

Appendix A Pre-Application Technical Notes and Correspondence



Technical Note

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Land East of Woodgate Road

20-061-001 Rev -

Transport Scoping Note

November 2020

Rev	Issue Purpose	Author	Checked	Reviewed	Approved	Date
-	Approval	PL	GAC	PL	GAC	13/11/20

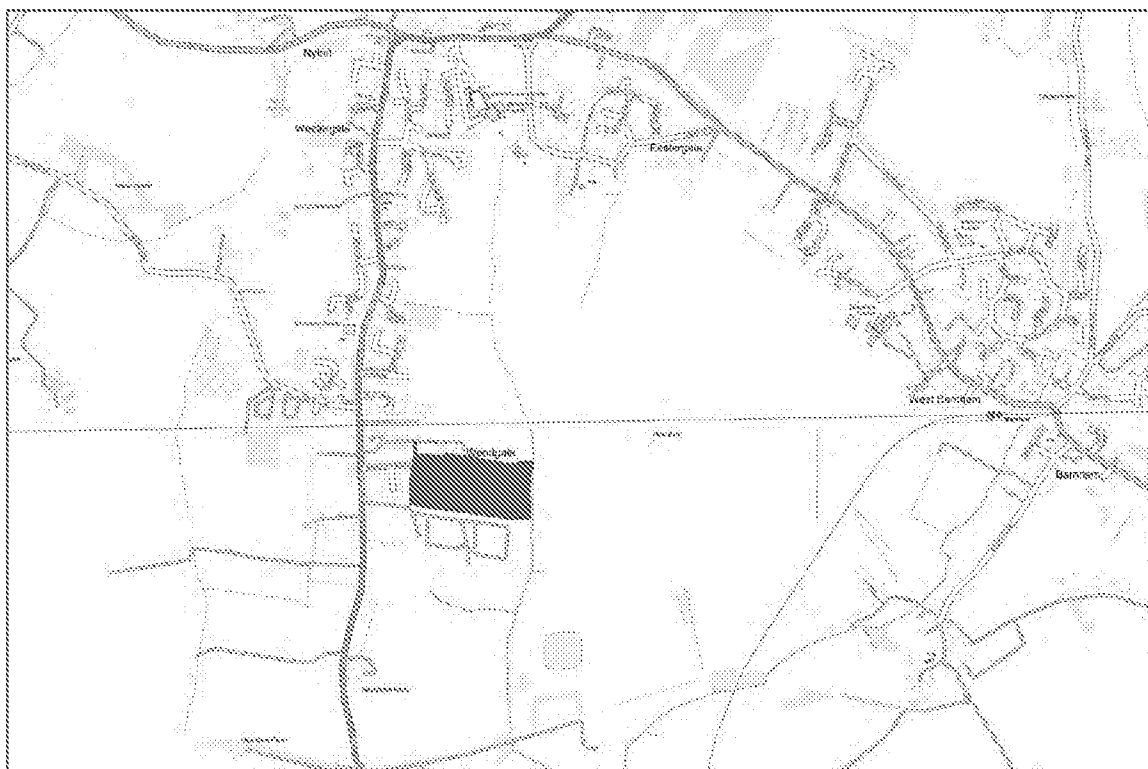
1 Introduction

1.1 Introduction

- 1.1.1 This Transport Scoping Note (TSN) has been prepared by Charles & Associates Consulting Engineers Ltd (C&A), as a review of transport and highways matters relating to a detailed planning application for a potential residential development of up to 180 dwellings on a site referred to as Land East of Woodgate Road, Aldingbourne, West Sussex. The location of the site is illustrated in red in **Figure 1.1**.
- 1.1.2 This scoping note has been prepared with regard to guidance currently available from West Sussex County Council (WSSCC) Highways and Arun District Council's (ADC) planning policy requirements together with the knowledge that the site forms part of the ADC Local Plan allocation known as the Barnham, Eastergate & Westergate (BEW) allocation.
- 1.1.3 This note is presented as a precursor to pre-application discussions with the local planning and highway authorities and in this regard, the note is also intended to inform the scoping of written submissions in support of an application for the above site. C&A therefore request comments and/or additions on the suggested scope of works required to support the transport appraisal for the application.

- 1.1.4 As stated above, the site forms part of the wider strategic allocation referred to as Barnham, Eastergate and Westergate (BEW) under Policy H SP2c (SD5) within the adopted ADC Local Plan 2018. As per the plan, the wider allocation collectively will provide at least 2,300 dwellings over the plan period, and up to 3,000 in total (a further 700 beyond 2031).
- 1.1.5 It is noted that a consultation for Framework Masterplan of the strategic allocation was carried out by ADC from 7 September until 9 October 2020. Additionally, a consultation on the proposed A29 Realignment Scheme was also recently held by WSCC. The transport appraisal supporting the planning application will give due regards to these.

Figure 1.1: Site Location



2 Existing Conditions

2.1 Development Site

- 2.1.1 The development site is located to the east of the A29 Lindsey Road. It is bounded by single storey bungalows to the west, by Willows Caravan Park to the south and by farmlands to the north and east.
- 2.1.2 The site covers approximately 7.17 hectares in area and currently comprises a mix use premises collectively called the Woodgate Centre which accommodates several small businesses.

2.1.3 Currently, access to the development site is through Woodgate Road which also provides direct access to circa 23 bungalows along the road and serves as an access road to Woodgate Close comprising approximately 14 bungalows. It is intended that the proposed development will be served through this existing access.

2.2 Sustainable Accessibility

2.2.1 The site is in a predominantly residential location. It is well located in terms of good proximity to several local facilities and amenities, including primary schools, shops and bus services albeit constrained to the north via a railway level crossing. Aldingbourne Primary School, Community Sports Centre and Hirange Supermarket are located within walking distance of approximately 1.2-1.3km from the western boundary of the site.

2.2.2 The transport appraisal will provide a comprehensive review of these destinations, along with an audit of pedestrian and cycle links between these and the site including public rights of ways. However, in overall terms, the site can be seen to be appropriately located relative to trip generating activities that support travel on foot and by bicycle particularly with the introduction of the strategic sustainable cycle/footway infrastructure to be constructed as part of the overall BEW allocation which includes cycle/footway links that will be unimpeded by the existing railway line.

2.2.3 The closest bus stops from the site are located on the A29 approximately 250m from the western boundary of the site just north of its junction with Willows Caravan Park access. These stops provide access to bus services 66A and 66C which run between Bognor Regis and Yapton.

2.2.4 The closest rail station is Barnham station which is located within cycling distance of 4km approximately. It provides services to destinations including Portsmouth Harbour, Brighton, Bognor Regis, and London Victoria.

2.2.5 The transport appraisal will review the accessibility to these services and to public transport in general, placing the services in the context of the prevailing requirements.

2.2.6 In addition, due to the scale of the development, a Travel Plan is proposed to be prepared which will be the basis on the overall BEW sustainable transport objectives.

2.3 Local Highway Network

- 2.3.1 The local highway network surrounding the site is comprised of Woodgate Road, the A29, the B2233 and several residential estate roads.
- 2.3.2 The access to the site is intended through the extension of the existing Woodgate Road to the west. It is approximately 5m in width and has footways and streetlights on both sides of the carriageway. Some on street parking can be observed along the road whilst majority of the properties have provision of driveway.
- 2.3.3 The A29 running north to south to the west of the site is a key route in the area. It runs through the Woodgate village and within the vicinity of the site, is approximately 7m in width and has provision of footways on both sides of the carriageway and streetlights. There are sign posts indicating that the road is subject to 30mph speed limit as it passes through the village.
- 2.3.4 The A29 provides access to the wider highway network as it connects with the B2233 and the A27 to the north and with the A259 to the south.
- 2.3.5 Again, the transport appraisal will provide comprehensive review the existing local and wider highway network surrounding the site.

3 Proposed Development

3.1 Proposals

- 3.1.1 The proposals are for development of up to 180 residential dwellings (private and affordable) and the associated access and parking provision. A plan illustrating the preliminary layout of the development is provided within **Appendix A**.
- 3.1.2 The Framework Masterplan for the overall Strategic Allocation that was part of the ADC's recent consultation is provided in **Appendix B**. This Framework Masterplan illustrates how the proposed site sits within the overall allocation and links with the new A29 route.

Site Access

- 3.1.3 Initially, it is intended that the proposed development will be accessed through the extension of Woodgate Road which to the west directly connects the site with the existing A29, Lidsey Road via a simple priority T junction. As illustrated in the preliminary layout, the site will several loop roads internally within the site omitting the need for a secondary access. Ultimately, as the BEW allocation progresses, a second access will be achieved to the east allowing for connection onto the new A29 route.

- 3.1.4 The existing junction between the A29 and Woodgate Road will be reviewed as part of detailed transport appraisal to ensure that the layout of the junction and visibilities are to sufficient standards to serve the proposed development and has adequate capacity to accommodate the increased traffic due to the development in addition to the existing traffic, background growth and phased committed development, until the new A29 route is opened.

Internal Road Layout

- 3.1.5 In terms of on-site road hierarchy, it is envisaged that the extension of Woodgate Road will be a 5.5m wide spine road and will run through the centre of the site providing direct access to some of the dwellings as well as access to other smaller 4.8m and 4.1m secondary and shared surface streets and drives.
- 3.1.6 The spine road will then terminate at the site's eastern boundary where the potential for further extension of this road to serve and ensure permeability with the wider BEW strategic allocation will be maintained. When the BEW allocation and the A29 realignment scheme comes forward, this will provide a secondary access to the site.
- 3.1.7 As shown within the Framework Masterplan, there will be several pedestrian and cycle routes within the Strategic Allocation that will be linked into to ensure permeability of non-motorised forms of travel.
- 3.1.8 The internal road layout will be subject to swept path analysis using appropriate refuse vehicle and access for refuse and emergency vehicles to individual properties will be provided in accordance with the distances recommended within the Manual for Streets.

Parking

- 3.1.9 Provision for on-site parking and electric vehicle (EV) charging will provided to meet the standards as set out in the ADC's Parking Standards Supplementary Planning Document January 2020.

4 Policy Compliance

4.1 Policy Review

- 4.1.1 The proposals will be subject to a full review of pertinent transport policy, to be included in the transport submission; including those contained within:
- National Planning Policy Framework 2019
 - West Sussex Transport Plan 2011-26 (LTP3)
 - ADC Adopted Local Plan 2018

- ADC Parking Standards Supplementary Planning Document January 2020
- ADC BEW Framework Masterplan

- 4.1.2 In addition to the above, as a residential scheme, the proposals will be reviewed in the context of Manual for Streets (MfS).
- 4.1.3 As noted above, the development site forms part of the wider Barnham, Eastergate and Westergate (BEW) Framework Masterplan.
- 4.1.4 A preliminary review of the relevant policies indicates that the site would be compliant with prevailing transport policy and therefore acceptable in this regard.

5 Traffic Impact Assessment

5.1 Trip Generation and Distribution

- 5.1.1 The trip rates for the proposed development (private and affordable dwellings) have been derived from the TRICS database and are presented within the table below. The selection parameters include the UK but excludes Ireland and Greater London and only includes the weekday surveys. The full TRICS output reports summarising the trip rates and selections are provided within **Appendix C**.

Table 5.1: Trip Rates

Trips Rates	AM Peak Hour			PM Peak Hour		
	Arr	Dep	Two way	Arr	Dep	Two Way
Private Dwellings	0.138	0.361	0.499	0.331	0.156	0.487
Affordable Dwellings	0.162	0.268	0.430	0.280	0.207	0.487

- 5.1.2 For the purposes of transport appraisal, it is proposed to use the trip rates for private dwellings only for impact assessment. The trip rates for private dwellings are slightly higher and hence, this allows for more robust assessment. The estimated trip arrivals and departures from the proposed development using private trip rates are tabulated in **Table 5.2** below.

Table 5.2: Estimated Proposed Development Trips

Trips	AM Peak Hour			PM Peak Hour		
	Arr	Dep	Two way	Arr	Dep	Two Way
Trips 180 Dwellings	25	65	90	60	28	88

5.1.3 It is estimated that the proposed development of 180 dwellings will result in 90 two-way trips in the AM peak and 88 in the PM peak. This will be compared against the WSCC modelling work and the worst of the two will be utilised following consultation with WSCC.

5.1.4 The proposed development trip distribution will be derived based on the WSCC's existing model, prepared by WSP subject to agreement with WSCC. Alternatively, the anticipated trips can be distributed appropriately within the local highway network based on the distribution derived using the 2011 Census Journey to Work data.

5.2 Assessment

5.2.1 It is proposed to assess the impact of the proposed development traffic on a phased basis, i.e. before the opening of the A29 realignment scheme with background growth and any committed developments forecast for occupation at that time and then, if required, after the opening of the relief road with any remaining committed developments and the redistribution of traffic accordingly. The extent of the study area will include the junction between A29 and Woodgate Road (the site access), the A29 Fontwell Western Roundabout and the A29 War Memorial Roundabout subject to agreement with the WSCC Highways. Additionally, the impact of the development on the perceived existing congestion issues at the Woodgate railway level crossing will also be considered as part of the transport appraisal.

5.2.2 Developer contributions are being sought by WSCC and ADC, as discussed later, to bring forward several improvement schemes on the surrounding local highway network and these schemes are considered to mitigate the impact of the proposed development as well as other nearby developments. As such, it is expected that the proposed development will only require to review the impact of any committed development and background growth up to the implementation of these schemes and mitigate the areas on the local highway network which this development creates a severe impact.

5.2.3 For example, the A29 War Memorial Roundabout is expected to experience significantly reduced traffic flows because of the A29 Realignment Scheme; hence, developer contribution is not being sought for this junction. However, if the proposed development is to come forward before the A29 Realignment Scheme and as the junction is likely to be most affected by the development traffic, improvement measures at this junction will be investigated if the relative impact compared to without the development is identified to be severe.

- 5.2.4 With regards to the future year assessment, it is considered appropriate to assess these junctions for the future year of 5 years post application.
- 5.2.5 It is understood that WSCC keep a record of traffic volume, speed, and classified data. Due to the uncertainties in current travel patterns and its representativeness, it is intended WSCC will be consulted for the use of the existing traffic that they hold. Subsequently, WSCC have indicated that ATC and turning counts data as well as the A29 model can be obtained from them. These data will then be growthed appropriately using TEMPro factors to derive future year flows.

The A29 Realignment Scheme and Other Identified Mitigation Schemes

- 5.2.6 A key transport infrastructure requirement as set out in the Policy H SP2c (SD5) of the adopted ADC Local Plan 2018 for the wider BEW Strategic Allocation is a new A29 route (the A29 realignment/bypass scheme). It is envisaged by WSCC and ADC as an important strategy to provide extra capacity within the local highway network to not only reduce the existing congestion but also to mitigate the effect of additional traffic from the Strategic Allocation and to reduce potential future congestion.
- 5.2.7 Previous studies supporting this scheme has identified congestion and delays at the Woodgate railway level crossing and other junctions within other parts of the A29 network. It is anticipated that the scheme will redistribute the trip patterns and traffic volumes within the surrounding from other existing routes. Therefore, the transport appraisal supporting the application will give due consideration to this scheme and its impact on the traffic flows and the local junctions.
- 5.2.8 It is noted that an outline planning consent has been recommended for approval (AL/21/20/OUT) for 38 dwellings at Land North of Lee's Yard, Woodgate. Consultation responses from West Sussex County Council Highway and Highways England provided no objection to this application and confirmed that it is in a sustainable location. Given that this site is just to the south west of Woodgate Road and to the south of the railway line. This is perceived as a positive indication of the highways authority's position (**Appendix D**) with respect to this application. Albeit we acknowledge that each application must be taken on its own merits.
- 5.2.9 WSCC's Transport Business Case Draft (dated Jan 2019), prepared by WSP, estimated the total cost of delivery of the scheme to be £54.2 million of which £30 million is anticipated to be funded through developer contributions. Given the proposed development forms part of the BEW Strategic Allocation, it is jointly responsible for the delivery of the A29 scheme hence, appropriate developer contributions will be made available through S106 agreements.

5.2.10 Additionally, appropriate contribution through S106 agreements will also be made for the following schemes as identified in the WSCC/ADC Local Plan Transport Mitigation Apportionment Study (June 2020):

- A27 Nyton Road junction
- A27 Fontwell East Roundabout
- Barnham Village Centre Enhancements
- A259 Oystercatcher junction
- A259 Corridor Improvement Bognor Regis-Littlehampton

5.2.11 At the time of this note being prepared and as per Appendix 1 of the Apportionment Study, contribution per unit relevant to the proposed site was estimated to be £8,371.99 subject to inflation and more detailed design costs. However, WSCC have highlighted that the amounts shown in the Study should not be the total of contributions required from the development locations listed. As such, this will be re-evaluated moving forward.

Accident Review

5.2.12 Personal injury accident data that have occurred during the last five-year period over the length of the A29 between and including the A29 War Memorial Roundabout to the north and the A29/A259 Roundabout to the south will be obtained from KCC and reviewed.

6 Summary

6.1 Summary

6.1.1 Although subject to more comprehensive assessment, as detailed above, this preliminary appraisal indicates that a development of up to 180 residential dwellings, would be appropriate for the site. The proposed development will also make appropriate contributions to bring forward the A29 realignment scheme, which include contributions towards/facilitating the delivery of a bridge over the Rife into the CCE site and other improvement schemes identified in the WSCC/ADC Local Plan Transport Mitigation Apportionment Study.

6.1.2 The scope of assessment set out above is suggested to be appropriate for fully appraising the site and confirming the validity of this conclusion.

6.1.3 It is therefore requested that WSCC Highways provide agreement and/or additional comments to the above principles to enable the detailed assessments to be undertaken.

**WEST SUSSEX COUNTY COUNCIL
PRE APPLICATION CONSULTATION**

TO:	Organisation: Charles and Associates FAO: Prabin Limbu
FROM:	WSCC - Highway Authority: Tim Townsend
DATE:	15 th December 2020
LOCATION:	Land East of Woodgate Road, Aldingbourne
SUBJECT:	Internal Reference: PRE-126-20 Potential residential development of up to 180 dwellings.
DATE OF SITE VISIT:	1 st December 2020
RECOMMENDATION:	Advice
S106 CONTRIBUTION TOTAL:	TBA at time of any planning application submission

The Highway Authority has been consulted for pre-application advice in regard to the proposed development at Land East of Woodgate Road, Aldingbourne .

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.

I refer to your consultation in respect of the above planning application and would provide the following site specific comments.

Summary position of WSCC as Highway Authority.

A key part of any planning application will be the need for you/your client to make clear to WSCC how the transport infrastructure associated with it will contribute to the entire Strategic allocation. This will involve developers working with adjacent landowners and demonstrating that this site is making proportionate contributions to the overall infrastructure package for the allocation. This will also include infrastructure identified as a policy requirement in the Local Plan. Added to this, you will need to demonstrate a clear mechanism for securing and delivering all infrastructure requirements in a timely and appropriate manner. Further to this, you should look carefully at the appeal decisions for the site and the more recent decision on land known as Bridge Cottage, Shripney – the latter with reference Appeal Ref: APP/C3810/W/20/3248659.

Site Specific Comments.

Review of submitted Transport Scoping Note dated 13 November 2020 (please see *red italic text*):

Introduction.

- 1.1.4. As stated above, the site forms part of the wider strategic allocation referred to as Barnham, Eastergate and Westergate (BEW) under Policy H SP2c (SD5) within the adopted ADC Local Plan 2018. As per the plan, the wider allocation collectively will provide at least 2,300 dwellings over the plan period, and up to 3,000 in total (a further 700 beyond 2031). *This number might be extended to up to circa 4100 and as such, should be reflected in any modelling you undertake.*

Existing conditions.

- 2.1.3 Currently, access to the development site is through Woodgate Road which also provides direct access to circa 23 bungalows along the road and serves as an access road to Woodgate Close comprising approximately 14 bungalows. It is intended that the proposed development will be served through this existing access.
- 2.2.2 The transport appraisal will provide a comprehensive review of these destinations, along with an audit of pedestrian and cycle links between these and the site including public rights of ways. However, in overall terms, the site can be seen to be appropriately located relative to trip generating activities that support travel on foot and by bicycle particularly with the introduction of the strategic sustainable cycle/footway infrastructure to be constructed as part of the overall BEW allocation which includes cycle/footway links that will be unimpeded by the existing railway line. *Any application should provide a clear account of what infrastructure will be provided to support it and the Strategic Allocation found to the east. You will need to provide and demonstrate an appropriate delivery mechanism for all infrastructure requirements, show what that infrastructure is and include timescale for delivery. Evidence of discussions and agreement with neighbouring landowners should also form part of this.*
- 2.2.3 The closest bus stops from the site are located on the A29 approximately 250m from the western boundary of the site just north of its junction with Willows Caravan Park access. These stops provide access to bus services 66A and 66C which run between Bognor Regis and Yapton. *Waiting facilities at both stops will require improving – e.g. bus shelters and/or new poles with real-time passenger information + new or improved sections of footway and crossing facilities on A29.*

Local Highway Network.

- 2.3.2 The access to the site is intended through the extension of the existing Woodgate Road to the west. It is approximately 5m in width and has footways and streetlights on both sides of the carriageway. Some on street parking can be observed along the road whilst majority of the properties have provision of driveway. *In some places the carriageway is narrower than 5.0m. On-street parking is prevalent along much of its length – particularly close to the junction with the A29. This will need to be considered carefully as part of the TA process. This matter was also raised when previous applications and subsequent appeals were previously submitted. Please also reference access to the site to/from the land to the east and demonstrate how this future link will be provided, when and in what guise.*
- 2.3.3 The A29 running north to south to the west of the site is a key route in the area. It runs through the Woodgate village and within the vicinity of the site, is approximately 7m in width and has provision of footways on both sides of the carriageway and streetlights. There are sign posts indicating that the road is subject to 30mph speed limit as it passes through the village. *The description in the TA should be expanded to consider the A29 south of the former Lee's Yard and north of the War Memorial Roundabout. Reference to A27 too, please.*

Proposed development.

