the closest being:

- i. PRow 158 which connects Yapton Road to PRow 195_1 and Drove Lane to the south of the site
- ii. PRow 325 which connects Yapton Road with Lake Lane to the north of the site
- iii. PRow 324 Which connects Yapton Road with Lake Lane near the centre of Barnham

2.29 These PRow routes provide onward connectivity to a high density of other PRow in the area. **Figure 2.6** provides an extract of the online WSCC PRow map.

Figure 2.6 – PRow map extract (WSCC)



Cycle Facilities

2.30 As set out in **paragraph 2.6 and 2.7**, there is a shared path on the southern side of Yapton Road. The start of this shared path is located around 35 metres west of the site access and provides a safe route across the access junctions of the nearby Mill Gate and Windmill View housing estates before rejoining the road in the direction of Barnham centre.

- 2.31 The nearest National Cycle Route is Route 2, which runs between Dover and St. Austell.
- 2.32 Route 2 is situated around 2.8km to the south of the site on the A259 and can be reached in around 12 minutes by cycle.

Bus Facilities

- 2.33 As it can be seen in **Figure 2.5**, there are a number of bus stop located within walking distance of the site access. The nearest bus stops and the services accessible from them are described in **Table 2.2**, with the bus timetables contained in **Appendix 3**.

Table 2.2 – Local bus facilities

Bus stop	Distance from site (m)	Services	Frequency	Supports Local Commuting
Village Hall (E&W)	250	<u>500</u> Littlehampton – Yapton – Barnham – Fontwell – Tangmere – Chichester	Mon- Sat: Two/three buses per hour Hourly buses on Sundays	Yes – provides services every 20 to 30 minutes in the peak hours, enabling commuters to travel to Eastergate, Tangmere, Shopwhyke, Chichester and Littlehampton
Windmill (E&W)	350	<u>66A</u> Bognor Regis – Bognor Regis (Clockwise)	Mon – Sat: Three services per day between 0800 and 1800 hrs	Yes – provides one service in the AM peak hour to enable commuters to travel to Bognor Regis, Barnham and Walberton
		<u>66C</u> Bognor Regis – Bognor Regis (Anti-clockwise)	Mon – Sat: Four services per day between 0700 and 1830 hrs	Yes – provides one service in the PM peak hour to enable commuters to travel from Bognor Regis, Barnham and Walberton
Dial Close (N&S)	600	<u>85A</u> Arundel – Barnham – Chichester	Mon-Fri: Two buses per day	No – bus services are outside the typical peak hours for commuting

- 2.34 The bus stops set out in **Table 2.2** can be accessed safely by foot via connected, lit footways, and pedestrian crossings, as can be seen in **Figure 2.5**.

- 2.35 Bus service 500 operates from 05:46 to 00:20 at Barnham railway station, with services every 20 to 30 minutes, and would enable future residents to access Chichester in around 20 minutes (during off-peak hours) which demonstrates that the route is a viable and good quality service given the location of the application site.
- 2.36 It is also noted that pupils could walk to the Barnham Village Hall bus stop and catch a bus (service 500, 66C for travel to school and 66A for travel from school) to the Elm Gove bus stop to access either St Philip Howard or Barnham Primary School.

Rail Facilities

- 2.37 As can be seen in **Figure 2.5**, Barnham Railway Station is located around 700 metres north-west of the site. Google Maps calculate this to be a 10-minute walk or a three-minute cycle from the application site.
- 2.38 It is understood from the proposed reforms to the National Planning Policy Framework (NPPF) that the Government is seeking to establish 'in principle' support for suitable proposals around railway stations within existing settlements (*Proposed reforms to the National Planning Policy Framework and other changes to the planning system*, December 2025).
- 2.39 Chapter 15 of the proposed NPPF (see consultation document dated December 2025), provides national decision-making policies in relation to promotion of sustainable transport. TR3: Locating development in sustainable locations, around development supporting sustainable patterns of movement and good accessibility for all users, to offer genuine choice of transport modes and promote walking, wheeling, cycling and public transport use.
- 2.40 Whilst the proposed NPPF does not explicitly define what a reasonable walking distance of a railway station is, in the Parliamentary debate Matthew Pennycook suggested 800 metres. Professionals have surmised that it relates to a 15-minute city i.e. a railway station within a 15-minute walk of a development. In either case, this application site should be considered suitable for development.
- 2.41 The station can be accessed from the site safely via connected and lit footways along Yapton Road and pedestrian crossings, the locations of which are marked in orange in the figure.
- 2.42 Barnham Railway Station is provided with 62 cycle parking spaces and step-free access.
- 2.43 The station provides services to London Victoria, via Horsham and Gatwick Airport, Brighton via Worthing, and Littlehampton via Ford to the east. Westbound, there are services to Bognor Regis, Portsmouth and Southsea, and Southampton. These services also provide connectivity to a number of other stations in the surrounding area, including Chichester, enabling residents and commuters to access Chichester in around 15 minutes.

- 2.44 There are frequent services to these destinations Monday to Sunday, with increased provision during peak travel times (around 20 trains during peak hours) and reduced provision on Sunday. During normal hours, trains to each destination operate with around a 10-minute interval however this can vary.
- 2.45 WSCC Highways confirmed in their pre-application response that the proximity of the site to Barnham railway station is a benefit to the site in terms of promoting sustainable transport.

Summary of Sustainable Transport Options

- 2.46 It has been demonstrated that there are a significant number of local facilities and day to day services, including to the local schools, within walking distance of the site (**Table 2.1**). Furthermore, there are good quality existing public transport options available in the form of regular bus services and excellent rail connections, thereby providing future residents for genuine choice of sustainable transport options, reducing the reliability on the private car.

Pedestrian and Cycle Audit

- 2.47 As part of the WSCC Highways pre-application discussions, it was requested that a Pedestrian and Cycle audit is carried out as part of the planning application.
- 2.48 The audit was carried out on Tuesday 23rd September 2025 between 1030 and 1400 hours. A Technical Note (HTp/2413/TN/02/A, dated May 2026) was prepared following the audit, and is contained in **Appendix 4**. A Key Routes Plan (HTp/2413/14/A Sheet 1 to 2 of 2), showing the walking and cycling routes undertaken during the audit is contained in **Appendix 5**.
- 2.49 The Audit includes seven suggestions for improvements to the local network to enhance pedestrian connectivity from the site. The suggestions are set out below, with a summary of whether they are to be implemented or not provided below:
- i. Widen footway along site frontage
 - a. This is included in the site access arrangement proposals
 - ii. Install dropped kerbs and tactile paving at the Murrell Arms east crossing
 - a. This is not along the desire line of pedestrians travelling to/from the railway station and the application site
 - b. Therefore, it is not proposed to take this suggestion forward under this planning application. This has been accepted by the highway officer
 - iii. Install tactile paving at the Murrell Arms west crossing
 - a. It is proposed to install tactile paving at this crossing point
 - iv. Widen footway at village hall westbound bus stop
 - a. Widening of the footway at the westbound bus stop is proposed. It is understood from the Arun Ecology Officer that the highway trees within this grass verge are self-set and of poor condition. Details regarding whether the trees would need to be removed will be set out and agreed in the Section 278 detailed design process, and replanted on site as required

- v. Relocate give way markings and install dropped kerbs and tactile paving at Barnham Trading post access
 - a. This junction is not along the pedestrian desire line for those travelling to/from the railway station and the application site
 - b. The give way markings are behind setts, indicating they are on private land
 - c. Therefore, it is not proposed to take this suggestion forward under this planning application. This has been accepted by the highway officer
- vi. Install dropped kerbs and tactile paving at The Square crossing
 - a. This junction is not along the pedestrian desire line for pedestrians travelling to/from the railway station and the application site
 - b. There are setts where The Square meets the main road, indicating this is private land
 - c. Therefore, it is not proposed to take this suggestion forward under this planning application. This has been accepted by the highway officer
- vii. Provide kerbing at footway pinch point by the speed limit change on Yapton Road
 - a. Given the extent of highway boundary, it does not appear that there would be enough land available to construct/provide a kerb in this location
 - b. Therefore, it is not proposed to take this suggestion forward under this planning application. This has been accepted by the highway officer

2.50 The correspondence with the highway officer is contained in **Appendix 6**.

2.51 The proposals to be taken forward are detailed further in **Section 4.0**, and were included within the Stage 1 Road Safety Audit.

Active Travel England

2.52 The development proposals have been designed in accordance with the principles set out within Active Travel England's (ATE) Standing Advice Note: Active Travel and Sustainable Development. The guidance has informed the approach to site access, internal layout, sustainable movement strategy, and the integration of active travel within the wider transport network ensuring that ATE's guidance have been embedded within the original principle of the design.

2.53 The ATE Planning Application Assessment Toolkit Appraiser Report is contained in **Appendix 7**, and sets out how the development is in accordance with the guidance.

DfT Connectivity Tool

2.54 The DfT Connectivity Tool has been utilised to assess the site connectivity, demonstrating how well located the site is to everyday destinations, including jobs, schools, shops, healthcare and leisure, using sustainable modes of travel.

2.55 The report is contained in **Appendix 8**, with the overall score summarised in **Table 2.3**.

Table 2.3 – Summary of DfT Connectivity Tool – Overall score

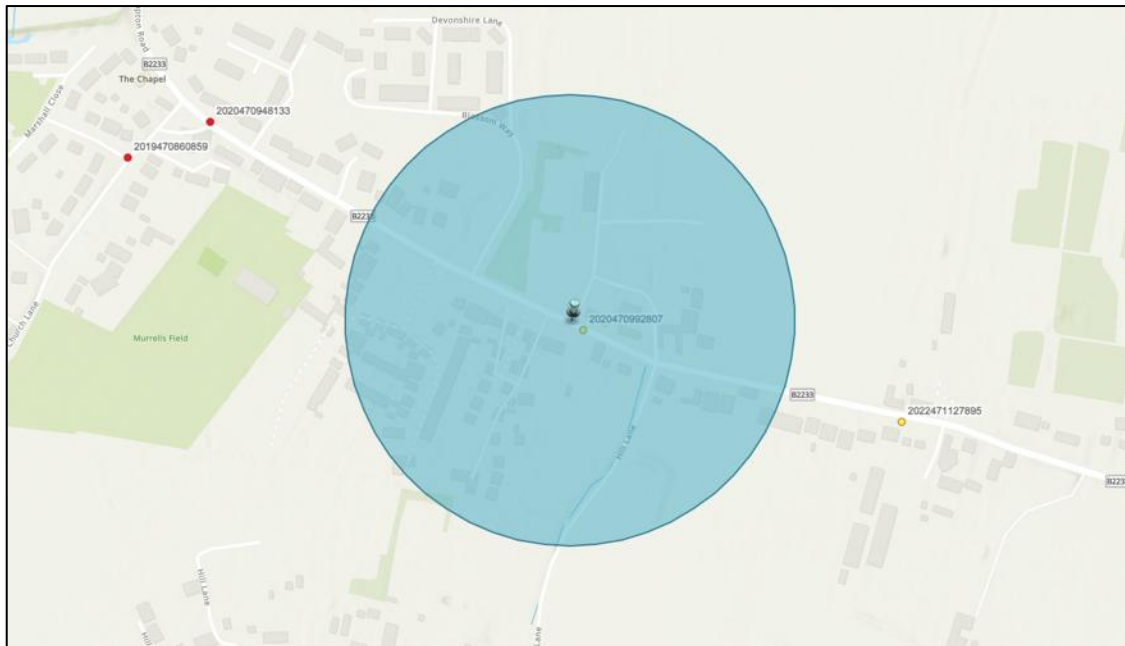
Type of Travel	Site Score	Comparison to National Average
Overall (except driving)	57	Slightly above average
Public Transport	63	Above average
Walking	48	Slightly below average
Cycling	58	Slightly above average
Driving	79	High

- 2.56 From **Table 2.3**, it can be seen that the site location is slightly above the national average for the overall type of travel to everyday destinations.
- 2.57 Given that the application proposals include improvements to the pedestrian connectivity, both at the site access, and off-site; including proposed tactile paving at the Murrell Arms west crossing and the proposed widening of the existing footway at the Village Hall westbound bus stop, it is considered that the walking score could be improved from the existing situation.
- 2.58 When compared to the context of development in Arun, the Arun District Council's document 'Settlement Hierarchy Study' November 2025 identifies Barnham as a higher-order settlement within the district's rural hierarchy, with a range of services and facilities and strong public transport connections, including a mainline railway station. The study confirms that such settlements are appropriate locations for housing growth.
- 2.59 Given that the application site is well positioned to the existing infrastructure and housing provision within Barnham, as well as access to services and facilities by sustainable modes, including high-quality public transport, including Barnham railway station, it is considered that the site is aligned with the objectives of the ADC Settlement Hierarchy Study.

Review of Recent Personal Injury Road Traffic Collisions

- 2.60 Personal Injury Collision (PIC) data for the period January 2020 to December 2024 has been obtained from the CrashMap Pro database. The output report is provided as **Appendix 9**.
- 2.61 **Figure 2.7** shows the extent of the study area which covers an area of 195 metres from the site access location. The search area was accepted by WSCC Highways as part of the pre-application submission.

Figure 2.7 – Personal Injury Collision area



- 2.62 The report shows that during the study period, there has been one recorded 'slight' PIC.
- 2.63 The PIC (ref. 2020470992807) occurred around 15 metres to the east of the site access on Yapton Road in October 2020. The collision occurred between a car slowing down or stopping and another car proceeding normally along the carriageway at a T or staggered junction. One 'slight' driver casualty was recorded.
- 2.64 From a review of the above, it is concluded that there are no underlying road safety issues that would be exacerbated by the proposed development.

Traffic Surveys

Automatic Traffic Count (ATC)

- 2.65 ATC surveys were carried out on Yapton Road from 16th-22nd April 2024 inclusive. The location of the ATCs is shown in **Figure 2.8**.

Figure 2.8 – ATC locations



2.66 The results of the survey, contained in **Appendix 10**, are summarised in **Table 2.4** below.

Table 2.4 – ATC results

Yapton Road	Weekday Vehicle Flow				Daily	85th %ile Speeds	HGV%
	Traditional Peak		Observed Peak				
	AM	PM	AM	PM			
	0800-0900	1700-1800	0800-0900	1500-1600			
West (Eastbound)	312	366	312	410	4,165	36.1mph	1%
East (Westbound)	474	311	474	349	4,596	35.7mph	1%
Two-way total	786	677	786	759	8,761	-	-

2.67 **Table 2.4** shows that the ATC survey recorded an AM peak hour weekday, two-way vehicle movement of around 786 vehicles.

2.68 The ATC recorded the PM peak hour as 1500-1600 with two-way vehicle movement of 759 vehicles.

2.69 From **Table 2.4**, it can be seen that the difference between the observed PM peak hour and the traditional PM peak hour is 82 two-way vehicle movements. This is considered a negligible difference in flows.

2.70 Therefore, the traditional peak hours of 1700-1800 will be used within the capacity assessment; especially given that the TRICS vehicular trip rates are higher for the PM peak period of 1700-1800 than during 1500-1600. Therefore, using the traditional peak hours is considered robust and has been agreed with WSCC as Local highway Authority.

