A280/A27/ARUNDEL ROAD ROUNDABOUT (NORTH)

2.6.32 The A280/A27/Arundel Road roundabout has five arms and is the northern most of a double roundabout layout. The layout of the junction is shown in **Figure 2-8**.

Figure 2-8: View of A280/A27/Arundel Road Roundabout Junction (North)

2.6.33 The geometry inputted into the junction model and used as the basis for the capacity assessment are generally reasonable and are reflective of the physical geometry of the junction. The entry arm for Long Furlong is measured as 7.3m with an effective flare length of 29m. Whilst these represent the physical dimensions of the roundabout arm, in practical terms it should be considered whether this is realistic. Based on the turning movements within the AM Peak 93.8% of the traffic will continue straight ahead and 4.9% of the traffic will be turning left. Therefore, most of the traffic will be sat in the left-hand lane, and the right-hand lane would remain relatively empty. Therefore, if you enter the full approach geometry for this arm, ARCADY will produce an over optimistic result, i.e. predicted queues and delays on this approach will be too small.

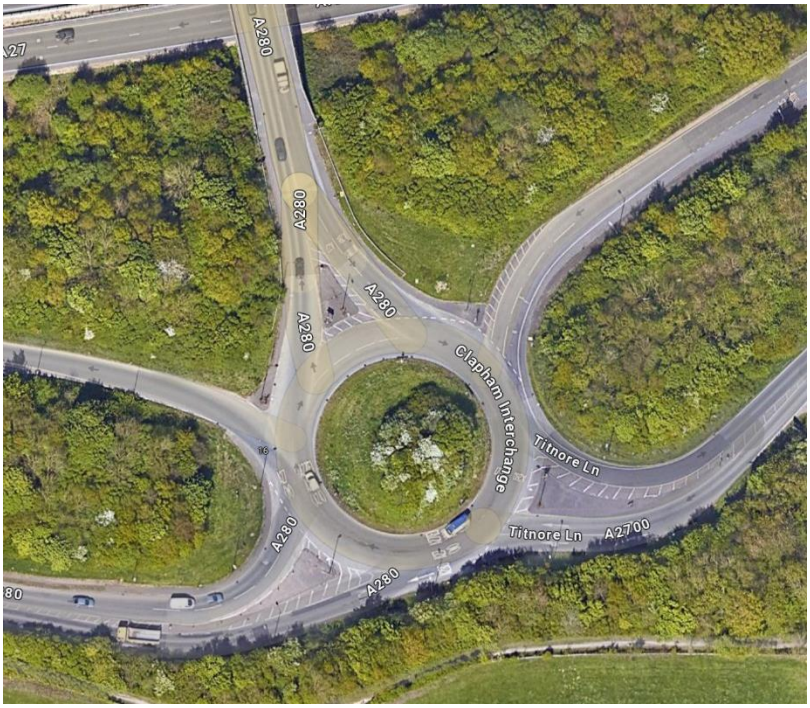
2.6.34 It is recommended that the turning counts at arms with multiple lane approaches are reviewed, and where there is anticipated to be unequal lane usage adjustments should be made to the arms to reflect the on-site conditions.

2.6.35 A one-hour traffic flow profile type has used for the analysis. This type of profile is considered robust, as a higher proportion of traffic arrives in the middle of the hour, representing a peak within the hour.

A280/A27/TITNORE LANE ROUNDABOUT (SOUTH)

2.6.36 The A280/A27/Ditmore Lane roundabout has five arms and is the southernmost of a double roundabout layout. The layout of the junction is shown in **Figure 2-9**.

Figure 2-9: View of the A280/A27/Titnore Lane Roundabout Junction (South)



2.6.37 The geometry inputted into the junction model and used as the basis for the capacity assessment are generally reasonable and are reflective of the physical geometry of the junction.

2.6.38 During the day of the observation, lanes along the approaches of A280 (south-west) and Titmore Lane were coned out. Both arms had long queues, however as these were not reflective of typical conditions it is not known whether these are representative of a typical peak hour.

2.6.39 As with the northern roundabout it is recommended that the turning counts at arms with multiple lane approaches are reviewed, and where there is anticipated to be unequal lane usage adjustments should be made to the arms to reflect the on-site conditions.

2.6.40 A one-hour traffic flow profile type has used for the analysis. This type of profile is considered robust, as a higher proportion of traffic arrives in the middle of the hour, representing a peak within the hour.

BLUE STAR ROUNDABOUT

2.6.41 The Blue Star roundabout is a four-arm roundabout made up of Station Road, Roundstone By-Pass, the B2140 and the A259. The layout of the junction is shown in **Figure 2-10**.

Figure 2-10: View of Blue Star Roundabout Junction

2.6.42 The flare length on the A259 (W) arm has been measured at 47.4m, with an entry width of 8.99m. This is overly optimistic of how the junction would operate and should be remeasured to more accurately represent how the junction operates (a two-lane entry width with a shorter flare).