- 3.1.1 The proposals are for development of up to 180 residential dwellings (private and affordable) and the associated access and parking provision. A plan illustrating the preliminary layout of the development is provided within Appendix A. *Noted.*
- 3.1.2 The Framework Masterplan for the overall Strategic Allocation that was part of the ADC's recent consultation is provided in Appendix B. This Framework Masterplan illustrates how the proposed site sits within the overall allocation and links with the new A29 route. *The plan shows access from both sides of the site. This should be described and shown in further detail as part of any proposals.*
- 3.1.3 Initially, it is intended that the proposed development will be accessed through the extension of Woodgate Road which to the west directly connects the site with the existing A29, Lidsey Road via a simple priority T junction. As illustrated in the preliminary layout, the site will several loop roads internally within the site omitting the need for a secondary access. Ultimately, as the BEW allocation progresses, a second access will be achieved to the east allowing for connection onto the new A29 route. *A clear mechanism for delivery of a link to land to the east will need to be*

demonstrated. It will need to be demonstrated what it will look like, when it'll be provided and how it will be suitable for access to the east. Timing of delivery should be provided too. With regard to junction design on the A29, this will be informed by modelling outputs and other factors. You would need to demonstrate that any design meets the requirements of relevant design guidance and/or standards.

- 3.1.4 The existing junction between the A29 and Woodgate Road will be reviewed as part of detailed transport appraisal to ensure that the layout of the junction and visibilities are to sufficient standards to serve the proposed development and has adequate capacity to accommodate the increased traffic due to the development in addition to the existing traffic, background growth and phased committed development, until the new A29 route is opened. *Previous applications were scrutinised very carefully with regard to access using Woodgate Road and its junction with the existing A29. The road is narrow and the junction geometry is also constrained in places (e.g. width, bellmouth radii etc.) and there is no dedicated right hand turning lane. The presence of the railway level crossing to the north also has an impact on how the junction operates, particularly when it is closed but also before and after opening and closure because of the resultant impact on traffic queues which can cause blocking-back at Woodgate Road and other nearby local junctions. You will also need to factor-in future traffic impact at this junction with any future connection made into the rest of the Strategic Allocation.*

Internal Road Layout.

- 3.1.5 In terms of on-site road hierarchy, it is envisaged that the extension of Woodgate Road will be a 5.5m wide spine road and will run through the centre of the site providing direct access to some of the dwellings as well as access to other smaller 4.8m and 4.1m secondary and shared surface streets and drives. *The whole length of Woodgate Road and its junction will need to be reviewed alongside any new road proposals. Other than very short sections by agreement with the Highway Authority, 4.1m wide access roads (secondary and/or shared surface) will not be accepted due to the likelihood of accessibility issues.*
- 3.1.6 The spine road will then terminate at the site's eastern boundary where the potential for further extension of this road to serve and ensure permeability with the wider BEW strategic allocation will be maintained. When the BEW allocation and the A29 realignment scheme comes forward, this will provide a secondary access to the site. *Please see comments made above alongside some of the earlier points.*
- 3.1.7 As shown within the Framework Masterplan, there will be several pedestrian and cycle routes within the Strategic Allocation that will be linked into to ensure permeability of non-motorised forms of travel. *Detail of this will need to be shown in any TA.*

Policy Compliance.

4.1.4 A preliminary review of the relevant policies indicates that the site would be compliant with prevailing transport policy and therefore acceptable in this regard. *This is a matter to be determined upon submission of a planning application.*

Traffic Generation.

Table 5.1: Trip Rates

Trips Rates	AM Peak Hour			PM Peak Hour		
	Arr	Dep	Two way	Arr	Dep	Two Way
Private Dwellings	0.138	0.361	0.499	0.331	0.156	0.487
Affordable Dwellings	0.162	0.268	0.430	0.280	0.207	0.487

Use of trip rates solely for private dwellings is accepted on this occasion. However, if the proposed housing mix at the time of submission of a planning application has a predominance of flats and affordable housing then any different rates proposed to be used in the TA would need to be discussed further. For avoidance of doubt, the trips rates you have used for affordable dwellings has not been assessed while considering this TA Scoping Note.

5.1.3 It is estimated that the proposed development of 180 dwellings will result in 90 two-way trips in the AM peak and 88 in the PM peak. This will be compared against the WSCC modelling work and the worst of the two will be utilised following consultation with WSCC. *You will need to factor-in any before and after scenario and model the impact of that – so the site without a link into the rest of the Strategic Allocation and one with. Please ensure that all committed developments and the Strategic Location are factored-into any modelling undertaken. A list of these should be included in any TA.*

5.1.4 The proposed development trip distribution will be derived based on the WSCC's existing model, prepared by WSP subject to agreement with WSCC. Alternatively, the anticipated trips can be distributed appropriately within the local highway network based on the distribution derived using the 2011 Census Journey to Work data. *Please use the distribution as found in the WSCC model.*

Assessment.

- 5.2.1 It is proposed to assess the impact of the proposed development traffic on a phased basis, i.e. before the opening of the A29 realignment scheme with background growth and any committed developments forecast for occupation at that time and then, if required, after the opening of the relief road with any remaining committed developments and the redistribution of traffic accordingly. The extent of the study area will include the junction between A29 and Woodgate Road (the site access), the A29 Fontwell Western Roundabout and the A29 War Memorial Roundabout subject to agreement with the WSCC Highways. Additionally, the impact of the development on the perceived existing congestion issues at the Woodgate railway level crossing will also be considered as part of the transport appraisal. *Using a selection of modelling scenarios is accepted in principle. However, before undertaking this work it would be helpful seeing in tabular form the exact phases/scenarios you propose so we can look to agree it.*
- 5.2.2 Developer contributions are being sought by WSCC and ADC, as discussed later, to bring forward several improvement schemes on the surrounding local highway network and these schemes are considered to mitigate the impact of the proposed development as well as other nearby developments. As such, it is expected that the proposed development will only require to review the impact of any committed development and background growth up to the implementation of these schemes and mitigate the areas on the local highway network which this development creates a severe impact. *This statement is not clear – please provide further explanation.*
- 5.2.3 For example, the A29 War Memorial Roundabout is expected to experience significantly reduced traffic flows because of the A29 Realignment Scheme; hence, developer contribution is not being sought for this junction. However, if the proposed development is to come forward before the A29 Realignment Scheme and as the junction is likely to be most affected by the development traffic, improvement measures at this junction will be investigated if the relative impact compared to without the development is identified to be severe. *Noted.*
- 5.2.4 With regards to the future year assessment, it is considered appropriate to assess these junctions for the future year of 5 years post application. *Given that the site is within the BEW allocation, you should look to provide analysis up to the end of the Local Plan period. Highways England should also be consulted for their view too.*
- 5.2.5 It is understood that WSCC keep a record of traffic volume, speed, and classified data. Due to the uncertainties in current travel patterns and its representativeness, it is intended WSCC will be consulted for the use of the existing traffic that they hold. Subsequently, WSCC have indicated that ATC and turning counts data as well as the A29 model can be obtained from them. These data will then be growthed appropriately using TEMPRO factors to derive future year flows. *This is correct. However, there will be a charge*

made for use of the model to undertake modelling for your client's scheme. The methodology for 'growing' any figures is accepted.

The A29 Realignment Scheme and Other Identified Mitigation Schemes.

- 5.2.6 A key transport infrastructure requirement as set out in the Policy H SP2c (SD5) of the adopted ADC Local Plan 2018 for the wider BEW Strategic Allocation is a new A29 route (the A29 realignment/bypass scheme). It is envisaged by WSCC and ADC as an important strategy to provide extra capacity within the local highway network to not only reduce the existing congestion but also to mitigate the effect of additional traffic from the Strategic Allocation and to reduce potential future congestion. *Correct. However, any TA should demonstrate your/your client's understanding of when the A29 is going to come online, particularly if you are seeking to rely on its delivery to reduce the length of any short-term impacts.*
- 5.2.8 It is noted that an outline planning consent has been recommended for approval (AL/21/20/OUT) for 38 dwellings at Land North of Lee's Yard, Woodgate. Consultation responses from West Sussex County Council Highway and Highways England provided no objection to this application and confirmed that it is in a sustainable location. Given that this site is just to the south west of Woodgate Road and to the south of the railway line this is perceived as a positive indication of the Highway Authority's position (Appendix D) with respect to this application. Albeit we acknowledge that each application must be taken on its own merits. *You will need to include a detailed appraisal of sustainable access for your client's site which will be reviewed at any planning stage.*
- 5.2.9 WSCC's Transport Business Case Draft (dated Jan 2019), prepared by WSP, estimated the total cost of delivery of the scheme to be £54.2 million of which £30 million is anticipated to be funded through developer contributions. Given the proposed development forms part of the BEW Strategic Allocation, it is jointly responsible for the delivery of the A29 scheme hence, appropriate developer contributions will be made available through S106 agreements. *You will need to demonstrate how you intend to provide all necessary infrastructure including when and where for both your client's site and that for access to the neighbouring sites also forming part of the BEW allocation. Evidence of working with adjacent landowners and any agreements reached should also be demonstrated. Timescales for delivery also required, please.*

5.2.10 Additionally, appropriate contribution through S106 agreements will also be made for the following schemes as identified in the WSCC/ADC Local Plan Transport Mitigation Apportionment Study (June 2020):

- A27 Nyton Road junction
- A27 Fontwell East Roundabout
- Barnham Village Centre Enhancements
- A259 Oystercatcher junction
- A259 Corridor Improvement Bognor Regis-Littlehampton

The above is noted.

5.2.11 At the time of this note being prepared and as per Appendix 1 of the Apportionment Study, contribution per unit relevant to the proposed site was estimated to be £8,371.99 subject to inflation and more detailed design costs. However, WSCC have highlighted that the amounts shown in the Study should not be the total of contributions required from the development locations listed. As such, this will be re-evaluated moving forward. *Comments noted. In-line with other comments made in this response, you will need to demonstrate how such contributions will be used to deliver infrastructure to assist with delivery of the Strategic location.*

5.2.12 Personal injury accident data that have occurred during the last five-year period over the length of the A29 between and including the A29 War Memorial Roundabout to the north and the A29/A259 Roundabout to the south will be obtained from KCC and reviewed. *Please provide 10 years given that the site forms part of the Strategic Allocation.*

Summary.

6.1.1 Although subject to more comprehensive assessment, as detailed above, this preliminary appraisal indicates that a development of up to 180 residential dwellings, would be appropriate for the site. The proposed development will also make appropriate contributions to bring forward the A29 realignment scheme, which include contributions towards/facilitating the delivery of a bridge over the Rife into the CCE site and other improvement schemes identified in the WSCC/ADC Local Plan Transport Mitigation Apportionment Study. *It will be for you and/or your client to demonstrate how you consider the site could come forward, when and how it will contribute towards highways and transport infrastructure to assist with delivery of the BEW Strategic Allocation.*

Replies to emails of 3 December 2020.

Email 1 (WSCC replies again in *red italic text*):

Could you please provide some assistance in finding the reports which were used to estimate funding for the A29 realignment scheme and other improvement schemes which the strategic allocation at BEW is expected to contribute towards? *You can find this information by looking at the Transport Business Case for the A29 at this [link](#).*

Attached is the breakdown of estimated cost of the A29 Realignment Scheme extracted from the Transport Business Case. As the report was prepared on behalf of WSCC, I was hoping you would be able to provide us with the further detailed breakdown/calculation of these costs particularly the construction costs. By further breakdown, I mean something similar to the attached Appendix F which was prepared by Systra as part of the initial feasibility study in 2014. At the moment, the table only shows lump sum construction costs. *The Transport Business Case gives a summary table with broken down costs – this was appropriate for feasibility stage and are the only ones available publicly at the present time.*

Also within Appendices 1 and 2 (tables) of the attached 2020 Apportionment Study, references have been made to the 2019 and 2020 reports (first row second column) with regards to the estimated costings associated with the A259 Oystercatcher and A259 Corridor Improvement Bognor Regis to Littlehampton. We were unable to identify or locate these reports anywhere. Within this report, it also mentions *"Barnham Village Centre Enhancement has been identified by West Sussex County Council"* however, doesn't give much detail on how the cost for this scheme was estimated. It would be much appreciated, if you can provide us with any sort of study report or evidence base showing how these were worked out to help us understand detailed breakdown of the costs.

The final apportionment study published by Arun District Council was completed by the District Council based on information from a number of sources, including an apportionment study undertaken by WSP for the County and District Councils along with a report on the A259 Comet Corner and Oystercatcher junctions. The figures used in the apportionment have preceded recent work done on the A259 Bognor Regis to Littlehampton Major Road Network scheme.

The apportionment costs for the Comet Corner and Oystercatcher junctions are based on the WSP report and these are included as separate items to the A259 contribution of £3.0M. The latest cost of £29.2M for the current Bognor to Littlehampton major scheme will include improvements at these junctions, although the designs have been amended from those in the Comet Corner and Oystercatcher report, notably for Comet Corner.

The major scheme also includes locations which were not identified as severe impacts for capacity or safety in the Arun Local Plan strategic study, but have pressures relating to existing use and background growth. The apportionment does not seek to raise developer funding for the additional costs of these elements of the work from the existing Local Plan allocations. The apportionment work included a cost for widening the carriageway between Littlehampton and Oystercatcher only,

which led to the 3.0M figure. However the planned improvements have evolved since then, hence Arun's apportionment uses a different heading in relation to the use of this funding.

Earlier cost estimates were from the work for the Arun Local Plan Transport Study, subsequently incorporated into the Enterprise Bognor Regis (EBR) study, where some amendments to junction designs were made and were based on outline designs or generic estimates only. Other improvements such as widening Littlehampton to Oystercatcher and traffic management at Barnham Village centre were based on generic estimates, not on any specific design, so there is no detail available for them. Study work has been undertaken in Barnham to examine further the most beneficial and appropriate form of mitigation for the forecasted flow increases through the village centre although this work is yet to be completed.

Email 2:

We also wanted to know if there has been any works undertaken including costs with regards to the east west link off the new A29 route towards Woodgate Road through the site. *No. The E-W link would need to be provided by developers.*

Standard Requirements.

The Highway Authority would require the following documents to 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 including planning appeals and decisions (+ 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 any identified departures and/or relaxations from standards.
- For internal road layouts, swept-path diagrams demonstrating access by refuse and fire appliance vehicles.
- Final Stage 1 Road Safety Audit of site access and any other proposed highway works undertaken in accordance with DMRB GG 119, with designer's response (RSA Log), including amended plans.
- A Transport Statement/Assessment, including location plan of key services, availability of sustainable modes of transport and existing/future vehicular generation.
- 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 requirements.

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.

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:

- 2.0 metres -domestic single accesses
- 2.4 metres- for shared or busy crossovers
- 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.

The page also includes a link to our latest parking standards which we adopted in August 2019 as Supplementary Planning Guidance (SPG) that sets out parking standards for development in West Sussex. Within you will find recommended levels for cycle parking and also guidance on levels of Electric Vehicle charging points for new developments.

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/dmrb/>

Please note that any advice given by council officers for 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. 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
County Highways Team – Highways, Transport and Planning



Technical Note

c-a.uk.com

Land East of Woodgate Road

20-061-003 Rev -

Woodgate Road Review

February 2021

Rev	Issue Purpose	Author	Checked	Reviewed	Approved	Date
-	Draft	PL	GAC	PL	GAC	Jan 2021
A	Final	PL	GAC	PL	GAC	Feb 2021

1 Introduction

1.1 Introduction

- 1.1.1 This Technical Note (TN) has been prepared by Charles & Associates Consulting Engineers Ltd (C&A), as a review the suitability of Woodgate Road to accommodate a residential development of up to 180 dwellings to the east of Woodgate Road, Aldingbourne, West Sussex in advance of the final east west link road from the realigned A29 road as part of the allocated BEW sites.
- 1.1.2 This east/west link will continue to connect to the existing A29 once the realigned A29 is complete by 2031, via Woodgate Road as part of the overall improvements to the local highway network which form a key part of the BEW masterplan allocation. As such, it is not unreasonable to assume that Woodgate Road has already been considered by WSCCH as part of the overall highway network and deemed to be acceptable for development traffic and more sustainable movements.
- 1.1.3 As such, this TN builds upon these parameters to confirm the road can be utilised for vehicular traffic as well as sustainable means of travel, by means of improvements, in both the interim and ultimate use scenarios.
- 1.1.4 Woodgate Road to the west forms a priority junction with the A29 Lidsey Road and to the east provides access to the proposed development site.

- 1.1.5 Although Woodgate Road forms part of the improvements to the local highway network for the BEW allocation, West Sussex County Council Highways (WSCC), have requested a review of the geometry of Woodgate Road to confirm it has the capacity to serve the proposed development scenarios, accounting for the existing on street parking.
- 1.1.6 In addition, there is a need to confirm that sustainable forms of travel can be accommodated to allow sustainable access to local facilities in the interim, while the A29 realignment and associated sustainable links are put in place with the ability to connect into these in the future.
- 1.1.7 This TN aims to address the above and is informed by parking stress survey undertaken on the 8th and 9th December 2020. For completeness, the results of the survey in the form of plots illustrating locations of parked vehicles at 08:00, 18:00 and 00:00 and results table are provided in **Appendix A**.

2 Parking Stress Survey

- 2.1.1 It is identified that there are 23 bungalows who gain direct access from Woodgate Road and although majority of these have driveway provision, there appears to be four bungalows who do not have driveway provision.
- 2.1.2 These bungalows are situated directly opposite to the junction with Woodgate Close and it is apparent that the cars belonging to these are parked on street as can be surmised from the parking inventory plan provided below.
- 2.1.3 It is also identified that some on the dwellings towards the end of Woodgate Road did not utilise their driveway at the time of the survey and parked their cars on street. It is therefore not unreasonable to consider the current parking is the worst-case scenario.
- 2.1.4 **Figures 2.1 and 2.2** below illustrate the availability of unrestricted parking (blue), dropped kerb (black) and vehicles parked (red) at 08:00, 18:00 and 00:00 along the full length of Woodgate Road on the 8th and 9th December 2020, respectively.

Figure 2.1: Street Inventory Tuesday 8th Dec 20

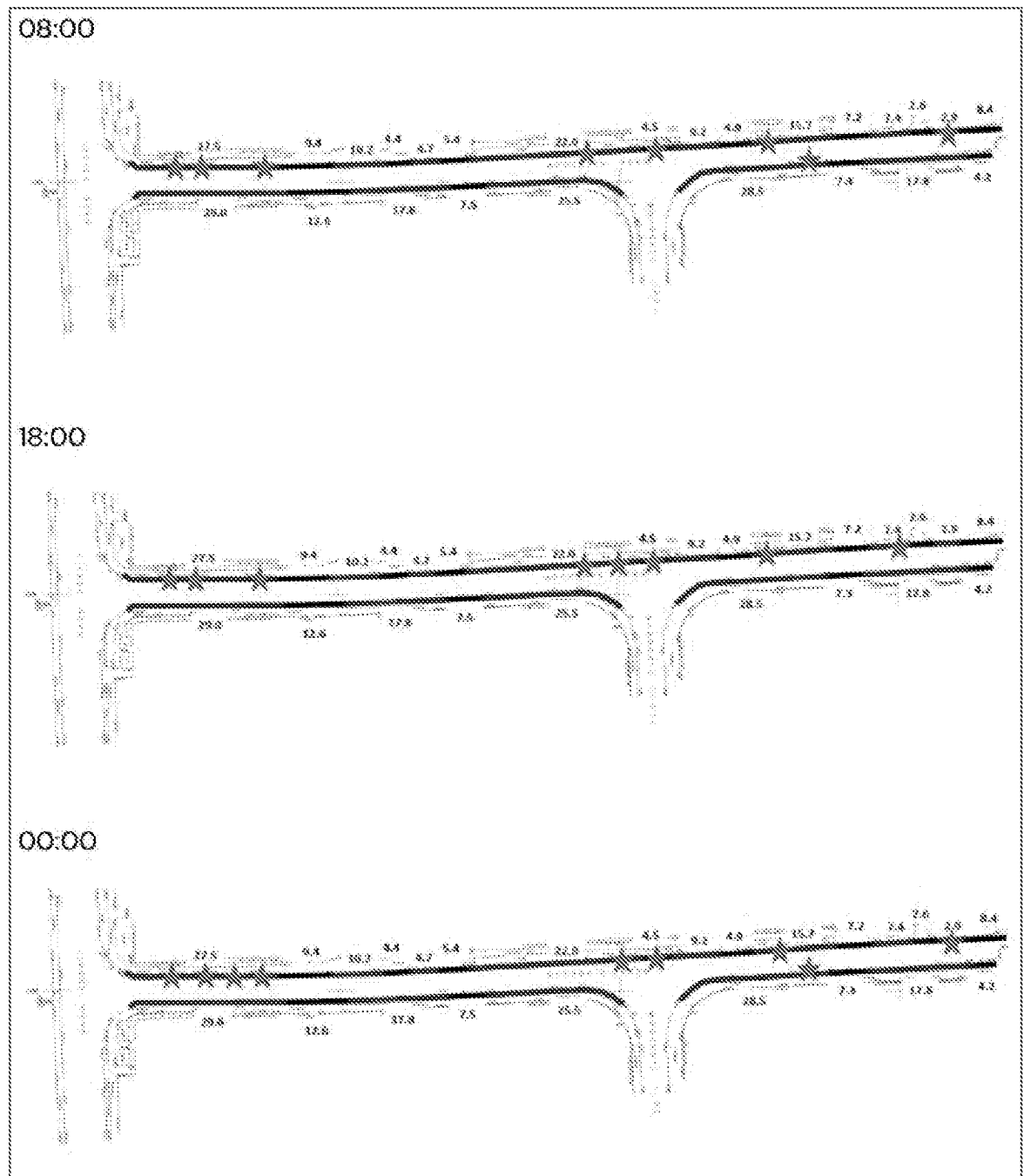
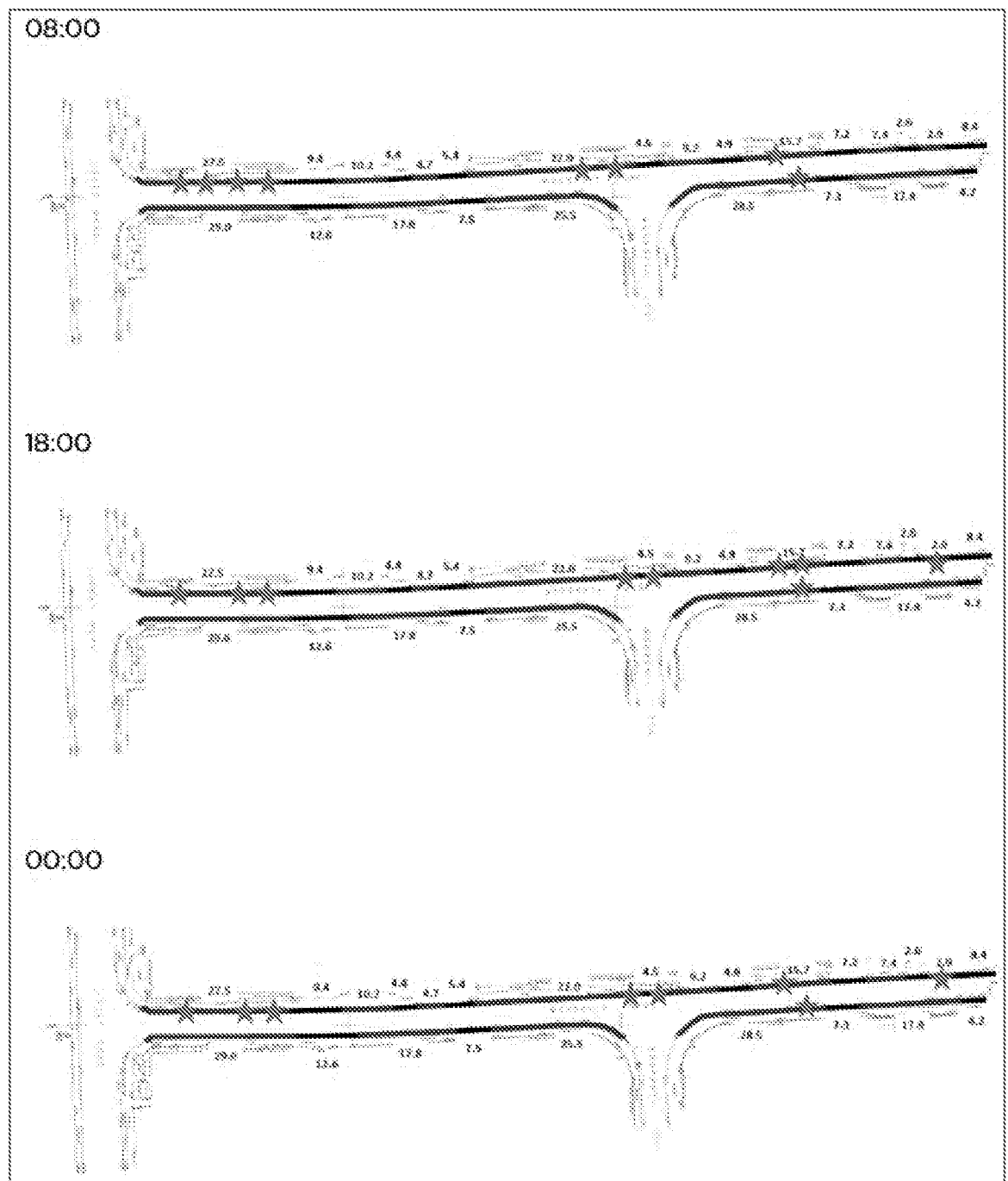


