

**B5017 Henhurst Hill, Forest Road and Shobnall Road,
Burton upon Trent
Request for 7.5T Weight Limit
Preferred Options Feasibility Report**



Version control

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Burton upon Trent
Proposals for 7.5T Weight Limit**

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Chapter 1 - Introduction

- 1.1 Around 2 years ago the Shobnall Traffic Action Group (STAG) was established, following concerns centred on the use of the B5017 Shobnall Road, Forest Road and Henhurst Hill by HCVs.
- 1.2 The issues here revolve around the increased use of the B5017 by HCVs primarily in the evening and overnight and the noise, vibration and distress this is causing. The group have produced a YouTube video highlighted their concerns. <http://youtu.be/i6SpvOOcpWU>
- 1.3 The County Council first became aware of concerns about this road 18 months ago when several residents contacted the County Council over noise and vibration issues affecting their properties and also causing distress.
- 1.4 The two local County Councillors, Councillor Corbett and Councillor Clarke are aware of the issues and concerns.
- 1.5 A major maintenance has just been completed investing over £525k in resurfacing the B5017, which has significantly removed the noise and vibration issues in Henhurst Hill and Forest Road, although this has not yet been extended into Shobnall Road.

Chapter 2 - Existing environment

- 2.1 The B5017 is located to the West of Burton upon Trent, forming an important artery into the Town. Onwards the B5017 leads to the New St Georges Park, the A515, the A50 and then onwards to Uttoxeter.
- 2.2 In the urban 30mph section there are properties directly situated on either side of the B5017 with direct access to it. There are several small industrial estates adjacent to the B5017, along with Marston's Brewery having direct access onto the B5017. Onwards the area becomes rural national speed limit, with isolated properties accessing it, there are several businesses along its length including a skip hire company and a waste transfer station.
- 2.3 The strategic route for traffic accessing St Georges Park from the South of the County takes traffic along the B5017 Shobnall Road.
- 2.4 Directly opposite the Marston's Brewery there is access the Shobnall Leisure Complex.
- 2.5 Situated on Shobnall Road is the Shobnall Grange Primary school. This has recently been included within the '20 is plenty' campaign, with the use of term time fixed speed indication devices (SIDS). These have now been replaced with 20 is plenty signs. A day nursery is also situated along its length.

- 2.6 Shobnall Road is approximately 6.3 metres wide. There are footways on both sides at either end with an average width of 1.8m wide and footways on one side only in the Forest Road section with an average width of 1.3m wide (with parked vehicles straddling the footway). It has a 30 mph speed limit in the urban section and is fully illuminated. The road is on a bus route with a number of bus stops along its length.
- 2.7 The B5017 forms part of our Strategic Network and is signed accordingly. The road is gritted as part of our Precautionary Gritting regime.
- 2.8 To the East of Shobnall Road is the Centrum 100 business park. There are a number of major retailers situated in this area, including Boots, Holland Barrett, and Pallet Force, along with numerous other large businesses. Further along are several retail parks with the likes of B&Q, Wickes, Morrisons, and PC World etc.
- 2.9 A permanent traffic count is sited on the B5017 at Shobnall Road and this was adapted in order to capture additional information relating to HCV movements

Chapter 3 - Action taken and communications

- 3.1 The Cabinet member for Highways and Transportation Councillor Maryon, The leader of East Staffordshire Borough Council, local County Councillors and officers, along with Andrew Griffiths MP have met the STAG group and have discussed the issues and concerns.
- 3.2 An initial Traffic Survey was undertaken in September 2011 and the results have shown that around 5.9% of all traffic using the B5017 is HCV traffic. This compares to a Staffordshire average of around 4.5% for other 'B' roads in Staffordshire. The results of this survey can be found in Appendix 1 of this report.
- 3.3 The Staffordshire Freight Strategy April 2011 offers advice on the use of 'B' roads as follows:-

The Staffordshire HCV Driver Survey (SHCVDS, January 2010) asked drivers what proportion of total journeys were distributed between Motorway and A-class Trunk roads, other A-class roads and B-class roads and the rest of the network. In any cases of uncertainty or confusion in classification and in order to expedite an easy response dual carriageways were taken as a proxy for Trunk roads. 67.5% of journeys did not encounter any roads of B-class or lower and a further 26% of journeys had involved at least 90% of distance covered without encountering a B-class road or lower (93.5% of all HCV journeys therefore involved at least 90% of distance covered on roads classified as A-class or higher).

