

Highgate *Transportation*

Land at Woodgate Nurseries, Lidsey Road, Woodgate

Proposal for up to 130 residential dwellings

Transport Assessment

(2401/TA/01)

July 2024

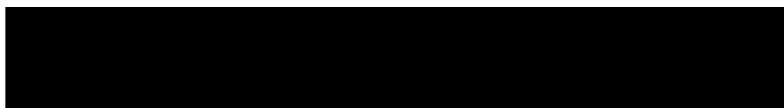
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1.0 Introduction

- 1.1 This Transport Assessment has been prepared by Highgate Transportation Limited (HTp) to support an outline planning application for a residential development with up to 130 dwellings (Use Class C3), informal and formal public open space, landscaping, drainage and other associated works on land at Woodgate Nurseries, Lidsey Road (A29), Woodgate.
- 1.2 This application follows the granting of planning permission (ref: AL/129/21/OUT) for 95 dwellings at land adjacent to Woodgate Nurseries, and the granting of the subsequent planning permission (ref: AL/70/23/OUT) for 155 dwellings at Land West of Lidsey Road (A29).
- 1.3 The site and the immediate area is shown at **Figure 1.1**.

Figure 1.1 – The site and immediate area



- 1.4 The application site is bordered by the A29 to the east, a residential development and undeveloped brownfield to the south, undeveloped land to the west and a railway line and public house to the north.

- 1.5 As part of the AL/129/21/OUT application, the detailed approval of matters of access included a new bellmouth junction and new junction with a ghost island right turn lane on the A29 Lidsey Road (plan ref: HTp/2087/36/F).
- 1.6 Access to the site will be via an internal spine road provided as part of the AL/70/23/OUT consent, and a ghost island right turn lane with the A29 Lidsey Road that was approved as part of the AL/129/21/OUT consent. This access arrangement is described in more detail in **Section 4.0**. A further access for pedestrians and cyclists will also be taken directly from the A29 to the northeast of the site, this is also set out in **Section 4.0**.
- 1.7 It should be noted that the approach to the transport assessment work adopted for this application largely follows the same principles as the AL/70/23/OUT and AL/129/21/OUT consents, however, updated survey data will be included. Additionally, a Technical Note (HTp/2401/TN/01/A, dated April 2024) was submitted to WSCC Highways requesting pre-application advice, with WSCC Highways providing advice in May 2024 with a written response and subsequent email correspondence.
- 1.8 WSCC Highways pre-application responses are contained in **Appendix 1**. A summary of the advice provided is as follows:
 - i. The vehicular access approved under application AL/70/23/OUT will include 'KEEP CLEAR' markings to ensure vehicles can enter and egress the site access
 - ii. The proposed trip generation, trip rates and distribution are agreed
 - iii. The committed development to be included within the capacity assessment has been agreed to include:
 - a. AL/20/21/PL– Wings Nursery, A29 Lidsey Road (71 units)
 - b. AL/21/20/OUT – Land north of Lee's Yard, A29 Lidsey Road (38 units)
 - c. AL/107/21/PL – Woodgate Centre Site, A29 Lidsey Road (180 units)
 - d. AL/70/23/OUT – Land west of Lidsey Road (A29) (155 units)
 - e. AL/129/21/OUT – Land west of A29 Lidsey Road (95 units)
 - f. AL/178/22/OUT – Land to the rear of Meadow Way, Westergate (89 units)
 - g. BN/147/22/RES – Church Lane, Barnham (200 units)
 - h. BE/61/23/RES – Land east of Shripney Road (44 units)
 - iv. The following junctions will be included in the capacity assessment:
 - a. Site access with A29 Lidsey Road
 - b. A29 Lidsey Road Level Crossing
 - c. Saltbox Roundabout
 - d. War Memorial Roundabout
 - v. The years of assessment scenarios are as follows:
 - a. 2024 – Year of application without proposed development
 - b. 2028 – Interim year without proposed development, without mitigation proposed as part of Phase 1 A29 Scheme
 - c. 2028 – Interim year without proposed development, with mitigation proposed as part of Phase 1 A29 Scheme 5.74
 - d. 2028 – Interim year (with development, i.e. opening year) without mitigation proposed as part of Phase 1 A29 Scheme
 - e. 2028 – Interim year (with development, i.e. opening year), with mitigation proposed as part of Phase 1 A29 Scheme

- f. 2031 – End of Arun Local Plan Period without proposed development (including mitigation proposed as part of Phase 1 A29 scheme)
 - g. 2031 – End of Arun Local Plan Period with proposed development (including mitigation proposed as part of Phase 1 A29 scheme)
 - vi. A suggested sensitivity test of the local highway network with vehicle trips associated with the BEW Strategic site
 - vii. A Travel Plan and monitoring fee will be secured by s106
- 1.9 The comments provided by WSCC Highways have been considered and are addressed in this Transport Assessment.
- 1.10 This Transport Assessment is provided to consider the following:
 - i. An overview of the proposals for the proposed development and what this means in highway and transport terms
 - ii. Confirmation that the site is close to a range of local services and facilities including public transport that are accessible on foot and by cycle, and the pedestrian provision required is appropriate
 - iii. A review of the local road safety history to ensure there are no underlying issues, as requested by WSCC Highways
 - iv. Confirmation that the use of the approved access onto the A29 Lidsey Road is safe and appropriate to accommodate the proposed development, as well as the quantum of development associated with AL/70/23/OUT and AL/129/21/OUT
 - v. Confirmation that the existing access onto the A29 to the south of the railway line will be for pedestrian and cycle access to/from the site as well as being used as a secondary emergency access
 - vi. Confirmation of the number of trips distributed onto the Strategic Road Network
 - vii. Swept path analysis to support the proposed access and internal layout
 - viii. Confirmation that the number and layout of parking spaces proposed are appropriate
 - ix. Confirmation that the proposals for the provision and storage of cycles are appropriate
 - x. Ensure that servicing and the strategy for the collection of waste and recycling is appropriate
 - xi. Capacity assessment of the proposed site access with A29 Lidsey Road, Lidsey Road level crossing, Saltbox Roundabout and War Memorial roundabout for 2028 (year of opening) and 2031 (end of ADC Local Plan period)
- 1.11 This Transport Assessment concludes that the application proposals are acceptable in transport development terms.

- 2.1 The site is currently a disused plant nursery / horticultural nursery with agricultural land to the west of the former nurseries, located west of the A29 Lidsey Road.
- 2.2 The A29 connects Bognor Regis to the south with Fontwell to the north where it joins the A27.
- 2.3 In the vicinity of the consented AL/129/21/OUT access junction, the A29 is subject to a 50mph speed restriction, which reduces to 30mph approximately 400 metres south of Woodgate level crossing.
- 2.4 The application site and surrounding area is shown in **Figure 2.1**.

The map illustrates the proposed route for the A29 Relief Road in Barnham and Eastergate. The route is shown as a thick black line, starting from the west, passing through Hook Lane, and then following a path that bypasses the existing A29 road to the east. Key features labeled on the map include: War Memorial Junction, Hook Lane, Woodgate Level Crossing, AL/129/21/OUT, AL/70/23/OUT, Eastergate, Barnham and Eastergate, and various local farms and schools.

- ARUN DISTRICT COUNCIL AL/89/24/OUT

- 2.7 The application was granted permission, however, was not implemented and has expired.

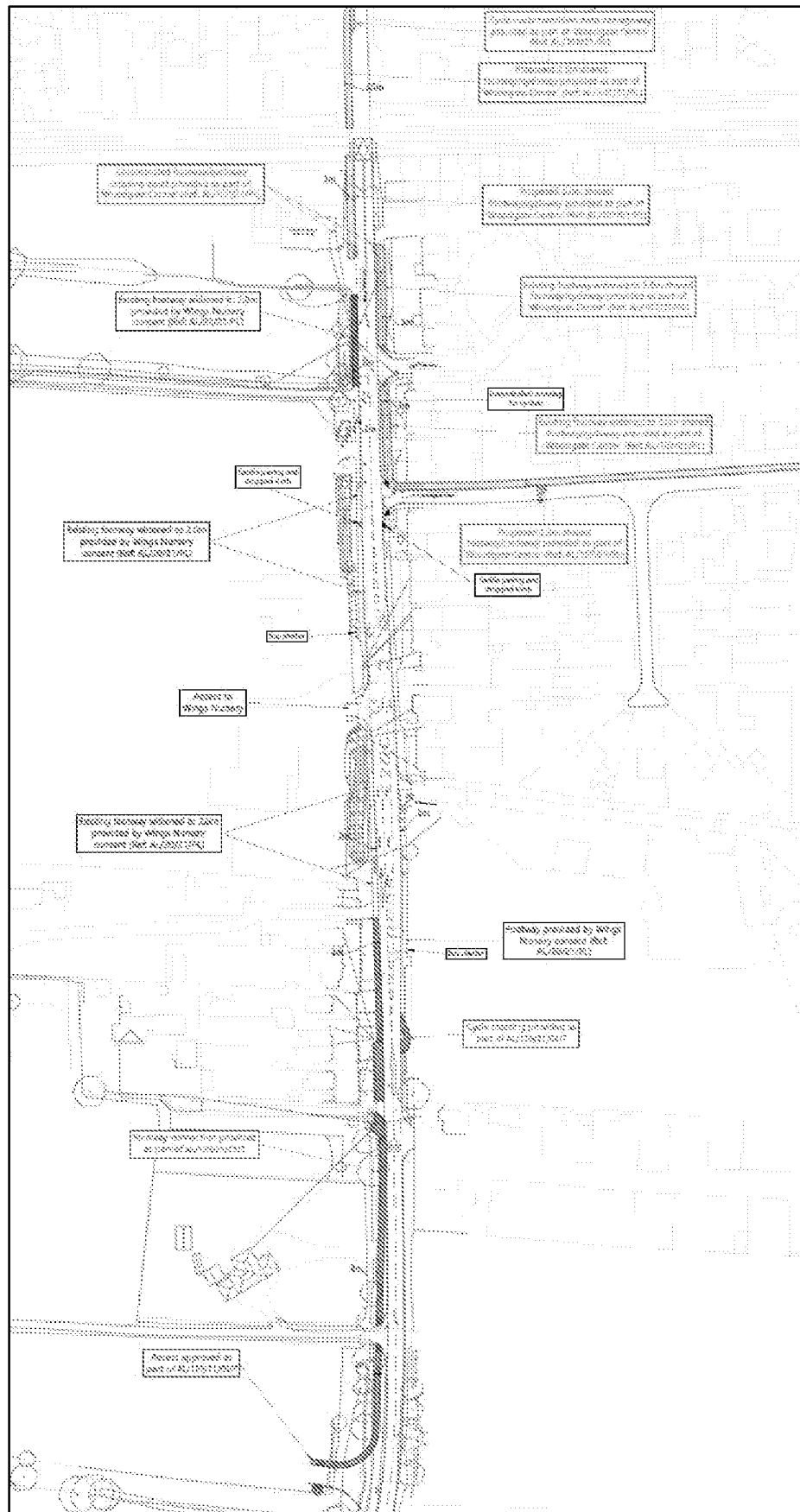
Highway Boundary

- 2.8 The highway boundary and Public Right of Way (PRoW) records are contained in **Appendix 2**. This identifies that the carriageway, footway and verges along A29 form part of the public highway.

Pedestrian and Cycle Facilities

- 2.9 The access arrangement that was granted planning permission as part of the 2022 planning application (ref: AL/129/21/OUT) includes a footway connection to the existing footway along the western side of the A29 Lidsey Road to connect with the existing shared footway/cycle path to the north. This shared path continues north towards Woodgate. The approved access arrangement was also included in the 2023 planning application (ref: AL/70/23/OUT).
- 2.10 The approved access junction can accommodate movements by all modes including foot and cycle.
- 2.11 To the north of the vehicular access, the existing footway along the western side of the A29 Lidsey Road has been widened to 2.0 metres. This widening has been provided as part of the 'Wings Nursery' consented development for up to 71 new units (ref: AL/20/21/PL and continued under s73 application ref: AL/34/22/PL). Along the site frontage of the Wings Nursery development, part of the footway has also been widened to 2.0 metres.
- 2.12 Additionally, the consented 'Woodgate Centre' development for up to 180 residential dwellings to the east of Lidsey Road (ref: AL/107/21/PL) also includes improvements to the existing footway and cycleway network, and improved connectivity for pedestrians and cyclists across the wider area.
- 2.13 The pedestrian and cycle connections on the A29 and within the vicinity of the site can be summarised below and are shown on **Figure 2.2**.
- i. A new section of footway on the eastern side of Lidsey Road south of the Willows Caravan Park access
 - ii. Widening of existing footways to 2.0 metres
 - iii. Upgrades of footways to shared use footway/cycleways, with associated widening
 - iv. New pedestrian and cycle crossing points

Figure 2.2 – Approved footway and cycleway improvements on the A29



- 2.14 Furthermore, the strategic BEW site (located east of the Land at Woodgate Nurseries Site) will provide new walking and cycling routes, increasing permeability in the area.
- 2.15 The current BEW Framework Masterplan includes east-west cycle routes which will significantly shorten the walking/cycling distance from the site to Barnham railway station, as well as providing a safer and more attractive route for users.
- 2.16 The BEW masterplan also includes the diversion of the A29 via a new route. Not only will the diverted A29 include segregated footways and cycleways, it will also reduce the volume of traffic on Lidsey Road within the vicinity of the application site, therefore increasing the attractiveness of Lidsey Road for walking and cycling journeys.

Public Transport Facilities

Bus

- 2.17 The nearest bus stops are located on the A29 Lidsey Road, circa 90 metres south of the proposed pedestrian/cycle access.
- 2.18 The bus stops have been upgraded as part of the Wings Nursery application (ref: AL/20/21/PL) to include new shelters, hardstanding and seating.
- 2.19 These bus stops are served by the 66A and 66C bus services which operate between Bognor Regis, Yapton, and Walberton. 66A provides an anti-clockwise service via Yapton and Walberton and 66C provides a clockwise service via Walberton and Yapton; together there are six services which run in each direction on weekdays, with one fewer service towards Bognor on Saturdays and no services on a Sunday.

Railway

- 2.20 Barnham railway station is located approximately 4km (12 minute cycle) to the east of the site. The station can also be reached via the 66A and 66C buses, taking approximately nine minutes. This and the timetable of services makes this an attractive option for onward commuting.
- 2.21 Barnham railway station is located on the West Coastway Line between Brighton and Southampton, at the junction of the branch line leading to Bognor Regis. The station also regularly serves London Victoria via Gatwick Airport, Brighton, Southampton, Portsmouth and Littlehampton. Typical off-peak frequencies of train services to key destinations from Barnham are set out in **Table 2.1**.

Table 2.1 – Frequency of train services to key destinations from Barnham

Destination	Frequency (trains per hour)		
	Weekdays	Saturday	Sunday
London Victoria	4	4	1
Gatwick Airport	4	4	1
Chichester	5	5	3
Bognor Regis	4	4	2
Brighton	2	2	2
Littlehampton	2	2	1
Portsmouth and Southsea	3	3	2
Southampton Central	2	2	1

- 2.22 Barnham railway station has 62 cycle parking spaces, 130 car parking spaces, a staffed ticket office, toilets, waiting rooms, and refreshment facilities.
- 2.23 Bognor Regis railway station is located around 5.2km travel distance to the south of the site which equates to a 16 minute cycle via the A29.
- 2.24 Bognor Regis railway station, located on the West Coastway Line, serves as the terminus of the branch line from Barnham. It provides direct connections to London Victoria via Gatwick Airport, and links to Brighton, Southampton, and Portsmouth.
- 2.25 There are additional infrequent direct services to Bristol Temple Meads, Salisbury and Great Malvern.
- 2.26 It has been demonstrated that the site is benefited by good access to public transport to adjacent and other larger settlements and that these enable sustainable commuting patterns, which reduce the dependence on the private car.

Local Services and Facilities

- 2.27 Various local facilities are located in Woodgate which is accessible via foot or cycle along the A29 Lidsey Road. Additional services are located in the Westergate and Eastergate areas to the north which are contiguous with Woodgate and accessible via footways for the entire route. A selection of these local facilities is listed in **Table 2.2** which shows a good range within convenient walking distance, and all within reasonable cycling distance.

Table 2.2 – Local services and facilities

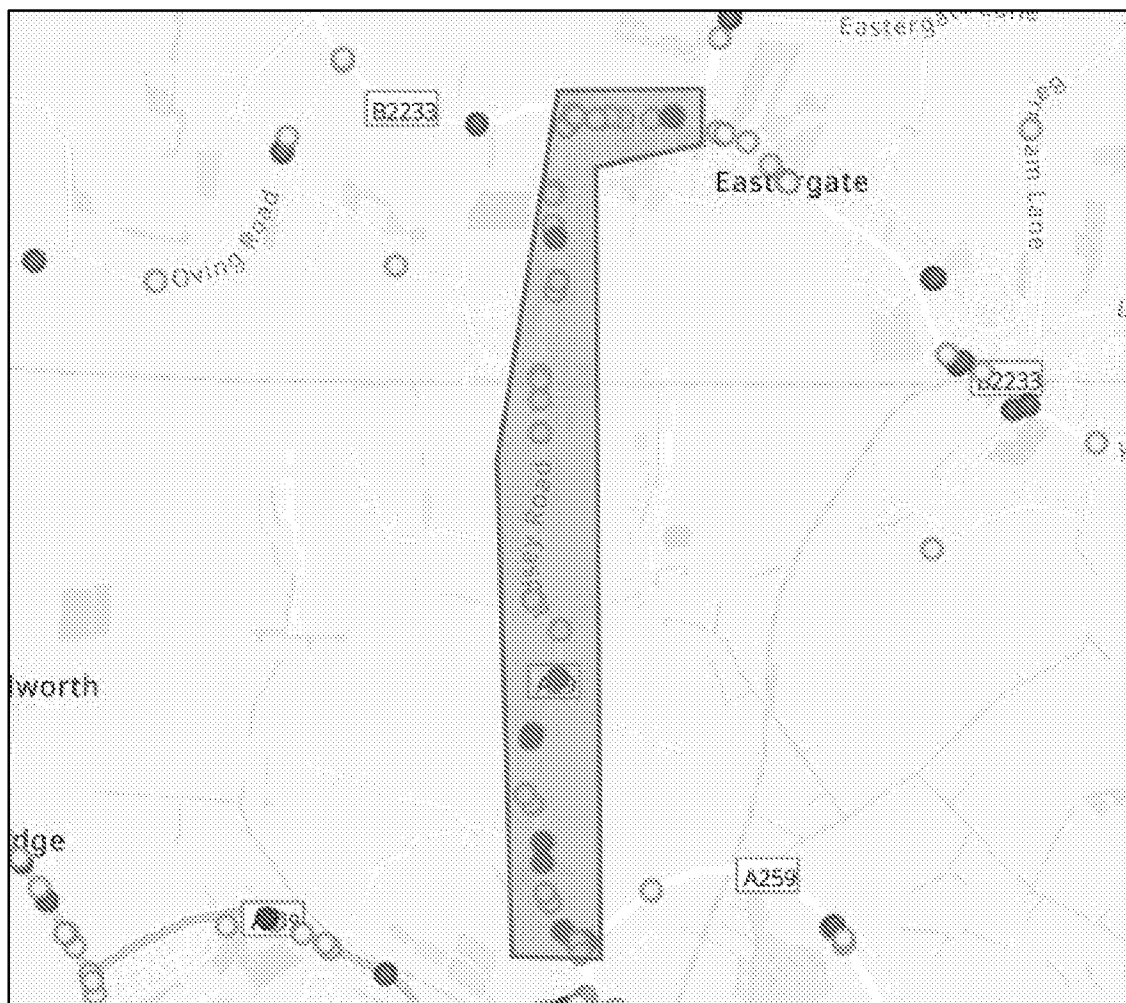
Service/Facility	Walk Distance (from main site access)	Walk Distance (from pedestrian/cycle access)
Prince of Wales public house	450m	52m
Aldingbourne Primary School	800m	450m
Hirange Supermarket	1.4km	1.0km
Aldingbourne Community Sports Centre	1.6km	1.2km
Esso Petrol Filling Station including store and car wash	1.9km	1.5km
Ormiston Six Villages Academy	2.2km	1.8km
Central Convenience Store with Post Office	2.2km	1.8km
Eastergate CE Primary School	2.5km	1.8km
The Croft Surgery (GP)	2.5km	2.1km
Eastergate Parish Hall	2.5km	2.3km
Chantry House Dental Practice	3.4km	2.9km

- 2.28 There are also various places of worship within easy walking and cycling distance of the site.
- 2.29 Additional services, including Barnham railway station, are located in Barnham which can be reached using footways and/or public rights of way for the entire route.
- 2.30 The site, like other local consented residential developments should in the medium and long term benefit from the further facilities and services planned within the adjacent BEW site allocation including new local centres, schools and community facilities.
- 2.31 The review of the proximity of the site to local services and facilities was agreed to be acceptable with WSCC Highways as part of the pre-application stage discussions.

Accident Records

- 2.32 Personal Injury Accident (PIA) data for the period January 2018 to December 2022 has been obtained from the Crashmap Pro database for the vicinity of the proposed site, as shown by **Figure 2.3**. The area examined extends from the War Memorial Roundabout in the north to the Saltbox roundabout in the south, as agreed with WSCC Highways as part of the pre-application stage discussions. The PIA output is contained in **Appendix 3**.

Figure 2.3 - Personal Injury Accident plot



- 2.33 The PIA data confirms that there have been 42 PIA recorded on the highway network in the study area between 2018 and 2022, of which 32 were recorded as 'slight', and ten as 'serious'.
- 2.34 The PIA recorded as 'serious' are summarised below.
- 2.35 One PIA was recorded at the War Memorial roundabout in 2021 involving a car and a pedal cycle. The car was proceeding north-eastbound on the A29 and the pedal cycle was turning right.
- 2.36 One PIA was recorded at the junction of the A29 and Nyton Road in 2018 involving a motorcycle and a pedestrian. The pedestrian was crossing the carriageway of the A29, and the motorcycle was proceeding north-eastbound on the A29.
- 2.37 One PIA was recorded between the junction of the A29 and Nyton Road and the Woodgate level crossing in 2022 on the A29 between Oaks Close and Old Farm Drive involving two vans or light goods vehicles and one car parked in the carriageway. One van was travelling northbound and passing the parked car, and the second van was proceeding southbound.

- 2.38 Six 'serious' PIA were recorded on the A29 between the Woodgate level crossing and the Saltbox roundabout (circa 3.2km):
- i. One PIA was recorded in 2020 on the A29 near the access to Lidsey caravan park involving two cars
 - ii. One PIA was recorded in 2022 on the A29 around 200 metres south-west of Sack Lane involving two cars. The cars were proceeding in opposite directions along the A29 and impact was recorded between the offside of the two vehicles
 - iii. One PIA was recorded in 2020 on the A29 around 200 metres south-west of Sack Lane involving two cars. Both cars were travelling southbound on the A29, with one car waiting to proceed and the other proceeding along the carriageway
 - iv. One PIA was recorded in 2022 on the A29 around 80 metres north of Shripney Lane involving a van or light goods vehicle and a car. The vehicles were proceeding in opposite directions along the A29
 - v. One PIA was recorded in 2018 on the A29 at the junction with Shripney Lane involving a car and a motorcycle
 - vi. One PIA was recorded in 2022 on the A29 around 90 metres north-west of the Saltbox roundabout involving a car and a pedestrian. The pedestrian was crossing the carriageway from the driver's nearside
- 2.39 One PIA was recorded at the Saltbox roundabout in 2021 involving two cars and a motorcycle. All three vehicles were proceeding from the A29 (NE) arm to the A29 (S).
- 2.40 From a review of the data, and consideration of the proposed site access, it is concluded that there is no pattern in PIA in the vicinity of the site, and therefore there are no underlying road safety issues on the local highway network that would be exacerbated by the proposed development.

Traffic Survey Data

- 2.41 The baseline traffic survey data that supported the consented AL/129/21/OUT and AL/70/23/OUT applications consisted of a 7-day Automatic Traffic Counter survey (ATC) which was carried out on the A29 Lidsey Road. This ATC was carried out from the 21st March 2019 to the 27th March 2019 and was used to assess the capacity of the ghost island right turn lane which was consented as part of the AL/129/21/OUT application.
- 2.42 An updated ATC traffic survey was carried out from the 22nd February 2023 to the 28th February 2023. The survey parameters, including the location of the ATC are consistent with the previous assessment carried out in 2019, with the results showing comparable levels of traffic to the previous survey. WSCC Highways provided no comments on the traffic survey data during the pre-application discussions.
- 2.43 The results of the survey are summarised in **Table 2.3**, and the full results are provided as **Appendix 4**.

Table 2.3 – ATC survey results on A29

	AM Peak (0800-0900) Vehicle Flow	PM Peak (1600-1700) Vehicle Flow
Northbound	435	378
Southbound	437	637
Total	872	1,015

2.44 A level crossing barrier survey was undertaken on 28th June 2023 and recorded the number of times the barrier was observed as down, i.e. to allow trains to travel through, as well as the length of time the barriers were down and the length of queuing vehicles to the north and south. The survey results are contained in **Appendix 5**

2.45 A Manual Classified Count (MCC) survey was carried out at the Saltbox/A29/A259 roundabout on 14th September 2023. The MCC survey recorded the following peak hours:

- i. 0800-0900
- ii. 1600-1700

2.46 The full results of the survey are contained in **Appendix 6**, and flow diagrams of the peak hours are shown in **Figure 2.4** and **Figure 2.5**.

Figure 2.4 – Saltbox roundabout – AM peak hour flow diagrams

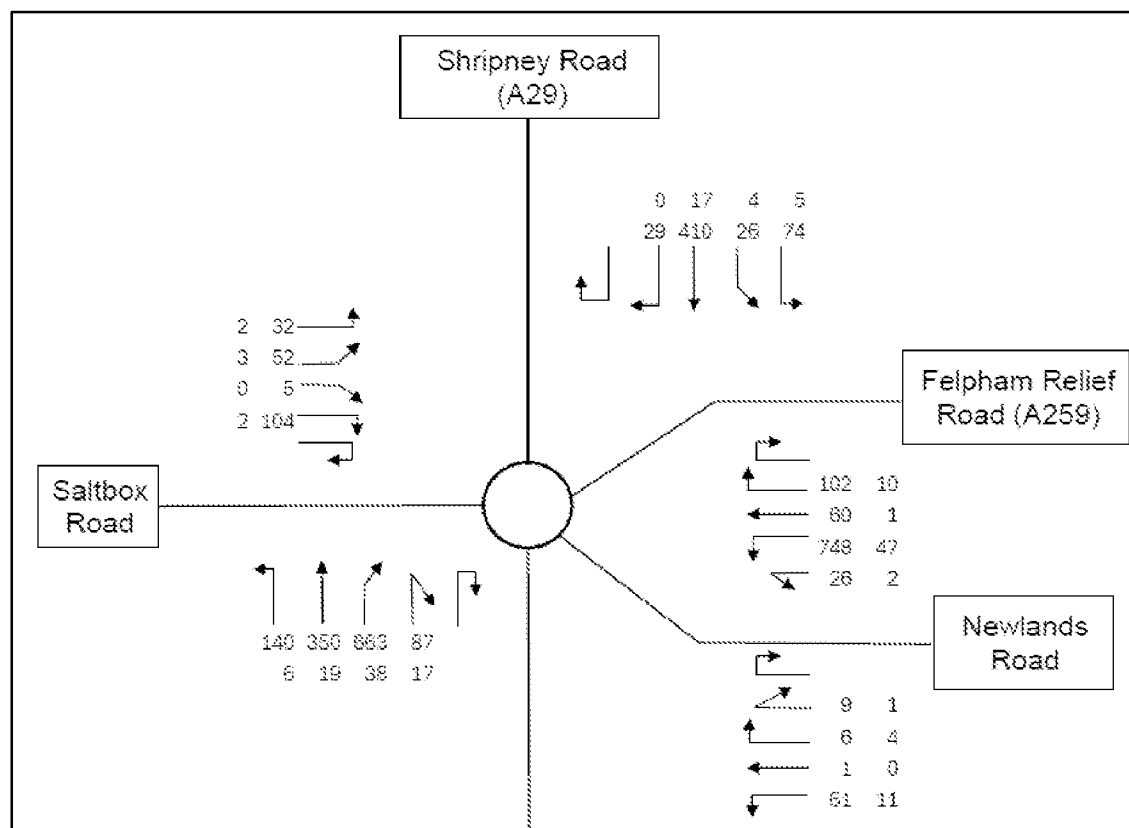
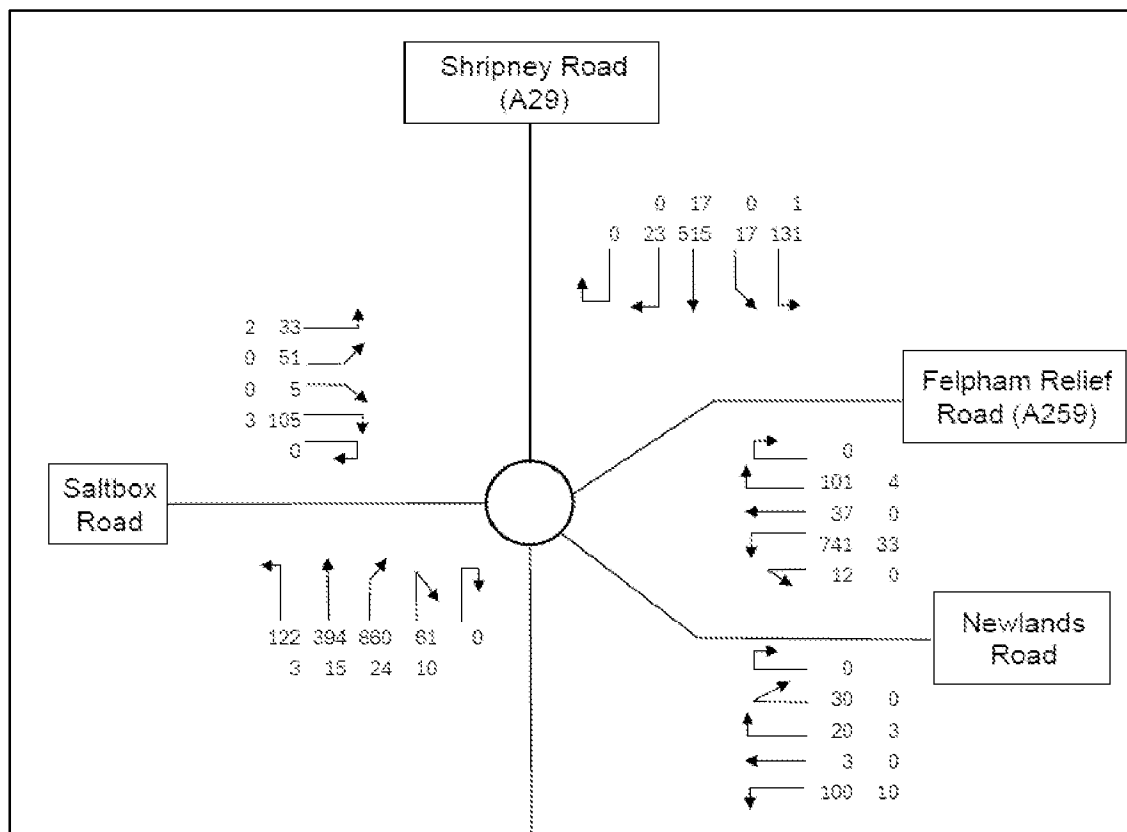


Figure 2.5 – Saltbox roundabout – PM peak hour flow diagrams



- 2.47 Base traffic data for the War Memorial roundabout has been derived from the Chichester Area Transport Model (CATM) as agreed with WSCC Highways during pre-application discussions. This provides a consistent approach with planning applications BN/11/22/OUT for BEW Parcel SC1 and AL/11/24/OUT for Land east of Westergate (Cala).
- 2.48 The CATM is a SATURN strategic model that was updated to a base year of 2019 for use within the A29 realignment business case and met relevant DfT WebTAG model validation criteria.

3.0 Transport Related Planning Policy

National Policy

- 3.1 National planning policy is set out in the National Planning Policy Framework (NPPF) which was published in 2012 and revised 19th December 2023.
- 3.2 Paragraph 10 sets out at the heart of the NPPF is a presumption in favour of sustainable development, which is elaborated upon at paragraph 11 which is as follows:

“11. Plans and decisions should apply a presumption in favour of sustainable development. For plan-making this means that:

a) all plans should promote a sustainable pattern of development that seeks to: meet the development needs of their area; align growth and infrastructure; improve the environment; mitigate climate change (including by making effective use of land in urban areas) and adapt to its effects;

b) strategic policies should, as a minimum, provide for objectively assessed needs for housing and other uses, as well as any needs that cannot be met within neighbouring areas, unless:

i. the application of policies in this Framework that protect areas or assets of particular importance provides a strong reason for restricting the overall scale, type or distribution of development in the plan area; or

ii. any adverse impacts of doing so would significantly and demonstrably outweigh the benefits, when assessed against the policies in this Framework taken as a whole.

For decision-taking this means:

c) approving development proposals that accord with an up-to-date development plan without delay; or

d) where there are no relevant development plan policies, or the policies which are most important for determining the application are out-of-date, granting permission unless:

i. the application of policies in this Framework that protect areas or assets of particular importance provides a clear reason for refusing the development proposed; or

ii. any adverse impacts of doing so would significantly and demonstrably outweigh the benefits, when assessed against the policies in this Framework taken as a whole.”

3.3 Paragraph 112 of the NPPF states:

"112. Maximum parking standards for residential and non-residential development should only be set where there is a clear and compelling justification that they are necessary for managing the local road network, or for optimising the density of development in city and town centres and other locations that are well served by public transport (in accordance with chapter 11 of this Framework). In town centres, local authorities should seek to improve the quality of parking so that it is convenient, safe and secure, alongside measures to promote accessibility for pedestrians and cyclists."

3.4 The report will demonstrate that the proposed car and cycle parking provision accords with standards and therefore accords with paragraph 112 of the NPPF.

3.5 Paragraph 114 of the NPPF confirms that

"114. In assessing sites that may be allocated for development in plans, or specific 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 Code⁴⁸; and*
- 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.*

3.6 Paragraph 115 of the NPPF states, overarchingly that:

*"115. 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 Having regard to the above relevant paragraphs, this report demonstrates that the contextual opportunities to promote sustainable transport will be taken, (e.g. through provision of a secondary pedestrian/cycle access, and the provision and quality of pedestrian/cycle routes) that safe access is indeed achieved (having already received planning permission) and that while the design of streets within the site will be a matter for detailed planning stages (i.e. reserved matters and planning conditions) the illustrative masterplan provides a robust example scheme that shows the site has the capacity for the scale of scheme proposed.

- 3.8 Furthermore, this Transport Assessment demonstrates the development proposals do not result in an unacceptable impact on highway safety, nor are the residual cumulative impacts on the road network severe and therefore accords with paragraph 115 of the NPPF.

National Policy – National Highways DfT Circular 01/20

- 3.9 The thrust of the DfT Circular 01/20 is to ensure that development:
- i. Is sustainably located
 - ii. Does not result in an unacceptable impact on highway safety nor are the residual cumulative impacts on the Strategic Road Network (SRN) severe
- 3.10 The DfT Circular 01/2022 requests that the vision of the development is outlined.
- 3.11 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 the local plan's strategic allocation of BEW (Barnham Eastergate Westergate – c. 3,000 homes plus supporting commercial, community, education and physical infrastructure) directly adjacent the site.
- 3.12 Chapter 8 of the DfT Circular sets out that the document should be read in conjunction with the NPPF. It is 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.
- 3.13 The application is submitted in outline, however, significant illustrative detail has been included over and above that required. This includes a detailed layout demonstrating road hierarchy, ancillary routes and accessibility to significant public open space.
- 3.14 This Transport Assessment also includes information relating to the connectivity to the wider area, including the access arrangement proposals which were approved as part of the AL/129/21/OUT development, and includes a footway connection to the existing footway along the western side of A29 Lidsey Road to connect with the existing footway to the north.
- 3.15 The approved access proposals also include the provision of a dropped kerb crossing (with tactile paving) of the existing private access lane serving Woodgate House and the fields to the west at its junction with the A29 Lidsey Road.
- 3.16 The new footway connecting to the existing footway on the western side of the A29, will provide a safe route for pedestrians and cycles to access Woodgate and Westergate in the north, where present day local facilities such as a primary school and local shops can be accessed. The site is also extremely well located to utilise facilities within the adjacent BEW strategic allocation, framework masterplanning for which shows a local centre, a primary school, allotments and further informal open space within walking distance.

3.17 Therefore, the outline application and illustrative masterplan proposals demonstrate that the development is located in an area of high accessibility by sustainable transport modes (which was accepted when AL/129/21/OUT was approved), would enable a reduction in the need to travel by private car and would not result in having to provide capacity enhancements and/or new connections onto the Strategic Road Network. Therefore, the proposed development complies with the DfT Circular 01/2022.

3.18 The proposed development is in line with paragraphs 47-54 of the Circular, as follows:

- 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, especially as there are a number of developments coming forward within the vicinity of the application site, as well as the local improvements which will come forward as part of the BEW application
- ii. **Section 8.0** 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. The proposed development trips applied to the SRN will be 'pre-vision' i.e. worst case scenario and therefore provides a robust assessment of the impact on the SRN
- iv. The Transport Assessment includes an interim year of 2028 (expected year of opening) and a future 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 8.0** 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

3.19 The DfT Circular 01/20 includes matters to be considered in proposed residential-led developments. The matters considered are set out in **Table 3.1**.

Table 3.1 – Matters to be considered in residential-led developments

Matters for Consideration	HTp Response
Home and street layouts	The home and street layout, including the street hierarchy will reflect what was agreed as part of the AL/129/21/OUT and AL/70/23/OUT applications. This is set out in further detail within the Design and Access Statement, which sets out that: i. A permeable network of streets has been established to encourage walking and cycling throughout ii. The irregular perimeter block structure is typical of those found throughout this area, as well as Arun as a whole, and are large enough to fit amenity space, gardens and parking, but small enough scale to facilitate a permeable and walkable street pattern iii. The street network incorporates 2m wide footpaths as well as a 3m wide combined footway/cycleway adjacent to the principal access road and connecting the principal open space areas.
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	The submitted Transport Assessment confirms that 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. It was agreed as part of the AL/129/21/OUT and AL/70/23/OUT applications that the site is sustainably located. Additionally, the Planning Statement includes an Open Space Statement which confirms the goal of the Illustrative layout is to foster healthy and active lifestyles, as well as seeking to maximise opportunities for social interaction and activity. This will be achieved through: i. The provision of safe and accessible green infrastructure

	ii. Play and sports facilities iii. The inclusion of a 'walk and play' trail linking foot and cycle ways and activity spaces within the site that feature incidental play and other features iv. Including 'edible landscape' areas v. A scheme that through a dedicated pedestrian/cycle access, highway improvements and the layout makes walking and cycling attractive The proposals also recognise that the potential exists to formalise connections to FP 291 in the event it is diverted to adopt a current informal alignment (by West Sussex County Council). The site makes provision for footpath connections which would allow connection to existing residents of Woodgate as well as the future occupiers of the proposed development.
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.

3.20 It has been demonstrated that the proposed development is compatible with the DfT Circular 01/2022.

Local Policy – West Sussex Transport Plan 2022-2036

3.21 WSCC's website sets out that the current West Sussex Transport Plan (2022-2036) sets the strategy for improving, maintaining and managing the transport network in the period up to 2036 across the county.

3.22 The objectives set out in the plan cover the following four themes:

- i. Prosperous West Sussex
- ii. Healthy West Sussex
- iii. Protected West Sussex
- iv. Connected West Sussex

3.23 The key issues identified by WSCC set out within the document are as follows:

- Climate change
- Local environmental impacts
- Spatially variable economic performance
- Development and regeneration pressures and opportunities
- Growing and ageing population
- Public health and well-being
- Access to services
- Transport network and performance issues

3.24 This report will demonstrate that pedestrian and cycle linkages are acceptable and as such the use of sustainable transport modes will be promoted. This aligns with the need to address the issues of climate change and public health and wellbeing set out above.

3.25 It is therefore concluded that the development proposals accord with the transport related goals of the West Sussex Transport Plan 2022-2036.

Local Policy – Arun Local Plan 2011 – 2031 (July 2018)

3.26 Section 15.1 of Arun's Local Plan 2011-2031 (adopted July 2018) sets out their strategic objectives for transport which are to:

- Reduce the need to travel and promote sustainable forms of transport
- Plan for climate change and work in harmony with the environment to conserve natural resources and increase biodiversity
- Create vibrant, attractive, safe and accessible towns and villages that build upon their unique characters to provide a wide range of uses and which are a focus for quality shopping, entertainment, leisure, tourism and cultural activities
- Promote strong, well integrated and cohesive communities, through the promotion of healthy lifestyles, provision of good quality accessible community facilities and a safe environment, which delivers an enhanced quality of life to all. This includes meeting the needs of a growing elderly population
- Strengthen Arun's economic base and provide local job opportunities by increasing, diversifying and improving the quality of employment within the District through the provision of appropriate employment sites, better infrastructure, including road and rail access, quality affordable accommodation and the development of business support and partnerships

3.27 This report will demonstrate that pedestrian and cycle linkages are appropriate and as such the use of active sustainable travel will be promoted. It is therefore concluded that the development proposals accord with the transport related goals of the Arun Local Plan 2011-2031.

3.28 Policy T SP1 of Arun's Local Plan covers transport and development which states:

"To ensure that growth in the District strengthens Arun's economic base, reduces congestion, works to tackle climate change and promotes healthy lifestyles; the Council will ensure that development: provides safe access on to the highway network; contributes to highway improvements and promotes sustainable transport, including the use of low emission fuels, public transport improvements and the cycle, pedestrian and bridleway network.

The Council will support transport and development which:

a. Is designed to reduce the need to travel by car by identifying opportunities to improve access to public transport services and passenger transport services whilst making provision for safe access to the highway network through improvements to the existing road network and the promotion of vehicles which use low-carbon energy;

b. Is incorporated into the District's green infrastructure network and gives priority to pedestrian and cycle movements;

c. Protects committed and indicative lines of major road schemes from development and, where applicable, contributes towards new road schemes which improve north-south links between Bognor Regis and Littlehampton and the A27, to ensure that they are delivered in line with strategic growth in the District;

d. Incorporates appropriate levels of parking in line with West Sussex County Council guidance on parking provision and the forthcoming Arun Design Guide taking into consideration the impact of development upon on-street parking and;

e. Is supported by an effective and deliverable Transport Assessment which demonstrates that the transport effects of development on the local and strategic road network can be satisfactorily mitigated and a Travel Plan, which is effective and deliverable, and;

f. Explains how the development has been designed to:

- i. accommodate the efficient delivery of goods and supplies;*
- ii. give priority to pedestrian and cycle movements and have access to high quality public transport facilities;*
- iii. create safe and secure layouts for traffic, cyclists and pedestrians whilst avoiding street clutter;*
- iv. incorporate facilities for charging electric and plug-in hybrid vehicles (where charging facilities are to be omitted from the development, evidence of market demand and viability must be provided); and*
- v. consider the needs of people with disabilities by all modes of transport.*

g. Provides improved crossing points over the railway line to improve transport links between the coast and the A27, in particular at Ford."

3.29 This report will demonstrate that the proposals:

- i. Provide appropriate connectivity with public transport
- ii. Promote the use of vehicles that use low-carbon energy
- iii. Incorporate policy compliant car and cycle parking
- iv. In addition to this comprehensive Transport Assessment, the planning application is supported by a Travel Plan (ref: HTp/2401/TP/01)
- v. The Illustrative Site Layout Plan has been the subject of swept path analysis which demonstrates that it is appropriate for an 11.2 metre long refuse collection vehicle which is required to serve the site and is the refuse collection vehicle used to assess the AL/129/21/OUT and AL/70/23/OUT consents
- vi. The site layout is not for determination at this stage but will be designed to ensure compliance with the remaining points of Policy T SP1 point f

3.30 It is therefore concluded that the proposals accord with policy T SP1 of Arun's Local Plan 2011-2031.

3.31 Policy T DM1 of Arun's Local Plan covers sustainable travel and Public Rights of Way, which states:

"New development must ensure ease of movement, prioritising safe pedestrian and cycle access to the green infrastructure network and access to public transport and community transport services where a need has been identified. Access to alternative modes of transport including public transport services, the public right of way and cycle networks, must be available and accessible to all members of the community.