Figure 2.2: Street Inventory Wednesday 9th Dec 20



- 2.1.5 As shown in the above figures, the on-street parking predominantly occurs on the northern side of the carriageway. The survey plots concur with the point raised by the highway authority that on-street parking is prevalent close to the junction with the A29 to west. Nonetheless, the level of on-street parking observed is not considered to be unusually high for a residential road that could otherwise cause safety issue.

- 2.1.6 Table 2.1 below summarises the parking utilisation on both survey days. On-street parking can be observed in approximately 25% of the overall length of Woodgate Road.

Table 2.1: Parking Utilisation Summary

Beat Time	Roadside	Total Spaces	Unrestricted Parking		Dropped Kerb Used	Single Yellow Used	Double Yellow Used	Total Parked	% of Spaces Used
			Spaces	Used					
Tuesday 08 th Dec 2020									
08:00	NORTH	16	16	6	1	-	-	7	38%
	SOUTH	16	16	1	-	-	-	1	6%
18:00	NORTH	16	16	7	1	-	-	8	44%
	SOUTH	16	16		-	-	-	0	0%
00:00 (Midnight)	NORTH	16	16	7	1	-	-	8	44%
	SOUTH	16	16	1	-	-	-	1	6%
Wednesday 09 th Dec 2020									
08:00	NORTH	16	16	7	-	-	-	7	44%
	SOUTH	16	16	1	-	-	-	1	6%
18:00	NORTH	16	16	7	1	-	-	8	44%
	SOUTH	16	16	1	-	-	-	1	6%
00:00 (Midnight)	NORTH	16	16	6	1	-	-	7	38%
	SOUTH	16	16	1	-	-	-	1	6%

- 2.1.7 It is realised that on-street parking being close to the junction with the A29 will have some implications on the efficient operation of this junction due to interactions with parked vehicles if the demand is sufficiently high.
- 2.1.8 Preliminary assessment based on TRICS analysis suggests, as reported in the Transport Scoping Note, that the development will add a maximum of 90 two-way flows during peak hours. This is equivalent to less than 2 vehicular trips per minute during the peak hour. This level of extra traffic is unlikely to have severe impact on the operation of the junction.
- 2.1.9 The initial capacity assessment exercise, discussed in the next section, demonstrates that the junction has adequate capacity to accommodate the existing and the development traffic without resulting in exit queues on Woodgate Road. In the absence of the exit queue, the on-street parked vehicles will only have marginal impact on the junction operation. There is also a potential of implementing parking restrictions (double yellow lines) within the vicinity of the junction if deemed necessary.

3 A29 Lidsey Road/Woodgate Road Junction Review

3.1 Proposed Right Turn Arrangement

- 3.1.1 The proposed development will be served through the junction between the A29 Lidsey and Woodgate Road which is currently in a form of a simple priority T junction.
- 3.1.2 The A29 is a strategic route serving significant volume of traffic. Therefore, the potential to upgrade the junction to a right turn ghost island arrangement has been investigated.
- 3.1.3 The DMRB CD 123 Figure 2.3.1 suggests that a ghost island arrangement on single carriageway roads should be considered when 2-way AADT flow is greater than 300 on a minor road and is greater than 13,000 on a major road. As the anticipated 2-way AADT flow on Woodgate Road is significantly higher than this threshold (refer to Table 3.1), it is considered appropriate to investigate such arrangement.
- 3.1.4 A potential junction arrangement with a provision of 3m wide right turn lane and 3m through lanes on each direction has been prepared as illustrated in **Drawing No. 20-061-014**. It is considered that the identified arrangement will enable drivers to access Woodgate Road without causing any delays to the through traffic along the A29 Lidsey Road and is suitable and appropriate for the level of development proposed.
- 3.1.5 This junction arrangement will also allow the right turning traffic to wait safely on the right turn lane before entering Woodgate Road. Furthermore, to assist with the right turn manoeuvre from Woodgate Road, the proposed junction improvements will incorporate an additional 'Keep Clear' marking on the A29 northbound lane.
- 3.1.6 The proposals that will be included in the TA will be subject to an independent Stage 1 Road Safety Audit.

3.2 Capacity Assessment

- 3.2.1 A preliminary capacity assessment exercise has been undertaken to estimate the operating capacity of the A29 Lidsey Road/Woodgate Road Junction with right turn with the proposed development traffic.
- 3.2.2 This assessment has been undertaken for indicative purposes only using the 2023 and 2038 A29 link flows provided in the WSCC's Transport Business Case report (Tables 3-9 and 3-11). Once the A29 Realignment scheme model is obtained, the traffic flows will be updated accordingly.

- 3.2.3 For future year 2023, the northbound and southbound through traffic on the A29 have been used as 624 and 614 respectively in the AM peak and 565 and 655 respectively in the PM peak. Similarly, for the future year 2038, the northbound and southbound traffic on the A29 have been used as 833 and 791 respectively in the AM peak and 715 and 734 respectively in the PM peak.
- 3.2.4 In the absence of actual turning counts, the traffic entering and exiting Woodgate Road have been estimated based on the number of existing dwellings currently served through the road and the number of dwellings proposed on the site and using the TRICS trip rates. 70% of the resultant trips have been assigned northbound and 30% have been assigned southbound. In the TA, this junction will be assessed using the actual turning counts instead of the estimated flows.
- 3.2.5 It is identified that there are 37 dwellings approximately currently being served through this junction. The proposed development of 180 dwellings will result in a total 217 dwellings being served through this junction. The anticipated number of trips based on 217 dwellings and the trip rates used are provided in **Table 3.1** below.

Table 3.1: Woodgate Road Anticipated Trips

	AM Peak			PM Peak			Daily		
	Arr	Dep	Two-Way	Arr	Dep	Two-Way	Arr	Dep	Two-Way
Trip Rates	0.138	0.361	0.499	0.331	0.156	0.487	2.352	2.367	4.719
Trips (217 Dwellings)	30	78	108	72	34	106	510	514	1024

- 3.2.6 **Table 3.2** below summarises the capacity assessment results, and the full PICADY output report is provided in **Appendix B**.

Table 3.2: A29/Woodgate Road Junction with Right Turn - Results

Movement	AM Peak			PM Peak		
	RFC	Queue (Veh)	Delay (s)	RFC	Queue (Veh)	Delay (s)
2023 With Development						
Woodgate Road	0.38	0.6	25.38	0.17	0.2	19.99
A29	0.02	0.0	8.40	0.06	0.1	9.14
2038 With Development						
Woodgate Road	0.60	1.4	61.38	0.22	0.3	27.22
A29	0.03	0.0	9.56	0.06	0.1	9.72

- 3.2.7 The model indicates that the junction will operate within capacity and will experience minimal queues of no more than 2 vehicles in both future years.

- 3.2.8 Whilst it is accepted that there are on-street parking occurring close to the junction, the vehicular demand and the resulting queues on Woodgate Road where on-street parking occurs are minimal. Therefore, it is considered that the on-street parking will not have severe impact on the junction operation.

3.3 Accident Review

- 3.3.1 Personal Injury Accident (PIA) data have been obtained from Sussex Police for the latest 10-year period up to 30/11/2020. The data shows that only two slight injury accidents have occurred at this junction over the last 10-year period. Each of these accidents occurred in June 2012 and July 2014. No accidents were recorded along Woodgate Road leading up to the site.
- 3.3.2 The first accident involved a car turning left from Woodgate Road failing to give way to another car travelling southbound on the A29. The second accident occurred when a motorcycle travelling northbound filtering the static traffic to the left failed to notice a car indicating to turn right on to Woodgate Road resulting in the collision. The weather was recorded as dry and fine on both occasions.
- 3.3.3 The nature of the accidents occurred at this junction as described above suggests that two accidents were unrelated and both of them were due to human errors (failing to look properly) rather than deficiency in the highway safety. Furthermore, no accidents have been recorded at this junction during the last 5-year period suggesting that there is no highway safety issue at this junction.
- 3.3.4 Although the parking survey suggests, as highlighted by the Highway Authority, there are some on-street parking on Woodgate Road just after the junction, the accident data indicates this has not had any adverse impact on the operation of this junction in safety terms.

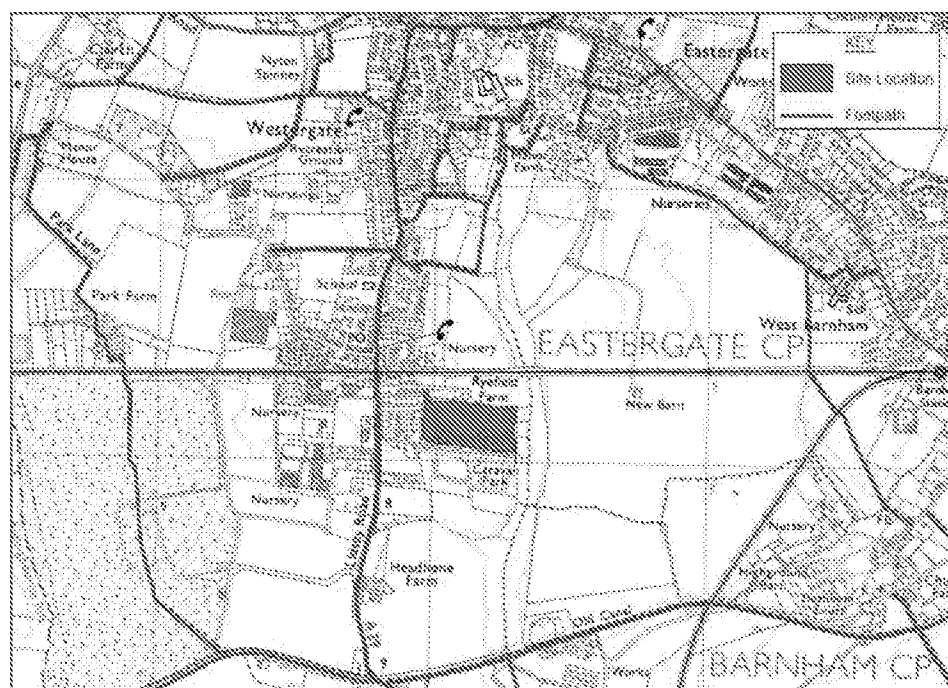
4 Sustainable Access to Local Facilities

4.1 Local Facilities

- 4.1.1 Planning guidance emphasises the integration of land use, transport and planning decisions. To ensure developments are sustainable, they should be accessible to local amenities, schools and public transport services on foot and cycle.
- 4.1.2 Manual for Street considers 800m to be comfortably accessible distance on foot and states that walking has the potential to replace short car trips of up to 2km. Whereas, CIHT's Planning for Walking document reports that approximately 80% of journeys shorter than 1 mile (1.6 km) are made wholly on foot.

- 4.1.3 Based on these, walking distance of up to 2km and cycling distance of up to 5km to such local amenities are generally considered to be acceptable.
- 4.1.4 The site is located within easy access on foot and cycle to the facilities and services of Woodgate, Aldingbourne and Westergate to the north of the site which can be accessed using the A29. In addition, public footpaths are available to the north of the level crossing as illustrated in **Figure 4.1** providing connections between the site and schools and amenities in Eastergate. Albeit it is accepted that some delay is incurred when the level crossing is in use.

Figure 4.1: Public Footpaths

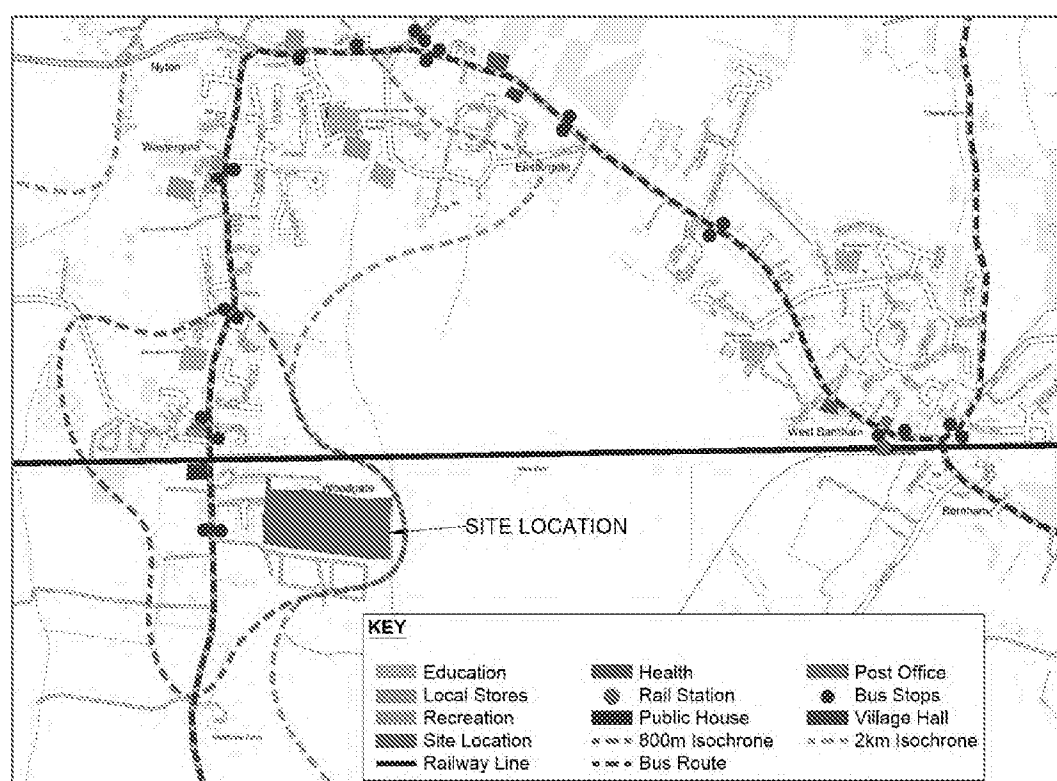


- 4.1.5 Initial review of the personal injury accident data indicates that there have been only a few incidents involving pedestrians and cyclists during the last 10 years along the A29 leading to the local facilities which is perhaps not unusual for such a long period whereas no incidents were recorded at the level crossing. These suggest that the route is relatively safe for travelling on foot and cycle to these facilities. It is also considered that the proposed shared footway/cycleway (discussed later in this note) will further enhance safety of pedestrians and cyclists. Detailed review of the accidents occurred along the A29 will be included the TA.
- 4.1.6 A comprehensive list of local facilities within walking and cycling distances from the site are tabulated in **Table 4.1**. The location of these relative to the site along with 800m and 2km isochrones are illustrated in **Figure 4.2**.
- 4.1.7 It is therefore considered that there is an opportunity to promote and encourage the future residents of the site to sustainably travel by walking and cycling to and from these local amenities and services.

Table 4.1: Local Facilities

	Facilities	Approx. Dist	Walk Time	Cycle Time
Education	Aldingbourne Primary School	600 m	8 min	3 min
	Hop Scotch Pre School	1.2 km	15 min	5 min
	Eastergate CE Primary School	1.7 km	21 min	9 min
	Ormiston Six Villages Academy	1.8 km	23 min	8 min
	St Philip Howard Catholic School	3.0 km	37 min	12 min
	Barnham Primary School	3.3 km	42 min	12 min
Health	The Croft Surgery	2.2 km	28 min	8 min
	Five Villages Pharmacy	3.3 km	42 min	11 min
Public Transport	Willows Caravan Park Bus Stops	250 m	3 min	1 min
	Barnham Rail Station	3.5 km	44 min	11 min
Retail	Aldingbourne Village Stores	350 m	5 min	2 min
	Hirange Supermarket	1.2 km	15 min	5 min
	Hursts Convenience Store	1.7 km	21 min	6 min
Others	Public House	250 m	3 min	2 min
	Post Office	350 m	5 min	2 min
	Aldingbourne Community Sports Centre	1.4 km	17 min	5 min
	Six Villages Sports Centre	1.8 km	23 min	8 min
	Eastergate Parish Hall	2.3 km	29 min	9 min

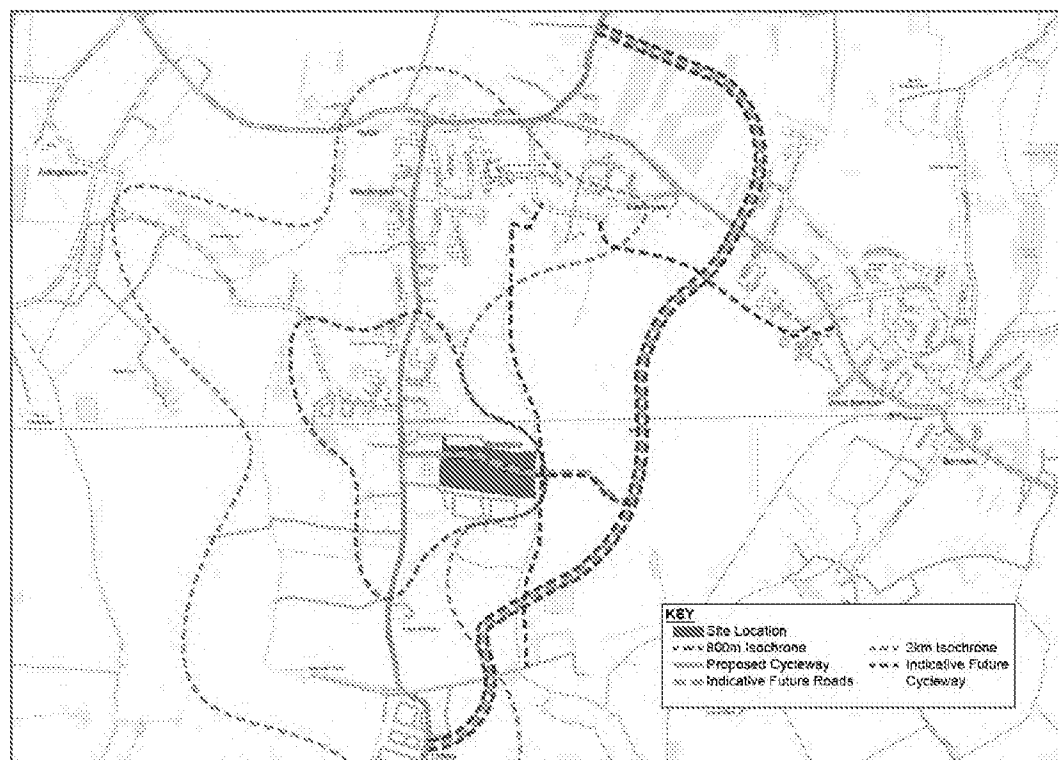
Figure 4.2: Local Facilities Plan



4.2 Proposed Sustainable Travel Strategy

- 4.2.1 Sustainable travel strategy has been considered to encourage the future residents of the site to travel sustainably to the local facilities discussed above.
- 4.2.2 The proposed shared footway/cycleway provision along Woodgate Road and the A29 Lidsey as illustrated in **Drawing No. 20-061-014** is a key part of Proposed Sustainable Travel Strategy in the interim until the A29 Realignment Scheme comes forward which includes further sustainable link. It will also continue to serve as one of these sustainable routes in the final overall network improvements.
- 4.2.3 The provision will enable the future residents of the site and the existing residents of Woodgate Road and Woodgate Close to make use of the off-road cycle route. The east to west link to the new A29 route will provide access to a host of local facilities and services to be built when the remainder of the BEW allocation comes forward.
- 4.2.4 As shown in the drawing, due to limited availability of highway land, only 2.5m wide shared provision can be accommodated along Woodgate Road on its northern side. However, this is the absolute minimum effective width acceptable for shared provision based on WSCC Cycling Design Guide 2019 and therefore, is considered be acceptable.
- 4.2.5 From the junction with the A29, the shared provision will head northbound on the eastern side of the road and crosses to the western side just south of the level crossing and heads north to Hook Lane. As shown, there is adequate highway land available on the eastern side and as such 3m wide shared provision can be provided. Again, due to highway boundary limitation, only 2.5m wide shared provision can be accommodated north of the level crossing which is acceptable based on the WSCC cycle guidance stated in the paragraph above. Crossing facilities with dropped kerbs and tactile paving will be provided where the provision crosses the road. This will also be subject to an independent Stage 1 Road Safety Audit in the TA.
- 4.2.6 It should be noted that the above are based on Ordnance Survey map and may require clearance of some of the hedgerows which have overgrown into the highway land along Woodgate Road.
- 4.2.7 **Figure 4.3** below gives illustration on how the proposed shared footway/cycleway sits alongside the BEW Framework Masterplan proposals and ensures accessibility to the local facilities in the plan above.

