

**Horsham District Council and Crawley Borough Council
Local Development Framework
Examination into the West of Bewbush Joint Area Action Plan (JAAP)**

Statement of Common Ground

Highways Agency and Peter Brett Associates (on behalf of Crest Nicholson Developments Ltd)

1. Introduction

- 1.1. Peter Brett Associates (PBA) and the Highways Agency (HA) have been working together since November 2005 to assess and agree the optimum transport strategy to support development at West of Bewbush.
- 1.2. This Statement of Common Ground (SoCG) has been developed to accompany Crest Nicholson Developments (CNDs) Examination Statement on Issue 5 relating to the transport policies of the JAAP.

2. Background

West Sussex County Council (WSCC) Model

- 2.1. The WSCC multi-modal model has been developed to undertake the assessment of development at West and North West Crawley using the SATURN/TRIPS suites of computer software. WSCC had previously developed a transport model for Crawley town centre (CTC). The CTC Transport Model and the North East Sector (NES) Highway Model have been combined and updated to undertake this assessment.
- 2.2. Significant investment has allowed the model to be extensively improved and extended to cover a wider geographical area to enable future scenario testing for transport and development options at West and North West of Crawley. Traffic surveys were commissioned by Crest Nicholson Developments Ltd (CND) in May 2006 to provide information on car travel demand and patterns to form the basis for extending the model. These surveys included roadside interviews, automatic traffic counts, manual turning counts at junctions, registration plate surveys, queue length observations and journey time measurements. Regular liaison with

WSCC since October 2005 has ensured that the model has been updated and validated based on this data and approved by WSCC.

Gatwick Area Traffic Study (GATS) Model

- 2.3. The HA has developed in parallel a traffic model (the GATS model) to assess the cumulative impact of development planned within the catchment area of the M23/A23 corridor. The model covers the corridor from the M25 in the north to Brighton in the south with the focus of detail on the trunk roads with the inclusion of the strategic roads. This has been refined and improved and now titled the 'GATS4 model'. The extended WSCC model, by comparison, focuses on the Crawley area and includes more minor roads (rural and residential).

3. Previous Statements

Statement of Common Ground, June 2006

- 3.1. The Statement of Common Ground between WSCC, HA, English Partnerships and Peter Brett Associates prepared in June 2006 for the Examination of the Core Strategy outlined the methodology for the assessment of development at West of Crawley and is included in Appendix A.

HA Statement, September 2006

- 3.2. The HA issued a statement to the Examination of the Horsham Core Strategy in September 2006. This stated their broad brush study using the GATS model has confirmed that a number of highway improvements in the M23 / A23 area will be required by 2026 to enable the delivery of all planned development in the Gatwick sub-region. The statement also stated that the nature of these improvements is likely to be in the form of operational and safety measures similar to elsewhere in the South East and accordingly capable of delivery. It concluded that no 'showstoppers' have emerged that might preclude the prospects of development to the west of Crawley, but more detailed work was required. This statement is at Appendix B.

HA Letter, July 2008

3.3. The HA prepared a letter to Horsham Borough Council and Crawley District Council in July 2008 regarding the West of Bewbush Submission. This confirmed agreement to the sustainable transport initiatives proposed to support the development. It also stated that the studies undertaken between the HA and PBA confirmed that the West of Bewbush site can be delivered in transport terms subject to the implementation of appropriate mitigation measures. The HA highlighted reservations with the compatibility of the GATS4 and WSCC models and with the trip rates used in assessing the site. The HA concluded that more work and discussion was needed on the trip rates and relief road issues. This Statement of Common Ground reports on this further work and draws conclusions.

4. Recent Studies and Liaison

4.1. A number of documents have been prepared by PBA in support of the JAAP under the guidance of WSCC and/or HA and issued to the HA including:

- Third Draft Transport Assessment with figures and appendices (May 2008);
- Addendum Report to the Third Draft Transport Assessment (July 2008);
- Supplementary Report with appendices (October 2008);
- AM and PM peak vehicle matrices for development traffic to GATS zoning (23 June 2008).

