

VIP Peak East – Application Reference - 2019/101

Response to HE and BMBC comments on CTMP and Access Drawings

Highways England Queries

1. Need to include A616 as well as the Flouch Roundabout within the study area.

As acknowledged within HE's letter dated 1/11/2019, and in line with the guidelines for the Environmental Assessment of Road Traffic - Institute of Environmental Assessment (IEA), 1993. (Now the Institute of Environmental Management and Assessment (IEMA)), Table 12-10 within the traffic chapter of the Environmental Assessment Report (EAR) compares the '2021 baseline traffic' with the '2021 baseline + construction traffic' by testing the net increase in total flows and HGV flows against the IEMA criteria. A link has only been considered for further assessment where a percentage threshold has been exceeded. The percentage change in traffic flows on the A616 Whams Road (the section north of Flouch Roundabout) has been shown to be below the threshold that would trigger the need for further assessment. The section of the A616 south of Flouch Roundabout has an AADT of around 16,500 (Source: WebTRIS sites 8300/1 and 8300/2 – 2018 data), with the implication that the percentage threshold is not exceeded. Therefore, no further analysis is warranted under the IEMA criteria used for the assessment.

The highest average hourly HGV and LGV traffic generated by the construction works on the local traffic network is illustrated in Figure 1 and 2 below. The quantum of trips forecast at the Flouch Roundabout is not material enough to necessitate a detailed assessment of the Flouch Roundabout. It should be noted that the average hourly flows presented below are based on flows from the month with the highest predicted monthly two-way flows over the construction duration, and therefore represent a worst case scenario. The typical average hourly flows over the rest of the construction period are therefore likely to be less than those presented.

Figure 1: Highest average hourly HGV traffic generation (8:00-9:00 and 17:00-18:00)