- 2.71 The 85th percentile speeds measured over 30mph in both directions, with 36.1mph for eastbound traffic and 35.7mph for westbound traffic.

Manual Classified Count (MCC)

- 2.72 An MCC survey was carried out between 0700 and 1800 hours on Tuesday 16th April 2024 on the simple priority junction to the Mill Gate housing development to the south of Yapton Road.
- 2.73 The full survey data is contained in **Appendix 10** and summaries of the AM and PM peak hour vehicle movements are provided in **Table 2.5**.

Table 2.5 – MCC survey data

Arm	Destination	Total Vehicle Movements			
		Traditional Peak		Observed Peak	
		AM Peak Hour (0800-0900)	PM Peak Hour (1700-1800)	AM Peak Hour (0730-0830)	PM Peak Hour (1600-1700)
Yapton Road (W)	Yapton Road (E)	328	346	298	387
	Edward Tompkins Lane	3	5	2	7
Yapton Road (E)	Yapton Road (W)	466	310	531	341
	Edward Tompkins Lane	1	2	2	1
Edward Tompkins Lane	Yapton Road (W)	9	4	15	5
	Yapton Road (E)	3	1	3	3
Total		810	668	851	744

- 2.74 From **Table 2.5**, it can be seen that the observed AM peak hours of 0730-0830 and 1600-1700 in the PM. The difference between the traditional AM Peak hour vehicle movements and the observed AM peak hour vehicle movements is 41. The difference between the traditional PM Peak hour vehicle movements and the observed PM peak hour vehicle movements is 76. This is considered a negligible difference in flows.
- 2.75 Given the above, it is proposed to use the traditional peak hours and apply the TRICS trip generation for the traditional peak hours, which provides a worst case scenario, with vehicle movements likely to be lower during off-peak hours. Furthermore, the committed development in the wider area typically uses the traditional peak hours, and therefore the capacity modelling will be robust.
- 2.76 The traffic survey data was provided as part of the pre-application Technical Note, and was accepted by the highway officer, including the use of traditional peak hours.

2.77 The MCC surveys, carried out in November 2024, of the following junctions are also contained in **Appendix 10**, and will be used as part of the capacity assessment of the junctions where the development traffic is over 30 vehicle movements in any hour:

- i. Church Lane/Yapton Road priority junction
- ii. Lake Lane/Yapton Road priority junction
- iii. Elm Grove/Barnham Road crossroads
- iv. War Memorial Roundabout
- v. B2233/North End Road mini roundabout
- vi. B2233/Bilsham Road mini roundabout

3.0 Policy Review

- 3.1 This chapter sets out the national, regional and local planning policy framework relevant to the transport and highways aspects of the proposed residential development. The policy review identifies the key requirements that the development proposals need to address.

National Policy

National Planning Policy Framework (December 2024, updated February 2025)

- 3.2 Paragraph 105 states that 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.
- 3.3 As set out in **Section 2.0**, the proposed development is located within a sustainable location, within the context of the Arun area, with a genuine choice of sustainable transport modes available to reduce the reliance on the private car.
- 3.4 Paragraph 110 states that in assessing applications for development, it should be ensured that:
- a. Appropriate opportunities to promote sustainable transport modes can be or have been taken up, given the type of development and its location
 - b. Safe and suitable access to the site can be achieved for all users
 - c. The design of streets, parking areas, other transport elements and the content of associated standards reflects current national guidance, including the national design guide and the national model design code
 - d. Any significant impacts from the development on the transport network (in terms of capacity and congestion), or on highway safety, can be cost effectively mitigated to an acceptable degree
- 3.5 This Transport Assessment will demonstrate that the proposed development is in accordance with paragraph 110 (a-d) by demonstrating that a safe and suitable access can be achieved for all users, and there will not be a significant impact on highway safety.
- 3.6 Paragraph 111 states that development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe.
- 3.7 This Transport Assessment will confirm that there will not be an unacceptable impact on highway safety or a severe residual cumulative impact on the local highway network arising from the proposed development and therefore is acceptable in highway terms.
- 3.8 Paragraph 112 requires that the design of the development should create places that are safe, secure and inclusive and meet the needs of users, and that patterns of movement, streets, parking and other transport considerations are integral to the design of schemes, and contribute to making high quality places.

- 3.9 Although the application is in outline, the Illustrative Masterplan demonstrates that a safe, secure and inclusive development can be provided.
- 3.10 Paragraph 113 states that all developments that will generate significant amounts of movement should be required to provide a Travel Plan, and the application should be supported by a transport statement or transport assessment so that the likely impacts of the proposal can be assessed.
- 3.11 The application is supported by a Transport Assessment (HTp/2413/TA/01/A) and a Travel Plan (HTp/2413/TP/01/A).

Draft NPPF Consultation (December 2025)

- 3.12 The Government published a draft revised NPPF for consultation on 16 December 2025. The consultation closes on 10 March 2026. This draft Framework represents the most significant rewrite of planning rules in over a decade and includes substantial changes to transport policy.
- 3.13 Whilst these changes have not yet been formally adopted, they are a material consideration in planning decisions and indicate the direction of national policy.
- 3.14 The draft Framework embeds a vision-led approach to transport planning, moving away from the traditional 'predict and provide' approach. This emphasises designing sustainable and well designed transport systems from the outset, rather than simply forecasting future traffic and providing infrastructure to accommodate it.
- 3.15 The approach focuses on outcomes desired and planning to achieve them, rather than planning for a worst case peak hour scenario.
- 3.16 The draft proposes establishing in principle support for housing and mixed use development around railway stations, with minimum densities of 40 dwellings per hectare around all stations within settlements, and 50 dwellings per hectare around well connected stations.
- 3.17 Well connected stations are those served by four trains per hour overall, or two trains per hour in one direction, in top 60 Travel to Work Areas by GVA. Development around well connected stations outside settlements would also be supported where physically well related to the station and within reasonable walking distance.
- 3.18 The draft Framework proposes that transport considerations must be an important part of early engagement with local communities for major development, reinforcing the need to front load investment, modelling and local consultation on transport matters.
- 3.19 The draft NPPF Consultation will be referenced where appropriate within the Transport Assessment.

DfT Circular 01/2022: Strategic Road Network and the Delivery of Sustainable Development

- 3.20 The DfT Circular 01/2022 sets out the way in which DfT and National Highways will engage with the planning system. Whilst primarily focused on the Strategic Road Network (SRN), it establishes key principles for sustainable development.
- 3.21 The Government expects a vision led approach from local planning authorities and developers that supports local and strategic policy outcomes and embeds a safe and sustainable transport system from the outset.
- 3.22 The Circular emphasises the importance of embedding a vision led approach to reducing car dependency, prioritising sustainable transport from the outset, and ensuring developments create a safe and sustainable transport system.
- 3.23 The DfT Circular is referenced in **Section 8.0** of this report.

Active Travel England

- 3.24 Active Travel England (ATE) was established in 2022 as the Government's statutory consultee on major planning applications in England.
- 3.25 ATE provides guidance on the design of walking and cycling infrastructure through its Planning Assessment Toolkit and assesses major planning applications against best practice standards.
- 3.26 ATE's role includes providing statutory consultation responses on major planning applications, assessing active travel provision against national standards, promoting high quality walking and cycling infrastructure, and supporting local authorities in delivering active travel schemes.
- 3.27 The ATE Planning Application Assessment Toolkit Appraiser Report is contained in **Appendix 7**, and sets out how the development is in accordance with the guidance.

West Sussex County Council Policy

West Sussex Transport Plan 2022-2036

- 3.28 The West Sussex Transport Plan sets out the county's transport strategy. Key objectives include promoting sustainable and active travel, supporting the economy, protecting the environment and improving safety.
- 3.29 The Plan establishes a clear hierarchy for transport modes, prioritising walking, cycling, public transport, powered two wheelers and ultra low emission vehicles, and other motor vehicles in that order.
- 3.30 The Transport Plan states that the county will prioritise sustainable and active travel modes in decision making. When considering transport schemes and development proposals, priority will be given to measures that support walking, cycling and public transport over measures that only benefit private car use.

- 3.31 This Transport Assessment demonstrates that infrastructure for pedestrians and cyclists is proposed, and that there is good quality public transport infrastructure in place, demonstrating that sustainable and active travel is prioritised.

West Sussex County Council Travel Plan Guidance

- 3.32 WSCC requires Travel Plans for developments that are likely to generate significant amounts of travel.
- 3.33 The guidance establishes requirements for Travel Plan targets and monitoring arrangements, Travel Plan coordinator and management arrangements, Travel Plan measures and initiatives, and Travel Plan monitoring fees.
- 3.34 WSCC's Travel Plan guidance states that Travel Plans should be used to promote sustainable travel choices and reduce reliance on the private car. They should set realistic targets for modal shift, be adequately resourced, and include effective monitoring arrangements to ensure targets are met.
- 3.35 Travel Plan monitoring fees are required to cover the costs of Travel Plan assessment and monitoring by the County Council over a five year period.
- 3.36 A Travel Plan (HTp/2413/TP/01/A) has been prepared in accordance with WSCC Travel Plan Guidance.

Arun District Council Policy

Arun Local Plan 2011-2031 (Adopted July 2018)

- 3.37 The Arun Local Plan was adopted in July 2018 and sets out planning policies for the district to 2031.

Policy T SP1: Transport and Development

- 3.38 This strategic policy states that the Council will promote sustainable transport networks across the District that enable safe and easy access to jobs, homes and services and will support developer contributions that provide, or improve, the range and quality of transport infrastructure.
- 3.39 Development proposals must:
- a. Provide safe and suitable access for vehicles and pedestrians with appropriate access to public transport, cycling and walking infrastructure
 - b. Not result in severe residual cumulative impacts on the road network and minimise any potential road safety issues
 - c. Be designed to reduce the need to travel by private vehicle and prioritise ease of access for pedestrians and cyclists through the provision of appropriate infrastructure
 - d. Provide parking in accordance with the council's adopted parking standards

- 3.40 This Transport Assessment will demonstrate that the proposed development is in accordance with Policy T SP1 by demonstrating that a safe and suitable access can be achieved for all users, and there will not be a significant impact on highway safety.

Policy T DM1: Sustainable Travel and Public Rights of Way

- 3.41 This development management policy requires that all development proposals will be expected to promote sustainable travel and encourage walking, cycling and public transport use.

- 3.42 Proposals should:

- a. Maintain and enhance the existing Public Rights of Way network
- b. Provide new or improved pedestrian and cycle links where appropriate
- c. Be located within easy walking distance of public transport, schools, shops and community facilities where practicable
- d. Be designed to minimise the need to travel by car

- 3.43 The supporting text notes that development should be located where there is good access to facilities and services by sustainable modes, reducing reliance on the private car.

- 3.44 This Transport Assessment demonstrates that the existing Public Right of Way network will be maintained (albeit it is proposed to close FP 325, but pedestrian access from within the site will be maintained). It has also been demonstrated that the application site is located within a suitable walking distance of public transport hubs, as well as local facilities required on a daily basis.

Summary

- 3.45 This Transport Assessment demonstrates that the proposed residential development of up to 190 dwellings is in accordance with local and national policy and should not be refused on highway grounds.

4.0 Application Proposals and Parking Provision

- 4.1 The development proposals are shown on Illustrative Masterplan (ref: DLA.2242.L14.S08) provided at **Appendix 11**, with an extract provided at **Figure 4.1**.

Figure 4.1 – Illustrative masterplan



- 4.2 From **Figure 4.1**, it can be seen that the development will comprise parcels which will be connected by roads, footpaths and cycle paths. These routes will make travelling via sustainable modes of transport more attractive than via private cars for local trips, therefore reducing the vehicular movements generated by the site and also improving biodiversity.

Car Parking

- 4.3 Arun District Council's car parking standards are contained within their Parking Standards Supplementary Planning Document dated January 2020.
- 4.4 The standards provide the following advice on expected car parking provision, and are summarised in **Table 4.1**.

Table 4.1 – Arun District Council car parking standards

Number of bedrooms	Number of habitable rooms	Parking behaviour zone		
		1	2	4
1	1 to 3	2	2	1
2	4	2	2	1
3	5 or 6	2	2	2
4+	7 or more	3	3	2

- 4.5 The site most closely reflects a 'Parking Behaviour 2' which is described in the standards as "Peri-Rural (large villages or small settlements close to towns e.g. Angmering, Barnham)".
- 4.6 Car parking will be provided in accordance with the standards set out in **Table 4.1**, and will be secured by a planning condition.
- 4.7 Visitor car parking will be provided at 20% of the total number of residential units and will be accommodated along the access roads and/or in lay-bys to be added as the layout evolves.
- 4.8 The standards also set out that each property with a garage or driveway should be provided with an electric vehicle charger. This is in line with Building Regulations Infrastructure for the charging of electric vehicles, approved document S, which sets out that:
- All homes with off-street parking should have an EV charging point
 - Residential developments with communal car parking of 10+ spaces should have a minimum of one charge point per unit and cable routes to all other spaces
- 4.9 Electric vehicle charging will be provided in accordance with these regulations and will also be secured by a planning condition.
- 4.10 Swept path analysis of a private car accessing and egressing the illustrative parking spaces has been provided to support the Architect's site layout, as shown on drawing HTp/2413/TR/07 (**Appendix 12**). From this it can be seen that the car parking is acceptable.
- 4.11 The approach to car parking provision was accepted by WSCC Highways as part of the pre-application discussions.

Cycle Parking

- 4.12 WSCC's cycle parking standards are contained within the Parking Guidance for New Developments. The standards following recommended minimum provisions are shown in **Table 4.2**.

Table 4.2 – WSCC minimum levels of cycle provision

Type	Dwelling Size	Cycle Provision (per unit)
Houses	Up to 4 rooms (1 & 2 bed)	1 space
Houses	5+ rooms (3+ bed)	2 spaces
Houses	Multiple Occupation	1 space
Flats	Up to 3 rooms (1 & 2 bed)	0.5 space (if communal storage otherwise same as 1 & 2 bed house)
Flats	4+ rooms (3+ bed)	1 space

- 4.13 Cycle parking will be provided in accordance with WSCC's standards and will be secure, suitably located and undercover. Cycle parking will be secured by a planning condition.
- 4.14 The approach to cycle parking provision was accepted by WSCC Highways as part of the pre-application discussions.

Emergency Service Vehicles

- 4.15 Drawing HTP/2413/TR/08, contained in **Appendix 12**, provides swept path analysis of a fire tender safely accessing the site, manoeuvring on site and leaving in a forward gear.
- 4.16 Drawing HTP/2413/TR/09, also contained in **Appendix 12**, provides swept path analysis of a vehicle with the dimensions of an ambulance safely accessing the site, manoeuvring on site and leaving in a forward gear.
- 4.17 Therefore, it is considered that the proposed site layout will accommodate emergency service vehicles appropriately.

Delivery Vehicles and Servicing

- 4.18 Drawing HTP/2413/TR/09 (**Appendix 12**) provides swept path analysis of a delivery vehicle accessing the site, manoeuvring and egressing the proposed site access.
- 4.19 Therefore, it is considered that the proposed site access arrangement and layout can suitably accommodate delivery vehicles and servicing.

