

**MARLBOROUGH AND TIDWORTH COMMUNITY AREA
WORKING GROUP.
A338/A346 LGV ISSUES.**

INTRODUCTION

The Working Group was established in 2008 as a result of many complaints about the volume of traffic, particularly the number of Large Goods Vehicles (LGVs), on the A338/A346 road between the junction of the A338 with the A30 at the Laverstock mini roundabout near Salisbury, and Junction 15 of the M4 motorway near Swindon. This is a distance of 34 miles and known as the Corridor.

Traffic along the Corridor is augmented by traffic entering from the A303 at Parkhouse Junction near Cholderton, from the A342/A346 through Ludgershall, from Hungerford and from Pewsey at Burbage, and from the A4 and the A345 at Marlborough. A map of the Corridor area is attached as Document 1.

The Corridor is single carriageway and passes through Marlborough and a number of villages, the only one of which with a by-pass is Burbage. The route is hilly, straight in places with blind humps at the top of hills. In other places it has sharp bends, a number of narrow sections and it passes over two narrow and badly aligned railway bridges. Although the A338/A346 is a Primary Route, that is to say it forms part of the National Primary Route Network, it is not suitable for through LGVs. It has never been part of Wiltshire Council's strategic lorry route and this policy has been continued in the SW Region's draft transport strategy.

While it is accepted that little can be done to reduce pollution caused by some of the traffic using the Corridor, the Working Group consider that there may be scope for reducing the environmental damage caused by Large Goods Vehicles (formerly known as HGVs) passing along the Corridor as through traffic.

OBJECTIVE.

The objective is to reduce the amount of through LGV traffic on the Corridor.

METHOD.

The Report identifies:
The factors, including the problems and issues.
The options available to meet the objective.
The preferred strategy.

It is intended that this Report will be submitted to local Area Boards as stakeholders for their comments, after which it will be submitted to other affected stakeholders for comments before a course of action is decided by Wiltshire Council.

GOVERNMENT GUIDANCE.

In November 2008 the Government published five overriding transport related goals in the document '*Delivering A Sustainable Transport System.*' This is a set of clear goals that take full account of transport's wider impact on climate change, health, quality of life and the natural environment. The Government wants our transport system to:

- Support national economic competitiveness and growth by delivering reliable and efficient transport networks.
- Reduce transport's emissions of carbon dioxide and other greenhouse gases, with the desired outcome of tackling climate change.
- Contribute to better safety, security and health and longer life expectancy by reducing the risk of death, injury or illness arising from transport, and by promoting travel modes that are beneficial to health.
- To promote greater equality of opportunity for all citizens, with the desired outcome of achieving a fairer society.
- Improve quality of life for transport users and non-transport users, and to promote a healthy natural environment.

These are enduring goals, and all are important for building the sort of society we want to live in. We expect to be able to make progress against all five, but are well aware that there can sometimes be tension between the different goals when considering decisions about future transport. In particular, it is important to strike the right balance between supporting economic growth while improving the quality of life.

ASSOCIATED DOCUMENTS

This report should be read in conjunction with the following documents:

Document 1- map of the Corridor.

Document 2- The A338/A346 HGV Registration Plate Survey October 2006, Survey Report dated August 2007. Produced by Wiltshire County Council.

Document 3- Illustration of traffic flow of the data in Document 2.

Document 4- Data on traffic flows obtained from Wiltshire County Council's Automatic Traffic Counters (ATCs) in 2007.

Document 5- Joint Marlborough and Tidworth Community Area Working Group, A338/A346 HGV Issues. Produced by Wiltshire County Council.

Document 6 – Accident Report including HGVs

Copies of these documents are attached. It should be noted that Documents 2, 3 and 5 refer to the northern section of the Corridor between the A303 in the south and Junction 15 of the M4 in the north. No recent survey of the southern section of the Corridor has been carried out with the same level of detail as in Document 2, but a Bourne Valley

Freight Study was carried out on behalf of Wiltshire Council on 19th May 2009. This concluded, among other things, that the A338 south of the A303 'is poorly aligned and not intended to form part of a regional strategic corridor.' Other aspects of that Freight Study are at present under discussion between the Working Group and Wiltshire Council.