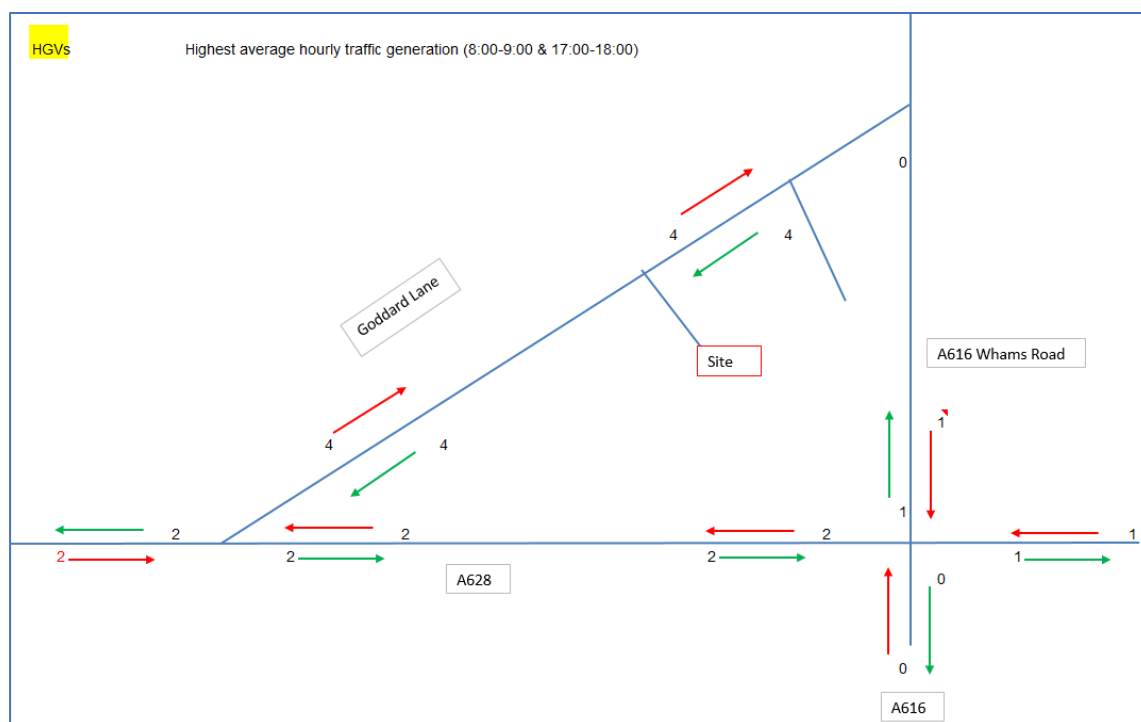
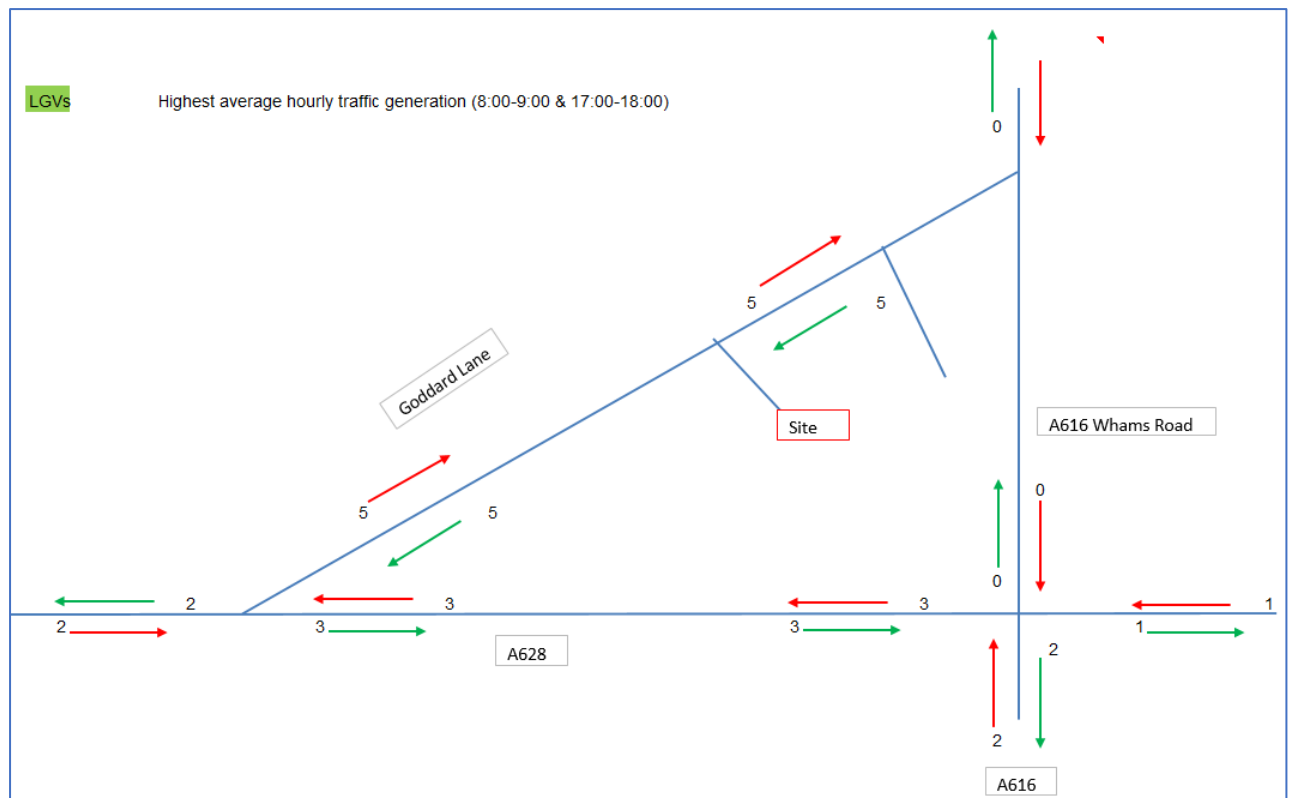


Figure 2: Highest average hourly LGV traffic generation (8:00-9:00 and 17:00-18:00)



The estimated traffic generation figures presented in the EAR have been subsequently reviewed by, the principal contractor responsible for delivering the Peak District Project. Based on their experience of delivering similar schemes in the past, the contractor has revised the construction traffic estimates to better represent the traffic generated by the scheme. The resulting highest hourly average HGV and LGV traffic estimates in the AM and PM peak periods are presented in Figures 3 and 4. The figures show that, whilst the LGV estimates are broadly similar to the original estimates, the highest average hourly HGV estimates are significantly lower than those estimated for assessment purposes. This further demonstrates that the trips forecast from the Proposed Project are not material enough to warrant any further assessment.