Looking from the perspective of the top of the road hierarchy down it was found that 71% and 49% of all journeys maintained at least 70% and 90% respectively of distance travelled on motorways and trunk roads.

Much of the HCV traffic in rural areas has a legitimate right of access to a point of collection or delivery and a significant proportion of it is related to a business operating in the rural area. The small proportion of HCV traffic that is using the rural network inappropriately however is of considerable concern to local communities.

- 3.4 It was agreed that due to the ongoing roadwork's taking place in autumn 2011, a further traffic count survey be undertaken. This was completed in late May 2012 and the results are shown in Appendix 2.
- 3.5 Traffic Counts were also taken when the B5017 was closed in January 2012 on the surrounding diversion route and other roads to compare how the traffic used alternative routes, before, during and after the road was closed. These can be found in Appendix 3.
- 3.5 Attached in Appendix 4 are graphs showing the commercial vehicle counts Eastbound and Westbound between the period of September 2011 and August 2012 which shows the commercial vehicle flows for a 12 month period, this also shows the total number of vehicles for the same period.
- 3.6 It was also agreed that we undertake a 'livery' survey in order to understand the usage of the B5017 by HCVs and to understand why HCV drivers feel they need to use this road in preference to other routes. The results of this survey can be found in Appendix 5.
- 3.7 The timing of this survey was planned carefully to maximise daylight hours and also in a location where maximum benefit could be attained. Attention is drawn to guidance in the 'Design Manual for Roads and Bridges Chapter 12 May 1996 – Traffic Appraisal Advice:-

Surveys should be carried out during a 'neutral', or representative, month avoiding main and local holiday periods, local school holidays and half terms, and other abnormal traffic periods. National experience is that the following Monday to Thursdays can be neutral a) late March and April – excluding the weeks before and after Easter, b) May - excluding the Thursday before and all of the week of each Bank Holiday, c) most of June, d) late September, e) all of October, f) all of November – provided adequate lighting is available; this requirement often dictates the timescale of the appraisal. Data processing may also add substantially to the study timescale. In addition, if existing data are to be reused, ample time must be allowed for them to be identified, obtained from their current custodian, reprocessed as necessary, and checked for consistency and validating. Further delays may be incurred if these checks reveal that the data cannot be used

- 3.8 A visual survey of the current signage in the area has been undertaken; there is no evidence to show that vehicles are being encouraged to use the B5017 in preference to the A38, A50 or A515 and surrounding 'A' roads. Existing signage shows that traffic accessing Burton via the

A50 or the A515 are encouraged to use the A50 and the A511. Traffic exiting Burton heading North or South are encouraged to use the A38 and onwards to the A50.

- 3.9 There are potentially three new residential developments proposed along this corridor that may have a potential to affect traffic flows here.

Chapter 4 - Data Analysis

Accident data:

- 4.1 Accident data has been collected for the B5017 Henhurst Hill, Forest Road and Shobnall Road from the junction with Hopley Road to the junction with the A5121, excluding the junction with the A5121. This has been checked for the last 3 year complete period from 1st May 2009 to 30th April 2012 which is the latest complete data available and can be found in Appendix 6.
- 4.2 There were 19 personal injury accidents within the area of this study. One of the injuries sustained were serious, the others were slight. Only one of these accidents involved a commercial vehicle and this was of 3.5T mgw and under.

