

TRAFFIC REPORT

Within the Neighbourhood Development Plan area

This brief report deals with the traffic situations now and for the foreseeable future in the N.D.P. area.

Traffic figures have been taken from the most recent available data, namely *High Speed Rail (West Midlands – Crewe) Environmental Statement Volume 5: Technical Appendices - Transport Assessment (TR-001-000) Part 1*.

Traffic figures on the accompanying linear drawings show the total average daily flow (i.e. both directions added together) known as the Annual Average Daily Total or AADT.

It must be emphasised that traffic data was obtained at different times between November 2015 and July 2016 and therefore strict mathematical calculations are not possible owing to differing recorded volumes.

The Neighbourhood Development Plan area (NDP) is served by two major routes: A51 Stone to Nantwich road and A53 Newcastle to Market Drayton road. Numerous side roads intersect with these two and connect with areas such as Keele, Stableford, Chapel Chorlton, Maer, Madeley and Aston. A51 and A53 roads intersect at Blackbrook where they run together as A51 for 300m before dividing.

With regards to traffic, this report deals with two areas of principal concern, namely Baldwins Gate (in the parish of Whitmore) and Blackbrook (in the parish of Maer & Aston).

1) Baldwins Gate.

A53 runs through the village of Baldwins Gate, is subject to a 30mph speed limit and has developments on each side of it. It is considered to be the major conurbation within the N.D.P. area.

Plan 1 shows the diagrammatical layout of the area together with HS2 traffic figures underlined. Computed volumes have been extrapolated from this information and the calculations shown; these are circled.

There is one anomaly of particular note: to the west of Holly Bush Lane there is a recorded volume of 9,855 but at Blackbrook (see plan 2) there is a computed volume of 10,270 - a difference of 415 and with no junctions of note between the two sites. Consequently, I have considered the mean of these two i.e. 10,063, in the following calculations. Deducting Holly Bush Lane traffic of 542 suggests 9,521 vehicles pass the end of Madeley Road.

Consideration should now be given to Manor Road (referred to as Madeley Road by HS2) and to Woodside. 1592 vehicles are recorded on Madeley Road; allowing a 50/50 split of this traffic between A53 to/from the east with Woodside, then 796 vehicles can be added to the 9,521 above. Furthermore, local knowledge and experience suggests that a similar amount of A53 traffic to/from the east use Woodside so adding these in brings an estimated AADT at the western end of Baldwins Gate of **11,113** (9521 + 796 + 796)

Moving now to the eastern end of the village, 12,672 vehicles are recorded on A53 east of Common Lane which itself carries 343 vehicles. As most of these will travel to/from the east, it is reasonable to say that **12,329** vehicles (12,672 – 343) will enter Baldwins Gate.

In conclusion, it can therefore be realistically assumed that 1,216 vehicles (12,329 – 11,113) start or finish in the Baldwins Gate area between Common Lane and Woodside, on a daily basis.

2) Blackbrook

A51 passes through the area of Blackbrook and is crossed by A53 by means of staggered junctions i.e. the A53 runs within A51 for 300 metres. Although A53 traffic is required to give way or stop where it intersects A51, it carries the heavier volume of traffic. The area is subject to a 50mph speed limit.

As stated, the heavier traffic flows are on A53 which means queuing is inevitable at the junctions with A51. Dealing firstly with the eastern most of these, table 79 of the HS2 document referred to above shows the turning volumes and paragraph 5.6.26 states "*The model shows that this junction operates close or over its capacity on the A53 Newcastle Road arm in the AM and PM peak periods*".

Turning to the western intersection, table 85 of the HS2 document shows the turning volumes and paragraph 5.6.38 states "*The model shows that this junction is approaching capacity on the A53 arm in both the AM and PM peak periods*".

Plan number 2 shows the diagrammatical layout of the area together with HS2 traffic figures underlined. Computed volumes have been extrapolated from this information and the calculations shown and circled.

What is evident is that these two intersections will become seriously overloaded with natural traffic growth and more importantly by HS2 construction traffic, most of which will be HGV's. (Figures are available at table 338 of *High Speed Rail (West Midlands – Crewe) Environmental Statement Volume 5: Technical Appendices - Transport Assessment (TR-001-000) Part 2*).

Implementation of junction improvements prior to commencement of construction are essential.

Attachments:

Plan 1 – Baldwins Gate.

Plan 2 – Blackbrook.

(signed) *R Latham*

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