FACTORS

1. Volume of Traffic.

a. HGV registration Plate Survey October 2006- North of the A303.

The last major traffic survey on the Corridor between the A303 and Junction 15 of the M4 at Swindon was carried out by Wiltshire County Council in October 2006, and the results of that survey were published in August 2007 in the form of The HGV Registration Plate Survey October 2006. A copy of that report is attached as Document 2, with analysis of the data in Document 3.

The Report established that during a ten hour period on a weekday in October 2006, 125 LGVs were identified as making through northbound journeys along the Corridor between the A303 and the M4 Junction 15 near Swindon. It is reasonable to assume that approximately an equal number of vehicles also travelled from north to south along the Corridor during the same period making the average number of through LGVs 25 per hour over that ten hour period. The report also established that about 26% of LGV traffic north of Marlborough was through traffic. The percentage of through LGVs is higher through the Collingbournes and Savernake –see document 3.

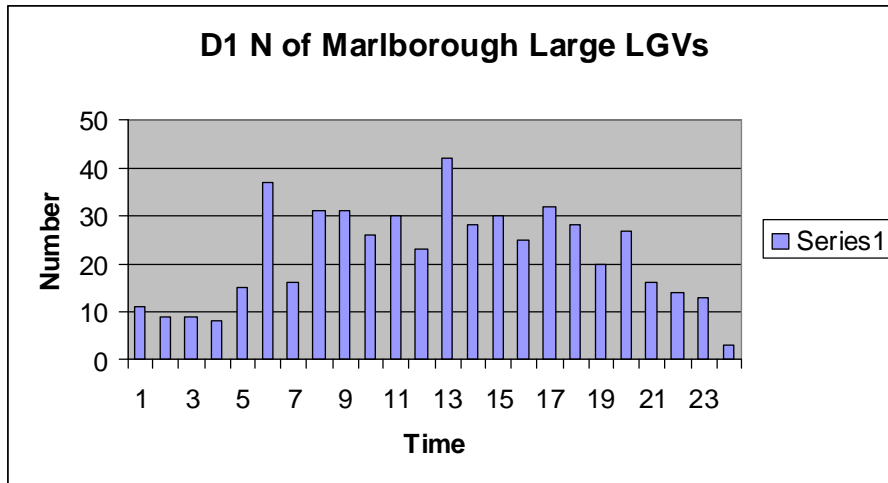
b. The A338 South of the A303 Between Cholderton and Salisbury.

It is abundantly clear to all those who live along the southern part of the Corridor that traffic there is at a very high and unacceptable level. Although ATC readings confirm that the volume of LGV traffic along the Corridor to the south of the A303 is lower than in the north, it is still at a high level and some sections of the road between the villages are even more unsuitable for LGV traffic than in the northern part of the Corridor.

c. Night-time Traffic.

The A338/A346 HGV Registration Plate Survey 2006 did not consider the number of LGVs which travel at night along the Corridor, which people living on the route say is considerable.

The ATC data at Document 4 gives hourly numbers of vehicles, and it is the very large LGVs which cause the main problems, particularly in Marlborough. The bar chart below shows the number of large LGVs, between 12.5 and 30 metres long, travelling on the A346 north of Marlborough on Thursday 19th July 2007.



The chart shows that there were about 9 to 15 long LGVs per hour travelling along the A346 at point D1 north of Bay Bridges. It is very likely that most, if not all, those vehicles also passed through Marlborough, and if so it means that one LGV passed along Herd Street every 4 to 6 minutes from midnight to 6 am. That is not acceptable to the people living along the Corridor route through Marlborough. Further information and comment on the negative social impact from vehicles is at Factors 2.a. and 4 below.