Refuse and Recycling Storage and Collection Strategy

- 4.20 Residents of the dwellings will move their waste and recycling bins to the footway within the development for collection similarly to the vast majority of dwellings throughout the UK.
- 4.21 Should any properties be served by shared driveways then an allocated collection area close to the end of the road will be provided for residents to position their bins for collections. This would involve providing a section of hardstanding or widened footway due to their being bins of multiple properties.
- 4.22 The distance between bin stores and collection will be located to avoid long carry distances with an ideal maximum of 25 metres between collection point and a waiting collection vehicle; and 30 metres between store and collection point.

- 4.23 Turning heads suitable for an 11.2 metre refuse collection vehicle will be provided to minimise reverse distances – ideally below 12 metres.
- 4.24 Drawing HTP/2413/TR/10, contained in **Appendix 12**, demonstrates a refuse vehicle manoeuvring within the site.

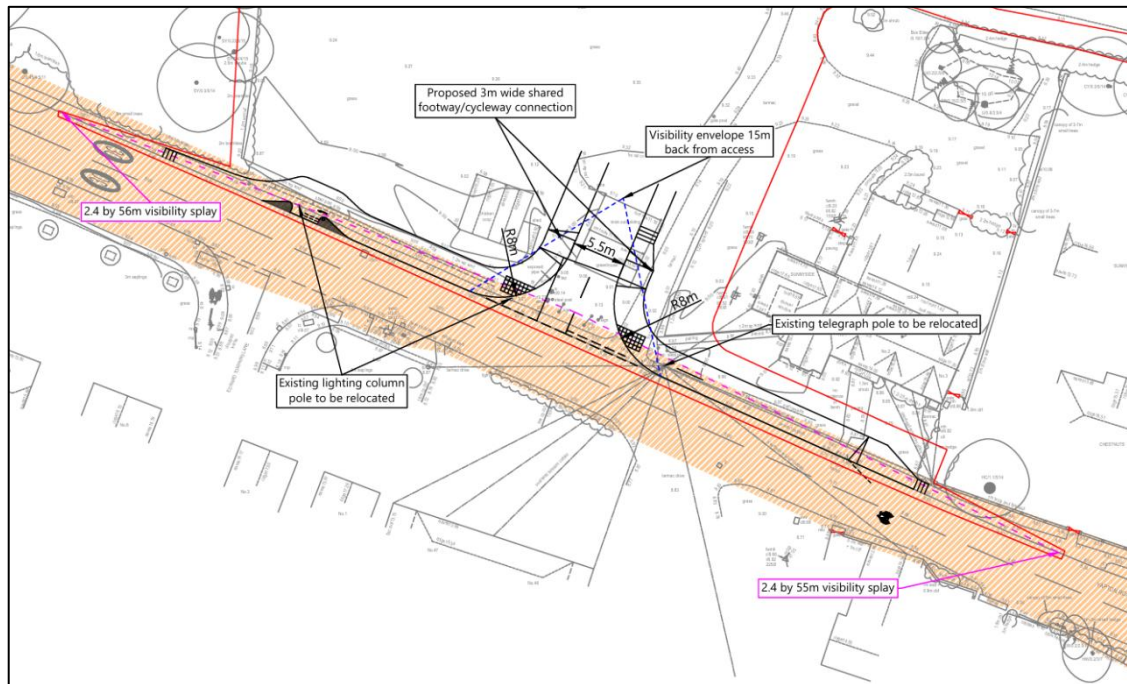
Proposed Internal Highway Network

- 4.25 The Architect's Illustrative Masterplan, shown at **Figure 4.1**, sets out that the internal highway network is likely to include the following:
- i. The spine road will provide access to the development, which has:
 - a. A 5.5 metre wide carriageway
 - b. A 2.0 metre wide footway on the eastern side, which continues into the site
 - c. A 3.0 metre wide shared footway/cycleway on the western side (200 metres), which then becomes a 2.0 metre wide footway
 - ii. Other streets in the development will be provided with 2.0 metre wide footways and carriageway widths of 4.8 metres
 - iii. Shared space arrangements are to be provided where appropriate, at around 6.5 metres wide
 - iv. Off-street, external car parking will be provided for all dwellings
 - v. On-street visitor parking will also be provided

5.0 Proposed Access Strategy

- 5.1 It is proposed that the application site is developed for up to 190 residential dwellings with associated cycle parking, car parking, landscaping, and refuse storage.
- 5.2 The proposed development will be accessed via a simple priority junction with Yapton Road. **Figure 5.1** provides an extract of the proposed access drawing (HTp/2413/09/D) which is contained in **Appendix 13**.

Figure 5.1 – Proposed access arrangement



5.3 From **Figure 5.1**, it can be seen that the following is proposed:

- i. The existing access is widened from 3.3 metres to create a 5.5 metre wide, simple priority junction with a shared footway/cycleway on either side of the access which will tie into the existing footway network
- ii. 3.0 metre wide shared pedestrian/cycle path on either side of the access, continuing into the site on the western side of the access road and reducing to 2.0 metres wide for pedestrians on the eastern side
- iii. A cycle transition on the western side of the vehicular access, providing a connection from the internal cycle path to the existing shared pedestrian/cycle infrastructure on the southern side of Yapton Road, accessed via the cycle transition from Edward Tompkins Road
- iv. To the east of the site access, it is proposed to include a cycle transition for cyclists continuing eastbound on carriageway. The proposals include a dropped kerb and markings on the carriageway, which reflect what has been implemented on Yapton Road, around 200 metres west of the site access
- v. There is also an arrow marking on the westbound side of the carriageway, indicating that cyclists can access the cycle path at the cycle transition

- 5.4 The widening of the access will allow for two-way vehicle flow for the proposed and existing dwellings. Swept path analysis of the site access (HTp/2413/TR/06/B) is contained in **Appendix 14**.
- 5.5 Design Manual for Roads and Bridges (DMRB) sets out that if a minor arm of a junction has more than 300 vehicles per day, then a ghost right turn junction should be considered. As part of the pre-application discussions, it was confirmed that a ghost right turn at the site access would be substandard, and given the modelled priority junction works well within capacity, it was considered that a priority bellmouth junction would be appropriate for the site access.
- 5.6 The highway officer confirmed that the provision of a priority bellmouth junction would be workable, subject to a Stage 1 Road Safety Audit being carried out, and capacity modelling demonstrating that the junction can operate well within capacity. The Stage 1 Road Safety Audit is summarised at **paragraphs 5.13 to 5.16** and confirms that the proposals are safe and appropriate. The capacity assessment of the junction is contained in **Section 8.0**, and demonstrates that the priority junction design works well within capacity.

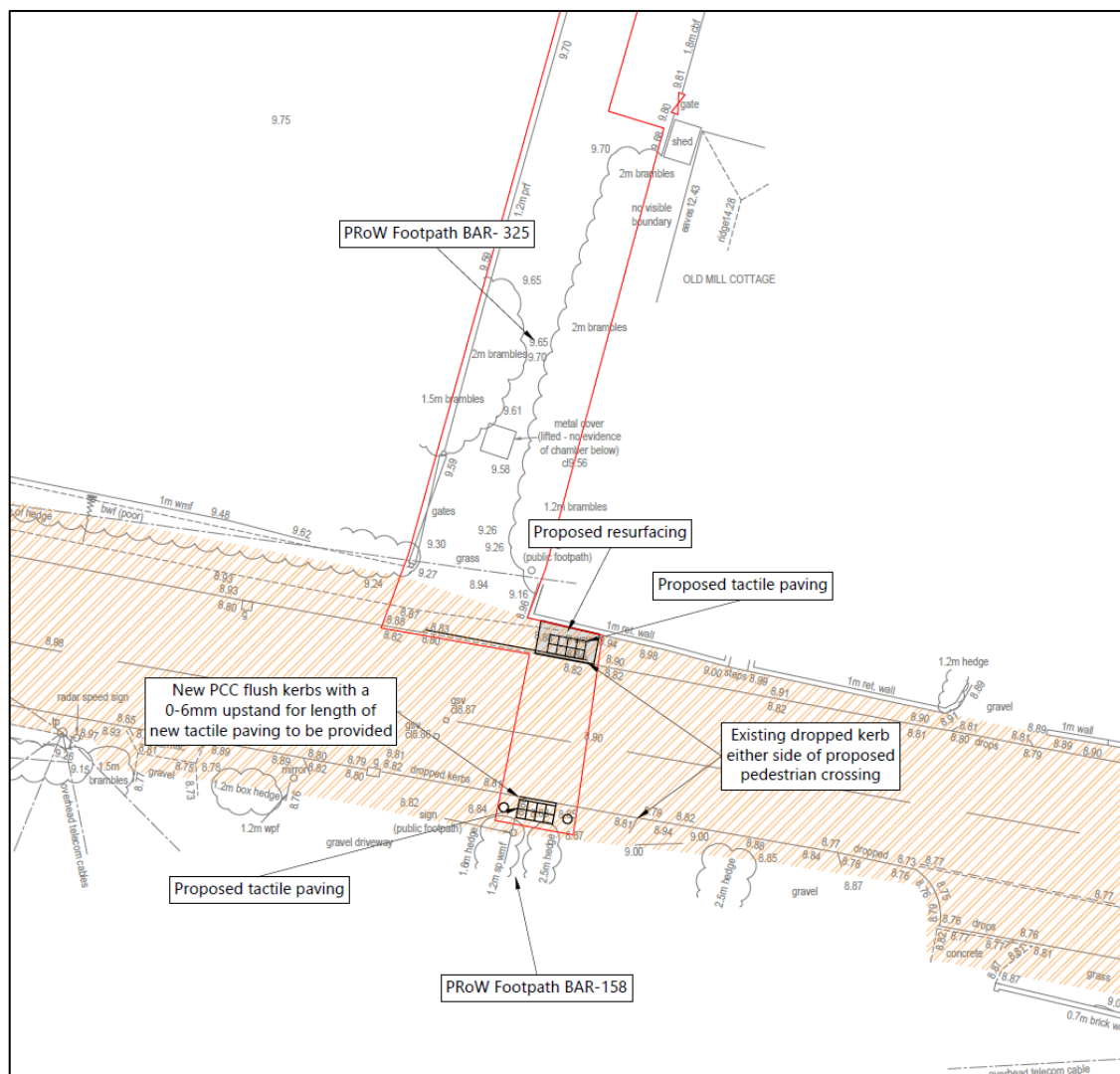
Visibility Splays

- 5.7 The visibility splays at the proposed modified access arrangement have been prepared based on the calculations contained in Manual for Streets (MfS).
- 5.8 The 85th percentile speeds recorded by the ATC survey determine that the required visibility splays at the proposed site access are:
- i. 56 metres to the north-west
 - ii. 55 metres to the south-east
- 5.9 The stopping sight distance calculations used to determine the required visibility splays are contained in **Appendix 15**.
- 5.10 Drawing HTp/2413/09/D demonstrates that appropriate visibility splays can be achieved in both directions within client or highway controlled land. Therefore, the access proposed are considered appropriate in highway terms.
- 5.11 The recorded vehicle speeds and associated visibility splays were provided to WSCC Highways as part of the pre-application discussions, and were accepted.

Pedestrian Access from PRow Footpath 325

- 5.12 As set out in **paragraph 2.16**, it is understood that the footpath will be closed from its junction with Lake Lane to the junction with Yapton Road, including the level crossing. It is proposed to maintain a footway connection within the red line boundary.
- 5.13 Where the footpath meets Yapton Road, it is proposed to improve the existing crossing point by providing tactile paving. The proposals are shown on drawing HTp/2413/09/D Sheet 2, contained in **Appendix 13**, with an extract shown in **Figure 5.2**

Figure 5.2 – Proposed tactile paving on Yapton Road



Road Safety Audit

- 5.14 As agreed during pre-application discussions with WSCC Highways, a Stage 1 Road Safety Audit has been carried out of the proposed access arrangements onto Yapton Road including the pedestrian crossing from the existing PRoW footpath 325, as well as the proposed tactile paving at the junction of Church Lane/Yapton Road and the proposed widening of the footway at the Village Hall bus stop. The Road Safety Audit and Designer's Response are contained in **Appendix 16**.
- 5.15 The Road Safety Audit raised no recommendations to the proposed tactile paving at the junction of Church Lane/Yapton Road and the proposed widening of the footway at the Village Hall bus stop.
- 5.16 The Road Safety Audit provided ten recommendations associated with the proposed design of the access arrangements and the pedestrian crossing on Yapton Road. The recommendations and the Designer's Response are set out below:

a. Location – Yapton Road at Edward Tompkins Lane

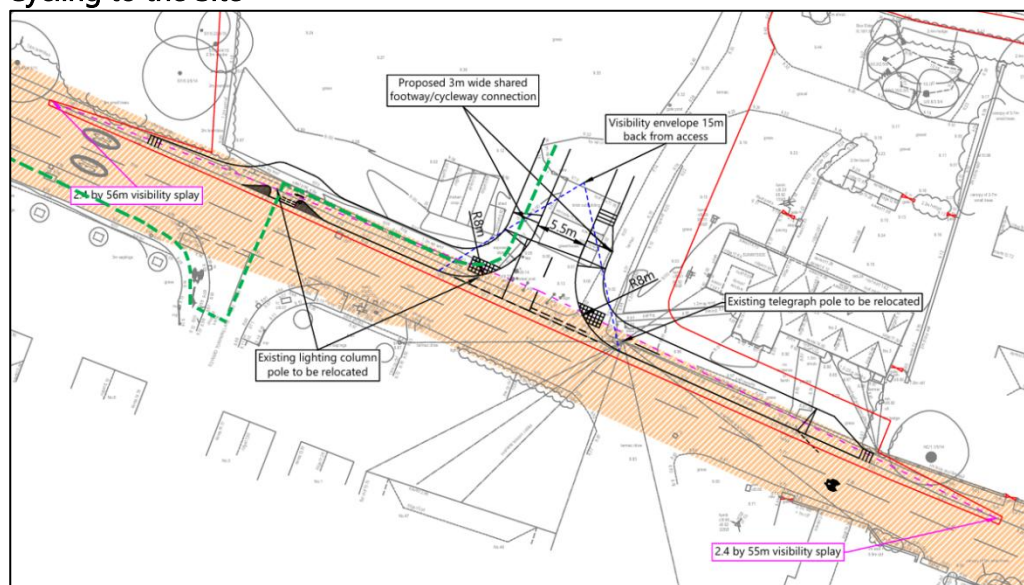
Recommendation – Relocate the cycle transition point at a safe location to minimise the risk of conflict between road users.

Designer's Response – Noted – Due to highway boundary constraints, the cycle transition cannot be relocated.