Figure 4.3: Proposed and Indicative Future Shared Footway/Cycleway



4.2.8 Overall, it is considered that the proposed shared footway/cycleway link supported by the proposed Travel Plan will provide an opportunity to promote and encourage sustainable travel to the new residents of the site as well as existing. This will be further enhanced when the additional sustainable measures come forward as part of the remaining BEW allocation.

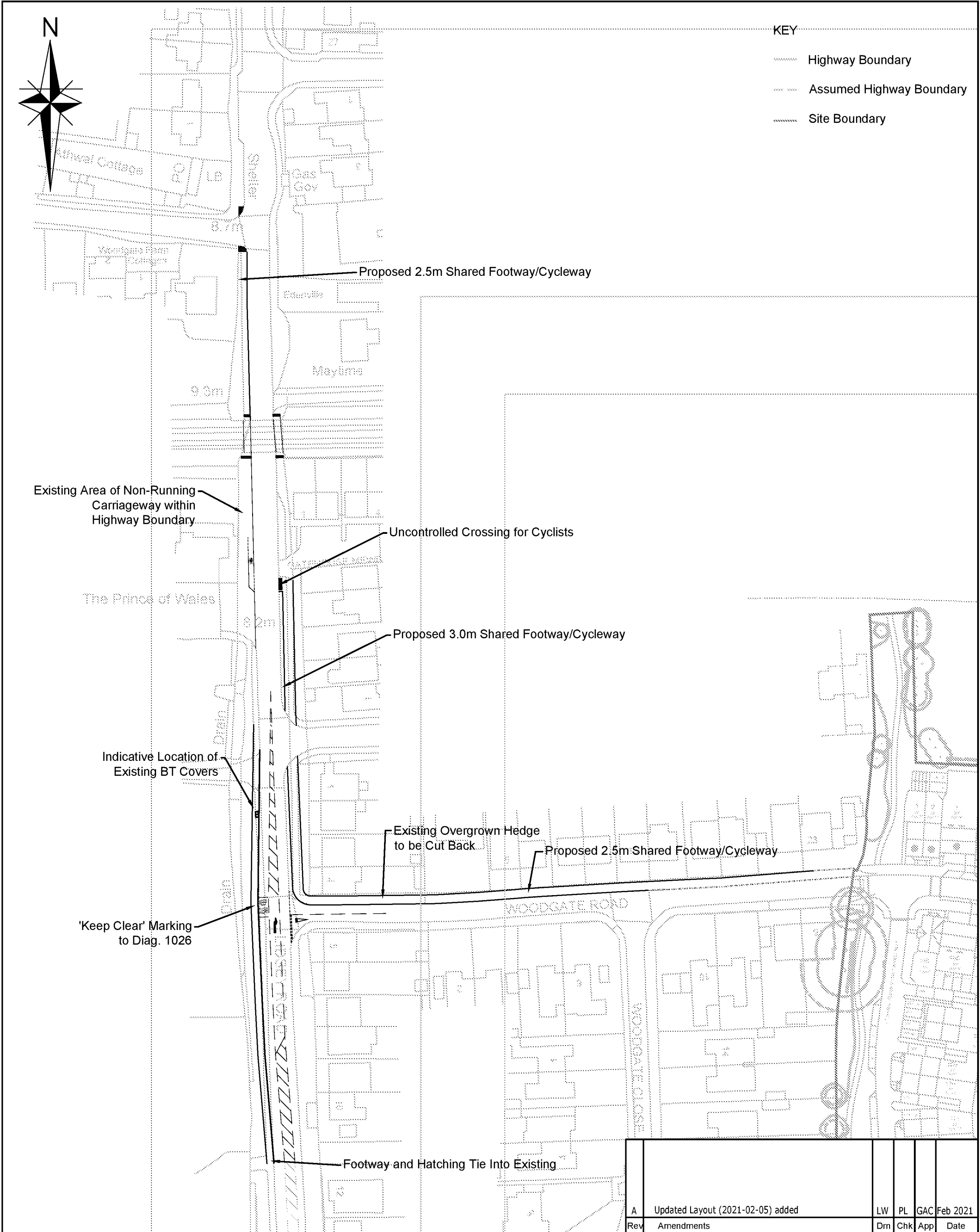
5 Conclusion

5.1.1 Following this exercise and based on the parking survey results, it is considered that the on-street parking observed on Woodgate Road is not unusually high for a residential road and this would act as a traffic calming feature. No personal injury accidents are recorded along Woodgate Road over the last 10 years which suggests that there is no accident risk due to the on-street parking.

5.1.2 It is recognised that some on street parking occurs near the A29 and Woodgate Road junction. But this occurs only on one side of the road and the junction is anticipated to operate with adequate capacity and minimal queues on the minor arm where on-street parking occurs. Therefore, the on-street parking is unlikely to have adverse impact on the operation of this junction.

- 5.1.3 Although the junction is anticipated to operate within capacity with the proposed development traffic and the review of accident data doesn't identify any safety risks at the junction, potential to upgrade the junction to include right turn provision has been investigated as the 2-way AADT flow on Woodgate Road is anticipated to exceed the DMRB threshold for a simple priority junction.
- 5.1.4 Furthermore, potential shared footway/cycleway along Woodgate Road and the A29 heading north towards existing local facilities has also been investigated. This will be continuation of the onsite shared footway/cycleway provision that will be part of the development proposals. It is intended that this provision will continue further east as remainder of the BEW Strategic Allocation comes forward and link with the provision on the new A29 route.
- 5.1.5 A wide range of local facilities are available within walking and cycling distance from the site and additional facilities are expected to come forward as part of the BEW allocation. The site's Sustainable Travel Strategy which includes the shared footway/cycleway provision to the west and supported by the implementation of Travel Plan will aim to promote and encourage the site's residents to travel sustainably to these facilities.

Drawings



Issued by ☒		Landmark House Station Road Hook Hampshire RG27 9HA 01256 630420		Job Title		Scale		Date		Designed	
		Charles & Associates		Land East of Woodgate Lane		1:1000		Jan 21		LEW	
☐		Park House, Park Farm East Malling Trust Estate Bradbourne Lane Aylesford, Kent ME20 6SN 01732 448120		Drawing Title		Drawn		Checked		Approved	
				Proposed Site Access and Cycle Connection		LEW		PL		GAC	
				Client		Job No		Drawing No		Rev	
				Pye Homes		20-061		20-061-014		A	

Rev	A	Updated Layout (2021-02-05) added	LW	PL	GAC	Feb 2021
Rev		Amendments	Drm	Chk	App	Date

Appendix A Parking Stress Survey Results

	CLIENT: CHARLES & ASSOCIATES		JOB NUMBER: OPS11138	
	PROJECT DESCRIPTION: WOODGATE ROAD - PARKING STRESS SURVEY DATA			
	WEATHER: DRY/MILD		DATE: TUE 08TH DEC 2020	

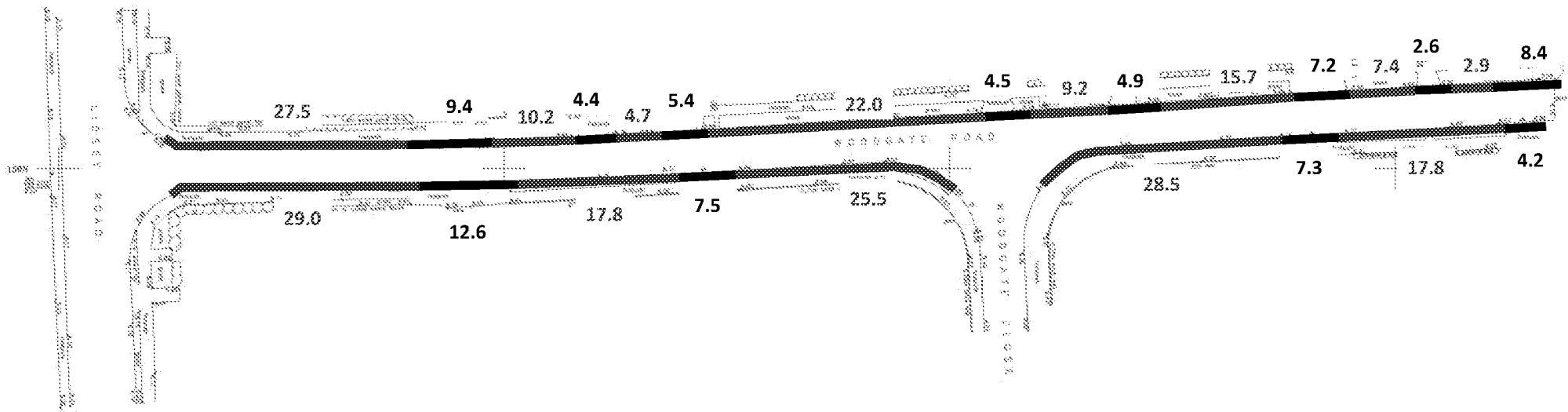
*Parking space availability based upon 5.0m per space

Beat Time	Roadside	Total Spaces	Unrestricted Parking		Dropped Kerb	Single Yellow	Double Yellow	Total Parked	% of Spaces Used
			Spaces	Used	Used	Used	Used		
08:00	NORTH	16	16	6	1			7	38%
	SOUTH	16	16	1				1	6%
18:00	NORTH	16	16	7	1			8	44%
	SOUTH	16	16					0	0%
00:00:00 (MIDNIGHT)	NORTH	16	16	7	1			8	44%
	SOUTH	16	16	1				1	6%

	CLIENT: CHARLES & ASSOCIATES		JOB NUMBER: OPS11138	
	PROJECT DESCRIPTION: WOODGATE ROAD - PARKING STRESS SURVEY DATA			
	WEATHER: DRY/MILD		DATE: WED 09TH DEC 2020	

*Parking space availability based upon 5.0m per space

Beat Time	Roadside	Total Spaces	Unrestricted Parking		Dropped Kerb	Single Yellow	Double Yellow	Total Parked	% of Spaces Used
			Spaces	Used	Used	Used	Used		
08:00	NORTH	16	16	7				7	44%
	SOUTH	16	16	1				1	6%
18:00	NORTH	16	16	7	1			8	44%
	SOUTH	16	16	1				1	6%
00:00:00 (MIDNIGHT)	NORTH	16	16	6	1			7	38%
	SOUTH	16	16	1				1	6%

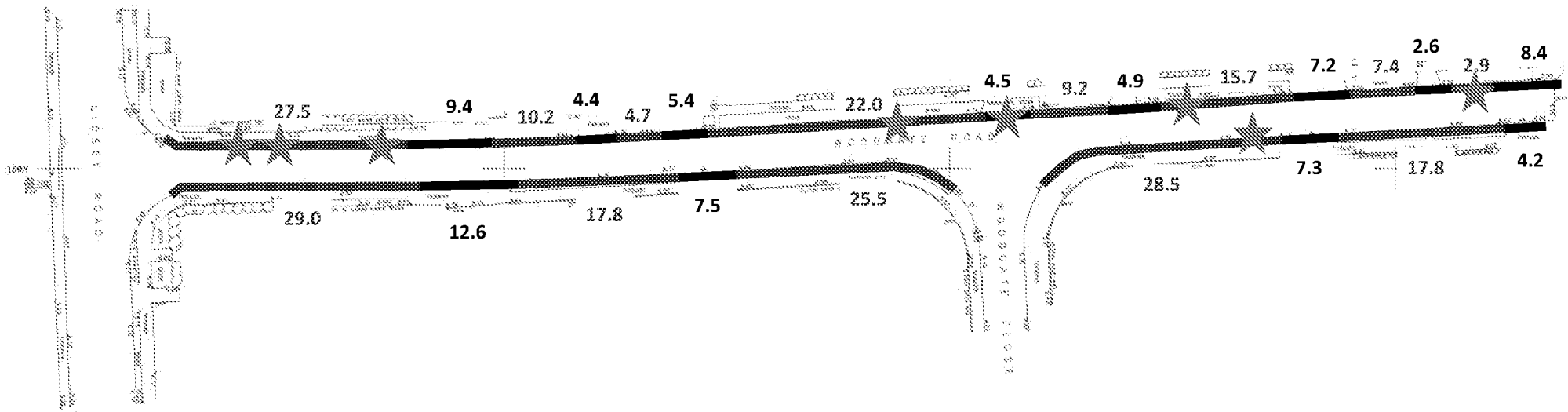


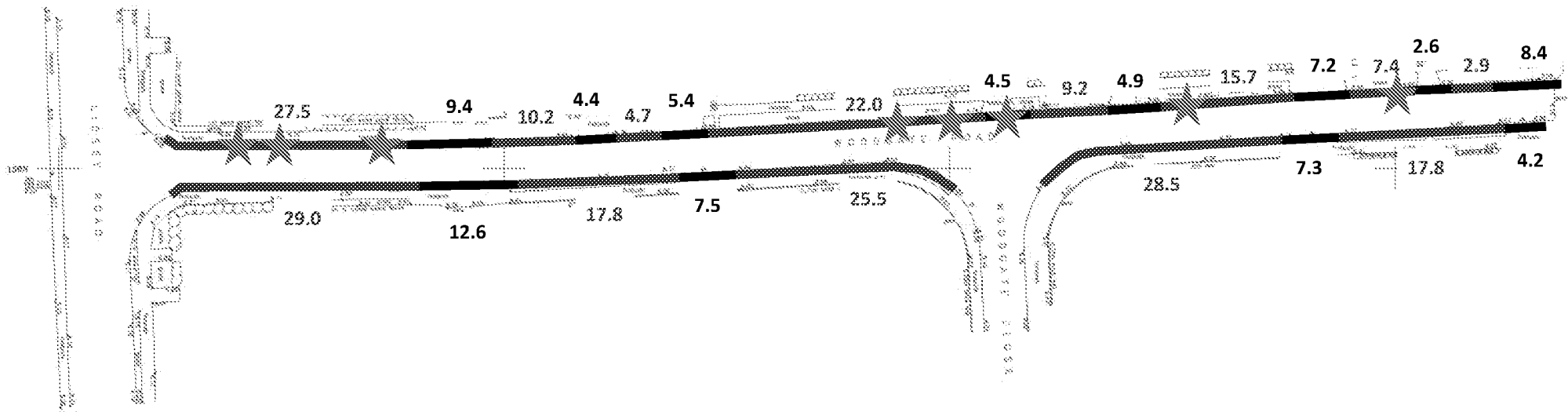
KEY:

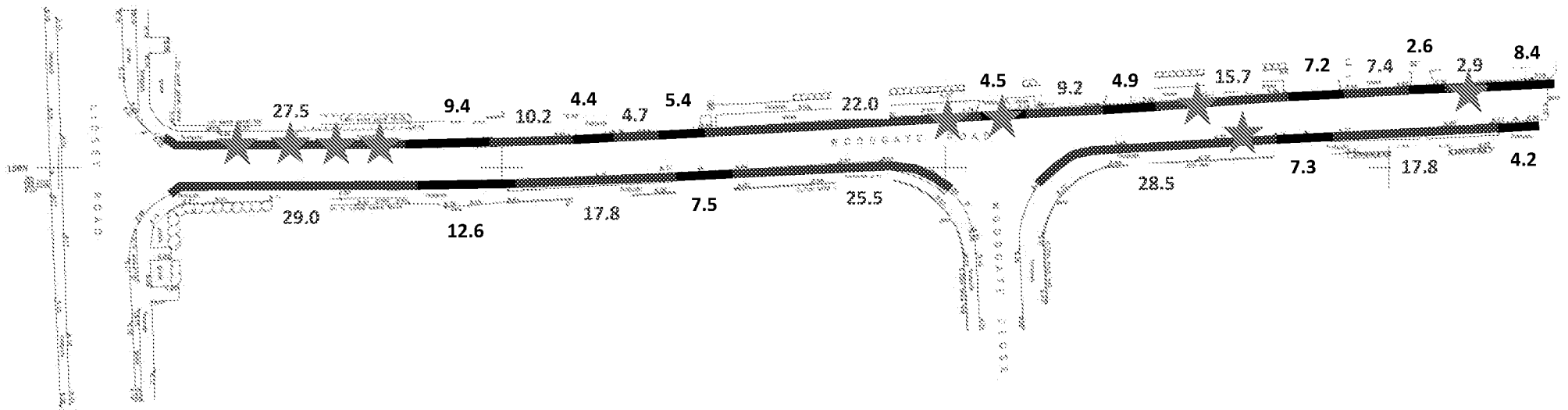
 Unrestricted Parking

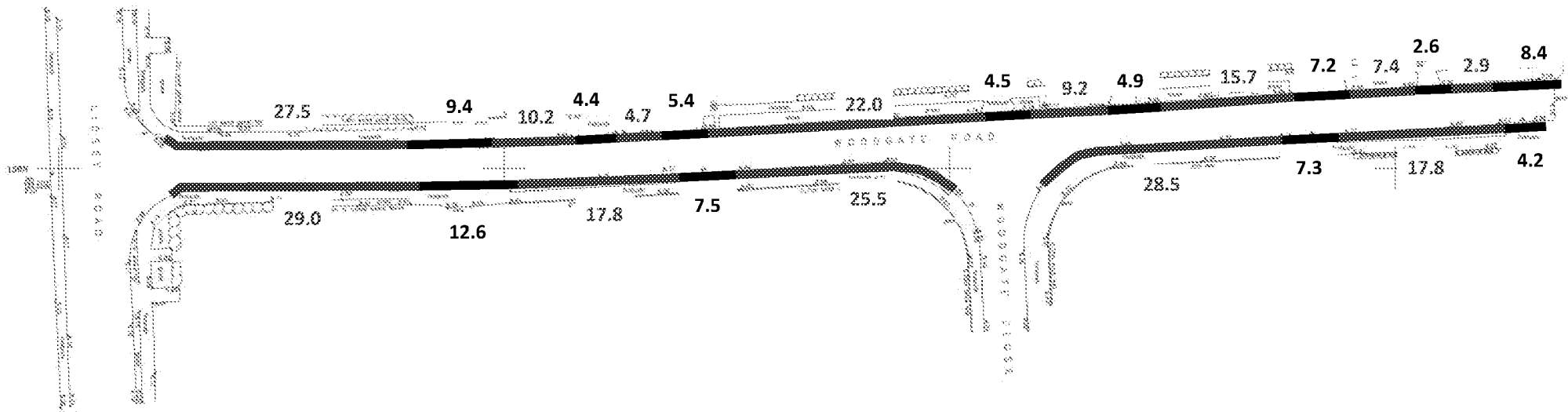
 Drop Kerb

 Parked Vehicle







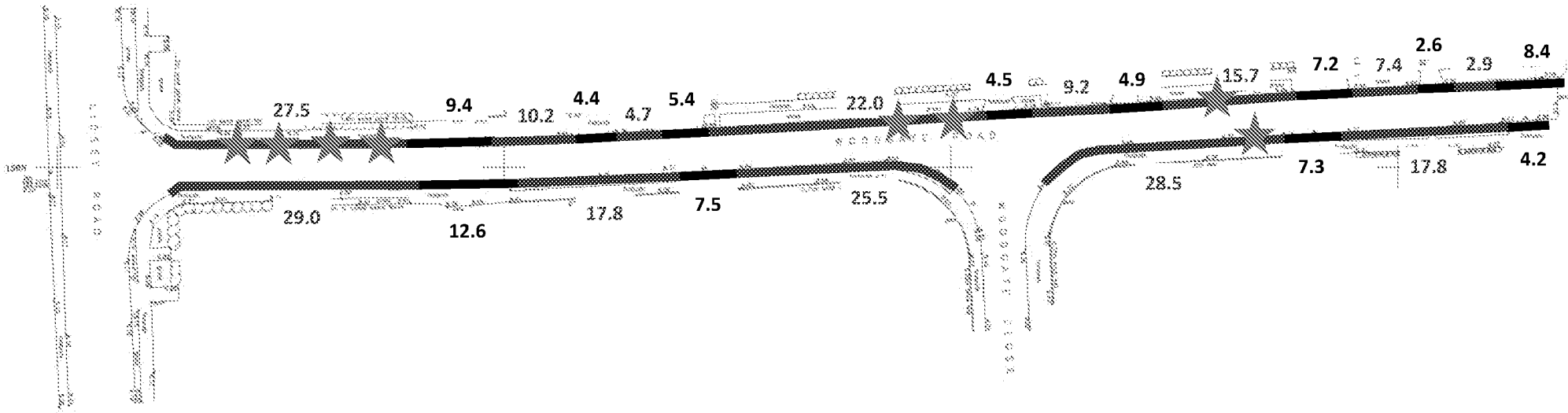


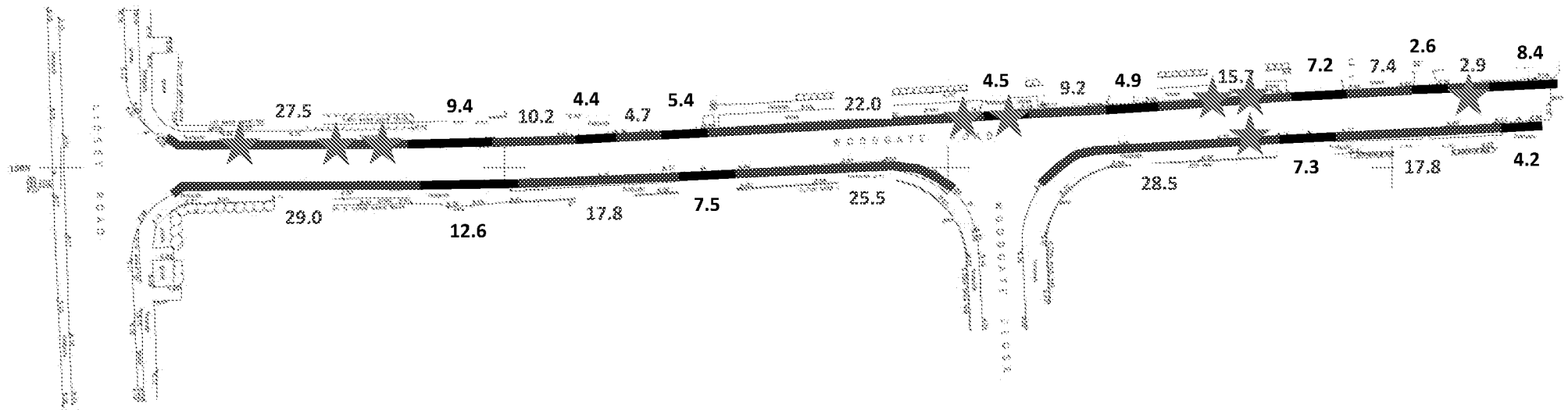
KEY:

