

**HASTINGS LOCAL PLAN – DEVELOPMENT MANAGEMENT PLAN
TRAFFIC ON THE RIDGE HASTINGS – SUPPLEMENTARY NOTE**

January 2015

1. Introduction

- 1.1 At the reconvened hearing of the Examination on 16 January 2015, the Inspector considered a submission by the County Council relating to the above subject. The Inspector subsequently requested a supplementary note to specifically clarify two issues:
1. The meaning of the traffic figures quoted in the original note and table relating to 2011 existing flows on selected roads in The Ridge area with a request that any revised table also show comparison of the current and predicted flows (natural growth) over the Plan period against those traffic flows with (i) the construction of the Bexhill Hastings Link Road (BHLR) and (ii) both the BHLR and the construction of the Queensway Gateway Road.
 2. A breakdown of components of the total forecast flows, separately indentifying the element attributable to the housing development sites identified on The Ridge in the Council's Development Management Plan (DMP) and a comparison of this with "natural growth" over the Plan period and that which is expected following completion of the BHLR and which has already been considered as part of the Public Inquiry for the BHLR
- 1.2 This supplementary note has been produced by the County Council to address those requests. In addition the County, as Highway Authority has taken the opportunity to confirm a number of the points made by its officers in response to the Inspectors specific questions about:
- a) natural growth in traffic flows across the network over the Plan period;
 - b) growth attributed to the BHLR and the evidence supporting the acceptability of this at the Link Road Inquiry (subject to implementation of complementary measures); and
 - c) the increase in traffic flows on the network arising from the growth proposed in the Hastings Borough Council's DMP –with particular reference to the Ridge.

2. 2011 flows

- 2.1 The flows quoted in the original note considered at the 16 January hearing related to modelled estimates of flows on the selected links in 2011 and were not actual recorded flows. As was stated at the Hearing, the model has been developed over the years to satisfactorily replicate existing flows at the defined 'Base Year' at a number of locations within the study area highway network.
- 2.2 In general, the model is considered satisfactory if it meets a set of defined 'validation' criteria across the whole study area. It is confirmed that the 2011 Base Year model achieved that to the satisfaction of both the County Council and the Department for Transport in their consideration of the bid for funding for the Bexhill and Hastings Link Road (BHLR) scheme. In essence the model itself is validated by reference to how well it predicts flow/ growth including by use of the more limited actual recording sites used by the Highway Authority.

2.3 The model's validation sites are spread across the whole study area. In The Ridge area, actual recorded flow information is available for one of the three sites for which flow information was supplied in the original note. Tables 1a – 1c represents the data presented in the original note, but has been augmented to now also include the actual 2011 count for the link comprising The Ridge between the junctions with Harrow Lane and the Conquest Hospital. As the tables show, the comparison of actual observed 2011 flow and modelled 2011 flow at that point in the network is very good, and demonstrates that the model is suitable for use in predicting traffic flows in that part of the study area. In addition, and as highlighted in our previous evidence to the examination, there will be a reduction in traffic flows on The Ridge in the 2015 and 2028 modelled scenarios, in particular The Ridge West between junctions with Queensway and Junction Road, with both the Bexhill Hastings Link Road and Queensway Gateway Road in place.

Table 1a: The Ridge West – between junctions with Queensway and Junction Road			
Year	Annual Average Daily Traffic		
	No BHLR or QGR	With BHLR	With BHLR & QGR
2011 actual	not available	not applicable	not applicable
2011 modelled	21000	not applicable	not applicable
2015 modelled	22000	27000	19700
2028 modelled	26000	29200	22300

Table 1b: The Ridge East – between junctions with Harrow Lane and Conquest Hospital			
Year	Annual Average Daily Traffic		
	No BHLR or QGR	With BHLR	With BHLR & QGR
2011 actual	16956	not applicable	not applicable
2011 modelled	17800	not applicable	not applicable
2015 modelled	19300	24400	22900
2028 modelled	22700	26200	25800