An additional use of the road is by large military vehicles. This traffic is sometimes very heavy and consists of convoys, or of well spaced out single vehicles which travel during both the day and at night.

d. Daily Traffic Volume along the Corridor

Daily average of all vehicles taken from Automatic Traffic Counters

Total number of vehicles in both directions

WCC ATC Code	Location	Average daily total number of vehicles recorded	Number of LGVs recorded in this sample	% LGVs in total number of vehicles
B2	N of Winterbourne Gunner	7,327	326	4.5%
C2	Tidworth Military Cemetery	7,044	592	8.4%
C3	N of Collingbourne Kingston	7,895	836	10.6%
C4	A346 S of Cadley	8,833	883	10.0%
D1	A346 N of Marlborough	15,044	1,241	8.3%

Conclusion.

Given the limitations of the single carriageway road along the Corridor and the Priority Locations on the road as described in Factor 2 below, this road is inadequate and unfit for purpose for the volume of traffic which it carries.

2. Priority Locations.

Nine sections of the Corridor are particularly badly affected by through LGV traffic:

a. Barn Street and Herd Street, Marlborough.

The Corridor route in Marlborough is through a Conservation Area. Along London Road, Barn Street, The Green and Herd Street there are at least 120 Listed buildings. Most of these Listed buildings are residential properties very close to the road, and being Listed they do not have double glazing to help to reduce the noise of passing lorries and hence it is noisy for sleeping. In Barn Street, which is at the bottom end of Herd Street, the road is too narrow for two LGVs to pass. The Listed buildings are all on the east side of the road.



There is no pavement on the west side and no frontage of any houses. Herd Street is on a quite steep hill with traffic lights half way up, and vehicles have to come to a halt and then restart on the hill.



In 2007, on a typical day between 12 noon and 1 pm, **93** LGVs between 6.5 and 12.5 metres long and **42** heavy LGVs between 12.5 and 30 metres long, a total of **135** LGVs, passed along Barn Street/Herd Street. This is more than 2 LGVs per minute.

Barn Street/Herd Street has been identified by Wiltshire County Council as a Location Considered and Prioritised as part of the Local Freight Assessment and Priority Mechanism as at 31st March 2008, and is ranked sixth on the list of Priority Locations. If any width restriction is made at the lower end of Barn

Street, as has been under consideration by Wiltshire County Council, it will be impossible for a car and a lorry, let alone two lorries, to pass and there will be continuing hold-ups to the traffic in Marlborough and hence even more pollution and environmental damage.

The negative social impact from vehicles at Herd Street is described at Factor 4 below.

There is no apparent easy physical solution to the problems at this location.

b. Burbage Wharf.

The A346 crosses over the main railway line from London to Exeter and also the Kennet and Avon Canal. The line carries high speed trains which pass under the road bridge at speeds of around one hundred miles per hour. LGVs are unable to pass each other on the bridges. Long LGVs have difficulty with the bends at each end of the bridges, and despite considerable recent improvements to the metal barriers on the bridges, the prospect remains of a large vehicle leaving the road and falling onto the railway line with catastrophic results.



c. Collingbourne Ducis.

The A338 in Church Street is too narrow for two large vehicles to pass in opposite directions and has no pavement on either side.



This location is rated twenty fifth on the County Council list of Priority Locations. The photographs above show large vehicles on a narrow part of the road in Church Street.

d. Ludgershall.

47% of the through LGV traffic which joins the Corridor from the A303 at Collingbourne Ducis travels through Ludgershall –see Document 3, the flow chart on page 3. There are two points where HGV traffic causes particular congestion:

- (1) At the T junction where the High Street joins Andover Road by the War Memorial.
- (2) At the north end of Castle Street where it bends round sharply into Butt Street.

e. Savernake Forest.