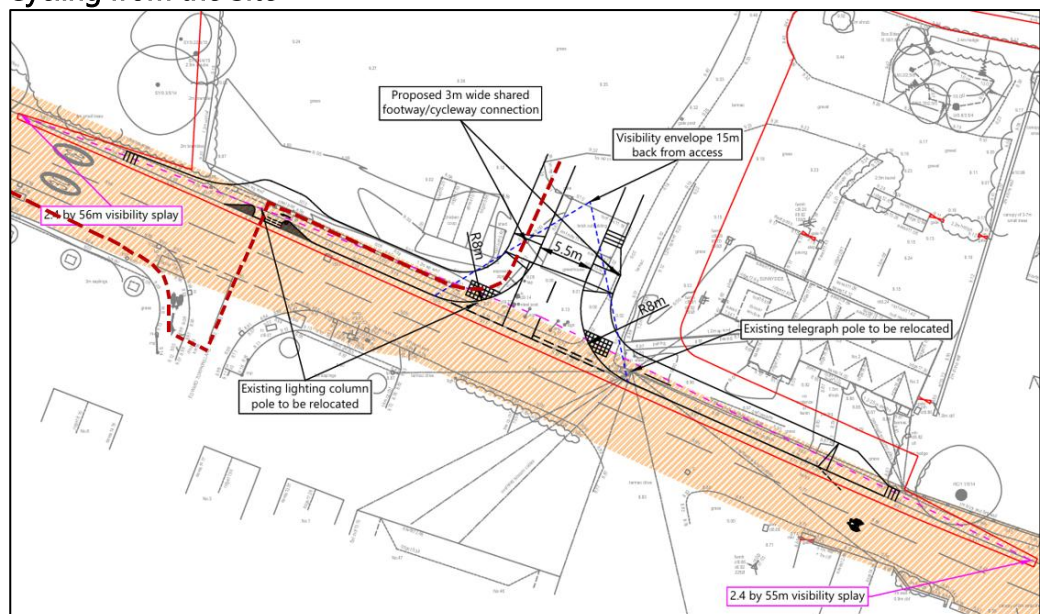
It is considered that there is good visibility from Edward Tompkins Lane for cyclists to cross Yapton Road on carriageway at this junction, and vice versa, with vehicle movements on Edward Tompkins Lane being low and slow.

Cyclists will be able to transition to and from the cycle infrastructure on either side of the carriageway as shown below (green dashed route arrivals, brown dashed route departures).

Cycling to the Site



Cycling from the Site



b. Location – Cycle transition at Edward Tompkins Lane

Recommendation – Given the concerns raised at problem 2.1 (*see above*) relocate the transition point at a safer location and ensure that visibility to and from it is maintained at all times.

Designer's Response – Noted – The vegetation will be cut back to provide the 3.0 metre wide path to the west of the vehicular access, as shown on the Proposed Access Arrangement Plan.

It will be ensured that vegetation to the rear of the shared path will be cut back sufficiently to allow for seasonal growth under a maintenance programme, to ensure that visibility is not obstructed.

c. Location – Yapton Road at western end of proposed shared use footway

Recommendation – Ensure that corduroy paving is provided at the transition to and from the shared-use footway.

Designer's Response – Agreed – Drawing HTP/2413/09/D updated to include corduroy paving.

d. Location – Proposed shared use footway and priority junction

Recommendation – Relocate the existing lighting columns to prevent obstruction and ensure the safe movement of both pedestrians and vehicles. Appropriately positioned lighting will also provide sufficient illumination of the new priority junction and enhance visibility for pedestrians and cyclists during hours of darkness or poor weather conditions.

Designer's Response – Agreed – Drawing HTP/2413/09/D updated to include annotation to relocate existing lighting columns.

e. Location – Cycle transition at eastern end of shared use footway

Recommendation – Remove the cycle markings from this location and provide a safe crossing point elsewhere.

Designer's Response – Noted – The cycle transition has been provided at this point to support cyclists from transitioning on and off Yapton Road east of the site access, as cycling on the footway has been observed in this location, where it is very narrow. Therefore, it is considered that the path, with transition, in this location is appropriate.

Drawing HTP/2413/09/D has been updated to show the cycle marking closer to the centre of the carriageway

- f. Location – Cycle transition at eastern end of shared use footway

Recommendation – Provide a suitable transition point for eastbound cyclists to safely enter the carriageway.

Designer's Response – Noted – The cycle transition provided to the east of the access reflects the cycle transitions within the area, notably 200 metres west of the access, see photograph below:



Therefore, it is considered that the cycle transition is acceptable, and cyclists and drivers will understand that there will be cyclists present on Yapton Road

- g. Location – Pedestrian access proposed on Yapton Road at south-east corner of development site

Recommendation – Revise the design to ensure that the proposals do not increase the risk of pedestrian injury at this location.

Designer's Response – Noted – Given there is an existing Public Right of Way footpath in this location, the tactile paving will improve the existing crossing over Yapton Road, as such, no increase to the risk of pedestrian injury is expected.

A visually impaired user of the PRow would benefit from the provision of tactile paving.

- h. Location – Northern side of pedestrian access proposed on Yapton Road in the south-east of the proposed development site

Recommendation – Take appropriate mitigation measures to prevent surface water from collecting at this location.

Designer's Response – Agreed – This will be dealt with at detailed design stage and therefore subject to a Stage 2 RSA. New kerbs will be put in that start at 25mm and transition to 6mm.

- i. Location – Southern side of pedestrian access proposed on Yapton Road in the south-east of the proposed development site

Recommendation – Ensure that the proposals eliminate any potential trip hazards and do not pose a safety risk to pedestrians

Designer's Response – Agreed – Drawing HTp/2413/09/D updated to include annotation regarding ensuring kerbs are modified to reduce the likelihood of potential trips.

New PCC flush kerbs with a 0 to 6mm upstand for the length of the new tactile paving, and a 2.0m by 1.3m width of hard standing to be provided within highway land.

- j. Location – Southern side of pedestrian access proposed on Yapton Road in the south-east of the proposed development site

Recommendation – Given the concerns raised at problem 2.6 (*above*) revise the design to ensure that the proposals do not increase the risk of pedestrian injury at this location.

Designer's Response – Noted – Bollards have been shown either side of the tactile paving to protect both pedestrians and the tactile paving.

- 5.17 The recommendations from the Road Safety Audit have been taken into account within the design of the access arrangements, as shown on drawing HTp/2413/09/D (**Appendix 13**).

Pedestrian and Cycle Access

- 5.18 As set out in **Section 2.0**, PRoW footpath 325 runs along the eastern boundary of the site, and falls partially within the red line boundary, meeting Yapton Road in the south, with PRoW FP158 continuing south on the southern side of the carriageway.
- 5.19 It is proposed to surface the section of footpath 325 within the red line boundary to where it meets Yapton Road, to enable the route to be useable by pedestrians and wheelers.
- 5.20 The proposed modifications where the footpath 325 meets Yapton Road is shown on drawing HTp/2413/09/D sheet 2, contained in **Appendix 13**.
- 5.21 As set out in the Pedestrian and Cycle Audit, it is proposed to install tactile paving at the Murrell Arms west crossing, and widen the existing footway at the Village Hall westbound bus stop. Discussions have been held with WSCC Highways with regard to these proposals, with the design accepted in principle.
- 5.22 The proposed tactile paving at the Murrell Arms west crossing is shown on drawing HTp/2413/12 and the proposed widening of the existing footway at the Village Hall westbound bus stop is shown on drawing HTp/2413/13/A. The drawings are contained in **Appendix 17**, with extracts shown in **Figure 5.3** and **5.4**.

Figure 5.3 – Proposed tactile paving at Murrell Arms west crossing

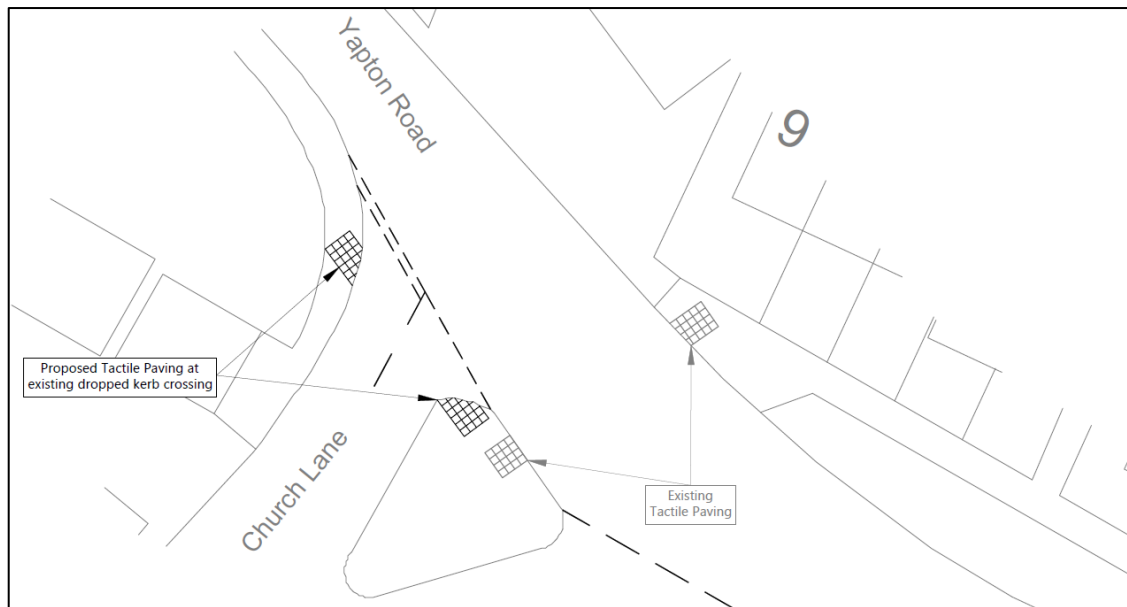
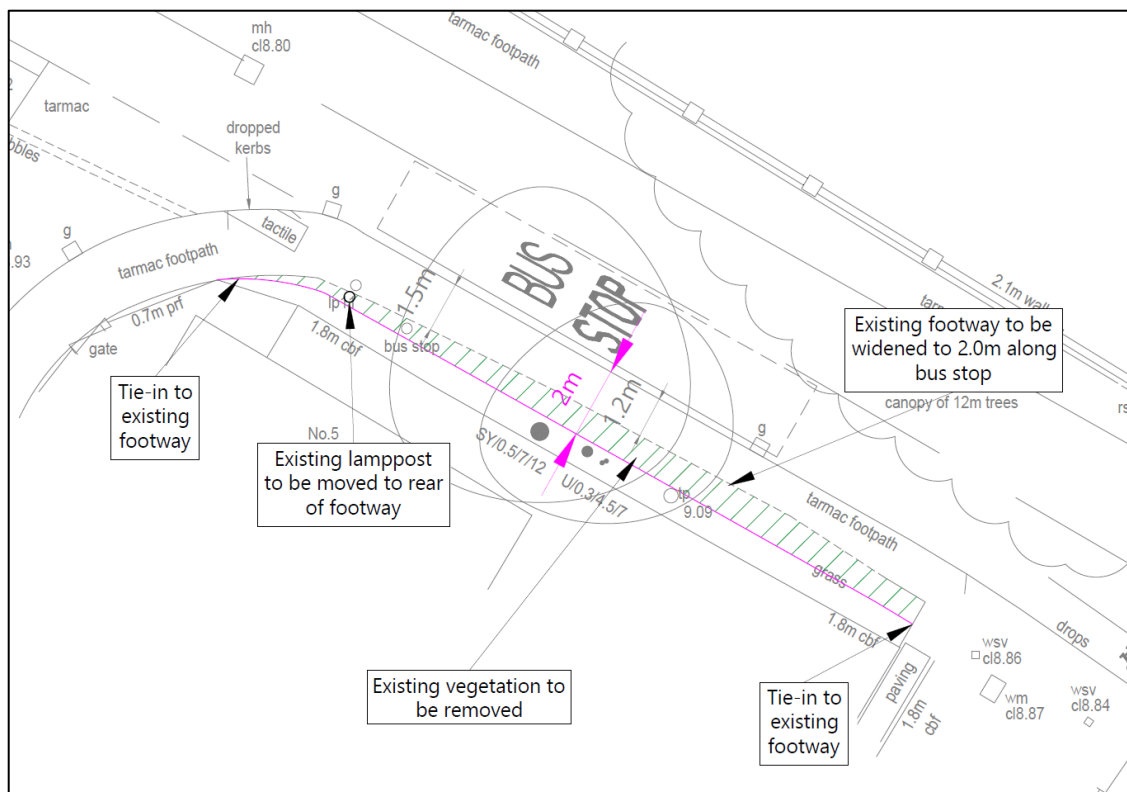


Figure 5.4 – Proposed widening of footway at the Village Hall westbound bus stop



5.23 As set out at **paragraph 5.14**, the proposals have been included within the Stage 1 Road Safety Audit, which raised no recommendations or concerns to the proposals.

5.24 Individually and cumulatively these enhancements will improve the relative accessibility of the proposed development via non-car modes to local facilities, including the local schools, but they are also inherently, a benefit of the proposals as they will also be used by the wider village population enhancing walking and public transport.

6.0 Calculation of Future Background Traffic

Years of Assessment

6.1 The years of assessment are:

- i. 2026 – The year of application
- ii. 2031 – End of Local Plan period

Background Growth

- 6.2 TEMPro 8.1 Core growth factors will be applied to the 2024 survey data to calculate the year of assessment (2026) and the future year of 2031, i.e., end of the Arun Local Plan period. This provides a 'Predict and Provide' assessment.
- 6.3 TEMPro 8.1 Behavioural growth rates will be applied to the 2031 future year, to demonstrate a Vision Led approach.
- 6.4 The Core and Behavioural TEMPro growth rates are contained in **Appendix 18** and set out in **Table 6.1**.
- 6.5 Behavioural growth rates reflect expected changes in travel behaviour over time, based on car ownership and use, as well as a reduction in trip rates per person, due to remote working, online shopping and an aging population, as well as the gradual shift towards sustainable transport. It was confirmed by WSCC Highways that TEMPro Behavioural growth factors should be used with caution where the growth factor falls below 1.0. From **Table 6.1**, it can be seen that the behavioural growth rates in 2031 are above 1.0, and then are considered appropriate to be used.