Table 1c: The Ridge East – near Grange Road			
Year	Annual Average Daily Traffic		
	No BHLR or QGR	With BHLR	With BHLR & QGR
2011 actual	not available	not applicable	not applicable
2011 modelled	12300	not applicable	not applicable
2015 modelled	13600	18000	17400
2028 modelled	16200	19600	19400

3. Components of Forecast flows

- 3.1 The transport model is a complex set of integrated modules, incorporating consideration of traffic growth due to external influences (including factors such as changes in real disposable income and cost of fuel, development planned outside the study area, modal competition between car and public transport, variable demand arising from significant changes in costs of travel within modes, trip generations from identified larger development sites and, collectively, from smaller area-wide sites).
- 3.2 The highway model also takes into account the ability of all parts of the network to accommodate traffic in assigning demand trip matrices to the network. For any given highway link the disaggregation into component sources, as requested by the Inspector, must therefore be somewhat simplistic. Nonetheless, the exercise has been carried out and the results for the three selected links are as shown in the following table (Table 2).
- 3.3 Table 2 demonstrates that for all three links by far the largest components of forecast growth in traffic flows within the local network arises from background growth (ie. natural traffic growth) and the inclusion of the BHLR and associated major developments in North/North-east Bexhill. The identified and allocated residential development sites on The Ridge as shown in the Borough Council's Development Management Plan (DMP) amount to only c 500 units which, in terms of traffic generation will contribute only a minor component of total flow in 2028 (this element is estimated as being between 5 and 8% of overall traffic flow on The Ridge as highlighted in the summary at the end of Table 2 below) compared to general background growth and/or route assignment changes and additional traffic due to the Link Road.

Table 2 – Components of forecast growth in traffic flows on The Ridge

		The Ridge West	The Ridge East Harrow Lane - Hospital	The Ridge East near Grange Road
2011 modelled AADT	A	21000	17800	12300
2028 modelled flow (no BHLR/QGR)	B	26000	22700	16200
2028 modelled flow with BHLR	C	29200	26200	19600
Difference 2028 modelled (no BHLR/QGR) – 2011 modelled	D (=B-A)	5000	4900	3900
Estimated increase in 2011-2028 (no BHLR) AADT based on study area average AADT growth rate (1.25) see Note 1 . Includes for all planned development (including sites on The Ridge) other than major sites in N/NE Bexhill contingent on BHLR.	E (=Ax1.25)①	5300	4500	3100
<i>Differences between D and E would arise from other factors e.g. assignment routeing changes.</i>	F (=D-E)	-300	400	800
<i>Composition of modelled flow increase (D above):</i>				
a. <i>Traffic directly associated with planned development on The Ridge (see Note 2).</i>	G	1500	2000	1500
b. <i>Traffic associated with other area-wide planned development &/or arising on The Ridge as a result of assignment routing changes</i>	H(=D-G)	3500	2900	2400
2028 modelled flow (no BHLR/QGR)	J	26000	22700	16200
2028 modelled flow with BHLR	K	29200	26200	19600
1. 2028 AADT flow change attributable to BHLR + major contingent developments in N/NE Bexhill	L (=K-J)	3200	3500	3400

SUMMARY				
Total 2028 AADT flow (with BHLR)	K	29200 (100%)	26200 (100%)	19600 (100%)
Comprises:				
2011 base flow	A	21000 (72%)	17800 (68%)	12300 (63%)
Growth associated with The Ridge developments	G	1500 (5%)	2000 (8%)	1500 (8%)
Other (general background growth &/or assignment routing changes)	H	3500 (12%)	2900 (11%)	2400 (12%)
Additional due to BHLR	L	3200 (11%)	3500 (13%)	3400 (17%)

Note 1 Average AADT growth rate for the period 2011 – 2028 has been derived from the analysis extension set out in Appendix 1 to this note.

Note 2: 500+ housing units in the identified major site on The Ridge would generate 2,000+ vehicle trips AADT. The assessment of how much of the total would arise on each of the links is based on broad distributions to destinations of existing development on The Ridge and manual assignment to the available highway network.