4.2. The Third Draft Transport Assessment was prepared with Crawley Borough and Horsham District Councils as evidence supporting the JAAP.

4.3. A meeting on 16th October 2008 was organised to agree the principles of development at West of Bewbush and the compatibility of the two models (GATS4 and WSCC) used to assess the impact of development and identify the mitigation measures. The following elements of the assessment work were discussed and agreed:

- Trip Generation
- Trip Distribution

- Mode Choice
- Impacts on Junction 11

Trip Generation

- 4.4. It was agreed that the resultant vehicle trip rates in the Addendum Report (without travel planning and without railway station) were reasonable for assessing development at West of Bewbush, due to the location of the development with respect to employment and town centre and also the good public transport proposals and connections.

Trip Distribution

- 4.5. It was agreed that the WSCC and GATS4 models showed very similar assignment or distribution of vehicular trips in both peak hours, indicating that between 26-27% vehicle trips generated by the West of Bewbush development are likely to use the M23 junction 11. The two models are therefore considered to be compatible on this basis.

Mode Share

- 4.6. Person trip rates had been agreed at the outset of the assessment work with both West Sussex County Council and the Highways Agency. The vehicle trip rate and therefore vehicle mode share was agreed in the meeting on 16th October.

Impacts on Junction 11

- 4.7. The assessment work undertaken using the WSCC and GATS4 models confirm that the relief road is not essential to deliver the development, but a greater level of traffic will use the M23 without the relief road.
- 4.8. It was agreed that on completion of the West of Bewbush development that 26-27% of vehicle traffic generated by the West of Bewbush development will use the M23 Junction 11 during the peak hours. It was also agreed that there will be insignificant impact on the other M23 junctions around Crawley (junctions 9, 10 and 10a).

- 4.9. A scheme to improve the M23 junction 11 to accommodate the additional development traffic has been identified. This is considered to be feasible and deliverable, i.e. capable of being delivered within the highway boundary.
- 4.10. A wider scheme to improve the M23 junctions 9, 10, and 11 has been identified by the HA to accommodate the cumulative planned growth in the Gatwick Diamond. This includes the widening of the approaches and bridges at junctions 9, 10 and 11. The HA has submitted a bid to the Regional Transport Board to help fund the improvements along with contributions from the surrounding developments.
- 4.11. A Travel Plan will be necessary with realistic targets and commitments to influence residents when they move in to the new houses. PBA has researched and assessed the potential effects of introducing a high quality travel plan, which could further reduce car borne trips by 10%.

Next Step

- 4.12. The next step is to agree a mechanism to determine the level of contribution and phasing of the contributions, which is consistent for all planned developments impacting on the M23/A23 corridor. Consideration will be given to how the contributions could be directed to delivering the first phase of the wider M23 improvements and the potential for linking the contribution to future traffic levels providing an incentive to commit to and invest in travel planning. The further detailed stage is considered by all parties to be applicable as part of the planning application (and pre application discussions).

5. Summary

- 5.1. The HA and PBA (on behalf of CND) have agreed the principles of the assessment work undertaken to date and that the two models (WSCC and GATS) show compatible results in relation to the M23 corridor when assessing the development proposals.
- 5.2. It was agreed that 26-27% of vehicle traffic generated by the West of Bewbush development will use the M23 Junction 11 during the peak hours on completion of the development. The development results in less than 10% increase in

- overall trips at junction 11. It was also agreed that there will be insignificant impact on the other M23 junctions around Crawley (junction 9, 10 and 10a).
- 5.3. A feasible and deliverable M23 junction 11 improvement scheme has been identified to accommodate increased traffic flow levels well in excess of that imposed by the West of Bewbush development. The HA has also submitted a bid to the Regional Transport Board to help fund a wider M23 junction improvements at junctions 9, 10, and 11 to accommodate development within the Gatwick Diamond.
 - 5.4. The Highways Agency supports the delivery of development at West of Bewbush subject to a contribution to improvements at M23 junction 11 and the provision a Travel Plan for the development.
 - 5.5. It is agreed that the relief road is not essential to deliver development at West of Bewbush. As such there is broad support for policy WB26 of the JAAP in terms of there being no perquisite requirement for the relief road.
 - 5.6. The next step is to agree a mechanism to determine the level of contribution and phasing of the contributions, which is consistent for all planned developments impacting on the M23/A23 corridor.