The A346 passes through Savernake Forest which is an SSSI and one of the most notable sites in Europe for veteran trees. South of Cadley stands the Big Belly Oak, an exceptionally large oak which bulges into the road and lorries have knocked bits off the side of this 1,000 year old tree. In 2003, the Big Belly Oak was included amongst the fifty Great British Trees which were singled out by the conservation charity the Tree Council in tribute to Her Majesty Queen Elizabeth II as a special way to mark the Golden Jubilee. From the oldest and the rarest to some of the most historically or culturally famous they highlight the fundamental importance of trees to the national heritage and form a link between past and present.

At the northern end of the Forest, on the side of Postern Hill there is a very large camp site with 600 pitches for caravans or tents. The noise of the many LGVs crawling up Postern Hill is of great concern to the many campers who are trying to sleep on this site.

f. Cholderton.

The A338 runs alongside the River Bourne through the village of Cholderton, and turns south west at the mini roundabout opposite the Crown Inn. The road is narrow and unsuitable for the level of LGV traffic that uses it. The noise pollution caused when vehicles have to slow down and then accelerate away from the mini roundabout has a serious effect on the occupants of the houses in the middle of the village.

g. Porton

The A338 passes through a residential part of the village and is currently only subjected to a 40mph speed limit without double white lines to restrict overtaking. LGVs frequently mount the pavement or straddle the centre of the road. Speeds are too high and the junction with the C288 Winterslow Road is very dangerous, being the subject of several recent accidents.



h. Winterbourne/Hurdcott/Ford

The road south of Porton to Broken Cross Bridge (see below) via the Winterbournes has many sharp bends and is narrow, so much so that throughout this stretch of road between these villages, it is impossible for LGVs travelling in opposite directions to pass without either slowing to a crawl or stopping altogether. The fact that this stretch of road is used by cyclists commuting to and from Porton Down exacerbates an already bad situation.

i. Broken Cross Bridge.

This bridge carries the A338 road over the main railway line between Andover and Salisbury and is approximately mid-way between the village of Hurdcott and the Laverstock mini roundabout. The A338 road has to turn through ninety degrees on both sides of the bridge to cross the railway line which means that all vehicles have to slow right down to cross the bridge and there is no room for any vehicle to pass an LGV or bus on the bridge. A 'C' class road joins the A338 on both sides of the bridge and thus queues form in each of the 4 directions which approach this bridge



The photographs show vehicles having to cross the double white lines when travelling from both directions.

On 22nd September 2009 a car careered off the A338 at Broken Cross Bridge and fell onto the railway line. The driver managed to escape just in time before his car was hit by a train, and fortunately in this case nobody was seriously injured.

This adds to other recent cases of vehicles leaving the road at this location, and like the bridge at Burbage Wharf (see paragraph 2b. above), the prospect remains of a vehicle leaving the road and falling onto the railway line with catastrophic results.

The A338/A346 Corridor compared with Wiltshire Council List of Prioritised Routes.

The current Wiltshire County Council list of Prioritised Routes/Locations consists of 62 locations and routes, few of which are on the National Primary Route Network. The locations shown at Marlborough and at Collingbourne Ducis above are on the National Primary Route Network. The Corridor is subject to LGV traffic at all times of the day and night, with Marlborough and villages such as the Collingbournes, Cholderton, the Winterbournes and parts of Tidworth and Ludgershall suffering severely from noise and other forms of traffic pollution caused by large vehicles passing along the route.

Details of the current WCC list of Prioritised Routes/Locations can be viewed at <http://194.72.162.210/documents/dscgi/ds.py/Get/File-19596/ETED-019-08-Local> Freight Assessment & Priority Mechanism-Priority Routes-Appendix B.Doc.

Conclusion.

The A338/A346 road is unsuitable for the level of LGV traffic which it has to bear, and this situation is likely to get worse- see Factor 3 below.