Proposals for all new development must:

a. Be located within easy access of established public transport service(s), existing pedestrian and cycle networks, the committed and aspirational cycle networks and the green infrastructure network which links the development with key destinations including places of work, education, leisure and town centres;

b. Where applicable, contribute to the extension of public transport services to serve the development and community transport services to ensure that a wide range of transport services are available to all residents;

c. Make provision for cycling and pedestrian facilities to meet the County Council Parking Standards, including cycle storage, convenient and secure cycle parking in association with retail and educational uses and sufficient secure parking and changing/showering facilities at places of work;

d. Contribute towards the provision of a joined up cycle network and Public Rights of Way network, taking into account the aspirational cycle network, which provides convenient, accessible, safe, comfortable and attractive routes for pedestrians and cyclists and; where appropriate, horse riders, both within the development and in the form of links between the development and;

- i. places of work, education, leisure and food retail;*
- ii. the South Downs National Park,*
- iii. along the coast particularly between Bognor Regis and Littlehampton,*
- iv. along the coast to Chichester,*
- v. Bognor Regis to Arundel, and*
- vi. Littlehampton to Goring."*

3.32 This report will demonstrate that the proposals:

- i. Include appropriate pedestrian and cycle linkages and therefore suitable accessibility to services and facilities including public transport
- ii. Include secure and weatherproof cycle parking in accordance with WSCC standards

3.33 It is therefore concluded that the proposals accord with policy T DM1 of Arun's Local Plan 2011-2031.

3.34 Part of policy WM DM 1 covers refuse collection and is relevant in transport development terms, this part of the policy states:

"New residential development, including conversion of one dwelling into multiple units, will be permitted provided that:

- a. It is designed to ensure that kerbside collection is possible for municipal waste vehicles*
- b. Where appropriate, communal recycling bins and safe bin storage areas are available to residents of flats."*

3.35 This report confirms that the site will be designed for kerbside collection and all properties will benefit from appropriate storage areas.

3.36 It should be noted that ADC are currently updating their Local Plan (2023-2041), with a Regulation 18 Issues & Options consultation for the Direction of Travel Document being undertaken to help prepare a new Local Plan for the district.

Local Policy – Aldingbourne Parish Neighbourhood Development Plan 2019 – 2031

3.37 Policy GA3 of Aldingbourne Parish Council's Neighbourhood Development Plan 2019 – 2031 (dated July 2021) states:

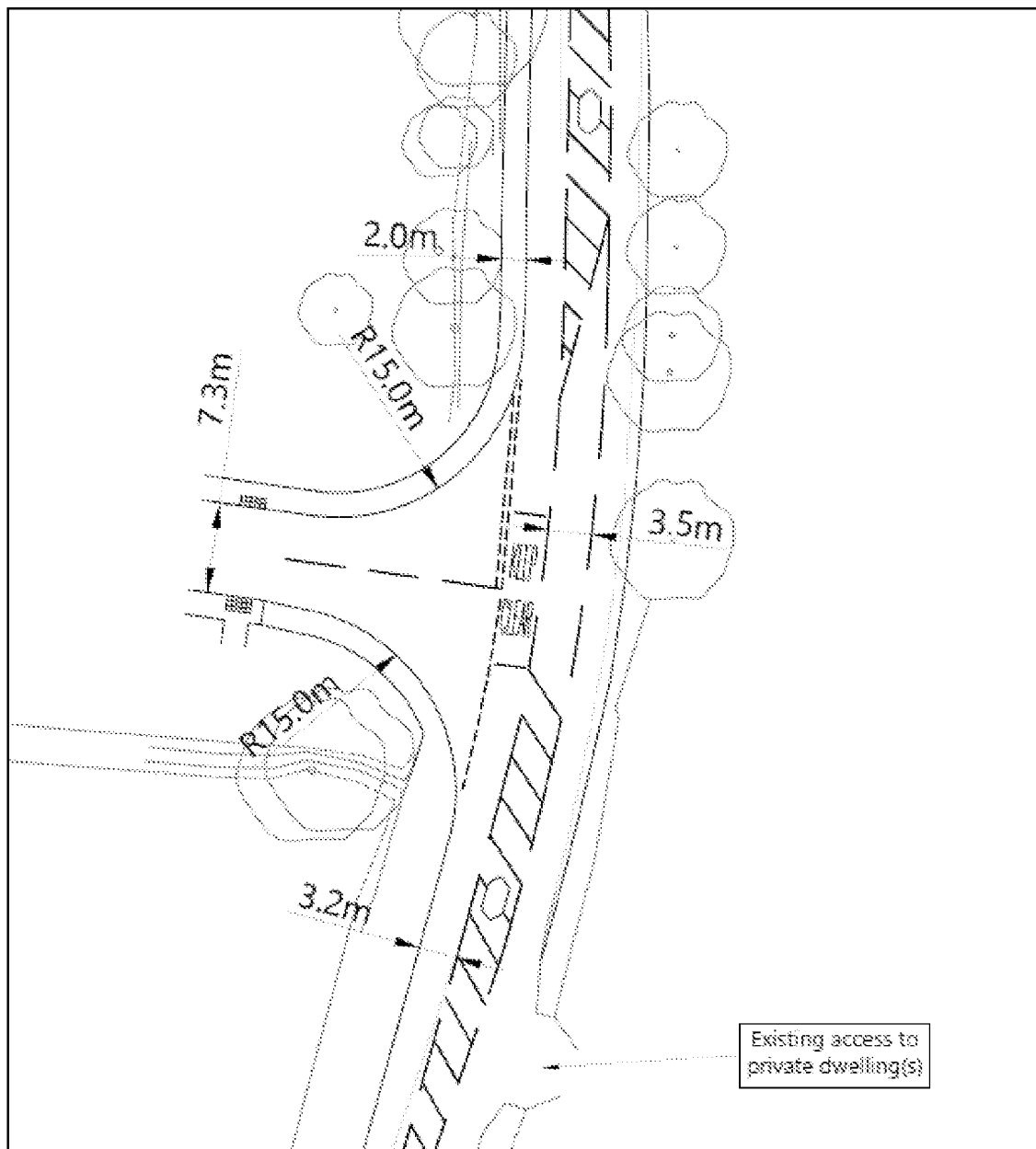
"Proposals must provide adequate parking in accordance with the standards adopted at the time. Proposals that would result in a loss of parking spaces either on or off street will be resisted."

- 3.38 This report will demonstrate that the proposed car and cycle parking provision accords with standards and therefore is compliant with policy GA3 of Aldingbourne Parish Council's Neighbourhood Development Plan 2019 – 2031.
- 3.39 It is therefore concluded that the development proposals comply with relevant national and local planning policy in transport development terms.

4.0 Access Arrangement on to Lidsey Road

- 4.1 The application proposals will be served by the junction arrangement that was approved as part of the AL/129/21/OUT consent. This arrangement takes the form of a ghost island right turn lane on the A29 Lidsey Road (ref: HTP/2087/36/F), contained in **Appendix 7**. These arrangements are secured by planning conditions (including 3, 27, 28, 29) for planning permission AL/129/21/OUT.
- 4.2 As part of the pre-application discussions with WSCC Highways, it was suggested that 'KEEP CLEAR' markings are provided at the access to ensure that vehicles exiting and entering the site are not impeded. Drawing HTP/2401/11, contained in **Appendix 8**, with an extract is shown in **Figure 4.1**, and is based on drawing HTP/2087/36/F, with the addition of 'KEEP CLEAR' markings.

Figure 4.1 – Proposed site access junction



4.3 Drawing HTP/2401/11 includes:

- i. A ghost island right turn access with Lidsey Road
- ii. A 7.3 metre wide access road. As shown the Illustrative Site Layout Plan, this will taper to generally 5.5 metres for the spine road that continues throughout the site
- iii. 15 metre radii kerbs
- iv. 2.4 x 160 metre visibility splays based on DMRB requirements of vehicle speeds up to 85 kph (52.8 mph). This reflects the visibility splay requirements for an access junction onto a road that is subject to a 50mph speed restriction
- v. A 2.0 metre wide footway (over a length of around 125 metres) leading towards Woodgate to the north to connect with the existing network
- vi. A dropped kerb pedestrian crossing (with tactile paving) of the access road leading to Woodgate House and field to the west is also proposed
- vii. A verge will be provided along the southern side of the access
- viii. A tactile paving dropped kerb crossing of the access road will be provided circa 20 metres from Lidsey Road
- ix. 'KEEP CLEAR' markings at the junction

4.4 Swept path analysis of the site access was provided as part of the AL/129/21/OUT consent. This demonstrated that the site access is appropriate for an 11.2 metre refuse collection vehicle, which is the largest vehicle expected to serve the site.

4.5 The approved site access arrangements are the result of an independent Stage 1 Road Safety Audit. The full Road Safety Audit with embedded Designer's Response is provided at **Appendix 9**.

4.6 Drawing HTP/2401/11 with the 'KEEP CLEAR' markings included have been subject of an updated Stage 1 Road Safety Audit. The full Road Safety Audit with embedded Designer's Response is provided at **Appendix 9**. The audit raised no comments on the vehicular access. Therefore, it is considered that the addition of the 'KEEP CLEAR' markings is acceptable in safety terms.

5.0 Application Proposals

- 5.1 The application proposals are for up to 130 dwellings on land west of Lidsey Road (A29), Woodgate. Access will be taken through site with planning permission AL/129/21/OUT via the approved ghost right hand turn lane junction with Lidsey Road.
- 5.2 The indicative mix of 130 dwellings shown in the Illustrative Site Layout Plan that supports this planning application shows:
- i. 52 two-bedroomed houses
 - ii. 50 three-bedroomed houses
 - iii. 11 four-bedroomed houses
 - iv. 4 one-bedroomed apartments
 - v. 13 two-bedroomed apartments
- 5.3 The Architect's Illustrative Site Layout Plan (ref: DLA.2222.L.04.S06) is provided at **Appendix 10**, an extract is provided at **Figure 5.1**.

Figure 5.1 – Extract from the Architect's Illustrative Site Layout Plan

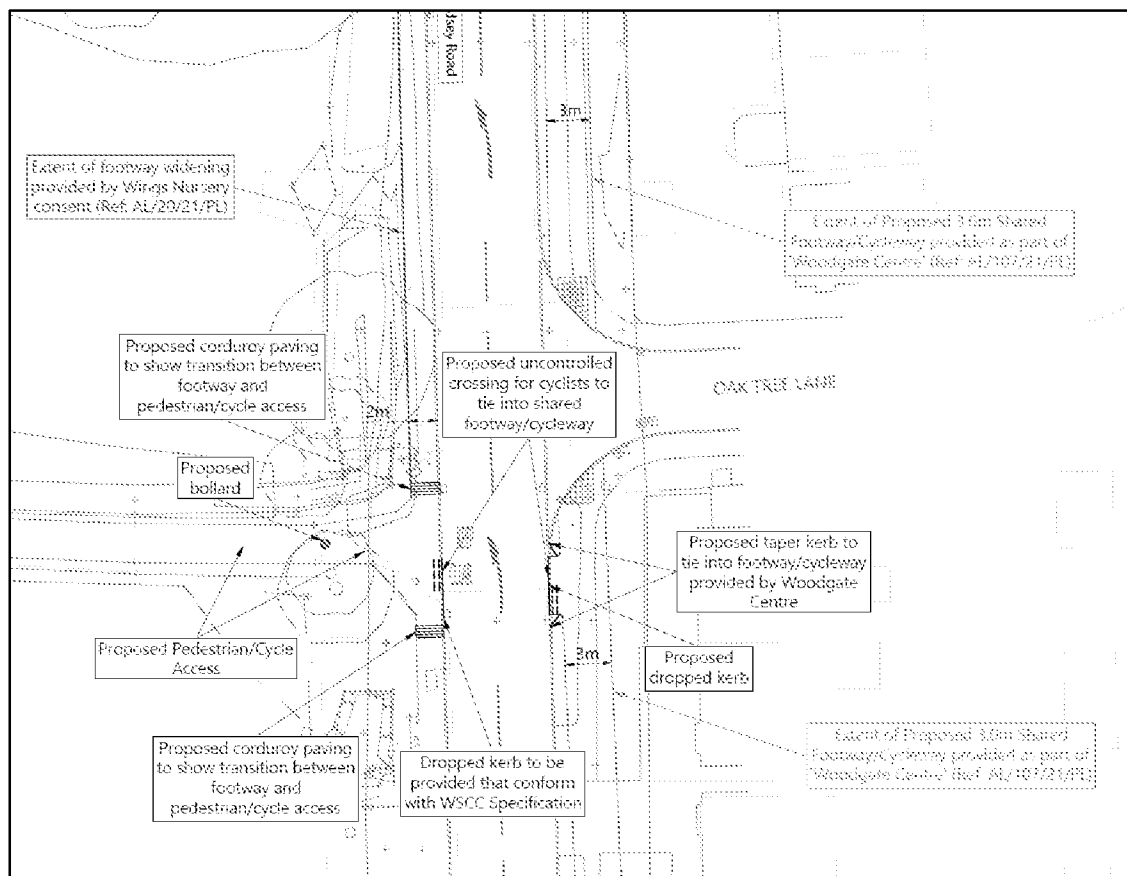


- 5.4 As well as confirming that the site will take access by means of the ghost island right turn junction with Lidsey Road, the illustrative proposals are summarised as follows:
- i. The access road will continue through land as part of application AL/129/21/OUT providing access to the application site along a north/south access road to the west
 - ii. A pedestrian/cycle connection will be provided along the existing and proposed access road from the A29 into the application site. This access will be restricted for vehicles with a bollard at either end of the path. The bollard will be removable to allow the route to be used as a secondary emergency vehicle access
 - iii. Each dwelling will benefit from off-street car parking
 - iv. Additional visitor car parking will be provided in lay-bys
 - v. 2.0 metre footways will be provided adjacent to the majority of site roads with shared surface shared driveways provide at the end of some cul-de-sac spurs
 - vi. A road Hierarchy summarise as:
 - a. The access road will start at 7.3 metres and taper to 5.5 metres
 - b. The spine road connecting the access road will be 5.5 metres wide throughout the site
 - c. Minor roads connecting to the spine road will typically vary in width from 4.1-4.8m wide

Pedestrian/Cycle Access

- 5.5 A pedestrian and cycle access from the A29 Lidsey Road will be provided into the site along the existing track located to the south of the site boundary. This pedestrian and cycle access will include a bollard to prevent unauthorised vehicular access. The proposed pedestrian and cycle access arrangement is shown on drawing HTp/2401/04/C, contained in **Appendix 11**, with an extract shown in **Figure 5.2**.

Figure 5.2 – Pedestrian and cycle access arrangement



- 5.6 Drawing HTP/2401/04/C includes a proposed crossing for pedestrians and cyclists which will tie into the 3.0 metre wide footway/cycleway provided by the Woodgate Centre application
- 5.7 Drawing HTP/2401/04/C also includes the following improvements which have been approved under local planning applications, demonstrating connectivity for pedestrians and cyclists from the site to the wider local highway network:
- i. Widening of the footway to 2.0 metres along the western side of the A29 Lidsey Road provided as part of the adjacent Wings Nursery Consented development (ref: AL/20/21/PL). The footway along the site frontage of Wings Nursery has been widened and an uncontrolled pedestrian crossing with tactile paving and been constructed – this will allow pedestrians to cross Lidsey Road and continue north and south from the application site
 - ii. The provision of a 3.0 metre wide shared footway/cycleway along the eastern side of the A29 Lidsey Road provided by the Woodgate Centre development (ref: AL/107/21/PL), including an uncontrolled crossing circa 40 metres to the north of the proposed pedestrian/cycle access
- 5.8 It has been confirmed by the applicant that there will be no vehicular rights of access along the existing track. The track is wide enough to enable vehicular traffic to enter the site, therefore a bollard will be provided to prevent unauthorised vehicular access. The bollard will be removable to allow the route to be used as a secondary emergency access.

5.9 The proposed pedestrian/cycle connection has been included as part of a Stage 1 Road Safety Audit, contained in **Appendix 9**. The audit provided six recommendations. The recommendations and the Designer's Response are set out below:

- i. Recommendation - The vegetation is cut back and maintained such that it does not impact on the visibility requirements

Designer's Response – Agreed. The vegetation obstructing visibility is located within land controlled by the applicant and land within the public highway. The vegetation will be cut back and maintained to below 0.6 metres in height

- ii. Recommendation - Dropped kerbs with a maximum upstand of between 4-6mm are provided where appropriate

Designer's Response – Agreed. Dropped kerbs will be provided that conform with the specification required by the local highway authority as shown on drawing HTP/2401/04/C

- iii. Recommendation - Replace the two existing gully gratings with new pedestrian friendly types. Also to investigate and remedy the ponding surface water

Designer's Response – Agreed. New gully gratings will be provided which minimise the risk of pedestrian slips and cycle accidents. This detail will be provided at the detailed design stage

The cause of ponding and surface water will be investigated. It is expected that rodding will solve this issue

- iv. Recommendation - Sufficient warning is provided to highlight the change of use via appropriate corduroy paving and signing

Designer's Response – Agreed. Corduroy paving will be provided to show the transition between the footway along A29, and the shared used footway cycleway entering the site. The corduroy paving is shown on drawing HTP/2401/04/C. Further detail will be provided at the detailed design stage

- v. Recommendation - ensure the proposed shared footway/cycleway provision and cycle crossing is designed appropriately and can operate freely. It would be advantageous to explore siting the shared footway/cycleway provision further back within the available highway to create a buffer strip and larger landing/waiting area for crossing cyclists

Designer's Response – Disagree - In an event where a large cycle (i.e cargo bike) is waiting to cross Lidsey Road, there will be sufficient room for most users to manoeuvre around the waiting cycle. This is shown in drawing 2401/TR/04

In the event that a significantly larger bike is waiting to cross and blocks the path, this is not a safety issue, as a pedestrian/cyclist will have good visibility on the approach to the crossing, and will be able to wait until the path is clear to continue.

Therefore, this comment has been addressed

- vi. Recommendation - The street lighting column is relocated out of the footway/cycleway

Designer's Response - It should be noted that the proposed widening of the existing footway to 3.0 metres will be provided as part of the 'Woodgate Centre' scheme (ref: AL/107/21/PL)

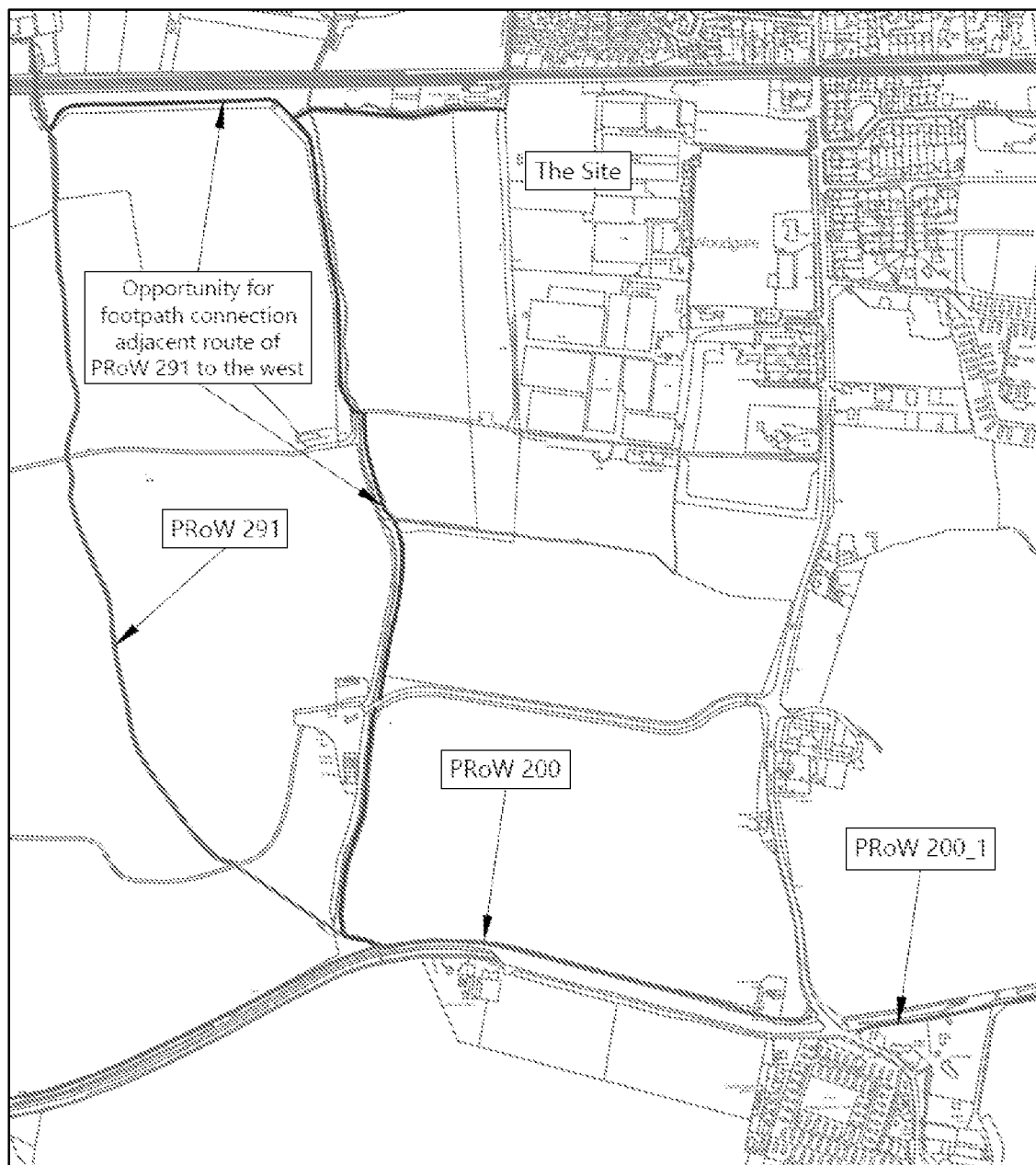
However, if the proposed pedestrian/cycle access is implemented before the Woodgate Centre application works come forward, it is likely that a small section of the works will need to be undertaken to ensure that cyclists can cross the road appropriately and re-enter the carriageway at Woodgate Lane in the south, or use Oak Tree Lane to exit the carriageway and use the new cycle crossing to cross into the site. We have provided a plan (HTp/2401/12) to show these works, including ensuring the lighting column is located outside of the footway/cycleway

- 5.10 It is considered that the proposed pedestrian/cycle access and cycle crossing are safe and appropriate.

Connectivity to the Wider Area

- 5.11 The access arrangement that was included as part of the AL/129/21/OUT development includes a footway connection to the existing footway along the western side of A29 Lidsey Road to provide a continuous pedestrian connection to the north. This also includes the provision of a dropped kerb crossing (with tactile paving) of the existing private access lane serving Woodgate House and the fields to the west at its junction with the A29 Lidsey Road. Both schemes are committed to ensuring these provisions are delivered.
- 5.12 A connection will be provided that links to the footway provision within the AL/129/21/OUT development. This will facilitate pedestrian permeability between the site and the existing footway network.
- 5.13 The approved access junction can accommodate movements by all modes including foot and cycle.
- 5.14 The majority of side roads will be flanked by 2.0 metres footways with the sections of shared space provided at the end of culs-de-sac where there will be low levels of traffic.
- 5.15 A 3.0 metre wide pedestrian/cycle shared path will be provided within the site which continues from the existing private road along the southern boundary of the site, allowing a traffic free route within the site.
- 5.16 The site area also includes land to allow the potential for future connections to the existing Public Right of Way footpath 291 in the north west corner of the site and footpath 200 to the south of the site. This could significantly improve connectivity through the proposed site between Woodgate and the footpath and improve wider pedestrian connectivity. This is of course subject to the alignment of the defined route. The location of these PRow in relation to the site is shown in **Figure 5.3**.

Figure 5.3 – PRow within the vicinity of the site



- 5.17 It is understood that the general public currently use the route which is proposed as a footpath connection, rather than PRoW 291, therefore a formalised route, would be a benefit to the wider area.
- 5.18 As shown on the masterplan (**Appendix 10**) the internal footway provision will continue east through the site to the pedestrian/cycle access with A29. This will allow continuous connection from the site to the wider network, including Woodgate Centre and the proposals which will come forward as part of the BEW strategic site (i.e. Arun Local Plan Policy SP2c).

Car Parking

- 5.19 Arun District Council's car parking standards are contained within their Parking Standards Supplementary Planning Document dated January 2020.
- 5.20 The standards provide the following advice on expected car parking provision, and are summarised in **Table 5.1**.

Table 5.1 – 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

- 5.21 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)".
- 5.22 The development will be supported by car parking in accordance with **Table 5.1**, which is readily achievable in the scheme given its area and proposed density of housing.
- 5.23 It is expected that visitor car parking at a ratio of one space per five dwellings will be accommodated along the access roads and/or in lay-bys to be added as the layout evolves.
- 5.24 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.
- 5.25 The Illustrative Site Layout Plan shows an indicative parking layout. It is anticipated that a condition will be attached to any planning permission arising that ensures that the car parking provision will be policy compliant. The car parking provision in accordance with ADC policy is set out in **Table 5.2**.

Table 5.2 – Car parking provision

Number of bedrooms	Number of units	Number of Parking Spaces
1	4	8
2	65	130
3	50	100
4+	11	33
Total	130	321

- 5.26 Visitor car parking at a ratio of one space per five dwellings will be accommodated with lay-by parking areas and / or in parking courts where they feature throughout the site.

- 5.27 Each property with a garage or driveway would be provided with an Electric Vehicle (E.V) charging point in accordance with the Arun Parking Standards SPD.
- 5.28 The planning condition attached to the AL/129/21/OUT consent says that 5% of all parking provided as suitable for disabled persons. This reflects the commensurate policy requirement (and separate condition) securing a small proportion of homes meeting increased accessibility standards at M4(2) and M4(3) of building regulations within that site
- 5.29 Based on the above, the car parking shown indicatively on the Illustrative Site Layout Plan would accord with standards and is considered appropriate.

Cycle Parking

- 5.30 Arun District Council's cycle parking standards are also contained within their Parking Standards Supplementary Planning Document dated January 2020.
- 5.31 The standards set out the following recommended provisions:
- One and two-bedroomed dwellings – one space
 - Three plus bedroomed dwellings – two spaces
- 5.32 The cycle parking provision in accordance with ADC policy is set out in **Table 5.3**.

Table 5.3 – Car parking provision

Number of bedrooms	Number of units	Number of Parking Spaces
1	4	4
2	65	65
3	50	100
4+	11	22
Total	130	191

- 5.33 It should however be noted that the standards also set out that one space can be provided per flat if within a communal store. It is assumed that this potential reduction is intended for large, flatted developments in urban areas where the store could be too large if, instead of cycling, residents predominately undertook trips by foot, and as such is not considered relevant to these proposals.
- 5.34 Where dwellings are provided with garages, it will be ensured that these are large enough to accommodate cycle storage in addition to car parking.
- 5.35 For dwellings without garages, secure undercover cycle storage will be provided in gardens, with suitable access routes to the front of the property for transporting cycles.
- 5.36 This approach was used and agreed as part of AL/129/21/OUT and AL/70/23/OUT applications.

Strategy For Collection of Waste and Recycling

- 5.37 The internal access roads will be built to an adoptable standard and designed to accommodate the swept path analysis of an 11.2 metre long refuse collection vehicle.
- 5.38 Residents of the dwellings will move their waste and recycling bins to the footway for collection on the designated collection day, similarly to the vast majority of dwellings throughout the UK.
- 5.39 Should any properties be served by shared driveways then a dedicated 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 to accommodate the bins as they would be from multiple properties.
- 5.40 In accordance with Manual for Streets, and to meet the requirements under Building Regulations Document H, refuse and recycling storage points will be within 30 metres of the dwelling, and waste collection vehicles will be able to get within 25 metres of the collection point.
- 5.41 Turning heads suitable for an 11.2 metre refuse collection vehicle will be provided to minimise reverse distances.
- 5.42 Swept path analysis is provided at **Appendix 12** which confirms that the site layout is appropriate for an 11.2 metre long refuse collection vehicle. This is the same size refuse vehicle agreed as part of the AL/129/21/OUT and AL/70/23/OUT consents.

6.0 Committed Developments

6.1 As part of the pre-application discussions with WSCC Highways, it was agreed that the following committed developments will be included within the capacity assessment:

- i. AL/20/21/PL– Wings Nursery, A29 Lidsey Road (71 units)
- ii. AL/21/20/OUT – Land north of Lee’s Yard, A29 Lidsey Road (38 units)
- iii. AL/107/21/PL – Woodgate Centre Site, A29 Lidsey Road (180 units)
- iv. AL/70/23/OUT – Land west of Lidsey Road (A29) (155 units)
- v. AL/129/21/OUT – Land west of A29 Lidsey Road (95 units)
- vi. AL/178/22/OUT – Land to the rear of Meadow Way, Westergate (89 units)

6.2 As part of planning pre-application discussions with ADC, it was also agreed that the following committed developments will be included within the capacity assessment:

- i. BN/147/22/RES – Church Lane, Barnham (200 units)
- ii. BE/61/23/RES – Land east of Shripney Road (44 units)

6.3 The flow diagrams demonstrating the committed development on the local highway network are contained in **Appendix 13**.

A29 Woodgate Bypass proposals and BEW Consortium

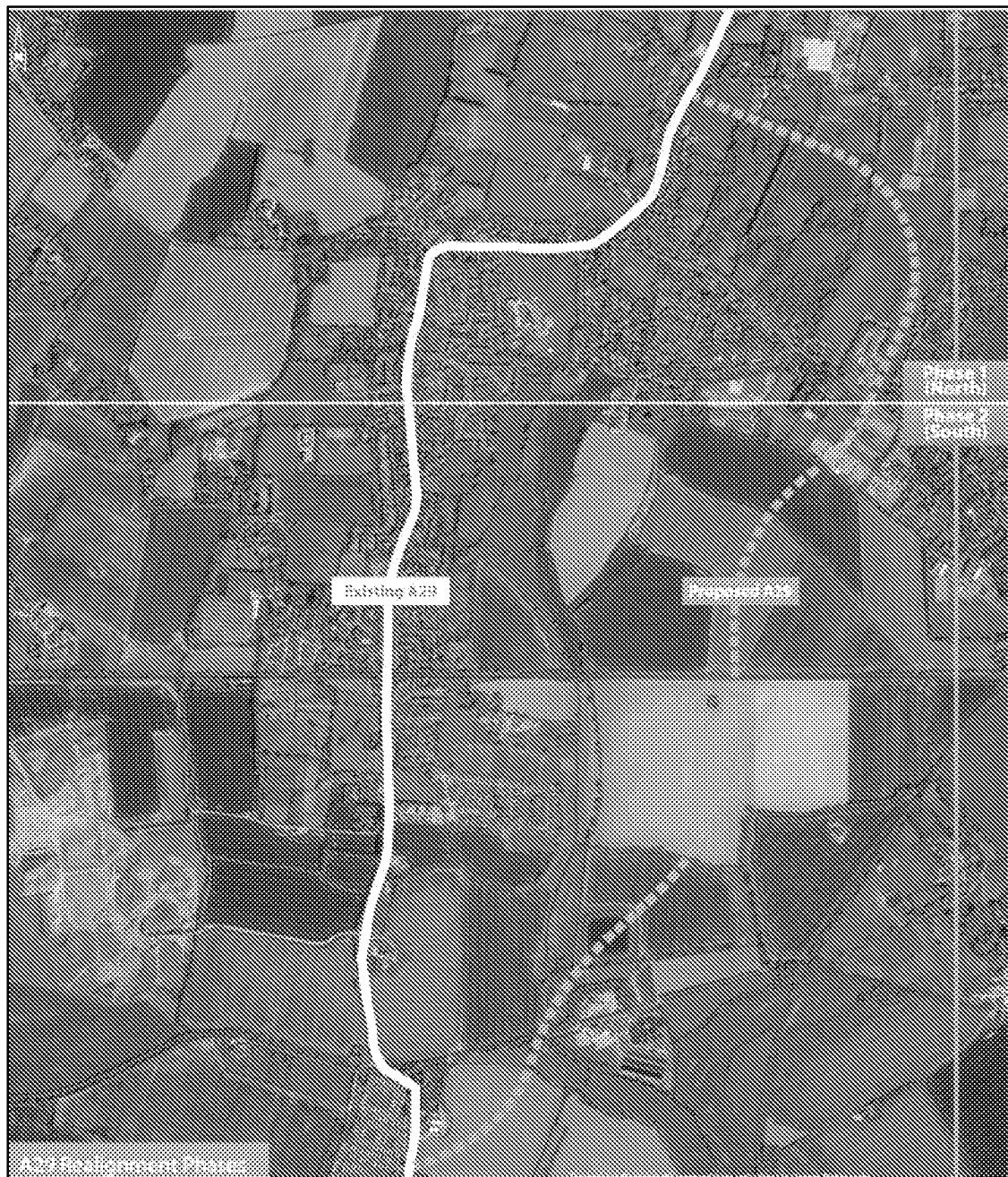
6.4 There are advanced proposals to realign part of the A29 to the east of Eastergate, Westergate and Woodgate villages to alleviate peak time traffic congestion through these villages. These proposals are currently being led by the BEW consortium alongside WSCC as the local highway authority with consultation from impacted stakeholders.

6.5 West Sussex Council’s website sets out the new section of road will help:

- Provide a more reliable connection to Bognor Regis
- Reduce traffic along the existing section of the A29, especially at the Woodgate level crossing and the War Memorial junction
- Improve and reduce journeys, making them safer for all road users
- Enable access to allocated development land in the adopted Arun Local Plan providing access to new jobs and new homes in Arun District

6.6 It is proposed that the realignment works are completed across two phases. Phase 1 of the works are currently expected to commence with construction of the road planned to start in Spring/Summer 2025 and anticipated to be completed by Spring 2027. No timescales have been made available for Phase 2 of the realignment works. These are progressing as part of a first phase of BEW south of Barnham Road. The proposed A29 realignment is shown in **Figure 6.1**.

Figure 6.1 – A29 realignment scheme



Source – WSCC A29 Realignment Scheme (https://www.westsussex.gov.uk/media/14935/a29_scheme_phases.jpg)

6.7 The following planning applications are under consideration by ADC:

- i. BN/195/22/PL (Barratt David Wilson) – Land north of Barnham Road and east of Fontwell Avenue (hybrid application for; full application for 551 units and outline application for a 60 bed care home)
- ii. AL/11/24/OUT (Cala) – Land east of Westergate (400 units)
- iii. BN/11/22/OUT – Parcel SC1 (1,250 dwellings, care home, flexible retail and community floor space, a primary school and realignment of the A29 and early connection to the existing A29)

- 6.8 As part of pre-application discussions with WSCC Highways, it was agreed that the developments set out in **paragraph 6.7 (i-iii)** i.e. a total of 2,201 dwellings are already included for within the NTEM TEMPro growth rates.
- 6.9 NTEM Planning Data Version 7 Guidance Note sets out that the TEMPro Growth Factors use the Arun District Council Housing Implementation Strategy (HIS) from 2015 to 2030 to calculate growth factors. The 2017 version of the guidance includes the BEW allocation as a 'potential strategic site' for 2,300 dwellings, in line with the ADC Local Plan Policy SD5. Therefore, it appears that TEMPro growth factors do not include the full 4,180 dwellings (included in the BEW framework masterplan) however, it does include for the number of units set out in **paragraph 6.7 (i-iii)**.
- 6.10 Within the Cala and Barratt David Wilson applications, their Transport Assessments have set out that background growth uses 'NTEM-adjusted TEMPro growth' which includes for 2,300 dwellings of the BEW application. Therefore, the capacity assessment within this Transport Assessment is following the same approach as the recent local applications.
- 6.11 Email correspondence with WSCC Highways confirming agreement with the approach set out above is contained in **Appendix 1**.

7.0 Trip Generation and Trip Distribution

Previous Use

- 7.1 Planning permission (ref: AL/90/13) for a caravan and touring park was granted in February 2014. The proposals included for 11 static caravans/lodges and 20 touring/camping pitches, with access taken via the existing circa 140 metre long private access road which was proposed to be widened to 4.1-4.5 metres, with a 6.1 metre wide bellmouth junction with Lidsey Road, in which it was proposed to remove the existing oak tree to the south of the junction.
- 7.2 The Transport Assessment which supported the application set out that the proposed development of 29 holiday lodges and the existing residential dwelling would have resulted in 38 arrivals and 34 departures daily, with up to three vehicle movements in the AM peak hour and seven vehicle movements in the PM peak hour. It should be noted that the application did not include any capacity modelling of the site access or local highway network.
- 7.3 The highway officer's response set out that given the application was for a holiday park, it was considered that the impact on the local highway network would not be significant due to holiday traffic normally occurring outside of traditional peak hours, and the application received no objection from highways.
- 7.4 Prior to the approval of the caravan and camping site, the extant use of the site was for a plant and nursery site and was occupied until June 2013. The site included three glass houses and a residential dwelling, with access taken from the private access road.
- 7.5 The Transport Assessment supporting the application for the caravan and touring park set out that the previous nursery and residential uses would have been expected to have attracted 73 arrivals and 92 departures daily, of which circa 126 movement were associated with transit vehicles, LGVs and HGVs with up to 13 vehicle movements in the AM peak hour and 23 vehicle movements in the PM peak hour.
- 7.6 Given that the proposed development will result in the access road being closed to vehicular access and will provide a connection from the site for pedestrians and cyclists, this will result in no vehicular movements along the private access road, or at the existing junction with Lidsey Road. Furthermore, the proposed development will not generate any significant number of HGV movements, and far fewer than the extant nursery use.

Proposed Use

- 7.7 The TRICS database will be used to calculate the multi-modal trip generation associated with the proposed development.
- 7.8 The trip rates have been accepted by WSCC Highways as part of pre-application discussions.
- 7.9 The TRICS database (version 7.11.1) has been interrogated to calculate the number of trips that will be generated up to 130 dwellings. The TRICS parameters used are as follows:
- 03 – Residential / A – Houses Privately Owned
 - Multi-modal sites within Great Britain
 - Sites with 100-200 dwellings
 - Use of weekday data (Saturdays and Sundays excluded)
 - Suburban and Edge of town location types only
- 7.10 The full TRICS output files are contained in **Appendix 14**.
- 7.11 The trip rates and resultant multi-modal trips associated with the up to 130 dwellings for the surveyed network AM and PM peak hours 0800-0900 and 1600-1700 are set out in **Table 7.1** and **Table 7.2**, respectively.

Table 7.1 – Trip Rate

	Trip Rates (per dwelling)				
	AM Peak Hour		PM Peak Hour		Daily
	Arrival	Departure	Arrival	Departure	
Total Vehicle	0.141	0.362	0.262	0.15	4.426
Cyclist	0.009	0.029	0.021	0.01	0.21
Pedestrian	0.054	0.148	0.076	0.04	1.184
Public Transport	0.002	0.043	0.019	0.004	0.254
Total People	0.223	0.812	0.518	0.256	7.744

Table 7.2 – Multi-Modal Development Trips

	Trip Generation (130 Dwellings)				
	AM Peak Hour		PM Peak Hour		Daily
	Arrival	Departure	Arrival	Departure	
Total Vehicle	18	47	34	20	575
Cyclist	1	4	3	1	27
Pedestrian	7	19	10	5	154
Public Transport	0	6	2	1	33
Total People	29	106	67	33	1,007

- 7.12 From **Table 7.2** it can be seen that the 130 dwellings will result in 65 vehicle movements during the AM peak hour and 54 movements during the PM peak hour with fewer at other times.

- 7.13 Furthermore, the results are robust as trips associated with the extant use (**paragraph 7.5**) and the previously approved use (**paragraph 7.2**) and not been netted off the trip generation.

Distribution of Proposed Trips

- 7.14 The proposed development traffic will be distributed onto the local highway network based on the observed peak hour flows identified in the base traffic data (summarised in **Section 2.0**). This was agreed as part of the pre-application discussions with WSCC Highways and the agreed approach taken for AL/129/21/OUT and AL/70/23/OUT.
- 7.15 The traffic distribution is demonstrated in **Figure 7.1** and **Figure 7.2** for the AM and PM peak hours, respectively, and are contained in **Appendix 13**.