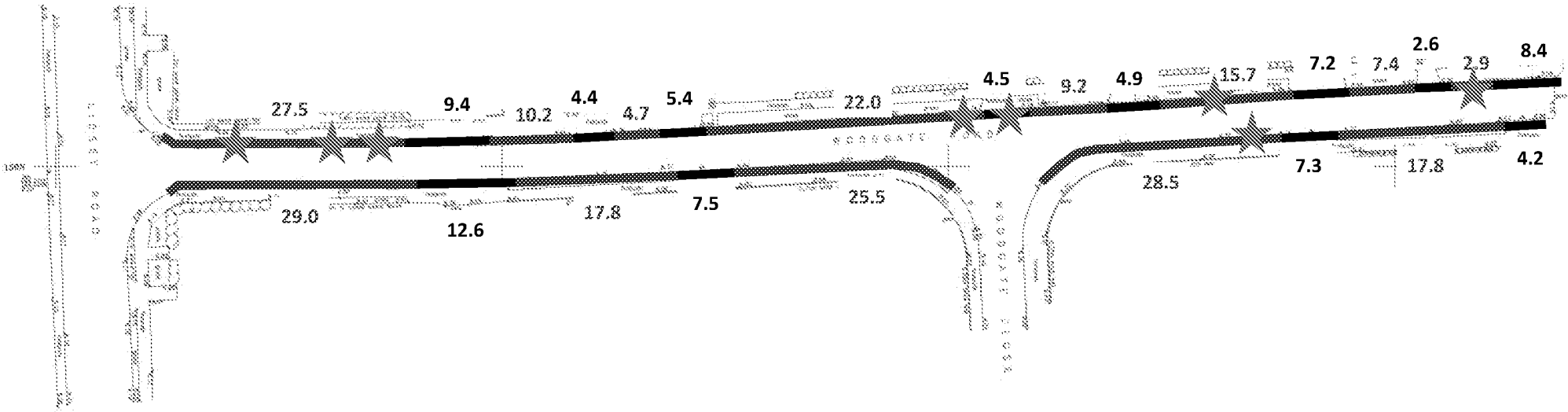
 Unrestricted Parking

 Drop Kerb

 Parked Vehicle







Appendix B A29/Woodgate Road PICADY Output

Junctions 9	
PICADY 9 - Priority Intersection Module	
Version: 9.5.1.7462	
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	www.trlsoftware.co.uk
The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution	

Filename: A29 Woodgate Road Junction 70-30 split and Right Turn.j9
 Path: Z:\Shared\Projects\20-061 Land East of Woodgate Road\Trans\Picady
 Report generation date: 05/02/2021 16:47:25

»2023 With Dev, AM
 »2023 With Dev, PM
 »2038 With Dev, AM
 »2038 With Dev, PM

Summary of junction performance

	AM					PM				
	Queue (Veh)	Delay (s)	RFC	LOS	Network Residual Capacity	Queue (Veh)	Delay (s)	RFC	LOS	Network Residual Capacity
2023 With Dev										
Stream B-AC	0.6	25.38	0.38	C	11 %	0.2	19.99	0.17	C	24 %
Stream C-AB	0.0	8.40	0.02	A	[Stream B-AC]	0.1	9.14	0.06	A	[Stream B-AC]
2038 With Dev										
Stream B-AC	1.4	61.33	0.60	F	-10 %	0.3	27.22	0.22	D	8 %
Stream C-AB	0.0	9.56	0.03	A	[Stream B-AC]	0.1	9.72	0.06	A	[Stream B-AC]

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

File summary

File Description

Title	A29 Woodgate Road Junction
Location	
Site number	
Date	21/12/2020
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	20-061
Enumerator	CA-PC06\PLimbu
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	Veh	Veh	perHour	s	-Min	perMin

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75			✓	Delay	0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2023 With Dev	AM	ONE HOUR	07:45	09:15	15	✓
D2	2023 With Dev	PM	ONE HOUR	16:45	18:15	15	✓
D3	2038 With Dev	AM	ONE HOUR	07:45	09:15	15	✓
D4	2038 With Dev	PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

2023 With Dev, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A29 Woodgate Road Junction	T-Junction	Two-way		1.54	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	11	Stream B-AC

Arms

Arms

Arm	Name	Description	Arm type
A	A29 N		Major
B	Woodgate Road		Minor
C	A29 S		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Width for right turn (m)	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - A29 S	6.00		✓	3.00	100.0	✓	6.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B - Woodgate Road	One lane	3.04	19	17

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	494	0.090	0.227	0.143	0.325
B-C	637	0.098	0.247	-	-
C-B	687	0.266	0.266	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

Streams may be combined, in which case capacity will be adjusted.

Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2023 With Dev	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A29 N		ONE HOUR	✓	635	100.000
B - Woodgate Road		ONE HOUR	✓	79	100.000
C - A29 S		ONE HOUR	✓	633	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - A29 N	B - Woodgate Road	C - A29 S
From	A - A29 N	0	21	614
	B - Woodgate Road	55	0	24
	C - A29 S	624	9	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - A29 N	B - Woodgate Road	C - A29 S
From	A - A29 N	0	10	10
	B - Woodgate Road	10	0	10
	C - A29 S	10	10	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.38	25.38	0.6	D	72	109
C-AB	0.02	8.40	0.0	A	8	12
C-A					573	859
AB					19	29
AC					563	845

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	59	15	312	0.191	59	0.0	0.2	14.157	B
C-AB	7	2	497	0.014	7	0.0	0.0	7.339	A
C-A	470	117			470				
AB	16	4			16				
AC	462	116			462				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	71	18	277	0.256	71	0.2	0.3	17.363	C
C-AB	8	2	473	0.017	8	0.0	0.0	7.751	A
C-A	561	140			561				
A-B	19	5			19				
A-C	552	138			552				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	87	22	229	0.380	86	0.3	0.6	25.052	C
C-AB	10	2	438	0.023	10	0.0	0.0	8.401	A
C-A	687	172			687				
A-B	23	6			23				
A-C	676	169			676				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	87	22	229	0.380	87	0.6	0.6	25.381	C
C-AB	10	2	438	0.023	10	0.0	0.0	8.401	A
C-A	687	172			687				
A-B	23	6			23				
A-C	676	169			676				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	71	18	277	0.256	72	0.6	0.4	17.603	C
C-AB	8	2	473	0.017	8	0.0	0.0	7.751	A
C-A	561	140			561				
A-B	19	5			19				
A-C	552	138			552				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	59	15	312	0.191	60	0.4	0.2	14.312	B
C-AB	7	2	497	0.014	7	0.0	0.0	7.342	A
C-A	470	117			470				
A-B	16	4			16				
A-C	462	116			462				

2023 With Dev, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A29 Woodgate Road Junction	T-Junction	Two-way		0.66	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	24	Stream B-AC

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2023 With Dev	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A29 N		ONE HOUR	✓	705	100.000
B - Woodgate Road		ONE HOUR	✓	34	100.000
C - A29 S		ONE HOUR	✓	587	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
From		A - A29 N	B - Woodgate Road	C - A29 S
	A - A29 N	0	50	655
	B - Woodgate Road	24	0	10
	C - A29 S	565	22	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
From		A - A29 N	B - Woodgate Road	C - A29 S
	A - A29 N	0	10	10
	B - Woodgate Road	10	0	10
	C - A29 S	10	10	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.17	19.99	0.2	C	31	47
C-AB	0.06	9.14	0.1	A	20	30
C-A					518	778
A-B					46	69
A-C					601	902

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	26	6	304	0.084	25	0.0	0.1	12.899	B
C-AB	17	4	483	0.034	16	0.0	0.0	7.710	A
C-A	425	106			425				
A-B	38	9			38				
A-C	493	123			493				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	31	8	268	0.114	30	0.1	0.1	15.132	C
C-AB	20	5	456	0.043	20	0.0	0.0	8.256	A
C-A	508	127			508				
A-B	45	11			45				
A-C	589	147			589				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	37	9	217	0.172	37	0.1	0.2	19.925	C
C-AB	24	6	418	0.058	24	0.0	0.1	9.143	A
C-A	622	156			622				
A-B	55	14			55				
A-C	721	180			721				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	37	9	217	0.172	37	0.2	0.2	19.992	C
C-AB	24	6	418	0.058	24	0.1	0.1	9.144	A
C-A	622	156			622				
A-B	55	14			55				
A-C	721	180			721				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	31	8	268	0.114	31	0.2	0.1	15.192	C
C-AB	20	5	456	0.043	20	0.1	0.0	8.259	A
C-A	508	127			508				
A-B	45	11			45				
A-C	589	147			589				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	26	6	304	0.084	26	0.1	0.1	12.951	B
C-AB	17	4	483	0.034	17	0.0	0.0	7.717	A
C-A	425	106			425				
A-B	38	9			38				
A-C	493	123			493				

2038 With Dev, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A29 Woodgate Road Junction	T-Junction	Two-way		2.85	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-10	Stream B-AC

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2038 With Dev	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A29 N		ONE HOUR	✓	812	100.000
B - Woodgate Road		ONE HOUR	✓	79	100.000
C - A29 S		ONE HOUR	✓	842	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
From		A - A29 N	B - Woodgate Road	C - A29 S
	A - A29 N	0	21	791
	B - Woodgate Road	55	0	24
	C - A29 S	833	9	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
From		A - A29 N	B - Woodgate Road	C - A29 S
	A - A29 N	0	10	10
	B - Woodgate Road	10	0	10
	C - A29 S	10	10	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.60	81.28	1.4	F	72	109
C-AB	0.03	9.56	0.0	A	8	12
C-A					764	1147
A-B					19	29
A-C					726	1089

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	59	15	259	0.230	58	0.0	0.3	17.875	C
C-AB	7	2	462	0.015	7	0.0	0.0	7.910	A
C-A	627	157			627				
A-B	16	4			16				
A-C	596	149			596				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	71	18	212	0.335	70	0.3	0.5	25.248	D
C-AB	8	2	430	0.019	8	0.0	0.0	8.528	A
C-A	749	187			749				
A-B	19	5			19				
A-C	711	178			711				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	87	22	144	0.602	84	0.5	1.3	58.497	F
C-AB	10	2	387	0.026	10	0.0	0.0	9.558	A
C-A	917	229			917				
A-B	23	6			23				
A-C	871	218			871				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	87	22	144	0.602	87	1.3	1.4	81.378	F
C-AB	10	2	387	0.026	10	0.0	0.0	9.558	A
C-A	917	229			917				
A-B	23	6			23				
A-C	871	218			871				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	71	18	212	0.335	75	1.4	0.5	26.782	C
C-AB	8	2	430	0.019	8	0.0	0.0	8.529	A
C-A	749	187			749				
A-B	19	5			19				
A-C	711	178			711				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	59	15	259	0.230	60	0.5	0.3	18.240	C
C-AB	7	2	462	0.015	7	0.0	0.0	7.912	A
C-A	627	157			627				
A-B	16	4			16				
A-C	596	149			596				

2038 With Dev, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A29 Woodgate Road Junction	T-Junction	Two-way		0.73	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	8	Stream B-AC

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2038 With Dev	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A29 N		ONE HOUR	✓	784	100.000
B - Woodgate Road		ONE HOUR	✓	34	100.000
C - A29 S		ONE HOUR	✓	747	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
From		A - A29 N	B - Woodgate Road	C - A29 S
	A - A29 N	0	50	734
	B - Woodgate Road	24	0	10
	C - A29 S	725	22	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
From		A - A29 N	B - Woodgate Road	C - A29 S
	A - A29 N	0	10	10
	B - Woodgate Road	10	0	10
	C - A29 S	10	10	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.22	27.22	0.3	D	31	47
C-AB	0.06	9.72	0.1	A	20	30
C-A					665	998
A-B					46	69
A-C					674	1010

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	26	6	274	0.094	25	0.0	0.1	14.470	B
C-AB	17	4	467	0.035	16	0.0	0.0	7.980	A
C-A	546	136			546				
A-B	38	9			38				
A-C	553	138			553				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	31	8	231	0.132	30	0.1	0.1	17.938	D
C-AB	20	5	437	0.045	20	0.0	0.0	8.629	A
C-A	652	163			652				
A-B	45	11			45				
A-C	660	165			660				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	37	9	170	0.221	37	0.1	0.3	27.030	D
C-AB	24	6	395	0.061	24	0.0	0.1	9.715	A
C-A	798	200			798				
A-B	55	14			55				
A-C	808	202			808				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	37	9	170	0.221	37	0.3	0.3	27.225	D
C-AB	24	6	395	0.061	24	0.1	0.1	9.716	A
C-A	798	200			798				
A-B	55	14			55				
A-C	808	202			808				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	31	8	231	0.132	31	0.3	0.2	18.060	C
C-AB	20	5	437	0.045	20	0.1	0.0	8.633	A
C-A	652	163			652				
A-B	45	11			45				
A-C	660	165			660				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	26	6	274	0.094	26	0.2	0.1	14.545	B
C-AB	17	4	467	0.035	17	0.0	0.0	7.988	A
C-A	546	136			546				
A-B	38	9			38				
A-C	553	138			553				

Appendix C Highway Boundary Plan



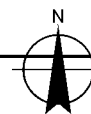
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Local Development for Customers and Communities

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: 25/11/2020

Scale: 1:1,250





Technical Note

c-a.uk.com

Land East of Woodgate Road

20-061-006 Rev -

Proposed Traffic Modelling Scenarios

January 2021

Rev	Issue Purpose	Author	Checked	Reviewed	Approved	Date
-	Final	PL	GAC	JW	GAC	08/01/21

1 Introduction

1.1 Introduction

- 1.1.1 This Technical Note (TN) has been prepared by Charles & Associates Consulting Engineers Ltd (C&A) with the intention to reach an agreement with West Sussex County Council (WSCC) Highways regarding the methodology for traffic modelling in relation to the potential residential development of up to 180 dwellings on a site referred to as Land East of Woodgate Road, West Sussex hereafter referred to as 'the site'. The site is part of the BEW Strategic Allocation of Arun Local Plan coming forward within the Local Plan period i.e. 2031.
- 1.1.2 WSCC, as the relevant highway authority, have provided pre-application advice and suggested using the existing A29 Realignment scheme (SATURN) model, developed by WSP, to inform the traffic impact of the development on the local highway network. Additionally, the highway authority has also requested a list of traffic impact assessment scenarios proposed to be undertaken as part of the Transport Assessment (TA) for agreement in advance. For completeness, the pre-application advice is provided within **Appendix A**.
- 1.1.3 It is agreed that the A29 Realignment scheme (SATURN) model will be obtained from WSCC and used for the traffic impact assessment in the TA. Whereas, the proposed assessment scenarios for the TA and the methodology/assumptions used for deriving these scenarios (SATURN models) are discussed in this TN.

2 Traffic Modelling Proposals and Assumptions

2.1 Future Assessment Year

- 2.1.1 In the pre-application advice, the highway authority has requested assessment of traffic impact on the local highway network for scenarios representing before and after the A29 Realignment Scheme is in place.
- 2.1.2 It should be noted that the main purpose of the A29 Realignment Scheme coming forward is to ease the traffic congestion on the existing A29 corridor by diverting the traffic passing through the villages of Woodgate and Westergate along this new route. It is evident from several transport reports prepared in support of the scheme that following the completion of the scheme, the local highway network, particularly the existing A29 corridor through the two villages, will experience reduced congestion.
- 2.1.3 Due to the above, it is considered that an assessment for scenario 'before the scheme' is robust and this makes an assessment for 'after the scheme' scenario unnecessary. Therefore, it is proposed that traffic impact assessment is only undertaken for the scenario before the scheme takes place as this is the worst-case scenario between the two.
- 2.1.4 It is understood that the planning application for Phase 1 of the scheme has recently been submitted and it is expected that Phase 1 of the scheme will be complete by the end of 2025 with the full scheme expected to be complete by the end of the Local Plan period. This is informed by Chapter 8 of the BEW's Framework Masterplan. For reference, an extract of this is provided in **Appendix B**.
- 2.1.5 Albeit, the phasing and the housing trajectory are estimates at this stage and could vary, it is not anticipated that these will vary significantly. Therefore, it is proposed that the future year assessment be undertaken for 2025 i.e. before the completion of Phase 1 of the A29 Realignment scheme.

2.2 Proposed Scenarios

2025 Do-Minimum

- 2.2.2 Based on the Access and Charging Protocol document for the model (paragraph 5.2), it is understood that the highway authority can provide the model as existing, including base year model and latest do-minimum 2021 and 2031 forecast models subject to the payment of appropriate fees.

- 2.2.3 At this stage, it is unclear whether these models include any upcoming offsite highway infrastructures (if there are any) during the Local Plan period besides the A29 Realignment Scheme.
- 2.2.4 Assuming there are not any significant offsite highway infrastructures between 2025 and 2031 that has been coded in the models, it is proposed that WSCC's 2031 Base model will be used as 2025 Reference Case model. It is assumed that WSCC's existing 2031 base model include all of the consented developments until the end of the Local Plan period.
- 2.2.5 In terms of strategic sites, Appendix 4 of the Arun District Council's Annual Monitoring Report December 2020 provides housing trajectory until the end of Local Plan period from these sites. It is proposed that the projected housing from the strategic sites until the assessment year of 2024/25 will be coded into the model to derive the 2025 Do-Minimum scenario model. For completeness, this is provided within **Appendix C** of this TN.
- 2.2.6 It is considered that the inclusion of the consented developments until the end of Local Plan period and the strategic sites up to 2024/25 makes this approach robust for assessing 2025 Do-Minimum scenario. It should be noted that this will include some element of the BEW allocation which the site forms part of.

2025 Do-Something

- 2.2.7 As aforementioned, the site is part of the BEW Strategic site and is to be delivered within the Local Plan period. It is proposed that this site will be added in to the 2025 Do-Minimum model to derive 2025 Do-Something model. It should be noted that the housing projection from the BEW Strategic site, which this site forms part of, is already coded in to the 2025 Do-Minimum model. Therefore, this represents a robust approach for forecasting future with development scenario.
- 2.2.8 In overall, the above approach for deriving the 2025 Do-Minimum and 2025 Do-Something models are considered to be robust as all of the consented developments with planning permission until the end of Local Plan period and the built-out rates of the forthcoming strategic sites until 2025 will be included these models.
- 2.2.9 The magnitude of the impact of the proposed development will be assessed by comparing the 2025 Do-Something scenario with the 2025 Do-Minimum scenario. Measures to mitigate the relative impact on the proposed development will then be investigated and proposed appropriately.

3 Response Highway Authority's Comments

- 3.1.1 Within the pre-app advice, the Highway Authority has also provided the following two comments which have been considered.

"This number might be extended to up to circa 4100 and as such, should be reflected in any modelling you undertake."

- 3.1.2 The Highway Authority's above comment in relation to the total number of houses to be delivered by the BEW strategic allocation sites could increase to 4,100 is acknowledged. However, the build out trajectory within the Arun District Council's recent Authority Monitoring Report (AMR) dated December 2020 suggest only around 2,400 houses are projected to be delivered during the plan period and the remainder will be delivered beyond the plan period. Furthermore, BEW Masterplan Framework, which although recognises that up to 4,300 houses could be accommodated on the sites, only 2,300 would be delivered in the Local Plan period to 2031.

- 3.1.3 Planning Practice Guidance (PPG) on Travel Plans, Transport Assessments and Statements states that *"It is important to give appropriate consideration to the cumulative impacts arising from other committed development (ie development that is consented or allocated where there is a reasonable degree of certainty will proceed within the next 3 years)"*.

- 3.1.4 Notwithstanding the Highway Authority's comment, only around 2,400 houses are projected until the end of Local Plan and remainder will come forward several years beyond the Local Plan period. With respect to the above Planning Practice Guidance, it is not considered appropriate and reasonable to assess the local highway network for such long horizon beyond the plan period and without certainty that this number of houses will come forward.

"Given that the site is within the BEW allocation, you should look to provide analysis up to the end of the Local Plan period."

- 3.1.5 It is accepted that in cases where a site forms part of wider allocation, then the traffic impact assessment should be considered up to the end of the Local Plan period.

- 3.1.6 However, on this occasion, several infrastructure improvement works are proposed in addition to the A29 Realignment and are expected to occur by the end of the Local Plan period. This site, as part of the strategic allocation sites, will make appropriate contributions to bring these schemes as identified in the Local Plan Transport Mitigation Apportionment Study.

- 3.1.7 It is considered that these improvement works will enhance the efficiency of the local highway network compared to the proposed 2025 future assessment year that is to be assessed.
- 3.1.8 Therefore, it is considered appropriate that the traffic impact assessment should be undertaken for future year 2025 as proposed above. Without the need to test the end of the Local Plan period that has the strategic improvements in place. If required, measures will be proposed to mitigate the immediate impact of the development on the local highway network until these other improvement measures come forward.

4 Conclusion

- 4.1.1 To conclude, WSCC's A29 Realignment model will be used to inform the traffic impact assessment within the TA supporting the planning application for the site as suggested in the pre-application advice.
- 4.1.2 It is also accepted that the traffic impact assessment in the TA should include before the A29 Realignment scheme. As such, Future year 2025 is considered appropriate for assessment of the 'before the scheme' scenario as the scheme will likely come forward at this point.