4. **Consideration of Impacts**

- 4.1 All assessment forecast traffic flows considered in the statutory processes associated with grant of planning permission for the Bexhill Hastings Link Road (BHLR) and in the November 2009 Public Inquiry into CPO/SROs for the scheme have included all the above growth components, i.e. background growth, the specific growth from identified major development sites including those on The Ridge, and the effects of providing the BHLR, and associated major developments in North/North-east Bexhill.
- 4.2 The County Council in granting planning permission concluded that the associated BHLR Complementary Measures should be delivered before the opening of the BHLR to provide satisfactory mitigation of the impacts of the forecast increase in traffic on The Ridge. Details of these proposals were submitted to Government in Annex 10 – Complementary Highway Improvements Measures of our Best and Final Funding Bid¹:

“The Ridge

The results of traffic modelling confirmed that the junctions of Queensway and The Ridge are the key stress points on The Ridge in terms of capacity. Various options were considered for both Queensway and Harrow Lane and the options that develop the greatest capacity benefits with consideration to site constraints and buildability have been developed as feasibility designs and are detailed below.

The Ridge/Queensway Junction

It is proposed to re-model the existing mini-roundabout to provide additional lane capacity... .

The Ridge/Harrow Lane Junction

It is proposed to enhance the existing mini roundabout through the introduction of additional lanes on each approach.”

- 4.3 As highlighted in our examination evidence, the note discussed at the 16 January Hearing and our evidence throughout the Examination, it remains the County Council’s intention to deliver those improvements prior to the Bexhill Hastings Link Road opening in the summer. Indeed as confirmed to the Inspector these were a specific prerequisite/ condition of the permission for the BHLR itself. This is also reiterated in our September 2014 update to the Department for Transport – an extract from that update is at Appendix 2.
- 4.4 The Inspector at the CPO/SRO Inquiry concluded in his report that overall the benefits of the BHLR outweighed the disbenefits (paragraph 10.10.3), including some residual impacts on roads such as The Ridge (para 10.10.2) - an extract from the Inspector’s report is attached at Appendix 3 which addresses this particular matter.

¹ <http://www.eastsussex.gov.uk/roadsandtransport/bexhillhastingslinkroad/fundingbids.htm> - Annex 10
Complementary Highway improvement measures

- 4.5 The Inspector also refers to an improvement at Baldslow as a part of a mitigation package (paragraph 10.10.2 refers); the Baldslow scheme providing a link between Queensway and the A21 was being promoted by the Highways Agency up until October 2010 when it was cancelled as part of the Coalition Government's Comprehensive Spending Review.
- 4.6 Of particular note in this regard is the planning application recently lodged for the construction of a Queensway Gateway Road which was referred to at some length at the Hearings and which it is understood will be determined in February 2015 by the Local Planning Authority. As well as unlocking the site allocations LRA7 and LRA8 in the Hastings Local Plan Development Management Plan, the proposed Queensway Gateway Road would in effect perform the same function as the Baldslow Link would have done and would deliver significant traffic relief where most needed in the local network to enable it to function more efficiently, improving the movement and management of traffic along the western section of the Ridge.
- 4.7 Both conclusions were reached on the basis of forecast flows including all relevant traffic contributors to increased flows on The Ridge including the contribution from the identified development sites on The Ridge now contained within the DMP. As further clarification of the points made by the Highway Authority in response to the Inspectors questions at the Hearing session held on the 16th January, the further analysis that follows within this note demonstrates that the contribution from those sites is minor compared to other sources of traffic growth on The Ridge arising from the opening of the BHLR and from background growth in traffic over the Plan period.
- 4.8 The National Planning Policy Framework (NPPF) requires that development should only be refused planning permission on traffic grounds if the residual cumulative impacts are 'severe'. In the County Council's firm opinion, supported by the Inspector at the CPO/SRO Inquiry, the combined impact of all contributors to growth in traffic on The Ridge can be satisfactorily mitigated by the delivery of the agreed and identified package of Complementary Measures referred to throughout our evidence—the improvements to the junctions at Queenway and Harrow Lane as part of the Link Road complementary measures as well as the potential closure of The Ridge's junction with Junction Road and the closure northern end of Maplehurst Road associated with the Queensway Gateway Road proposals and improvements to the A259 Rye Road junction - such that the residual cumulative impact cannot be considered 'severe'.