Figure 7.1 – AM peak hour traffic distribution

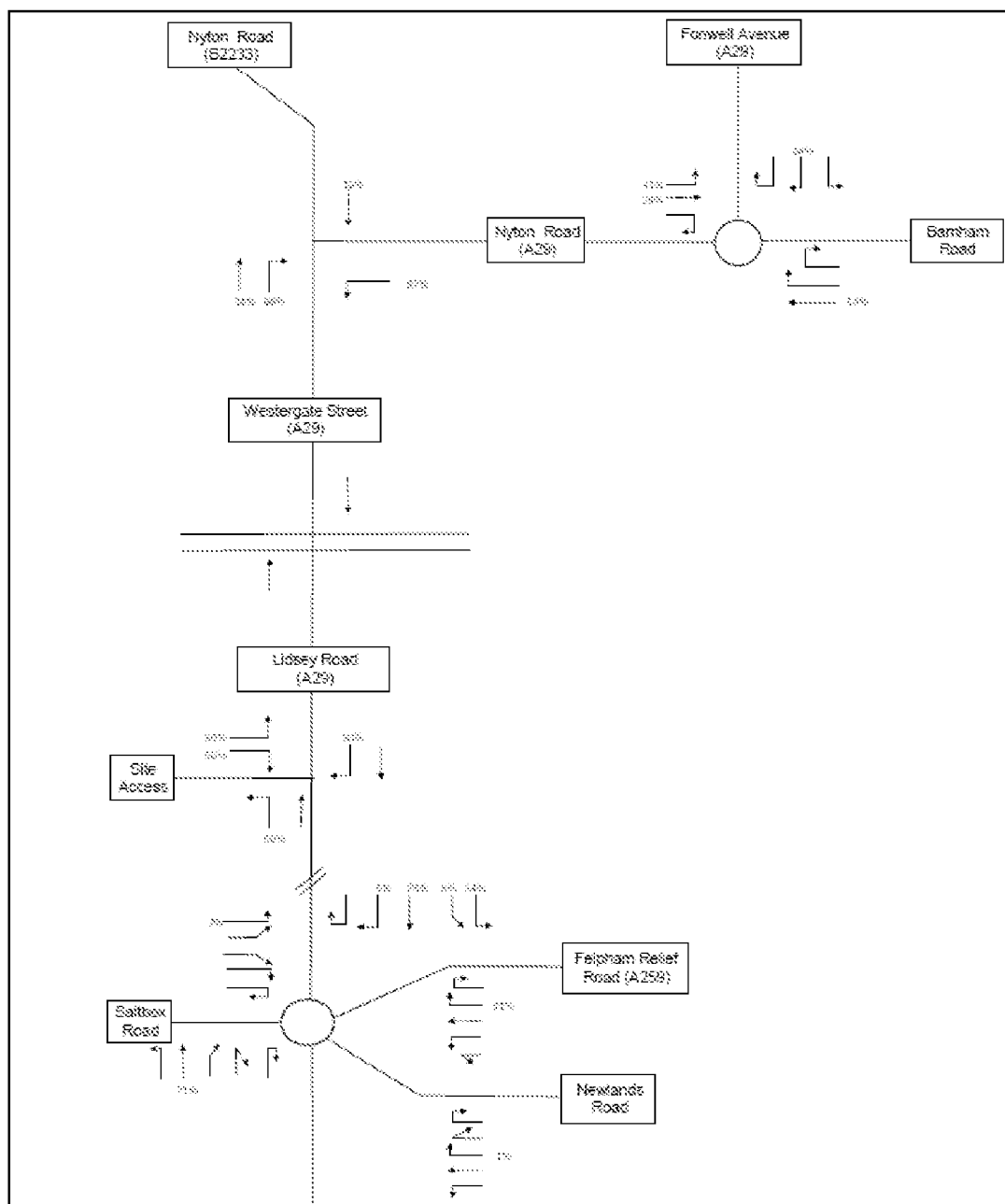
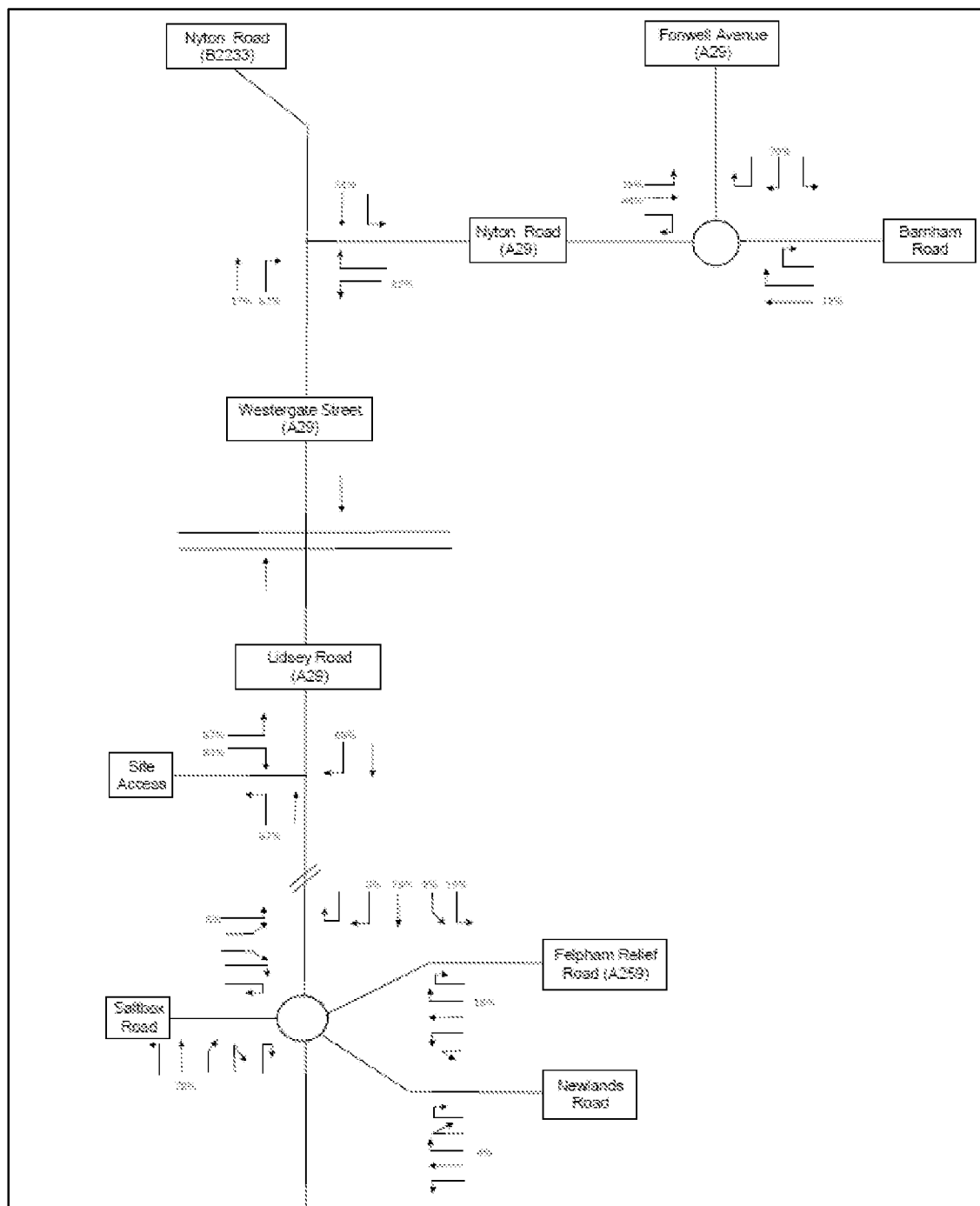


Figure 7.2 – PM peak hour traffic distribution



Background Traffic Growth

7.16 It has been agreed with WSCC Highways that capacity assessments of the local highway network will include the following assessment years:

- i. 2024 – Year of application without proposed development
- ii. 2028 – Interim year without proposed development, without mitigation proposed as part of Phase 1 A29 Scheme
- iii. 2028 – Interim year without proposed development, with mitigation proposed as part of Phase 1 A29 Scheme (War Memorial Roundabout only)

- iv. 2028 – Interim year (with development, i.e. opening year) without mitigation proposed as part of Phase 1 A29 Scheme
- v. 2028 – Interim year (with development, i.e. opening year), with mitigation proposed as part of Phase 1 A29 Scheme (War Memorial Roundabout only)
- vi. 2031 – End of Arun Local Plan Period without proposed development (including mitigation proposed as part of Phase 1 A29 scheme)
- vii. 2031 – End of Arun Local Plan Period with proposed development (including mitigation proposed as part of Phase 1 A29 scheme)

7.17 A sensitivity test for 2031 with an additional 700 dwellings included is provided in a Technical Note (HTp/2401/TN/03) within **Appendix 15**.

7.18 Phase 1 of the A29 scheme includes for the realignment of the A29 between the A29 Fontwell Avenue and the B2233 Barnham Road, reducing the amount of traffic at the War Memorial roundabout, specifically the left turn manoeuvre from A29 Fontwell Avenue to B2233 Barnham Road and the right turn manoeuvre from B2233 Barnham Road to A29 Fontwell Avenue. Therefore, scenarios set out in **paragraph 7.164 iii, v, vi and vii** will apply to the capacity assessment of the War Memorial roundabout only.

7.19 The base traffic data, as set out in **Section 2.0** has been growthed using NTEM TEMPro v8.1 (core). The growth rates are contained in **Appendix 16**, and set out in **Table 7.3**.

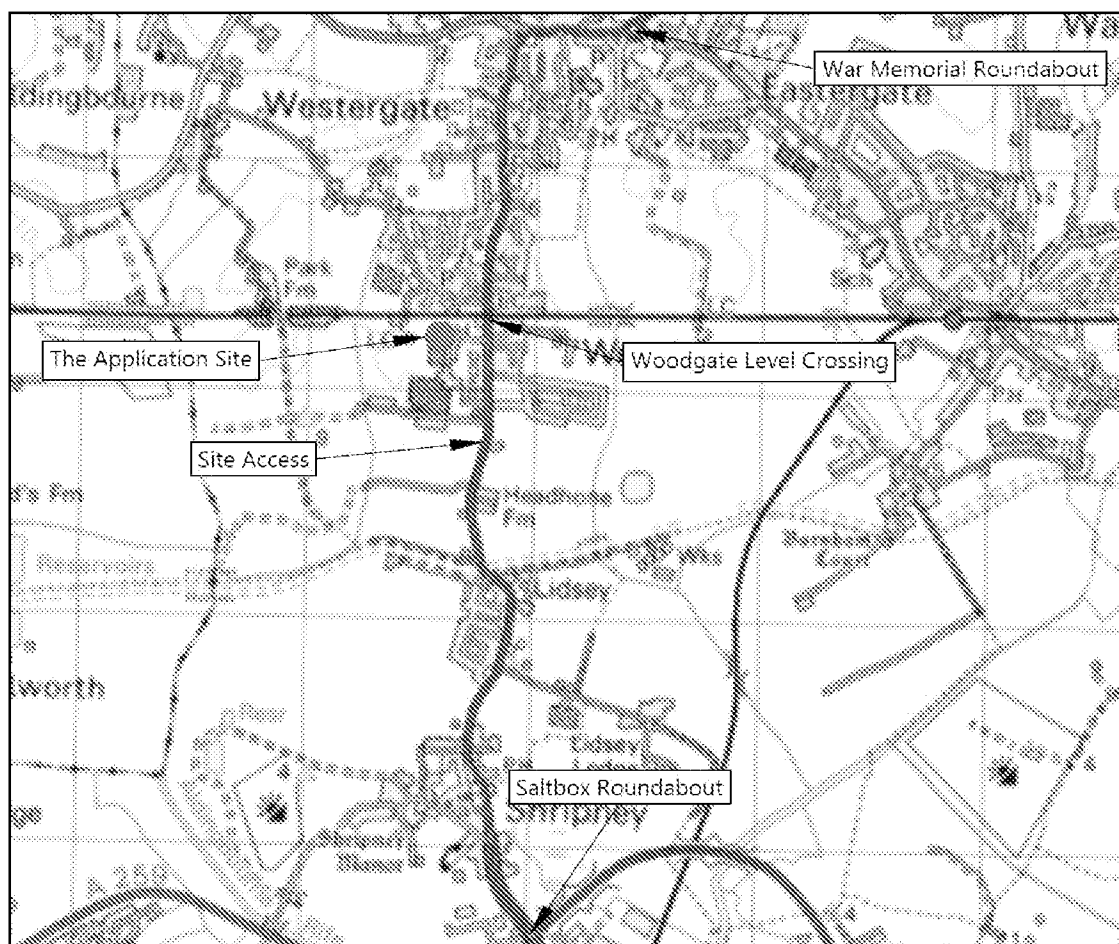
Table 7.3 – TEMPRO Growth Rates

	AM	PM
2019 - 2024	1.0156	1.0159
2019 - 2028	1.0498	1.0506
2019 - 2031	1.0792	1.0808
2023 - 2024	1.0037	1.0036
2023 - 2028	1.0375	1.0379
2023 - 2031	1.0665	1.0678

8.0 Junction Assessments

- 8.1 The pre-application discussions with WSCC as part of this application confirmed that the following junctions would be included in the capacity assessment:
- 8.2 The junction locations with respect to the application site are shown in **Figure 8.1**.

Figure 8.1 – Junctions to be included in capacity assessment



Site Access Junction

- 8.3 The proposed site access junction has been assessed using PICADY which forms part of the Junctions 9 software suite.
- 8.4 The outputs of the PICADY assessments are set out in the following tables with the full output at **Appendix 17**:

Table 8.1

- i. 2024 Base + Committed Development
- ii. 2024 Base + Proposed Development
- iii. 2024 Base + Proposed Development + Committed Development

Table 8.2

- iv. 2028 Base + Committed Development
- v. 2028 Base + Proposed Development

- vi. 2028 Base + Proposed Development + Committed Development

Table 8.3

- vii. 2031 Base + Committed Development
viii. 2031 Base + Proposed Development
ix. 2031 Base + Proposed Development + Committed Development

- 8.5 Given that the site access will be in operation once the development associated with AL/129/21/OUT and AL/70/23/OUT are under construction, a comparison has been provided between the base year + committed development scenario and the base year + proposed development + committed development scenario to demonstrate what the impact of the proposed development will be on the junction.

Table 8.1 – Site access/A29 Lidsey Road capacity analysis – 2024

Arm	AM			PM		
	Queue (Veh)	Delay (s)	RFC	Queue (Veh)	Delay (s)	RFC
2024 Base + Committed Development						
Site Access	0.2	15.36	0.15	0.1	15.57	0.1
A29 Lidsey Road	0.0	6.01	0.03	0.1	6.09	0.08
2024 Base + Proposed Development						
Site Access	0.1	13.34	0.09	0.0	13.31	0.05
A29 Lidsey Road	0.0	5.84	0.02	0.0	5.66	0.04
2024 Base + Proposed Development + Committed Development						
Site Access	0.3	17.56	0.25	0.2	17.25	0.16
<i>Difference from 2024 Base + Committed Development</i>	<i>+0.1</i>	<i>+2.2</i>	<i>+0.1</i>	<i>+0.1</i>	<i>+1.68</i>	<i>+0.06</i>
A29 Lidsey Road	0.0	6.15	0.04	0.1	6.38	0.12
<i>Difference from 2024 Base + Committed Development</i>	<i>0</i>	<i>+0.14</i>	<i>+0.01</i>	<i>0</i>	<i>+0.29</i>	<i>+0.04</i>

- 8.6 From **Table 8.1**, it can be seen that during the AM peak hour, with the vehicle movements associated with the proposed development using the site access junction with Lidsey Road, on the site access arm, there is an increase in RFC of only 0.10 with queuing of up to one vehicle and during the PM peak hour there is an increase in RFC of only 0.06, with queuing of up to one vehicle when compared to with only committed development using the site access.
- 8.7 With the proposed development traffic using the site access junction, during the AM peak hour, the A29 Lidsey Road has an increase in RFC of only 0.01 with no vehicles recorded queuing, and during the PM peak hour, there is an increase in RFC of only 0.04, with queuing of up to one vehicle when compared to with only committed development using the site access.
- 8.8 This increase in RFC and queuing at the junction is negligible and is too low to have a discernible impact in terms of capacity or safety of the junction.

Table 8.2 – Site access/A29 Lidsey Road capacity analysis – 2028

Arm	AM			PM		
	Queue (Veh)	Delay (s)	RFC	Queue (Veh)	Delay (s)	RFC
2028 Base + Committed Development						
Site Access	0.2	15.9	0.16	0.1	16.21	0.11
A29 Lidsey Road	0.0	6.08	0.03	0.1	6.15	0.08
2028 Base + Proposed Development						
Site Access	0.1	13.75	0.09	0.1	13.77	0.05
A29 Lidsey Road	0.0	5.9	0.02	0.0	5.71	0.04
2028 Base + Proposed Development + Committed Development						
Site Access	0.3	18.27	0.26	0.2	18.04	0.17
<i>Difference from 2028 Base + Committed Development</i>	<i>+0.1</i>	<i>+2.37</i>	<i>+0.10</i>	<i>+0.1</i>	<i>+1.83</i>	<i>+0.06</i>
A29 Lidsey Road	0	6.22	0.04	0.1	6.45	0.12
<i>Difference from 2028 Base + Committed Development</i>	<i>0</i>	<i>+0.14</i>	<i>+0.01</i>	<i>0</i>	<i>+0.3</i>	<i>+0.04</i>

- 8.9 From **Table 8.2**, it can be seen that during the AM peak hour, with the vehicle movements associated with the proposed development using the site access junction with Lidsey Road, on the site access arm, there is an increase in RFC of only 0.10 with queuing of up to one vehicle and during the PM peak hour there is an increase in RFC of only 0.06, with queuing of up to one vehicle when compared to with only committed development using the site access.
- 8.10 With the proposed development traffic using the site access junction, during the AM peak hour, the A29 Lidsey Road has an increase in RFC of only 0.01 with no vehicles recorded queuing, and during the PM peak hour, there is an increase in RFC of only 0.04, with queuing of up to one vehicle when compared to with only committed development using the site access.
- 8.11 This increase in RFC and queuing at the junction is negligible and is too low to have a discernible impact in terms of capacity or safety of the junction.

Table 8.3 – Site access/A29 Lidsey Road capacity analysis – 2031

Arm	AM			PM		
	Queue (Veh)	Delay (s)	RFC	Queue (Veh)	Delay (s)	RFC
2031 Base + Committed Development						
Site Access	0.2	16.38	0.16	0.1	16.78	0.11
A29 Lidsey Road	0	6.14	0.03	0.1	6.19	0.08
2031 Base + Proposed Development						
Site Access	0.1	14.11	0.09	0.1	14.19	0.05
A29 Lidsey Road	0	5.95	0.02	0	5.75	0.04
2031 Base + Proposed Development + Committed Development						
Site Access	0.4	18.92	0.26	0.2	18.75	0.17
<i>Difference from 2031 Base + Committed Development</i>	<i>+0.2</i>	<i>+2.54</i>	<i>+0.1</i>	<i>+0.1</i>	<i>+1.97</i>	<i>+0.06</i>
A29 Lidsey Road	0	6.28	0.04	0.1	6.5	0.12
<i>Difference from 2031 Base + Committed Development</i>	<i>0</i>	<i>+0.14</i>	<i>+0.01</i>	<i>0</i>	<i>+0.31</i>	<i>+0.04</i>

- 8.12 From **Table 8.3**, it can be seen that during the AM peak hour, with the vehicle movements associated with the proposed development using the site access junction with Lidsey Road, on the site access arm, there is an increase in RFC of only 0.10 with queuing of up to one vehicle and during the PM peak hour there is an increase in RFC of only 0.06, with queuing of up to one vehicle when compared to with only committed development using the site access.
- 8.13 With the proposed development traffic using the site access junction, during the AM peak hour, the A29 Lidsey Road has an increase in RFC of only 0.01 with no vehicles recorded queuing, and during the PM peak hour, there is an increase in RFC of only 0.04, with queuing of up to one vehicle when compared to with only committed development using the site access.
- 8.14 This increase in RFC and queuing at the junction is negligible and is too low to have a discernible impact in terms of capacity or safety of the junction.
- 8.15 It is evident that the site access junction will operate well within capacity, with queuing of up to only one vehicle waiting to turn into the site from Lidsey Road in 2031, which can be accommodated in the right turn lane of the proposed junction. Therefore, it is considered that the access junction approved under application AL/129/21/OUT is still acceptable.

Woodgate Level Crossing

- 8.16 A standalone LinSig model of Woodgate level crossing has been prepared using a mixture of site observations, flows calculated within this report and traffic surveys.
- 8.17 It should be noted that once the A29 is realigned then flows through the level crossing will be significantly reduced due to the majority of through traffic be rerouted onto the realigned A29.
- 8.18 The barrier down time is based on a survey undertaken in June 2023, as set out in **Section 2.0**.
- 8.19 The Degree of Saturation and Mean Maximum Queue Length results are provided at **Appendix 17** and are summarised in the following tables:

Table 8.4

- i. 2024 Base
- ii. 2024 Base + Committed Development
- iii. 2024 Base + Proposed Development
- iv. 2024 Base + Proposed Development + Committed Development

Table 8.5

- v. 2028 Base
- vi. 2028 Base + Committed Development
- vii. 2028 Base + Proposed Development
- viii. 2028 Base + Proposed Development + Committed Development

Table 8.6

- ix. 2031 Base
- x. 2031 Base + Committed Development
- xi. 2031 Base + Proposed Development
- xii. 2031 Base + Proposed Development + Committed Development

- 8.20 A comparison has been carried out for each of the scenarios against the base year flows.

Table 8.4 – Level crossing capacity analysis – 2024

Scenario	Southbound		Northbound	
	Deg Sat (%)	Queue Length (PCU)	Deg Sat (%)	Queue Length (PCU)
AM				
2024 Base	37.6%	24.2	38.5%	27.4
2024 Base + Committed Development	41.6%	27.8	47.7%	37
<i>Difference from 2024 Base</i>	<i>+4.0%</i>	<i>+3.6</i>	<i>+9.2%</i>	<i>+9.6</i>
2024 Base + Proposed Development	38.3%	24.8	40.2%	28.9
<i>Difference from 2024 Base</i>	<i>+0.7%</i>	<i>+0.6</i>	<i>+1.7%</i>	<i>+1.5</i>
2024 Base + Proposed Development + Committed Development	42.3%	28.4	49.4%	38.8
<i>Difference from 2024 Base</i>	<i>+4.7%</i>	<i>+4.2</i>	<i>+10.9%</i>	<i>+11.4</i>
PM				
2024 Base	62.3%	52.1	32.4%	22.4
2024 Base + Committed Development	73.2%	69.4	37.1%	26.6
<i>Difference from 2024 Base</i>	<i>+10.9%</i>	<i>+17.3</i>	<i>+4.7%</i>	<i>+4.2</i>
2024 Base + Proposed Development	64.1%	54.7	32.9%	22.8
<i>Difference from 2024 Base</i>	<i>+1.8%</i>	<i>+2.6</i>	<i>+0.5%</i>	<i>+0.4</i>
2024 Base + Proposed Development + Committed Development	75.0%	72.6	37.7%	27.1
<i>Difference from 2024 Base</i>	<i>+12.7%</i>	<i>+20.5</i>	<i>+5.3%</i>	<i>+4.7</i>

- 8.21 From **Table 8.4**, compared to 2024 base, with the proposed development applied to the local highway network, during the AM peak hour, there would be an increase of up to one vehicle queuing southbound (i.e. an increase in queue length from 139 metres to 143 metres) and up to two vehicles queuing northbound (i.e. an increase in queue length from 158 metres to 166 metres). This is compared to up to four additional vehicles queuing southbound with committed development applied to the local highway network (i.e. an increase in queue length from 139 metres to 160 metres), and up to 10 vehicles queuing northbound (i.e. an increase in queue length from 158 metres to 213 metres).
- 8.22 During the PM peak hour, with the proposed development applied to the local highway network, there could be up to an additional three vehicles queuing southbound (i.e. an increase in queue length from 300 metres to 315 metres) and up to one additional vehicle queuing northbound (i.e. an increase in queue length from 129 metres to 131 metres). This is compared to up to 18 vehicles queuing southbound with committed development applied to the local highway network (i.e. an increase in queue length from 300 metres to 399 metres), and up to five vehicles queuing northbound i.e. an increase in queue length from 129 metres to 153 metres).

- 8.23 In scenario 2024 base + proposed development + committed development, both AM and PM Peak hours the northbound queue would not reach the vehicular site access with a queue length of 223 metres and 156 metres long respectively. The southbound queue would reach 163 metres in the AM peak hour and 417 metres PM peak hour. During the AM peak hour, the southbound queue would not reach the primary school. While it would pass the school access in the PM peak, this queuing occurs outside of school hours.
- 8.24 It can therefore be seen that the proposed development will result in negligible in queuing at the level crossing in 2024 and is too low to have a discernible impact in terms of capacity or safety of the junction. It is also worth considering that the Base does not take account of the former horticultural use of the site which, while not active, remains the lawful use of the site. As identified above in this report the peak AM and PM hours feature a significant proportion of LGV and HGV traffic that would pronounce the effects of queueing in the Baseline scenario.

Table 8.5 – Level crossing capacity analysis – 2028

Scenario	Southbound		Northbound	
	Deg Sat (%)	Queue Length (PCU)	Deg Sat (%)	Queue Length (PCU)
AM				
2028 Base	38.9%	25.3	39.9%	28.6
2028 Base + Committed Development	42.8%	28.9	49%	38.3
<i>Difference from 2028 Base</i>	<i>+3.9%</i>	<i>+3.6</i>	<i>+9.1%</i>	<i>+9.7</i>
2028 Base + Proposed Development	39.6%	25.9	41.5%	30.1
<i>Difference from 2028 Base</i>	<i>+0.7%</i>	<i>+0.6</i>	<i>+1.6%</i>	<i>+1.5</i>
2028 Base + Proposed Development + Committed Development	43.5%	29.6	50.7%	40.5
<i>Difference from 2028 Base</i>	<i>+4.6%</i>	<i>+4.3</i>	<i>+10.8%</i>	<i>+11.9</i>
PM				
2028 Base	64.5%	55.2	33.5%	23.4
2028 Base + Committed Development	75.4%	73.3	38.2%	27.7
<i>Difference from 2028 Base</i>	<i>+10.9%</i>	<i>+18.1</i>	<i>+4.7%</i>	<i>+4.3</i>
2028 Base + Proposed Development	66.2%	58.0	34.0%	23.9
<i>Difference from 2028 Base</i>	<i>+1.7%</i>	<i>+2.8</i>	<i>+0.5%</i>	<i>+0.5</i>
2028 Base + Proposed Development + Committed Development	77.1%	76.6	38.8%	28.2
<i>Difference from 2028 Base</i>	<i>+12.6%</i>	<i>+21.4</i>	<i>+5.3%</i>	<i>+4.8</i>

- 8.25 From **Table 8.5**, compared to 2028 base, with the proposed development applied to the local highway network, during the AM peak hour, there would be an increase of up to one vehicle queuing southbound (i.e. an increase in queue length from 145 metres to 149 metres) and up to two vehicles queuing northbound (i.e. an increase in queue length from 164 metres to 173 metres). This is compared to up to four additional vehicles queuing southbound with committed development applied to the local highway network (i.e. an increase in queue length from 145 metres to 166 metres), and up to 10 vehicles queuing northbound (i.e. an increase in queue length from 164 metres to 220 metres).
- 8.26 During the PM peak hour, with the proposed development applied to the local highway network, there could be up to an additional three vehicles queuing southbound (i.e. an increase in queue length from 317 metres to 334 metres) and up to one additional vehicle queuing northbound (i.e. an increase in queue length from 135 metres to 137 metres). This is compared to up to 19 vehicles queuing southbound with committed development applied to the local highway network (i.e. an increase in queue length from 317 metres to 421 metres), and up to five vehicles queuing northbound (i.e. an increase in queue length from 135 metres to 159 metres).
- 8.27 In scenario 2028 base + proposed development + committed development the northbound queue would not reach the vehicular site access in either of the AM and PM peak hours with queue lengths of 233 metres and 162 metres respectively. The southbound queue length would reach 170 metres in the AM peak hour and 440 metres PM peak hour. In this scenario, again, during the AM peak hour, the southbound queue would not reach the primary school. While it would pass the school access in the PM peak, this queueing occurs outside of school hours.
- 8.28 It can therefore be seen that the proposed development result in negligible in queuing at the level crossing in 2028 and is too low to have a discernible impact in terms of capacity or safety of the junction.

Table 8.6 – Level crossing capacity analysis – 2031

Scenario	Southbound		Northbound	
	Deg Sat (%)	Queue Length (PCU)	Deg Sat (%)	Queue Length (PCU)
AM				
2031 Base	40.0%	26.3	40.9%	29.7
2031 Base + Committed Development	43.9%	30	50.2%	39.6
<i>Difference from 2031 Base</i>	<i>+3.9%</i>	<i>+3.7</i>	<i>+9.3%</i>	<i>+9.9</i>
2031 Base + Proposed Development	40.7%	26.9	42.6%	31.3
<i>Difference from 2031 Base</i>	<i>+0.7%</i>	<i>+0.6</i>	<i>+1.7%</i>	<i>+1.6</i>
2031 Base + Proposed Development + Committed Development	44.6%	30.6	51.8%	41.8
<i>Difference from 2031 Base</i>	<i>+4.6%</i>	<i>+4.3</i>	<i>+10.9%</i>	<i>+12.1</i>
PM				
2031 Base	66.3%	58	34.5%	24.2
2031 Base + Committed Development	77.2%	77.1	39.2%	28.7
<i>Difference from 2031 Base</i>	<i>+10.9%</i>	<i>+19.1</i>	<i>+4.7%</i>	<i>+4.5</i>
2031 Base + Proposed Development	68%	60.7	35%	24.7
<i>Difference from 2031 Base</i>	<i>+1.7%</i>	<i>+2.7</i>	<i>0.5%</i>	<i>+0.5</i>
2031 Base + Proposed Development + Committed Development	78.9%	80.5	39.8%	29.3
<i>Difference from 2031 Base</i>	<i>+12.6%</i>	<i>+22.5</i>	<i>+5.3%</i>	<i>+5.1</i>

- 8.29 From **Table 8.6**, compared to 2031 base, with the proposed development applied to the local highway network, during the AM peak hour, there would be an increase of up to one vehicle queuing southbound (i.e. an increase in queue length from 151 metres to 155 metres) and up to two vehicles queuing northbound (i.e. an increase in queue length from 171 metres to 180 metres). This is compared to up to four additional vehicles queuing southbound with committed development applied to the local highway network (i.e. an increase in queue length from 151 metres to 173 metres), and up to 10 vehicles queuing northbound (i.e. an increase in queue length from 171 metres to 228 metres).
- 8.30 During the PM peak hour, with the proposed development applied to the local highway network, there could be up to an additional three vehicles queuing southbound (i.e. an increase in queue length from 334 metres to 349 metres) and up to one additional vehicle queuing northbound (i.e. an increase in queue length from 139 metres to 142 metres). This is compared to up to 20 vehicles queuing southbound with committed development applied to the local highway network (i.e. an increase in queue length from 334 metres to 443 metres), and up to five vehicles queuing northbound (i.e. an increase in queue length from 139 metres to 165 metres).

- 8.31 During the PM peak hour, the northbound queue is equivalent to circa 175 metres, which does not reach the proposed site access.
- 8.32 In scenario 2031 base + proposed development + committed development, in both AM and PM peak hours, the northbound queue would not reach the vehicular site access with the queue lengths recorded as 240 metres and 168 metres respectively. The southbound queue would extent in this scenario to 176 metres in the AM peak hour and 463 metres PM peak hour. As with other scenarios the southbound queue would not reach the primary school in the AM peak but would pass it in the PM peak.
- 8.33 It can therefore be seen that the proposed development result in negligible in queuing at the level crossing in 2031 and is too low to have a discernible impact in terms of capacity or safety of the junction.
- 8.34 Furthermore, given that when the A29 realignment comes forward, it will allow vehicle to bypass the level crossing, it is therefore considered that the small increase in queuing is acceptable associated with the proposed development and will be significantly reduced with the realigned A29 in place.

War Memorial Roundabout

- 8.35 As set out in **Section 2.0**, the base flows at the War Memorial roundabout are taken from the CATM, to be consistent with the BEW Parcel SC1 and Cala applications.
- 8.36 The War Memorial roundabout has been assessed using ARCADY which forms part of the Junctions 9 software suite.
- 8.37 The outputs of the ARCADY assessments are set out in the following tables with the full output at **Appendix 17**:

Table 8.7

- i. 2024 Base
- ii. 2024 Base + Committed Development
- iii. 2024 Base + Proposed Development
- iv. 2024 Base + Proposed Development + Committed Development

Table 8.8

- v. 2028 Base
- vi. 2028 Base + Committed Development
- vii. 2028 Base + Proposed Development
- viii. 2028 Base + Proposed Development + Committed Development
- ix. 2028 Base + Committed Development + Phase 1 A29 Scheme
- x. 2028 Base + Proposed Development + Committed Development + Phase 1 A29 Scheme

Table 8.9

- xi. 2031 Base
- xii. 2031 Base + Committed Development
- xiii. 2031 Base + Proposed Development
- xiv. 2031 Base + Proposed Development + Committed Development
- xv. 2031 Base + Committed Development + Phase 1 A29 Scheme
- xvi. 2031 Base + Proposed Development + Committed Development + Phase 1 A29 Scheme

- 8.38 A comparison has been carried out of each scenario against the base year.
- 8.39 Additionally, in assessment years 2028 and 2031, a comparison has been carried out of the scenario with and without the Phase 1 A29 realignment scheme.

Table 8.7 – War Memorial roundabout capacity analysis – 2024

Arm	AM			PM		
	Queue (Veh)	Delay (s)	RFC	Queue (Veh)	Delay (s)	RFC
2024 Base						
B2233 Barnham Road	1.8	8.35	0.64	1.1	7.33	0.52
A29 Nyton Road	1	3.75	0.5	0.9	3.84	0.47
A29 Fontwell Avenue	1.1	6.97	0.52	4.5	19.24	0.82
2024 Base + Committed Development						
B2233 Barnham Road	2.4	10.13	0.7	1.4	8.72	0.58
<i>Difference from 2024 Base</i>	<i>+0.6</i>	<i>+1.78</i>	<i>+0.06</i>	<i>+0.3</i>	<i>+1.39</i>	<i>+0.06</i>
A29 Nyton Road	1.3	4.15	0.55	1	4.09	0.5
<i>Difference from 2024 Base</i>	<i>+0.3</i>	<i>+0.4</i>	<i>+0.05</i>	<i>+0.1</i>	<i>+0.25</i>	<i>+0.03</i>
A29 Fontwell Avenue	1.2	7.39	0.54	9.1	36.57	0.92
<i>Difference from 2024 Base</i>	<i>+0.1</i>	<i>+0.42</i>	<i>+0.02</i>	<i>+4.6</i>	<i>+17.33</i>	<i>+0.1</i>
2024 Base + Proposed Development						
B2233 Barnham Road	1.8	8.46	0.64	1.1	7.53	0.53
<i>Difference from 2024 Base</i>	<i>0</i>	<i>+0.11</i>	<i>0</i>	<i>0</i>	<i>+0.2</i>	<i>+0.01</i>
A29 Nyton Road	1.1	3.79	0.51	0.9	3.86	0.47
<i>Difference from 2024 Base</i>	<i>+0.1</i>	<i>+0.04</i>	<i>+0.01</i>	<i>0</i>	<i>+0.02</i>	<i>0</i>
A29 Fontwell Avenue	1.1	7.04	0.52	5	21.14	0.84
<i>Difference from 2024 Base</i>	<i>0</i>	<i>+0.07</i>	<i>0</i>	<i>+0.5</i>	<i>+1.9</i>	<i>+0.02</i>
2024 Base + Proposed Development + Committed Development						
B2233 Barnham Road	2.4	10.27	0.71	1.4	9	0.59
<i>Difference from 2024 Base</i>	<i>+0.6</i>	<i>+1.92</i>	<i>+0.07</i>	<i>+0.3</i>	<i>+1.67</i>	<i>+0.07</i>
A29 Nyton Road	1.3	4.22	0.56	1	4.12	0.5
<i>Difference from 2024 Base</i>	<i>+0.3</i>	<i>+0.47</i>	<i>+0.06</i>	<i>+0.1</i>	<i>+0.28</i>	<i>+0.03</i>
A29 Fontwell Avenue	1.2	7.47	0.54	10.9	43.03	0.93
<i>Difference from 2024 Base</i>	<i>+0.1</i>	<i>+0.5</i>	<i>+0.02</i>	<i>+6.4</i>	<i>+23.79</i>	<i>+0.11</i>

8.40 From **Table 8.7**, it can be seen that in 2024, with no proposed development or committed development on the local highway network, all arms of the junction are working within capacity during both the AM and PM peak hours.

8.41 With the committed development applied to the local highway network, during the AM peak hour, all arms of the junction are working within capacity. During the PM peak hour, the A29 Fontwell Avenue is reaching theoretical capacity with an RFC of 0.92, i.e. an increase in RFC of 0.10 compared to the 2024 base scenario.

8.42 With the proposed development applied to the local highway network, all arms at the junction are working within capacity in both the AM and PM peak hours.

- 8.43 With both the proposed development and committed development applied to the local highway network, during the AM peak hour, all arms of the junction continue to work well within capacity. During the PM peak hour, the A29 Fontwell Avenue has an RFC of 0.93, which is reaching theoretical capacity. However, given that the proposed development is only a small proportion of the increase in RFC, i.e. 0.01, having regard to the particular test in national policy [NPPF115], the impact of the application proposals is acceptable, as it would not contribute to a 'severe' residual cumulative impact on the local highway network.
- 8.44 Therefore, it has been demonstrated that the proposed development is compliant with National Planning Policy having regard to the impact on the War Memorial roundabout and the increase in vehicles queuing is too low to have a discernible impact in terms of capacity or safety of the junction.

Table 8.8 – War Memorial roundabout capacity analysis – 2028

Arm	AM			PM		
	Queue (Veh)	Delay (s)	RFC	Queue (Veh)	Delay (s)	RFC
2028 Base						
B2233 Barnham Road	2.0	9.04	0.66	1.2	7.85	0.55
A29 Nyton Road	1.1	3.89	0.52	0.9	4	0.48
A29 Fontwell Avenue	1.2	7.33	0.54	5.6	23.57	0.86
2028 Base + Committed Development						
B2233 Barnham Road	2.7	11.18	0.73	1.5	9.42	0.61
<i>Difference from 2028 Base</i>	<i>+0.7</i>	<i>+2.14</i>	<i>+0.07</i>	<i>+0.3</i>	<i>+1.57</i>	<i>+0.06</i>
A29 Nyton Road	1.4	4.33	0.57	1.1	4.28	0.52
<i>Difference from 2028 Base</i>	<i>+0.3</i>	<i>+0.44</i>	<i>+0.05</i>	<i>+0.2</i>	<i>+0.28</i>	<i>+0.04</i>
A29 Fontwell Avenue	1.3	7.81	0.56	13.1	50.91	0.95
<i>Difference from 2028 Base</i>	<i>+0.1</i>	<i>+0.48</i>	<i>+0.02</i>	<i>+7.5</i>	<i>+27.34</i>	<i>+0.09</i>
2028 Base + Proposed Development						
B2233 Barnham Road	2.1	9.17	0.67	1.3	8.1	0.56
<i>Difference from 2028 Base</i>	<i>+0.1</i>	<i>+0.13</i>	<i>+0.01</i>	<i>+0.1</i>	<i>+0.25</i>	<i>+0.01</i>
A29 Nyton Road	1.2	3.95	0.53	1	4.04	0.49
<i>Difference from 2028 Base</i>	<i>+0.1</i>	<i>+0.06</i>	<i>+0.01</i>	<i>+0.1</i>	<i>+0.04</i>	<i>+0.01</i>
A29 Fontwell Avenue	1.2	7.41	0.54	6.4	26.54	0.87
<i>Difference from 2028 Base</i>	<i>0</i>	<i>+0.08</i>	<i>0</i>	<i>+0.8</i>	<i>+2.97</i>	<i>+0.01</i>
2028 Base + Proposed Development + Committed Development						
B2233 Barnham Road	2.8	11.38	0.73	1.6	9.72	0.62
<i>Difference from 2028 Base</i>	<i>+0.8</i>	<i>+2.34</i>	<i>+0.07</i>	<i>+0.4</i>	<i>+1.87</i>	<i>+0.07</i>
A29 Nyton Road	1.4	4.41	0.58	1.1	4.32	0.52
<i>Difference from 2028 Base</i>	<i>+0.3</i>	<i>+0.52</i>	<i>+0.06</i>	<i>+0.2</i>	<i>+0.32</i>	<i>+0.04</i>

A29 Fontwell Avenue	1.3	7.89	0.57	16.1	60.23	0.97
<i>Difference from 2028 Base</i>	<i>+0.1</i>	<i>+0.56</i>	<i>+0.03</i>	<i>+10.5</i>	<i>+36.66</i>	<i>+0.11</i>
2028 Base + Committed Development + Phase 1 A29 Scheme						
B2233 Barnham Road	2.1	9.33	0.67	0.3	4.94	0.25
<i>Difference from 2028 Base + Committed Development</i>	<i>-0.6</i>	<i>-1.85</i>	<i>-0.06</i>	<i>-1.2</i>	<i>-4.48</i>	<i>-0.36</i>
A29 Nyton Road	1.3	4.08	0.55	0.8	3.21	0.45
<i>Difference from 2028 Base + Committed Development</i>	<i>-0.1</i>	<i>-0.25</i>	<i>-0.02</i>	<i>-0.3</i>	<i>-1.07</i>	<i>-0.07</i>
A29 Fontwell Avenue	0.7	5.85	0.42	4	17.98	0.8
<i>Difference from 2028 Base + Committed Development</i>	<i>-0.6</i>	<i>-1.96</i>	<i>-0.14</i>	<i>-9.1</i>	<i>-32.93</i>	<i>-0.15</i>
2028 Base + Committed Development + Proposed Development + Phase 1 A29 Scheme						
B2233 Barnham Road	2.1	9.47	0.68	0.3	5.03	0.25
<i>Difference from 2028 Base + Proposed Development + Committed Development</i>	<i>0</i>	<i>0.3</i>	<i>0.01</i>	<i>-1</i>	<i>-3.07</i>	<i>-0.31</i>
A29 Nyton Road	1.3	4.16	0.56	0.8	3.24	0.45
<i>Difference from 2028 Base + Proposed Development + Committed Development</i>	<i>0.1</i>	<i>0.21</i>	<i>0.03</i>	<i>-0.2</i>	<i>-0.8</i>	<i>-0.04</i>
A29 Fontwell Avenue	0.7	5.9	0.42	4.5	19.7	0.82
<i>Difference from 2028 Base + Proposed Development + Committed Development</i>	<i>-0.6</i>	<i>-1.99</i>	<i>-0.15</i>	<i>-11.6</i>	<i>-40.53</i>	<i>-0.15</i>

- 8.45 From **Table 8.8**, it can be seen that in 2028, with no additional traffic applied to the local highway network, during the AM peak hour, all arms of the junction are working within capacity. During the PM peak hour, the A29 Fontwell Avenue is starting to reach theoretical capacity with an RFC of 0.86.
- 8.46 With the committed development applied to the local highway network, during the AM peak hour, all arms of the junction are working within capacity. During the PM peak hour, the A29 Fontwell Avenue is starting to reach theoretical capacity with an RFC of 0.95, i.e. an increase in RFC of 0.09 compared to the 2028 base scenario.
- 8.47 With the proposed development applied to the local highway network, all arms at the junction are working within capacity in the AM peak hour. During the PM peak hour, the A29 Fontwell Avenue has an RFC of 0.87, however, this is an increase of only 0.01 compared to the 2028 base scenario.

- 8.48 With both the proposed development and committed development applied to the local highway network, during the AM peak hour, all arms of the junction continue to work well within capacity. During the PM peak hour, the A29 Fontwell Avenue has an RFC of 0.97, which is reaching theoretical capacity. However, given that the proposed development is only a small proportion of the increase in RFC, i.e. 0.01, it is not considered that the impact of the application site is contrary to national policy requirements (i.e. not a severe residual cumulative impact on the local highway network).
- 8.49 Therefore, it has been demonstrated that the proposed development will not have a severe impact on the War Memorial roundabout and the increase in vehicles queuing is too low to have a discernible impact in terms of capacity or safety of the junction.
- 8.50 With Phase 1 of the A29 scheme applied, all arms are working within theoretical capacity in both the AM and PM peak hours with both the proposed development and committed development applied to the local highway network. It can be seen from **Table 8.8** that there is a significant decrease in queuing, delay and RFC on all arms across the AM and PM peak hours.
- 8.51 Given that the Phase 1 A29 scheme has been granted permission, with construction of the road planned to start in Spring/Summer 2025 and anticipated to be completed by Spring 2027¹, it is considered that appropriate mitigation is in place, and therefore no additional mitigation is required.

