Bournemouth, Dorset and Poole Mineral Sites Plan Examination

September 2018







Preliminary Assessment of the Cumulative Impacts of Quarry Traffic from BC-04 Trigon Hill Extension; AS-12 Philliol's Farm and AS-15 Tatchell's Extension on the C7 Sugar Hill Road (Version 2)

Background

The three sites being considered, Philliols Farm, Trigon Hill and Tatchell's, all connect to the C7 Bere Road.

The C7 Bere Road has an southeast to northwest alignment and connects to the A35 Poole Road at Woodbury Cross to the East of Bere Regis and to the A351 Sandford Road at north Wareham.

The junction of the C7 Bere Road with the A35 is a well designed and built priority junction having a standard single carriageway with a right turn lane. Visibility at, and of the junction is very good. It is covered by the national speed limit. This section of the A35 is identified as a Regional Route, and leads within a very short distance to Bere Regis and the junction with the A31 Primary Route Network from the East and the A35 continuation of the A35 west which then becomes Primary Route Network.

The southern end of Bere Road joins the A351 Sandford Road just north of Wareham at a well-designed roundabout. This in turn connects to the Wareham bypass to the south which provides suitable access to a processing site at Furze Brook to the south (not part of this submission) but involved in processing Ball Clay from the Trigon Hill site.

The C7 in has an AADT¹ flow of in the region of about 3,200 vehicles per day which is considered low.

The northern half of the C7 Bere Road has a 60mph speed limit reducing to 50mph and subsequently 30mph as it enters the outer residential fringe of Wareham then joins the A351.

Over the entire length of the C7 Bere Road there have been 15 collisions in the last 5 years. 1 fatal, 4 serious and 10 slight. Only 1 of these involved a lorry but it was not at fault as there was evidence to suggest a pedestrian had stepped out into its path.

Cumulative impacts

To minimise cumulative impacts of quarry traffic on the C7 Wareham to A35 road, the Philliol's Farm site will not begin extraction operations while both the Tatchell's and Trigon Hill mineral operations are still working unless it can be clearly demonstrated that the local road network has the necessary capacity for the traffic loading that would be generated by all three sites working simultaneously

Tatchell's Quarry

This site has a traffic generation (two-way) of 26 vehicles per day and this is not expected to change with the extension. This is only about 0.8% of the AADT flow on the C7 Bere Road and extraction here is expected to cease before it commences at Philliol's Farm.

¹ Annual average daily traffic, abbreviated **AADT**, is a measure used primarily in transportation planning, transportation engineering and retail location selection. Traditionally, it is the total volume of vehicle traffic of a highway or road for a year divided by 365 days.

Philliol's Farm

The rate of extraction at Philliol's Farm will vary depending on market demand, and possible planning constraints. The rate of extraction is likely to be around 200,000 tonnes per annum, which equates to approximately 80 vehicle movements per day. This is only about 2.5% of the AADT flow on the C7 Bere Road.

Trigon Hill Quarry

An application for a proposed extension for ball clay extraction is currently being determined. If permitted, traffic movements are estimated to be 56 vehicles per day, going as high as 80 vehicles per day during campaigns of ball clay removal, or as low as no movements per day sometimes.

Traffic associated with sand and gravel will cease and traffic generation from this proposed extension will be much reduced over previous levels. Since traffic is currently being generated from this site, the proposed extension would not represent a cumulative impact in its own right. 80 vehicles per day equates to 2.5% of the AADT flow on the C7 Bere Road.

Highway Authority Comment

Given that two quarries are currently operating (Tatchell's and Trigon Hill) the County Highway Authority considers that these potential traffic levels should not be a problem.

Even if all three quarries did operate concurrently this would account for a cumulative total of approximately 186 vehicles per day. This is only about 5.8% of the AADT flow on the C7 Bere Road.

The proposed individual and cumulative effects of the three sites are not expected to lead to any significant increase in traffic or collision risk.

The County Highway authority therefore sees no reason to not allow the vehicle movements both during the day and at peak traffic times associated with these sites. Obviously it is best for the operators and drivers to try to avoid peak times and also travelling via the A351 Sandford Road north of its junction with the C7 Bere Road when possible.