Figure 3: Revised highest average hourly HGV traffic generation (8:00-9:00 and 17:00-18:00) based on the contractor’s estimates

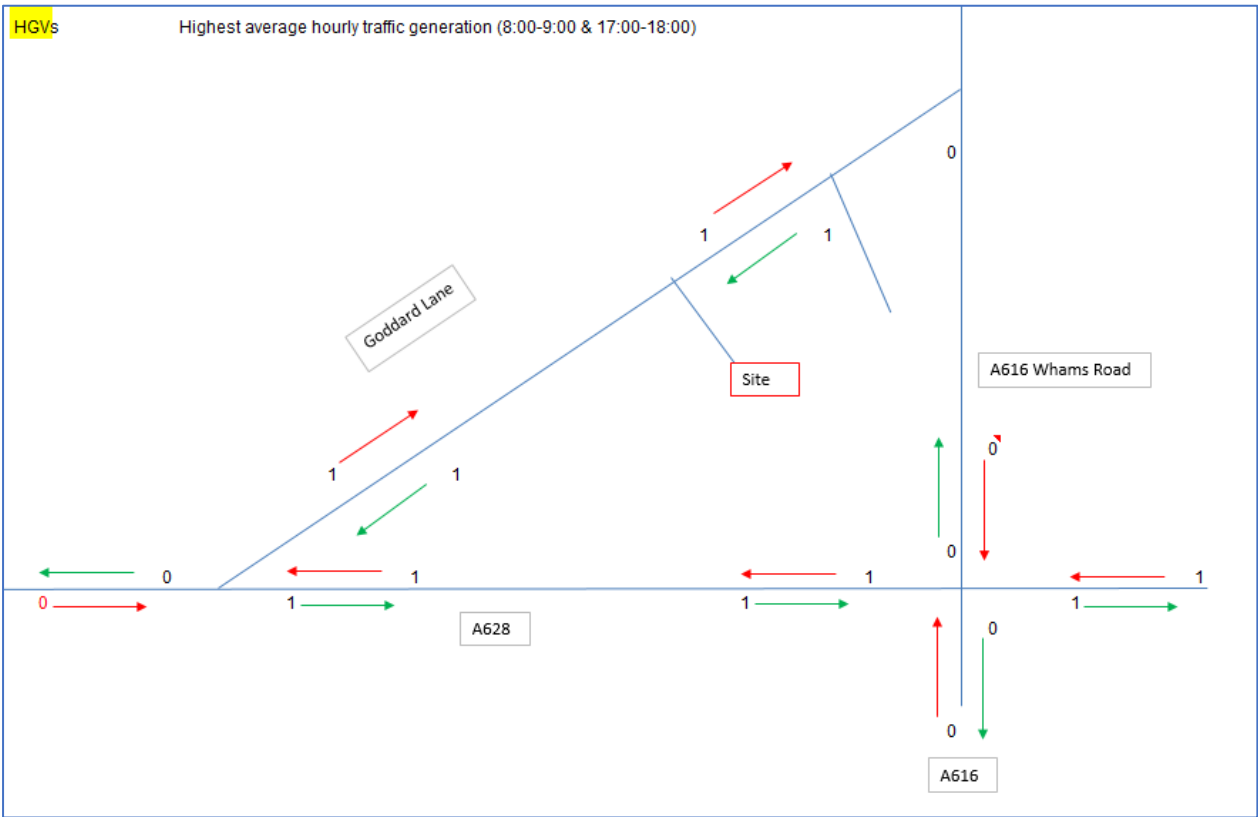
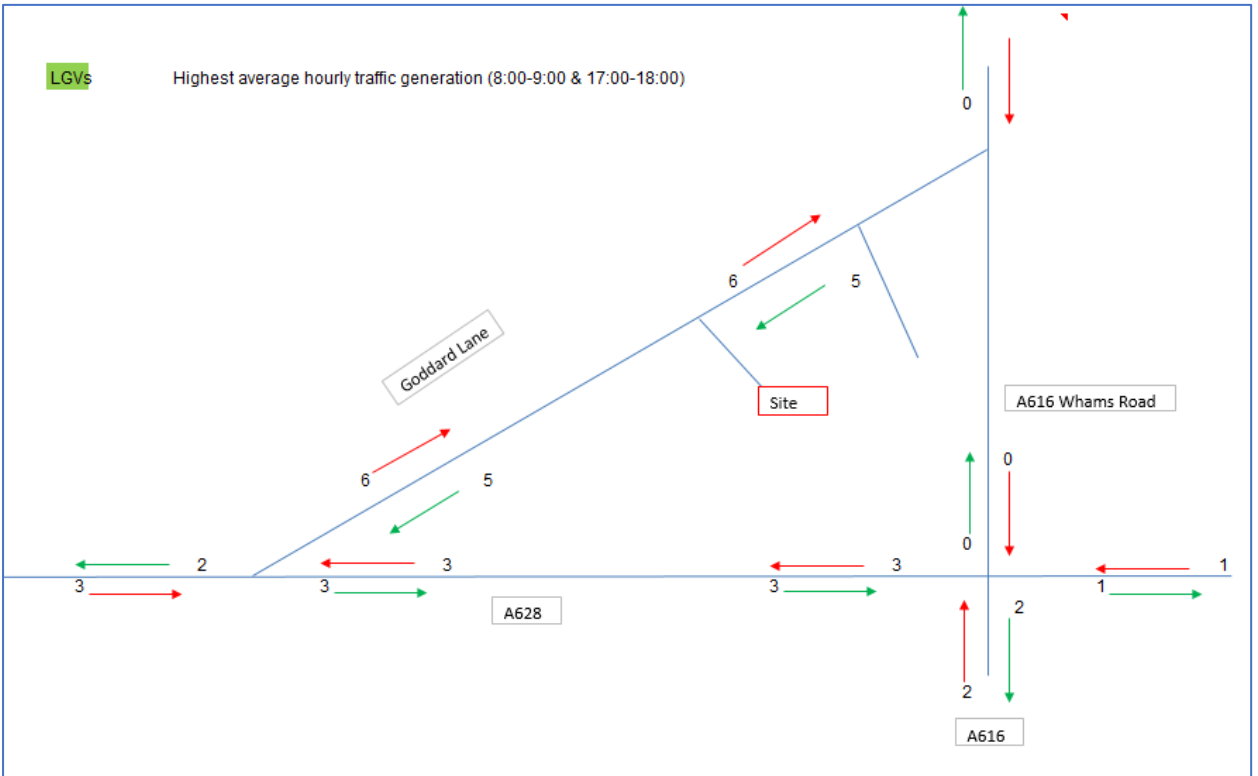