Speed Data:

- 4.3 The speed data for the B5017 is attached in Appendix 7. This shows that the speeds here show an 85th percentile speed of 34.7mph and 37mph, with a mean speed of 29.2mph and 31.6mph. These speeds are within enforceable limits for 30mph speed limit. There is one fixed safety camera located along Henhurst hill, along with mobile enforcement measures.
- 4.4 The safety Camera Partnership van has visited the area on a number of occasions between 23rd September 2009 and 23rd September 2012. The fixed safety camera has recorded 278 offences; however, no offences have been captured since December 2010.
- 4.5 Mobile enforcement detected 1063 offences in the same period.

Chapter 5 - Proposed Options and Scheme Costs

The proposed options to be considered here are:-

5.1 Option 1 – No intervention at this time, but continue to monitor

- 5.1.1 By not making any engineering intervention at this time will help to avoid undesired consequences such as the transfer of HCV traffic on to other local roads. No assessment has been undertaken of the potential impacts upon the A515 through Yoxall, the A513 through Kings Bromley, the B5016 through Barton under Needwood or the other

outlying villages and settlements within East Staffordshire and Lichfield District. Further analysis would be required here.

- 5.1.2 Temporary weight limits are only normally used in extreme circumstances either during a period of roadwork's or to protect weak structures etc. The concerns about increased risk of accidents are not borne out by the accident data. There have been very few accidents attributable to HCVs on the B5017. It should also be noted that there is no data to suggest the A515, the A513 and the B5016 have a high HCV accident history.
- 5.1.3 The A515 through Yoxall is already subject to concerns by local residents and a 'not fit for purpose' group exists. This group are also seeking HCV restrictions. A 7.5T weight limit on the B5017 Henhurst Hill may lead to increased traffic on the A515, the A513 and the B5016 thus opening the calls for similar restrictions.
- 5.1.4 Barton under Needwood has previously requested a weight limit on the B5016 through Barton under Needwood.
- 5.1.5 The existing Tactical Diversion route for the A38 for use in times of emergencies is currently being reviewed by the County Council and the Highways Agency. The current route is via the B5016 through Barton, the C18 and the B5017 along Henhurst Hill, Forest Road and Shobnall Road. However, the use of this route for planned works by the Highways Agency is currently on hold whilst this review takes place (apart from emergencies).
- 5.1.6 The County Council has developed a Staffordshire Freight Strategy document that seeks to identify the needs of HCV users whilst proactively engaging with communities to whom are affected by such use. This document can be viewed at <http://www.staffordshire.gov.uk/transport/transportplanning/localtransportplan/appendixl-staffordshirefreightstrategy.pdf>
- 5.1.7 The County Council has a previously communicated to Michael Fabricant MP our views upon the pro active management of our 'A' and 'B' Road network which can be found in Appendix 8.

5.2 Option 2 – Install an 'experimental' environmental Weight Restriction for a defined period:

- 5.2.1 In this particular case we would need to apply for an order use an experimental 7.5T weight limit.
- 5.2.2 Any order would remain in place for a maximum of 18 months of which the first 6 months will be open to consultation from the general public on the effect to other roads.

- 5.2.3 The order can be removed at any time during that 18 month period by means of an advertised termination.
- 5.2.4 To implement such an order would require local consultation with the Police, other emergency services and the Freight Hauliers association.
- 5.2.5 Side roads approaching the area of the 7.5T limit would need appropriate signage.
- 5.2.6 The cost to introduce an experimental 7.5T weight limit would be in the region of £10,000 plus £1000 to introduce the order.
- 5.2.7 Weight Restrictions are enforced by the Police or Trading Standards. To enforce such a proposed weight restriction may require additional resources. It should be noted that many of the freight movements to and from Centrum 100 and other distribution centres within Burton and surrounding areas take place between 18:00hrs and 06:00hrs and as such enforcement is unlikely to take place.
- 5.2.8 The Police, Trading Standards and The Fire and Rescue Service (FARS) do not support the introduction of a 7.5T weight limit here. We will require their support for any potential enforcement here.

Works Elements	Approximate Estimate (£000's)
	<u>Experimental Weight Restriction</u>
Civil Construction	10
Statutory undertakers diversions	•
Land acquisition	-
SCC design/consultation fees(including the order)	7
Total	17

- Liaison with statutory undertakers, to confirm the extent and cost of any illumination works.