Table 8.9 – War Memorial roundabout capacity analysis – 2031

Arm	AM			PM		
	Queue (Veh)	Delay (s)	RFC	Queue (Veh)	Delay (s)	RFC
2031 Base						
B2233 Barnham Road	2.2	9.76	0.69	1.3	8.4	0.57
A29 Nyton Road	1.2	4.02	0.53	1	4.17	0.5
A29 Fontwell Avenue	1.3	7.66	0.56	7.1	29.31	0.89
2031 Base + Committed Development						
B2233 Barnham Road	3	12.31	0.75	1.7	10.07	0.63
<i>Difference from 2031 Base</i>	<i>+0.8</i>	<i>+2.55</i>	<i>+0.06</i>	<i>+0.4</i>	<i>+1.67</i>	<i>+0.06</i>
A29 Nyton Road	1.4	4.49	0.58	1.2	4.47	0.53
<i>Difference from 2031 Base</i>	<i>+0.2</i>	<i>+0.47</i>	<i>+0.05</i>	<i>+0.2</i>	<i>+0.3</i>	<i>+0.03</i>
A29 Fontwell Avenue	1.4	8.19	0.58	18.8	68.74	0.98
<i>Difference from 2031 Base</i>	<i>+0.1</i>	<i>+0.53</i>	<i>+0.02</i>	<i>+11.7</i>	<i>+39.43</i>	<i>+0.09</i>
2031 Base + Proposed Development						
B2233 Barnham Road	2.3	9.92	0.69	1.4	8.65	0.58
<i>Difference from 2031 Base</i>	<i>+0.1</i>	<i>+0.16</i>	<i>0</i>	<i>+0.1</i>	<i>+0.25</i>	<i>+0.01</i>
A29 Nyton Road	1.2	4.09	0.54	1	4.19	0.5

¹ Per WSCC Position at July 2024 and discussions with WSCC officers - www.westsussex.gov.uk/roads-and-travel/roadworks-and-projects/road-projects/a29-realignment-scheme/

<i>Difference from 2031 Base</i>	0	+0.07	+0.01	0	+0.02	0
A29 Fontwell Avenue	1.3	7.74	0.56	8.2	33.43	0.9
<i>Difference from 2031 Base</i>	0	+0.08	0	+1.1	+4.12	+0.01
2031 Base + Proposed Development+ Committed Development						
B2233 Barnham Road	3.1	12.51	0.76	1.7	10.35	0.64
<i>Difference from 2031 Base</i>	+0.9	+2.75	+0.07	+0.4	+1.95	+0.07
A29 Nyton Road	1.5	4.59	0.59	1.2	4.5	0.54
<i>Difference from 2031 Base</i>	+0.3	+0.57	+0.06	+0.2	+0.33	+0.04
A29 Fontwell Avenue	1.4	8.29	0.58	23.4	82.05	1.00
<i>Difference from 2031 Base</i>	+0.1	+0.63	+0.02	+16.3	+52.74	+0.11
2031 Base + Committed Development + Phase 1 A29 Scheme						
B2233 Barnham Road	2.3	10.05	0.7	0.3	5.08	0.26
<i>Difference from 2031 Base + Committed Development</i>	-0.7	-2.26	-0.05	-1.4	-4.99	-0.37
A29 Nyton Road	1.4	4.22	0.57	0.9	3.29	0.46
<i>Difference from 2031 Base + Committed Development</i>	0	-0.27	-0.01	-0.3	-1.18	-0.07
A29 Fontwell Avenue	0.8	6.02	0.43	4.8	21.15	0.83
<i>Difference from 2031 Base + Committed Development</i>	-0.6	-2.17	-0.15	-14	-47.59	-0.15
2031 Base + Proposed Development + Committed Development + Phase 1 A29 Scheme						
B2233 Barnham Road	2.4	10.18	0.70	0.4	5.18	0.26
<i>Difference from 2031 Base + Proposed Development + Committed Development</i>	-0.7	-2.33	-0.06	-1.3	-5.17	-0.38
A29 Nyton Road	1.4	4.31	0.58	0.9	3.31	0.46
<i>Difference from 2031 Base + Proposed Development + Committed Development</i>	-0.1	-0.28	-0.01	-0.3	-1.19	-0.08
A29 Fontwell Avenue	0.8	6.08	0.43	5.4	23.58	0.85
<i>Difference from 2031 Base + Proposed Development + Committed Development</i>	-0.6	-2.21	-0.15	-18	-58.47	-0.15

- 8.52 From **Table 8.9**, it can be seen that in 2031, with no additional traffic applied to the local highway network, during the AM peak hour, all arms of the junction are working within capacity. During the PM peak hour, the A29 Fontwell Avenue is starting to reach theoretical capacity with an RFC of 0.89.
- 8.53 With the committed development applied to the local highway network, during the AM peak hour, all arms of the junction are working within capacity. During the PM peak hour, the A29 Fontwell Avenue is starting to reach theoretical capacity with an RFC of 0.98, i.e. an increase in RFC of 0.09 compared to the 2031 base scenario.
- 8.54 With the proposed development applied to the local highway network, all arms at the junction are working well within capacity in the AM peak hour. During the PM peak hour, the A29 Fontwell Avenue has an RFC of 0.90, however, this is an increase of only 0.01 compared to the 2031 base scenario, which is not considered to be a significant increase.
- 8.55 With both the proposed development and committed development applied to the local highway network, during the AM peak hour, all arms of the junction continue to work well within capacity. During the PM peak hour, the A29 Fontwell Avenue has an RFC of 1.0, which means the junction will reach theoretical capacity. However, given that the proposed development is only a small proportion of the increase in RFC, i.e. 0.01, it is not considered that the impact of the vehicle movements associated with the application site will have a discernible impact on the local highway network.
- 8.56 Therefore, it has been demonstrated that the proposed development conforms with National Planning Policy insofar as it will not result in a severe residual cumulative impact on the local highway network by way of impact on the War Memorial roundabout and the increase in vehicles recorded queuing is too low to have a discernible impact in terms of capacity or safety of the junction.
- 8.57 With Phase 1 of the A29 scheme applied, all arms are working within theoretical capacity in both the AM and PM peak hours with both the proposed development and committed development applied to the local highway network. It can be seen from **Table 8.9** that there is a significant decrease in queuing, delay and RFC on all arms across the AM and PM peak hours.
- 8.58 As set out in **paragraph 8.51**, as the Phase 1 A29 scheme is expected to be completed before 2031, and it has been demonstrated that the roundabout will be working within capacity, it is not considered that additional mitigation is required.
- 8.59 Furthermore, the proposed development will not compromise the delivery of the BEW Local Plan Strategic Allocation.

Saltbox Roundabout

8.60 The Saltbox roundabout has been assessed using ARCADY which forms part of the Junctions 9 software suite, with the full output contained at **Appendix 17**. Two capacity assessment scenarios have been carried out, as follows:

- i. Without any mitigation on the roundabout, i.e. geometry based on the existing roundabout:

Table 8.10

- a. 2024 Base
- b. 2024 Base + Proposed Development
- c. 2024 Base + Committed Development
- d. 2024 Base + Proposed Development + Committed Development

Table 8.11

- e. 2028 Base
- f. 2028 Base + Proposed Development
- g. 2028 Base + Committed Development
- h. 2028 Base + Proposed Development + Committed Development

Table 8.12

- i. 2031 Base
- j. 2031 Base + Proposed Development
- k. 2031 Base + Committed Development
- l. 2031 Base + Proposed Development + Committed Development
- ii. Scenarios 1. a-l with mitigation proposed in ADC's Local Plan (**Tables 8.13-8.15**), which includes:
 - a. Widening on the A259 to provide three entry lanes
 - b. Widening on A29 (southern arm) to provide three entry lanes
 - c. Widening on A29 (northern arm) to provide three entry lanes

8.61 A comparison has been carried out of each scenario against the base year

Table 8.10 – Saltbox roundabout capacity analysis (no mitigation) – 2024

Arm	AM			PM		
	Queue (Veh)	Delay (s)	RFC	Queue (Veh)	Delay (s)	RFC
2024 Base						
A29 (Northern Arm)	0.6	3.44	0.37	1.0	4.40	0.49
A259	5.5	17.7	0.85	3.8	13.12	0.79
Newlands Road	0.3	7.69	0.17	0.4	8.25	0.29
A29 (Southern Arm)	2.7	6.34	0.72	3.8	8.15	0.79
Saltbox	0.7	10.52	0.39	0.9	14.71	0.48
2024 Base + Committed Development						
A29 (Northern Arm)	0.8	3.73	0.42	1.1	4.68	0.52
<i>Difference from 2024 Base</i>	+0.2	+0.29	+0.05	+0.1	+0.28	+0.03
A259	7.1	22.97	0.88	4.4	15.04	0.81
<i>Difference from 2024 Base</i>	+1.6	+5.27	+0.03	+0.6	+1.92	+0.02
Newlands Road	0.3	8.3	0.19	0.5	8.81	0.31
<i>Difference from 2024 Base</i>	0	+0.61	+0.02	+0.1	+0.56	+0.02
A29 (Southern Arm)	2.9	6.75	0.74	4.5	9.46	0.82
<i>Difference from 2024 Base</i>	+0.2	+0.41	+0.02	+0.7	+1.31	+0.03
Saltbox	0.7	11.15	0.41	1.1	17.11	0.51
<i>Difference from 2024 Base</i>	0	+0.63	+0.02	+0.2	+2.4	+0.03
2024 Base + Proposed Development						
A29 (Northern Arm)	0.7	3.52	0.39	1.0	4.48	0.5
<i>Difference from 2024 Base</i>	+0.1	+0.08	+0.02	0	+0.08	+0.01
A259	5.9	18.98	0.86	3.9	13.55	0.80
<i>Difference from 2024 Base</i>	+0.4	+1.28	+0.01	+0.1	+0.43	+0.01
Newlands Road	0.3	7.85	0.18	0.5	8.38	0.3
<i>Difference from 2024 Base</i>	0	+0.16	+0.01	+0.1	+0.13	+0.01
A29 (Southern Arm)	2.7	6.44	0.72	3.9	8.37	0.79
<i>Difference from 2024 Base</i>	0	+0.1	0	+0.1	+0.22	0
Saltbox	0.7	10.70	0.4	0.9	14.97	0.48
<i>Difference from 2024 Base</i>	0	+0.18	+0.01	0	+0.26	0
2024 Base + Committed Development + Proposed Development						
A29 (Northern Arm)	0.8	3.80	0.44	1.1	4.76	0.53
<i>Difference from 2024 Base</i>	+0.2	+0.36	+0.07	+0.1	+0.36	+0.04
A259	7.8	25.16	0.89	4.5	15.53	0.82
<i>Difference from 2024 Base</i>	+2.3	+7.46	+0.04	+0.7	+2.41	+0.03
Newlands Road	0.3	8.53	0.2	0.5	8.94	0.31

<i>Difference from 2024 Base</i>	0	+0.84	+0.03	+0.1	+0.69	+0.02
A29 (Southern Arm)	3	6.87	0.74	4.7	9.74	0.82
<i>Difference from 2024 Base</i>	+0.3	+0.53	+0.02	+0.9	+1.59	+0.03
Saltbox	0.7	11.36	0.41	1.1	17.61	0.52
<i>Difference from 2024 Base</i>	0	+0.84	+0.02	+0.2	+2.9	+0.04

- 8.62 From **Table 8.10**, it can be seen that on all arms of the Saltbox roundabout, traffic associated with the proposed development will have a significantly lesser impact on the junction than the approved committed development when compared to the 2024 base traffic.
- 8.63 It can also be seen that during the AM peak hour of the 2024 base scenario, the A259 has been recorded as starting to reach theoretical capacity, with an RFC of 0.85, however, with the proposed development included on the highway network, the RFC only increases by 0.01, which is not considered to be a significant increase. There is an RFC increase of only 0.03 with the committed development included on the highway network.
- 8.64 With both committed development and proposed development on the local highway network, the A259 has an RFC of 0.89, i.e. an increase of 0.04 RFC. It can also be seen that the queue length is only up to eight vehicles with a delay of up to 26 seconds, which is not considered significant. All other arms are within capacity. Given that the proposed development is only a small proportion of the increase in RFC, it is considered that the impact of the application site on this junction is not significant.
- 8.65 During the PM peak hour, all arms are recorded as within capacity with both committed development and proposed development on the local highway network.
- 8.66 Therefore, it has been demonstrated that the proposed development will not give rise to a residual cumulative impact on the Saltbox roundabout that can be considered 'severe' for the purposes of national policy (NPPF115) while the proposed queues are also too low to have a discernible impact in terms of capacity or safety of the junction.

Table 8.11 – Saltbox roundabout capacity analysis (no mitigation) – 2028

Arm	AM			PM		
	Queue (Veh)	Delay (s)	RFC	Queue (Veh)	Delay (s)	RFC
2028 Base						
A29 (Northern Arm)	0.7	3.61	0.39	1.1	4.75	0.52
A259	7.5	23.58	0.89	4.8	16.15	0.83
Newlands Road	0.3	8.25	0.19	0.5	9.06	0.32
A29 (Southern Arm)	3.1	7.04	0.75	4.5	9.46	0.82
Saltbox	0.8	11.69	0.42	1.1	17.05	0.52
2028 Base + Committed Development						
A29 (Northern Arm)	0.8	3.93	0.44	1.2	5.06	0.54
<i>Difference from 2028 Base</i>	<i>+0.1</i>	<i>+0.32</i>	<i>+0.05</i>	<i>+0.1</i>	<i>+0.31</i>	<i>+0.02</i>
A259	10.3	32.57	0.92	5.6	18.95	0.85
<i>Difference from 2028 Base</i>	<i>+2.8</i>	<i>+8.99</i>	<i>+0.03</i>	<i>+0.8</i>	<i>+2.8</i>	<i>+0.02</i>
Newlands Road	0.3	8.94	0.21	0.6	9.69	0.34
<i>Difference from 2028 Base</i>	<i>0</i>	<i>+0.69</i>	<i>+0.02</i>	<i>+0.1</i>	<i>+0.63</i>	<i>+0.02</i>
A29 (Southern Arm)	3.3	7.52	0.76	5.5	11.28	0.85
<i>Difference from 2028 Base</i>	<i>+0.2</i>	<i>+0.48</i>	<i>+0.01</i>	<i>+1</i>	<i>+1.82</i>	<i>+0.03</i>
Saltbox	0.8	12.48	0.44	1.3	20.72	0.57
<i>Difference from 2028 Base</i>	<i>0</i>	<i>+0.79</i>	<i>+0.02</i>	<i>+0.2</i>	<i>+3.67</i>	<i>+0.05</i>
2028 Base + Proposed Development						
A29 (Northern Arm)	0.7	3.69	0.41	1.1	4.83	0.52
<i>Difference from 2028 Base</i>	<i>0</i>	<i>+0.08</i>	<i>+0.02</i>	<i>0</i>	<i>+0.08</i>	<i>0</i>
A259	8.1	25.6	0.9	4.9	16.72	0.83
<i>Difference from 2028 Base</i>	<i>+0.6</i>	<i>+2.02</i>	<i>+0.01</i>	<i>+0.1</i>	<i>+0.57</i>	<i>0</i>
Newlands Road	0.3	8.42	0.19	0.5	9.2	0.33
<i>Difference from 2028 Base</i>	<i>0</i>	<i>+0.17</i>	<i>0</i>	<i>0</i>	<i>+0.14</i>	<i>+0.01</i>
A29 (Southern Arm)	3.1	7.15	0.75	4.7	9.74	0.82
<i>Difference from 2028 Base</i>	<i>0</i>	<i>+0.11</i>	<i>0</i>	<i>+0.2</i>	<i>+0.28</i>	<i>0</i>
Saltbox	0.8	11.88	0.43	1.1	17.64	0.53
<i>Difference from 2028 Base</i>	<i>0</i>	<i>+0.19</i>	<i>+0.01</i>	<i>0</i>	<i>+0.59</i>	<i>+0.01</i>
2028 Base + Committed Development + Proposed Development						
A29 (Northern Arm)	0.9	4.01	0.46	1.3	5.17	0.55
<i>Difference from 2028 Base</i>	<i>+0.2</i>	<i>+0.4</i>	<i>+0.07</i>	<i>+0.2</i>	<i>+0.42</i>	<i>+0.03</i>
A259	11.5	36.50	0.93	5.9	19.84	0.86
<i>Difference from 2028 Base</i>	<i>+4</i>	<i>+12.92</i>	<i>+0.04</i>	<i>+1.1</i>	<i>+3.69</i>	<i>+0.03</i>
Newlands Road	0.3	9.14	0.21	0.6	9.89	0.35

<i>Difference from 2028 Base</i>	0	+0.91	+0.02	+0.1	+0.83	+0.03
A29 (Southern Arm)	3.4	7.65	0.77	5.7	11.7	0.85
<i>Difference from 2028 Base</i>	+0.3	+0.61	+0.02	+1.2	+2.24	+0.03
Saltbox	0.8	12.66	0.45	1.4	21.66	0.58
<i>Difference from 2028 Base</i>	0	+0.97	+0.03	+0.3	+4.61	+0.06

- 8.67 From **Table 8.11**, it can be seen that on all arms of the Saltbox roundabout, traffic associated with the proposed development will have a significantly lesser impact on the than the approved committed development when compared to the 2028 base traffic.
- 8.68 It can also be seen that during the AM peak hour of the 2028 base scenario, the A259 has been recorded as starting to reach theoretical capacity, with an RFC of 0.89, however, with the proposed development included on the highway network, the RFC only increases by 0.01, which is not considered to be a significant increase. There is an RFC increase of only 0.03 with the committed development included on the highway network.
- 8.69 With both committed development and proposed development on the local highway network, the A259 has an RFC of 0.93, i.e. an increase in RFC of 0.04. It can also be seen that the queue length is only up to 11 vehicles with a delay of up to 37 seconds, which is not considered severe. All other arms are within capacity. Given that the proposed development is only a small proportion of the increase in RFC, it is not considered that the impact of the application site can be considered significant.
- 8.70 During the PM peak hour, with both committed development and proposed development on the local highway network, the A259 and A29 (southern arm) are shown to have an RFC of 0.86 and 0.85 respectively. However, the queue lengths are only six vehicles on each arm, with a delay of up to 20 seconds on the A259 and up to 12 seconds on the A29 (southern arm) which is not considered a significant delay. All other arms are within capacity.
- 8.71 It has been demonstrated that the impact of the development traffic on the Saltbox roundabout does not result in a severe residual cumulative impact on the local highway network, and again, the queues are too low to have a discernible impact in terms of capacity or safety of the junction.

Table 8.12 – Saltbox roundabout capacity analysis (no mitigation) – 2031

Arm	AM			PM		
	Queue (Veh)	Delay (s)	RFC	Queue (Veh)	Delay (s)	RFC
2031 Base						
A29 (Northern Arm)	0.7	3.76	0.41	1.2	5.09	0.54
A259	10.1	31.41	0.92	6.0	20.13	0.86
Newlands Road	0.3	8.75	0.20	0.6	9.87	0.35
A29 (Southern Arm)	3.5	7.72	0.77	5.4	11.05	0.84
Saltbox	0.9	12.84	0.45	1.3	20.26	0.57
2031 Base + Committed Development						
A29 (Northern Arm)	0.9	4.12	0.46	1.3	5.46	0.57
<i>Difference from 2031 Base</i>	<i>+0.2</i>	<i>+0.36</i>	<i>+0.05</i>	<i>+0.1</i>	<i>+0.37</i>	<i>+0.03</i>
A259	15.3	46.65	0.96	7.4	24.63	0.89
<i>Difference from 2031 Base</i>	<i>+5.2</i>	<i>+15.24</i>	<i>+0.04</i>	<i>+1.4</i>	<i>+4.5</i>	<i>+0.03</i>
Newlands Road	0.3	9.5	0.22	0.6	10.61	0.37
<i>Difference from 2031 Base</i>	<i>0</i>	<i>+0.75</i>	<i>+0.02</i>	<i>0</i>	<i>+0.74</i>	<i>+0.02</i>
A29 (Southern Arm)	3.8	8.3	0.78	6.8	13.6	0.87
<i>Difference from 2031 Base</i>	<i>+0.3</i>	<i>+0.58</i>	<i>+0.01</i>	<i>+1.4</i>	<i>+2.55</i>	<i>+0.03</i>
Saltbox	0.9	13.80	0.47	1.7	25.48	0.63
<i>Difference from 2031 Base</i>	<i>0</i>	<i>+0.96</i>	<i>+0.02</i>	<i>+0.4</i>	<i>+5.22</i>	<i>+0.06</i>
2031 Base + Proposed Development						
A29 (Northern Arm)	0.8	3.85	0.42	1.2	5.18	0.55
<i>Difference from 2031 Base</i>	<i>+0.1</i>	<i>+0.09</i>	<i>+0.01</i>	<i>0</i>	<i>+0.09</i>	<i>+0.01</i>
A259	11.2	34.77	0.93	6.3	21.11	0.87
<i>Difference from 2031 Base</i>	<i>+1.1</i>	<i>+3.36</i>	<i>+0.01</i>	<i>+0.3</i>	<i>+0.98</i>	<i>+0.01</i>
Newlands Road	0.3	8.93	0.21	0.6	10.05	0.35
<i>Difference from 2031 Base</i>	<i>0</i>	<i>+0.18</i>	<i>+0.01</i>	<i>0</i>	<i>+0.18</i>	<i>0</i>
A29 (Southern Arm)	3.5	7.85	0.77	5.6	11.45	0.85
<i>Difference from 2031 Base</i>	<i>0</i>	<i>+0.13</i>	<i>0</i>	<i>+0.2</i>	<i>+0.4</i>	<i>+0.01</i>
Saltbox	0.9	13.09	0.46	1.4	21.02	0.58
<i>Difference from 2031 Base</i>	<i>0</i>	<i>+0.25</i>	<i>+0.01</i>	<i>+0.1</i>	<i>+0.76</i>	<i>+0.01</i>
2031 Base + Committed Development + Proposed Development						
A29 (Northern Arm)	0.9	4.2	0.48	1.4	5.57	0.58
<i>Difference from 2031 Base</i>	<i>+0.2</i>	<i>+0.44</i>	<i>0.07</i>	<i>+0.2</i>	<i>+0.48</i>	<i>+0.04</i>
A259	17.5	52.69	0.97	7.8	25.86	0.89
<i>Difference from 2031 Base</i>	<i>+7.4</i>	<i>+21.28</i>	<i>+0.05</i>	<i>+1.8</i>	<i>+5.73</i>	<i>+0.03</i>
Newlands Road	0.3	9.71	0.23	0.6	10.82	0.37

<i>Difference from 2031 Base</i>	0	+0.96	+0.03	0	+0.95	+0.02
A29 (Southern Arm)	3.9	8.47	0.79	7.1	14.14	0.88
<i>Difference from 2031 Base</i>	+0.4	+0.75	+0.02	+1.7	+3.09	+0.04
Saltbox	0.9	14.05	0.48	1.7	26.68	0.64
<i>Difference from 2031 Base</i>	0	+1.21	+0.03	+0.4	+6.42	+0.07

- 8.72 From **Table 8.12**, it can be seen that on all arms of the Saltbox roundabout, traffic associated with the proposed development will have a significantly lesser impact on the than the approved committed development when compared to the 2031 base traffic.
- 8.73 It can also be seen that during the AM peak hour of the 2031 base scenario, the A259 has been recorded as starting to reach theoretical capacity, with an RFC of 0.92, however, with the proposed development included on the highway network, the RFC only increases by 0.01 which is not considered to be a significant increase. There is an RFC increase of 0.04 with the committed development included on the highway network.
- 8.74 With both committed development and proposed development on the local highway network, during the AM peak hour, the A259 has an RFC of 0.97, i.e. an increase in RFC of 0.05, with a queue length of up to 18 vehicles with a delay of up to 53 seconds, which is not considered a significant delay. All other arms are within capacity. Given that the proposed development is only a small proportion of the increase in RFC, it is not considered that the impact of the application site is significant.
- 8.75 During the PM peak hour, in the 2031 base scenario, the A259 has been recorded as starting to reach theoretical capacity, with an RFC of 0.86, however, with the proposed development included on the highway network, the RFC only increases by 0.01 which is not considered to be a significant increase, whereas there is an RFC increase of only 0.03 with the committed development included on the highway network.
- 8.76 With both committed development and proposed development on the local highway network, during the PM peak hour, the A259 and A29 (southern arm) are shown to have an RFC of 0.89 and 0.88 respectively. However, the queue lengths are only eight vehicles on each arm, with a delay of up to 26 seconds on the A259 and up to 15 seconds on the A29 (southern arm) which is not considered to be a significant delay. All other arms are within capacity.
- 8.77 Therefore, it has been demonstrated that the proposed development will not have a 'severe' residual cumulative impact on the Saltbox roundabout and the queues are too low to have a discernible impact in terms of capacity or safety of the junction.
- 8.78 To demonstrate how the roundabout will operate with the proposed mitigation in place, a capacity analysis of the Saltbox roundabout with the proposed mitigation geometry has been carried out, and is set out in **Table 8.13**, with the full results contained in **Appendix 17**.

Table 8.13 – Saltbox roundabout capacity analysis (with mitigation) – 2024

Arm	AM			PM		
	Queue (Veh)	Delay (s)	RFC	Queue (Veh)	Delay (s)	RFC
2024 Base						
A29 (Northern Arm)	0.4	2.04	0.26	0.5	2.35	0.34
A259	1.8	5.66	0.63	1.5	5.02	0.59
Newlands Road	0.3	7.75	0.18	0.5	8.31	0.3
A29 (Southern Arm)	0.9	2.03	0.45	1.0	2.15	0.49
Saltbox	0.6	9.70	0.37	0.8	13.03	0.45
2024 Base + Committed Development						
A29 (Northern Arm)	0.4	2.14	0.30	0.6	2.43	0.36
<i>Difference from 2024 Base</i>	0	+0.1	+0.04	+0.1	+0.08	+0.02
A259	2	6.18	0.65	1.6	5.30	0.60
<i>Difference from 2024 Base</i>	+0.2	+0.52	+0.02	+0.1	+0.28	+0.01
Newlands Road	0.3	8.35	0.19	0.5	8.85	0.31
<i>Difference from 2024 Base</i>	0	+0.6	+0.01	0	+0.54	+0.01
A29 (Southern Arm)	0.9	2.08	0.46	1.1	2.23	0.51
<i>Difference from 2024 Base</i>	0	+0.05	+0.01	+0.1	+0.08	+0.02
Saltbox	0.6	10.23	0.39	0.9	14.83	0.48
<i>Difference from 2024 Base</i>	0	+0.53	+0.02	+0.1	+1.8	+0.03
2024 Base + Proposed Development						
A29 (Northern Arm)	0.4	2.07	0.27	0.5	2.37	0.34
<i>Difference from 2024 Base</i>	0	+0.03	+0.01	0	+0.02	0
A259	1.9	5.80	0.64	1.5	5.09	0.59
<i>Difference from 2024 Base</i>	+0.1	+0.14	+0.01	0	+0.07	0
Newlands Road	0.3	7.90	0.18	0.5	8.43	0.30
<i>Difference from 2024 Base</i>	0	+0.15	0	0	+0.12	0
A29 (Southern Arm)	0.9	2.05	0.45	1	2.16	0.50
<i>Difference from 2024 Base</i>	0	+0.02	0	0	+0.01	+0.01
Saltbox	0.6	9.86	0.38	0.8	13.23	0.45
<i>Difference from 2024 Base</i>	0	+0.16	+0.01	0	+0.2	0
2024 Base + Committed Development + Proposed Development						
A29 (Northern Arm)	0.5	2.15	0.31	0.6	2.45	0.36
<i>Difference from 2024 Base</i>	+0.1	+0.11	+0.05	+0.1	+0.1	+0.02
A259	2.1	6.35	0.66	1.6	5.37	0.61
<i>Difference from 2024 Base</i>	+0.3	+0.69	+0.03	+0.1	+0.35	+0.02
Newlands Road	0.3	8.57	0.2	0.5	8.98	0.32

<i>Difference from 2024 Base</i>	0	+0.82	+0.02	0	+0.67	+0.02
A29 (Southern Arm)	0.9	2.09	0.46	1.1	2.24	0.52
<i>Difference from 2024 Base</i>	0	+0.06	+0.01	+0.1	+0.09	+0.03
Saltbox	0.7	10.4	0.39	0.9	15.2	0.48
<i>Difference from 2024 Base</i>	+0.1	+0.7	+0.02	+0.1	+2.17	+0.03

8.79 From **Table 8.13**, it can be seen that on all arms of the Saltbox roundabout with the planned mitigation proposed in ADC's Local Plan in place, traffic associated with the proposed development will have a significantly lesser impact on the than the approved committed development when compared to the 2024 base traffic.

8.80 It can also be seen that all arms of the roundabout are operating within theoretical capacity in all scenarios.

Table 8.14 – Saltbox roundabout capacity analysis (with mitigation) – 2028

Arm	AM			PM		
	Queue (Veh)	Delay (s)	RFC	Queue (Veh)	Delay (s)	RFC
2028 Base						
A29 (Northern Arm)	0.4	2.1	0.27	0.6	2.46	0.36
A259	2.1	6.2	0.66	1.7	5.44	0.62
Newlands Road	0.3	8.3	0.19	0.5	9.09	0.32
A29 (Southern Arm)	0.9	2.1	0.47	1.1	2.23	0.51
Saltbox	0.7	10.68	0.40	0.9	14.79	0.48
2028 Base + Committed Development						
A29 (Northern Arm)	0.5	2.21	0.31	0.6	2.54	0.38
<i>Difference from 2028 Base</i>	+0.1	+0.11	+0.04	0	+0.08	+0.02
A259	2.3	6.83	0.68	1.8	5.75	0.63
<i>Difference from 2028 Base</i>	+0.2	+0.63	+0.02	+0.1	+0.31	+0.01
Newlands Road	0.3	8.99	0.21	0.6	9.7	0.34
<i>Difference from 2028 Base</i>	0	+0.69	+0.02	+0.1	+0.61	+0.02
A29 (Southern Arm)	1	2.15	0.48	1.2	2.32	0.53
<i>Difference from 2028 Base</i>	+0.1	+0.05	+0.01	+0.1	+0.09	+0.02
Saltbox	0.7	11.32	0.42	1.1	17.44	0.53
<i>Difference from 2028 Base</i>	0	+0.64	+0.02	+0.2	+2.65	+0.05
2028 Base + Proposed Development						
A29 (Northern Arm)	0.4	2.13	0.28	0.6	2.48	0.36
<i>Difference from 2028 Base</i>	0	+0.03	+0.01	0	+0.02	0
A259	2.1	6.36	0.67	1.7	5.51	0.62
<i>Difference from 2028 Base</i>	0	+0.16	+0.01	0	+0.07	0

Newlands Road	0.3	8.47	0.19	0.5	9.23	0.33
<i>Difference from 2028 Base</i>	0	+0.17	0	0	+0.14	+0.01
A29 (Southern Arm)	0.9	2.11	0.47	1.1	2.25	0.52
<i>Difference from 2028 Base</i>	0	+0.01	0	0	+0.02	+0.01
Saltbox	0.7	10.83	0.41	1.0	15.23	0.49
<i>Difference from 2028 Base</i>	0	+0.15	+0.01	+0.1	+0.44	+0.01
2028 Base + Committed Development + Proposed Development						
A29 (Northern Arm)	0.5	2.23	0.32	0.6	2.56	0.38
<i>Difference from 2028 Base</i>	+0.1	+0.13	+0.05	0	+0.1	+0.02
A259	2.3	7.04	0.69	1.8	5.84	0.64
<i>Difference from 2028 Base</i>	+0.2	+0.84	+0.03	+0.1	+0.4	+0.02
Newlands Road	0.3	9.2	0.21	0.6	9.9	0.35
<i>Difference from 2028 Base</i>	0	+0.9	+0.02	+0.1	+0.81	+0.03
A29 (Southern Arm)	1	2.16	0.48	1.2	2.34	0.53
<i>Difference from 2028 Base</i>	+0.1	+0.06	+0.01	+0.1	+0.11	+0.02
Saltbox	0.7	11.47	0.42	1.2	18.09	0.54
<i>Difference from 2028 Base</i>	0	+0.79	+0.02	+0.3	+3.3	+0.06

8.81 From **Table 8.14**, it can be seen that on all arms of the Saltbox roundabout with the proposed mitigation in place, traffic associated with the proposed development will have a significantly lesser impact on the than the approved committed development when compared to the 2028 base traffic.

8.82 It can also be seen that all arms of the roundabout are operating within theoretical capacity in all scenarios.

Table 8.15 – Saltbox roundabout capacity analysis (with mitigation) – 2031

Arm	AM			PM		
	Queue (Veh)	Delay (s)	RFC	Queue (Veh)	Delay (s)	RFC
2031 Base						
A29 (Northern Arm)	0.4	2.16	0.28	0.6	2.56	0.37
A259	2.3	6.73	0.69	1.8	5.86	0.64
Newlands Road	0.3	8.81	0.21	0.6	9.88	0.35
A29 (Southern Arm)	1	2.16	0.48	1.2	2.31	0.53
Saltbox	0.8	11.61	0.43	1.1	17.12	0.53
2031 Base + Committed Development						
A29 (Northern Arm)	0.5	2.27	0.32	0.7	2.65	0.39
<i>Difference from 2031 Base</i>	<i>+0.1</i>	<i>+0.11</i>	<i>+0.04</i>	<i>+0.1</i>	<i>+0.09</i>	<i>+0.02</i>
A259	2.6	7.48	0.71	2	6.24	0.66
<i>Difference from 2031 Base</i>	<i>+0.3</i>	<i>+0.75</i>	<i>+0.02</i>	<i>+0.2</i>	<i>+0.38</i>	<i>+0.02</i>
Newlands Road	0.3	9.59	0.22	0.6	10.61	0.37
<i>Difference from 2031 Base</i>	<i>0</i>	<i>+0.78</i>	<i>+0.01</i>	<i>0</i>	<i>+0.73</i>	<i>+0.02</i>
A29 (Southern Arm)	1	2.21	0.49	1.2	2.41	0.55
<i>Difference from 2031 Base</i>	<i>0</i>	<i>+0.05</i>	<i>+0.01</i>	<i>0</i>	<i>+0.1</i>	<i>+0.02</i>
Saltbox	0.8	12.39	0.45	1.4	20.62	0.58
<i>Difference from 2031 Base</i>	<i>0</i>	<i>+0.78</i>	<i>+0.02</i>	<i>+0.3</i>	<i>+3.5</i>	<i>+0.05</i>
2031 Base + Proposed Development						
A29 (Northern Arm)	0.4	2.19	0.29	0.6	2.58	0.38
<i>Difference from 2031 Base</i>	<i>0</i>	<i>+0.03</i>	<i>+0.01</i>	<i>0</i>	<i>+0.02</i>	<i>+0.01</i>
A259	2.4	6.92	0.69	1.9	5.95	0.64
<i>Difference from 2031 Base</i>	<i>+0.1</i>	<i>+0.19</i>	<i>0</i>	<i>+0.1</i>	<i>+0.09</i>	<i>0</i>
Newlands Road	0.3	9.00	0.21	0.6	10.06	0.35
<i>Difference from 2031 Base</i>	<i>0</i>	<i>+0.19</i>	<i>0</i>	<i>0</i>	<i>+0.18</i>	<i>0</i>
A29 (Southern Arm)	1	2.18	0.48	1.2	2.33	0.53
<i>Difference from 2031 Base</i>	<i>0</i>	<i>+0.02</i>	<i>0</i>	<i>0</i>	<i>+0.02</i>	<i>0</i>
Saltbox	0.8	11.81	0.43	1.2	17.66	0.53
<i>Difference from 2031 Base</i>	<i>0</i>	<i>+0.2</i>	<i>0</i>	<i>+0.1</i>	<i>+0.54</i>	<i>0</i>
2031 Base + Committed Development + Proposed Development						
A29 (Northern Arm)	0.5	2.29	0.33	0.7	2.67	0.40
<i>Difference from 2031 Base</i>	<i>+0.1</i>	<i>+0.13</i>	<i>+0.05</i>	<i>+0.1</i>	<i>+0.11</i>	<i>+0.03</i>
A259	2.6	7.74	0.72	2	6.34	0.66
<i>Difference from 2031 Base</i>	<i>+0.3</i>	<i>+1.01</i>	<i>+0.03</i>	<i>+0.2</i>	<i>+0.48</i>	<i>+0.02</i>
Newlands Road	0.4	9.85	0.23	0.6	10.82	0.37

<i>Difference from 2031 Base</i>	<i>+0.1</i>	<i>+1.04</i>	<i>+0.02</i>	<i>0</i>	<i>+0.94</i>	<i>+0.02</i>
A29 (Southern Arm)	1.0	2.22	0.49	1.3	2.43	0.55
<i>Difference from 2031 Base</i>	<i>0</i>	<i>+0.06</i>	<i>+0.01</i>	<i>+0.1</i>	<i>+0.12</i>	<i>+0.02</i>
Saltbox	0.8	12.60	0.45	1.4	21.48	0.59
<i>Difference from 2031 Base</i>	<i>0</i>	<i>+0.99</i>	<i>+0.02</i>	<i>+0.3</i>	<i>+4.36</i>	<i>+0.06</i>

8.83 From **Table 8.15**, it can be seen that on all arms of the Saltbox roundabout with the planned mitigation proposed in ADC's Local Plan in place, traffic associated with the proposed development will have a significantly lesser impact on the than the approved committed development when compared to the 2031 base traffic.

8.84 It can also be seen that all arms of the roundabout are operating within theoretical capacity in all scenarios.

8.85 It is therefore not considered that any further mitigation is required at the roundabout. It is also confirmed that the additional vehicular movements associated by the proposed development will not result in any significant impact on residual capacity or delay, when compared to the roundabout with committed development included and the impact is too low to have a discernible impact in terms of capacity or safety of the junction.

Rowan Way

8.86 The impact of development traffic at the A259 Rowan Way/A29 Shripney Road/Steining Way has been considered.

8.87 The distribution of traffic at the roundabout has been based on the results on an MCC survey carried out in September 2023.

8.88 The distribution of development traffic for the the AM and PM peak hour periods at the Rowan Way roundabout is shown in **Figure 8.2** and **Figure 8.3**, respectively.

Figure 8.2 – AM peak hour trip distribution at Rowan Way Roundabout

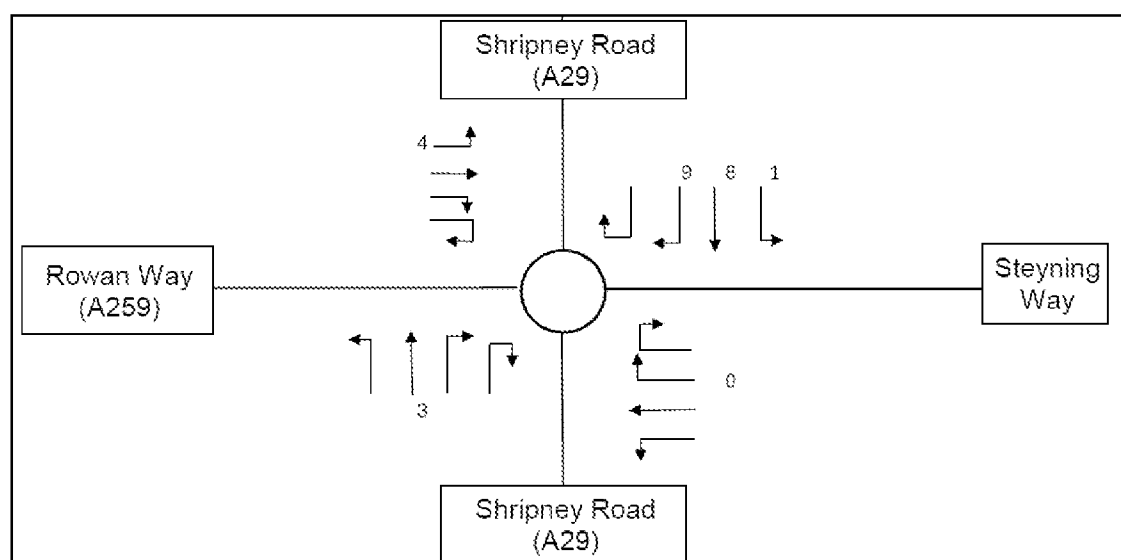
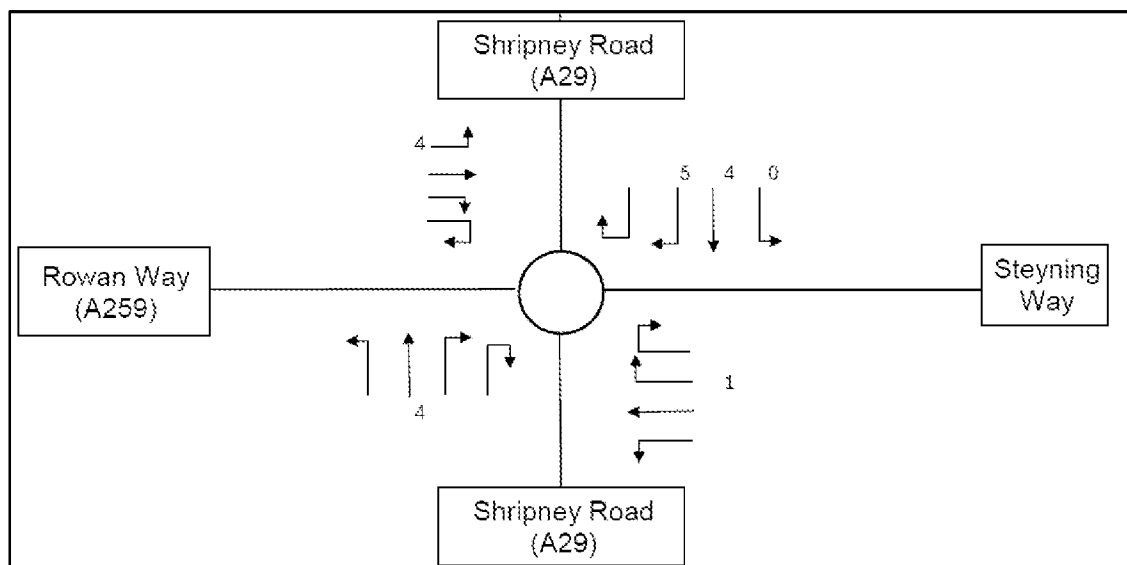


Figure 8.3 – PM peak hour trip distribution at Rowan Way Roundabout



8.89 From **Figure 8.2** and **8.3** it can be seen that the amount of development traffic arising from the application site at the Rowan Way roundabout is too low to have a significant cumulative impact on safety or capacity 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 is required.

Strategic Road Network

8.90 The impact of development traffic at the following junctions with the A27(T) have been considered:

- i. The Fontwell East roundabout to the north connecting to the A27(T)
- ii. The Fontwell West roundabout to the north connecting to the A27(T)
- iii. The Bognor Road junction to the west connecting to the A27(T)

8.91 The distribution to the three 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, and have been used to demonstrate the impact of the development on the SRN as part of the AL/129/21/OUT and AL/70/23/OUT applications, which was agreed by National Highways.

8.92 The distribution of development traffic for the the AM and PM peak hour periods is shown in **Figure 8.4** and **Figure 8.5**, respectively.