Appendix A Pre-Application Advice

**WEST SUSSEX COUNTY COUNCIL
PRE APPLICATION CONSULTATION**

TO:	Organisation: Charles and Associates FAO: Prabin Limbu
FROM:	WSCC - Highway Authority: Tim Townsend
DATE:	15 th December 2020
LOCATION:	Land East of Woodgate Road, Aldingbourne
SUBJECT:	Internal Reference: PRE-126-20 Potential residential development of up to 180 dwellings.
DATE OF SITE VISIT:	1 st December 2020
RECOMMENDATION:	Advice
S106 CONTRIBUTION TOTAL:	TBA at time of any planning application submission

The Highway Authority has been consulted for pre-application advice in regard to the proposed development at Land East of Woodgate Road, Aldingbourne .

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.

I refer to your consultation in respect of the above planning application and would provide the following site specific comments.

Summary position of WSCC as Highway Authority.

A key part of any planning application will be the need for you/your client to make clear to WSCC how the transport infrastructure associated with it will contribute to the entire Strategic allocation. This will involve developers working with adjacent landowners and demonstrating that this site is making proportionate contributions to the overall infrastructure package for the allocation. This will also include infrastructure identified as a policy requirement in the Local Plan. Added to this, you will need to demonstrate a clear mechanism for securing and delivering all infrastructure requirements in a timely and appropriate manner. Further to this, you should look carefully at the appeal decisions for the site and the more recent decision on land known as Bridge Cottage, Shripney – the latter with reference Appeal Ref: APP/C3810/W/20/3248659.

Site Specific Comments.

Review of submitted Transport Scoping Note dated 13 November 2020 (please see *red italic text*):

Introduction.

- 1.1.4. As stated above, the site forms part of the wider strategic allocation referred to as Barnham, Eastergate and Westergate (BEW) under Policy H SP2c (SD5) within the adopted ADC Local Plan 2018. As per the plan, the wider allocation collectively will provide at least 2,300 dwellings over the plan period, and up to 3,000 in total (a further 700 beyond 2031). *This number might be extended to up to circa 4100 and as such, should be reflected in any modelling you undertake.*

Existing conditions.

- 2.1.3 Currently, access to the development site is through Woodgate Road which also provides direct access to circa 23 bungalows along the road and serves as an access road to Woodgate Close comprising approximately 14 bungalows. It is intended that the proposed development will be served through this existing access.
- 2.2.2 The transport appraisal will provide a comprehensive review of these destinations, along with an audit of pedestrian and cycle links between these and the site including public rights of ways. However, in overall terms, the site can be seen to be appropriately located relative to trip generating activities that support travel on foot and by bicycle particularly with the introduction of the strategic sustainable cycle/footway infrastructure to be constructed as part of the overall BEW allocation which includes cycle/footway links that will be unimpeded by the existing railway line. *Any application should provide a clear account of what infrastructure will be provided to support it and the Strategic Allocation found to the east. You will need to provide and demonstrate an appropriate delivery mechanism for all infrastructure requirements, show what that infrastructure is and include timescale for delivery. Evidence of discussions and agreement with neighbouring landowners should also form part of this.*
- 2.2.3 The closest bus stops from the site are located on the A29 approximately 250m from the western boundary of the site just north of its junction with Willows Caravan Park access. These stops provide access to bus services 66A and 66C which run between Bognor Regis and Yapton. *Waiting facilities at both stops will require improving – e.g. bus shelters and/or new poles with real-time passenger information + new or improved sections of footway and crossing facilities on A29.*

Local Highway Network.

- 2.3.2 The access to the site is intended through the extension of the existing Woodgate Road to the west. It is approximately 5m in width and has footways and streetlights on both sides of the carriageway. Some on street parking can be observed along the road whilst majority of the properties have provision of driveway. *In some places the carriageway is narrower than 5.0m. On-street parking is prevalent along much of its length – particularly close to the junction with the A29. This will need to be considered carefully as part of the TA process. This matter was also raised when previous applications and subsequent appeals were previously submitted. Please also reference access to the site to/from the land to the east and demonstrate how this future link will be provided, when and in what guise.*
- 2.3.3 The A29 running north to south to the west of the site is a key route in the area. It runs through the Woodgate village and within the vicinity of the site, is approximately 7m in width and has provision of footways on both sides of the carriageway and streetlights. There are sign posts indicating that the road is subject to 30mph speed limit as it passes through the village. *The description in the TA should be expanded to consider the A29 south of the former Lee's Yard and north of the War Memorial Roundabout. Reference to A27 too, please.*

Proposed development.

- 3.1.1 The proposals are for development of up to 180 residential dwellings (private and affordable) and the associated access and parking provision. A plan illustrating the preliminary layout of the development is provided within Appendix A. *Noted.*
- 3.1.2 The Framework Masterplan for the overall Strategic Allocation that was part of the ADC's recent consultation is provided in Appendix B. This Framework Masterplan illustrates how the proposed site sits within the overall allocation and links with the new A29 route. *The plan shows access from both sides of the site. This should be described and shown in further detail as part of any proposals.*
- 3.1.3 Initially, it is intended that the proposed development will be accessed through the extension of Woodgate Road which to the west directly connects the site with the existing A29, Lidsey Road via a simple priority T junction. As illustrated in the preliminary layout, the site will several loop roads internally within the site omitting the need for a secondary access. Ultimately, as the BEW allocation progresses, a second access will be achieved to the east allowing for connection onto the new A29 route. *A clear mechanism for delivery of a link to land to the east will need to be*

demonstrated. It will need to be demonstrated what it will look like, when it'll be provided and how it will be suitable for access to the east. Timing of delivery should be provided too. With regard to junction design on the A29, this will be informed by modelling outputs and other factors. You would need to demonstrate that any design meets the requirements of relevant design guidance and/or standards.

- 3.1.4 The existing junction between the A29 and Woodgate Road will be reviewed as part of detailed transport appraisal to ensure that the layout of the junction and visibilities are to sufficient standards to serve the proposed development and has adequate capacity to accommodate the increased traffic due to the development in addition to the existing traffic, background growth and phased committed development, until the new A29 route is opened. *Previous applications were scrutinised very carefully with regard to access using Woodgate Road and its junction with the existing A29. The road is narrow and the junction geometry is also constrained in places (e.g. width, bellmouth radii etc.) and there is no dedicated right hand turning lane. The presence of the railway level crossing to the north also has an impact on how the junction operates, particularly when it is closed but also before and after opening and closure because of the resultant impact on traffic queues which can cause blocking-back at Woodgate Road and other nearby local junctions. You will also need to factor-in future traffic impact at this junction with any future connection made into the rest of the Strategic Allocation.*

Internal Road Layout.

- 3.1.5 In terms of on-site road hierarchy, it is envisaged that the extension of Woodgate Road will be a 5.5m wide spine road and will run through the centre of the site providing direct access to some of the dwellings as well as access to other smaller 4.8m and 4.1m secondary and shared surface streets and drives. *The whole length of Woodgate Road and its junction will need to be reviewed alongside any new road proposals. Other than very short sections by agreement with the Highway Authority, 4.1m wide access roads (secondary and/or shared surface) will not be accepted due to the likelihood of accessibility issues.*
- 3.1.6 The spine road will then terminate at the site's eastern boundary where the potential for further extension of this road to serve and ensure permeability with the wider BEW strategic allocation will be maintained. When the BEW allocation and the A29 realignment scheme comes forward, this will provide a secondary access to the site. *Please see comments made above alongside some of the earlier points.*
- 3.1.7 As shown within the Framework Masterplan, there will be several pedestrian and cycle routes within the Strategic Allocation that will be linked into to ensure permeability of non-motorised forms of travel. *Detail of this will need to be shown in any TA.*

Policy Compliance.

4.1.4 A preliminary review of the relevant policies indicates that the site would be compliant with prevailing transport policy and therefore acceptable in this regard. *This is a matter to be determined upon submission of a planning application.*

Traffic Generation.

Table 5.1: Trip Rates

Trips Rates	AM Peak Hour			PM Peak Hour		
	Arr	Dep	Two way	Arr	Dep	Two Way
Private Dwellings	0.138	0.361	0.499	0.331	0.156	0.487
Affordable Dwellings	0.162	0.268	0.430	0.280	0.207	0.487

Use of trip rates solely for private dwellings is accepted on this occasion. However, if the proposed housing mix at the time of submission of a planning application has a predominance of flats and affordable housing then any different rates proposed to be used in the TA would need to be discussed further. For avoidance of doubt, the trips rates you have used for affordable dwellings has not been assessed while considering this TA Scoping Note.

5.1.3 It is estimated that the proposed development of 180 dwellings will result in 90 two-way trips in the AM peak and 88 in the PM peak. This will be compared against the WSCC modelling work and the worst of the two will be utilised following consultation with WSCC. *You will need to factor-in any before and after scenario and model the impact of that – so the site without a link into the rest of the Strategic Allocation and one with. Please ensure that all committed developments and the Strategic Location are factored-into any modelling undertaken. A list of these should be included in any TA.*

5.1.4 The proposed development trip distribution will be derived based on the WSCC's existing model, prepared by WSP subject to agreement with WSCC. Alternatively, the anticipated trips can be distributed appropriately within the local highway network based on the distribution derived using the 2011 Census Journey to Work data. *Please use the distribution as found in the WSCC model.*

Assessment.

- 5.2.1 It is proposed to assess the impact of the proposed development traffic on a phased basis, i.e. before the opening of the A29 realignment scheme with background growth and any committed developments forecast for occupation at that time and then, if required, after the opening of the relief road with any remaining committed developments and the redistribution of traffic accordingly. The extent of the study area will include the junction between A29 and Woodgate Road (the site access), the A29 Fontwell Western Roundabout and the A29 War Memorial Roundabout subject to agreement with the WSCC Highways. Additionally, the impact of the development on the perceived existing congestion issues at the Woodgate railway level crossing will also be considered as part of the transport appraisal. *Using a selection of modelling scenarios is accepted in principle. However, before undertaking this work it would be helpful seeing in tabular form the exact phases/scenarios you propose so we can look to agree it.*
- 5.2.2 Developer contributions are being sought by WSCC and ADC, as discussed later, to bring forward several improvement schemes on the surrounding local highway network and these schemes are considered to mitigate the impact of the proposed development as well as other nearby developments. As such, it is expected that the proposed development will only require to review the impact of any committed development and background growth up to the implementation of these schemes and mitigate the areas on the local highway network which this development creates a severe impact. *This statement is not clear – please provide further explanation.*
- 5.2.3 For example, the A29 War Memorial Roundabout is expected to experience significantly reduced traffic flows because of the A29 Realignment Scheme; hence, developer contribution is not being sought for this junction. However, if the proposed development is to come forward before the A29 Realignment Scheme and as the junction is likely to be most affected by the development traffic, improvement measures at this junction will be investigated if the relative impact compared to without the development is identified to be severe. *Noted.*
- 5.2.4 With regards to the future year assessment, it is considered appropriate to assess these junctions for the future year of 5 years post application. *Given that the site is within the BEW allocation, you should look to provide analysis up to the end of the Local Plan period. Highways England should also be consulted for their view too.*
- 5.2.5 It is understood that WSCC keep a record of traffic volume, speed, and classified data. Due to the uncertainties in current travel patterns and its representativeness, it is intended WSCC will be consulted for the use of the existing traffic that they hold. Subsequently, WSCC have indicated that ATC and turning counts data as well as the A29 model can be obtained from them. These data will then be growthed appropriately using TEMPRO factors to derive future year flows. *This is correct. However, there will be a charge*

made for use of the model to undertake modelling for your client's scheme. The methodology for 'growing' any figures is accepted.

The A29 Realignment Scheme and Other Identified Mitigation Schemes.

- 5.2.6 A key transport infrastructure requirement as set out in the Policy H SP2c (SD5) of the adopted ADC Local Plan 2018 for the wider BEW Strategic Allocation is a new A29 route (the A29 realignment/bypass scheme). It is envisaged by WSCC and ADC as an important strategy to provide extra capacity within the local highway network to not only reduce the existing congestion but also to mitigate the effect of additional traffic from the Strategic Allocation and to reduce potential future congestion. *Correct. However, any TA should demonstrate your/your client's understanding of when the A29 is going to come online, particularly if you are seeking to rely on its delivery to reduce the length of any short-term impacts.*
- 5.2.8 It is noted that an outline planning consent has been recommended for approval (AL/21/20/OUT) for 38 dwellings at Land North of Lee's Yard, Woodgate. Consultation responses from West Sussex County Council Highway and Highways England provided no objection to this application and confirmed that it is in a sustainable location. Given that this site is just to the south west of Woodgate Road and to the south of the railway line this is perceived as a positive indication of the Highway Authority's position (Appendix D) with respect to this application. Albeit we acknowledge that each application must be taken on its own merits. *You will need to include a detailed appraisal of sustainable access for your client's site which will be reviewed at any planning stage.*
- 5.2.9 WSCC's Transport Business Case Draft (dated Jan 2019), prepared by WSP, estimated the total cost of delivery of the scheme to be £54.2 million of which £30 million is anticipated to be funded through developer contributions. Given the proposed development forms part of the BEW Strategic Allocation, it is jointly responsible for the delivery of the A29 scheme hence, appropriate developer contributions will be made available through S106 agreements. *You will need to demonstrate how you intend to provide all necessary infrastructure including when and where for both your client's site and that for access to the neighbouring sites also forming part of the BEW allocation. Evidence of working with adjacent landowners and any agreements reached should also be demonstrated. Timescales for delivery also required, please.*

5.2.10 Additionally, appropriate contribution through S106 agreements will also be made for the following schemes as identified in the WSCC/ADC Local Plan Transport Mitigation Apportionment Study (June 2020):

- A27 Nyton Road junction
- A27 Fontwell East Roundabout
- Barnham Village Centre Enhancements
- A259 Oystercatcher junction
- A259 Corridor Improvement Bognor Regis-Littlehampton

The above is noted.

5.2.11 At the time of this note being prepared and as per Appendix 1 of the Apportionment Study, contribution per unit relevant to the proposed site was estimated to be £8,371.99 subject to inflation and more detailed design costs. However, WSCC have highlighted that the amounts shown in the Study should not be the total of contributions required from the development locations listed. As such, this will be re-evaluated moving forward. *Comments noted. In-line with other comments made in this response, you will need to demonstrate how such contributions will be used to deliver infrastructure to assist with delivery of the Strategic location.*

5.2.12 Personal injury accident data that have occurred during the last five-year period over the length of the A29 between and including the A29 War Memorial Roundabout to the north and the A29/A259 Roundabout to the south will be obtained from KCC and reviewed. *Please provide 10 years given that the site forms part of the Strategic Allocation.*

Summary.

6.1.1 Although subject to more comprehensive assessment, as detailed above, this preliminary appraisal indicates that a development of up to 180 residential dwellings, would be appropriate for the site. The proposed development will also make appropriate contributions to bring forward the A29 realignment scheme, which include contributions towards/facilitating the delivery of a bridge over the Rife into the CCE site and other improvement schemes identified in the WSCC/ADC Local Plan Transport Mitigation Apportionment Study. *It will be for you and/or your client to demonstrate how you consider the site could come forward, when and how it will contribute towards highways and transport infrastructure to assist with delivery of the BEW Strategic Allocation.*

Replies to emails of 3 December 2020.

Email 1 (WSCC replies again in red italic text):

Could you please provide some assistance in finding the reports which were used to estimate funding for the A29 realignment scheme and other improvement schemes which the strategic allocation at BEW is expected to contribute towards? *You can find this information by looking at the Transport Business Case for the A29 at this [link](#).*

Attached is the breakdown of estimated cost of the A29 Realignment Scheme extracted from the Transport Business Case. As the report was prepared on behalf of WSCC, I was hoping you would be able to provide us with the further detailed breakdown/calculation of these costs particularly the construction costs. By further breakdown, I mean something similar to the attached Appendix F which was prepared by Systra as part of the initial feasibility study in 2014. At the moment, the table only shows lump sum construction costs. *The Transport Business Case gives a summary table with broken down costs – this was appropriate for feasibility stage and are the only ones available publicly at the present time.*

Also within Appendices 1 and 2 (tables) of the attached 2020 Apportionment Study, references have been made to the 2019 and 2020 reports (first row second column) with regards to the estimated costings associated with the A259 Oystercatcher and A259 Corridor Improvement Bognor Regis to Littlehampton. We were unable to identify or locate these reports anywhere. Within this report, it also mentions "*Barnham Village Centre Enhancement has been identified by West Sussex County Council*" however, doesn't give much detail on how the cost for this scheme was estimated. It would be much appreciated, if you can provide us with any sort of study report or evidence base showing how these were worked out to help us understand detailed breakdown of the costs.

The final apportionment study published by Arun District Council was completed by the District Council based on information from a number of sources, including an apportionment study undertaken by WSP for the County and District Councils along with a report on the A259 Comet Corner and Oystercatcher junctions. The figures used in the apportionment have preceded recent work done on the A259 Bognor Regis to Littlehampton Major Road Network scheme.

The apportionment costs for the Comet Corner and Oystercatcher junctions are based on the WSP report and these are included as separate items to the A259 contribution of £3.0M. The latest cost of £29.2M for the current Bognor to Littlehampton major scheme will include improvements at these junctions, although the designs have been amended from those in the Comet Corner and Oystercatcher report, notably for Comet Corner.

The major scheme also includes locations which were not identified as severe impacts for capacity or safety in the Arun Local Plan strategic study, but have pressures relating to existing use and background growth. The apportionment does not seek to raise developer funding for the additional costs of these elements of the work from the existing Local Plan allocations. The apportionment work included a cost for widening the carriageway between Littlehampton and Oystercatcher only.

which led to the 3.0M figure. However the planned improvements have evolved since then, hence Arun's apportionment uses a different heading in relation to the use of this funding.

Earlier cost estimates were from the work for the Arun Local Plan Transport Study, subsequently incorporated into the Enterprise Bognor Regis (EBR) study, where some amendments to junction designs were made and were based on outline designs or generic estimates only. Other improvements such as widening Littlehampton to Oystercatcher and traffic management at Barnham Village centre were based on generic estimates, not on any specific design, so there is no detail available for them. Study work has been undertaken in Barnham to examine further the most beneficial and appropriate form of mitigation for the forecasted flow increases through the village centre although this work is yet to be completed.

Email 2:

We also wanted to know if there has been any works undertaken including costs with regards to the east west link off the new A29 route towards Woodgate Road through the site. *No. The E-W link would need to be provided by developers.*

Standard Requirements.

The Highway Authority would require the following documents to 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 including planning appeals and decisions (+ 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 any identified departures and/or relaxations from standards.
- For internal road layouts, swept-path diagrams demonstrating access by refuse and fire appliance vehicles.
- Final Stage 1 Road Safety Audit of site access and any other proposed highway works undertaken in accordance with DMRB GG 119, with designer's response (RSA Log), including amended plans.
- A Transport Statement/Assessment, including location plan of key services, availability of sustainable modes of transport and existing/future vehicular generation.
- 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 requirements.

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.

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:

- 2.0 metres -domestic single accesses
- 2.4 metres- for shared or busy crossovers
- 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.

The page also includes a link to our latest parking standards which we adopted in August 2019 as Supplementary Planning Guidance (SPG) that sets out parking standards for development in West Sussex. Within you will find recommended levels for cycle parking and also guidance on levels of Electric Vehicle charging points for new developments.

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/dmrb/>

Please note that any advice given by council officers for 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. 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.

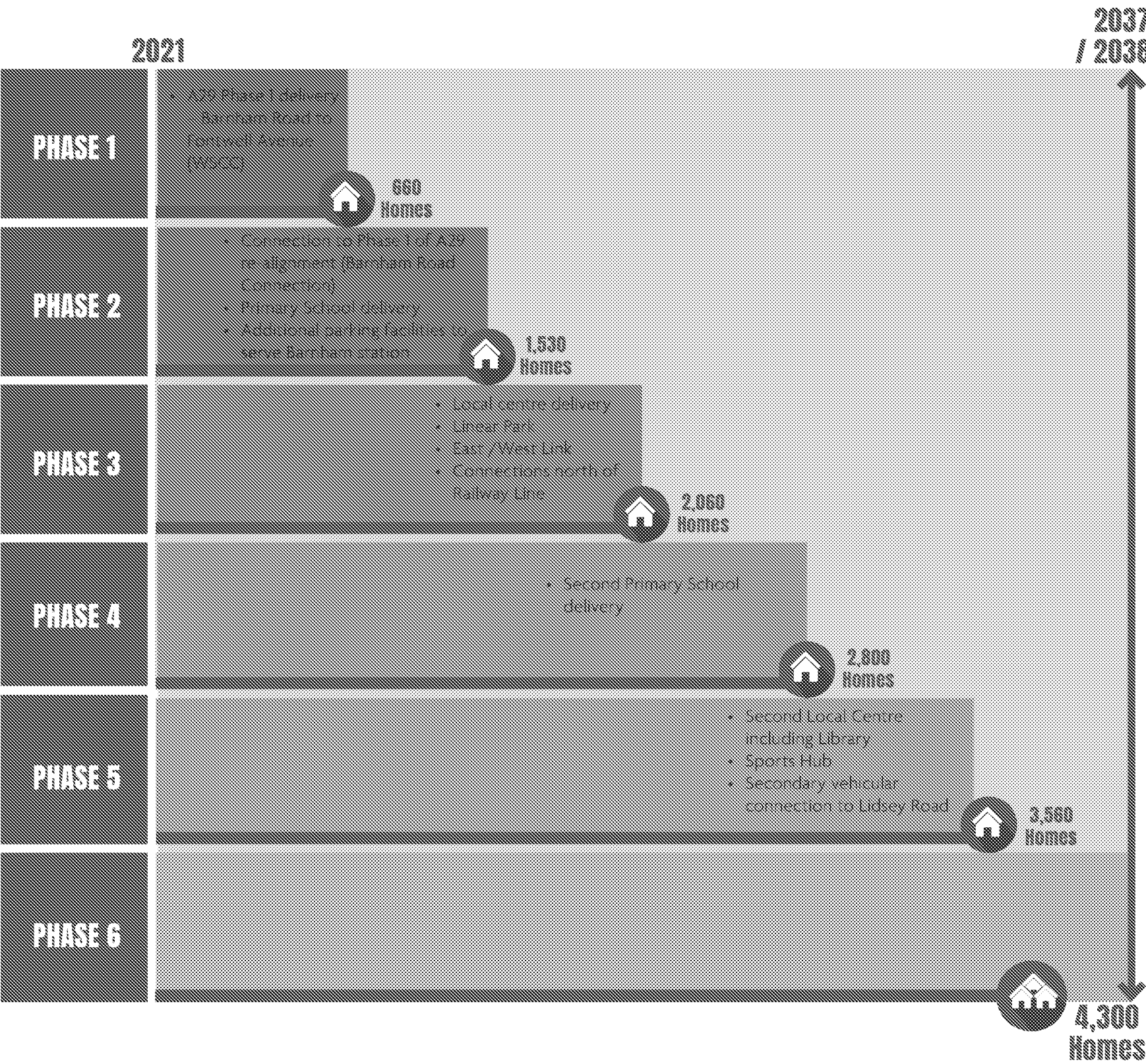
Tim Townsend

County Highways Team – Highways, Transport and Planning

Appendix B BEW Masterplan Framework Chapter 8

CHAPTER EIGHT

Phasing & Delivery



Indicative Phasing & Key Infrastructure Delivery

The delivery of infrastructure and phasing of the development has been approached with the following principles:

- Infrastructure should be provided in a timely way to mitigate the impact of the development;
- Each part of the site that comes forward for development will be as self-sufficient as possible, in terms of access, drainage etc, whilst delivering necessary strategic elements of infrastructure in a timely manner and not prejudicing the ability of the following phases to do the same.