Table 6.1 – TEMPro growth rates

	TEMPro 8.1 Core		TEMPro 8.1 Behavioural	
	AM	PM	AM	PM
2024 - 2026	1.0130	1.0129	-	-
2024 - 2031	1.0626	1.0639	1.0203	1.0254

Committed Development

- 6.6 The following committed developments have been identified and agreed with WSCC Highways to be included on top of background growth factors within this assessment:
- i. Land South of Barnham Station, Church Lane (200 dwellings) BN/142/20/OUT
 - ii. Land at Bilsham Road, Yapton (250 dwellings) Y/91/17/OUT
 - iii. Land East of Drove Lane, Yapton (300 dwellings) Y/92/17/OUT
 - iv. BEW Parcel SC1 (1,250 dwellings) BN/11/22/OUT
 - v. Land West of Bilsham Road, Yapton (170 dwellings) Y/52/23/PL
 - vi. Land at Ford Airfield Ford (1,500 dwellings) F/4/20/OUT
 - vii. Land North of Barnham Road and East of Fontwell Avenue (523 dwellings) BN/85/25/OUT

- 6.7 This list of committed development was provided as part of the ADC Planning Pre-Application Technical Note. No comments were received from the allocated planning officer.
- 6.8 The committed development associated with BEW Parcel SC1 have been taken from the Pell Frischmann report VISSIM Modelling Assessment Report, dated August 2024. The report was prepared to assess the capacity of the local highway network and demonstrate the quantum of development that could be delivered prior to Phase 1 of the A29 scheme in place. The report is based on up to 689 dwellings coming forward, with the following development quantum:
- i. 350 dwellings from the Parcel SC1 site (ref: BN/11/22/OUT)
 - ii. 150 dwellings from the Barratt David Wilson site (ref: BN/195/22/PL)
 - iii. 100 dwellings from the Cala Homes site (AL/11/24/OUT)
 - iv. 89 dwellings from the recently approved Meadow Way development (LPA ref: AL/178/22/OUT, PINS ref: APP/C3810/W/23/3323858)
- 6.9 Their capacity assessment of the local highway network uses VISSIM micro-simulation traffic modelling software for the following scenarios:
- i. 2024 Base scenario – using traffic surveys carried out in March 2024
 - ii. 2031 Base scenario – 2024 traffic flows growthed to 2031 using TEMPro software
 - iii. 2031 Base plus traffic associated with 689 dwellings and a one-form entry primary school (with 80% of Parcel SC1 and BDW trips internalised, and 100% of Cala trips to/from the local highway network)
- 6.10 The development traffic flows from the report will be applied to the committed development within the 2031 assessment in this report.
- 6.11 The application at land North of Barnham Road and East of Fontwell Avenue for 523 dwellings (ref: BN/85/25/OUT) has provided two scenarios for their capacity modelling as follows:
- i. 200 units in advance of the Phase 1 link being fully open (which they have assessed in their 2024 assessment year)
 - ii. 523 dwellings in 2031 with Phase 1 link road being fully open
- 6.12 As part of the capacity assessment within this Transport Assessment, the trip generation associated with 200 dwellings will be applied to the 2026 assessment year, and 523 dwellings will be applied to the 2031 assessment year.
- 6.13 The application for 523 dwellings supersedes the Barratt David Wilson application BN/195/22/PL, in which 150 dwellings were included within the VISSIM Modelling Assessment Report. Given this, there is an element of double counting of the trip generation associated with this site, therefore, it is considered that our assessment of committed development is very robust.

- 6.14 Furthermore, BEW Parcel SC1 is included within TEMPro background growth rates. The BEW strategic allocation (SD5) providing at least 2,300 dwellings is allocated in the adopted Arun Local Plan 2011-2031 (Policy H SP1, Page 118). DfT confirms that TEMPro derives dwelling forecasts from published Local Authority housing trajectories (NTEM Planning Data Guidance, Section 4.4). As BEW is an allocated strategic site within the adopted Local Plan, its dwelling provision forms part of the Arun District housing trajectory which feeds TEMPro growth assumptions at the Local Authority District level.
- 6.15 Given that there have been no discounts applied to the TEMPro growth rates, it is further considered that the traffic generation associated with the committed development is highly robust and is likely an over-estimation on the impact on the local highway network.

7.0 Development Traffic

Trip Rates and Trip Generation

- 7.1 The National TRICS database has been used to calculate the multi-modal trip generation associated with the proposed development.
- 7.2 The TRICS database provides an indication of the likely number of AM and PM peak hour and daily weekday multi-modal trip movements arising from the proposed development.
- 7.3 A search of the TRICS database (version 8.25.12) has been undertaken using the following parameters:
- i. 03 – Residential
 - ii. A – Houses Privately Owned
 - iii. Multi-modal trip rates
 - iv. Great Britain only (excluding Ireland)
 - v. Edge of Town
- 7.4 The trip rates and resultant multi-modal trips associated with the proposed 190 dwellings for the surveyed network AM and PM peak hours 0800-0900 and 1700-1800 are set out in **Tables 7.1** and **7.2**, respectively, with the full report contained in **Appendix 19**.

Table 7.1 – Trip rates per dwelling

	Trip Rates (per dwelling)				
	AM Peak Hour (0800-0900)		PM Peak Hour (1700-1800)		Daily
	Arrival	Departure	Arrival	Departure	
Total Person	0.230	0.765	0.556	0.265	7.396
Pedestrian	0.039	0.109	0.048	0.037	0.937
Cyclist	0.004	0.019	0.01	0.005	0.130
Total Vehicles	0.151	0.359	0.327	0.159	4.336
Public Transport	0.004	0.036	0.016	0.002	0.213

Table 7.2 – Trip generation

	Trip Generation (190 dwellings)				
	AM Peak Hour (0800-0900)		PM Peak Hour (1700-1800)		Daily
	Arrival	Departure	Arrival	Departure	
Total Person	44	145	106	50	1,405
Pedestrian	7	21	9	7	178
Cyclist	1	4	2	1	25
Total Vehicles	28	68	62	30	824
Public Transport	1	7	3	0	40

- 7.5 From **Table 7.2** it can be seen that the proposed development will generate up to around 97 two-way vehicular movements in the AM peak hour and 91 two-way vehicular movements in the PM peak hour. This equates to just over one vehicle per minute, with fewer vehicles at other times. It can also be seen that development could result in around 810 daily vehicle movements.

Distribution of Proposed Trips

- 7.6 As part of the pre-application discussions with WSCC Highways, it was advised by the highway officer that the scope provided as part of approved planning application at Land South of Barnham Station (ref: BN/142/20/OUT) should be utilised to determine the junctions to be assessed.
- 7.7 The agreed trip distribution from that application (taken from the application's Technical Note in Response to Highway Officer Comments, dated February 2021) has been used to distribute the trip generation associated with the application site. The trip generation is based on both 2011 Census journey to work data and a P/T^2 gravity model. The trip distribution was accepted by WSCC Highways in their consultation response dated 22nd June 2021.
- 7.8 The distribution of our development trips (**Table 7.2**) onto the local highway network, is shown on flow diagrams contained in **Appendix 20**.

Capacity Modelling Hours

- 7.9 As set out at **paragraph 2.70**, the capacity assessments of the local highway network will be based on the peak hours of 0800-0900 and 1700-1800 with the TRICS trip generation applied to these traditional peak hours, which provides a worst case scenario, with vehicle movements likely to be lower during off-peak hours.
- 7.10 The traffic survey data was provided as part of the pre-application Technical Note, and was accepted by the highway officer, including the use of traditional peak hours.

8.0 Vision Led Approach

- 8.1 The recent NPPF document (dated December 2024, updated 7th February 2025) and WSCC's Pre-Application Advice webpage sets out that a vision led approach should be taken to identify transport solutions that deliver well-designed, sustainable and popular places.
- 8.2 A draft NPPF consultation (dated December 2025) is open until 10th March 2026. Given the document is a draft consultation and is subject to modifications, it is considered that limited weight can be given to it for this planning application. However, draft policy TR6: Assessing transport impacts confirms:

"2. Transport assessments and statements, and travel plans, should reflect the transport vision for the development and how it is intended to be achieved (including, in the case of Travel Plans, identifying fallback options if initial measures do not deliver the expected outcomes)."

- 8.3 This section sets out how a vision led approach will be applied to the capacity assessments of the local highway network.

Background Traffic Growth

- 8.4 As set out in **Section 5.0**, the TEMPro growth rates to be applied to the 2024 traffic survey data is as follows:
- i. 2024 to 2026 – Core growth rates, i.e. a predict and provide approach
 - ii. 2024 to 2031 – Core growth rates and Behavioural growth rates, i.e. providing both a predict and provide and decide and provide approach
- 8.5 Behavioural growth rates reflect expected changes in travel behaviour over time, based on car ownership and use, as well as a reduction in trip rates per person, due to remote working, online shopping and an aging population, as well as the gradual shift towards sustainable transport. As set out in **Section 6.0**, the behavioural growth rates in 2031 are above 1.0, and therefore are considered reliable.
- 8.6 WSCC Highways set out in pre-application email correspondence, that on known congested parts of the network, core growth rates should be applied to provide a comparison with a more aspirational scenario (i.e. behavioural), so that a worst case scenario is presented.
- 8.7 **Section 9.0** summarises the capacity modelling of the local highway network. Where the junction is working well within the Core scenario, the summary table includes the results of the capacity assessment for the aspirational scenario only. Where the junction appears to be congested, the 2031 Core scenario is also included.
- 8.8 For ease of reference for the highway officer, both the 2031 Core and Behavioural scenarios are included within the appendices (**Appendix 18**) for all modelling.

Trip Generation

- 8.9 WSCC Highways Travel Plan Guidance sets out that Travel Plans should include a reduction in single occupancy private vehicle of 10% over five years, with this reduction being achieved by the measures set out in the Travel Plan.
- 8.10 Given it is expected that trip generation will be lower over a five year period from the traditional results obtained from TRICS with the Travel Plan measures in place, as well as a National Policy drive for an increase in sustainable transport uses, i.e. increase the percentage of short journeys in towns and cities that are walked or cycled to 50% in 2030 and to 55% in 2035², it is considered that an additional percentage reduction can be applied to the trip generation, to forecast what the expected impact on the local highway network would be in the future, rather than carrying out a traditional predict and provide analysis.
- 8.11 Therefore, a 25% reduction has been applied to the trip generation associated with this development.
- 8.12 The reduction has been applied to the trip generation flow diagrams, which are contained in **Appendix 20**. Given that the junctions are working well within capacity using a traditional 'predict and provide' approach (including mitigation where already proposed), it is clear that with the vision led approach applied the capacity of the junctions will further improve. As such, capacity modelling using a vision led trip generation (25% discount applied) has not been provided.

DfT Circular 01/2022

- 8.13 The DfT Circular 01/2022 requests that the vision of the development is outlined.
- 8.14 The vision of the development is guided by the holistic aim of reducing the need to travel by private car while recognising the present and future opportunities, including through the establishment of development within the vicinity of the site.
- 8.15 Chapter 8 of the DfT Circular sets out that the document should be read in conjunction with the National Planning Policy Framework (NPPF). It can be confirmed that the proposed development is in accordance with NPPF, and that the development proposals do not result in an unacceptable impact on highway safety, nor are the residual cumulative impacts on the road network severe.
- 8.16 Furthermore, the supporting Planning Statement includes reference to the NPPF and confirms that the proposed development is in accordance with the appropriate policies contained in the NPPF.
- 8.17 The Design and Access Statement (DAS) included within the planning application, sets out that the proposals will integrate and connect into the wider area, as well as focus on integrated cycle and pedestrian routes that connect with existing and proposed routes.

² The second cycling and walking investment strategy (CWIS2), updated March 2023

- 8.18 Furthermore, the Design and Access Statement sets out the how the design strategies embodied in an Illustrative Masterplan have been prepared, including road design/hierarchy, with reference to the Arun District Design Guide.
- 8.19 National Highways sets out that the proposed development should be in line with paragraphs 47-54 of the Circular. Details of how the supporting transport work has addressed the relevant paragraphs are set out below:
- i. The development will be located in an area of high accessibility by sustainable transport modes and would not create a significant constraint to the delivery of any planned improvements to the transport network or allocated sites. Residents of the development will be able to access local facilities and services by walking and cycling. Furthermore, it has been demonstrated that the impact on the local highway network is not considered to be severe. Therefore, this is considered acceptable and in line with the DfT Circular
 - ii. **Section 9.0** of this report sets out the amount of development traffic arising from the application site onto the following SRN junctions:
 - a. The Fontwell East roundabout to the north connecting to the A27(T)
 - b. The Fontwell West roundabout to the north connecting to the A27(T)
 - c. The Bognor Road junction to the west connecting to the A27(T)
 - iii. The flow diagrams in **Section 8.0** confirm that the amount of development traffic arising from the application is too low to have a significant cumulative impact on safety or capacity of the SRN junctions. Therefore, this is considered acceptable and in line with the DfT Circular
 - iv. The Transport Assessment includes a future assessment year of 2031 which is in line with the end of the ADC Local Plan period. Therefore, this is considered acceptable and in line with the DfT Circular
 - v. The flow diagrams in **Section 9.0** will confirm that the amount of development traffic arising from the application is too low to have a significant cumulative impact on safety or capacity of the SRN junctions. Therefore, transport improvements at the SRN junctions are not required, and the proposed development is in line with the DfT Circular
- 8.20 Although the layout is in outline, matters associated with the proposed development have been considered as part of the forthcoming scheme, as set out in **Table 8.1**.

Table 8.1 – Matters to be considered in residential-led development

Matters for Consideration	Application Provision
Home and street layouts	The home and street layout is provided in further detail within the Design and Access Statement, which sets out that: - The vision of the development is to establish pedestrian, cycle and road connections that link to the local public transport and active travel routes - The scheme focuses on integrated cycle and pedestrian routes that connect with existing and proposed routes and new local centre - The site layout incorporates 2.0 metre wide footways adjacent to the primary and secondary streets which will also connect to the PRow and greenspaces - The scheme also includes shared surface arrangements
Broadband infrastructure	It is understood that a broadband internet connection will be provided to all dwellings. This will provide future residents with the option to work from home
Safe and secure cycle parking	Cycle parking will be provided in accordance with the Arun Parking Standards SPD
Access to local amenities and open space	Various local amenities are located within close proximity to the application site Additionally, the DAS includes an Open Space Strategy which sets out that the proposed development will deliver circa 28,438sqm of public open space, which is 15,062sqm in excess of the policy requirement for 190 dwellings. The public open space will include parks and gardens, amenity green space and natural and semi natural areas
Mobility or micro mobility hubs should be provided in larger schemes	The proposed development is not considered to be large enough to require a mobility hub. There is no policy requirement to provide a mobility hub
High-powered and open-access EV charge points should be installed where developments include on-street or communal parking	Each property with a garage or driveway would be provided with an Electric Vehicle (EV) charging point in accordance with the Arun Parking Standards SPD

8.21 It has therefore been demonstrated that the vision of the proposed development is appropriate and demonstrates that the proposed development will reduce the need to travel by private car while recognising the present and future opportunities available, and as such is in line with the DfT Circular 01/2022.

9.0 Junction Capacity Analysis

- 9.1 WSCC Highways confirmed as part of the pre-application discussions that any junctions with an increase of 30 or more vehicles during any hour should be included within the capacity assessment.
- 9.2 Based on the trip generation set out in **Table 7.2**, and vehicle distribution (**Appendix 20**), the following junctions have an increase of 30 or more vehicles:
- i. Site access/Yapton Road priority junction
 - ii. Church Lane/Yapton Road priority junction
 - iii. Lake Lane/Yapton Road priority junction
 - iv. Elm Grove/Barnham Road crossroads
 - v. War Memorial Roundabout
 - vi. B2233/North End Road mini roundabout
 - vii. B2233/Bilsham Road mini roundabout
- 9.3 As set out in **Section 8.0**, where junctions are working well within capacity, the 2031 Behavioural growth scenario is summarised below. Where junctions appear to be congested, the 2031 Core growth scenario is also presented. It is noted that the North End Road and Bilsham Road roundabout capacity assessments are congested, however, as set out within this section, there is mitigation proposed at the two junctions as part of the Ford Airfield planning application (ref: F/4/20/OUT). Given that the mitigation is not currently in place, both the core and behavioural growth rates applied to the base traffic survey data have been presented within the report. However, it will be demonstrated that with the mitigation in place, the junctions are shown to operate within capacity.
- 9.4 The Junctions 9 modelling outputs for both Core and Behavioural growth rate scenarios, for each of the junctions, are provided in full at **Appendix 21**. Each junction is discussed in turn.