3. Future Increases in LGV Traffic from Andover Airfield and Solstice Park.

- a. On 1st December 2008 Test Valley Borough Council granted planning permission for a Regional Distribution Centre (RDC) to be constructed at the former Andover Airfield site. This was expected to generate a substantial amount of LGV traffic west along the A303 and then north along the Corridor.

A condition of the planning approval is to be that LGV traffic shall be limited to a total of 7 movements in any one hour along the Corridor, and this will further increase the flow of through traffic from the 25 vehicles per hour shown in Factor 1.a. above to 32 per hour.

The developers of the Andover Airfield site have now reached agreement with the Co-operative Group for the establishment of a new RDC at the site, subject to planning consents. It is understood that this new development is likely to be substantial in terms of size and the amount of new LGV traffic generated, but smaller than the application which was approved in December 2008. The application process for this development has started.

- b. In September 2009 a planning application for a new Regional Distribution Centre (RDC) at Solstice Park, Amesbury was approved by Wiltshire Council, and will now be submitted for Government approval. The number of vehicle movements to and from the site is estimated to be 1500 per day.

If this new application is approved and the RDC comes into operation, the additional traffic along the Corridor will be significant. In the absence of any definite statistics at the moment, it has been assumed that the additional traffic will be the same as for Andover Airfield, i.e. 7 movements per hour, thereby increasing through LGV movements along the Corridor from 32 per hour as in paragraph 3.a above to 39 per hour, or one LGV every 1½ minutes.

The Head of Service, Transport Development, at Wiltshire Council has stated in writing that “The A338 is not proposed to be a barred route or a controlled route, given it’s Primary Route status.” This means that, unlike the Andover Airfield site, there are to be no restrictions on The Solstice Park RDC traffic using the Corridor.

Conclusion.

These likely additional movements add further weight to the conclusions in Factors 1 and 2 above. The fact that LGVs from Andover Airfield and Solstice Park are not yet using the Corridor cannot be ignored because the probability is that they will become a reality within the next few years. In practice, the number of additional LGV movements may turn out to be higher than forecast due to the lack of satisfactory monitoring arrangements.

4. Social Impact.

Air Quality and Noise Pollution.

a. Air Quality.

The UK Air Quality Standards set a target of 40 µg/m³, and a summary of NO₂ roadside monitoring at Upper Herd Street in 2008 showed that the corrected mean average reading was 57 µg/m³, or 42% above the target of 40 µg/m³.

Wiltshire Council’s Environmental Health Department is to carry out a detailed assessment in Upper Herd Street which may include that there is a need to declare an Air Quality Management Area.

b. Noise Pollution.

Details of night- time traffic movements are given at Factor 1.c above.

Noise pollution is at very high levels in Marlborough, and also in villages along the Corridor including both the Collingbournes, Cholderton, Allington, Porton, the Winterbournes and Hurdcott. In addition, it is a problem for Postern Hill camp site.

Conclusion.

Air quality and noise pollution, especially at night, are known to be at very high levels in Marlborough, and are also a major problem in villages south of Marlborough. This has a serious impact on the quality of life of those living along the Corridor, and for visitors to the camp site.

5. Accidents involving LGVs and Accident Rates.

On the A346/A338 between junction 15 of the M4 and the Laverstock roundabout near Salisbury during the five year period 01/03/04 to 28/02/09 there have been 205 accidents resulting in 343 casualties which included 10 fatal, 45 serious and 288 slightly injured.

LGVs over 7.5t were involved in 20 (10%) of these accidents in which 3 people were killed, 9 seriously injured and a further 22 slightly injured; a total of 34 casualties (ie 10% of the total number of casualties).

LGVs 3.5t to 7.5t were involved in 5 accidents resulting in 5 casualties, which included 1 fatal and 4 slightly injured.

Therefore in the 5 year period LGVs were involved in 25 accidents, which is 12% of the total number of accidents. The 25 accidents involving LGVs resulted in 39 casualties, which included 4 fatalities and 9 serious injuries. This is 11% of the total number of casualties, but 40% of the fatalities of which 30% were for LGVs over 7.5t. Of the 45 people seriously injured 20% were in accidents involving a LGV over 7.5t.