- 5.2.9 Whilst accurate costs cannot be produced until a full detailed design has been produced and consultation is required on such schemes and as a result design fees have been increased to a realistic sum.

5.3 Option 3 – Improved signage: Strategic Signing Strategy

- 5.3.1 Whilst at present there does not appear to be evidence to show that HCVs are being directed to use the B5017, it is a 'B' road and is signed accordingly. However, there may be some potential to amend existing signage further to encourage vehicles to use other routes such as the A515, the A50 and the A38. There are around 10 large Advance Directional Signs (ADS) on the approaches to Burton upon Trent, excluding those on the A38 and the A50. These could be amended to include improved route strategic signage that directs traffic to the A50, A38, A515 and A511.

Works Elements	Approximate Estimate (£000's)
	<u>Additions to existing signage</u>
Civil Construction	20
Statutory undertakers diversions	•
Land acquisition	-
SCC design/consultation fees	5
Total	25

5.4 Option 4 – Gateway signage

- 5.4.1 Access for HCVs into the area of Henhurst Hill, Forest Road and Shobnall Road is via an island at the West of the area locally known as 5 lane ends and via an island at the East of the area at the junction of Shobnall Road and Parkway. It could be possible to highlight the area as a 'residential zone' with 'gateway features' that discourage HCVs to those having immediate access from either end.
- 5.4.2 Whilst this may discourage some of the offending HCVs, it may not deter all. It is also important that existing businesses within this area must still be able to gain access into the area.
- 5.4.3 The signing here could be designed so as to reflect upon the existing 'National Forest' signing and to give drivers a sense that they are entering an area which is residential and inappropriate for their use. Materials used could be timber or similar that differs from existing signage and would be located at 5 lane ends and at the junction with Shobnall Road and Parkway.

Works Elements	Approximate Estimate (£000's)
	<u>Gateway signing on the B5017</u>
Civil Construction	10
Statutory undertakers diversions	•
Land acquisition	-
SCC design/consultation fees	2
Total	12

5.5 Option 5 – Speed awareness measures:

- 5.5.1 Although the traffic speed data (Appendix 7) shows that the 50%-ile and 85%-ile speeds are within enforceable limits, further work could be done to reinforce the speed limit in this area, especially in the Shobnall Road area. From the existing fixed and mobile enforcement activities a large number of fixed penalty notices (FPN's) have been issued.

- 5.5.2 This could be further reinforced by improved signage measures along the route to advise drivers of their speed.
- 5.5.3 Further investigations to determine if Vehicle Activated signage (VAS) could be incorporated along the route, to further reinforce the 30mph speed limit. However, a more detailed investigation here would be required on the benefits this would bring.
- 5.5.4 Outside the Shobnall Road Primary School, consideration should be given to incorporating this into our permanent programme of '20 is plenty' sites across Staffordshire. This would operate during school drop off and collection, during term time only. Outside of school drop off and collection the road would revert back to 30mph.

Works Elements	Approximate Estimate (£000's)
	<u>Continued Dialogue</u>
Civil Construction	
VAS Signing to introduce a '20 is plenty' signage.	20
Investigate additional signage measures	8
Statutory undertakers diversions	•
Land acquisition	-
SCC design/consultation fees	0
Total	28

5.6 Option 6 – Continued Dialogue with local hauliers:

- 5.6.1 It is most important that local haulage companies are involved at an early Stage to understand their views on the potential impact any of the above proposals, as any of these measures may have an effect upon their business and the potential future prosperity and employment opportunities for Burton upon Trent. Effectively this would be officer time to meet individual companies to discuss their logistics and freight movements.
- 5.6.2 This will be based upon the Livery survey results, targeting those companies using the B5017 where clear and evident use is taking place.