Site Access/Yapton Road Priority Junction

- 9.5 The proposed access arrangement has been assessed using PICADY which forms part of the Junctions 9 software suite.
- 9.6 Given that the proposed site access will be located approximately 35 metres to the south-east of the existing Edward Tompkins Lane priority junction, it is considered appropriate to assess this junction as a staggered crossroad.
- 9.7 The output of the PICADY assessment is set out in **Table 9.1**.

Table 9.1 – Capacity Analysis results for a staggered site access junction

	AM			PM		
	Queue	Delay (s)	RFC	Queue	Delay (s)	RFC
	2026 Base + Committed + Development					
Edward Tompkins Lane	0.0	9.42	0.03	0.0	7.74	0.01
Yapton Road (E)	0.1	4.00	0.04	0.1	4.70	0.07
Site Access	0.2	11.26	0.19	0.1	9.75	0.08
Yapton Road (W)	0.0	4.78	0.01	0.0	4.31	0.02
	2031 Base (behavioural) + Committed + Development					
Edward Tompkins Lane	0.0	9.53	0.03	0.0	7.83	0.01
Yapton Road (E)	0.1	3.99	0.04	0.1	4.66	0.07
Site Access	0.2	11.51	0.19	0.1	9.93	0.08
Yapton Road (W)	0.0	4.73	0.01	0.0	4.29	0.02

9.8 From **Table 9.1** it can be seen that the proposed site access will operate well within capacity with minimal queuing and delay in all scenarios during the peak hours, and is likely to work even better at other times. The existing Edward Tompkins Lane arm will also continue to operate well within capacity in both scenarios during the peak hours. Therefore, it is considered that the staggered priority junction arrangement proposed is acceptable.

Church Lane/Yapton Road Priority Junction

9.9 The junction modelling results for the Church Lane/Yapton Road priority junction are provided at **Table 9.2**. Given that the junction is working well within capacity, the 2031 Behavioural growth rates scenario is summarised within the table only.

Table 9.2 – Church Lane/Yapton Road priority junction capacity analysis results

	AM			PM		
	Queue	Delay (s)	RFC	Queue	Delay (s)	RFC
	2026 Base					
Church Lane	0.1	9.38	0.10	0.1	8.90	0.08
Yapton Road	0.3	5.46	0.11	0.2	4.69	0.10
	2026 Base + Committed					
Church Lane	0.5	14.66	0.34	0.2	10.59	0.17
Yapton Road	0.6	5.56	0.20	0.9	5.23	0.31
	2026 Base + Committed + Development					
Church Lane	0.5	15.47	0.35	0.2	10.86	0.18
Yapton Road	0.6	5.57	0.21	1.0	5.21	0.32
	2031 Base (behavioural)					
Church Lane	0.1	9.41	0.10	0.1	8.91	0.08
Yapton Road	0.3	5.46	0.12	0.2	4.69	0.11
	2031 Base (behavioural) + Committed Development					
Church Lane	0.5	14.98	0.34	0.2	10.84	0.18
Yapton Road	0.6	5.51	0.21	1.0	5.27	0.32
	2031 Base (behavioural) + Committed + Development					
Church Lane	0.5	15.84	0.36	0.2	11.13	0.18
Yapton Road	0.6	5.53	0.22	1.1	5.26	0.33

9.10 The results confirm that the Church Lane/Yapton Road junction will operate within capacity during all scenarios during the peak hours. Mean maximum queues on all arms are fewer than one during all assessment scenarios (i.e. for the vast majority of the time there will no vehicles waiting to turn at the junction and, when there are vehicles, queues will very rarely extend beyond the first vehicle). Therefore, it is considered that the junction will operate well within capacity, and is likely to continue to work well within capacity outside of the peak hours.

Lake Lane/Yapton Road Priority Junction

9.11 The junction modelling results for the Lake Lane/Yapton Road priority junction are provided at **Table 9.3**. Given that the junction is working well within capacity, the 2031 Behavioural growth rates scenario is summarised within the table only.

Table 9.3 – Lake Lane/Yapton Road priority junction capacity analysis results

	AM			PM		
	Queue	Delay (s)	RFC	Queue	Delay (s)	RFC
2026 Base						
Lake Lane	1.1	16.06	0.52	0.6	11.43	0.39
Yapton Road	0.8	6.12	0.31	0.2	5.80	0.11
2026 Base + Committed						
Lake Lane	2.2	26.82	0.70	1.0	15.93	0.50
Yapton Road	1.6	6.74	0.44	0.8	6.87	0.30
2026 Base + Committed + Development						
Lake Lane	2.5	29.60	0.72	1.1	17.04	0.52
Yapton Road	1.8	6.85	0.47	0.8	6.90	0.31
2031 Base (behavioural)						
Lake Lane	1.1	16.34	0.53	0.6	11.61	0.39
Yapton Road	0.8	6.14	0.31	0.2	5.80	0.12
2031 Base (behavioural) + Committed Development						
Lake Lane	2.4	28.93	0.72	1.0	16.70	0.51
Yapton Road	1.7	6.85	0.45	0.8	6.83	0.31
2031 Base (behavioural) + Committed + Development						
Lake Lane	2.7	32.18	0.74	1.1	17.93	0.53
Yapton Road	1.9	6.99	0.48	0.9	6.87	0.32

9.12 The results confirm that the Lake Lane/Yapton Road junction will operate within capacity during all scenarios. In 2031 with committed development and proposed development on the local highway network, the mean maximum queue on Lake Lane is up to three vehicles in the AM peak hour and up to two vehicles in the PM peak hour, with an increase in RFC of only up to 0.03 compared to the 2031 base plus committed development scenario, which is so small as to be inconsequential. Therefore, it is demonstrated that the junction will continue to work well within capacity during the peak hours and is likely to continue to work well within capacity outside of the peak hours.

Elm Grove/Barnham Road Crossroads

9.13 The junction modelling results for the Elm Grove/Barnham Road crossroads are provided at **Table 9.4**. Given that the junction is working well within capacity, the 2031 Behavioural growth rates scenario is summarised within the table only.

Table 9.4 – Elm Grove/Barnham Road crossroads capacity analysis results

	AM			PM		
	Queue	Delay (s)	RFC	Queue	Delay (s)	RFC
	2026 Base					
Elm Grove (N)	0.5	15.63	0.32	0.2	11.84	0.18
Barnham Road (N)	0.6	5.48	0.22	0.2	4.47	0.09
Elm Grove (S)	0.4	12.00	0.30	0.1	8.11	0.08
Barnham Road (S)	0.2	4.84	0.09	0.1	5.28	0.05
	2026 Base + Committed					
Elm Grove (N)	0.6	21.51	0.39	0.3	15.51	0.22
Barnham Road (N)	0.9	5.59	0.27	0.3	4.11	0.12
Elm Grove (S)	0.6	16.56	0.37	0.1	9.47	0.09
Barnham Road (S)	0.3	4.30	0.12	0.1	5.04	0.07
	2026 Base + Committed + Development					
Elm Grove (N)	0.7	23.08	0.41	0.3	16.44	0.23
Barnham Road (N)	0.9	5.63	0.28	0.3	4.04	0.13
Elm Grove (S)	0.6	17.82	0.38	0.1	9.74	0.09
Barnham Road (S)	0.3	4.22	0.13	0.1	5.01	0.07
	2031 Base (behavioural)					
Elm Grove (N)	0.5	15.79	0.33	0.2	11.95	0.18
Barnham Road (N)	0.6	5.47	0.22	0.2	4.47	0.10
Elm Grove (S)	0.4	12.07	0.30	0.1	8.18	0.08
Barnham Road (S)	0.2	4.83	0.10	0.1	5.27	0.06
	2031 Base (behavioural) + Committed Development					
Elm Grove (N)	0.7	22.60	0.41	0.3	16.07	0.23
Barnham Road (N)	0.9	5.55	0.27	0.3	4.10	0.13
Elm Grove (S)	0.6	17.12	0.37	0.1	9.71	0.09
Barnham Road (S)	0.3	4.29	0.13	0.1	4.99	0.07
	2031 Base (behavioural) + Committed + Development					
Elm Grove (N)	0.7	24.26	0.42	0.3	17.06	0.24
Barnham Road (N)	1.0	5.60	0.29	0.4	4.03	0.14
Elm Grove (S)	0.6	18.44	0.39	0.1	9.91	0.10
Barnham Road (S)	0.4	4.22	0.14	0.1	4.96	0.07

9.14 The results confirm that the Elm Grove/Barnham Road junction will operate within capacity during all scenarios during the peak hours. Mean maximum queues on all arms are one vehicle or fewer during all assessment scenarios (i.e. for the vast majority of the time there will no vehicles waiting to turn at the junction and, when there are vehicles, queues will very rarely extend beyond the first vehicle). Therefore, it is considered that the junction will continue to work well within capacity during the peak hours and is likely to continue to work well within capacity outside of the peak hours.

War Memorial Roundabout

9.15 The junction modelling results for the War Memorial roundabout are provided at **Table 9.5**. Given that the roundabout is known to be congested, both the capacity assessments with Core and Behavioural TEMPro growth rates applied to 2031 have been presented.

Table 9.5 – War Memorial roundabout capacity analysis results

	AM			PM		
	Queue	Delay (s)	RFC	Queue	Delay (s)	RFC
	2026 Base					
Barnham Road	1.4	7.01	0.58	0.7	5.47	0.41
Nyton Road	1.0	3.67	0.49	0.6	2.86	0.37
Fontwell Avenue	1.1	7.49	0.52	2.5	12.14	0.72
	2026 Base + Committed					
Barnham Road	5.9	21.34	0.87	1.2	7.14	0.55
Nyton Road	1.4	4.74	0.58	0.9	3.43	0.47
Fontwell Avenue	1.5	9.40	0.60	7.3	32.35	0.89
	2026 Base + Committed + Development					
Barnham Road	7.2	25.24	0.89	1.3	7.31	0.56
Nyton Road	1.4	4.83	0.59	0.9	3.50	0.48
Fontwell Avenue	1.5	9.58	0.61	8.4	36.72	0.91
	2031 Base (core)					
Barnham Road	1.6	7.72	0.61	0.8	5.84	0.44
Nyton Road	1.1	3.89	0.52	0.6	2.96	0.39
Fontwell Avenue	1.2	8.10	0.55	3.1	14.48	0.76
	2031 Base (core) + Committed					
Barnham Road	8.6	30.63	0.91	1.4	7.81	0.58
Nyton Road	1.6	5.17	0.61	1.0	3.62	0.49
Fontwell Avenue	2.0	11.24	0.67	14.0	56.82	0.96
	2031 Base (core) + Committed + Development					
Barnham Road	10.9	37.86	0.93	1.4	8.00	0.59
Nyton Road	1.6	5.27	0.62	1.0	3.70	0.50
Fontwell Avenue	2.0	11.48	0.67	16.7	66.31	0.98
	2031 Base (behavioural)					
Barnham Road	1.4	7.11	0.58	0.7	5.56	0.42
Nyton Road	1.0	3.70	0.50	0.6	2.89	0.38
Fontwell Avenue	1.1	7.59	0.53	2.6	12.65	0.73
	2031 Base (behavioural) + Committed Development					
Barnham Road	6.5	23.50	0.88	1.3	7.35	0.56
Nyton Road	1.4	4.85	0.59	0.9	3.50	0.48
Fontwell Avenue	1.7	10.25	0.64	9.5	40.43	0.92
	2031 Base (behavioural) + Committed + Development					
Barnham Road	7.9	28.01	0.90	1.3	7.54	0.57
Nyton Road	1.5	4.94	0.60	0.9	3.58	0.49
Fontwell Avenue	1.8	10.39	0.64	11.0	46.58	0.94

- 9.16 From **Table 9.5**, it can be seen that in 2026, with no proposed or committed development on the local highway network, all arms of the junction are working well within capacity during both the AM and PM peak hours.
- 9.17 With the committed development applied to the local highway network, during the AM peak hour, Barnham Road is starting to reach theoretical capacity with an RFC on 0.87, i.e. an increase in RFC of 0.29 compared to the 2026 base scenario, with the remaining two arms working well within capacity. During the PM peak hour, the A29 Fontwell Avenue is starting to reach theoretical capacity with an RFC of 0.89, i.e. an increase of 0.17 compared to the 2026 base scenario, with the remaining two arms working well within capacity.
- 9.18 With both the proposed development and committed development applied to the local highway network, during the AM peak hour, the RFC on Barnham Road increases by 0.02 to 0.89, with an increase of two vehicles queuing, with the remaining two arms working well within capacity. During the PM peak hour, the RFC on the A29 Fontwell Avenue increases by 0.02, with an increase of one vehicle queuing. The remaining two arms continue to work well within capacity.
- 9.19 In 2031, with the background traffic growthed using Core TEMPro growth rates, with no proposed or committed development on the local highway network, all arms of the junction are working well within capacity during both the AM and PM peak hours.
- 9.20 With the committed development applied to the local highway network, during the AM peak hour, Barnham Road is starting to reach theoretical capacity with an RFC on 0.91, i.e. an increase in RFC of 0.30 compared to the 2031 base scenario, with the remaining two arms working well within capacity. During the PM peak hour, the A29 Fontwell Avenue is reaching theoretical capacity with an RFC of 0.96, i.e. an increase of 0.20 compared to the 2031 base scenario, with the remaining two arms working well within capacity.
- 9.21 With both the proposed development and committed development applied to the local highway network, during the AM peak hour, the RFC on Barnham Road increases by 0.02 to 0.93, with an increase of two vehicles queuing, with the remaining two arms working well within capacity. During the PM peak hour, the RFC on the A29 Fontwell Avenue increases by 0.02 to 0.98, with an increase of three vehicles queuing. The remaining two arms continue to work well within capacity.
- 9.22 With the Behavioural TEMPro growth rates applied to the local highway network, the RFC on all arms decreases, improving the capacity of the roundabout. It can also be seen that the increase in RFC and queuing at the junction associated with the proposed development, compared to the committed development, is so small as to be consequential, and therefore the impact of the proposed development will not be severe, especially given what committed development has been accepted previously.
- 9.23 Given that Phase 1 of the A29 scheme will reduce the number of vehicles at the War Memorial Roundabout significantly, it is not considered that additional mitigation is required at the junction, as the capacity of the roundabout will further improve.

9.24 Furthermore, given that the capacity assessment is provided for the AM and PM peak hours, it is considered that this provides a worst case scenario for a short period of time during a typical day, and the queuing and delay at the roundabout is likely to be reduced during non-peak hour periods.

B2233/North End Road Mini Roundabout

9.25 The B2233/North End Road mini roundabout has mitigation proposed as part of the Ford Airfield application (ref: F/4/20/OUT). Given that the mitigation has not yet been constructed, the capacity for with and without the mitigation is provided, for both Core and Behavioural scenarios.