This development is expected to take place over approximately 16 years, and an element of flexibility needs to be built in to allow future development to respond to changing circumstances over time.

The indicative phasing diagram shows how the site could be developed with the key items of infrastructure to be delivered on site at the appropriate time to meet the demand, and assumes delivery from the north of the site.

The A29 realignment will be delivered in sections alongside the land parcels coming forward, with the full A29 delivered by 2031 within phases 1-4 of the development.

Infrastructure provision would be controlled through Section 106 Agreements tied to planning permissions as required. Further technical work including transport modelling is underway to inform the timely provision of appropriate infrastructure as the masterplan is delivered on site.

The diagram covers the anticipated on site infrastructure but does not include contributions or provisions of off-site infrastructure.

This will inform the phasing strategy and the potential for possible early delivery in the southern part of the site along with the community infrastructure. Further information on the phasing of the development and the delivery of specific infrastructure requirements will be provided as part of the relevant planning applications.

Appendix C ADC's Annual Monitoring Report Appendix 4

Appendix 4 for 5 year HLS - Strategic Sites (without PP at base date) from HELAA

HELAA Ref	Address	Latest Status Comments	Status	Parish	Commitment	Pending	PA Ref	Strategic Site	Committed Yield (if ICE what's	HELAA Viability	Losses	Built up Area	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030	2030/2031	
18A14	Land at Bridge Cottage and The Old Cottage Lidsley Road	AL/75/19/PL - Refused 05.12.19 Site Update Form 2020 - 27 in yrs 2021-2022 not realistic so moved back to yr 3 AL/75/19/PL - appeal dismissed - 10.11.20 R.S.	Deliverable	Aidingbourne				Part			27	Part	0	0	0	27	0	0	0	0	0	0	0	0
W66A	Ryefield Farmhouse, Oaktree Lane (Part of SD5)	AL/72/19/PL application for 10 dwellings submitted Sept 2019 AL/72/19/PL - Refused 24.12.19 Site Update Form 2020 - 5 in yrs 2021-2022, 5 in yrs 2022-2023 - not realistic so moved back to yr 3 R.S. 03.07.20	Deliverable	Aidingbourne				Yes			10	In	0	0	0	5	5	0	0	0	0	0	0	0
W66	Ryefield Farm & Woodgate Centre, Oaktree Lane (Part of SD5)	Site Update Form 2020 - 50 in yrs 2022/23- 50 in yrs 2023/24- 60 in yrs 2024/25 - not realistic so moved back to yr 3 R.S. 03.07.20	Deliverable	Aidingbourne				Yes			160	In	0	0	0	50	50	60	0	0	0	0	0	0
W64	Land East of Westergate Street (Part of SD5)	AL/15/17/PL Hybrid Application - Refused 26/3/2020 for full 303 dwellings and Outline for 149 dwellings RB 15/4/2020 Site Update 2020 - 100 in yrs 2021/22, 50 in yrs 2022/23, 50 in yrs 2023/24, 50 in yrs 2024/25, 50 in yrs 2025/26, 50 in yrs 2026/27 - yields moved back as part of BEW Masterplan Aug 2020.	Deliverable	Aidingbourne				Yes			350	In	0	0	0	100	50	50	50	50	50	0	0	0
NEWEC18	Land to East of Lidsley Road (Part of SD5)	Site Update 2020 - moved yields forward one year below to start in yr 7 instead of yr 8 - R.S. 13.07.20	Developable	Aidingbourne				Yes			425	In	0	0	0	0	0	0	0	50	50	50	50	50
18EG2	Bovstone House Barnham Road, Eastergate (Part SD5)	Application submitted 04/05/19/OUT for demolition and 10 new dwellings - refused 06.12.19 No HELAA update 2020 so moved to yr 6 - 28.10.20 R.S.	Developable	Barnham & Eastergate				Yes			17	In	0	0	0	0	0	0	17	0	0	0	0	0
156	Boweries Barnham Road (Part of SD5)	April 2019 - Planning Application submitted EG/22/19/OUT for 28 dwellings refused Sept 2019 but now under appeal as at June 2020 Site Update Form 2020 - 30 in 2020-2021 but not realistic so moved to year 4 - 09.06.20 R.S.	Deliverable	Barnham & Eastergate				Yes			30	Out	0	0	0	0	30	0	0	0	0	0	0	0
NEWEG1A	Land South of BEW (Part of SD5)	Site Update Form 2020 - 50 in yrs 2026/27- 50 in yrs 2027/28, 50 in yrs 2028/29, 50 in yrs 2029/30, 50 in yrs 2030/31, 50 in yrs 2031/32, 75 in yrs 2032/33, 75 in yrs 2033/34, 75 in yrs 2034/35, 75 in yrs 2035/36 (600)	Developable	Barnham & Eastergate				Yes			600	In	0	0	0	0	0	0	0	50	50	50	50	50
BA118	Fordingbridge Industrial Site & North of Barnham Road 15 Barnham Road (Part of SD5)	Scoping opinion determined 3 April 2020 - BN/112/20/EIS Site Update 2020 - 0 in 2021/22, 50 in yrs 2022/23, 75 in yrs 2023/24, 75 in yrs 2024/25, 75 in yrs 2025/26, 75 in yrs 2026/27, 75 in yrs 2027/28, 75 in yrs 2028/29, 90 in yrs 2029/30, 50 in yrs 2030/31 - total = 600 (550 in plan period and 50 in 2030-31)	Deliverable	Barnham & Eastergate				Yes			600	In	0	0	0	50	75	75	75	75	75	75	50	50
NEWEC1	SD5/BEW site (Barnham Eastergate Westergate)	Strategic Allocation site SD5 for 2300 dwellings Site Update 2020 - 75 in yrs 2023/24, 75 in yrs 2024/25, 75 in yrs 2025/26, 75 in yrs 2026/27, 100 in yrs 2027/28, 100 in yrs 2028/29, 100 in yrs 2029/30, 100 in yrs 2030/31, 150 in yrs 2031/32, 150 in yrs 2032/33, 150 in yrs 2033/34, 150 in yrs 2034/35, 150 in yrs 2035/36, 250 in yrs beyond 2036 (Total promoted is = 1700) (700 in plan period) + 1600 in 2034-35 and 400 (or 150 to make it same total as WSEC of 3683) beyond 2036 Outside Plan period) BN/112/20/EIS Scoping Opinion approved by delegated powers - 10.11.20	Deliverable	Barnham & Eastergate				Yes			1700	In	0	0	0	0	75	75	75	75	100	100	100	100
18EG3	Little Warwick Barnham Road, Eastergate (Part SD5)	Site Update 2020 - 7 in yrs 2022-2023	Deliverable	Barnham & Eastergate				Yes			7	In	0	0	0	7	0	0	0	0	0	0	0	0
18EG4	Kimmerley Barnham Road, Eastergate (Part of SD5)	Site Update 2020 - 7 in yrs 2022-2023	Deliverable	Barnham & Eastergate				Yes			7	In	0	0	0	7	0	0	0	0	0	0	0	0
NEWA13	Warming Rugby Club, Roundstone Lane Angmering (SD11)	Site Update 2020 - 20 in yrs 2024-2025, 60 in yrs 2025-2026 - 2027-2028 and 30 in yrs 2029-2030	Deliverable	Angmering				Yes			250	In	0	0	0	0	0	60	60	65	65	0	0	0
109	Land between Arundel Road and Dappers Lane (Part SD5)	A/76/20/PL submitted for 84 dwellings - pending 20.05.20 R.S. HELAA Update 03.06.20 - promoter states delivery is the same providing planning permission is approved in Oct 2020 updated yields not given 10.06.20 R.S. Site Update 2020 - 50 in yrs 2022-2023, 34 in yrs 2023-2024	Deliverable	Angmering		Y	A/76/20/PL	Yes			84	In	0	0	0	50	35	0	0	0	0	0	0	0
18BE1	Land at Chalcraft Cottage Bersted (Part of SD3)	Needs a masterplan - more work - possible 2022/23 Site Update 2020 - 20 in yrs 2021-2022	Deliverable	Bersted				Yes			22	In	0	22	0	0	0	0	0	0	0	0	0	0
125	SD3 - Land off New Barn Lane/Morelis Farm/ Chalcraft Nurseries (Bognor Regis ECO Quarter)	STRATEGIC SITE SD3 WEST OF BERSTED for 2500 dwellings Site Update 2020 - 50 in yrs 2022/23, 125 in yrs 2023/24, 225 in yrs 2024/25, 275 per yr in yrs 2025/26 - 2032/33. Total = 2600 (Strat Allocation is 2500) therefore with 1825 in Plan Period up until 2029/30 BE/61/20/OUT received Aug 2020 for 20 residential dwellings & 2,240 sqm of commercial on the Chalcraft nurseries part of the site.	Deliverable	Bersted				Yes			2500	In	0	0	50	125	225	275	275	275	275	275	275	275

71	Land at Former Ford Airfield Ford (SD8)	Strategic Allocation Site SD8 FORD - F/4/20/OUT up to 1500 C3, 60 bed (C2), 9000sqm employment floorspace (B1), A1-A5, D1-D2 pending at March 2020 -10.03.20 R.S. Site Update 2020 - 75 in yrs 2023-24, 125 in yrs 2024-25, 125 in yrs 2025-26, 175 in yrs 2026-27, 175 in yrs 2027-2028, 175 in yrs 2028-29, 175 in yrs 2029-30, 175 in yrs 2030-31, 150 in yrs 2031-32, 150 in yrs 2032-33 (total 1475)	Deliverable	Ford		Y	F/4/20/OUT	Yes		1500		In	0	0	0	75	125	125	175	175	175	175	150
1475	Land to the west of Pagham (Part of SD2)	Osborne Refrigeration Site SD8 (Formerly known as L2724 & Richardson's Enterprise Trading Estate) Site update 2020 - transfer estate refer to AGC housing property on West Bank SD12 SD30 - updated yields - moved from part 10 to 11 due to viability issues 18.11.20 R.S.	Developable	Pagham				Yes		1500		In	0	0	0	75	125	125	175	175	175	175	150
27	Land to the west of Osborne Refrigeration (Part of SD2)	Site Update 2020 - 25 in yrs 2024-2025, 30 in yrs 2025-2026	Developable	Pagham				Yes		55		In	0	0	0	0	25	30	0	0	0	0	0
Total													0	22	346	520	695	807	940	990	850	825	800

5yr HLS 1583

LP Total 6795

Prabin Limbu

From: Ian Stocks <[REDACTED]> on behalf of FRS Water and Access
Sent: 14 May 2021 10:48
To: Glenn Charles
Cc: Prabin Limbu; Ashley Maltman
Subject: RE: Development at Woodgate Road, Woodgate Emergency Access

Morning Glen,

Having walked the route with you yesterday I am satisfied that Oak Tree Lane would give adequate access to the site providing the access onto the new housing estate meets with the requirements identified below and the requirements of AD-B volume 1 2019 edition: B5 section 13 (measurements given in Table 13.1).

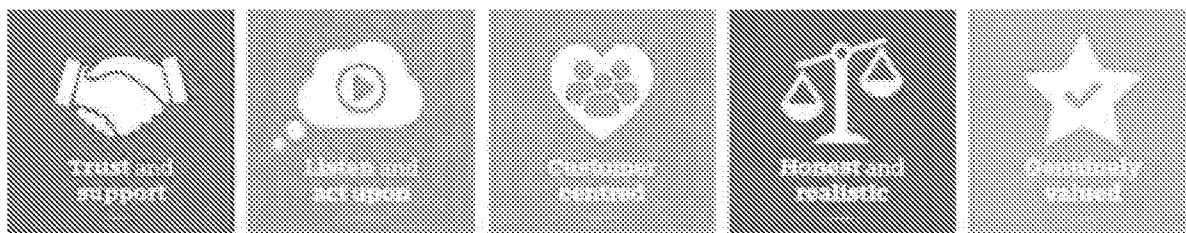
The route can be gated or have removable or drop bollards to prevent general use if required. Whatever is used will need to be easily and quickly opened by the Emergency Services for access if required; remembering that the Ambulance Service and the Police do not carry bolt croppers or any equipment to remove padlocks, so this may need to be considered when deciding on how to secure them shut.

Regards

Ian Stocks

Ian Stocks – Water and Access Manager
Water and Access Office
West Sussex Fire and Rescue Service [West Sussex County Council](#)
Location: Bognor Fire Station, West Meads Drive, Bognor, PO21 5TB
[REDACTED]

Living Our Values Every Day



From: Glenn Charles <[REDACTED]>
Sent: 14 May 2021 09:47
To: Ian Stocks <[REDACTED]>
Cc: Prabin Limbu <[REDACTED]> Ashley Maltman <[REDACTED]>
Subject: Development at Woodgate Road, Woodgate Emergency Access

Ian,
Many thanks for your time yesterday, our discussion was very helpful.

As discussed the provision of an emergency access would be prudent for the 220 proposed dwellings coupled with the existing 37 dwellings on Woodgate rd.

As such we discussed the potential provision of the emergency access via the existing private access known as Oak Tree Lane that the site currently enjoys.

Having walked the length of Oak Tree Lane and the metaled drive to the existing buildings on site. It was agreed that this route is suitable for an emergency access to the proposed development.

The Fire Brigade would require a clear 3.1m width if there is just a fence/hedge either side of the access or if a corridor built up on either side, 3.7m width is required.

The access could have cropable bollards or a gate. to stop the public using it other than cyclists and pedestrians. On the development side it would be preferable to have an adopted pavement or road carriageway to land on. However a clear private drive 3.7m wide with no obstructions may be acceptable but not preferred.

Once again many thanks for your time. It would be appreciated if you would respond confirming the above is correct and/or adding anything that I may have misinterpreted or left out.

I look forward to your response.

Regards

Glenn Charles

B.Eng (Hons) Chartered MICE,

MIEAust CPEng NER APEC Engineer IntPE(Aus)

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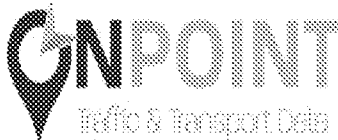
Charles & Associates

Registered in England No. 08136641

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Appendix B Woodgate Road Parking Survey Results

	CLIENT: CHARLES & ASSOCIATES		JOB NUMBER: OPS11138	
	PROJECT DESCRIPTION: WOODGATE ROAD - PARKING STRESS SURVEY DATA			
	WEATHER: DRY/MILD		DATE: TUE 08TH DEC 2020	

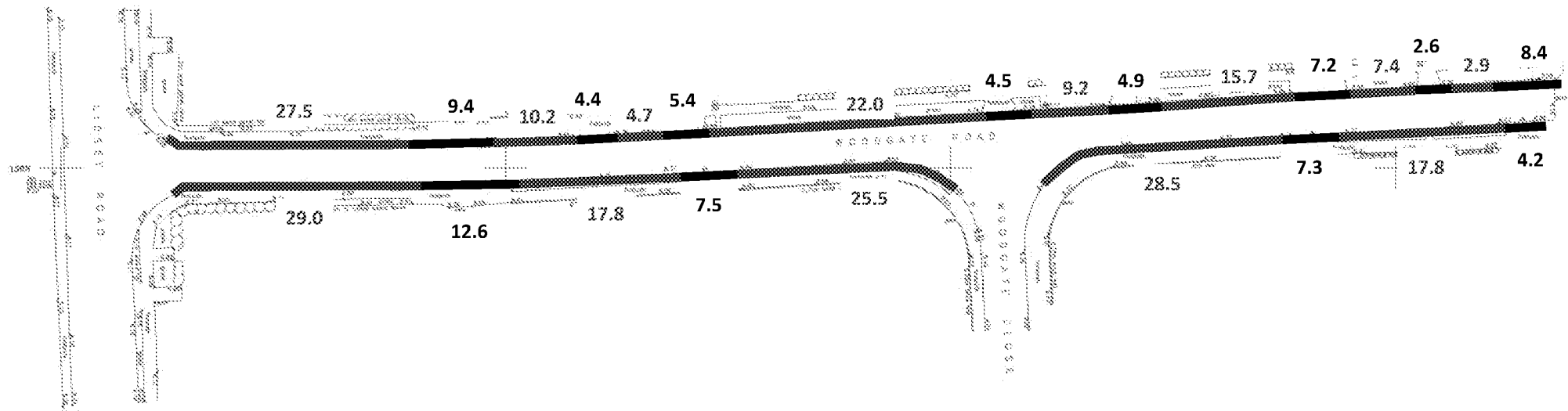
*Parking space availability based upon 5.0m per space

Beat Time	Roadside	Total Spaces	Unrestricted Parking		Dropped Kerb	Single Yellow	Double Yellow	Total Parked	% of Spaces Used
			Spaces	Used	Used	Used	Used		
08:00	NORTH	16	16	6	1			7	38%
	SOUTH	16	16	1				1	6%
18:00	NORTH	16	16	7	1			8	44%
	SOUTH	16	16					0	0%
00:00:00 (MIDNIGHT)	NORTH	16	16	7	1			8	44%
	SOUTH	16	16	1				1	6%

**CLIENT:** CHARLES & ASSOCIATES**JOB NUMBER:** OPS11138**PROJECT DESCRIPTION:** WOODGATE ROAD - PARKING STRESS SURVEY DATA**WEATHER:** DRY/MILD**DATE:** WED 09TH DEC 2020

*Parking space availability based upon 5.0m per space

Beat Time	Roadside	Total Spaces	Unrestricted Parking		Dropped Kerb	Single Yellow	Double Yellow	Total Parked	% of Spaces Used
			Spaces	Used	Used	Used	Used		
08:00	NORTH	16	16	7				7	44%
	SOUTH	16	16	1				1	6%
18:00	NORTH	16	16	7	1			8	44%
	SOUTH	16	16	1				1	6%
00:00:00 (MIDNIGHT)	NORTH	16	16	6	1			7	38%
	SOUTH	16	16	1				1	6%