5. Conclusion

- 5.1 From the evidence presented above, the contribution to overall traffic flows in 2028 on The Ridge of the identified development sites on The Ridge within the Hastings Local Plan Development Management Plan (DMP) of around 500 homes has been shown to be a minor component and there is no case for the exclusion of those sites from the DMP on the basis of their traffic impact on The Ridge. Nor is there argument for lessening of overall housing numbers from the DMP based upon traffic impacts and where it was explained to the Hearing that all parts of the network will experience growth over the Plan period and The Ridge will, along with all other parts of the network, play some part in accommodating this growth.

Appendix 1 – Vehicle Trips / Traffic Growth across whole Bexhill / Hastings study area

Extract from Bexhill Hastings Link Road Best and Final Funding Bids, Traffic Forecasting Report

Note: 'Core Scenario' includes all planned development excluding major allocations in N/NE Bexhill which are contingent on provision of BHLR.

Table 3-5: AM Peak Core Scenario Matrix Totals

	2011	2015	2028	2015/2011	2028/2011
Cars commuting	15,885	16,691	17,336	1.05	1.09
Cars employers business	2,785	2,927	3,063	1.05	1.10
Cars – other	8,043	8,449	9,315	1.05	1.16
LGV	3,863	4,226	5,625	1.09	1.46
HGV	2,195	2,274	2,511	1.04	1.14

Table 3-6: Interpeak Core Scenario Matrix Totals

	2011	2015	2028	2015/2011	2028/2011
Cars commuting	3,090	3,244	3,409	1.05	1.10
Cars employers business	3,081	3,236	3,439	1.05	1.12
Cars other	14,755	15,497	17,420	1.05	1.18
LGV	3,981	4,355	5,796	1.09	1.46
HGV	1,808	1,877	2,062	1.04	1.14

Table 3-7: PM Peak Core Scenario Matrix Totals

	2011	2015	2028	2015/2011	2028/2011
Cars commuting -	12,268	12,834	13,525	1.05	1.10
Cars employers business -	1,805	1,892	2,011	1.05	1.11
Cars other -	12,236	12,810	14,111	1.05	1.15
LGV	4,998	5,468	7,277	1.09	1.46
HGV	1,518	1,579	1,724	1.04	1.14

Analysis Extension of the above data (not from quoted report)

	AM PEAK (trips)	INTER PEAK (trips)	PM PEAK (trips)	AADT
2011 TOTAL TRIPS	32771	26715	32825	
2015 TOTAL TRIPS	34567	28209	34583	
2028 TOTAL TRIPS	37850	32126	38648	
GROWTH 2011-2015	1.05	1.06	1.05	1.05
GROWTH 2011-2028	1.15	1.20	1.18	<u>1.25</u>
GROWTH 2015-2028	1.09	1.14	1.12	1.18

Note: AADT is a measure of 'traffic' not 'trips', and is the product of growth in trips and changes in average trip length – AADT estimates in this note allow for a small growth in average trip length in the longer term (1.18 to 2028 x 1.05).

Appendix 2 –Complementary Highway Improvement Measures (Update to Department for Transport, September 2014)



Complementary public transport measures (junction improvements and bus priority measures) set out in Annex 10 of the Final Funding Bid (December 2012)

Progress Update 30th September 2014

A259 Bus Priority Measures

The preliminary designs for the bus lanes and improvements to the bus stops (including the provision of real time passenger information) have been developed in consultation with the bus company, ESCC's public transport team and Hastings Borough Council.