Figure 4: Revised highest average hourly LGV traffic generation (8:00-9:00 and 17:00-18:00) based on the contractor’s estimates



2. Suitability of 2016 (August) traffic data for assessment purposes

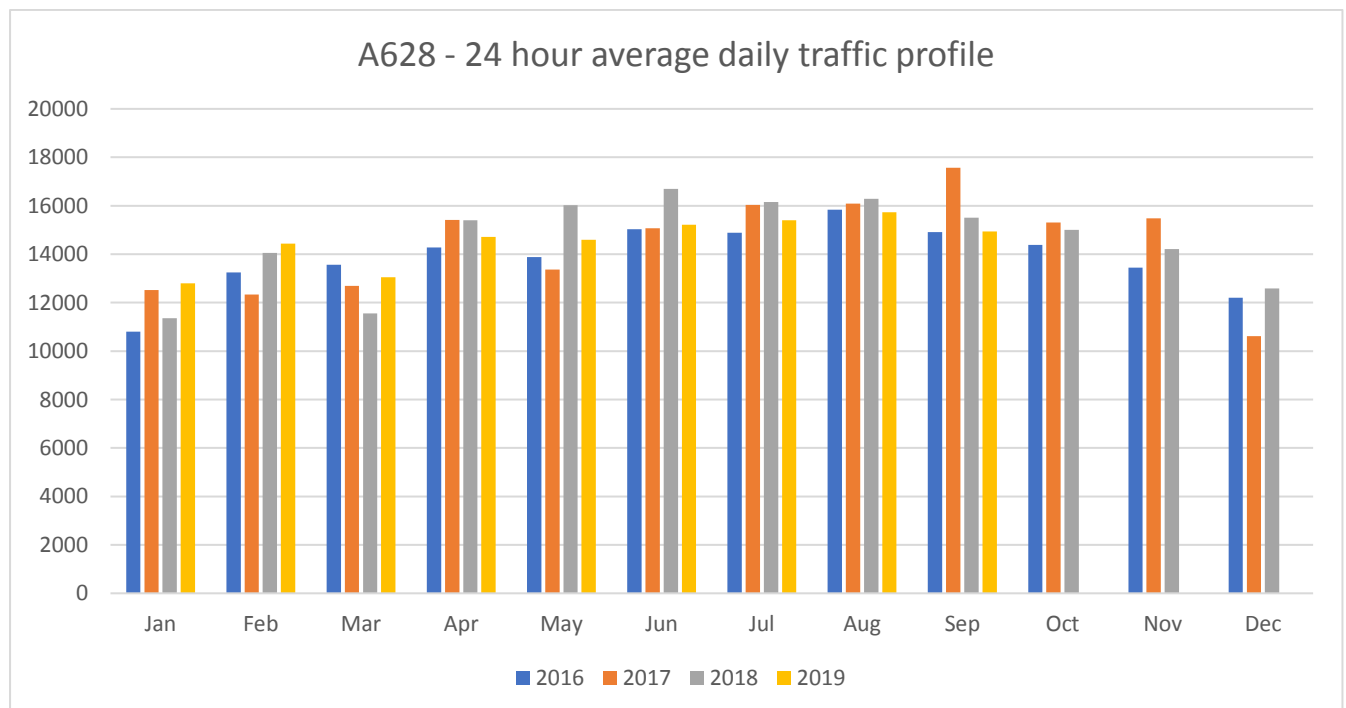
Use of traffic data of less than 4 years old is typically considered as acceptable within the transport planning discipline, unless traffic flows change significantly due to a range of location specific factors. Paragraph 8.1.1 of WebTAG unit M3-1 states that trip ends within the 'Fully Modelled Area' derived from traffic data which are less than six years old is deemed acceptable, which further reinforces the rationale for using traffic data obtained in the latter part of 2016.