Most sections of the Corridor have an accident rate above the average for 'A' roads in Wiltshire of 27. The worst accident rates on the A346/A338 are on the A338 Laverstock to Winterbourne Earls section with an accident rate of 68 and on the A346 Ogbourne St George to the M4 section with an accident rate of 51. These rates are compatible with the other bad 'A' roads in eastern Wiltshire. The A346 has the additional problem of the high number of accidents north of Ogbourne St George due to the high traffic flow of 15,000 vehicles per day which is twice the number for south of the A303.

See also Document 6.

Conclusion

If the number of LGVs on the Corridor is reduced it could result in a reduction in the number of accidents involving LGVs, by 25% north of Marlborough, 50% from Marlborough to the A303 and 40% south of the A303. For the whole Corridor the average total number of accidents per year is 41 with those involving LGVs being 5 per year and this could be reduced to 3 per year if there are no through LGVs.

6. The National Primary Route Network.

The Corridor is part of the National Primary Route Network connecting Salisbury with Marlborough and Swindon. Primary Routes are those which are nationally

designated as being of national and regional significance for through and long distance traffic connecting main urban centres, and are normally marked in green in motoring atlases.

The Wiltshire HGV Route Network does not include the A338/A346 Corridor as part of the County's Strategic Lorry Route. The north-south Strategic Lorry Routes are the A350 and the A34 in Berkshire.

The policy of the Highways Agency is not to agree to any changes to signage on the A303 or the M4 to encourage lorries to use the A34 instead of the A338/A346 Corridor. The imposition of any weight or other restrictions on National Primary Route Network roads appears to be against Government Policy, and to override any other advisory route restrictions suggested under the Wiltshire Freight Strategy or by any public body or pressure group.

Conclusion

The chances of achieving any restrictions on or reduction in LGV traffic along the Corridor appear to be slim unless the Corridor roads are de-primed so that their designation is reduced from the current status as part of the National Primary Route Network.

7. Bypasses.

Attempts have been made in the past to secure the construction of bypasses round Marlborough and the Collingbournes. Both projects failed to be approved for a variety of reasons, including cost, technical problems and environmental issues.

It should be pointed out that if one or more bypasses are built it will encourage more traffic to use the Corridor, thereby increasing traffic pollution pressure on those parts of the Corridor which have not been bypassed.

Conclusion.

It seems unlikely that any bypasses will be built along the Corridor in the foreseeable future, and that they must remain as a long term aspiration.

8. Satellite Navigation Systems.

It has been suggested that the mapping overlay of Satnavs should be amended so that LGVs are directed away from the Corridor route. Among the reasons why this is unlikely to make much difference to the volume of LGV traffic along the Corridor are:

- a. The Corridor is a Primary Route and as such it is mapped as being suitable for LGVs.
- b. The routes indicated would be advisory, not mandatory.

- c. LGVs already use Satnavs which show routes which make no distinction between routes for cars and LGVs. Although development of special software for LGVs, known as UK HGV Routing, is in progress it is going to be many years before it is in general use by drivers of LGVs, and even then it will be unlikely to be mandatory.

For further information about Satellite Navigation Systems, please see Document 2, sixth page and Document 5, fourth page.

Conclusion.

The development and use of Satnavs with UK HGV Routing is a long term project which may eventually assist with the LGV problems on the Corridor, but only to a limited extent.

9. Economic Impact.

Alternative Routes.

If LGV traffic is diverted away from the Corridor, a viable alternative route must be available. The Wiltshire Freight Strategy identified the A34 as a suitable alternative route for LGVs, and the South Western Regional Transport Strategy identified the A36 road through Salisbury to Bath as part of its Corridor of Regional Importance. Potential alternative routes are shown at paragraphs a, b and c below.