A public exhibition was held at the West St Leonards Community Centre on 31st January/1st February 2014, and the consultation was available online on the ESCC website (www.eastsussex.gov.uk/haveyoursay) between 31st January and 28th February 2014.

103 people attended the exhibition and 142 people have completed the feedback form. It was made very clear at the exhibition that delivery of these measures is both a requirement on the planning permission for the Link Road and a condition on the DfT Funding contribution towards that scheme. However, the bus priority measures received mixed views.

The main aim of the exhibition was to identify aspects of the scheme that could cause difficulties for those using the A259 Bexhill Road or those occupying properties along it, so that adjustments might be able to be made during the detailed design phase to overcome the issues that were raised.

The results of the consultation were presented to the ESCC Lead Cabinet Member for Transport and Environment at his meeting on 28th April 2014, and he agreed for the proposals to progress to detailed design and construction

Detailed design is underway and construction of the bus priority measures is planned to commence in summer 2015, shortly after the BHLR opens in May 2015.

The Ridge/Queensway and The Ridge/Harrow Lane Junctions

Due to dependency of these improvements being implemented in advance of the BHLR opening to traffic, the design and construction of these improvements is being taken forward by the BHLR contractor.

Detailed design is underway and advance site clearance has been undertaken. Construction is planned to be complete before the BHLR opens in May 2015.

New Bus Service along the BHLR

The actions necessary to take forward the new bus service along the BHLR to delivery are expected to take 7-8 months to complete (preparation of bus service design and tender of the bus service provision if not provided on a commercial basis).

The BHLR is programmed to open in May 2015 therefore we are starting to progress work on developing a service in accordance with the Final Funding Bid submission. With the aim of providing a relevant and sustainable service we are working with local commercial bus service providers to assess potential service requirements arising from new commercial and residential developments due to be opened up from the BHLR.

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² <http://www.eastsussex.gov.uk/roadsandtransport/bexhillhastingslinkroad/fundingbids.htm>, Annex 10 – Update 2 – September 2014

Appendix 3 – Extract from BHLR CPO/SRO Inquiry Inspectors Report

10.10 Summary of Conclusions

10.10.1 For the reasons set out above, it is my view that there is a compelling need for the BHLR in the public interest. This compelling need arises from the essential role that the BHLR would play in the furthering of regeneration of the area, including the enabling of the NEBBP and other developments in north east Bexhill. Without the BHLR these developments could not proceed; without the developments, the necessary new dwellings and commercial/industrial floorspace, express requirements of development plan policy, could not be constructed. These developments represent by far the largest part of the regeneration proposals for the area, and, without them, it is my view that the initiatives for regeneration of the area are likely to falter or fail altogether. The extent of deprivation in the area is not disputed.

10.10.2 The BHLR would have other more minor beneficial impacts, largely arising from the predicted reduction of traffic on sections of the local road network, leading to some local improvements in the local air quality and noise ambiance. The BHLR would clearly also have residual adverse impacts. These include additional traffic on other parts of the local road network, though some

of these impacts would be relieved on construction of the Baldslow Link. I have drawn the attention of the SoSs to what appear to me to be the more significant among these adverse impacts, and especially the impact of the BHLR on landscape and tranquillity in the Combe Haven Valley, the additional carbon emissions that the BHLR would generate, the adverse impacts on the living conditions of a significant number of local residents, and the possible loss of one agricultural unit.

10.10.3 Whether taken severally or cumulatively, however, these impacts do not seem to me to be of such severity as to outweigh the regenerative and other benefits of the BHLR. The balance to which I refer in paragraph 10.1.5 to my mind falls decisively in favour of the BHLR. I have had regard to these and all other matters raised both at the inquiry and in written representations. They do not alter the conclusions I have reached.

10.10.4 I conclude that ESCC should be granted the powers it seeks in order to construct the BHLR. I therefore propose to recommend that the Orders be confirmed, with, in the case of the CPOs, the proposed modifications set out in section 9 of this report.