Notwithstanding the above, an analysis has been undertaken of the daily flow patterns on the A628 between 2016 and 2019 to establish any daily variation in flows. The outcome of this analysis is illustrated in Figure 3. The analysis is based on data obtained from WebTRIS sites 30361361 and 30361360 for the respective years. Figure 5 demonstrates that average daily traffic flows on the A628 have remained fairly consistent between 2016 and 2019. August flows in particular have seen little or no variation across the years under consideration.

Between 2016 and now, Goddard Lane/Windle Edge has not been subject to any intensification of use by vehicular traffic as it continues to serve as a local access road to a few farmsteads, the Trans Pennine Sailing Club and the Trans Pennine Trail.

In light of the above, the 2016 traffic data is considered robust enough to form the basis of the assessments presented in the traffic chapter of the EAR.

Figure 5 – 24-hour average daily traffic profile on the A628



3. Assessment required of the impact of the morning and evening peaks on the capacity, safety and operation of the strategic road network.

The predicted maximum hourly construction traffic illustrated in Figure 1 and 2 is not material enough to warrant any junction assessments. No further assessments are therefore proposed.

4. Concern regarding the safety risk and A628 / Goddard Lane junction

The predicted level of hourly HGV traffic is unlikely to pose any safety issues at the A628 junction with Goddard Lane. Firstly, the Personal Injury Accident analysis has not highlighted any incidents at this junction in the past five years, which demonstrates that there are no inherent highway deficiencies requiring further investigation. It is also worth noting that vehicles with horse boxes turning right into Goddard Lane is a regular feature at this junction, without any recorded safety related incidents to date. Secondly, as demonstrated by the Google Street View image in Figure 6, by virtue of the topography of the location, an HGV driver turning right will have forward visibility in excess of 200m. Generous forward visibility combined with low predicted hourly construction traffic would alleviate any potential safety issues at this junction.

Figure 6: A notional vehicle waiting to turn right into Goddard lane, looking west along the A628



Source: (Source: Google Streetview https://www.google.com/maps/@53.5013892,-1.7890035,3a,60y,97.33h,89.17t/data=!3m6!1e1!3m4!1sNZCONLuW2t1c7-K_vUbg5g!2e0!7i13312!8i6656)

5. The Abnormal Indivisible Loads proposals and routes to be agreed.

Section 2.12 of the Construction Traffic Management Plan sets out the key principles underpinning the AIL strategy for the proposed project. An 'Abnormal Indivisible Load Access Study' detailing the route strategy for AILs has been prepared and is included at Appendix E of the CTMP. Stakeholders consulted during the preparation of this report includes the Police, Highways England Historical Railways Estate, Network Rail, Canal and Rivers Trust and Barnsley Metropolitan Borough Council.