Figure 8.4 – Junctions with the A27(T) (AM peak vehicle trip distribution)

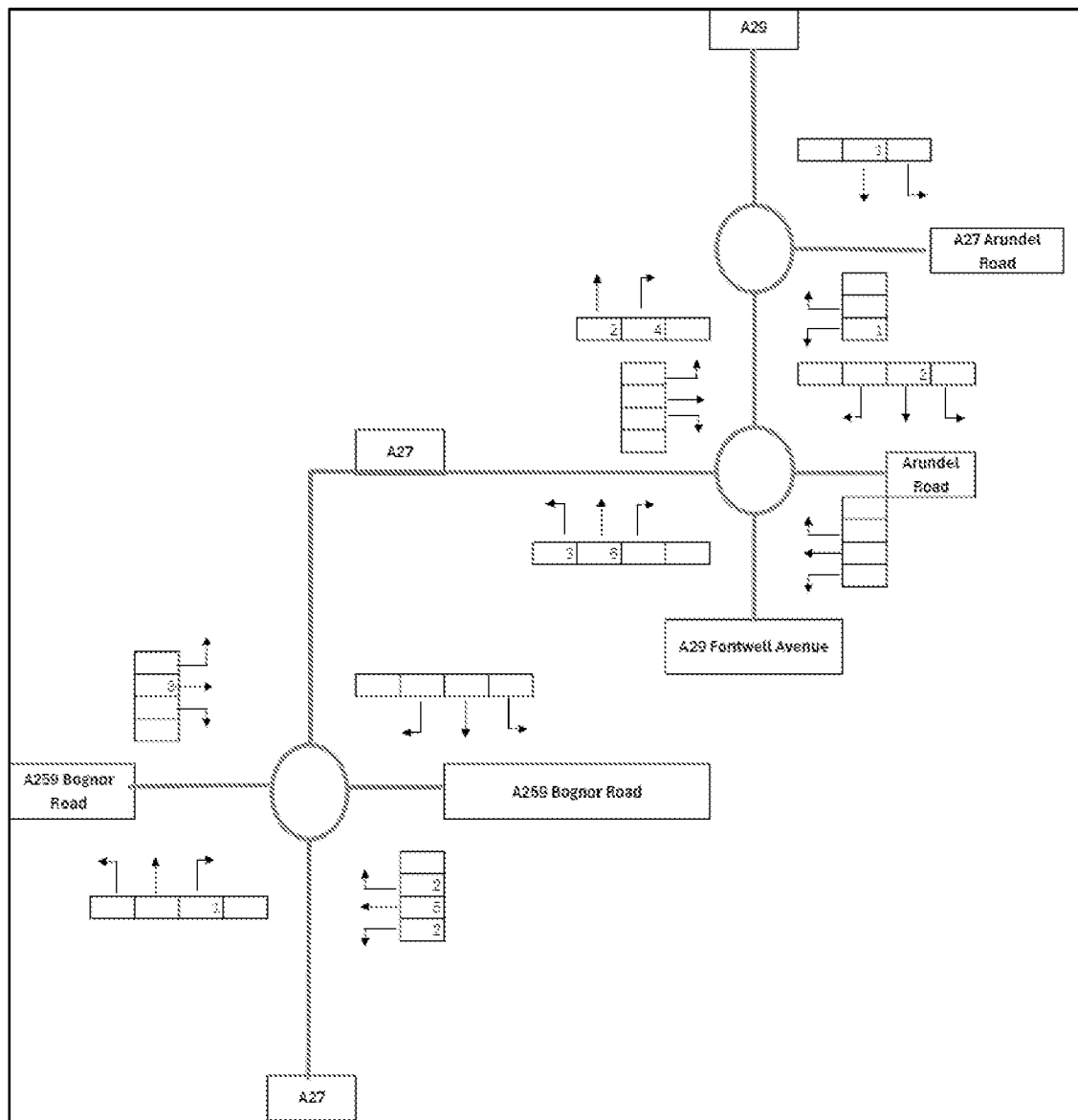
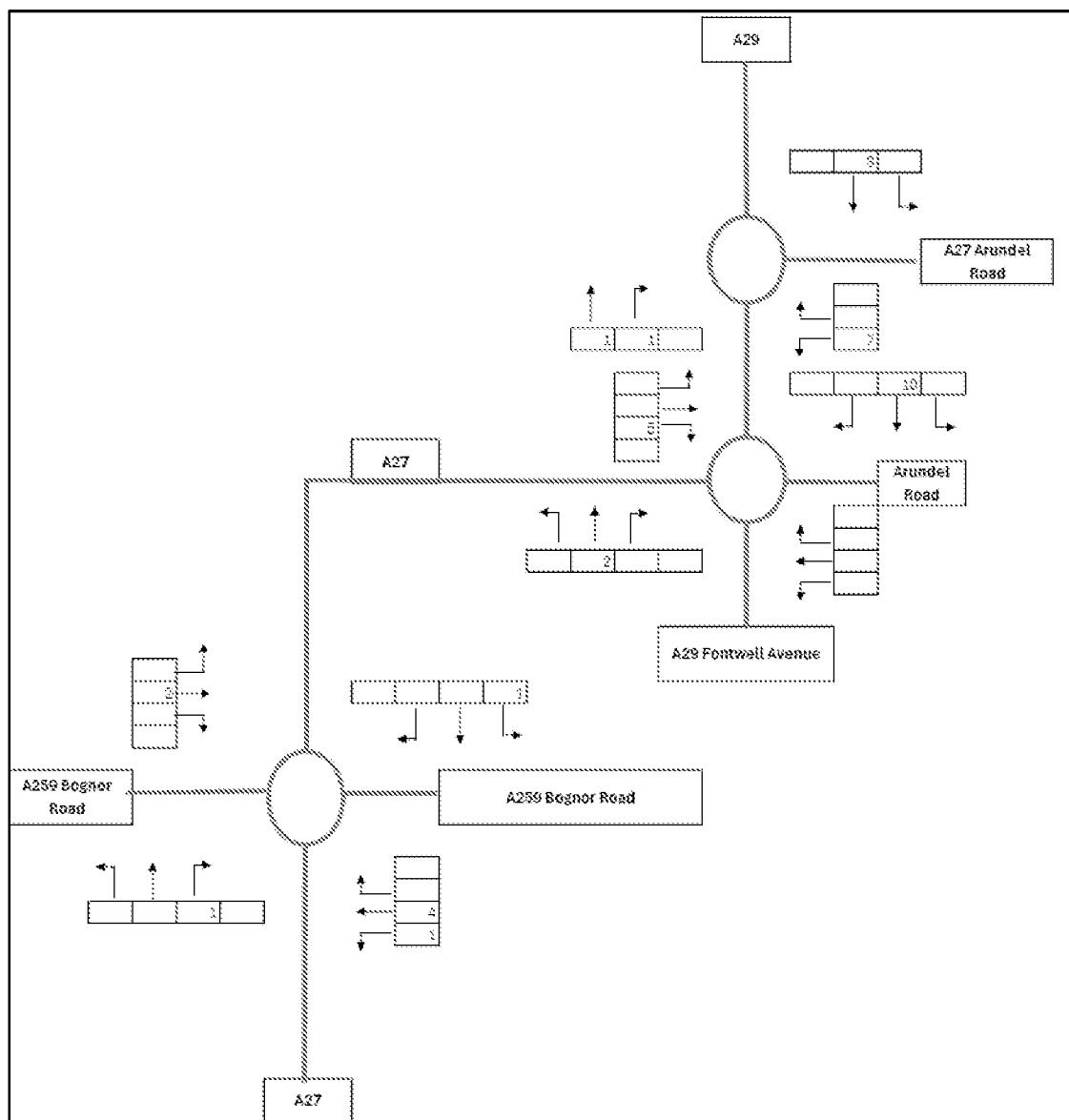


Figure 8.5 – Junctions with the A27(T) (PM peak vehicle trip distribution)



8.93 From **Figure 8.4** and **8.5** 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.

9.0 Summary and Conclusions

- 9.1 This Transport Assessment has been prepared in support of a forthcoming outline planning application for a residential development with up to 130 dwellings on land at Woodgate Nurseries, Lidsey Road, Woodgate.
- 9.2 Pre-application discussions were held with WSCC Highways, with the comments forming the basis of this Transport Assessment.
- 9.3 Vehicular access for the application site will be via a ghost right turn junction arrangement approved as part of application AL/129/21/OUT and an additional pedestrian/cycle access will be provided along the existing private access road, which will be closed to traffic.
- 9.4 The application is supported by a Residential Travel Plan, also prepared by HTp (ref: HTp/2401/TP/01).
- 9.5 The appropriate tests are set out by national policy include paragraphs 114-118. In summary:
 - i. The site is close to a range of local services and facilities including public transport that are accessible on foot and by cycle, including the pedestrian and cycle connectivity provided
 - ii. A review of the local road safety history has confirmed there are no underlying issues, as requested by WSCC Highways
 - iii. The site access junction with Lidsey Road agreed for AL/129/21/OUT is appropriate to serve the application proposals, with the ghost right turn lane an appropriate length to accommodate the expected queue lengths
 - iv. The proposed 'KEEP CLEAR' markings at the approved site access and the pedestrian/cycle crossing have been subject to an independent Stage 1 Road Safety Audit and the recommendations considered
 - v. The proposed development is policy compliant in transport development terms
 - vi. The pedestrian and cycle linkages to the local highway network are appropriate to ensure that the application proposal is suitably connected to the wider area, including the new pedestrian/cycle path along the existing private access road with Lidsey Road, which will also be used as a secondary emergency access and connections to the existing PRow
 - vii. The number and layout of parking spaces proposed are appropriate
 - viii. The provision and storage of cycle parking is appropriate
 - ix. Servicing and the strategy for the collection of waste and recycling is appropriate
 - x. The development traffic can be accommodated within the ghost right turn lane provided as part of the agreed access arrangement
 - xi. The development traffic will not result in a significant increase in queuing of vehicles at the level crossing

- xii. The development traffic arising at the following junctions is too low to have a discernible impact in terms of capacity or safety:
 - a. The War Memorial roundabout to the north
 - b. The Saltbox and Rowan Way roundabouts to the south
 - c. The trunk road junctions with the A27(T), including
 - The Fontwell East roundabout to the north connecting to the A27(T)
 - The Fontwell West roundabout to the north connecting to the A27(T)
 - The Bognor Road junction to the west connecting to the A27(T)
- 9.6 Having regard to the tests in the NPPF and local planning policies which must be in conformity with the Framework, it is finally concluded that the proposals are acceptable in transport development terms. They will not have any unacceptable impacts on highway safety nor will any severe residual cumulative effects on the road network arise.

Appendix 1

WSCC Highways Pre-Application Correspondence

**WEST SUSSEX COUNTY COUNCIL
HIGHWAYS PRE-APPLICATION CONSULTATION**

TO:	Organisation: Highgate Transportation FAO: Alice Howse/Fiona Bennett
FROM:	WSCC - Highway Authority
DATE:	13 May 2024
LOCATION:	Land at and adjoining Woodgate Nursery, Lidsey Road, Woodgate PO20 3SU
SUBJECT:	Internal Reference: PRE-31-24 Up to 150 residential dwellings on land at Woodgate Nurseries and Adjacent Land, to the west of Lidsey Road. Access to the site will be via an internal spine road provided as part of the AL/70/23/OUT consent, and a ghost island right turn lane with the A29 Lidsey Road that was approved as part of the AL/129/21/OUT consent. Notes: This application follows the granting of planning permission (ref: AL/129/21/OUT) for 95 dwellings at land adjacent to Woodgate Nurseries, and the granting of the subsequent planning permission (ref: AL/70/23/OUT) for 155 dwellings at Land West of Lidsey Road (A29).
DATE OF SITE VISIT:	17 April 2024
RECOMMENDATION:	Advice
S106 CONTRIBUTION TOTAL:	TBA

The Highway Authority has been consulted for pre-application advice for proposed development at:

**Land at and adjoining Woodgate Nursery,
Lidsey Road,
Woodgate,
PO20 3SU.**

The advice provided below has been prepared by means of a desktop study and site visit, using the information and plans submitted with this request, in conjunction with other available WSCC map information.

Site-Specific Comments.

1. Pedestrian and cycle linkage to the wider network.

This needs to be provided in detail, also including references to the previously approved developments south and additionally, BEW and the infrastructure planned for the that Strategic Allocation.

2. A review of the proximity of the site to local services and facilities.

Agreed.

3. Review of the recent Personal Injury Accident data.

Latest five years of PIAs to be provided with accompanying map. Include PIAs for the whole study area between A29 J/W Barnham Road (War Memorial RBT) and A29 J/W A259 Felpham By-Pass (Saltbox RBT).

4. Baseline data to be used for the capacity assessment.

Junction capacity analysis needs to go up to, and include, 2031. PICADY fine to use for site access junction. See further comments below. LINSIG is fine for railway level crossing analysis.

5. Local committed development to be included within the capacity assessment.

AL/20/21/PL– Wings Nursery, A29 Lidsey Road (71 units)

AL/21/20/OUT – Land North of Lee's Yard, A29 Lidsey Road (38 units)

AL/107/21/PL – Woodgate Centre Site, A29 Lidsey Road (180 units)

AL/70/23/OUT – Land West of Lidsey Road (A29) (155 units)

AL/129/21/OUT – Land west of A29 Lidsey Road (95 units)

AL/178/22/OUT – Land to the rear of Meadow Way, Westergate (89 units)

To find out if there are any other sites needing consideration, please contact Arun DC Planning Dept.

6. Area of study and methodology.

A29 J/W Barnham Road (War Memorial RBT) and A29 J/W A259 Felpham By-Pass (Saltbox RBT) must be included. There will be a need to model up to the end of the current Local Plan period (2031) to demonstrate that the full Local Plan allocation can come forward and that the additional impact of your client's development does not cause a residual severe impact on Local Plan delivery taking into account the mitigation already identified as part of the Local Plan. Interim scenarios to be modelled too (see the following information taken from WSCC email - Tim Townsend to Alice Howse and Fiona Bennett - dated 10 May 2024 – WSCC comments in *red italic text*):

- 2024 – Year of application - Agreed
- 2028 – Interim year without mitigation proposed as part of Phase 1 A29 scheme – *Please also include 200 homes from BEW in your assessment using Barnham Road and the War Memorial RBT (e.g. traffic travelling westbounds along this road and using the War Memorial RBT) for this scenario as well as Cala's proposed 300 units and all other committed developments outside of BEW. You will not need to include the 1,200 homes, 61 bed care home, etc. when modelling this scenario although the 200 figure mentioned will come from the 1,200 figure and will still need to be factored-in. Please also include the school in this scenario.*
- 2028 – Interim year with mitigation proposed as part of Phase 1 A29 scheme – *Agreed (using the Cala assumption set out below – i.e. 1,200 homes, 61 bed care home, school etc. + Cala's 300 units) plus all other committed developments outside of BEW.*
- 2031 – End of Arun Local Plan Period (including mitigation proposed as part of Phase 1 A29 scheme) – *This should include all of the Local Plan Allocation built*

including the full new A29 realignment - i.e. Phases 1 and 2 + all Local Plan mitigation in-place + all committed developments outside of BEW.

With regard to the interim scenario, we note from the Cala application (AL/11/24/OUT) they have included for 300 units in 2028 as they consider that based on their build out rate, 300 units will be occupied. We therefore intend to model for 300 of the Cala units in our interim assessment. *See comments above.*

Additionally, the Cala application's interim year includes for BEW Parcel SC1, with 1,200 homes, 61 C2 care home units, 3FE primary school and A29 realignment north of Chichester-Barnham railway line. The Cala TA sets out that the east-west link road bridge will operate as a pedestrian, cycle and bus link only. Please could you confirm if you're happy for us to apply the same data to our capacity assessment for our interim year assessment? *See comments above. With regard to the E-W link road (between Cala and Church Commissioner's land), for road capacity reasons it is proposed to keep this as a pedestrian, cycle and bus link only until such time as the full new A29 is complete and open, at which stage it will be opened for all traffic movements.*

Additionally, please would you add a further scenario for opening year of the development, with and without Phase 1 A29, including all committed development + a quantum of development from BEW (Church Commissioners, Barratt David Wilson and Cala) expected to be built at that time. Exact numbers to include from those sites might be difficult to ascertain but TEMPRO might be able to assist here. Before modelling commences for these scenarios, any figures proposed should first be agreed with the Highway Authority.

Do also speak to National Highways to establish if they have any specific requirements. Matthew Lewis is my contact there:

7. Use of the access approved as part of the AL/129/21/OUT consent.

There is a need to demonstrate traffic capacity of the junction with all committed development including Local Plan traffic (see comments above), plus effects on queueing and capacity of turning lane. The turning lane currently only has space for approximately three PCUs. Additionally, 'KEEP CLEAR' markings should be applied to the northbound lane on the existing A29 to minimise chance of junction blockage in the event the queueing from the railway runs southwards across and beyond the site access junction. Please include this amendment in your Stage 1 Road Safety Audit of the junction.

8. The design of the proposed access to the northeast of the site for pedestrians and cyclists.

This needs to concur with LTN 1/20. Look to see how route can be incorporated into scheme from The Woodgate Centre. Lighting and natural surveillance to be provided too. Please also get this route included in your brief to the Safety Audit team.

9. Public Rights of Way (PRoW).

It is noted that a Public Footpath runs close to the site. However, the plan provided also shows the route of a path that ISN'T a PRoW. You should demonstrate what improvements are to be made to it and any PRoW to improve accessibility for those on-foot and bicycle. For the latter, the status of the PRoW would need to be re-assessed as currently it is thought that cycle access along

the path is prohibited. And, what improvements are proposed for the arch under the railway, found north-west of the site? Our PRoW officer, Donna Tretheway, can be contacted using the following email address:

10.Previous use of the site and associated vehicular movements.

Agreed.

11.Background traffic growth and years of assessment.

See comments above.

12.Proposed trip rates and resultant trip generation.

Trip rates look to be acceptable, including resultant trip generation.

13.Distribution of proposed trips.

Distribution looks to be acceptable.

14.A review of the design of the internal proposed highway network.

Adopt/not adopt? – not clear from looking at the submitted drawings. However, will depend on whether any of the preceding phases are to be offered for adoption and provide an ongoing (adopted) connection to this site. Note that parking bay design in front of some of the houses, as shown on submitted drawings, may preclude adoption. Service margins, contrasting materials to differentiate standard roadways (with footways) from shared surfaces would also need to be provided. Visitor parking to be provided across the whole development site (not just concentrated in one spot). There appears to be a distinct lack of visitor parking throughout the layout. No roads to measure less than 4.8m wide (other than for very short stretches to be considered on a case-by-case basis. Tracking for a selection of vehicles will be required to demonstrate accessibility to all parts of the development. Street lighting will also need to be provided. Speed controls will be necessary, particularly for the section of access road running from the approved development south through to the proposed development site. EV parking will need to be thought-through very carefully – NO trailing cables. Paths to/from south development to be for peds AND cyclists. Foot and cycle path to A29 adjacent to Wings to be street lit and try to make it as 'open' as possible with natural surveillance. Need slightly enlarged manoeuvring areas in communal car parking areas for improved turning. Could be some issues for fire appliances and refuse trucks adjacent to flats in southern half of the development because of lack of turning facilities nearby. Recommend that any layout is shown to WSCC Fire and Rescue Services prior to planning application submission.

15.An overview of the car parking provision and typical layout.

Arun District Council has its own parking SPD and this should be used to inform parking provision. With regard to space sizes, these should follow MfS guidance and no spaces should have fences, landscaping or other features immediately next to them (i.e. avoid narrow spaces and have space around them to be able to easily and comfortably enter and leave vehicles).

16.An overview of the cycle parking to be provided.

See comments below under 18 and 19.

17.Strategy for the collection of waste and recycling plus provision for emergency vehicles.

Refuse collection will need to be agreed with Arun DC and their refuse contractor. Note that domestic waste vehicles in Arun measure 12m and not the previous 9m. For emergency access, please consult directly the emergency services. It

may be that the link for pedestrians and cyclists needs to 'double' as an emergency access.

18.The contents of the supporting Residential Travel Plan.

This has not been reviewed yet as this does not fall under the terms of a pre-app. Any TP would need to follow WSCC guidance and would also require a monitoring fee (both to be secured by S106 Agreement). WSCC Travel Plan Model guidance and latest monitoring costs sent to Alice Howse and Fiona Bennett in email dated 10 May 2024.

19.On-site cycle parking (for communal bike parking/storage areas).

The following should be incorporated in any final design:

- LTN 1/20 advises at least 5% of communal cycle spaces should be provided for adapted and larger bikes to accommodate people with mobility impairments (see paragraph 11.3.2).
- Alongside any EV charging points for cars, provision for E-bike charging should be included as well as space for cycle maintenance, including a pump and tool station. This accords with WSCC Cycle Design Guide para 2.4.4.
https://www.westsussex.gov.uk/media/13164/cycling_design_guide.pdf
- The development should avoid use of vertical or raised level cycle stands. Unfortunately, these are less usable for people with mobility issues or larger and adapted cycles that are difficult to lift. Children's bikes may also be too small to fit into the hangers and be left without space to park, thus being vulnerable to theft or having to be taken inside. A covered and secure set of 'Sheffield' stands is recommended.

20.Bike storage for individual plots.

Bike storage on individual plots should be provided in garages and/or bespoke storage areas – again avoiding vertical or raised stands.

21.Access to bus services.

In your assessment of bus services, please describe existing waiting facilities plus any improvements offered (e.g. shelters, seating, real time passenger information). Recommend that you also speak to the local bus operator, Stagecoach. Contact details as follows:

22.Access to rail services.

No further comment at this scoping stage.

23.A29 Woodgate Bypass proposals and BEW Consortium.

As for timings for the new A29, at the time of writing the best estimate for Phase 1 of the road (so Fontwell Avenue to Barnham Road) is start-date of 2025 with completion in about 18 months. For Phase 2, no information is currently available.

Standard Highways-related comments.

The Highway Authority require the following documents be submitted as part of any future application:

- A site location plan scale (1:1250) with site boundary indicated.

- Schedule of existing uses including planning history with reference numbers.
- Description, including site layout plans, of the proposed development and schedule of uses.
- Summary of reasons supporting the site access/highways works proposals, including plan (scale 1:250 or similar) with achievable visibility splays indicated.
- Design Audit of any proposed highway works, including plan identified departures from standards.
- Final Stage 1 Road Safety Audit (RSA) of the site access and any other proposed highway works (please also include the walking/cycling/emergency link to A29), **with the Road Safety Audit Response Report (RSARR) in word format for the LHA to edit as Overseeing Organisation**, including any amended plans.
- A Transport Assessment, including location plan of key services, availability of sustainable modes of transport and existing/future vehicular generation.
- A Travel Plan prepared in accordance with WSCC guidance (both it and a monitoring fee will need to be secured in a S106 Agreement).
- Reference to supporting national, regional, and local planning documents and policies.
- Parking strategy, including provision of parking for all modes of transport.
- Relevant data collected to date.
- Proposed trip rates supported with TRICS outputs and site selection methodology.
- Junction capacity assessment in accordance with the WSCC Transport Assessment Methodology.
- Personal Injury Accident (PIA) data for latest five years.

I have provided, below, some standard guidance relating to road design and current standards.

There are two sets of guidance which govern road design: Manual for Streets (MfS) for lightly trafficked residential streets; and Design Manual for Roads and Bridges (DMRB) for all other roads, including rural roads. I have included links to both below.

Manual for Streets:

<http://www2.dft.gov.uk/pgr/sustainable/manforstreets/pdfmanforstreets.pdf>

DMRB supplementary documents CD 109 (Search for "CD 109"):

<https://standardsforhighways.co.uk/dmr/b/>

WSCC supports the approach set out in MFS, which has been adopted guidance for residential street design since its introduction in 2007. Within this document there are some very useful references to visibility splays, turning circles and car parking layouts. The document does not however provide specific measurements for visibility splays, so:

"X "Distances from the (kerb back) are typically:

- 2.4 metres - for domestic single access points and shared or busy crossovers (this may be reduced to 2.0 metres in certain circumstances in consultation with the Local Highways Authority and subject to local context)
- 4.5 metres - for busy junctions
- 9.0 metres -major junctions

"Y "Distances are based on vehicle speed, and for lightly trafficked residential streets MFS would be applied:

- 20 mph - 25 metres

- 25 mph - 33 metres
- 30 mph - 43 metres

For a road where the 85th percentile speed is in excess of 39 mph and for roads where MfS does not apply, CD 109 distances from DMRB would be applied:

- 40 mph -120 metres
- 50 mph -160 metres
- 60 mph -215 metres

I have attached a link to our Local Design Guide which provides further advice on how MfS is to be interpreted and applied within West Sussex.

The 'Additional Information' section of the WSCC Pre-application advice for roads and transport webpage provides a range of additional advice and guidance which you may find useful in preparing your application. Please click the link below and navigate to the 'Additional Information' section.

<https://www.westsussex.gov.uk/roads-and-travel/information-for-developers/pre-application-advice-for-roads-and-transport>

Here you will be able to access our Local Design Guide which provides further advice on how MfS is to be interpreted and applied within West Sussex.

Parking.

For applications within Arun, Crawley and South Downs National Park any parking provision should be provided in line with the Planning Authorities adopted Supplementary Planning Guidance (SPG) which will set out parking standards for development in these areas. Within you will find recommended levels for cycle parking and also guidance on levels of Electric Vehicle charging points for new developments. Building control also advises on EV parking provision.

LTN 1/20 should also be used to inform cycle provision and design, with particular emphasis on cycle parking for a selection of cycles and cycle users.

Arun

<https://www.arun.gov.uk/supplementary-planning-documents-spds/>

Crawley

<https://crawley.gov.uk/planning/planning-policy/local-plan/supplementary-planning-documents/urban-design-spd>

South Downs National Park

<https://www.southdowns.gov.uk/planning-policy/supplementary-planning-documents/>

For all other areas West Sussex County Councils latest parking standards which we adopted in August 2019 as Supplementary Planning Guidance (SPG) should be used. This can be found at the link below under the 'Additional Information' section.

<https://www.westsussex.gov.uk/roads-and-travel/information-for-developers/pre-application-advice-for-roads-and-transport>

Conclusion.

Please note that any advice given by council officers for highways pre-application enquiries does not constitute a formal response or decision of the council with regard to the granting of planning permission in the future, nor should it be considered exhaustive. Any views or opinions expressed are given in good faith, and to the best of ability, without prejudice

to the formal consideration of any application, which will be the subject of public consultation and ultimately decided by the Local Planning Authority.

Tim Townsend
Planning Services

Alice Howse

From: Tim Townsend
Sent: 23 May 2024 13:30
To: Alice Howse
Cc: Fiona Bennett
Subject: RE: (2401) RE: PRE-31-24 - Proposed development of up to 150 homes - Land at and adjoining Woodgate Nursery, Woodgate, West Sussex

Dear Alice,

Thank you for your email of 22 May below.

Please see my replies in *red italic* text below:

From: Alice Howse
Sent: Wednesday, May 22, 2024 2:39 PM
To: Tim Townsend
Cc: Fiona Bennett
Subject: RE: (2401) RE: PRE-31-24 - Proposed development of up to 150 homes - Land at and adjoining Woodgate Nursery, Woodgate, West Sussex

****EXTERNAL****

Hi Tim,

Many thanks for your email.

In summary,

- i. We are required to model the War Memorial roundabout. The base flows will be based on 2019 CATM flows, as used in the Cala (AL/11/24/OUT) and Parcel SC1 (BN/11/22/OUT) applications. The CATM flows were updated to a base year of 2019 for use within the A29 realignment business case and met relevant DfT WebTAG model validation criteria. Please can you confirm that it is acceptable to use the 2019 CATM flows for the capacity assessment of the War Memorial roundabout as this assessment will be consistent with the approach used in the Cala and Parcel SC1 applications - *Agreed*
- ii. With regard to TEMPro growth factors, please can you confirm the following:
 - a. NTEM-adjusted TEMPro growth includes for 2,300 dwellings of the BEW application - *Agreed*
 - b. It is considered that additional development (up to 700 dwellings) *may well come forward* within the local plan period (up to 2031). Therefore, the TEMPro growth factors should include an additional 700 dwellings, added in using Alternative Assumptions - *Agreed*
 - c. The additional 700 dwellings should only be applied to 2031, not the interim/application opening year of 2028 – it is unlikely that the additional 700 dwellings will have come forward and be occupied in the next 3.5 years - *Agreed*

If you are able to confirm the above, it would be much appreciated, happy to discuss.

Kind regards,
Alice

Alice Howse

HighgateTransportation

Tel: 0117 934 9121

Highgate Transportation Ltd
First Floor, 43-45 Park Street
BRISTOL BS1 5NL
Company Registration Number: 07500534

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From: Tim Townsend
Sent: Wednesday, May 22, 2024 10:13 AM
To: Alice Howse
Cc: Fiona Bennett
Subject: RE: (2401) RE: PRE-31-24 - Proposed development of up to 150 homes - Land at and adjoining Woodgate Nursery, Woodgate, West Sussex

Dear Alice,

Thanks for your email of 17 May found below. My replies are in *red italic* text alongside your comments.

Do come back to me if you have any further questions.

Regards,

Tim

Tim Townsend, MCIHT
Principal Transport Planner, County Highways Team -- Highways, Transport and Planning
West Sussex County Council Ground Floor Northleigh, County Hall, Chichester PO19 1RQ

Web: www.westsussex.gov.uk



From: Alice Howse
Sent: Friday, May 17 2024 12:27 PM
To: Tim Townsend
Cc: Fiona Bennett
Subject: RE: (2401) RE: PRE-31-24 - Proposed development of up to 150 homes - Land at and adjoining Woodgate Nursery, Woodgate, West Sussex

****EXTERNAL****

Hi Tim,

I hope you are well.

Many thanks for sending through the written response for land at Woodgate Nurseries, Lidsey Road (your ref: PRE-31-24).

Please could you provide further comment on the following:

Pedestrian/Cycle Link from the site

If a pedestrian/cycle link is provided to connect into the wider area, i.e. an uncontrolled crossing across Lidsey Road, please could confirm whether the works can be delivered by WSCC with a contribution from the applicant? *No, we would expect any works to be undertaken by the developer.*

War Memorial Roundabout

With regard to the impact of the development on the War Memorial Roundabout, we have undertaken a distribution exercise of the development traffic at the junction to demonstrate the expected impact. The distribution has been based on the 2019 traffic flows taken from the Cala application, which used CATM traffic flow data (this was accepted at the Cala pre-application stage so that capacity assessments are consistent with the BEW Parcel SC1 BN/11/22/OUT).

Our development traffic distributed at the War Memorial junction demonstrates that 26 vehicle movements will travel through the junction during both the AM and PM peak hours, with a percentage impact of 2% or less on each arm compared to baseline traffic.

We note that WSCC's Transport Assessment Methodology guidance sets out that 'Generally the study area will include all junctions where there is a predicted increase in total entry flows of 30 or more vehicles in any hour'.

Our planning consultant is requesting that we explain why we are being asked to model this junction, especially when the Cala application's base modelling results for the junction demonstrates that the junction is operating within capacity in both the AM and PM peak hours. Additionally, the capacity modelling of the roundabout in the Cala application within their 2031 scenarios demonstrates that the junction will work well within capacity, and during the 2028 interim scenario, the roundabout works well within capacity during the AM peak hour, and in the PM peak hour the B2233 and Nyton Road arms are well within capacity, with the Fontwell Avenue arm at 0.90 RFC, but with only a delay of 32 seconds, which the Transport Assessment sets out is not significant when compared to the 2028 baseline position.

Therefore, based on the above and given the negligible impact our development will have on the War Memorial roundabout, please could you confirm if we are still required to undertake capacity modelling of this junction, and why, so that we can confirm this back to our planning consultant.

The requirement to model the War Memorial roundabout has come about because of the number of speculative proposals coming forward, all of which are taking up road capacity. The War Memorial roundabout is probably one of the more sensitive junctions, hence WSCC requesting that it be included in any modelling scope. Fundamentally, though, you will need to demonstrate that anything your client proposes will not compromise delivery of the BEW Local Plan Strategic Allocation.

TEMPro Growth Rates

With regard to including development traffic associated with BEW (Church Commissioners Parcel SC1 – 1,250 dwellings, Barratt David Wilson – 551 dwellings and Cala – 400 dwellings = 2,201 dwellings), NTEM Planning Data Version 7 Guidance Note sets out that the TEMPro Growth Factors use the Arun District Council Housing Implementation Strategy (HIS) from 2015 to 2030 to calculate growth factors. The 2017 version of the guidance includes the BEW allocation as a 'potential strategic site' for 2,300 dwellings, in line with the ADC Local Plan Policy SD5. Therefore, it appears that TEMPro growth factors do not include the full 4,180 dwellings (included in the BEW framework masterplan) and also surpasses that outlined in ADC's Local Plan. *TEMPro is unlikely to include the figure of 4,180 (homes), a figure that Arun DC has made known as an aspiration for BEW, a proportion of which would be likely to follow after the current Local Plan period.*

We note that TEMPro v8.1 core (latest version) uses NTEM traffic growth.

Within the Cala and Barratt David Wilson applications, their Transport Assessments have set out that background growth uses 'NTEM-adjusted TEMPro growth' which includes for 2,300 dwellings of the BEW application. Given this, it should still be considered acceptable that the TEMPro growth factors includes for 2,300 dwellings of the BEW application. Please can you agree. *The TEMPro growth factor should include up to 2,300 homes. However, in ADC Local Plan Policy SDS, the figure of 3000 is mentioned and that was used by WSCC to determine mitigation for the BEW development proposals and as such, we consider that using this figure should provide a robust assessment within any TA.*

Furthermore, our assessment years of 2024 (year of application) 2028 (interim year) and 2031 (end of ADC Local Plan period) are at times when the full allocation of 4,180 dwellings is unlikely to be fully built and occupied, therefore, the use of TEMPro growth factors for the inclusion of 2,300 dwellings should be considered acceptable. Again, please could you agree. *As you might be aware, the different developers within BEW all appear to be increasing the number of dwellings from that originally proposed within their individual locations which will have an additional impact on the surrounding road network. So while it is unlikely that 4,180 homes would be built by the end of the Local Plan period, in the intervening period, more than were originally planned may well come forward. Therefore, increasing the growth factor to include an additional 700 homes should provide a robust indication of impact at key areas/junctions on the surrounding road network.*

In summary, given the above, please could you confirm that it is acceptable for us to set out that the TEMPro growth factors include for 2,300 dwellings (as reiterated in the Cala and Barratt David Wilson Transport Assessments), and therefore we do not need to include any additional committed development associated with the BEW strategic site for any of our assessment years given that the sum of the Church Commissioners Parcel SC1, Barratt David Wilson and Cala applications total 2,201 dwellings. *Please see comment above.*

Happy to discuss.

Kind regards,
Alice

Alice Howse

HighgateTransportation

TEL: 0117 334 5121

Highgate Transportation Ltd
First Floor, 43-45 Park Street
BRISTOL BS1 5NL
Company Registration Number: 07500534

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Please consider the environment before printing this email and any attachments.

From: Tim Townsend

Sent: Monday,

To: Alice Howse

Fiona Bennett

Subject: PRE-31-24 - Proposed development of up to 150 homes - Land at and adjoining Woodgate Nursery, Woodgate, West Sussex

Dear Alice and Fiona,

Following our recent meeting, please find attached WSCC Highways pre-application advice for the above site dated 13 May 2024.

I trust you will find the information helpful.

Please do not hesitate to contact me again should you wish to discuss the comments made, or any other matters, to do with the site.

Regards,

Tim

Tim Townsend, MCIHT

Principal Transport Planner, County Highways Team – Highways, Transport and Planning
West Sussex County Council, Ground Floor Northleigh, County Hall, Chichester PO19 1RQ

Web: www.westsussex.gov.uk



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Appendix 2

Highway & PRow Records



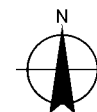
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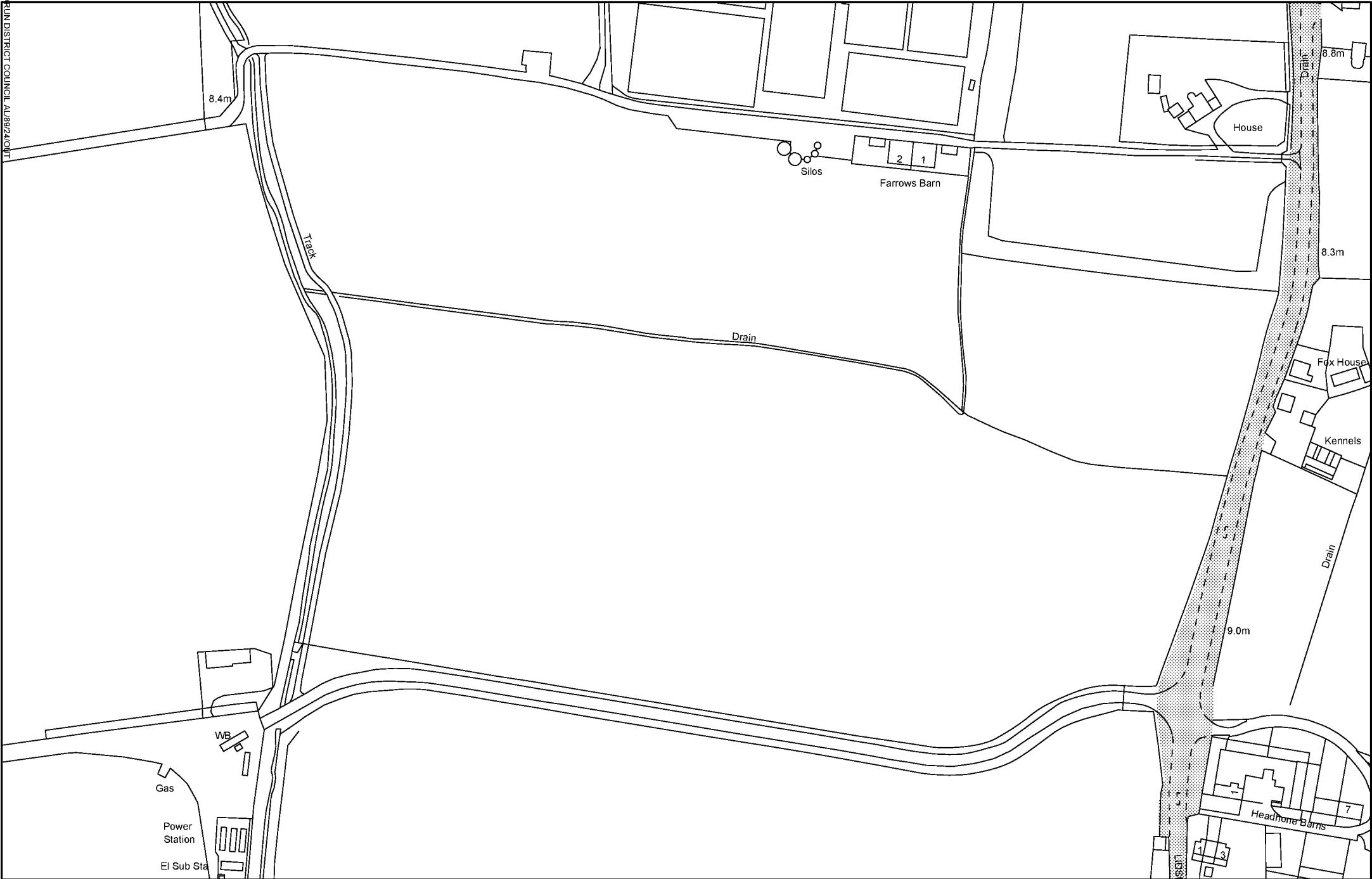
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Information about the status of a highway, and in some circumstances the extent of the highway, may be taken from a number of sources held by the County Council. Unless taken from a legal agreement the information should be regarded as guidance only.

Date: 15/12/2020

Scale: 1:2,500





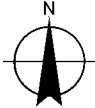
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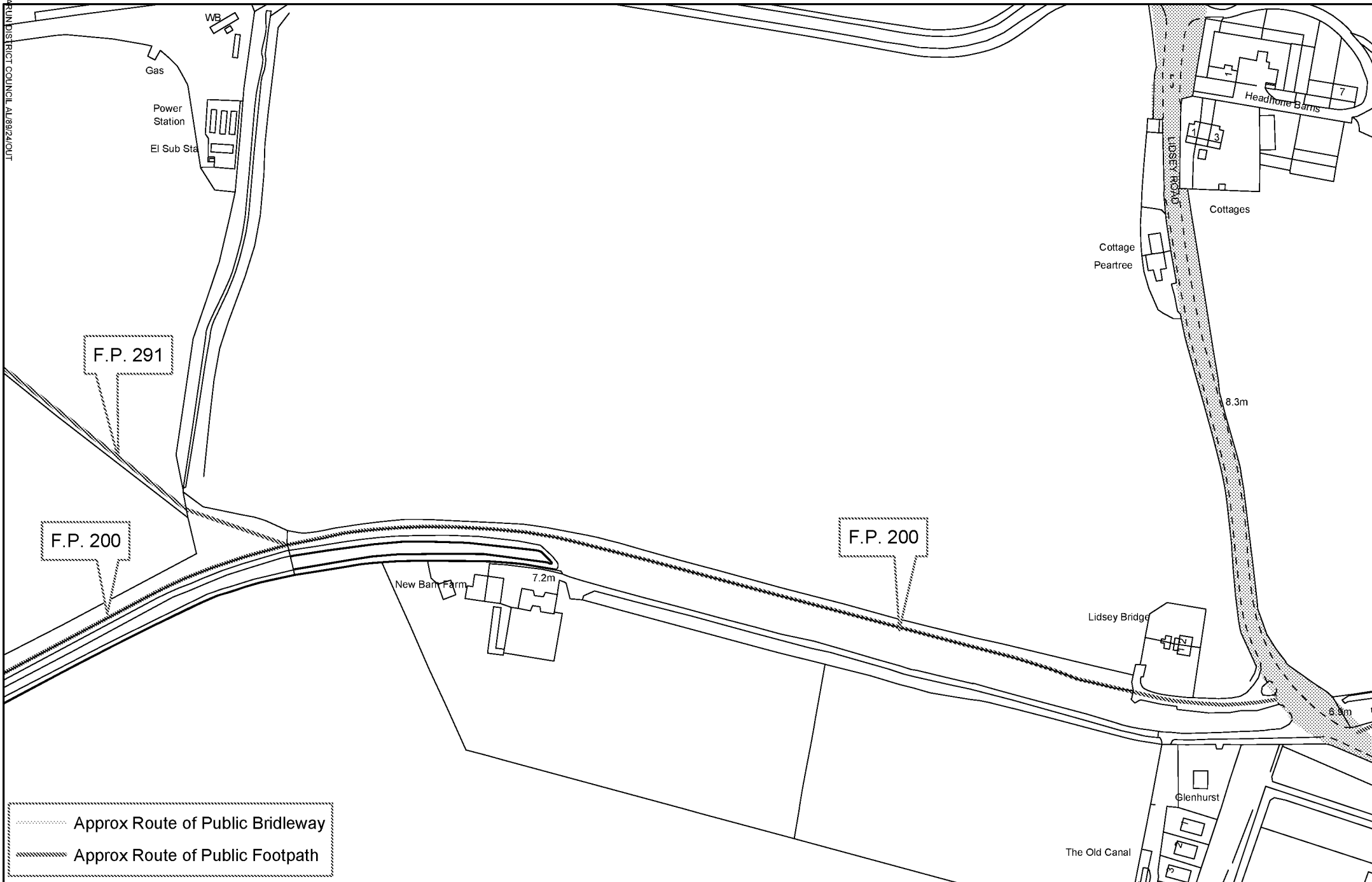
Local Development
for Customers and Communities

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Date: 15/12/2020

Scale: 1:2,500





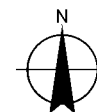
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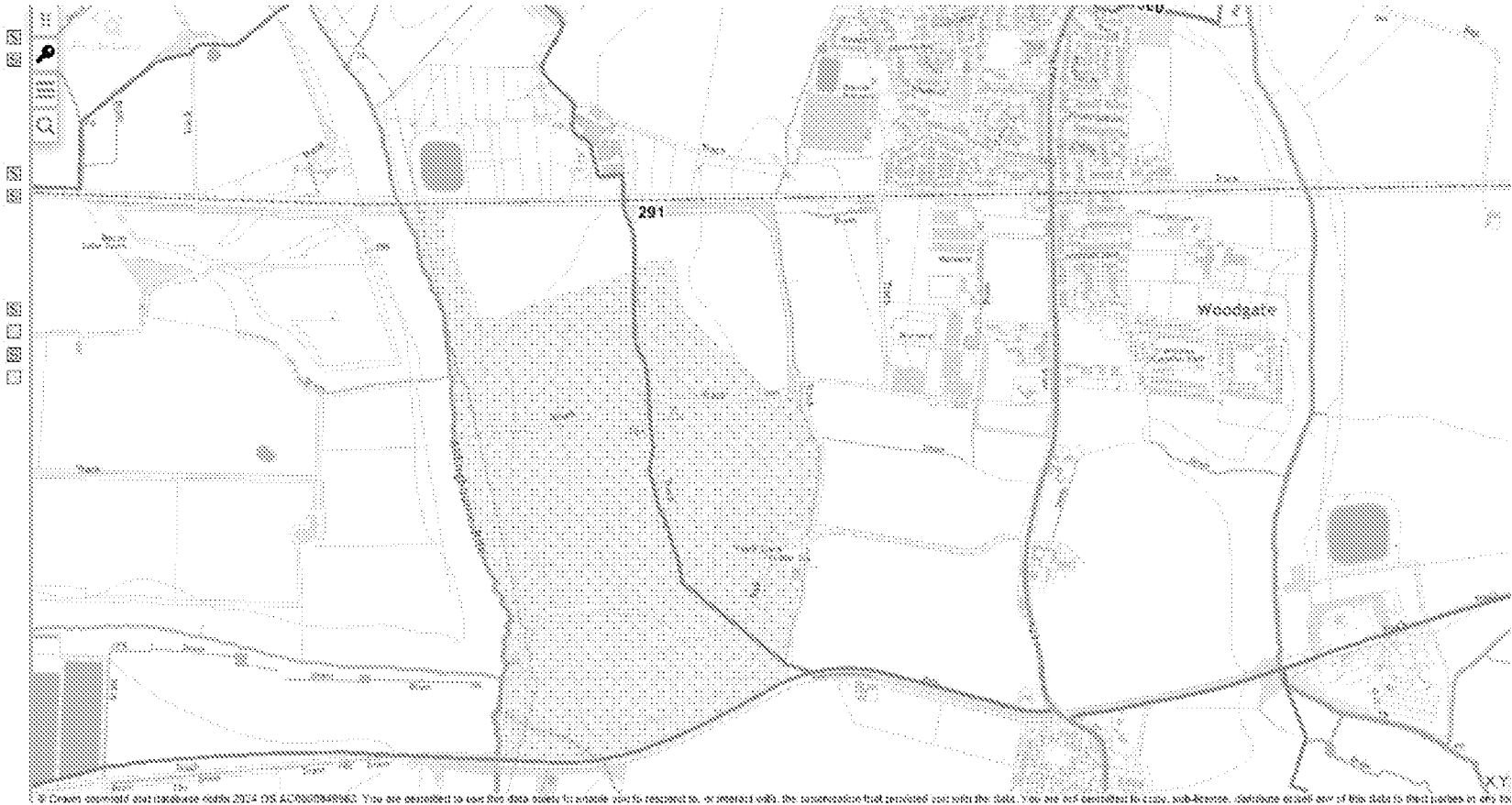
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Date: 15/12/2020