Appendix A

**Horsham District Council Local Development Framework
Public Examination of the Core Strategy**

Statement of Common Ground

**Highways Agency, West Sussex County Council, English Partnerships and
Crest Nicholson Ltd**

Whilst the Highways Agency supports the concept of a mixed-use site, it has raised concerns about the cumulative impact on the motorway and trunk road network of development that is proposed in Crawley and the surrounding areas. The Agency requested a broad assessment to be undertaken taking account of committed development to address the concerns set out within their position statement. This is being carried out through joint working between the Highways Agency, the relevant local authorities and other interested stakeholders.

The broad assessment will be undertaken in advance of the detailed modelling work, and will enable:

- the development of a sustainable transport strategy for development at west Crawley (to be confirmed and modified through the detailed modelling work);
- a broad understanding of any impacts on the existing motorway and trunk road;
and
- the identification of opportunities to manage any impacts.

The detailed multi-modal transport assessment is being progressed by Crest Nicholson with guidance from West Sussex County Council. This more detailed assessment will inform the preparation of the Joint Area Action Plan.

The scope of work for the broad assessment has been prepared and agreed by all parties (Highways Agency, West Sussex County Council, Horsham District Council,

Matter 4/Statement of Common Ground

Crawley Borough Council, English Partnerships and Crest Nicholson Ltd) and is included overleaf.

Matter 4/Statement of Common Ground

Job Name: Land West and North West of Crawley
Job No.: 16702
Note No.: HA/001
Date: 26th June 2006
Subject: Scope of Work
Broad Transport Assessment
Prepared By: Sarah Matthews (Input from Peter Minshull, Chris Owen & Kathryn Kennell)

Item	Subject
1.	<p>The purpose of this scope of work is to enable a statement of common ground between the Highways Agency and Horsham District Council to be prepared in advance of the examination.</p> <p>This scope of work will provide the methodology to undertake the broad assessment required by the Highways Agency ensuring the consistency of the data input.</p> <p>The aim of the broad assessment is to determine the individual and combined impacts of all the planned development (i.e. relevant Structure Plan strategic locations in West Sussex and other development envisaged in the emerging Local Development Frameworks within the Gatwick sub region on the M23 and A23 truck roads).</p> <p>This assessment work will allow the HA to:</p> <ul style="list-style-type: none">▪ identify improvements▪ determine the level/proportion of contribution▪ seek funding/change in priority of schemes <p>The assessment should be based upon realistic options for development and not a "worst case".</p> <p>The four stage modelling process will be required to complete the broad assessment:</p> <ol style="list-style-type: none">1. Trip generation2. Trip distribution3. Mode share4. Trip Assignment
2.	<p>Trip Generation</p> <p>The details of the location, scale and mix of the development proposals (at this stage) will be summarised, together with date of opening and phasing of build up of development.</p> <p>To assess the possible effects on different parts of the trunk road network, three development possibilities should be considered:</p> <ul style="list-style-type: none">• Predominantly to the north of the railway (land within English Partnerships'