The route has been structurally cleared by Highways England Historical Railways Estate. As part of this updated desktop review, a written response from HE Area 12 has not been provided to date. However, no significant issues are expected as the route was approved in 2016, and it is assumed that the route is acceptable as far as they are concerned in the absence of any information to the contrary.

Barnsley Council Highways Department Queries

1. Access Strategy

It is noted that AP7 forms entry to the northern access road. The forecast construction trip numbers presented in the chapter 12 of the EAR suggest 18 two-way hourly movements along Windle Edge. It is further noted that the forecast traffic numbers are averaged based on a 10 hour day and five day week and whilst arrivals will be planned to avoid mass arrival there remains the possibility of multiple arrivals/ departures at any one time. Further information would be required on the swept path analysis of the expected maximum size vehicle that will access via AP7. Such analysis should also seek to demonstrate how two way movements will be maintained or controlled along Windle Edge. Given the frequency of HGV arrivals to the access, this should also include for the passing or management of passing HGV traffic on Windle Edge. The strategy recognises the limited site lines and forward visibility achievable at AP7 and suggests a qualified banksman will assist in accessing the works at this point. Although proposed alongside a temporary 20mph speed limit, without additional supporting information to the contrary, I would take the view that the forward visibility of southbound approaching traffic, together with the frequency of site arrivals, would present substantial highway safety concerns over the current proposed approach to construction traffic management.

In response, we do not believe that our proposals increase highway safety risks disproportionately for the following reasons.

1. The forecast 18 two-way movements equate to one construction vehicle arriving every seven minutes. Multiple arrivals are unlikely and only hinder the site operations since the HGVs bringing the material will be limited by what can be achieved on site at any one period.
2. Drawing number PDD-33492-LAY-084 shows the interaction between a bus and a mobile crane (widest vehicle). Our widest vehicle (mobile crane) is no wider than typical farm tractors that use this road without difficulties. During the life time of the project only four mobile crane movements are anticipated. Majority of the construction vehicles are standard HGVs which should be able to traverse the route without adding disproportionate safety risks
3. Visibility at the AP7 intersection is 80m and 120m which exceed the recommended sight line values, please refer to PDD-33492-LAY-083. The traffic data for Brook Hill Lane shows that the 85th percentile speed is 40 mph. DMRB states that for a 40mph road the minimum required visibility is 90 metres. Manual for Streets states that for a 40mph road the minimum required visibility is 60 metres. For the location in question we recommend the use of Manual for Street because it is a local rural road. According to Manual for streets this junction is within the requirements in terms of visibility.
4. However, for additional safety reasons, with the permission of BMBC we will be implementing a temporary 20mph speed limit until the end of construction activities. Manual for Streets states that for a 20mph road the minimum required visibility is 25 metres which is well within the provisions of the current layout.
5. Drawing number PDD-33492-LAY-085 shows the Low Loader swept path for accessing AP7. The number of low loaders accessing the site are insignificant compared to the other construction vehicles but nonetheless it shows no constrictions.

Abnormal Loads:

The current swept path analysis of AP7 (20191013 PDD33492LAY030_Preliminary Bellmouth Layout AP7.pdf) shows a 60t mobile crane accessing from the south. Further swept path analysis and supporting text suggest that AIL arrivals via the current car park will be required to reverse into the car park. The information presented to date suggests that AIL's will utilise the carriageway at the Dunford River Bridge to perform such manoeuvres.

If this route / manoeuvres are expected this should be considered alongside the advice provided by colleagues in Highway Bridges and Structures relating to the Dunford River Bridge (B5.017).

On 17 December 2018 Babak Ahmadian (BMBC) wrote to Damian Spurr (NG) to confirm that the bridge in question has 40t capacity and there is no weight restriction in place.

Temporary Car Park Arrangements:

The current swept path analysis of the proposed temporary car park arrangements show a bus reversing within the car park (close to the main entry/exit point). This would be unacceptable for reasons of accessibility, manoeuvrability and safety. Alternative options should be presented whereby a bus does not have to reverse within the car park and can safely access the stop to pick up and set down passengers.

In addressing BMBC's comments, the temporary car park layout has been redesigned to allow a full size bus to make a 180° turn without having to make reversing manoeuvres. The revised layout provides 18 standard parking bays, two disabled bays and a horsebox parking bay as shown in drawing no. PDD-33492-LAY-082.