Works Elements	Approximate Estimate (£000's)
	<u>Continued Dialogue</u>
Civil Construction	0
Statutory undertakers diversions	•
Land acquisition	-
SCC Officer time	1
Total	1

5.7 Option 7 – Improved off Street Parking:

- 5.7.1 The properties along Henhurst Hill and Forest Road are set some way off the road and have long driveways, there is not an on street parking issues here.
- 5.7.2 The properties on Shobnall Road however, are situated very close to the road and have no off street parking, although there does appear to be some rear access available.
- 5.7.3 Previously raised concerns have been centred on the on street parking, associated damage etc.
- 5.7.4 Investigations through the relevant land owners to determine if rear access to off street parking could be utilised by the residents along Shobnall Road. This would ease the issues of damage, congestion etc. The knock on effect however, could be that vehicle speeds could increase due to there being no vehicles parked on the carriageway.
- 5.7.5 This could be countered by looking at reducing the carriageway widths, increasing footway widths and creating chicanes with greenery that enhance the urban residential feel of the area and this may discourage HCV use.
- 5.7.6 This could be funded by the potential new developments along this route from 'developer contributions'. However the infrastructure costs here could be high and will require significant design and consultation. The costings below are purely indicative and further detailed work would be required on both the feasibility and to gain accurate costings.

	Approximate Estimate (£000's)
Works Elements	<u>Off Street Parking and Traffic Calming</u>
Civil Construction	150
Statutory undertakers diversions	•
Land acquisition	?
SCC design/consultation fees	15
Total	165

Chapter 6 - Summary

- 6.1 Whilst there is not a significant road traffic accident problem along the B5017 Henhurst Hill, Forest Road and Shobnall Road, there is community concern over the number of HCVs. Staffordshire County Council has carried out significant investment to reconstruct the road to reduce noise and vibration, however concerns over safety still exist.

- 6.2 The introduction of an 'experimental' environmental weight restriction in the area may assist (albeit only temporarily) in preventing the B5017 being used inappropriately by a small number of heavy goods vehicles. However, It could transfer HCV traffic to other roads and would also be difficult to police. It is unlikely to prevent a large proportion of vehicles that currently have access from using this road.
- 6.3 The costs to set up such an order is high and the benefits achieved will be low in terms of HCV reduction.
- 6.4 The Police and Fire and Rescue Service (FARS) do not support the introduction of a 7.5T weight limit here. We will require their support for any order and future enforcement.
- 6.5 The County Councils Staffordshire Freight Strategy 2011 details the use of HCV's on Staffordshire Roads.
- 6.6 Serious consideration needs to be given to the potential 'knock on' effect to other villages, who may also request such weight limits. Including, Barton under Needwood, Yoxall and Kings Bromley.

Chapter 7 - Recommendations

- 7.1 Option 2 is therefore not recommended due to the potential knock on effect to other villages, the enforcement issues, the initial set up costs and the marginal effect that this would have on HCV use. It is therefore recommended that this option is NOT pursued at this time.
- 7.2 Option 3 improved signage: strategic signage strategy has the potential to direct HCVs away from the B5017 and onto 'A' class roads into and out of Burton. This is the preferred option here as it is considered most likely to provide a sustained reduction on HCV traffic along the B5017.
- 7.3 Options 4 and 5 which incorporate gateway signing and speed reduction measures go some way to manage all traffic using the B5017 and as with Option 3 go a long way to the long term management of the B5017.
- 7.4 Option 1 and Option 6 look to manage the current situation by continued monitoring and dialogue with Hauliers. This engagement has benefits as it engages with local businesses on the community impact their operations have. The livery survey data is a good starting point to target those users of the B5017 on why they feel the need to use this route as opposed to other roads. However, this needs to be managed along with the continued economic prosperity and employment that these businesses bring to Burton upon Trent and surrounding areas.
- 7.5 Option 7 seeks to utilise the potential for 'developer contributions' from new developments to seek to improve off street parking. These can then be utilised with options 4 and 5 to effectively manage the use of the roads and target inappropriate speeds of vehicles. Many of the frustrations as

highlighted within the STAG petition centre upon the difficulties encountered when large HCV's meet parked vehicles and those vehicles attempting to pass parked vehicles. Initial discussions with these potential developers have been favourable in terms of their support to financial contributions here.

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