Matter 4/Statement of Common Ground

	<p>ownership)</p> <ul style="list-style-type: none"> • Predominantly to the south of the railway (landfill site, which Crest Nicholson Development Ltd controls) • Similar levels of development in both areas <p>The trip generation for a site should be based upon agreed person AM and PM peak hour trip rates for the proposed landuses which will generate primary trips (i.e. not ancillary uses). Trips generated from residential development should be (where possible) divided by trip purpose to take account of differing generation and distribution characteristics. An allowance for car and public transport trip peak spreading may be appropriate, but this will be dependant on congestion/crowding by route.</p>
3.	<p>Trip Distribution</p> <p>Potential distribution of the generated trips should be determined. It is anticipated the 'journey to work' census data at a similar and/or local wards to the development site would be utilised. Trip distributions for education and any other purposes with significantly different distributions should be derived. The effect of planned employment and other uses in the area will need to be considered.</p>
4.	<p>Modeshare</p> <p>The multi-modal transport strategy for the development should be provided. The potential sustainable measures for walking, cycling and public transport proposed to support the development should be detailed along with any other measures being promoted by other developments or committed schemes. It should be demonstrated that any proposals for the strategy are viable and deliverable in the required timeframe.</p> <p>The development modeshare should to be reviewed on the basis of origin and destinations. It is anticipated that modeshare determined from the 'journey to work' census data would form the baseline modeshare figure for each origin-destination to/from the development. Modeshare should be determined for other significant trip purposes. Modeshare will need to reviewed where new services or changes have been introduced post 2001.</p> <p>The modeshare for each origin - destination will be reviewed and possibly revised based upon changes in bus patronage since 2001 and the development's proposed transport strategy. This should be based (where possible) on evidence of similar services, facilities, improvements and/or schemes with the use of sources such as: TRICS; census data; national travel statistics; work place statistics; and bus patronage data. This should provide a realistic case and not a worst case.</p> <p>This data would need to be provided to HA/Parsons Brinckerhoff (PB) in an agreed format.</p>
5.	<p>Trip Assignment</p> <p>Details of development location and proposed access arrangements will be required, as well as any highway improvements identified in advance of the trip assignment/modelling work.</p> <p>The trip assignment will be undertaken by PB on behalf of the HA utilising the Gatwick Area Traffic Study (GATS) model. This model covers the M23 and A23 from M25 to A27 and is currently being developed to provide more detail/accuracy with RSI surveys from other studies and from LATSI. For the broad transport assessment the Crawley</p>

Matter 4/Statement of Common Ground

	<p>and East Grinstead base year matrices will be used directly.</p> <p>The HA will distribute the model development report for the GATS model to all parties involved for information and comment. Assumptions on network changes, development proposals and forecasting methodology will also be supplied. HA will ensure that there is consistency of approach for the input of the other developments in the region (West of Horsham, East Grinstead, North East Sector, etc.).</p> <p>The agreed scenarios will be tested for 2016 and 2026 forecast years including with and without the possible relief road and results will be forwarded to all parties in order to identify/design any mitigation measures. Junction improvements will be assessed using appropriate capacity analysis. At this stage a broad transport assessment report will be issued. The report will need to address all important issues in appropriate detail.</p> <p>Scenarios will be re-tested with the GATS model with the introduction of the identified mitigation measures. The results will be forwarded for inclusion in the final broad transport assessment report.</p>
6.	<p>Suggested Programme</p> <p>Week commencing 19th June – First draft of scope to be prepared by both Atkins and PBA.</p> <p>Monday 26th June – First draft of ‘Scope of Work’ to be issued to HA and WSCC.</p> <p>Monday 3rd July – ‘Scope of Work’ finalised.</p> <p>Week commencing 3rd July - statement of common ground prepared.</p> <p>Monday 24th July – Methodology and input data for Gatwick sub regional model submitted to HA and WSCC for review and comment.</p> <p>Tuesday 25th July – ‘Statement of Common Ground’ to be submitted to HDC.</p> <p>Monday 14th August - Model results distributed to all parties for review and identification of improvement schemes.</p> <p>Monday 14th August – Draft Broad Transport Assessment Report issued</p> <p>Monday 28th August – Model results of re-testing to be distributed. Final Broad Assessment Report issued.</p> <p>Wednesday 6th September – Public Examination of the Core Strategy (HDC LDF) – Strategic Location West of Crawley.</p>

Appendix B

STATEMENT BY THE HIGHWAYS AGENCY REGARDING THE INITIAL FINDINGS OF THE BROAD TRANSPORT ASSESSMENT IN RESPECT OF THE WEST OF CRAWLEY SEARCH AREA