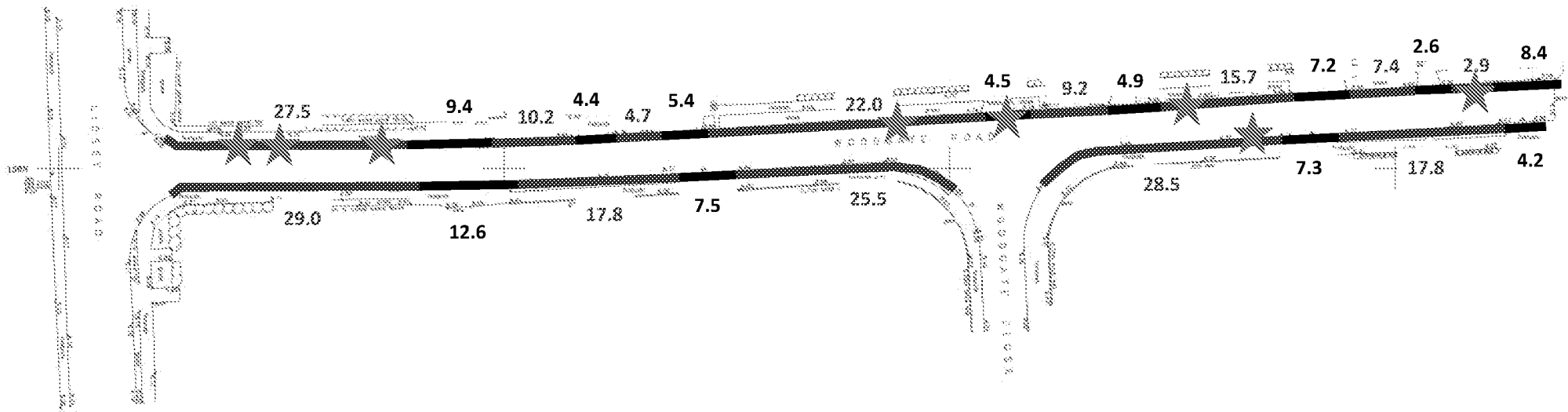


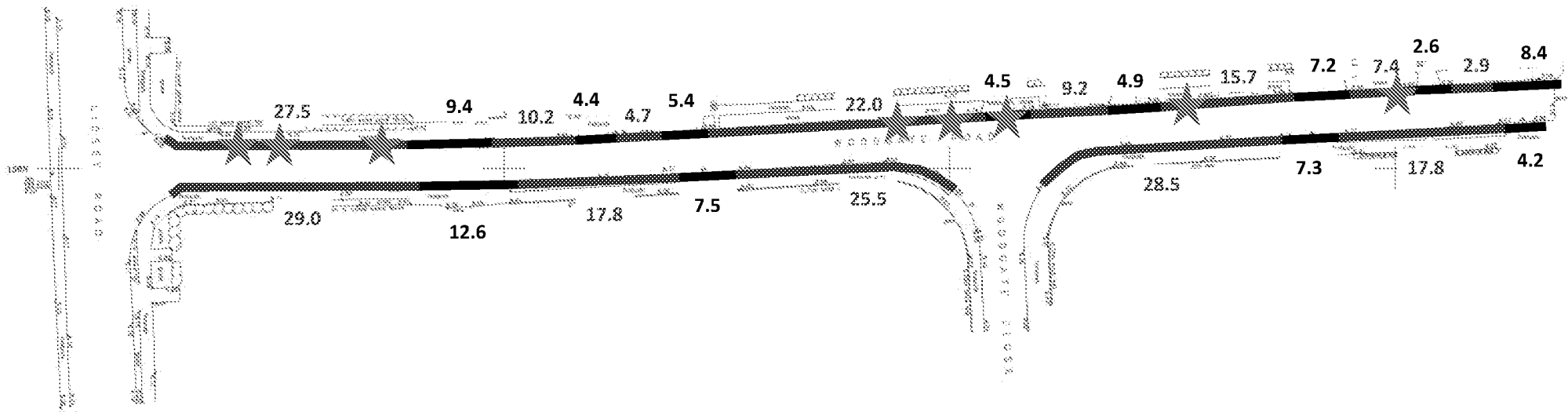
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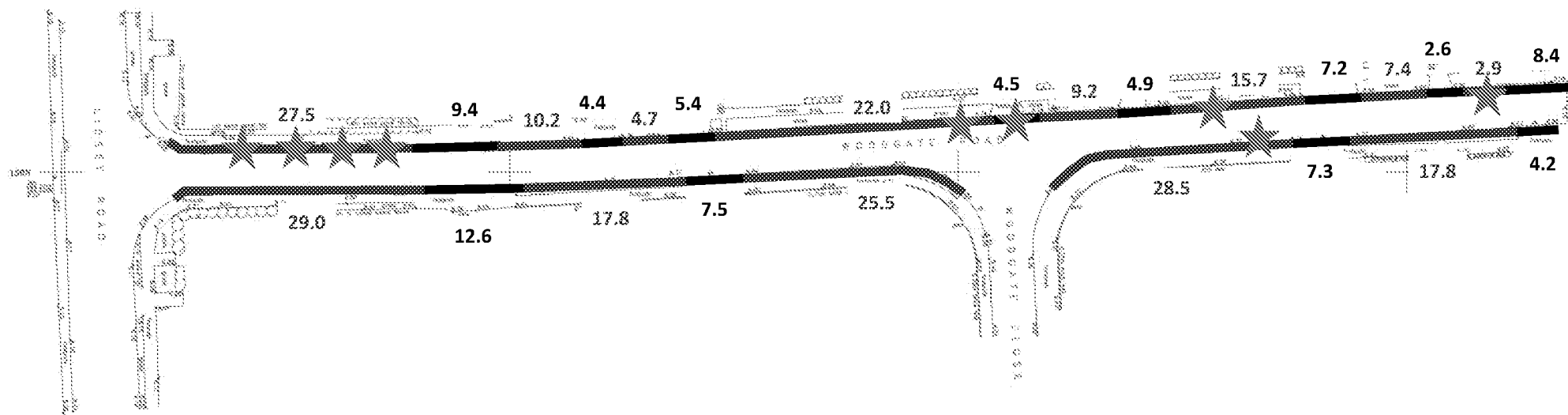
 Unrestricted Parking

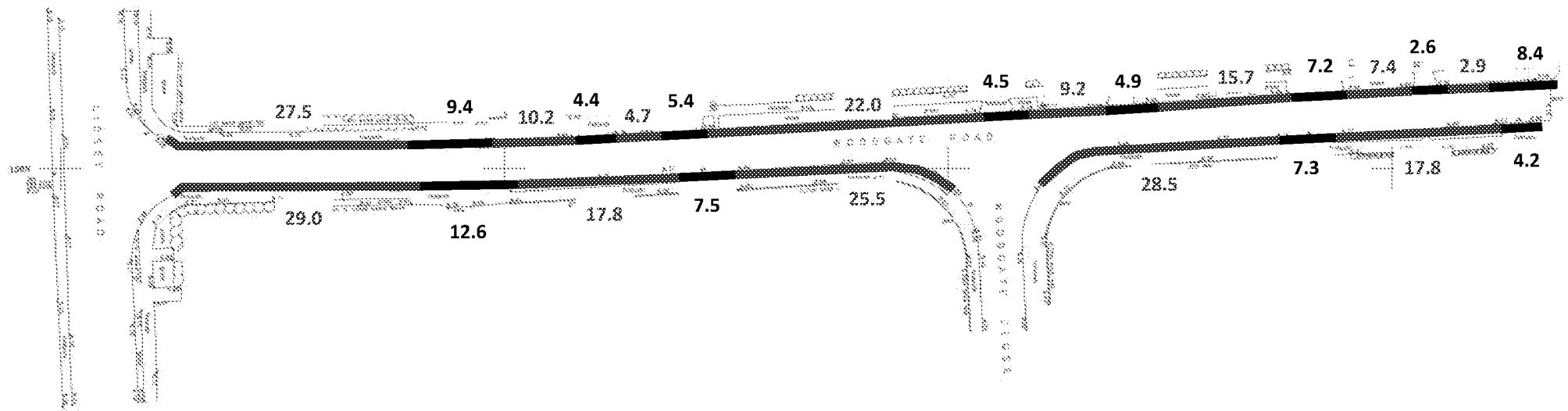
 Drop Kerb

 Parked Vehicle







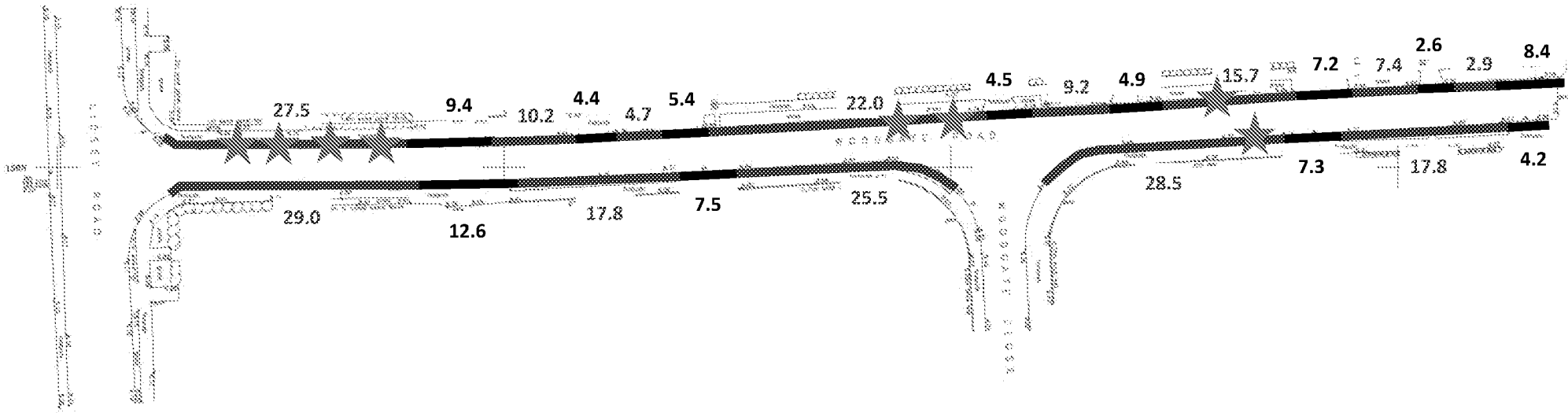


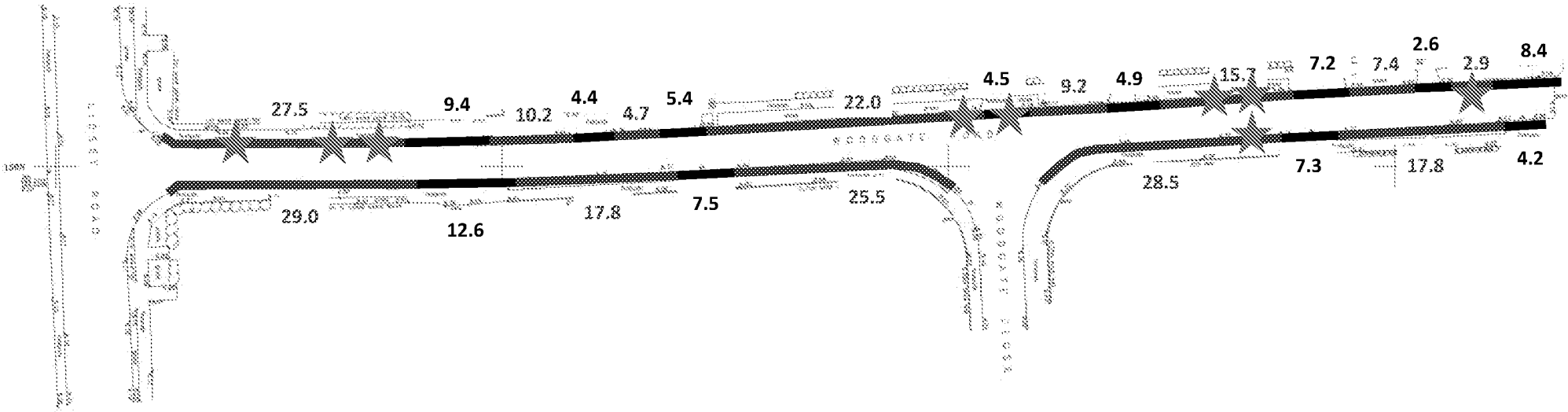
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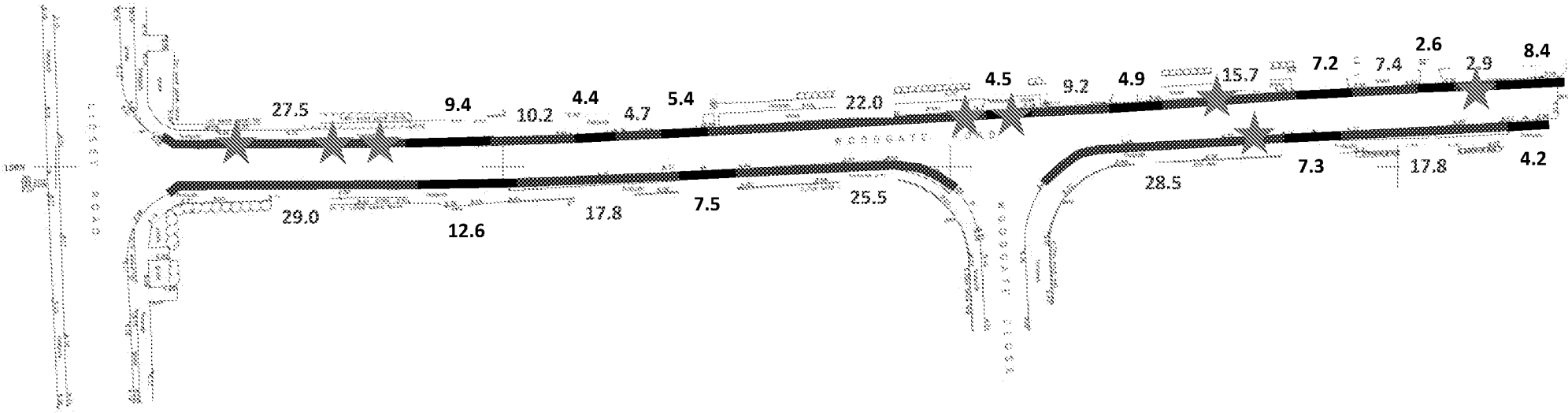
 Unrestricted Parking

 Drop Kerb

 Parked Vehicle







Appendix C Bus Routemaps and Timetables



66A: BOGNOR REGIS - BARNHAM - YAPTON - WALBERTON - BOGNOR REGIS**66C: BOGNOR REGIS - BARNHAM - WALBERTON - YAPTON - BOGNOR REGIS**

66A - anti-clockwise via Yapton and Walberton

66C - clockwise via Walberton and Yapton

Mondays to Saturdays**(except public holidays)**

	NS						
	66A	66C	66A	66C	66A	66C	66A
Bognor Regis, High Street		0815	1015	1235	1435#	1635	1740
Bognor Regis Station, Longford Rd		0818	1018	1238	1438#	1638	1743
Tesco, Shripney Road		0822	1022	1242	1442#	1641	1746
Shripney, Robin Hood		0826	1026	1246	1445#	1644	1749
Westergate, Barnett Close	E	0834	1034	1253	1457B	1651	1756
Barnham, Station	0726	0838	1038	1257	1505	1656	1801
Walberton, Post Office	....	0843	....	1302	....	1701	....
Yapton, Canal Road	0731	0850	1042	1309	1508	1707	1806
Yapton, Sparks Corner	0735	0853	1045	1312	1512	1709	1808
Walberton, Old Vicarage	0742	....	1051	....	1519	....	1814W
Barnham, Station	0749	0859	1059	1317	1526	1714	....
Westergate, Westergate Mews	0753	0904*	1104	1322	1530	1719	....
Shripney, Robin Hood	0759	0912*	1112	1330	1537	1726	....
Tesco, Shripney Road	0805	0916*	1116	1334	1541	1729	....
Bognor Regis Station, Longford Rd	0807	0919*	1119	1337	1544	1732	....
Bognor Regis, High Street	0810D	0922*	1122	1340	1547	1735D	....

Highlighted journeys are designated for school students only - on schooldays

NS - does not operate on Saturdays

B - on Schooldays operates via Ormiston Six Villages Academy departing 1451

D - returns to High St via Richmond Rd, Lyon St W, Sudley Rd. - not via Canada Grove, Queensway

E - commences from Eastergate Memorial, Barnham Road at 0724

W - continues to Walberton, The Green

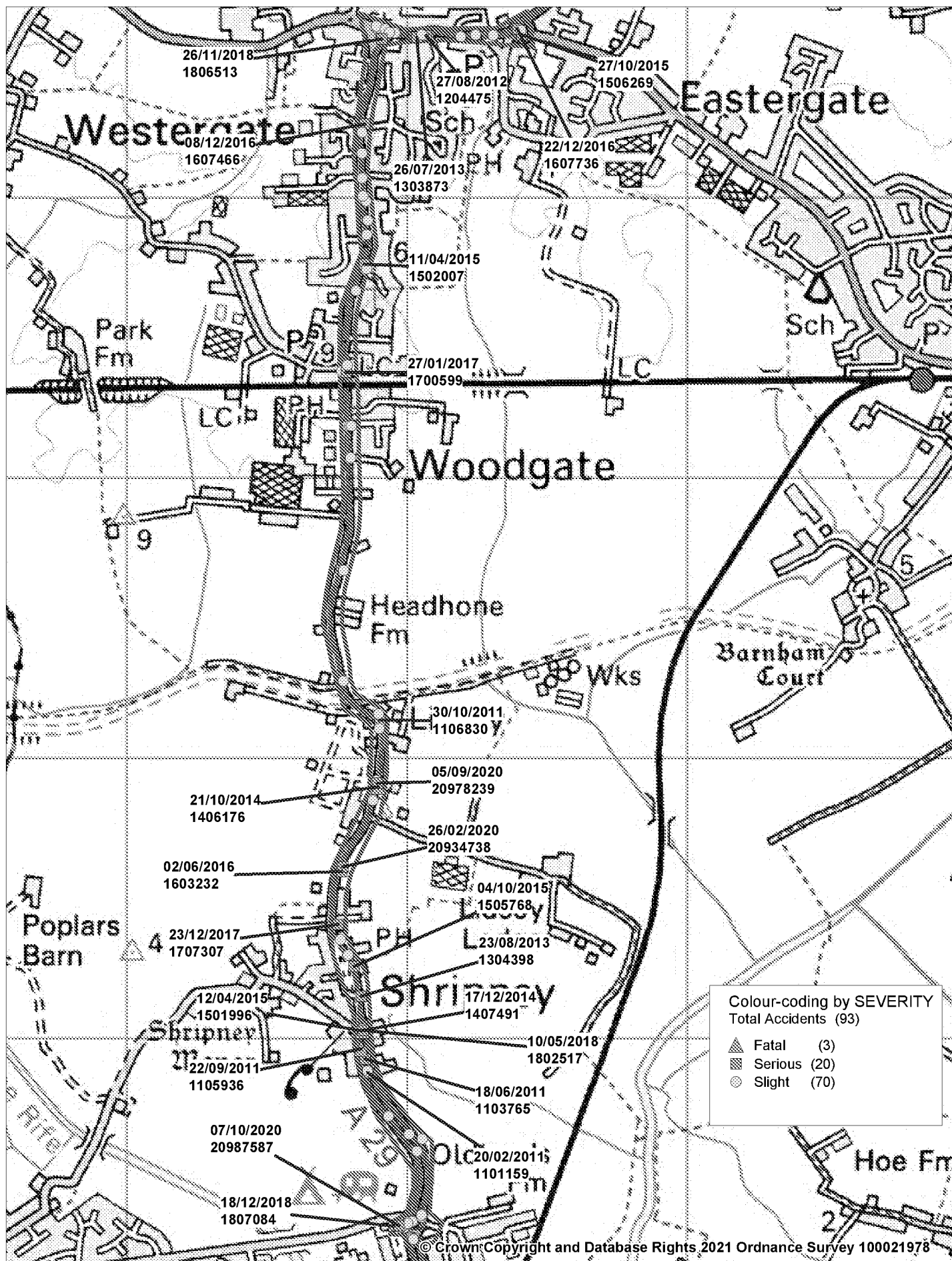
- operates 5 minutes later on Saturdays and in School Holidays

* - WSCC Concessionary card accepted from these points

67: BOGNOR REGIS - N FELPHAM - GLENWOOD ESTATE - BOGNOR REGIS**Mondays to Saturdays**

Bognor Regis, High Street	....	....	0950	1210	1410	1610	....	....
North Felpham, Wroxham Way	....	....	0956	1216	1416	1616	....	....
Glenwood Estate Shops	....	....	1004	1224	1424	1624	....	....
Bognor Regis, High Street	....	....	1010	1230	1430	1630	....	....

Appendix D PIA Data



Sussex Safer Roads
PARTNERSHIP

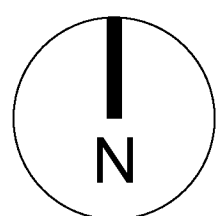
A29 Woodgate
Collision Dates 01/12/2010 - 30/11/2020
Charles and Associates

Her Majesty's Office (c) Crown Copyright

SCALE	1 : 18000
DATE	05/01/2021
DRAWING No.	
DRAWN BY	

Appendix E Development Site Plan





ACCOMMODATION SCHEDULE

Private Dwellings		
No.	Dwelling Type	
15no.	2-Bed 3 Person Flats	Type A
4no.	2-Bed 4 Person Flat Over Garage	Type C
3no.	3-Bed 4 Person Bungalow	Type D
11no.	2-Bed 4 Person House	Type E2
19no.	2-Bed 4 Person House	Type F
7no.	3-Bed 5 Person House	Type G
2no.	3-Bed 5 Person House	Type H
4no.	3-Bed 5 Person House	Type J
12no.	3-Bed 5 Person House	Type M
5no.	3-Bed 5 Person House	Type U
2no.	3-Bed 5 Person Chalet	Type S
19no.	3-Bed 5 Person House	Type K
1no.	4-Bed 6 Person House	Type T
14no.	4-Bed 6 Person House	Type L
3no.	4-Bed 7 Person House	Type R
6no.	4-Bed 8 Person House	

Total 127 Dwellings

Affordable Rent Dwellings

No.	Dwelling Type	
9no.	1-Bedroom Flats	Type A
2no.	2-Bed 4 Person Flat Over Garage	Type E1
17no.	2-Bed 4 Person House	Type I
10no.	3-Bed 5 Person House	Type K
2no.	4-Bed 6 Person House	

Total 40 Dwellings

Intermediate Family Home Dwellings

No.	Dwelling Type	
6no.	1-Bedroom Flats	Type A
1no.	2-Bed 4 Person Flat Over Garage	Type E1
2no.	2-Bed 4 Person House	Type I
3no.	3-Bed 5 Person House	Type K
1no.	4-Bed 6 Person House	

Total 13 Dwellings

Totals

53	Affordable Dwellings (30%)
127	Private Dwellings (70%)

Total 180 Dwellings

M4(2)

* Denotes Part M4 compliant. Out of the total provision, 56 dwellings are Part M4(2) & M4(3) compliant equating to 31%

Car Parking - generally;

- 1no. spaces per 1 & 2 bedroom apartment
- 2no. spaces per House (one of which is an EV charging point)
- 36no. visitor parking spaces (20%)
- 37no. unallocated parking spaces
- 4no. unallocated EV charging spaces

Cycle Parking - generally;

- 1no. space per 1 bedroom Flat
- 2no. spaces per 2-bedroom Dwelling
- 2no. spaces per 3-bedroom Dwelling
- 2no. spaces per 4-bedroom Dwelling

Cycle storage generally provided within garages, rear garden sheds or communal cycle stores.

Site Area - 7.25ha

Q	29.07.21	Highway amendments	LT	KE
P	29.07.21	Residential mix updated	LT	KE
Q	29.07.21	Parking in front of plots update	LT	KE
N	25.06.21	Layout Updated	LT	KE
M	17.06.21	Layout Updated	LT	KE
L	03.02.21	Layout Updated	LT	KE
K	16.12.20	Layout Updated	LT	KE
J	16.12.20	Residential Mix Adjusted & No's increase	LT	KE
I	25.11.20	Site Layout updated	LT	KE
H	25.11.20	Colour added	LT	KE
G	18.11.20	M4(2) positions reviewed	LT	KE
F	18.11.20	Layout adjusted to consultant comment	LT	KE
E	18.11.20	Layout adjusted to consultant comment	LT	KE
D	18.09.19	Affordable provision allocated	LT	KE
C	08.09.19	Site layout amended to tree & highway comments	LT	KE
B	18.09.19	Parking provision amended	LT	AK
A	08.09.19	Foot Sewer position added	LT	AK
Rev	Date	Revision Details	Dr	Ch



Client's Name
Pye Homes

Job Title:
Land east of Woodgate Lane,
Woodgate

Drawing Title:
Site Layout

Scale:
1:500 @ A0 / 1:1000 @ A2

Drawn: KE
Checked: LT
Date: 02.03.21

Job No: 6781
Drawing No: 02
Rev: Q

Status:
APPROVAL