2.6.43 The highest RFC of 77% is within the PM Peak hour on the A259 (E). Although the site was not examined during the PM Peak hour, this is reflective of the on-site conditions on the morning of the site observation.

2.6.44 On the morning of the observation long queues were building up on the Station Road arm. The queue was approximately 22 vehicles long and went back as far as Olders Lodge. The queue builds from the stop line with vehicles waiting at the give way line on Station Road experiencing long delays to wait for a gap in traffic from vehicles going straight ahead from the A259 (W) arm.

2.6.45 There is a signalised pedestrian crossing across Station Road, approximately 60m north of the roundabout. This is heavily used by school children during the morning peak and could affect capacity of Station Road. It should be noted that there was no evidence of queuing back from the crossing back to the roundabout.

2.6.46 It is recommended that the turning counts at arms with multiple lane approaches are reviewed, and where there is anticipated to be unequal lane usage adjustments should be made to the arms to reflect the on-site conditions.

2.6.47 A flat traffic flow profile type has used for the analysis. This profile type feeds traffic into the model at a consistent rate and is unlikely to be a true representation of how traffic would arrive at the roundabout. It is recommended that the flow profile is changed to a one-hour flow (to represent a peak in the middle of the hour) or that the flows are entered in directly (in 15 minute periods).

2.7 FRAMEWORK TRAVEL PLAN

2.7.1 A Framework Travel Plan (FTP) has been submitted in support of the outline planning application. In accordance with national and regional best practice guidance, this document sets out the aims and benefits, mode share targets, a range of measures, and a framework for the ongoing monitor and review of the FTP.

2.7.2 Paragraph 5.5.11 of the submitted FTP states that future households would be offered a sustainable travel voucher to be used on either public transport (such as Stagecoach Taster Tickets) or on cycle equipment. There is no mention of the monetary value of the voucher and how this will be distributed to future households. Further, there does not appear to be a commitment to implementing this measure, as it is not mentioned in Table 8.1.

2.7.3 In addition, the FTP does not clearly state whether the applicant would be willing to pay WSCC's auditing fees for evaluating the document over an initial 5-year time period. The FTP should be secured via a Section 106 (S106) Agreement.

3 SUMMARY

3.1.1 This TN has been prepared by VTP on behalf of APC for the purposes of evaluating a TA and FTP, submitted in support of an outline planning application (Reference: A/154/24/OUT) for a development proposal comprising of 190 residential units (Use Class C3) and a 600 sq.m community building (Use Class E(d, e) or F2(b)), together with the provision of open space, landscaping and associated infrastructure on land west of Bewley Road in Angmering, West Sussex.

3.1.2 In summary, the TN reveals:-

- Clarification on when the MCTC surveys were undertaken is required to assess whether the data is valid. Further, a copy of the raw baseline traffic survey data is requested to enable VTP to verify the summary tables and junction capacity modelling within the TA.
- There are a number of concerns with the methodology of the parking 'stress' survey that was undertaken along Bewley Road. Most notably, the parking 'stress' survey does not adhere to best practice guidance in assessing the on-street parking conditions during the night-time period, when demand is likely to be at its greatest. The location of parked vehicles along Bewley Road is not known. This together with the results of the parking 'stress' survey have not been attached to the submitted TA. The applicant in conjunction with i-Transport is requested to instruct an independent data collection company to undertake a parking 'stress' survey examining the demand for on-street parking spaces along Bewley Road in accordance with the widely used/accepted 'Lambeth Methodology'. The results of this survey should be presented to WSCC Highways.
- The applicant does not propose any mitigation to reduce the potential for conflict between motorised and non-motorised users along the sections of Bewley Road, which are subject to parking on both sides of the carriageway.
- Concern is raised on the design of the site's proposed access at the western end of Bewley Road, particularly the removal of a turning head off the southern side of the carriageway. This will require households at no.'s 42 and 44 to undertake multiple/awkward manoeuvres when exiting from the private driveway in reverse gear, leading to potential conflict between motorised and non-motorised users.
- Confirmation is sought on whether ADC have been consulted on or provided a list of committed developments, which need to be factored into the highway impact assessments. There is no mention on whether the growth factors from the TEMPro model have been amended to reflect other committed development sites.
- Concern is raised on the use of a flat traffic flow profile type within the model for the Bluestar Roundabout Junction. This profile type feeds traffic into the model at a consistent rate and is unlikely to be a true representation of how traffic would arrive at the roundabout. It is recommended that the flow profile is changed to a one-hour flow (to represent a peak in the middle of the hour) or that the flows are entered in directly (in 15 minute periods). It is further recommended that the turning counts at arms with multiple lane approaches are reviewed by WSCC Highways, and where it is anticipated to be unequal lane usage, adjustments should be made to the arms to reflect the on-site conditions.
- Clarification is sought from the applicant on their willingness to provide travel vouchers for each new household and payment of WSCC's auditing fees.

3.1.3 In light of the above concerns, the applicant in conjunction with i-Transport are requested to provide additional information in support of the outline planning application.

APPENDIX A

RESULTS OF PARKING STRESS SURVEY