Assuming a direction of travel from south to north between the Laverstock mini roundabout and the M4 Junction 15 near Swindon, and based on information provided by the AA Route Planner (www.theaa.com), the distances and running times are as shown in paragraphs a, b and c below. The running times have been calculated from speed limits for large LGVs taken from the Highway Code, namely 30 mph in built up areas, 40 mph on unrestricted single carriage ways, 50 mph on dual carriageways and 60 mph on motorways. They also allow for road junctions, and on this basis the estimated mileages and running times are as follows:

- a. (1) Laverstock mini roundabout to the M4, Junction 15 via Marlborough. The distance is 34.4 miles and the running time about 1 hour 20 minutes.
(2) Laverstock mini roundabout to the M4, Junction 15 via the A30/A343 to join the A303 near Andover, then east to Bullington Cross, north on the A34 to join the M4 at Chieveley and west along the M4 to Junction 15. The distance is 76.2 miles and the running time 1 hour 20 minutes, i.e. the same running time as via Marlborough.
- b. (1) Parkhouse Junction of the A303/ A338 near Cholderton to the M4, Junction 15 via Marlborough. The distance is 25.2 miles and the running time one hour.
(2) Parkhouse Junction of the A303/A338 near Cholderton to the M4, Junction 15 via the A303 to Bullington Cross, north along the A34 to the

M4 Junction 13 at Chieveley and then west to Swindon. The distance is 57.4 miles and the running time one hour five minutes, only five minutes longer than in paragraph b (1) above.

- c. (1) Andover Airfield to the M4, Junction 15 via Marlborough. The distance is 26.9 miles via Ludgershall and the running time 1 hour 4 minutes.
- (2) Andover Airfield to the M4. Junction 15 via Bullington Cross and Chieveley. The distance is 51.4 miles and the running time 58 minutes, i.e. 6 minutes less than the direct route up the Corridor in paragraph c. (1) above.

Conclusion.

Despite the higher mileage for the routes via Bullington Cross and Chieveley, that route is safer, less stressful for drivers, generates less traffic pollution of all kinds and has a lower running time in some cases than the route along the Corridor. On balance, the economic impact of diverting through LGV traffic away from the Corridor is considered to be broadly neutral, both for journeys originating in the Salisbury area and further afield.

OPTIONS AVAILABLE.

1. Bypasses.

These are unlikely to be available in the foreseeable future. However, if they are eventually provided at Marlborough and/or the Collingbournes, they would be highly beneficial in reducing the effect of pollution caused by all vehicle traffic through those places. To illustrate this, the opening of the bypass at Burbage over ten years ago has transformed the environment of that village. Unfortunately, if additional bypasses are constructed more traffic will use the route and cause extra problems to the places not with a by-pass. The A346 north of Marlborough is already up to maximum vehicle capacity and with more traffic the road will have to be dualled.

2. De-priming.

It may be possible to arrange for the A338/A346 to be declassified as part of the National Primary Route Network. If that is done, it could allow for weight/width and night-time restrictions to be imposed on those roads which would prevent through traffic LGVs with a maximum gross weight of over 7.5 tonnes from using the Corridor.

De-priming has already been achieved elsewhere, and it would be well worth investigating whether or not this could be done in the case of the Corridor. The capital cost would be very low in comparison to Option 1, and should consist of no more than the provision and maintenance of signs, monitoring and enforcement. The time which would be taken to implement the new arrangements should be no longer than a few months.

THE PREFERRED STRATEGY.

Option 2, De-priming, after which weight/width/length and night-time restrictions to be imposed along the Corridor and on other roads near the Corridor such as the A345.

Once the principle of De-priming has been accepted, a detailed study will be required to determine the location of appropriate signage to prevent through LGV traffic from entering the Corridor.

CH/JD 30th October 2009.

The only alterations are on page 11 section 5 Accidents - CH/JD 18th March 2010