Scale: 1:2,500



- Map
- King's Ditch of England Coast Path
 - Paved/stone Paths
 - Footpath
 - Bridleway
 - Cycleway
 - G Class Highway
 - Easy Access Trails
 - Drain's Mounds at Wray
 - Footpath
 - Bridleway
 - Restricted Byway
 - Byway
 - Long Distance Trails
 - West Sussex County Boundary
 - West Sussex Pattern
 - South Downs National Park



Appendix 3

PIA Output

Crash Report 2401

Area of Interest (AOI) Information

Area : 1,842,317.41 m²

May 30 2024 11:02:18 British Summer Time



Summary

Name	Count	Area(m²)	Length(m)
Crashes	42	N/A	N/A

Crashes

#	Carriageway_Hazards	Severity	Officer_Attended	Accident_DateTime	Year	Number_of_vehicles	Number_of_casualties	Easting
1	None	Slight	No officer attended crash scene	June 12, 2021	2021	2	1	493794
2	None	Slight	Police officer attended crash scene	May 30, 2021	2021	2	1	494170
3	None	Slight	Police officer attended crash scene	December 15, 2018	2018	2	1	493775
4	None	Slight	Unknown	January 31, 2022	2022	2	1	494011
5	None	Slight	Police officer attended crash scene	February 13, 2020	2020	1	1	494055
6	None	Slight	Police officer attended crash scene	December 10, 2021	2021	2	1	493882
7	None	Slight	Police officer attended crash scene	June 19, 2020	2020	3	1	494046
8	None	Slight	No officer attended crash scene	April 1, 2022	2022	2	1	493857
9	None	Slight	Police officer attended crash scene	December 20, 2021	2021	1	1	493892
10	None	Slight	Police officer attended crash scene	May 24, 2020	2020	2	1	494408
11	None	Serious	Police officer attended crash scene	January 13, 2022	2022	2	3	493787
12	None	Slight	Police officer attended crash scene	January 25, 2022	2022	2	1	494113
13	None	Serious	No officer attended crash scene	February 26, 2020	2020	2	1	493773
14	None	Serious	Police officer attended crash scene	May 10, 2018	2018	2	1	493845
15	None	Slight	Police officer attended crash scene	June 5, 2019	2019	1	1	493801
16	None	Slight	No officer attended crash scene	July 5, 2019	2019	2	1	494038
17	None	Slight	Unknown	November 28, 2022	2022	2	1	494406
18	None	Slight	Unknown	September 16, 2022	2022	2	1	494036
19	None	Slight	Police officer attended crash scene	June 18, 2018	2018	1	1	493924

20	None	Slight	Police officer attended crash scene	January 13, 2022	2022	2	2	493907
21	None	Slight	Police officer attended crash scene	December 23, 2022	2022	2	1	493901
22	None	Slight	Police officer attended crash scene	July 21, 2020	2020	1	1	494056
23	None	Serious	Police officer attended crash scene	March 1, 2022	2022	2	2	493842
24	None	Slight	Police officer attended crash scene	April 20, 2018	2018	2	1	493792
25	None	Serious	Police officer attended crash scene	January 22, 2021	2021	2	1	494397
26	None	Slight	Police officer attended crash scene	November 4, 2021	2021	3	2	493868
27	Involvement with previous accident	Serious	Police officer attended crash scene	September 5, 2020	2020	2	2	493897
28	None	Serious	Police officer attended crash scene	November 12, 2021	2021	3	1	494061
29	None	Serious	Police officer attended crash scene	November 26, 2018	2018	1	1	493912
30	None	Slight	Police officer attended crash scene	July 5, 2021	2021	3	5	493797
31	None	Serious	Police officer attended crash scene	December 17, 2022	2022	1	1	493951
32	None	Slight	Police officer attended crash scene	July 15, 2019	2019	2	1	493841
33	None	Slight	No officer attended crash scene	May 23, 2018	2018	2	1	493861
34	None	Slight	Police officer attended crash scene	March 6, 2022	2022	2	1	494297
35	None	Serious	Police officer attended crash scene	January 13, 2022	2022	3	3	493850
36	None	Slight	Police officer attended crash scene	June 10, 2018	2018	2	1	493939
37	None	Slight	No officer attended crash scene	July 29, 2021	2021	3	1	493795
38	None	Slight	Police officer attended crash scene	June 2, 2021	2021	2	3	494036

39	None	Slight	Police officer attended crash scene	August 1, 2022	2022	1	1	493754
40	None	Slight	Police officer attended crash scene	June 18, 2019	2019	4	4	494019
41	None	Slight	No officer attended crash scene	January 17, 2019	2019	2	1	493842
42	None	Slight	Police officer attended crash scene	December 19, 2021	2021	4	2	493839

#	Northing	Highway_Authority	Road_Number	Weather_conditions	Road_Type	Road_surface	Speed_Limit	Light_conditions
1	104353	West Sussex	A29	Fine without high winds	Single carriageway	Dry	30	Daylight: regardless of presence of streetlights
2	105577	West Sussex	A29	Fine without high winds	Single carriageway	Dry	30	Daylight: regardless of presence of streetlights
3	103275	West Sussex	A29	Raining without high winds	Single carriageway	Wet or Damp	30	Darkness: no street lighting
4	101638	West Sussex	A29	Unknown	Roundabout	Wet or Damp	20	Darkness: street lighting unknown
5	105581	West Sussex	A29	Fine without high winds	Single carriageway	Wet or Damp	30	Darkness: street lights present and lit
6	101834	West Sussex	A29	Fine without high winds	Dual carriageway	Dry	50	Darkness: no street lighting
7	105574	West Sussex	A29	Raining without high winds	Single carriageway	Wet or Damp	30	Daylight: regardless of presence of streetlights
8	104756	West Sussex	A29	Fine without high winds	Single carriageway	Dry	30	Daylight: regardless of presence of streetlights
9	105541	West Sussex	A29	Fine without high winds	Single carriageway	Dry	30	Darkness: street lights present and lit
10	105597	West Sussex	A29	Fine without high winds	Roundabout	Dry	30	Daylight: regardless of presence of streetlights
11	102639	West Sussex	A29	Other	Single carriageway	Frost or Ice	50	Daylight: regardless of presence of streetlights
12	105584	West Sussex	A29	Fine without high winds	Single carriageway	Dry	30	Daylight: regardless of presence of streetlights
13	102612	West Sussex	A29	Fine without high winds	Single carriageway	Dry	40	Darkness: no street lighting
14	102029	West Sussex	A29	Fine without high winds	Dual carriageway	Dry	60	Daylight: regardless of presence of streetlights
15	104072	West Sussex	A29	Fine without high winds	Single carriageway	Dry	30	Daylight: regardless of presence of streetlights

16	101598	West Sussex	A29	Fine without high winds	Single carriageway	Dry	60	Daylight: regardless of presence of streetlights
17	105598	West Sussex	A29	Raining without high winds	Roundabout	Wet or Damp	30	Daylight: regardless of presence of streetlights
18	105575	West Sussex	A29	Raining without high winds	Single carriageway	Wet or Damp	30	Daylight: regardless of presence of streetlights
19	105602	West Sussex	B2233	Fine without high winds	Single carriageway	Dry	30	Daylight: regardless of presence of streetlights
20	103139	West Sussex	A29	Other	Single carriageway	Frost or Ice	40	Daylight: regardless of presence of streetlights
21	105545	West Sussex	A29	Raining without high winds	Single carriageway	Wet or Damp	30	Daylight: regardless of presence of streetlights
22	101641	West Sussex	A29	Fine without high winds	Roundabout	Dry	50	Darkness: street lights present and lit
23	102116	West Sussex	A29	Raining without high winds	Single carriageway	Wet or Damp	40	Daylight: regardless of presence of streetlights
24	102298	West Sussex	A29	Fine without high winds	Single carriageway	Dry	40	Daylight: regardless of presence of streetlights
25	105598	West Sussex	A29	Other	Roundabout	Wet or Damp	30	Darkness: street lights present and lit
26	104805	West Sussex	A29	Fine without high winds	Single carriageway	Dry	30	Daylight: regardless of presence of streetlights
27	102911	West Sussex	A29	Fine without high winds	Single carriageway	Wet or Damp	50	Darkness: no street lighting
28	101653	West Sussex	A259	Fine without high winds	Roundabout	Wet or Damp	50	Daylight: regardless of presence of streetlights
29	105566	West Sussex	A29	Fine without high winds	Single carriageway	Dry	30	Daylight: regardless of presence of streetlights
30	104236	West Sussex	A29	Fine without high winds	Single carriageway	Dry	30	Daylight: regardless of presence of streetlights

31	101700	West Sussex	A29	Fine without high winds	Dual carriageway	Dry	40	Darkness: street lights present and lit
32	105233	West Sussex	A29	Fine without high winds	Single carriageway	Dry	40	Daylight: regardless of presence of streetlights
33	101884	West Sussex	A29	Fine without high winds	Dual carriageway	Dry	40	Daylight: regardless of presence of streetlights
34	105579	West Sussex	A29	Fine without high winds	Single carriageway	Dry	30	Daylight: regardless of presence of streetlights
35	105008	West Sussex	A29	Fine without high winds	Single carriageway	Dry	30	Darkness: street lights present and lit
36	105590	West Sussex	A29	Fine without high winds	Single carriageway	Dry	30	Daylight: regardless of presence of streetlights
37	104332	West Sussex	A29	Fine without high winds	Single carriageway	Dry	30	Daylight: regardless of presence of streetlights
38	101607	West Sussex	A29	Fine without high winds	Roundabout	Dry	40	Daylight: regardless of presence of streetlights
39	102349	West Sussex	A29	Fine without high winds	Single carriageway	Dry	40	Daylight: regardless of presence of streetlights
40	101659	West Sussex	A29	Raining without high winds	Dual carriageway	Wet or Damp	40	Daylight: regardless of presence of streetlights
41	105070	West Sussex	A29	Fine without high winds	Single carriageway	Wet or Damp	30	Daylight: regardless of presence of streetlights
42	105212	West Sussex	A29	Fine without high winds	Single carriageway	Dry	30	Daylight: regardless of presence of streetlights

#	Junction_detail	Pedestrian_Crossing	Involved_pedalcycl	Involved_Motorcycl	Pedestrian_casualty	Child_casualty	Pedal_cycleuser_casualty	Motorcycle_user_casualty
1	Not at or within 20 metres of junction	No physical crossing facility within 50 metres	1	0	0	0	1	0
2	T or staggered junction	Central refuge - no other controls	0	0	0	0	0	0
3	Not at or within 20 metres of junction	No physical crossing facility within 50 metres	0	0	0	0	0	0
4	Roundabout	No physical crossing facility within 50 metres	0	0	0	0	0	0
5	Not at or within 20 metres of junction	No physical crossing facility within 50 metres	0	0	1	0	0	0
6	Not at or within 20 metres of junction	No physical crossing facility within 50 metres	0	0	0	0	0	0
7	Using private drive or entrance	No physical crossing facility within 50 metres	0	0	0	0	0	0
8	Other junction	Pelican, puffin, toucan or similar non-junction pedestrian light crossing	0	1	1	1	0	0
9	T or staggered junction	No physical crossing facility within 50 metres	0	0	0	0	0	0
10	Roundabout	No physical crossing facility within 50 metres	0	0	0	0	0	0
11	Not at or within 20 metres of junction	No physical crossing facility within 50 metres	0	0	0	0	0	0
12	T or staggered junction	No physical crossing facility within 50 metres	0	0	0	0	0	0
13	Not at or within 20 metres of junction	No physical crossing facility within 50 metres	0	0	0	0	0	0

14	T or staggered junction	No physical crossing facility within 50 metres	0	1	0	0	0	1
15	T or staggered junction	No physical crossing facility within 50 metres	0	0	1	0	0	0
16	Roundabout	No physical crossing facility within 50 metres	0	0	0	0	0	0
17	Roundabout	Central refuge - no other controls	1	0	0	0	1	0
18	T or staggered junction	No physical crossing facility within 50 metres	0	0	0	1	0	0
19	T or staggered junction	No physical crossing facility within 50 metres	1	0	0	0	1	0
20	Not at or within 20 metres of junction	No physical crossing facility within 50 metres	0	0	0	0	0	0
21	T or staggered junction	No physical crossing facility within 50 metres	0	0	0	0	0	0
22	Roundabout	No physical crossing facility within 50 metres	0	0	0	0	0	0
23	Not at or within 20 metres of junction	No physical crossing facility within 50 metres	0	0	0	0	0	0
24	Not at or within 20 metres of junction	No physical crossing facility within 50 metres	0	0	0	0	0	0
25	Mini roundabout	No physical crossing facility within 50 metres	1	0	0	0	1	0
26	T or staggered junction	No physical crossing facility within 50 metres	0	0	0	0	0	0
27	T or staggered junction	No physical crossing facility within 50 metres	0	0	0	0	0	0

28	Roundabout	No physical crossing facility within 50 metres	0	1	0	0	0	1
29	T or staggered junction	No physical crossing facility within 50 metres	0	1	1	0	0	0
30	T or staggered junction	No physical crossing facility within 50 metres	0	0	0	0	0	0
31	Not at or within 20 metres of junction	No physical crossing facility within 50 metres	0	0	1	0	0	0
32	T or staggered junction	Pelican, puffin, toucan or similar non-junction pedestrian light crossing	1	0	0	0	1	0
33	Not at or within 20 metres of junction	Central refuge - no other controls	0	1	0	0	0	1
34	Multiple junction	No physical crossing facility within 50 metres	0	1	0	0	0	1
35	T or staggered junction	No physical crossing facility within 50 metres	0	0	0	0	0	0
36	T or staggered junction	No physical crossing facility within 50 metres	0	0	0	1	0	0
37	Other junction	No physical crossing facility within 50 metres	0	1	0	0	0	1
38	Roundabout	No physical crossing facility within 50 metres	0	0	0	1	0	0
39	T or staggered junction	No physical crossing facility within 50 metres	0	0	0	0	0	0
40	Roundabout	No physical crossing facility within 50 metres	0	0	0	0	0	0
41	T or staggered junction	No physical crossing facility within 50 metres	0	1	0	0	0	1

42	Not at or within 20 metres of junction	Pedestrian phase at traffic signal junction	0	0	0	0	0	0
----	--	---	---	---	---	---	---	---

#	Involved_car	Involved_good svehicle	Involved_Bus	Involved_young g_driver	Local_Authority y_District	Junction_control	Is_Provisional	Is_Amended	Web_Link	Count
1	0	1	0	1	Arun	Not Applicable	No	No	https://www.cras.hmap.co.uk/reports/prereportservice?reportId=2021471055558	1
2	1	0	0	1	Arun	Give way or uncontrolled	No	No	https://www.cras.hmap.co.uk/reports/prereportservice?reportId=2021471051442	1
3	1	0	0	0	Arun	Not Applicable	No	No	https://www.cras.hmap.co.uk/reports/prereportservice?reportId=2018471808972	1
4	1	0	0	0	Arun	Give way or uncontrolled	No	No	https://www.cras.hmap.co.uk/reports/prereportservice?reportId=2022471141015	1
5	1	0	0	0	Arun	Not Applicable	No	No	https://www.cras.hmap.co.uk/reports/prereportservice?reportId=2020470930060	1
6	1	0	0	1	Arun	Not Applicable	No	No	https://www.cras.hmap.co.uk/reports/prereportservice?reportId=2021471120077	1
7	1	1	0	0	Arun	Give way or uncontrolled	No	No	https://www.cras.hmap.co.uk/reports/prereportservice?reportId=2020470958378	1

8	1	0	0	0	Arun	Give way or uncontrolled	No	No	https://www.cras-hmap.co.uk/reports/prereportservice?reportId=2022471165281	1
9	1	0	0	0	Arun	Give way or uncontrolled	No	No	https://www.cras-hmap.co.uk/reports/prereportservice?reportId=2021471124379	1
10	1	0	0	0	Arun	Give way or uncontrolled	No	No	https://www.cras-hmap.co.uk/reports/prereportservice?reportId=2020470953098	1
11	1	0	0	0	Arun	Not Applicable	No	No	https://www.cras-hmap.co.uk/reports/prereportservice?reportId=2022471132215	1
12	1	0	0	0	Arun	Give way or uncontrolled	No	No	https://www.cras-hmap.co.uk/reports/prereportservice?reportId=2022471137453	1
13	1	0	0	1	Arun	Not Applicable	No	No	https://www.cras-hmap.co.uk/reports/prereportservice?reportId=2020470934738	1
14	1	0	0	0	Arun	Give way or uncontrolled	No	No	https://www.cras-hmap.co.uk/reports/prereportservice?reportId=2018471802517	1

15	1	0	0	0	Arun	Give way or uncontrolled	No	No	https://www.cras-hmap.co.uk/reports/prereportservice?reportid=2019470845205	1
16	1	0	0	0	Arun	Give way or uncontrolled	No	No	https://www.cras-hmap.co.uk/reports/prereportservice?reportid=2019470858557	1
17	0	1	0	1	Arun	Give way or uncontrolled	No	No	https://www.cras-hmap.co.uk/reports/prereportservice?reportid=2022471248018	1
18	1	0	0	0	Arun	Give way or uncontrolled	No	No	https://www.cras-hmap.co.uk/reports/prereportservice?reportid=2022471222053	1
19	0	0	0	0	Arun	Give way or uncontrolled	No	No	https://www.cras-hmap.co.uk/reports/prereportservice?reportid=2018471803334	1
20	1	0	0	0	Arun	Not Applicable	No	No	https://www.cras-hmap.co.uk/reports/prereportservice?reportid=2022471131537	1
21	1	1	0	0	Arun	Give way or uncontrolled	No	No	https://www.cras-hmap.co.uk/reports/prereportservice?reportid=2022471258873	1

22	1	0	0	0	Arun	Give way or uncontrolled	No	No	https://www.cras-hmap.co.uk/reports/prereportservice?reportid=2020470966281	1
23	1	1	0	0	Arun	Not Applicable	No	No	https://www.cras-hmap.co.uk/reports/prereportservice?reportid=2022471148880	1
24	1	0	0	1	Arun	Not Applicable	No	No	https://www.cras-hmap.co.uk/reports/prereportservice?reportid=2018471802135	1
25	1	0	0	0	Arun	Give way or uncontrolled	No	No	https://www.cras-hmap.co.uk/reports/prereportservice?reportid=2021471016352	1
26	1	0	0	0	Arun	Give way or uncontrolled	No	No	https://www.cras-hmap.co.uk/reports/prereportservice?reportid=2021471109630	1
27	1	0	0	0	Arun	Give way or uncontrolled	No	No	https://www.cras-hmap.co.uk/reports/prereportservice?reportid=2020470978239	1
28	1	0	0	0	Arun	Give way or uncontrolled	No	No	https://www.cras-hmap.co.uk/reports/prereportservice?reportid=2021471109458	1

29	0	0	0	1	Arun	Give way or uncontrolled	No	No	https://www.cras-hmap.co.uk/reports/prereportservice?reportid=2018471806513	1
30	1	0	0	1	Arun	Give way or uncontrolled	No	No	https://www.cras-hmap.co.uk/reports/prereportservice?reportid=2021471062795	1
31	1	0	0	1	Arun	Not Applicable	No	No	https://www.cras-hmap.co.uk/reports/prereportservice?reportid=2022471254884	1
32	1	0	0	0	Arun	Give way or uncontrolled	No	No	https://www.cras-hmap.co.uk/reports/prereportservice?reportid=2019470859222	1
33	1	0	0	0	Arun	Not Applicable	No	No	https://www.cras-hmap.co.uk/reports/prereportservice?reportid=2018471802775	1
34	1	0	0	1	Arun	Give way or uncontrolled	No	No	https://www.cras-hmap.co.uk/reports/prereportservice?reportid=2022471150726	1
35	1	1	0	0	Arun	Give way or uncontrolled	No	No	https://www.cras-hmap.co.uk/reports/prereportservice?reportid=2022471131770	1

36	1	0	0	0	Arun	Give way or uncontrolled	No	No	https://www.crasemap.co.uk/reports/prereportservice?reportid=2018471803170	1
37	1	0	0	1	Arun	Give way or uncontrolled	No	No	https://www.crasemap.co.uk/reports/prereportservice?reportid=2021471072436	1
38	1	1	0	0	Arun	Give way or uncontrolled	No	No	https://www.crasemap.co.uk/reports/prereportservice?reportid=2021471051397	1
39	1	0	0	0	Arun	Give way or uncontrolled	No	No	https://www.crasemap.co.uk/reports/prereportservice?reportid=2022471206802	1
40	1	1	0	0	Arun	Give way or uncontrolled	No	No	https://www.crasemap.co.uk/reports/prereportservice?reportid=2019470849824	1
41	0	0	0	1	Arun	Give way or uncontrolled	No	No	https://www.crasemap.co.uk/reports/prereportservice?reportid=2019471900312	1
42	1	1	0	0	Arun	Not Applicable	No	No	https://www.crasemap.co.uk/reports/prereportservice?reportid=2021471124396	1

Report produced from CrashMap Pro

Appendix 4

ATC Traffic Survey February 2023

Woodgate ATC 1, A29 Lidsey Road (Northern Site)

Produced by Road Data Services Ltd.

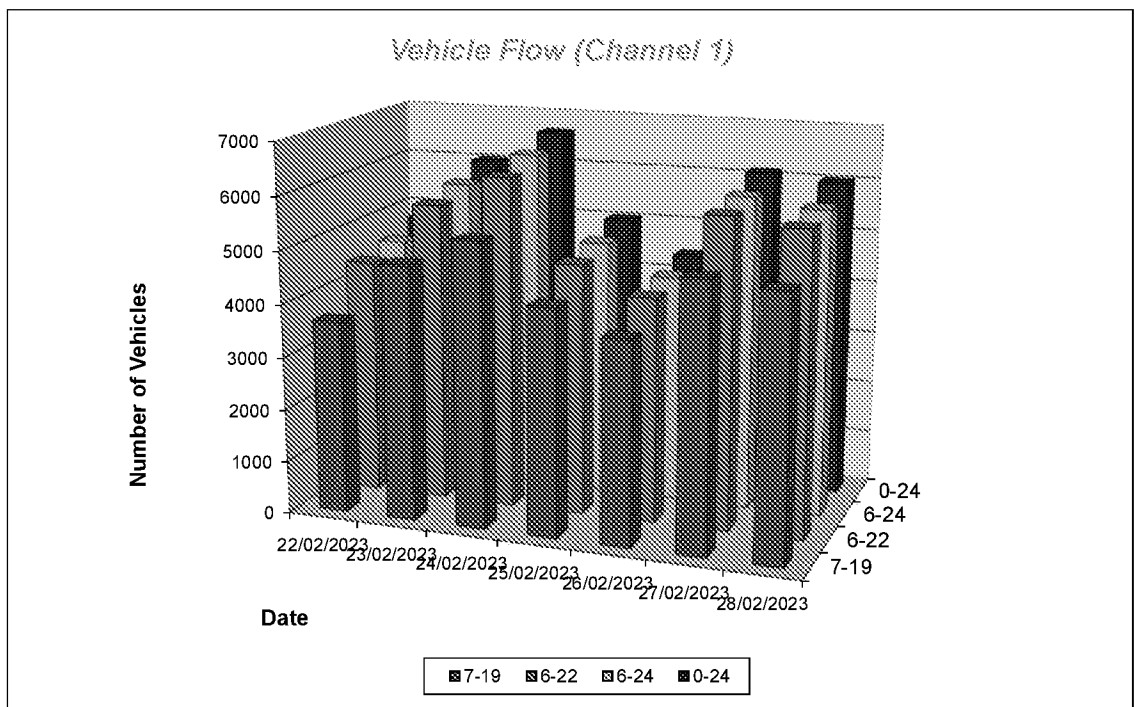
Channel 1 - Northbound

Vehicle Flow

Week 1

Hr Ending	22/02/2023 Wednesday	23/02/2023 Thursday	24/02/2023 Friday	25/02/2023 Saturday	26/02/2023 Sunday	27/02/2023 Monday	28/02/2023 Tuesday	Weekday Average	Average
1	21	18	16	46	33	10	20	17	20
2	10	9	13	22	10	6	11	10	12
3	13	10	16	14	12	11	12	12	13
4	18	18	28	15	14	12	21	19	18
5	36	44	25	24	18	27	42	25	31
6	124	129	122	60	36	143	147	133	109
7	378	359	359	121	66	392	387	375	288
8	338	626	607	153	111	735	777	617	478
9	227	428	536	283	181	584	534	482	398
10	325	344	415	338	306	396	440	384	366
11	255	380	449	434	401	370	358	382	378
12	317	395	430	464	498	399	346	377	407
13	347	408	466	478	451	398	360	399	415
14	361	351	427	408	442	340	364	368	388
15	355	458	476	430	397	381	349	404	407
16	346	393	471	371	377	418	373	400	393
17	292	404	432	372	319	372	385	377	366
18	278	357	376	312	197	352	348	342	317
19	213	275	282	239	147	276	292	258	246
20	188	214	246	142	179	222	158	209	193
21	129	131	148	115	106	110	150	134	127
22	112	135	134	85	61	95	83	112	101
23	88	109	120	75	33	57	44	84	75
24	38	40	76	38	37	24	32	62	41

7-18	3854	4819	5367	4263	3627	5021	4929	4757	4557
6-22	4481	5653	6254	4745	4219	5640	5704	5583	5272
6-24								5709	5387
0-24	4809	6035	6670	5038	4432	6130	6033	5935	5593



Woodgate ATC 1, A29 Lidsey Road (Northern Site)

Produced by Road Data Services Ltd.

Channel 1 - Northbound

Average Speed

Week 1

Hr Ending	22/02/2023 Wednesday	23/02/2023 Thursday	24/02/2023 Friday	25/02/2023 Saturday	26/02/2023 Sunday	27/02/2023 Monday	28/02/2023 Tuesday
1	28.0	27.5	30.0	27.5	26.5	26.3	23.0
2	29.0	29.3	33.5	29.4	32.2	30.9	33.1
3	31.9	27.2	30.7	31.5	29.8	33.8	28.0
4	32.0	30.4	30.7	32.8	31.5	33.5	33.2
5	31.9	29.9	30.6	34.5	32.9	28.0	28.6
6	27.0	26.7	27.3	29.2	32.9	26.6	24.1
7	22.3	22.9	23.2	26.2	27.2	23.7	23.6
8	12.2	22.5	20.8	25.4	27.4	21.0	19.6
9	11.3	19.8	20.3	23.9	26.7	17.3	17.0
10	12.6	17.6	18.7	21.6	26.2	18.6	17.2
11	22.0	21.6	21.5	21.1	24.3	20.2	18.6
12	23.9	21.0	20.0	20.2	20.8	20.2	20.1
13	21.0	20.0	20.9	20.5	23.1	20.1	18.8
14	21.3	21.7	21.7	21.0	24.0	21.6	18.7
15	20.1	21.3	19.2	19.7	23.4	19.2	19.5
16	17.4	18.9	17.9	21.3	23.2	19.1	18.4
17	16.4	20.5	19.9	18.9	23.6	20.9	21.1
18	21.4	20.6	21.4	22.4	24.0	21.4	20.3
19	20.7	20.6	22.7	21.8	26.1	21.8	20.6
20	22.2	21.7	21.3	22.3	26.6	21.4	24.3
21	26.0	24.3	24.4	24.8	25.1	24.3	23.7
22	22.6	24.3	22.4	22.8	27.4	22.4	26.7
23	24.0	20.6	23.6	25.5	28.2	25.2	25.5
24	27.7	27.0	27.1	28.8	28.4	26.0	24.9

0-13	23.1	21.3	23.7	20.8	23.4	20.2	18.3
0-24	19.8	21.3	21.1	21.8	24.3	20.7	20.1

Average (All)	21.2
Weekday Inter-Peak	19.9
85th Percentile	

Channel 1 - Northbound

85th Percentile

Hr Ending	22/02/2023 Wednesday	23/02/2023 Thursday	24/02/2023 Friday	25/02/2023 Saturday	26/02/2023 Sunday	27/02/2023 Monday	28/02/2023 Tuesday
1	36.1	37.9	40.2	34.7	32.9	35.7	29.3
2	32.0	32.4	39.6	34.9	37.5	34.4	42.6
3	38.5	35.2	36.9	37.4	34.8	40.8	32.4
4	38.1	35.3	35.3	37.6	37.3	38.5	40.4
5	41.5	40.0	39.8	40.5	39.2	36.3	36.7
6	37.4	35.3	36.7	38.0	38.0	37.1	33.1
7	30.8	31.6	31.1	34.5	33.9	32.3	31.6
8	17.6	29.2	28.3	32.8	34.1	28.1	26.0
9	16.9	27.8	27.5	32.0	35.5	24.6	23.3
10	19.1	25.2	26.3	30.1	32.9	26.5	23.7
11	29.9	28.5	28.7	28.5	31.9	27.1	26.2
12	31.1	28.9	27.4	27.7	28.9	27.5	27.3
13	28.8	27.1	28.2	28.0	30.6	28.3	25.8
14	28.6	29.4	29.4	28.4	30.7	28.8	26.2
15	27.3	28.6	26.8	27.6	30.5	26.0	27.5
16	24.0	27.2	25.7	28.8	30.6	26.9	25.5
17	24.0	28.0	27.1	26.9	31.2	28.8	28.7
18	29.5	27.4	28.7	30.1	32.5	29.0	28.8
19	28.7	28.5	30.2	30.0	33.2	30.2	28.3
20	30.7	29.8	30.3	30.9	33.6	29.8	32.0
21	33.0	32.6	32.7	32.9	33.4	32.9	31.8
22	31.2	32.2	31.2	31.7	33.7	30.1	33.6
23	30.3	29.7	30.7	31.9	35.1	32.3	33.1
24	37.7	33.7	35.2	34.7	36.2	33.1	34.8

0-13	30.7	28.8	29.0	28.1	30.5	27.5	26.7
0-24	28.8	29.2	29.1	30.0	32.0	28.7	27.9

85th %ile (All)	29.4
Weekday Inter-Peak	27.5

Woodgate ATC 1, A29 Lidsey Road (Northern Site)

Produced by Road Data Services Ltd.

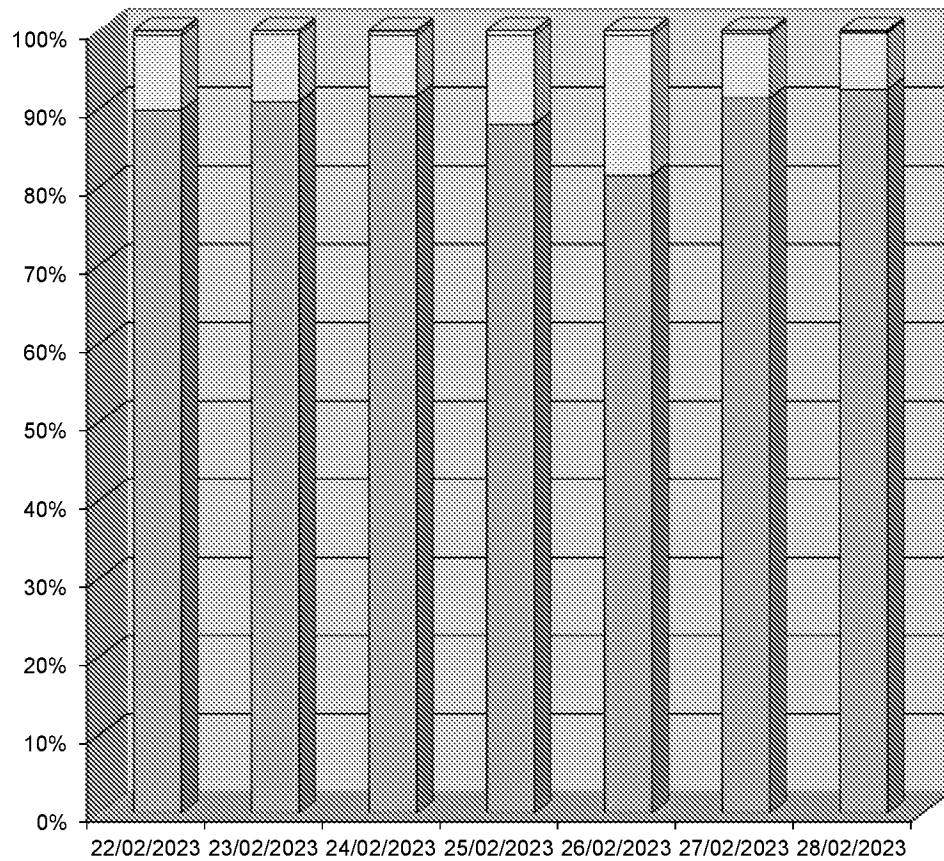
Channel 1 - Northbound

Speed Summary

Week 1

Speed (MPH)	22/02/2023 Wednesday	23/02/2023 Thursday	24/02/2023 Friday	25/02/2023 Saturday	26/02/2023 Sunday	27/02/2023 Monday	28/02/2023 Tuesday
0-30	4317	5484	6106	4434	3612	5601	5575
30-40	463	521	521	574	783	504	439
40-50	25	27	33	29	25	23	14
50+	4	3	8	2	2	2	5
TOTAL	4899	6035	6678	5039	4422	6130	6033

Speed Summary (MPH)



Date

0-30 30-40 40-50 50+

Woodgate ATC 1, A29 Lidsey Road (Northern Site)

Produced by Road Data Services Ltd.

Channel 1 - Northbound

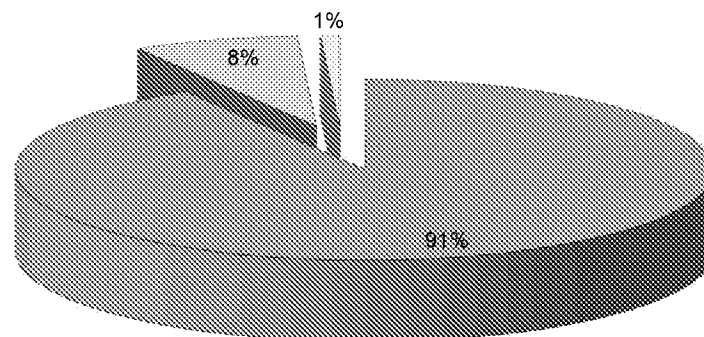
Vehicle Class

Week 1

Classes Day / Time	Car / LGV / Caravan - 1	OGV1 / Bus - 2,3,5,6,7,12	OGV2 - 4,8,9,10,11,13	TOTAL - 1-13
22/02/2023				
7-19	3358	271	25	3654
8-22	4878	353	30	4461
8-24	4353	381	34	4568
0-24	4363	405	41	4809
23/02/2023				
7-19	4348	435	38	4821
8-22	5134	516	38	5688
8-24	5134	523	44	5701
0-24	5404	580	51	6035
24/02/2023				
7-19	4825	380	62	5267
8-22	5722	458	66	6246
8-24	5722	523	87	6332
0-24	6077	518	75	6670
25/02/2023				
7-19	4980	186	36	4202
8-22	4425	216	39	4680
8-24	4425	223	36	4684
0-24	4748	249	42	5039
26/02/2023				
7-19	3844	185	18	3627
8-22	4323	191	19	4233
8-24	4323	193	19	4335
0-24	4207	205	20	4432
27/02/2023				
7-19	4882	389	40	5311
8-22	5321	473	46	5840
8-24	5321	480	46	5847
0-24	5560	524	46	6130
28/02/2023				
7-19	4482	385	59	4926
8-22	5180	454	60	5694
8-24	5180	489	60	5729
0-24	5438	524	71	6033

Average				
7-19	4200	317	39	4556
8-22	4848	381	42	5271
8-24	4848	381	44	5273
0-24	5114	429	49	5592

Total Vehicle Class Distribution



Woodgate ATC 1, A29 Lidsey Road (Northern Site)

Produced by Road Data Services Ltd.

Channel 2 - Southbound

Vehicle Flow

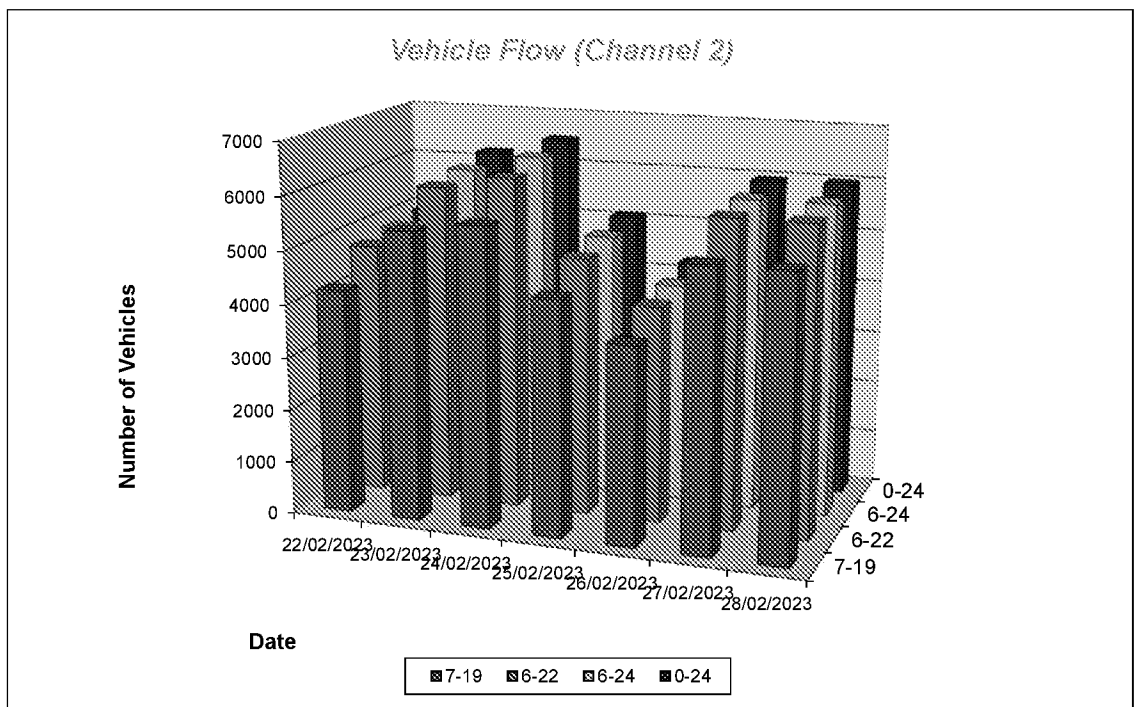
Week 1

Hr Ending	22/02/2023 Wednesday	23/02/2023 Thursday	24/02/2023 Friday	25/02/2023 Saturday	26/02/2023 Sunday	27/02/2023 Monday	28/02/2023 Tuesday	Weekday Average	Average
1	20	23	28	53	39	21	25	29	30
2	6	9	6	12	20	11	5	7	10
3	5	5	11	9	10	5	11	7	8
4	8	9	11	11	9	4	10	8	9
5	14	18	18	18	9	15	14	15	16
6	47	52	49	15	27	37	42	45	38
7	92	85	96	58	25	89	86	80	78
8	259	303	266	123	61	270	303	260	236
9	313	407	463	275	136	426	473	418	358
10	330	388	401	398	290	381	384	377	367
11	339	418	397	437	405	364	365	377	389
12	321	466	405	461	479	400	400	398	419
13	358	408	432	514	462	384	383	393	420
14	337	411	474	451	385	411	421	411	413
15	339	441	530	429	398	484	444	448	438
16	360	550	651	409	383	495	483	508	478
17	398	681	678	363	284	690	653	620	598
18	452	608	540	323	246	599	605	581	482
19	428	355	401	250	192	349	350	377	332
20	223	224	238	166	181	210	239	227	212
21	132	149	150	106	101	143	132	141	130
22	92	94	122	95	48	109	84	100	92
23	54	70	95	71	43	50	51	64	82
24	36	34	66	54	42	21	35	38	41

897
878

997
903

7-18	4234	5438	5838	4433	3721	5253	5264	5185	4854
8-22	4773	5683	6244	4958	4076	5604	5303	5723	5364
0-24	4963	6208	6528	5101	4275	5968	5998	5933	5577



Woodgate ATC 1, A29 Lidsey Road (Northern Site)

Produced by Road Data Services Ltd.

Channel 2 - Southbound

Average Speed

Week 1

Hr Ending	22/02/2023 Wednesday	23/02/2023 Thursday	24/02/2023 Friday	25/02/2023 Saturday	26/02/2023 Sunday	27/02/2023 Monday	28/02/2023 Tuesday
1	30.2	33.4	33.0	30.7	32.0	33.2	34.0
2	31.1	37.3	33.0	37.3	34.6	34.2	31.8
3	26.6	27.7	31.7	30.6	34.4	27.7	29.2
4	38.6	33.6	37.0	36.4	31.9	35.7	36.6
5	34.1	30.2	32.7	36.1	30.4	34.6	32.5
6	29.1	29.2	29.5	30.6	35.0	31.0	30.2
7	29.4	28.6	29.5	30.0	33.1	29.1	28.3
8	24.1	25.8	26.8	29.0	29.8	28.0	25.1
9	24.2	23.4	24.7	27.2	30.2	24.3	22.7
10	24.3	18.4	24.2	27.5	28.2	25.4	21.3
11	26.7	24.3	24.3	26.6	28.3	22.2	20.0
12	26.5	24.4	24.9	25.1	25.9	19.3	21.7
13	26.5	23.6	25.2	25.7	26.5	24.2	22.0
14	25.8	25.2	25.8	25.9	28.0	22.5	20.6
15	25.3	26.3	23.2	25.0	26.7	20.9	19.1
16	24.5	24.8	23.2	26.1	27.5	23.3	21.9
17	24.4	24.4	25.3	24.9	28.1	27.0	26.1
18	26.5	24.7	26.2	27.4	27.8	24.7	25.1
19	25.4	25.6	26.6	27.3	28.8	26.5	25.8
20	27.2	27.8	27.5	27.4	29.1	27.4	27.5
21	27.8	27.8	28.3	29.0	30.5	27.9	28.3
22	27.9	29.1	27.7	29.3	30.1	28.4	27.5
23	30.9	31.4	27.9	30.3	31.5	30.4	28.3
24	32.3	30.8	29.4	30.5	31.2	31.0	31.2

0-13	26.6	24.4	24.6	25.9	27.0	20.7	20.9
0-24	25.9	24.9	25.4	26.7	28.0	24.6	23.5

Average (ALL)	25.4
Weekday Inter-Peak	23.3

Channel 2 - Southbound

85th Percentile

Hr Ending	22/02/2023 Wednesday	23/02/2023 Thursday	24/02/2023 Friday	25/02/2023 Saturday	26/02/2023 Sunday	27/02/2023 Monday	28/02/2023 Tuesday
1	35.4	38.8	39.3	38.1	37.9	38.4	41.4
2	37.5	47.7	37.2	43.8	39.2	42.2	37.2
3	33.9	30.2	35.1	38.4	40.0	29.4	34.3
4	48.6	37.4	47.6	47.2	38.4	42.9	42.1
5	40.3	37.6	35.9	44.5	33.3	39.9	40.5
6	36.6	35.6	35.4	37.8	41.1	37.7	37.8
7	36.4	35.6	34.9	36.7	39.3	35.0	35.3
8	31.3	31.7	33.4	35.0	36.3	32.9	31.3
9	29.9	29.8	29.9	32.5	35.1	30.4	28.1
10	30.6	25.4	29.8	32.6	34.6	30.2	26.8
11	31.4	29.3	29.9	31.5	33.1	28.2	26.9
12	31.6	29.6	30.1	30.9	31.0	26.1	28.2
13	32.3	30.5	30.8	30.9	31.7	30.5	27.7
14	31.1	30.3	30.9	31.8	33.0	28.4	27.4
15	30.1	31.1	29.9	30.3	31.7	27.7	26.0
16	30.2	30.1	28.2	31.7	32.7	30.5	27.9
17	30.1	29.8	30.7	30.8	33.1	31.5	30.5
18	32.1	30.2	31.3	32.9	33.1	30.3	30.1
19	29.9	30.7	32.0	32.1	34.5	31.9	31.4
20	33.0	32.9	33.2	33.1	34.2	32.8	32.8
21	34.3	34.5	34.8	35.5	36.0	33.6	34.0
22	34.6	33.3	33.8	33.3	35.9	33.3	32.9
23	37.1	37.4	33.6	37.3	36.5	37.3	35.0
24	36.9	35.4	35.5	35.2	36.6	36.3	36.0

0-13	31.5	28.8	33.0	31.2	33.1	27.5	27.7
0-24	31.8	31.1	31.3	32.5	33.5	31.2	30.1

85th %ile (ALL)	31.8
Weekday Inter-Peak	28.8

Woodgate ATC 1, A29 Lidsey Road (Northern Site)

Produced by Road Data Services Ltd.