Without Ford Airfield Mitigation

9.26 The junction modelling results for the B2233/North End Road mini roundabout without mitigation are provided at **Table 9.6**.

Table 9.6 – B2233/North End Road mini roundabout capacity analysis results

	AM			PM		
	Queue	Delay (s)	RFC	Queue	Delay (s)	RFC
	2026 Base					
North End Road	0.4	8.89	0.31	1.8	17.96	0.65
B2233 East	1.6	9.11	0.62	0.6	5.38	0.36
B2233 West	0.9	8.34	0.48	1.0	8.10	0.51
	2026 Base + Committed					
North End Road	1.0	13.66	0.51	9.4	76.38	0.94
B2233 East	4.8	20.74	0.84	1.3	8.07	0.57
B2233 West	2.4	15.40	0.71	2.6	15.11	0.73
	2026 Base + Committed + Development					
North End Road	1.1	14.49	0.53	10.3	83.20	0.95
B2233 East	5.2	22.39	0.85	1.5	8.62	0.60
B2233 West	2.9	17.83	0.75	2.8	16.05	0.74
	2031 Base (core)					
North End Road	0.5	9.25	0.33	2.1	20.77	0.69
B2233 East	1.9	9.99	0.66	0.6	5.55	0.38
B2233 West	1.0	8.83	0.51	1.1	8.60	0.54
	2031 Base (core) + Committed					
North End Road	1.2	15.05	0.55	15.8	117.75	1.00
B2233 East	6.3	26.61	0.87	1.5	8.78	0.61
B2233 West	3.1	18.59	0.76	3.2	17.65	0.77
	2031 Base (core) + Committed + Development					
North End Road	1.2	16.00	0.56	17.8	130.36	1.02
B2233 East	7.0	29.11	0.89	1.7	9.43	0.63
B2233 West	3.8	22.08	0.80	3.5	18.90	0.78
	2031 Base (behavioural)					
North End Road	0.4	8.94	0.31	1.8	18.50	0.65
B2233 East	1.7	9.24	0.63	0.6	5.41	0.37
B2233 West	0.9	8.40	0.48	1.1	8.23	0.52
	2031 Base (behavioural) + Committed					
North End Road	1.1	14.21	0.52	11.1	87.76	0.96

B2233 East	5.1	22.21	0.85	1.4	8.47	0.59
B2233 West	2.7	16.81	0.74	2.8	16.14	0.75
2031 Base (behavioural) + Committed + Development						
North End Road	1.1	15.08	0.54	12.3	96.78	0.98
B2233 East	5.6	23.97	0.86	1.6	9.08	0.62
B2233 West	3.3	19.69	0.78	3.1	17.15	0.76

9.27 From **Table 9.6**, it can be seen that in all three base scenarios, the roundabout is working well within capacity.

9.28 In 2026 with committed development applied to the local highway network, during the AM peak hour, the roundabout works well within capacity. During the PM peak hour, North End Road is starting to reach theoretical capacity, with an RFC of 0.95, i.e. an increase of 0.29 compared to the 2026 base scenario.

9.29 With the proposed development added to the local highway network, the roundabout continues to work well within capacity during the AM peak hour, and in the PM peak hour, the RFC on North End Road only increases by 0.01, which is so small as to be inconsequential.

9.30 In 2031, with Core TEMPro growth applied to the background traffic, and with committed development applied to the local highway network, the eastern arm of the B2233 starts to reach theoretical capacity, with an RFC of 0.87, i.e. an increase of 0.21. During the PM peak hour, North End Road is at practical capacity with an RFC of 1.00, i.e. an increase of 0.31.

9.31 With the proposed development applied to the local highway network, the RFC increases by 0.02 in both the AM peak hour on the B2233 eastern arm and in the PM peak hour on North End Road.

9.32 The 2031 Behavioural TEMPro growth scenarios do decrease the impact on the roundabout, however, the junction is still shown reaching capacity, demonstrating the need for the mitigation provided as part of the Ford Airfield application.

With Ford Airfield Mitigation

9.33 The junction modelling results for the B2233/North End Road mini roundabout with mitigation are provided at **Table 9.7**.

Table 9.7 – B2233/North End Road mini roundabout capacity analysis results

	AM			PM		
	Queue	Delay (s)	RFC	Queue	Delay (s)	RFC
	2026 Base					
North End Road	0.1	2.92	0.13	0.3	3.47	0.26
B2233 East	0.9	5.14	0.48	0.4	3.69	0.28
B2233 West	0.5	4.64	0.34	0.6	4.45	0.36
	2026 Base + Committed					
North End Road	0.3	3.32	0.20	0.6	4.26	0.36
B2233 East	1.8	7.60	0.65	0.8	4.80	0.44
B2233 West	1.0	6.27	0.50	1.1	6.05	0.52

	2026 Base + Committed + Development					
North End Road	0.3	3.39	0.21	0.6	4.31	0.36
B2233 East	1.9	7.82	0.66	0.9	4.99	0.46
B2233 West	1.1	6.65	0.53	1.1	6.20	0.53
	2031 Base (core)					
North End Road	0.2	2.96	0.13	0.4	3.58	0.27
B2233 East	1.0	5.42	0.51	0.4	3.77	0.30
B2233 West	0.6	4.80	0.36	0.6	4.60	0.38
	2031 Base (core) + Committed					
North End Road	0.3	3.43	0.21	0.6	4.47	0.38
B2233 East	2.1	8.33	0.68	0.9	5.06	0.47
B2233 West	1.1	6.77	0.54	1.2	6.43	0.54
	2031 Base (core) + Committed + Development					
North End Road	0.3	3.49	0.22	0.6	4.53	0.38
B2233 East	2.2	8.59	0.69	1.0	5.27	0.49
B2233 West	1.3	7.20	0.56	1.2	6.59	0.56
	2031 Base (behavioural)					
North End Road	0.1	2.92	0.13	0.4	3.49	0.26
B2233 East	0.9	5.19	0.49	0.4	3.71	0.29
B2233 West	0.5	4.66	0.34	0.6	4.49	0.37
	2031 Base (behavioural) + Committed					
North End Road	0.3	3.37	0.21	0.6	4.33	0.36
B2233 East	1.9	7.80	0.65	0.8	4.94	0.46
B2233 West	1.1	6.50	0.52	1.1	6.21	0.53
	2031 Base (behavioural) + Committed + Development					
North End Road	0.3	3.44	0.21	0.6	4.38	0.37
B2233 East	2.0	8.02	0.66	0.9	5.15	0.48
B2233 West	1.2	6.90	0.55	1.2	6.36	0.54

9.34 From **Table 9.7**, it can be seen that with the Ford Airfield mitigation in place, the roundabout improves in all scenarios during the peak hours and is shown to be operating well within theoretical capacity. Therefore, it is not considered that any additional mitigation is required.

B2233/Bilsham Road Mini Roundabout

9.35 The B2233/Bilsham Road mini roundabout has mitigation proposed as part of the Ford Airfield application (ref: F/4/20/OUT). Given that the mitigation has not yet been constructed, the capacity for with and without the mitigation is provided, for both Core and Behavioural scenarios.

Without Ford Airfield Mitigation

9.36 The junction modelling results for the B2233/Bilsham Road mini roundabout without mitigation are provided at **Table 9.8**.

Table 9.8 - B2233/Bilsham Road mini roundabout capacity analysis results

	AM			PM		
	Queue	Delay (s)	RFC	Queue	Delay (s)	RFC
	2026 Base					
B2233 East	1.8	11.75	0.64	1.0	8.74	0.51
Bisham Road	0.5	10.37	0.36	0.3	7.21	0.20
B2233 West	0.8	6.79	0.46	2.4	12.42	0.71
	2026 Base + Committed					
B2233 East	3.8	21.77	0.80	1.8	12.89	0.65
Bisham Road	1.6	19.45	0.62	0.6	10.07	0.38
B2233 West	1.6	9.58	0.62	6.7	28.97	0.88
	2026 Base + Committed + Development					
B2233 East	4.2	23.48	0.82	2.1	14.29	0.69
Bisham Road	1.6	20.09	0.63	0.6	10.48	0.39
B2233 West	1.8	10.47	0.65	7.5	31.92	0.90
	2031 Base (core)					
B2233 East	2.0	12.91	0.68	1.1	9.28	0.54
Bisham Road	0.6	11.08	0.38	0.3	7.40	0.21
B2233 West	0.9	7.11	0.48	2.9	14.30	0.75
	2031 Base (core) + Committed					
B2233 East	5.0	27.19	0.84	2.3	15.08	0.70
Bisham Road	1.9	22.40	0.66	0.7	10.74	0.40
B2233 West	1.9	10.73	0.66	10.2	42.25	0.93
	2031 Base (core) + Committed + Development					
B2233 East	5.5	29.74	0.86	2.7	16.77	0.73
Bisham Road	2.0	23.28	0.67	0.7	11.16	0.41
B2233 West	2.2	11.83	0.69	11.8	47.76	0.94
	2031 Base (behavioural)					
B2233 East	1.8	11.88	0.65	1.1	8.86	0.52
Bisham Road	0.6	10.49	0.36	0.3	7.25	0.20
B2233 West	0.8	6.82	0.46	2.5	12.87	0.72
	2031 Base (behavioural) + Committed					
B2233 East	4.1	23.15	0.81	2.1	14.00	0.68
Bisham Road	1.7	20.14	0.63	0.6	10.39	0.39
B2233 West	1.7	10.10	0.64	7.8	33.21	0.90
	2031 Base (behavioural) + Committed + Development					
B2233 East	4.5	25.09	0.83	2.4	15.47	0.71
Bisham Road	1.7	20.88	0.64	0.7	10.80	0.40
B2233 West	2.0	11.06	0.67	8.8	36.99	0.92

9.37 From **Table 9.8**, it can be seen that in all three base scenarios, the roundabout is working well within capacity.

9.38 In 2026 with committed development applied to the local highway network, during the AM peak hour, the roundabout works well within capacity. During the PM peak hour, Yapton Road (western arm) is starting to reach theoretical capacity, with an RFC of 0.88, i.e. an increase of 0.17 compared to the 2026 base scenario. The remaining arms continue to be within capacity.

- 9.39 With the proposed development added to the local highway network, the roundabout continues to work well within capacity during the AM peak hour, and in the PM peak hour, the RFC on Yapton Road (western arm) only increases by 0.02, which is so small as to be inconsequential.
- 9.40 In 2031, with Core TEMPro growth applied to the background traffic, and with committed development applied to the local highway network, during the AM peak hour, the roundabout continues to work well within capacity. During the PM peak hour, the RFC on Yapton Road (western arm) increases to 0.93. The remaining arms continue to be within capacity.
- 9.41 With the proposed development applied to the local highway network, during the AM peak hour, the RFC on Yapton Road (eastern arm) increases to 0.86, with the remaining arms continuing to be within capacity. During the PM peak hour, the RFC on Yapton Road (western arm) increases by 0.01 to 0.94. The remaining arms continue to be within capacity.
- 9.42 The 2031 Behavioural TEMPro growth scenarios do decrease the impact on the roundabout, however, the junction is still shown reaching capacity in the PM peak hour, demonstrating the need for the mitigation provided as part of the Ford Airfield application.

With Ford Airfield Mitigation

- 9.43 The junction modelling results for the B2233/Bilsham Road mini roundabout with mitigation are provided at **Table 9.9**.

Table 9.9 – B2233/Bilsham Road mini roundabout capacity analysis results

	AM			PM		
	Queue	Delay (s)	RFC	Queue	Delay (s)	RFC
	2026 Base					
B2233 East	0.9	5.68	0.47	0.6	4.82	0.36
Bilsham Road	0.2	3.52	0.16	0.1	3.00	0.10
B2233 West	0.6	4.68	0.37	1.3	6.77	0.57
	2026 Base + Committed					
B2233 East	1.3	7.29	0.57	0.8	5.84	0.46
Bilsham Road	0.4	4.25	0.26	0.2	3.44	0.17
B2233 West	1.0	5.83	0.49	2.4	9.94	0.71
	2026 Base + Committed + Development					
B2233 East	1.4	7.47	0.58	0.9	6.11	0.48
Bilsham Road	0.4	4.29	0.27	0.2	3.50	0.18
B2233 West	1.1	6.15	0.52	2.5	10.31	0.72
	2031 Base (core)					
B2233 East	1.0	5.94	0.49	0.6	4.98	0.38
Bilsham Road	0.2	3.61	0.17	0.1	3.04	0.10
B2233 West	0.6	4.83	0.38	1.5	7.29	0.60
	2031 Base (core) + Committed					
B2233 East	1.5	7.84	0.60	1.0	6.25	0.49
Bilsham Road	0.4	4.41	0.28	0.2	3.53	0.18
B2233 West	1.1	6.23	0.53	2.9	11.42	0.75
	2031 Base (core) + Committed + Development					
B2233 East	1.6	8.05	0.61	1.1	6.52	0.52
Bilsham Road	0.4	4.45	0.28	0.2	3.59	0.18
B2233 West	1.2	6.59	0.55	3.1	11.93	0.76
	2031 Base (behavioural)					
B2233 East	0.9	5.71	0.47	0.6	4.85	0.37
Bilsham Road	0.2	3.53	0.16	0.1	3.01	0.10
B2233 West	0.6	4.70	0.37	1.4	6.90	0.58
	2031 Base (behavioural) + Committed					
B2233 East	1.4	7.44	0.58	0.9	6.06	0.48
Bilsham Road	0.4	4.30	0.27	0.2	3.49	0.18
B2233 West	1.0	6.02	0.51	2.6	10.46	0.73
	2031 Base (behavioural) + Committed + Development					
B2233 East	1.4	7.65	0.59	1.0	6.31	0.50
Bilsham Road	0.4	4.34	0.27	0.2	3.55	0.18
B2233 West	1.1	6.35	0.53	2.7	10.89	0.74

9.44 From **Table 9.9**, it can be seen that with the Ford Airfield mitigation in place, the roundabout improves in all scenarios during the peak hours and is shown to be operating well within theoretical capacity. Therefore, it is not considered that any additional mitigation is required.

Strategic Road Network

- 9.45 The impact of development traffic at the following junctions with the A27(T) Strategic Road Network (SRN) have been considered:
- The Fontwell East roundabout to the north connecting to the A27(T)
 - The Fontwell West roundabout to the north connecting to the A27(T)
- 9.46 As set out in **paragraph 7.6**, WSCC Highways set out in pre-application discussions that distribution should be based on the scope provided as part of approved planning application at Land South of Barnham Station (ref: BN/142/20/OUT) to determine the junctions to be assessed. It is noted that no SRN junctions were assessed as part of the Land South of Barnham Station application, and that a contribution towards mitigation of the SRN, where it forms junctions with the local highway network will be given.
- 9.47 The distribution to the two junctions has been based on the results of an MCC survey carried out in June 2016. The results of this MCC survey were submitted in support of the BEW consortium development proposals.
- 9.48 The distribution of development traffic for the the AM and PM peak hour periods is shown in **Figure 9.1** and **Figure 9.2**, respectively.