BACKGROUND

- 1.0 In its response of 16 December 2005 to the Horsham DC LDF Core Strategy the Highways Agency (HA) objected to the proposed development west of Crawley on the grounds that the Council had not demonstrated that the development had a sustainable transport infrastructure to support it. In particular, in line with their responsibilities for safeguarding the operational efficiency of the trunk road network, the HA was concerned that the Council had not provided evidence, to the satisfaction of the Agency, of the impact of the development on the motorway and trunk road network and the means of mitigating this impact. In a subsequent meeting with the Council and the developers it was agreed that a broad transport assessment would be carried out to advise the HA of the likely scale of traffic impact of various development options for west of Crawley on the M23. In particular the assessment was intended to identify the potential for any 'showstoppers', implying traffic impacts so adverse as to necessitate fundamental changes to the highway network that might not be deliverable. Examples might be proposals for further grade separation at motorway junctions that might fail at Public Inquiry.
- 2.0 In response a joint exercise has been carried out involving Parsons Brinckerhoff (PB) on behalf of the HA, Peter Brett Associates (PBA) on behalf of Crest Nicholson, English Partnerships and West Sussex County Council. A Scope of Work was agreed and submitted within a Statement of Common Ground. This work includes the development of a sub-regional traffic model to examine development proposals in the Gatwick sub-region. Assessments have been made of the likely levels of trip generation, distribution and mode share for development options in the west of Crawley search area.

ASSESSMENT

- 3.0 The situation in 2026 has been assessed, with and without development to the west of Crawley.
- 4.0 The assessment without development to the west of Crawley used TEMPRO 5.0 growth rates. TEMPRO represents the Government's current policy based planning and travel forecasts including the South East Plan proposals. The assessment with development included traffic

- flows forecast for the development to the west of Crawley. The assessment has assumed a realistic level of travel by sustainable modes.
- 5.0 This work has concluded that to deliver the forecast growth including all the planned development in the Gatwick sub-region a number of junction and link improvements are required in the M23/A23 corridor. These have been identified to mitigate the impact of traffic increases to 2026.
 - 6.0 The nature and scale of these improvements are similar to those already implemented on motorways in the South East. They are largely investments in operational and safety measures resulting in improved management of existing resources. No profound reconfigurations of junctions are called for and we therefore feel that the works are likely to prove deliverable.
 - 7.0 Funding mechanisms have yet to be agreed but as the need for many of the schemes arise from the TEMPRO forecasts, the strong likelihood is that contributions will be required from both public and private sources.
 - 8.0 The work to date has been of a broad brush nature. More detailed work will need to be carried out in the period leading up to the Joint Area Action Plan examination in September 2007. However, we feel confident that these initial conclusions are likely to be confirmed.

CONCLUSIONS

- 9.0 This exercise has demonstrated that a number of highway improvements in the M23 / A23 area will be required by 2026 to enable the delivery of all planned development in the Gatwick sub-region.
- 10.0 The nature of these improvements is likely to be in the form of operational and safety measures similar to elsewhere in the South East. Accordingly we feel that such schemes will be capable of delivery.
- 11.0 Accordingly, no 'showstoppers' have emerged that might preclude the prospects of development to the west of Crawley. Further work will be essential to identify the improvements in detail and the timing of these in relation to the phasing of development and appropriate funding mechanisms. The HA would require the improvements to be delivered and be in place to match the phasing of the development. Subject to the delivery of this implementation strategy the HA, at this stage, is prepared to withdraw its objection to the principle of development to the west of Crawley.
- 12.0 The HA would wish to see every opportunity taken to reduce car-based travel by maximising investment in feasible and effective sustainable

transport. To this effect we understand that the Fastway service could be extended into the search area with a 6 minute frequency. Other non-car based transport initiatives will be essential whilst the proposed new rail station would be a valuable contributor.

Highways Agency
Dorking

5 September 2006