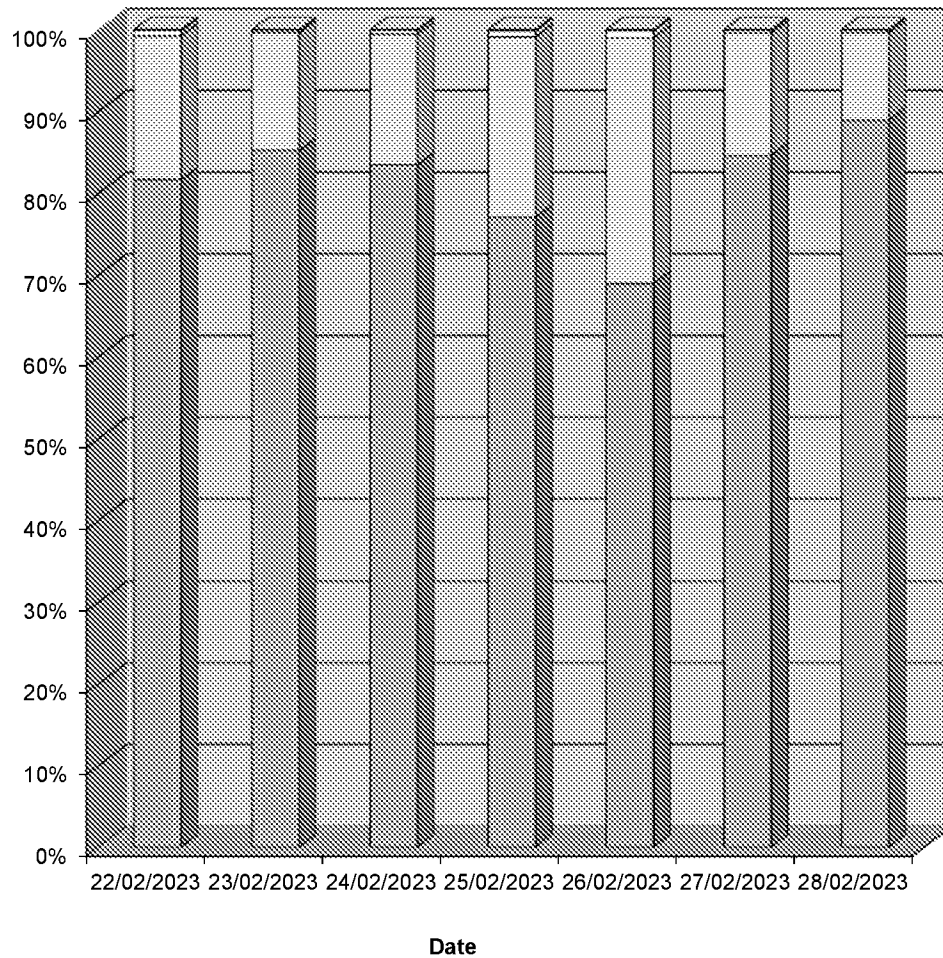
Channel 2 - Southbound

Speed Summary

Week 1

Speed (MPH)	22/02/2023 Wednesday	23/02/2023 Thursday	24/02/2023 Friday	25/02/2023 Saturday	26/02/2023 Sunday	27/02/2023 Monday	28/02/2023 Tuesday
0-30	4054	5290	5451	3931	2949	5051	5336
30-40	874	886	1044	1126	1284	893	639
40-50	30	19	29	37	37	20	20
50+	5	3	4	7	5	4	3
TOTAL	4963	6208	6528	5101	4275	5968	6998

Speed Summary (MPH)



0-30 30-40 40-50 50+

Woodgate ATC 1, A29 Lidsey Road (Northern Site)

Produced by Road Data Services Ltd.

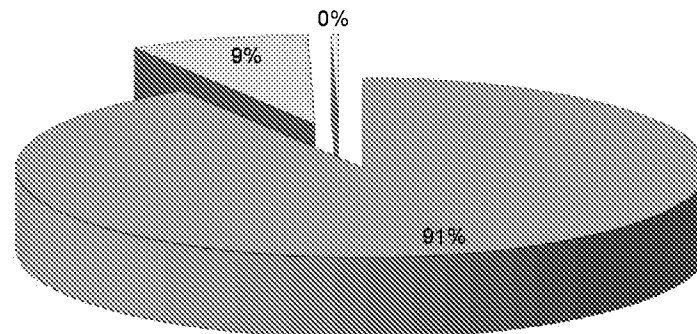
Channel 2 - Southbound

Vehicle Class

Week 1

Classes Day / Time	Car / LGV / Caravan - 1	OGV1 / Bus - 2,3,5,6,7,12	OGV2 - 4,8,9,10,11,13	TOTAL - 1,13
22/02/2023				
7-19	3851	378	5	4234
8-22	4337	430	6	4773
8-24	4506	447	6	4959
0-24	4506	450	7	4963
23/02/2023				
7-19	4854	548	34	5436
8-22	5387	537	34	5958
8-24	5568	551	35	6154
0-24	5568	604	36	6208
24/02/2023				
7-19	5144	471	23	5638
8-22	5702	519	23	6244
8-24	5967	528	23	6518
0-24	5967	538	23	6528
25/02/2023				
7-19	4138	390	7	4535
8-22	4525	317	8	4850
8-24	4767	323	8	5098
0-24	4767	325	9	5101
26/02/2023				
7-19	3884	219	8	3721
8-22	3825	241	9	4075
8-24	4019	233	9	4261
0-24	4019	247	9	4275
27/02/2023				
7-19	4742	485	16	5243
8-22	5258	531	17	5806
8-24	5414	535	17	5966
0-24	5414	537	17	5968
28/02/2023				
7-19	4725	508	31	5264
8-22	5217	557	31	5805
8-24	5397	564	31	5992
0-24	5397	570	31	5998
Average				
7-19	4421	416	18	4855
8-22	4831	455	18	5304
8-24	5022	457	16	5495
0-24	5081	467	19	5567

Total Vehicle Class Distribution



Woodgate ATC 2, A29 Lidsey Road (Middle Site)

Produced by Road Data Services Ltd.

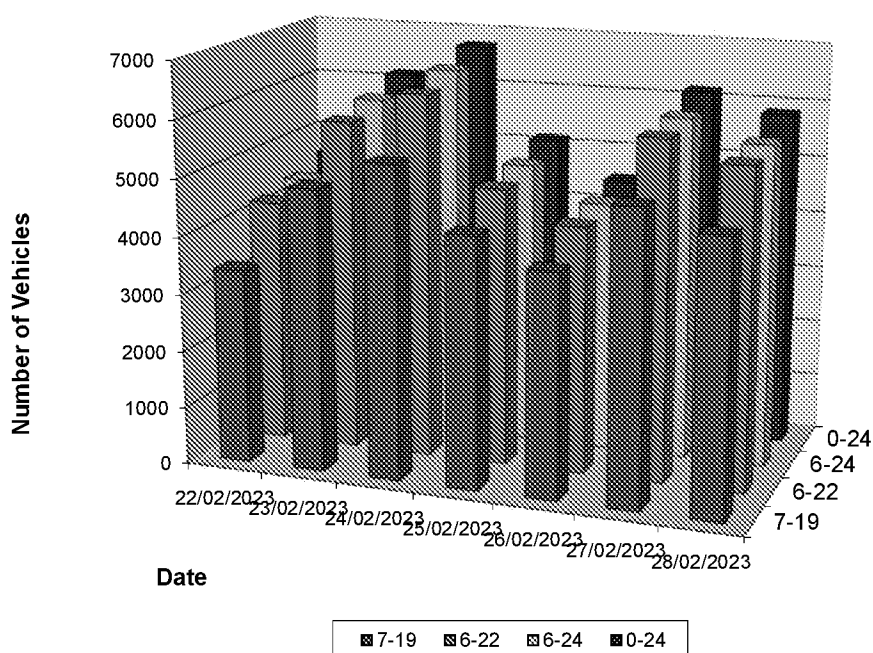
Channel 1 - Northbound

Vehicle Flow

Week 1

Hr Ending	22/02/2023 Wednesday	23/02/2023 Thursday	24/02/2023 Friday	25/02/2023 Saturday	26/02/2023 Sunday	27/02/2023 Monday	28/02/2023 Tuesday	Weekday Average	Average
1	22	17	17	47	33	9	21	17	24
2	10	9	13	19	10	6	13	10	11
3	14	11	12	14	13	8	10	11	12
4	18	19	29	15	13	12	23	20	18
5	35	42	25	25	15	26	36	33	29
6	125	131	118	61	36	144	149	133	109
7	415	371	368	119	66	391	436	396	309
8	252	623	614	154	107	738	731	592	460
9	101	440	520	291	179	569	546	435	378
10	225	377	412	335	303	392	422	368	352
11	263	395	451	450	417	378	319	361	382
12	322	402	448	474	505	416	328	389	414
13	371	427	480	478	450	409	258	369	410
14	369	344	424	431	475	343	340	364	368
15	376	455	485	427	394	385	376	415	414
16	337	402	498	392	391	387	358	395	395
17	287	401	433	384	316	384	383	378	370
18	294	373	384	308	198	373	369	359	328
19	207	278	289	239	155	286	281	268	248
20	200	217	248	153	181	223	165	211	198
21	137	139	156	115	105	115	146	139	130
22	114	135	133	84	61	98	82	112	101
23	88	116	120	80	36	55	41	84	77
24	41	40	72	40	39	27	28	42	41
7-19	3404	4917	5438	4383	3890	5080	4711	4708	4640
6-22	4270	5778	6343	4834	4303	5887	5540	5564	5279
6-24								5620	5397
0-24	4623	6164	6749	5135	4498	6174	5851	5814	5801

Vehicle Flow (Channel 1)



Woodgate ATC 2, A29 Lidsey Road (Middle Site)

Produced by Road Data Services Ltd.

Channel 1 - Northbound

Average Speed

Week 1

Hr Ending	22/02/2023 Wednesday	23/02/2023 Thursday	24/02/2023 Friday	25/02/2023 Saturday	26/02/2023 Sunday	27/02/2023 Monday	28/02/2023 Tuesday
1	38.0	42.1	40.9	40.9	39.6	39.9	35.2
2	36.3	41.0	39.4	38.1	38.6	38.5	38.1
3	39.4	39.2	41.5	42.2	38.7	44.6	38.5
4	38.2	41.5	39.1	41.0	36.9	40.6	41.8
5	41.0	41.3	40.3	42.0	41.1	40.1	38.6
6	39.6	40.8	42.0	42.0	40.6	41.2	42.0
7	36.5	38.6	37.6	39.5	39.1	38.1	38.6
8	18.3	34.8	36.1	38.6	39.7	35.2	33.2
9	11.0	35.3	35.8	37.0	40.2	33.7	34.0
10	22.3	33.9	35.4	36.9	37.9	35.5	35.6
11	34.7	33.0	35.7	36.0	37.1	35.8	16.5
12	35.2	35.0	35.5	36.4	36.2	35.1	32.7
13	34.8	34.8	35.4	36.2	35.7	35.5	25.3
14	35.3	35.9	35.8	36.8	36.8	35.7	28.5
15	36.3	35.1	35.0	35.9	36.0	28.8	31.3
16	36.7	34.8	35.5	36.6	36.7	32.9	34.1
17	34.7	35.8	34.5	36.9	37.4	35.0	35.4
18	35.1	34.7	36.2	37.0	38.7	36.2	35.4
19	36.1	35.0	35.4	36.7	36.9	36.8	35.0
20	36.3	35.9	36.1	38.6	36.6	36.5	36.3
21	37.3	38.5	37.7	38.1	37.4	39.8	34.2
22	37.9	37.2	36.4	38.6	40.3	39.3	37.8
23	36.9	37.6	36.0	39.5	40.9	39.9	36.7
24	40.1	37.0	38.7	36.6	38.8	42.2	38.4

10-12	35.3	34.3	35.6	35.2	36.6	35.4	24.7
13-15	35.3	35.3	35.4	36.8	36.8	35.7	28.5
0-24	33.8	35.5	36.0	37.0	37.2	35.4	33.1

Average (All)	35.4
Weekday Inter-Peak	33.7
85th Percentile	

Channel 1 - Northbound

85th Percentile

Hr Ending	22/02/2023 Wednesday	23/02/2023 Thursday	24/02/2023 Friday	25/02/2023 Saturday	26/02/2023 Sunday	27/02/2023 Monday	28/02/2023 Tuesday
1	45.5	48.6	47.5	48.4	45.3	46.5	39.8
2	43.7	46.8	45.2	42.8	42.1	43.9	48.0
3	46.1	46.3	47.9	49.0	45.6	51.0	43.1
4	45.4	46.3	44.8	47.9	40.8	46.3	48.0
5	49.6	47.1	46.0	48.6	48.5	45.1	44.5
6	46.0	46.8	48.4	47.3	45.9	46.9	46.9
7	41.4	44.6	42.6	44.9	47.1	42.8	43.2
8	29.0	40.6	41.7	44.4	44.7	40.2	39.6
9	19.2	40.5	40.1	43.0	45.9	40.3	39.2
10	37.2	40.0	40.8	41.6	43.6	40.6	40.3
11	39.8	39.2	41.0	41.1	42.9	40.8	27.5
12	40.1	39.9	40.2	41.9	40.5	40.2	39.3
13	40.1	39.3	39.8	41.1	41.0	39.9	39.1
14	40.5	40.5	40.3	41.4	41.6	40.0	39.1
15	41.2	40.8	40.5	41.9	41.4	40.5	40.1
16	41.1	41.1	39.8	41.8	41.8	41.7	39.4
17	43.5	41.0	42.7	41.6	42.5	42.0	41.0
18	41.3	41.5	41.9	42.3	44.0	42.1	40.9
19	41.4	40.1	40.8	42.1	42.2	42.3	41.0
20	41.9	42.0	41.8	44.5	41.6	42.8	42.4
21	42.5	44.0	42.9	44.1	43.5	45.3	40.9
22	43.4	42.4	43.3	45.0	47.6	45.5	44.5
23	42.7	43.8	42.5	45.2	46.9	45.1	45.3
24	46.1	45.0	44.3	44.4	47.2	52.3	48.5

10-12	40.3	39.7	40.8	41.5	41.7	40.5	37.1
13-15	40.5	40.5	40.3	41.4	41.6	40.0	39.1
0-24	43.1	41.4	41.6	42.5	42.7	42.2	42.0

85th %ile (All)	42.4
Weekday Inter-Peak	41.4

Woodgate ATC 2, A29 Lidsey Road (Middle Site)

Produced by Road Data Services Ltd.

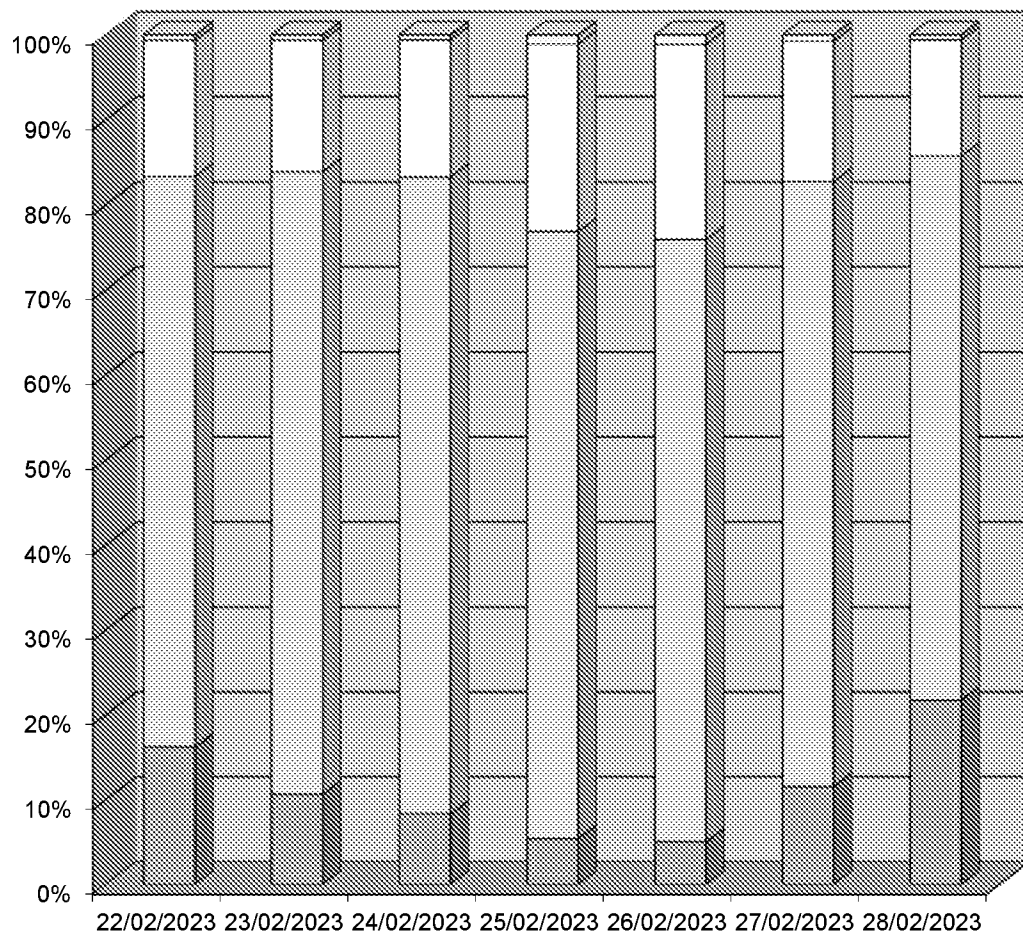
Channel 1 - Northbound

Speed Summary

Week 1

Speed (MPH)	22/02/2023 Wednesday	23/02/2023 Thursday	24/02/2023 Friday	25/02/2023 Saturday	26/02/2023 Sunday	27/02/2023 Monday	28/02/2023 Tuesday
0-30	750	659	561	279	226	714	1274
30-40	3104	4514	5061	3669	3189	4396	3752
40-50	740	952	1087	1133	1034	1019	800
50+	29	39	40	54	49	45	35
TOTAL	4623	6164	6749	5135	4498	6174	5861

Speed Summary (MPH)



Date

0-30 30-40 40-50 50+

Woodgate ATC 2, A29 Lidsey Road (Middle Site)

Produced by Road Data Services Ltd.

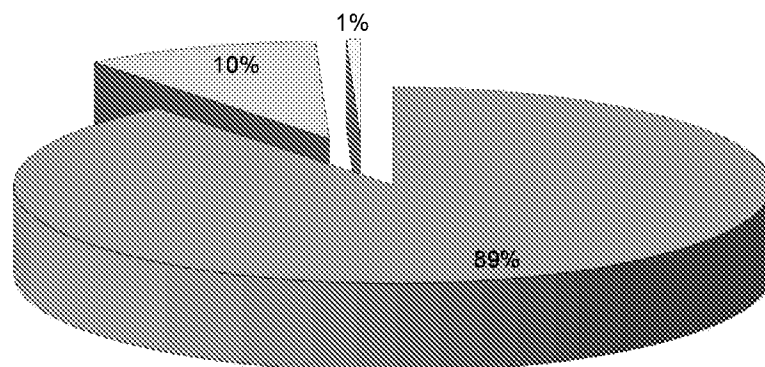
Channel 1 - Northbound

Vehicle Class

Week 1

Classes Day / Time	Car / LGV / Caravan - 1	OGV1 / Bus - 2,3,5,6,7,12	OGV2 - 4,8,9,10,11,13	TOTAL - 1-13
22/02/2023				
7-19	3015	373	16	3404
6-22	3779	474	17	4270
6-24	3773	434	21	4228
0-24	4061	535	27	4623
23/02/2023				
7-19	4305	505	27	4837
6-22	5083	688	31	5799
6-24	5083	685	34	5802
0-24	5384	757	43	6184
24/02/2023				
7-19	4616	504	38	5158
6-22	5020	602	41	5663
6-24	5021	583	41	5645
0-24	5961	742	46	6749
25/02/2023				
7-19	4060	291	12	4363
6-22	4455	338	13	4806
6-24	4455	335	13	4803
0-24	4757	359	19	5135
26/02/2023				
7-19	3660	223	7	3890
6-22	4044	250	9	4303
6-24	4044	253	9	4306
0-24	4225	264	9	4498
27/02/2023				
7-19	4451	565	34	5050
6-22	5202	647	36	5885
6-24	5203	633	36	5872
0-24	5441	695	38	6174
28/02/2023				
7-19	4226	449	36	4711
6-22	4958	534	36	5528
6-24	4958	533	36	5527
0-24	5223	589	49	5861
Average				
7-19	4078	439	24	4541
6-22	4738	514	27	5279
6-24	4738	509	28	5275
0-24	5005	563	33	5601

Total Vehicle Class Distribution



Woodgate ATC 2, A29 Lidsey Road (Middle Site)

Produced by Road Data Services Ltd.

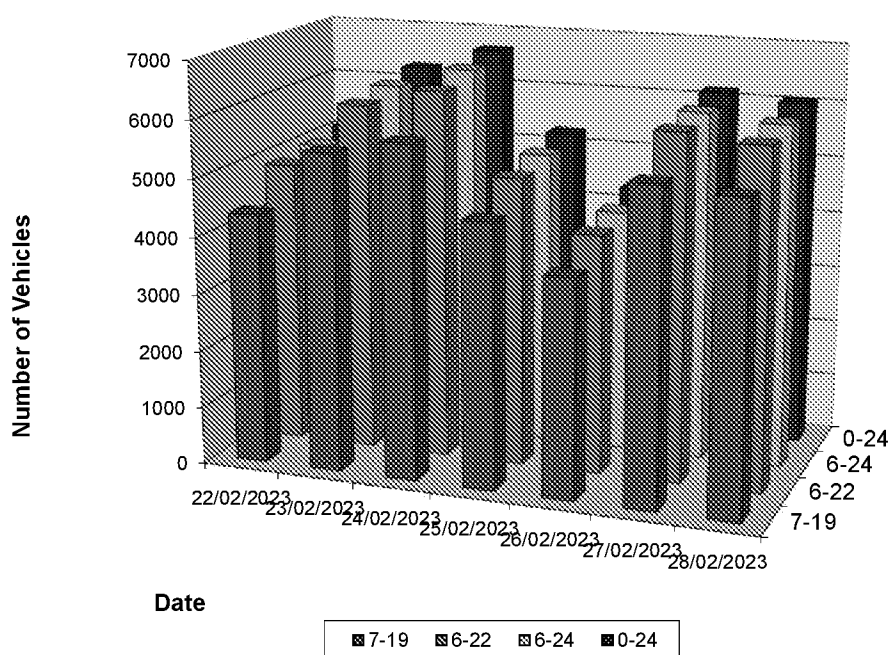
Channel 2 - Southbound

Vehicle Flow

Week 1

Hr Ending	22/02/2023 Wednesday	23/02/2023 Thursday	24/02/2023 Friday	25/02/2023 Saturday	26/02/2023 Sunday	27/02/2023 Monday	28/02/2023 Tuesday	Weekday Average	Average
1	20	23	27	55	41	23	24	23	30
2	6	9	7	15	20	12	6	8	11
3	6	5	11	10	10	4	10	7	8
4	8	9	14	10	11	4	10	9	9
5	14	17	20	19	8	17	12	16	16
6	47	51	48	16	30	40	48	47	40
7	97	87	104	54	23	102	95	97	80
8	245	284	265	119	64	278	309	276	223
9	329	422	481	283	134	464	487	407	371
10	357	403	401	412	295	407	418	397	386
11	341	428	421	450	409	368	347	381	395
12	327	468	433	475	498	413	398	406	430
13	375	415	450	528	480	402	352	399	429
14	352	426	482	475	405	432	401	418	428
15	363	431	537	455	396	503	461	459	448
16	382	580	662	409	396	487	506	523	489
17	417	698	691	381	281	705	676	637	650
18	460	602	561	345	235	622	607	570	490
19	426	366	395	257	197	347	359	379	336
20	232	229	239	167	190	218	240	232	216
21	131	144	148	111	103	136	137	139	130
22	100	94	125	97	51	104	76	100	82
23	52	72	95	70	42	55	46	64	62
24	36	33	62	54	41	22	37	38	41
7-19	4374	5523	5779	4589	3790	5426	5321	5265	4972
6-22	4254	5077	6395	5018	4157	5863	5859	5853	5491
6-24								5825	5594
0-24	5123	6296	6679	5267	4360	6165	6063	6065	5707

Vehicle Flow (Channel 2)



Woodgate ATC 2, A29 Lidsey Road (Middle Site)

Produced by Road Data Services Ltd.

Channel 2 - Southbound

Average Speed

Week 1

Hr Ending	22/02/2023 Wednesday	23/02/2023 Thursday	24/02/2023 Friday	25/02/2023 Saturday	26/02/2023 Sunday	27/02/2023 Monday	28/02/2023 Tuesday
1	38.2	41.2	40.2	40.3	38.6	40.3	42.7
2	33.8	41.9	40.8	41.7	38.6	38.6	39.4
3	37.5	41.2	39.4	37.5	39.0	39.7	37.1
4	47.5	45.0	43.2	38.4	38.7	46.5	39.0
5	39.2	38.1	39.9	42.9	39.2	39.5	41.0
6	36.0	37.6	36.9	37.0	39.6	37.9	36.7
7	34.2	36.3	35.7	36.8	39.3	35.6	37.1
8	31.5	34.7	35.0	37.1	37.2	35.4	34.5
9	30.0	33.8	32.9	34.8	36.8	34.3	31.3
10	31.4	32.4	32.8	34.9	35.3	32.9	31.5
11	33.8	33.1	32.8	33.2	35.3	31.8	26.5
12	33.2	32.3	33.1	33.8	32.1	30.1	30.3
13	34.2	33.3	33.3	34.1	34.1	31.5	30.2
14	33.6	33.4	34.1	34.8	35.1	30.1	31.4
15	33.6	33.5	34.1	33.3	35.6	30.3	30.9
16	34.0	33.8	33.3	35.0	34.6	32.5	31.8
17	33.5	33.7	31.8	34.9	34.2	34.3	33.1
18	32.7	32.5	33.2	34.3	35.5	31.1	32.7
19	32.2	33.9	33.5	33.9	35.7	33.2	33.3
20	33.8	33.2	34.7	36.2	35.9	34.8	33.8
21	34.9	35.4	36.2	36.3	37.5	35.2	32.5
22	35.5	35.4	35.8	35.5	38.9	36.4	35.2
23	39.3	36.9	35.7	38.2	40.2	38.0	34.6
24	40.0	39.9	36.2	38.2	35.9	43.7	35.3

10-12	33.5	32.7	33.0	33.5	33.5	30.5	29.5
13-15	33.5	33.5	33.5	34.5	35.5	32.5	31.5
0-24	33.2	33.6	33.6	34.7	35.1	32.7	32.0

Average (All)	33.6
Weekday Inter-Peak	32.3
85th Percentile	

Channel 2 - Southbound

85th Percentile

Hr Ending	22/02/2023 Wednesday	23/02/2023 Thursday	24/02/2023 Friday	25/02/2023 Saturday	26/02/2023 Sunday	27/02/2023 Monday	28/02/2023 Tuesday
1	43.5	47.5	47.5	47.3	45.4	50.0	49.5
2	42.1	47.5	45.4	48.9	44.4	47.2	47.2
3	46.9	44.2	44.6	44.6	45.2	42.9	44.5
4	54.6	53.6	51.0	44.2	44.3	52.2	50.6
5	44.5	45.5	46.6	51.1	49.0	43.3	49.0
6	43.3	44.6	44.3	46.2	48.8	44.5	45.7
7	41.6	42.7	40.8	42.2	45.9	42.4	43.0
8	38.2	40.0	40.4	43.3	44.4	40.2	40.2
9	35.9	38.8	37.4	40.2	42.4	38.5	36.1
10	38.1	37.3	37.9	39.1	40.8	38.2	36.9
11	38.7	37.7	37.8	39.6	40.4	36.8	33.1
12	38.2	37.4	37.7	38.5	38.5	36.3	37.1
13	38.9	38.3	37.8	38.5	38.8	35.7	36.6
14	38.1	38.4	38.3	39.4	39.7	35.5	36.3
15	38.1	38.8	39.4	38.8	39.7	35.9	36.5
16	38.7	38.8	37.5	39.6	39.5	38.0	36.9
17	38.6	38.1	38.7	39.6	39.8	38.7	38.1
18	39.0	37.9	37.8	38.9	40.6	38.5	38.2
19	36.6	38.8	38.5	38.8	41.0	38.9	38.4
20	39.1	40.7	40.0	41.6	41.1	39.9	39.2
21	39.7	40.3	41.8	41.6	43.6	39.8	38.3
22	41.0	40.4	41.9	40.9	45.1	42.7	41.2
23	45.2	44.6	42.3	44.8	45.5	45.4	40.7
24	47.8	47.3	41.9	43.1	42.4	51.9	41.7

10-12	38.5	37.6	37.8	38.1	38.5	36.5	35.8
13-15	38.5	38.5	38.5	39.5	40.5	37.5	36.5
0-24	38.9	39.0	38.9	40.0	40.7	38.7	38.1

85th %ile (All)	39.2
Weekday Inter-Peak	37.8

Woodgate ATC 2, A29 Lidsey Road (Middle Site)

Produced by Road Data Services Ltd.

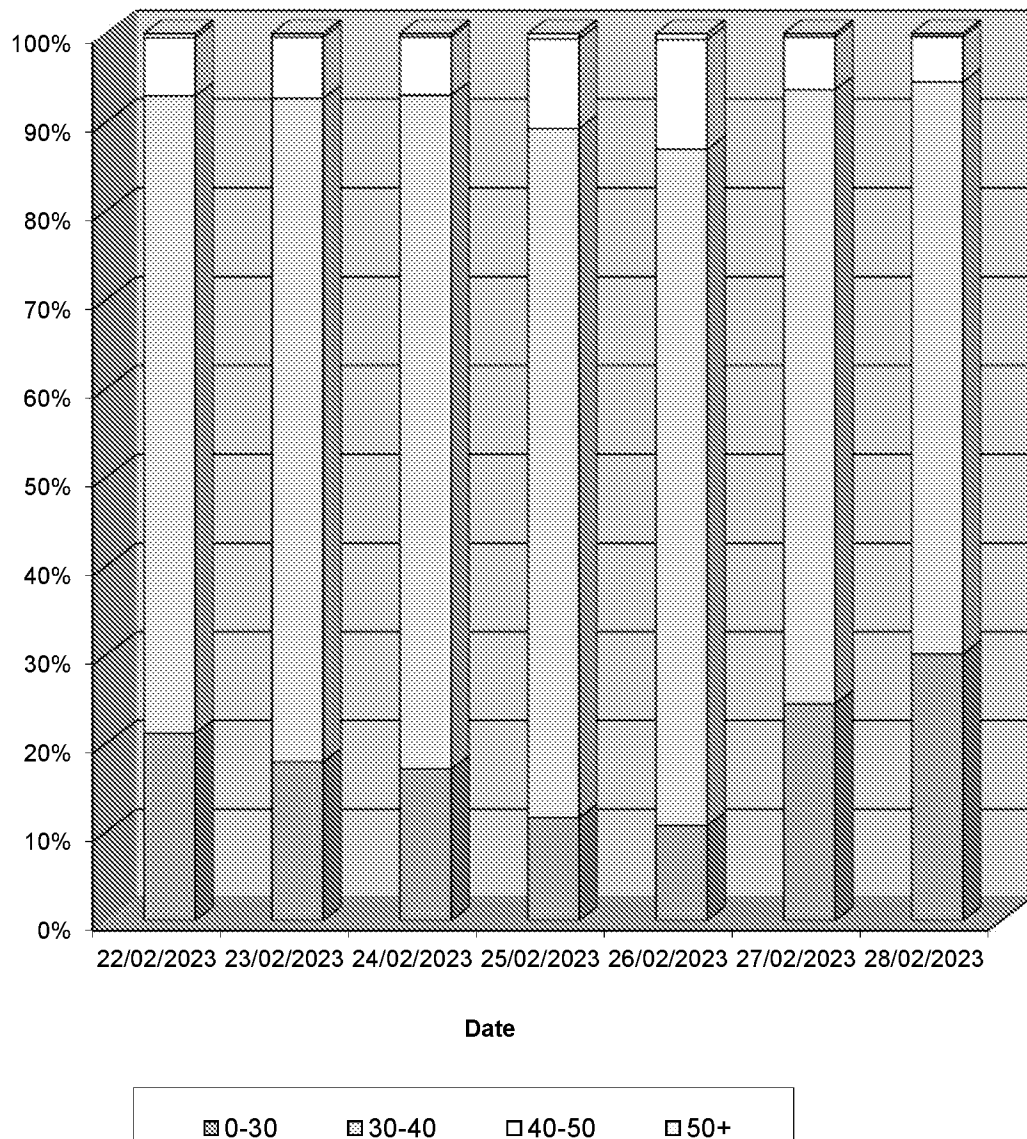
Channel 2 - Southbound

Speed Summary

Week 1

Speed (MPH)	22/02/2023 Wednesday	23/02/2023 Thursday	24/02/2023 Friday	25/02/2023 Saturday	26/02/2023 Sunday	27/02/2023 Monday	28/02/2023 Tuesday
0-30	1084	1129	1144	613	467	1510	1827
30-40	3679	4706	5073	4091	3324	4266	3906
40-50	336	436	437	531	540	365	308
50+	24	25	25	32	29	24	21
TOTAL	6123	6296	6679	5267	4360	6165	6082

Speed Summary (MPH)



Woodgate ATC 2, A29 Lidsey Road (Middle Site)

Produced by Road Data Services Ltd.

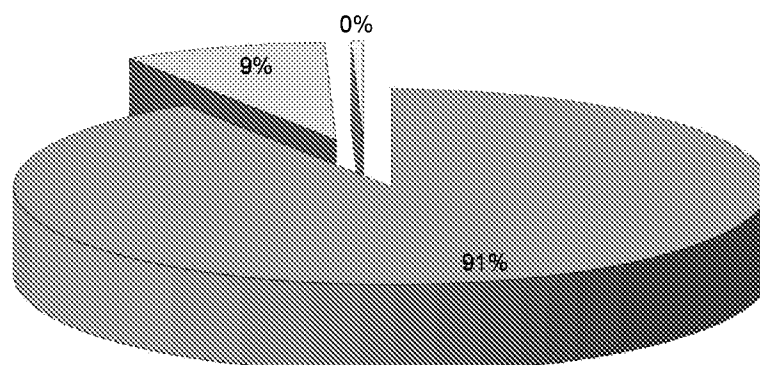
Channel 2 - Southbound

Vehicle Class

Week 1

Classes Day / Time	Car / LGV / Caravan - 1	OGV1 / Bus - 2,3,5,6,7,12	OGV2 - 4,8,9,10,11,13	TOTAL - 1-13
22/02/2023				
7-19	3817	442	15	4274
6-22	4423	488	17	4928
6-24	4333	487	17	4837
0-24	4597	509	17	5123
23/02/2023				
7-19	4922	567	34	5523
6-22	5423	613	35	6071
6-24	5333	608	35	5976
0-24	5621	636	39	6296
24/02/2023				
7-19	5218	525	36	5779
6-22	5760	577	36	6373
6-24	5653	585	38	6276
0-24	6038	599	42	6679
25/02/2023				
7-19	4309	276	10	4595
6-22	4709	297	12	5018
6-24	4553	294	12	4859
0-24	4943	312	12	5267
26/02/2023				
7-19	3585	200	5	3790
6-22	3931	218	8	4157
6-24	3833	208	8	4049
0-24	4123	228	9	4360
27/02/2023				
7-19	4848	544	35	5427
6-22	5360	568	40	5968
6-24	5253	552	40	5845
0-24	5626	599	40	6265
28/02/2023				
7-19	4751	532	38	5321
6-22	5249	582	38	5869
6-24	5153	568	38	5759
0-24	5423	599	40	6062
Average				
7-19	4507	440	25	4972
6-22	4984	481	27	5492
6-24	4853	487	27	5367
0-24	5182	497	28	5707

Total Vehicle Class Distribution



Appendix 5

Level Crossing Survey June 2023

WOODGATE LEVEL CROSSING - LIDSEY ROAD					MODAL				
WEDNESDAY 28TH JUNE 2023					modaldata.com				
08.00 - 09.00 AM					17.00 - 18.00 PM				
BARRIER		DURATION MINUTES	QUEUE N,BOUND	QUEUE S,BOUND	BARRIER		DURATION MINUTES	QUEUE N,BOUND	QUEUE S,BOUND
DOWN	UP				DOWN	UP			
8.02	8.05	0.0300	50+	25+	17.05	17.07	0.02	16	25+
8.07	8.09	0.0200	50+	25+	17.10	17.13	0.03	31	25+
8.13	8.15	0.0200	20	21	17.18	17.20	0.02	24	25+
8.26	8.28	0.0200	40+	25+	17.26	17.29	0.03	21	25+
8.32	8.34	0.0200	27	15	17.30	17.31	0.01	34	25+
8.37	8.38	0.0100	19	10	17.41	17.44	0.03	17	25+
8.41	8.43	0.0200	25	20	17.46	17.47	0.01	13	25+
8.45	8.46	0.0100	29	25+	17.49	17.51	0.02	14	25+
8.47	8.49	0.0200	24	25+	17.59	18.01	0.02	8	25+
TOTAL MINS AM =		0.17			TOTAL MINS PM =		0.19		

Appendix 6

MCC Traffic Survey September 2023

Rapid Data Services Ltd

Report Page:
Thursday 14th September 2023
Version: 2
Agreement: A23-00038

TIME	To A250										To Newlands Road										To A29(S)										To Saltbox Road									
	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUS	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUS	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUS													
0700-0715	0	0	6	0	1	0	0	7	7.0	0	0	1	0	1	0	0	2	2.0	0	1	28	17	6	0	0	0	32	34.4												
0715-0730	0	0	7	4	0	0	0	11	11.0	0	0	1	1	0	0	0	2	2.0	0	1	38	11	5	1	0	0	55	59.2												
0730-0745	0	0	12	2	2	0	0	16	16.0	0	0	2	0	1	1	0	4	4.0	1	0	57	13	2	0	0	0	72	76.3												
0745-0800	0	0	26	0	1	0	0	27	27.0	0	0	4	1	0	0	0	5	5.0	1	1	90	12	6	0	0	0	109	113.9												
Hourly Total	0	0	61	6	4	0	0	71	71.0	0	0	8	2	2	1	0	13	13.0	2	3	215	40	13	1	0	0	231	238.8												
0800-0815	0	0	12	1	1	0	0	14	14.0	0	0	4	0	0	0	1	5	5.0	0	2	59	12	3	0	1	0	75	78.3												
0815-0830	0	0	24	3	0	0	1	28	28.0	0	0	6	1	1	1	0	9	9.0	1	1	91	23	5	2	0	0	105	108.7												
0830-0845	0	0	10	1	0	1	0	12	12.0	0	0	4	1	0	0	0	5	5.0	0	0	75	12	3	1	0	0	91	94.6												
0845-0900	0	0	14	4	1	1	0	20	20.0	0	0	4	2	0	1	0	7	7.0	0	1	98	18	0	2	0	0	119	123.9												
Hourly Total	0	0	38	9	2	2	1	52	52.0	0	0	18	4	2	2	1	25	25.0	1	4	223	35	9	3	0	0	238	243.8												
0900-0915	0	0	9	2	0	0	0	11	11.0	1	0	3	0	0	0	2	6	7.0	0	1	69	18	3	0	0	0	81	85.0												
0915-0930	0	0	12	1	0	0	0	15	15.0	0	0	5	0	0	1	0	6	7.0	1	0	63	18	3	3	1	0	79	82.6												
0930-0945	0	0	18	2	0	0	0	20	20.0	0	0	4	0	0	0	0	4	4.0	0	0	70	6	2	0	0	0	78	79.7												
0945-1000	0	0	8	4	0	0	0	12	12.0	0	0	3	1	1	0	0	5	5.0	0	0	70	11	7	1	0	0	80	82.8												
Hourly Total	0	0	47	9	0	0	0	56	56.0	1	0	16	1	1	3	0	21	21.0	1	1	216	43	15	4	1	0	236	240.5												
TOTAL	0	0	188	24	6	2	1	211	217.6	1	0	41	3	2	4	1	66	70.0	2	5	514	77	48	10	2	0	585	595.6												
1600-1615	0	0	23	1	1	0	0	25	25.0	0	0	4	1	0	0	0	5	5.0	0	5	77	27	4	1	0	0	94	114.3												
1615-1630	0	0	19	8	0	0	0	27	27.0	0	0	4	0	0	0	0	4	4.0	0	2	81	19	3	1	0	0	105	107.6												
1630-1645	0	0	36	7	0	0	0	43	43.0	0	0	3	1	0	0	0	4	4.0	1	2	103	36	2	0	0	0	144	143.9												
1645-1700	0	1	25	10	0	0	0	35	35.0	0	0	4	0	0	0	0	4	4.0	0	1	116	28	6	0	0	0	135	132.4												
Hourly Total	0	1	103	26	1	0	0	131	131.0	0	0	15	2	0	0	0	17	17.0	1	10	317	118	15	1	0	0	443	435.2												
1700-1715	0	0	28	5	0	0	0	33	33.0	0	0	2	1	0	0	0	3	3.0	0	1	88	35	5	1	0	0	129	118.2												
1715-1730	0	0	16	5	0	0	0	21	21.0	0	0	4	0	0	2	0	6	6.0	1	0	97	24	1	0	0	0	122	122.7												
1730-1745	0	0	27	1	0	0	0	28	28.0	0	0	3	1	0	1	0	5	5.0	1	4	70	18	5	1	1	0	100	101.6												
1745-1800	0	0	31	3	0	0	0	34	34.0	0	0	4	2	0	0	0	6	6.0	0	3	93	19	7	2	0	0	115	126.2												
Hourly Total	0	0	102	14	0	0	0	116	116.0	0	0	11	3	0	3	0	26	26.0	2	8	268	56	16	4	1	0	343	346.9												
1800-1815	0	0	15	2	0	0	0	17	17.0	0	0	7	2	0	1	0	10	10.0	0	3	100	14	0	0	0	0	117	116.2												
1815-1830	0	0	18	0	1	0	0	19	19.0	0	0	4	1	0	0	0	5	5.0	0	2	87	16	0	0	0	0	105	105.9												
1830-1845	0	0	8	4	0	0	0	12	12.0	0	0	2	0	0	0	0	2	2.0	0	0	66	8	1	1	0	0	76	77.6												
1845-1900	0	0	18	2	1	0	0	21	21.0	0	0	2	0	0	0	0	4	4.0	0	2	96	15	2	0	0	0	113	114.9												
Hourly Total	0	0	69	8	1	0	0	78	78.0	0	0	13	3	0	1	0	19	19.0	0	7	249	43	3	1	0	0	303	311.6												
TOTAL	0	1	284	48	3	0	0	335	318.9	0	0	45	4	0	4	0	85	81.0	3	25	1078	259	35	7	1	0	1188	1181.2												