Figure 9.1 – SRN junctions (AM peak vehicle trip distribution)

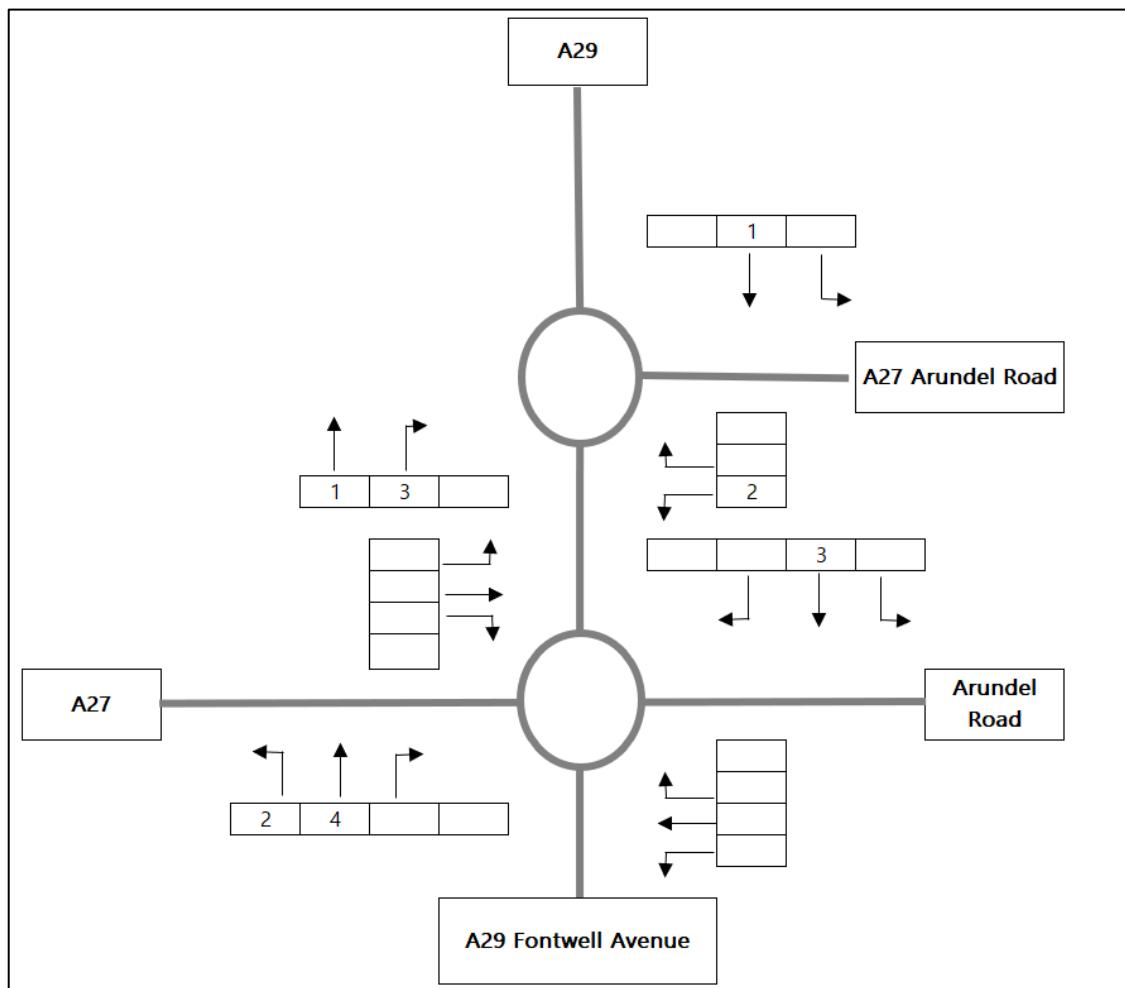
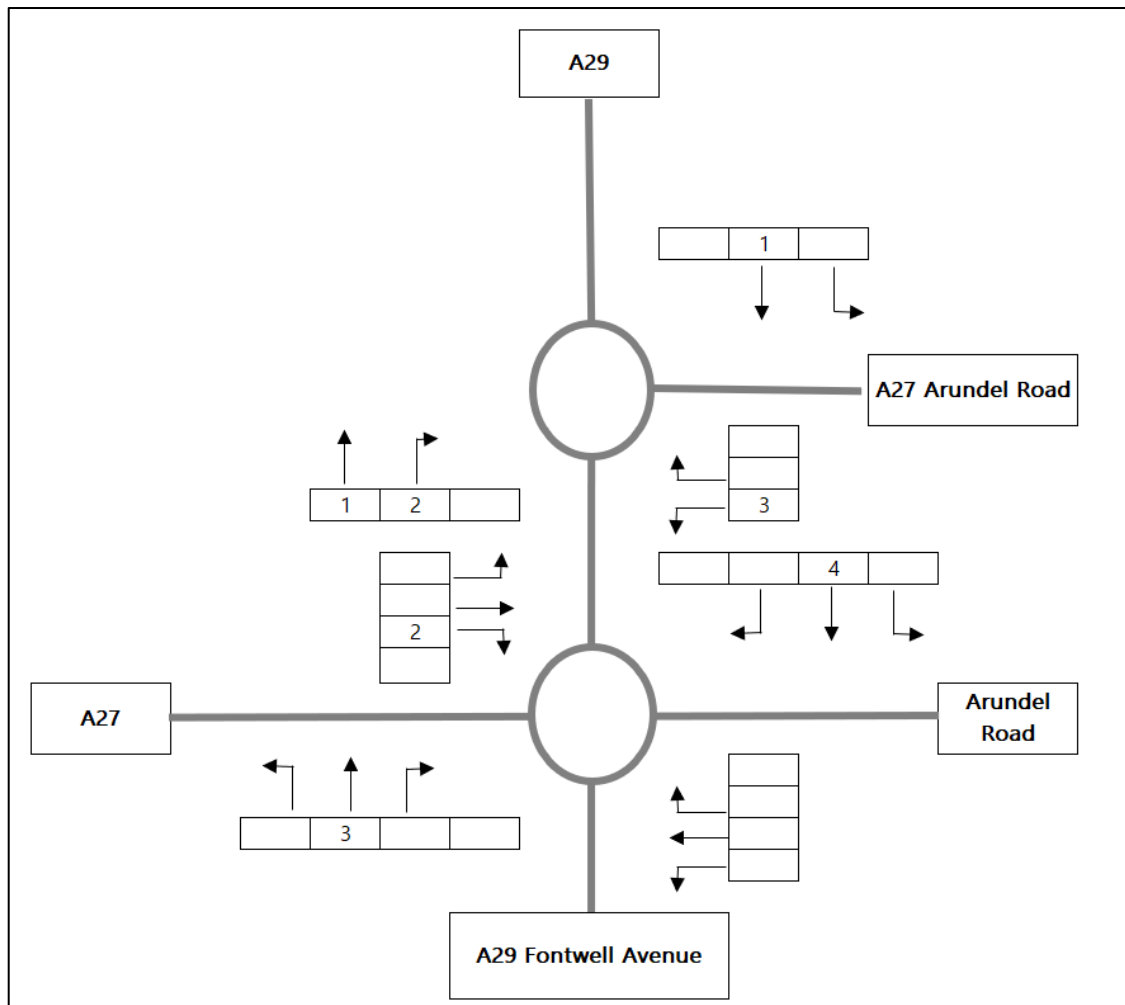


Figure 9.2 – SRN junctions (PM peak vehicle trip distribution)



9.49 From **Figure 9.1** and **9.2** it can be seen that the amount of development traffic arising from the application site is too low to have a significant cumulative impact on safety or capacity of the SRN and will easily fall within the variation of flow that occurs on a daily basis. Therefore, it is not considered that any further capacity assessments of the junction or mitigation is required.

10.0 Summary and Conclusions

- 10.1 This Transport Assessment has been produced to support the planning application for residential development of up to 190 dwellings at Sunnyside, Yapton Road, Barnham.
- 10.2 The application is in outline with all matters reserved except for access. The proposals are supported by a Travel Plan (ref: HTp/2413/TP/01/A, dated June 2026).
- 10.3 The proposed development has been subject to pre-application discussions with WSCC Highways. A Technical Note was submitted to WSCC Highways for pre-application advice regarding the proposed development of up to 240 dwellings. Comments were provided by WSCC in July 2024 and have been taken into account in the preparation of the supporting documents for this outline planning application.
- 10.4 The development will provide attractive sustainable infrastructure from the outset, including a pedestrian and cycle corridor to make walking and cycling convenient to travel within the application site and connect with the surrounding area.
- 10.5 Many services and facilities are located within easy walking and cycling distance of the proposed dwellings enabling people to live, work and use educational facilities within the same community.
- 10.6 The development will be located 10 minutes walk from Barnham railway station with regular services enabling future residents to have genuine choice of sustainable transport within suitable distance.
- 10.7 The development proposals have been designed in accordance with the principles set out within Active Travel England's (ATE) Standing Advice Note: Active Travel and Sustainable Development and an ATE Appraiser Report has been provided within this Transport Assessment which demonstrates that the proposed development either 'passes' or is 'exemplar'.
- 10.8 The DfT Connectivity Tool has been utilised to assess the site connectivity, demonstrating how well located the site is to everyday destinations, including jobs, schools, shops, healthcare and leisure, using sustainable modes of travel. The site location is slightly above the national average for the overall type of travel to everyday destinations, and the proposed off-site works will further improve the site's connectivity.
- 10.9 As requested by WSCC Highways, a Pedestrian/Cycle Audit has been carried out. From the audit, off-site works are proposed in the form of proposed tactile paving at the Murrell Arms west crossing (drawing HTp/2413/12) and the proposed widening of the existing footway at the Village Hall westbound bus stop (drawing HTp/2413/13/A).
- 10.10 The proposed access arrangements have been subject to a Stage 1 Road Safety Audit, with the design updated to reflect the recommendations and/or Designer's Response.

10.11 Junction capacity analysis has been undertaken for the following scenarios during the AM and PM peak hours:

- i. 2026 Base traffic
- ii. 2026 Base traffic plus traffic arising from the locally committed developments
- iii. 2026 base traffic plus traffic arising from the locally committed developments and the trip generation associated with the development proposals
- iv. 2031 base traffic
- v. 2031 base traffic plus traffic arising from the locally committed developments
- vi. 2031 base traffic plus traffic arising from the locally committed developments and the trip generation associated with the development proposals

10.12 The results of the junction capacity analysis can be summarised as:

- i. Site Access/Yapton Road priority junction – the junction will operate well within capacity during all scenarios
- ii. Church Lane/Yapton Road priority junction – the junction will operate well within capacity during all scenarios
- iii. Lake Lane/Yapton Road priority junction – the junction will operate well within capacity during all scenarios
- iv. Elm Grove/Barnham Road crossroads – the junction will operate well within capacity during all scenarios
- v. War Memorial roundabout:
 - a. In 2026, during the AM peak hour, the RFC on Barnham Road increases by 0.02 with an increase of two vehicles compared to the 2026 base plus committed development scenario. The other two arms work well within capacity
 - b. In 2026, during the PM peak hour, the RFC on Fontwell Avenue increases by 0.02, with an increase of one vehicle compared to the 2026 base plus committed development scenario. The other two arms work well within capacity
 - c. In 2031, with core TEMPro growth applied, during the AM peak hour, the RFC on Barnham Road increases by 0.02 to 0.93 with an increase of two vehicles compared to the 2031 base plus committed development scenario. The other two arms continue to work well within capacity
 - d. In 2031, with core TEMPro growth applied during the PM peak hour, the RFC on Fontwell Avenue increases by 0.02 to 0.98 with an increase of three vehicles compared to the 2031 base plus committed development scenario. The other two arms continue to work well within capacity
 - e. In 2031, with behavioural TEMPro growth applied, the RFC decreases during all scenarios, improving the capacity of the roundabout. Furthermore, the increase in RFC and queuing at the junction associated with the proposed development, compared to the committed development, is so small as to be consequential, and therefore the impact of the proposed development will not be severe, especially given what committed development has been accepted previously

- f. Given that Phase 1 of the A29 scheme will reduce the number of vehicles at the War Memorial Roundabout, it is not considered that additional mitigation is required at the junction, as the capacity of the roundabout will further improve
- vi. B2233/North End Road mini roundabout – with the mitigation proposed as part of the Ford Airfield application (ref: F/4/20/OUT), with mini roundabout works well within capacity during all scenarios
- vii. B2233/Bilsham Road mini roundabout – with the mitigation proposed as part of the Ford Airfield application (ref: F/4/20/OUT), with mini roundabout works well within capacity during all scenarios

10.13 Given that the capacity assessment of the local highway network was carried out during the AM and PM peak hours, it is considered it is considered that this provides a worst case scenario for a short period of time during a typical day, and the queuing and delay at the roundabout/junctions is likely to be reduced during non-peak hour periods.

10.14 This report concludes that:

- i. There are no underlying patterns in road traffic collisions
- ii. The site is located close to a wide range of services and facilities
- iii. The site is sustainably located, in the context of development in development in Arun, in terms of trips by foot, cycle and public transport, in relative terms in an area of high accessibility by sustainable transport modes, with improvements suggested along the pedestrian desire line to the Barnham railway station to further improve the sustainable connectivity
- iv. The proposed site access arrangements are appropriate, and considered safe and appropriate following a Stage 1 Road Safety Audit
- v. The trip generation associated with the proposed development is expected to be around 97 two-way vehicle movements in the AM peak hour and around 92 two-way vehicle movements in the PM peak hour, and the impact on the local highway network, including the proposed and existing junctions is not considered to be significant, with the existing junctions operating within capacity, or not be materially impacted by the proposals
- vi. The trip generation associated with the proposed development will not have a significant impact on the SRN
- vii. Swept path analysis of the internal layout of both a refuse vehicle and a fire tender is appropriate
- viii. The development is in accordance with the Active Travel England checklist
- ix. A Pedestrian and Cycle audit has been carried out, which has identified issues along the existing local pedestrian and cycle network between the site and Barnham railway station, and the wider area. Mitigation has been proposed to address the issues, therefore improving the connectivity for pedestrians from the site further
- x. The car and cycle parking provision is appropriate and in accordance with ADC standards
- xi. The strategy for the collection of waste and recycling is appropriate

- 10.15 The development complies with existing policy and suggested reforms to national policy. Sustainable transport has been considered from the outset of the development proposals, using a vision led approach to identify and provide existing and proposed walking, cycling and public transport use. In addition, a safe and suitable access to the site can be achieved for all users. The development proposals are therefore in accordance with paragraph 109 and paragraph 115 of the NPPF (December 2024, updated February 2025).
- 10.16 The capacity assessment of the local highway network has demonstrated that the trip generation associated with the proposed development would not have an unacceptable impact on highway safety, or a severe residual cumulative impact on the road network, across all future scenarios. Therefore, the development proposals are in accordance with paragraph 116 of the NPPF (December 2024, updated February 2025).
- 10.17 It is therefore finally concluded that the development of this site for up to 190 dwellings is acceptable in highway terms.