PCU Factors
CYCLE 0.2
M/CYCLE 0.4
CAR 1.0
LGV 1.0
OGV1 1.5
OGV2 2.3
BUS 2.0

Rapid Data Services Ltd

Report Page:
Thursday 14th September 2023
Version: 2
Appointed: A229

TIME	To Newlands Road										To A25 (S)										To Saktho Road										To A25 (N)									
	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUS	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUS	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUS	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUS				
0700-0715	0	0	1	3	0	0	0	4	4.0	0	4	105	29	8	7	1	154	165.7	0	0	4	5	0	0	0	9	9.0	0	0	22	5	0	0	0	27	27.0				
0715-0730	0	0	3	0	0	0	0	3	3.0	0	4	152	36	7	3	0	199	207.0	0	0	5	3	0	0	0	8	8.0	0	1	27	3	0	1	0	31	31.0				
0730-0745	0	0	1	1	0	1	0	3	3.0	0	3	142	26	3	1	0	172	172.0	0	0	5	5	0	0	0	10	10.0	0	1	32	7	0	0	0	40	40.0				
0745-0800	0	0	4	0	0	0	0	4	4.0	0	2	142	25	3	3	0	175	178.2	0	0	9	2	0	0	0	11	11.0	0	0	24	1	3	0	0	28	28.0				
Hourly Total	0	0	9	4	0	1	0	14	14.0	0	13	349	71	24	14	1	738	757.9	0	0	23	16	0	0	0	38	38.0	0	2	105	16	3	0	0	127	127.0				
0800-0815	0	0	6	0	0	0	0	6	6.0	0	1	181	28	9	3	0	202	228.6	0	0	9	2	0	0	0	11	11.0	0	0	13	1	1	1	0	16	17.6				
0815-0830	0	0	7	0	1	1	0	9	9.0	0	0	139	24	10	3	1	177	166.9	0	0	18	0	1	0	0	19	19.0	0	0	31	7	2	0	0	39	39.0				
0830-0845	0	0	6	1	0	0	0	7	7.0	0	4	150	28	10	3	0	185	185.0	0	0	12	2	0	0	0	14	14.0	0	0	23	9	3	1	0	36	36.0				
0845-0900	0	0	3	1	0	0	0	4	4.0	0	1	130	15	4	3	1	159	160.3	0	0	16	0	0	0	0	16	16.0	0	0	22	6	0	2	0	30	30.0				
Hourly Total	0	0	22	2	1	1	0	26	27.0	0	6	380	66	33	12	2	444	478.5	0	0	55	2	1	0	0	60	60.0	0	16	58	23	6	4	0	79	102.1				
0900-0915	0	0	6	0	0	0	0	6	6.0	0	1	149	23	10	1	0	164	169.7	0	0	14	2	0	0	0	16	16.0	0	1	30	5	0	0	0	36	36.0				
0915-0930	0	0	4	0	0	0	0	4	4.0	0	1	125	28	3	2	0	159	162.5	0	0	13	2	0	0	0	16	16.0	0	0	18	6	3	1	0	28	28.0				
0930-0945	0	0	3	1	0	0	0	4	4.0	0	3	103	27	8	4	0	144	147.4	0	0	9	3	0	0	0	12	12.0	0	0	15	6	1	2	0	24	25.0				
0945-1000	0	0	5	0	1	0	0	6	6.0	0	1	140	21	5	1	0	161	170.8	0	0	7	2	0	0	0	9	9.0	0	0	11	5	0	0	0	16	16.0				
Hourly Total	0	0	19	2	1	1	0	23	24.0	0	6	357	58	26	8	0	435	476.4	0	0	43	7	0	0	0	52	52.0	0	1	64	22	4	3	0	74	98.9				
TOTAL	0	0	49	7	2	2	0	59	63.0	0	14	1886	310	60	34	3	2108	2181.9	0	0	121	26	1	0	0	160	160.0	0	3	228	31	13	6	0	278	328.1				
1600-1615	0	0	3	0	0	0	0	3	3.0	0	2	109	25	3	3	0	142	146.2	0	0	5	0	0	0	0	5	5.0	0	1	18	6	2	0	0	27	27.4				
1615-1630	0	0	4	0	0	0	0	4	4.0	0	1	145	41	8	3	0	198	201.3	0	0	12	0	0	0	0	13	13.0	0	0	13	7	0	1	0	21	22.3				
1630-1645	0	0	2	0	0	0	0	2	2.0	0	4	169	36	6	2	1	218	222.2	0	0	10	2	0	0	0	12	12.0	0	0	25	2	1	0	0	29	29.0				
1645-1700	0	0	3	0	0	0	0	3	3.0	0	3	145	28	6	3	0	185	187.5	0	0	8	0	0	0	0	8	8.0	0	0	16	9	0	0	0	26	26.0				
Hourly Total	0	0	12	0	0	0	0	12	12.0	0	10	368	100	24	11	1	443	460.9	0	0	35	2	0	0	0	37	37.0	0	1	70	24	3	1	0	99	115.8				
1700-1715	0	0	3	2	0	0	0	5	5.0	0	1	142	40	3	1	0	186	188.2	0	0	5	0	0	0	0	5	5.0	0	0	16	2	1	0	0	19	19.0				
1715-1730	0	0	3	1	0	0	0	4	4.0	0	5	181	19	1	1	0	207	206.6	0	0	9	0	0	0	0	9	9.0	0	1	11	1	1	0	0	14	14.0				
1730-1745	0	0	3	0	0	0	0	3	3.0	0	1	156	22	4	2	0	185	188.2	0	0	13	2	1	0	0	16	16.0	0	0	8	1	0	0	0	17	17.0				
1745-1800	0	0	6	0	0	0	0	6	6.0	0	1	161	19	2	3	0	187	190.6	0	0	4	0	0	0	0	4	4.0	0	3	9	2	0	1	0	15	15.4				
Hourly Total	0	0	18	3	0	0	0	21	21.0	0	10	340	100	18	7	0	435	459.6	0	0	34	2	1	0	0	34	34.0	0	5	42	5	2	1	0	50	59.9				
1800-1815	0	0	4	0	0	0	0	4	4.0	0	4	161	23	2	0	0	178	188.0	0	0	10	2	0	0	0	12	12.0	0	0	22	3	3	0	0	28	28.0				
1815-1830	0	0	6	0	0	2	0	8	8.0	0	0	152	16	0	0	0	168	168.0	0	0	6	0	0	0	0	6	6.0	0	0	14	2	0	0	0	18	18.0				
1830-1845	0	0	2	1	0	0	0	3	3.0	0	0	140	21	2	0	0	163	164.0	0	0	7	0	0	0	0	7	7.0	0	0	12	1	0	0	0	15	15.0				
1845-1900	0	0	2	2	1	0	0	5	5.0	0	1	120	14	2	1	0	126	128.7	0	0	8	0	0	0	0	8	8.0	0	0	7	3	0	0	0	13	13.0				
Hourly Total	0	0	14	3	1	2	0	20	20.0	0	6	373	78	2	1	0	439	460.9	0	0	33	2	0	0	0	33	33.0	0	0	56	5	3	0	0	64	66.0				
TOTAL	0	0	41	6	1	2	0	50	53.1	0	14	1781	304	37	19	1	2101	2188.6	0	0	57	2	1	0	0	104	104.0	0	8	189	33	6	2	0	223	226.0				

PCU Factors	
CYCLE	0.2
M/CYCLE	0.4
CAR	1.0
LGV	1.0
OGV1	1.5
OGV2	2.3
BUS	2.0

Rapid Data Services Ltd

Report Page:
Thursday 14th September 2023
Version: 2
Appointed: Newbury Road

TIME	To A25 (S)										To Saltbox Road										To A25 (N)										To A259									
	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUS	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUS	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUS	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUS				
0730-0735	1	0	1	1	0	1	0	4	4.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
0735-0730	0	0	0	2	1	3	0	6	18.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
0730-0745	0	0	1	2	0	1	0	4	8.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
0745-0800	0	0	3	1	0	0	0	4	4.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Hourly Total	1	0	5	6	1	5	0	18	54.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
0800-0815	0	0	4	0	1	1	0	6	18.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
0815-0830	0	0	10	2	2	3	1	18	54.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
0830-0845	0	0	20	0	0	0	0	20	60.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
0845-0900	0	0	12	2	2	2	0	18	54.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Hourly Total	0	0	48	4	4	6	1	64	192.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
0900-0915	0	0	17	2	0	0	0	19	57.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
0915-0930	0	0	12	2	2	3	0	19	57.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
0930-0945	0	0	20	0	0	7	0	27	81.0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
0945-1000	0	0	14	0	0	3	0	17	51.0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Hourly Total	0	0	63	4	2	13	0	82	246.0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
TOTAL	1	0	114	14	7	24	1	180	540.0	0	0	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
1600-1615	0	0	27	1	1	2	0	31	93.0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
1615-1630	1	0	20	0	1	4	0	25	75.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
1630-1645	0	0	22	0	0	0	0	22	66.0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
1645-1700	0	0	17	2	0	2	0	21	63.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Hourly Total	1	0	86	3	2	8	0	103	309.0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
1700-1715	0	0	16	2	0	0	0	18	54.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
1715-1730	0	0	14	5	1	2	0	22	66.0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
1730-1745	0	0	11	1	0	2	0	14	42.0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
1745-1800	0	0	16	1	0	1	0	18	54.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Hourly Total	0	0	87	9	1	5	0	112	336.0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
1800-1815	0	0	15	3	1	1	0	20	60.0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
1815-1830	0	0	19	1	1	0	0	21	63.0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
1830-1845	0	0	12	1	0	0	0	13	39.0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
1845-1900	0	0	7	3	0	2	0	12	36.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Hourly Total	0	0	63	6	2	1	1	74	222.0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
TOTAL	1	0	181	20	9	16	1	238	714.0	0	0	11	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			

PCU Factor:	
CYCLE	0.2
M/CYCLE	0.4
CAR	1.0
LGV	1.0
OGV1	1.5
OGV2	2.3
BUS	2.0

Report Data Services Ltd

Report Name
Thursday 14th September 2023
Location
A23 South

TIME	To Saltbox Road										To A259 (N)										To A259										To Newlands Road									
	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUS	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUS	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUS	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUS				
0730-0735	0	0	14	11	0	0	0	25	26.0	0	0	64	25	2	2	0	90	87.0	0	2	136	43	5	2	0	0	149	149.0	0	0	3	0	1	0	0	4	4.0			
0735-0740	0	0	9	8	2	0	0	19	20.0	0	0	69	16	4	1	0	90	93.0	0	0	152	47	12	3	1	0	168	168.0	0	0	7	3	0	0	0	10	10.0			
0740-0745	0	0	17	4	0	0	0	21	21.3	1	2	132	30	5	2	0	167	169.8	0	3	111	38	7	1	0	0	160	160.0	0	0	4	1	1	2	0	16	16.0			
0745-0800	0	0	25	7	1	0	0	33	33.6	0	4	87	47	2	2	0	140	143.2	0	0	113	41	7	2	0	0	123	123.1	0	0	9	3	0	3	0	15	15.0			
Hourly Total	0	0	66	30	3	0	0	99	99.9	1	7	332	116	13	7	0	478	489.8	0	5	610	163	21	6	1	0	726	726.9	0	0	25	7	2	5	0	39	39.0			
0800-0815	0	0	29	7	2	0	0	38	38.0	0	1	88	20	7	1	0	117	121.2	0	0	102	31	7	5	1	0	145	147.0	0	0	20	2	0	5	0	27	27.0			
0815-0830	0	0	25	10	0	0	0	35	36.0	0	0	69	17	2	1	0	90	93.0	0	3	124	41	8	0	1	0	141	140.2	0	0	18	2	1	3	0	24	24.0			
0830-0845	0	0	23	6	3	0	0	32	32.6	0	1	60	12	3	1	0	76	77.0	0	0	114	38	5	2	0	0	135	135.1	0	0	14	1	1	3	0	20	20.0			
0845-0900	0	0	28	6	1	0	0	35	36.6	0	0	42	21	2	2	0	67	70.6	0	2	121	49	8	1	0	0	141	140.3	0	0	11	2	2	1	0	16	16.0			
Hourly Total	0	0	106	59	6	0	0	140	143.8	0	2	288	70	14	6	0	380	382.3	0	5	481	169	26	8	0	0	582	582.4	0	0	53	7	4	12	1	87	105.8			
0900-0915	0	0	37	9	0	1	0	47	48.0	0	1	70	12	6	2	0	90	90.0	0	0	107	32	7	4	0	0	120	118.7	0	0	15	1	1	5	0	23	23.0			
0915-0930	0	1	36	3	0	0	0	40	38.4	0	0	45	21	1	0	0	67	67.0	0	1	104	27	9	0	0	0	141	140.9	0	0	14	3	1	2	0	18	17.0			
0930-0945	0	0	39	6	1	1	0	47	46.8	0	0	54	18	5	1	0	78	80.8	0	0	97	21	14	4	0	0	134	133.0	0	0	10	0	3	0	0	23	23.0			
0945-1000	0	0	37	5	2	1	0	46	47.3	0	1	72	17	3	1	0	86	86.6	0	0	114	30	6	3	0	0	133	131.9	0	0	17	1	2	3	0	23	27.0			
Hourly Total	0	1	148	28	5	2	0	178	173.5	0	2	261	68	16	4	0	330	341.8	0	2	402	118	36	13	0	0	501	501.1	0	0	56	5	7	10	0	76	92.8			
TOTAL	0	1	318	82	12	1	0	417	428.5	1	11	632	166	40	10	0	806	818.4	0	7	1386	338	57	13	0	0	1578	1588.4	0	0	142	13	12	27	0	282	288.6			
1600-1615	0	0	22	5	1	0	0	28	28.0	0	1	64	12	2	1	0	80	81.7	0	2	191	30	6	2	0	0	201	201.4	0	0	14	2	0	3	0	19	20.0			
1615-1630	0	0	33	3	0	0	0	36	36.0	0	1	83	11	4	1	0	100	102.7	0	3	171	30	5	2	0	0	211	214.3	0	0	15	1	1	2	0	18	22.1			
1630-1645	0	0	29	1	0	0	0	30	30.0	1	4	83	12	2	0	0	100	100.0	0	2	189	32	4	1	0	0	206	203.1	0	0	8	1	0	0	0	11	9.0			
1645-1700	0	0	25	1	2	0	0	28	28.0	0	1	93	13	3	1	1	112	112.6	0	1	152	33	4	0	0	0	160	159.4	0	0	10	0	0	4	0	14	15.0			
Hourly Total	0	0	109	10	3	0	0	122	122.6	1	7	323	48	11	3	1	384	389.4	0	6	700	128	19	6	0	0	849	847.2	0	0	47	4	1	6	0	61	73.0			
1700-1715	0	0	34	2	1	0	0	37	37.6	0	0	74	16	1	0	0	90	91.6	0	4	169	24	1	1	0	0	198	198.4	0	0	7	3	1	1	0	12	13.0			
1715-1730	0	0	32	2	0	0	0	34	34.0	1	0	118	10	3	0	0	132	132.1	0	1	185	32	3	1	0	0	222	224.2	0	0	10	1	1	2	0	14	17.1			
1730-1745	0	0	21	7	0	0	0	28	28.0	0	2	95	18	0	1	0	116	116.3	0	3	180	28	3	2	0	0	206	206.3	0	0	14	1	0	2	0	17	19.0			
1745-1800	0	0	19	5	0	0	0	24	24.0	0	0	65	2	3	0	1	76	78.0	1	0	155	20	2	0	2	0	180	180.2	0	0	11	3	0	0	1	16	16.0			
Hourly Total	0	0	106	16	1	0	0	123	123.6	1	2	382	46	7	1	1	410	413.6	1	0	883	58	8	4	2	0	1027	1027.8	0	0	42	5	2	3	0	53	63.0			
1800-1815	0	0	15	2	0	0	0	17	17.0	0	0	64	9	4	0	0	75	76.0	0	2	155	28	1	0	0	0	186	186.3	0	0	15	4	2	2	0	23	26.0			
1815-1830	0	0	16	5	0	0	0	21	21.0	0	1	62	6	1	0	0	70	69.0	0	1	140	14	2	1	2	0	158	153.7	0	0	16	2	0	0	0	18	18.0			
1830-1845	0	0	19	1	0	0	0	20	20.0	0	1	69	7	0	0	0	77	78.4	0	2	119	8	4	0	0	0	130	133.8	0	1	11	1	0	0	1	14	14.4			
1845-1900	0	0	17	1	0	0	0	18	18.0	0	0	47	8	1	1	0	57	58.0	0	2	128	17	2	1	0	0	150	151.1	0	0	7	0	0	0	0	17	17.0			
Hourly Total	0	0	67	8	0	0	0	75	76.0	0	2	289	38	5	2	0	381	384.1	0	7	640	67	9	2	2	0	720	720.9	0	1	40	7	2	2	0	62	68.0			
TOTAL	0	0	282	85	4	0	0	371	372.0	0	11	957	184	24	6	0	1086	1087.3	1	7	1936	288	37	13	0	0	2296	2318.2	0	1	158	15	6	16	0	181	205.0			

PCU Factors
CYCLE 0.2
M/CYCLE 0.4
CAR 1.0
LGV 1.0
OGV1 1.5
OGV2 2.3
BUS 2.0

Rapid Data Services Ltd

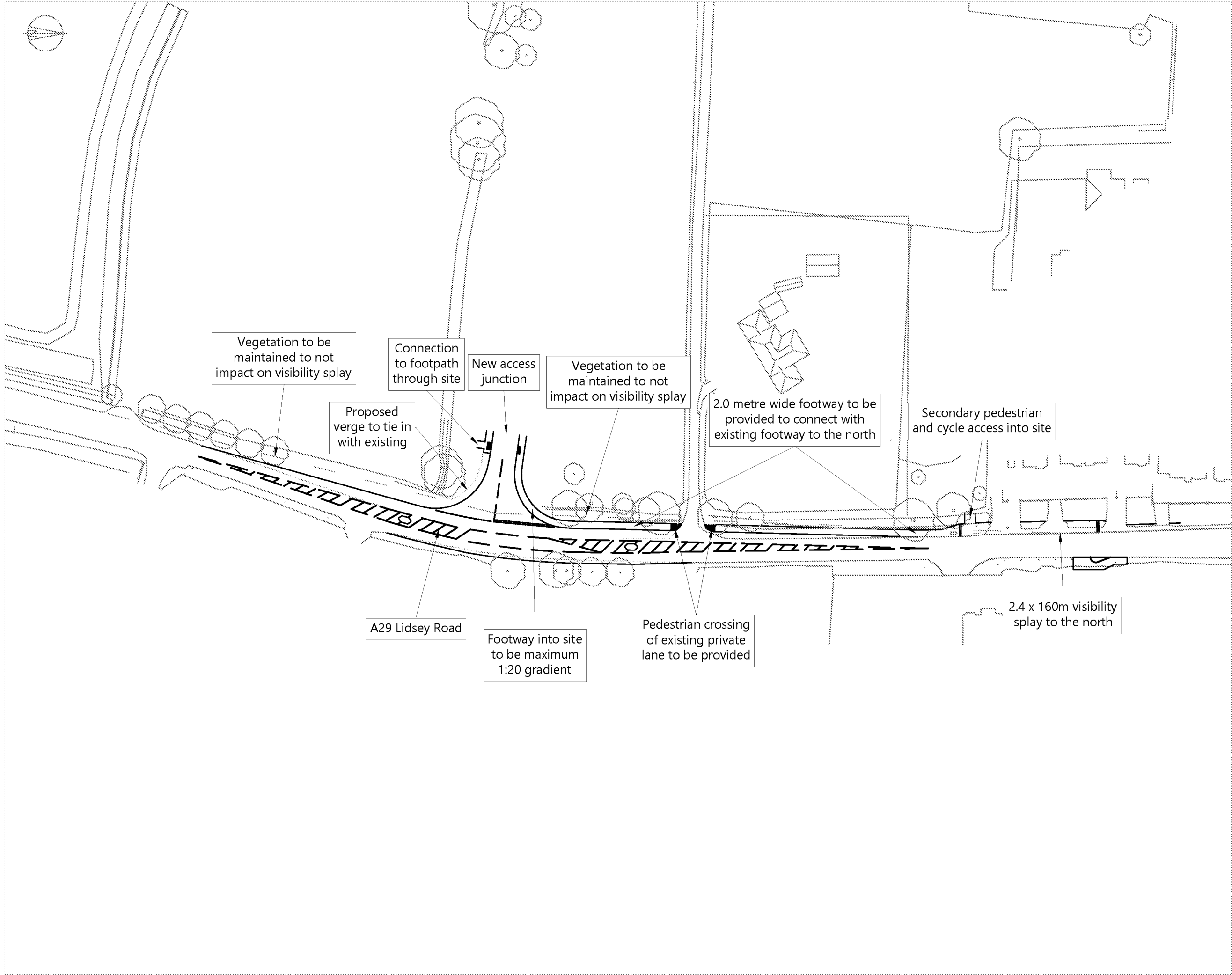
Report Page:
Thursday 14th September 2023
Version: 2
Approved by: Gordon Boyd

TIME	To A29 (N)										To A259										To Newlands Road										To A29 (S)									
	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUS	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUS	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUS	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUS				
0700-0715	0	0	3	1	0	0	0	4	4.0	0	0	4	7	0	0	0	11	11.0	0	0	0	0	0	0	0	0	0	0	0	0	6	4	2	0	0	12	13.0			
0715-0730	0	0	2	5	1	0	0	8	8.0	0	0	5	10	0	0	0	15	15.0	0	0	0	0	0	0	0	0	0	0	0	6	5	0	1	0	0	12	13.5			
0730-0745	0	0	3	3	0	0	0	6	6.0	0	0	2	7	1	0	0	10	10.0	0	0	0	0	0	0	0	0	0	0	0	6	5	0	0	0	0	11	11.0			
0745-0800	0	0	5	3	0	0	0	8	8.0	0	0	5	4	0	0	0	9	9.0	0	0	1	0	0	0	0	0	0	0	0	0	8	7	0	0	0	0	15	16.0		
Hourly Total	0	0	13	9	1	0	0	23	23.0	0	0	16	28	1	0	0	45	45.0	0	0	1	0	0	0	0	0	0	0	0	0	26	21	3	0	0	61	63.0			
0800-0815	0	0	4	3	0	0	0	7	7.0	0	0	6	2	0	0	0	8	8.0	0	0	2	0	0	0	0	0	0	0	0	0	15	3	0	0	0	0	18	18.0		
0815-0830	0	0	9	3	0	0	0	12	12.0	0	0	10	3	1	0	0	14	14.0	0	0	1	0	0	0	0	0	0	0	0	0	19	3	1	0	0	0	25	25.0		
0830-0845	0	0	4	1	1	0	0	6	6.0	0	0	14	3	1	0	0	18	18.0	0	0	1	0	0	0	0	0	0	0	0	0	19	3	0	0	0	0	22	22.0		
0845-0900	0	0	3	3	0	0	0	6	6.0	0	0	9	2	1	0	0	12	12.0	0	0	1	0	0	0	0	0	0	0	0	0	18	0	0	0	0	0	18	18.0		
Hourly Total	0	0	28	10	2	0	0	40	40.0	0	0	39	10	2	0	0	52	52.0	0	0	5	0	0	0	0	0	0	0	0	0	53	14	2	0	0	0	104	106.0		
0900-0915	0	0	6	1	0	0	0	7	7.0	0	0	12	5	0	0	0	17	17.0	0	0	1	0	0	0	0	0	0	0	0	0	23	2	0	0	0	0	26	26.0		
0915-0930	0	0	6	1	0	0	0	7	7.0	0	0	11	2	0	0	0	12	12.0	0	0	3	0	0	0	0	0	0	0	0	0	31	2	0	0	0	0	33	33.0		
0930-0945	0	0	12	3	0	1	0	16	16.0	0	0	12	3	1	0	0	18	18.0	0	0	2	0	0	0	0	0	0	0	0	0	33	3	0	1	0	0	36	36.0		
0945-1000	0	0	6	2	0	0	0	8	8.0	0	0	8	5	0	0	0	13	13.0	0	0	1	0	0	0	0	0	0	0	0	0	16	8	0	0	0	0	24	24.0		
Hourly Total	0	0	30	7	0	1	0	38	38.0	0	0	48	15	1	0	0	63	63.0	0	0	1	0	0	0	0	0	0	0	0	0	53	15	1	0	0	0	128	130.0		
TOTAL	0	0	65	28	2	1	0	95	95.0	0	0	88	23	2	0	0	186	186.0	0	0	13	0	0	0	0	0	0	0	0	0	227	48	3	2	0	0	284	289.0		
1600-1615	0	0	4	1	0	0	0	5	5.0	0	0	12	0	0	0	0	16	16.0	0	0	1	0	0	0	0	0	0	0	0	0	33	1	0	0	0	0	34	34.0		
1615-1630	0	0	7	1	2	0	0	10	10.0	0	0	12	2	0	0	0	14	14.0	0	0	0	0	0	0	0	0	0	0	0	0	20	2	0	1	0	0	23	24.0		
1630-1645	0	0	9	1	0	0	0	10	10.0	0	0	10	1	0	0	0	11	11.0	0	0	2	0	0	0	0	0	0	0	0	0	15	3	0	2	0	0	20	20.0		
1645-1700	0	0	8	0	0	0	0	8	8.0	0	0	13	1	0	0	0	14	14.0	0	0	2	0	0	0	0	0	0	0	0	0	16	7	0	0	0	0	23	23.0		
Hourly Total	0	0	28	3	2	0	0	33	33.0	0	0	47	4	0	0	0	51	51.0	0	0	5	0	0	0	0	0	0	0	0	0	64	10	2	1	0	0	77	77.0		
1700-1715	0	0	12	3	0	0	0	15	15.0	0	0	16	3	0	0	0	19	19.0	0	0	1	0	0	0	0	0	0	0	0	0	18	0	0	0	0	0	18	18.0		
1715-1730	0	0	2	1	0	0	0	3	3.0	0	0	14	1	0	0	0	15	15.0	0	0	3	0	0	0	0	0	0	0	0	0	24	1	0	0	0	0	26	26.0		
1730-1745	0	0	11	1	0	0	0	12	12.0	0	0	13	1	0	0	0	14	14.0	0	0	1	0	0	0	0	0	0	0	0	0	21	2	0	0	0	0	23	23.0		
1745-1800	0	0	9	0	1	0	0	10	10.0	0	0	9	4	0	0	0	13	13.0	0	0	1	0	0	0	0	0	0	0	0	0	18	2	1	0	0	0	21	22.0		
Hourly Total	0	0	24	6	1	0	0	31	31.0	0	0	52	9	0	0	0	61	61.0	0	0	5	0	0	0	0	0	0	0	0	0	53	12	3	1	0	0	68	69.0		
1800-1815	0	0	4	2	0	0	0	6	6.0	0	0	12	3	0	0	0	15	15.0	0	0	2	1	0	0	0	0	0	0	0	0	15	0	0	0	0	0	16	16.0		
1815-1830	0	0	1	0	0	0	0	1	1.0	0	0	10	3	0	0	0	13	13.0	0	0	1	0	0	0	0	0	0	0	0	0	11	2	0	0	0	0	13	13.0		
1830-1845	0	0	3	0	0	0	0	3	3.0	0	0	7	2	0	0	0	9	9.0	0	0	0	0	0	0	0	0	0	0	0	0	16	4	0	0	0	0	20	20.0		
1845-1900	0	0	4	0	0	0	0	4	4.0	0	0	13	0	0	0	0	12	12.0	0	0	1	0	0	0	0	0	0	0	0	0	17	1	0	0	0	0	18	18.0		
Hourly Total	0	0	12	2	0	0	0	14	14.0	0	0	48	8	0	0	0	56	56.0	0	0	4	1	0	0	0	0	0	0	0	0	56	6	0	0	0	0	62	64.0		
TOTAL	0	0	74	18	3	0	0	95	95.0	0	0	141	23	0	0	0	182	182.0	0	0	14	2	0	0	0	0	0	0	0	0	106	22	3	1	0	0	138	139.0		

PCU Factor:	
CYCLE	0.2
M/CYCLE	0.4
CAR	1.0
LGV	1.0
OGV1	1.5
OGV2	2.3
BUS	2.0

Appendix 7

Proposed Site Access Junction (HTp/2087/36/F)



NOTES

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Section 278 works to include:

- Culverting of the highway ditch at the ghost island site access junction.
- Anti-skid/high PSV surfacing along Lidsey Road approaching the ghost island site access junction.
- Consideration of pedestrian/cycle restraint systems adjacent to proposed footway and cycleways including at the site accesses.
- Provision of permanent or temporary junction warning signage.
- Checking of footway and cycleway widths around existing and proposed street furniture including signs and any resultant modifications/relocations to signs required for the safety and convenience of users.

#	Traffic islands modified based on WSCC design engineer comments	BL	06/04/22
#	Traffic islands modified based on WSCC design engineer comments	BL	07/04/22
O	Updated based on WSCC Design Engineer and RSA recommendations	BL	01/03/22
C	Updated based on officer and council design engineer comments	BL	15/02/22

ISSUE	REASON FOR REVISION	BY	DATE

PROJECT:

A29 LIDSEY ROAD
WOODGATE

CLIENT:

HANBURY PROPERTIES

PROJECT REF:	DRAWING NUMBER:	SCALE (AT A3):
2087	36	1:1,000

SHEET NUMBER:

SHEET NUMBER 1 OF 3

SCALE BAR:

0m 10m 20m 30m 40m 50m

HighgateTransportation

www.hgt-transportation.co.uk

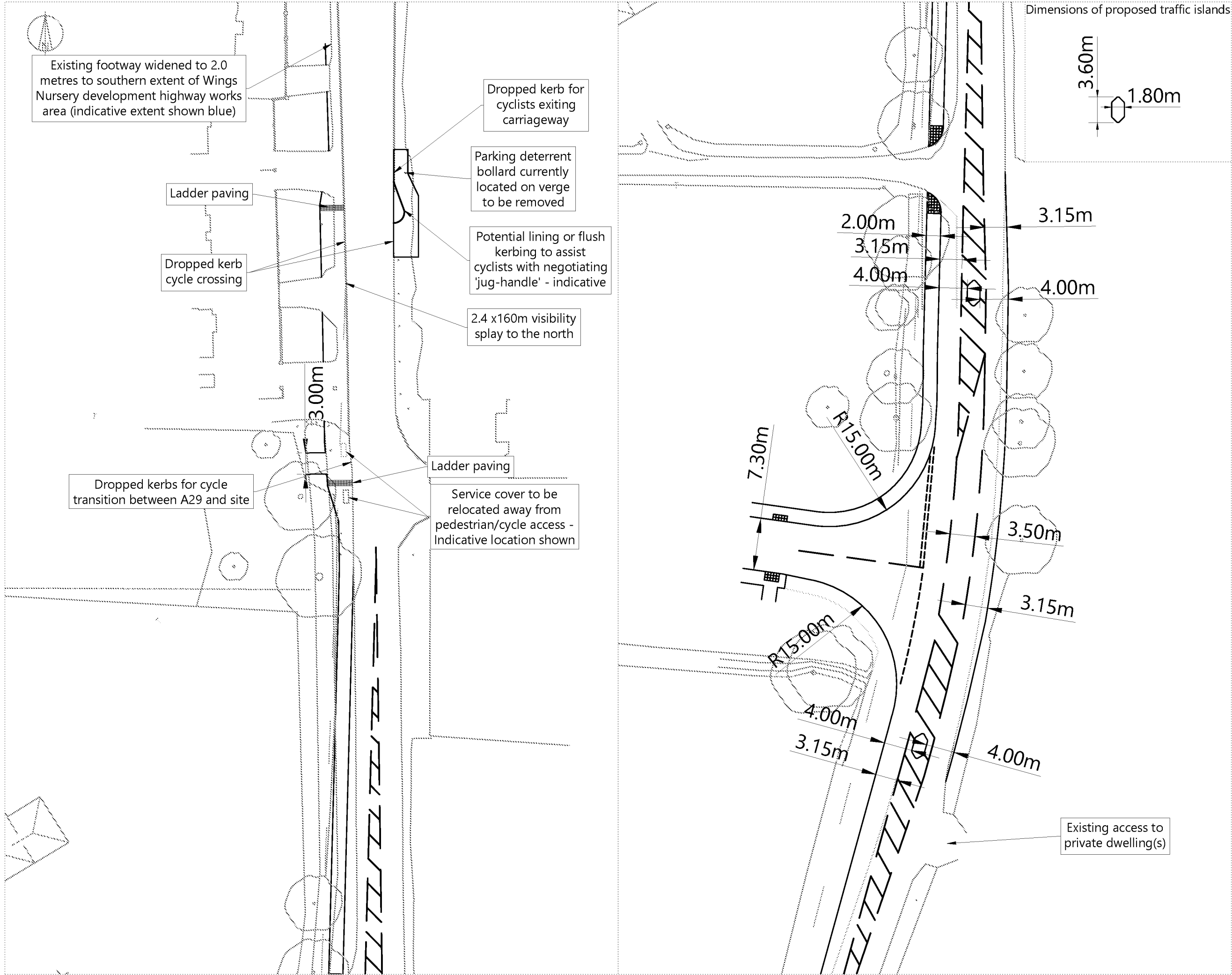
First Floor, 43-45 Park Street
Bristol BS1 5NL
01179 349 121

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TITLE:

PROPOSED SITE ACCESS
ARRANGEMENTS

DATE:	DRAWN BY:	CHECKED BY:
08.12.21	BL	DT



NOTES

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NO	REVISION	DATE
1	Traffic islands modified based on WSCC design engineer comments	06/04/22
2	Traffic islands modified based on WSCC design engineer comments	07/04/22
3	Updated based on WSCC Design Engineer and RSA recommendations	01/05/22
4	Updated based on officer and council design engineer comments	15/05/22

ISSUE	REASON FOR REVISION	BY	DATE
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PROJECT:

A29 LIDSEY ROAD
WOODGATE

CLIENT:

HANBURY PROPERTIES

PROJECT REF.	DRAWING NUMBER	SCALE (AT A1)
2087	36	1:500

SHEET NUMBER:

SHEET NUMBER 2 OF 3

SCALE BAR:

0m 5m 10m 15m 20m

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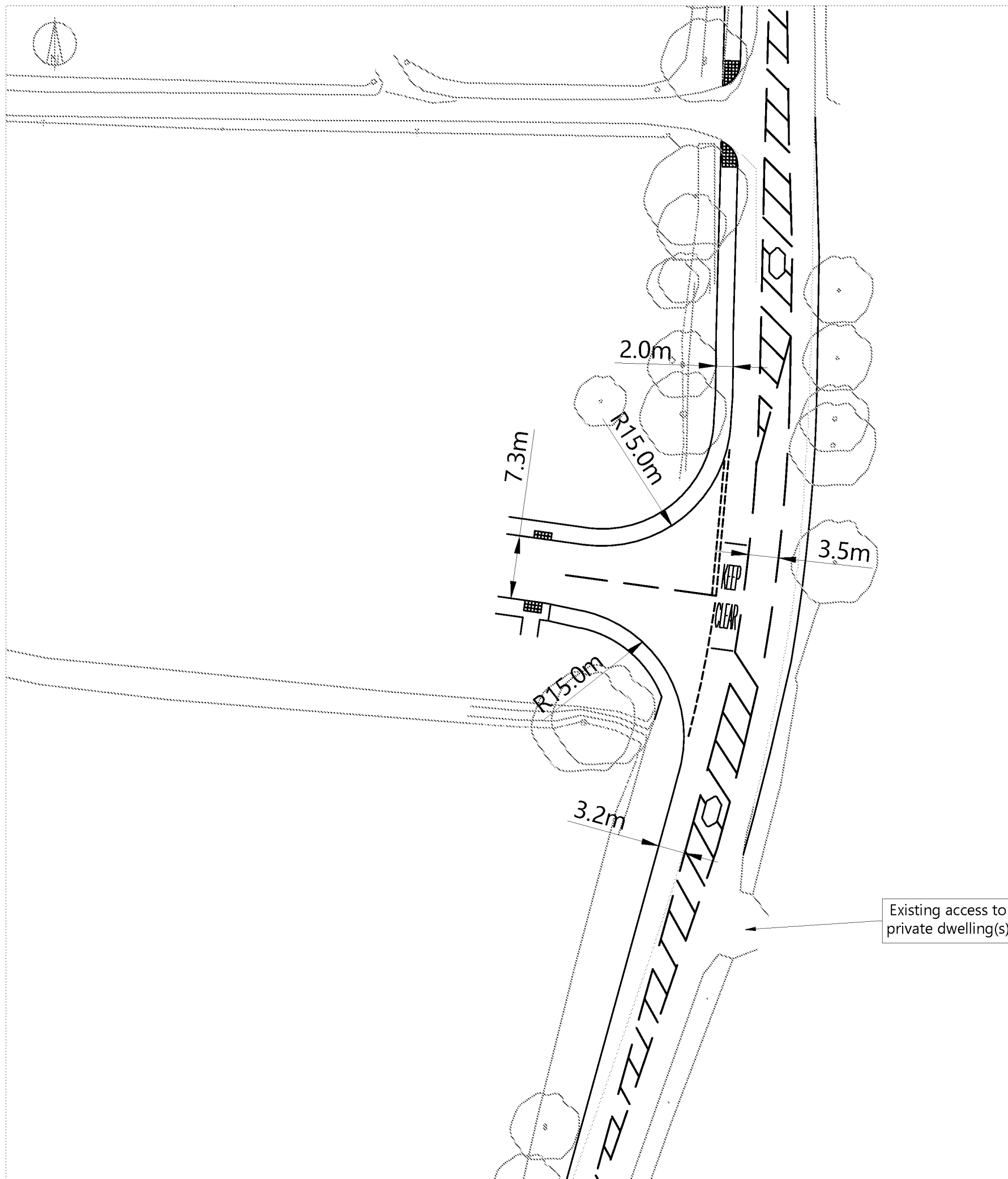
TITLE:

PROPOSED SITE ACCESS
ARRANGEMENTS

DATE	DESIGNED BY	CHECKED BY
08.12.21	BL	DT

Appendix 8

Updated Proposed Site Access Junction (HTp/2401/11)



NOTES

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AC96607855217.

Based on drawing H/10/2087/36/F approved under application A/P/29/21/P/001

DATE	REASON FOR REVISION	BY	DATE
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PROJECT:

A29 LIDSEY ROAD
WOODGATE

CLIENT:

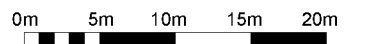
HANBURY PROPERTIES

PROJECT REF.	DRAWING NUMBER	SCALE (AT A2)
2401	11	1:500

0869 800080

SHEET NUMBER 1 OF 1

NOISE



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1999

PROPOSED SITE ACCESS ARRANGEMENTS

DATE:	CHARGE:	CHECKED:
03/06/24	AM	FB

Appendix 9

Road Safety Audit and Designer's Response

Road Safety Audit – Lidsey Road, Woodgate

Stage:	1
Location:	A29 Lidsey Road, Woodgate, West Sussex
Site:	Proposed vehicle and pedestrian/cycle accesses to residential development
ATSS Ref:	240602
Client Ref:	2401
Date:	24 June 2024



Project Details

Report Title:	Stage 1 road safety audit, A29 Lidsey Road
Date:	24 June 2024
Document reference and revision:	240602 V1
Prepared by:	Avon Traffic & Safety Services Ltd
On behalf of:	Highgate Transportation Ltd

Report Control Sheet

	Name	Position	Date
Audit requested by	Alice Howse	Highgate Transportation Ltd	5 June 2024
Team leader	James Dawson	Team Leader	
Team Member	Tasos Papaloucas	Team Member	
Observer			
Draft report issued by	James Dawson	Team Leader	19 June 2024
Final report issued by	James Dawson	Team Leader	24 June 2024
Designer's response issued by			

Avon Traffic & Safety Services Ltd disclaims any responsibility to the Client and others in respect of any matters outside the scope of this report. This report has been prepared with reasonable skill, care and diligence within the terms of the Contract with the Client taking account of the manpower, resources, investigations and testing devoted to it by agreement with the Client. This report is confidential to the Client and Avon Traffic & Safety Services Ltd accepts no responsibility of whatsoever nature to third parties to whom this report or any part thereof is made known. Any such party relies upon the report at their own risk.

Contents	Page
1. Introduction	4
2. Road Safety Issues raised in this Stage 1 safety audit	9
3. Audit Team Statement	15
Appendix A – Information utilised in this safety audit	16
Appendix B – Key Plan showing Audit Problems	17
Appendix C – Site location plan	18
Appendix D – Designer’s Response	separate document

1. Introduction

1.1 Avon Traffic & Safety Services Ltd has been commissioned by Highgate Transportation Ltd, to undertake a Stage 1 Road Safety Audit, with regard to the proposals to create a vehicle access and separate cycle and pedestrian access for a residential development off of the A29 Lidsey Road, Woodgate. The site has been subject to two previous stage 1 audits, one in August 2021 (ATSS ref. 210806) and one in March 2022 (ATSS ref. 220206). The design has subsequently been revised with additions including:

- i. Minor modification to the main vehicle site access, and
- ii. A cycle and pedestrian access and an uncontrolled cycle crossing approximately 425 metres north of the main site

Only the modifications/additions to the design are subject of the current audit.

1.2 The RSA Brief was supplied by Highgate Transportation Ltd and accepted by the Audit Team. The Brief and Audit Team were approved by Alice Howse, Highgate Transportation Ltd.

1.3 The proposed access off the A29 Lidsey Road is between the village curtilage of Woodgate to the north and Lidsey to the south, with the popular seaside town of Bognor Regis approximately 1.5 miles further south. Aldingbourne Primary school is situated half a mile to the north and a number of caravan parks are dotted in the surrounding area. This section of the A29 is a bus route, a semi-rural single carriageway with edge of carriageway markings, cats-eyes and no street lighting or footpaths present. A ditch/culvert runs along the west side of the road. The speed limit at the proposed main site access is 50 mph, however this changes to 30 mph approximately 130 metres to the north. The proposed pedestrian and cycle access and uncontrolled crossing will be within the 30 mph section to the north. Street lighting is present within the 30 mph speed limit and footpaths to both sides of the carriageway.

1.4 The audit team members are:

James Dawson – Team Leader

Tasos Papaloucas – Team Member

1.5 The audit took place during June 2024 and comprised of an examination of the documents and drawings listed in Appendix A. The auditors visited site together between 3.30pm and 4.20pm on Thursday 13 June when the weather conditions started dry and overcast, however rain showers developed and the surface became damp. Vehicle flows were moderate to heavy, with speeds appearing commensurate with the speed limit. No pedestrians or cyclists were observed.

- 1.6 Data from Crashmap.org shows that there have been two reported collisions involving injury, in the 5 years 2018-2022 inclusive, within a 50 metre vicinity of the proposals. One occurred in June 2019 and involved a single vehicle junction manoeuvre which resulted in a slight injury to a pedestrian. The other in July 2021 involved three vehicles (one of which a young driver) also carrying out a junction manoeuvre which resulted in five slight injuries.
- 1.7 ATC survey data from February 2023 (taken south of Lidsey Road Level crossing) show that average 12-hour vehicle flows (between 7am – 7pm) were 4557 (northbound) and 4854 (southbound); 85th%ile speeds were recorded as 29.4 mph (northbound) and 31.6 mph (southbound).
- 1.8 The audit team have not been made aware of any departures from standards or relaxations in relation to the modifications to the proposed scheme.
- 1.9 The audit was carried out under the terms and conditions of DMRB GG 119. The team examined and reported only on the road safety implications of the scheme as presented and has not examined or verified the compliance of the design with any other criteria. However, reference may be made to National/Local Guidance in order to verify a point.
- 1.10 Documents and drawings examined in this safety audit are listed at Appendix A.

1.11 General views of site



View of Lidsey Road in a southerly direction (proposed main vehicle access within the verge to the right)



View of Lidsey Road in a northerly direction, at location of proposed local road widening, new access formation and right-turn lane



Looking south on Lidsey Road towards the proposed location of the cycle crossing (adjacent to lighting column). Proposed pedestrian and cycle access into the development site on the right



Looking north on Lidsey Road at the proposed cycle crossing site. Note level crossing in background