



Highways Agency

TECHNICAL NOTE – TN01

NW BICESTER ECO TOWN – EXEMPLAR SITE TRANSPORT ASSESSMENT – SCOPING NOTE

DRAFT 1

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PROJECT: HTT91273A/3529.1

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1 INTRODUCTION

- 1.1 Parsons Brinckerhoff received a Scoping Note from the Highways Agency (HA) on 14 September 2010 in relation to the NW Bicester Eco Town Exemplar Site Transport Assessment. This Scoping Note was produced by Hyder Consulting Ltd. on behalf of their client P3Eco Limited & A2 Dominion.
- 1.2 This technical note provides PB's comments on the Scoping Note.

2 DEVELOPMENT OVERVIEW

- 2.1 The Exemplar Site is the first of many (yet to be defined) phases of the Eco Town development of 5000 homes located in NW Bicester. This first phase – Exemplar Site – comprises of 350 homes within 21.4 hectares of land. On paper, the residential density falls well below the typical 30 dwellings per hectare. The Scoping Note only considers these 350 homes proposal, as opposed to the total 5000 home Eco Town.
- 2.2 The 350 homes would include 105 affordable units. This 30% affordable housing proportion is a typical figure for any residential site being promoted in the South East of England.
- 2.3 The final development (5000 homes) is supplemented by a list of potential employment, community and education facilities. However, there is no indication that which of these facilities would be provided at the first phase of the Exemplar Site development. The Scoping Note needs to clarify this issue so that the planning and highways authorities can consider whether the 350 homes would put additional burden to the existing facilities of the community. In terms of transport, the need to travel to various facilities outside the Exemplar Site would have to be considered.

3 POLICY

- 3.1 In addition to those listed, the Scoping Note ought to include PPG13 Transport, DfT Circular 02/2007 Planning and the Strategic Road Network and DfT Guidance on Transport Assessment.
- 3.2 The Cherwell District Council Draft Core Strategy, February 2010 can only be considered as the best information available at this time. Indeed, it is not possible to determine the

soundness of policies within the Core Strategy and the prospect of promoting an Eco Town development until the necessary statutory procedures have been carried out.

- 3.3 To a certain extent, a planning application submission for the Exemplar Site could be considered as premature as the Eco Town development would have a much wider implication and on a much larger scale to Bicester. The Exemplar Site submission is not likely to deliver the level of services, infrastructure requirements and sustainable targets that is necessary to support the Eco Town development.

4 TRIP GENERATION

- 4.1 On paper, the 2007 Household Travel Diary Survey could be a good starting point to derive the residential trip rates of the Exemplar Site. However, the 2007 survey data would have been collected from established locations within Central Oxfordshire and are likely to have supporting facilities available, so that the conditions exhibit the average residential trip rates can be derived. The fact that the Exemplar Site may not be delivering any of the supporting facilities at this phase of development would have implications to adopt these trip rates derived from the 2007 survey data.
- 4.2 Clearly, if the supporting facilities are not forthcoming as part of this planning application of the Exemplar Site, then the TRICS 85th percentile residential trip rates would be more appropriate. The vehicular trip rates of housing can only be reduced when sufficient commitments and justifications emerge in order to convince the planning and highway authorities that trip generation and travel behaviour of an average site is achieved as part of the Exemplar Site deliverables.
- 4.3 It is necessary to derive the trip rates using both person rate and vehicular rate for each of the peak periods in order to provide the comprehensive view, which reflects the current mode share and the out-commuting natures of Bicester.

5 MODAL SHARE

- 5.1 Modal share established from the 2007 Household Travel Diary Survey is true for the Central Oxfordshire Transport Model (COTM). It is not necessarily that the modal share pattern for Bicester follows the 2007 survey. This is because the 2007 survey covers many sites and not just those in Bicester alone. The assessment ought to compare objectively the modal share obtained from the 2007 survey against the 2001 Census Data for Bicester.
- 5.2 Notwithstanding the comment in 5.1 above, the Scoping Note may well be referring to only use those data collected within Bicester from the 2007 Household Travel Diary Survey. In this case, the number of samples may be limited. Therefore, the recommendation to compare objectively the modal share obtained from the 2007 survey against the 2001 Census Data for Bicester is still valid.
- 5.3 The modes of travel and trip purposes to be addressed are reasonable.

6 TRAFFIC ASSESSMENT

- 6.1 As mentioned above, the trip generation should consider both person and vehicular trips. All traffic generated from the Exemplar Site, whether it is car-based or non-car-based, should be assessed.
- 6.2 In the case of public transport trips, for example bus passenger trips, it is necessary to consider whether the buses can travel relatively unimpeded across the road network or if they are being queued within the congested network.

7 EXTENT OF ASSESSMENT

- 7.1 Figure x is not provided within the Scoping Note. However, based on the text of the Scoping Note, none of the Strategic Road Network (SRN) or the Primary Routes of the county is included in the Extent of Assessment. It is necessary for the assessment to include the SRN of M40 Junction 9/A34 and the M40 Junction 10/A43. In addition, the A41 and B4100 corridors for the county road network leading to the SRN.

8 BASELINE TRAFFIC DATA

- 8.1 The Scoping Note only indicates that data collection includes turning counts, pedestrian and vehicle queuing surveys would take place in July 2010. There is no information with regard to the locations and details of the data collection exercise. Based on the Extent of Assessment description, it is unlikely that this data collection would include SRN or Primary Routes of the county.
- 8.2 There is a potential requirement to collect additional traffic data in order to supplement the July 2010 collection as the Extant of Assessment is defined more clearly.
- 8.3 As a matter of correctness, July is a non-neutral month. Traffic data is not normally collected at this time of the year. Justification would be needed to demonstrate that the quality of data is compatible with the assessment methodology.

9 ASSESSMENT HOURS

- 9.1 The Scoping Note also now suggested, in this section, that the data collection include Automatic Traffic Counts (ATC) and the AM and PM peak hours would be determined from the ATC data. However, the ATC locations, duration and whether includes sites within the SRN, are not discussed.

10 FUTURE YEARS

- 10.1 The future assessment year of 15 years after opening appears to be reasonable. This exceeds the requirements of Review Period within the DfT Circular 02/2007 for a typical planning application. However, in view that this Exemplar Site is first phase of the much larger Eco Town development, it is essential for the Scoping Note to define this opening year, and the quantum of dwellings to be delivered relative to the Eco Town development.
- 10.2 There is an issue with the methodology of deriving background traffic growth forecasts. The NRTF (National Road Traffic Forecast 1997) is no longer being used. Instead, the National Transport Model (NTM) should be used with TEMPRO. Information with regard to NTM and its application can be found in WebTag 3.15.2 and on the DfT website.

11 DISTRIBUTION AND ASSIGNMENT

- 11.1 COTM is a strategic transport model with variable demand capability. Since COTM was developed to assess the cumulative impact from the emerging planning provisions at a strategic level, its ability to re-assign, re-distribute and displace trips has the potential to mask the impact of a very modest 350 dwellings development at a local level. However, COTM would be a suitable tool to evaluate the Eco Town development in its entirety.
- 11.2 For the Exemplar Site, a traditional approach of traffic distribution and assignment maybe more cost effective and transparent.

12 JUNCTION ASSESSMENT

- 12.1 Since the Extent of Assessment currently exclude any SRN junctions, it is necessary to reserve judgement until these issues have been clarified. However, as a general observation, using propriety capacity assessment software would be reasonable.

13 PERSONAL INJURY ANALYSIS

- 13.1 This appears to be reasonable with the caveat that this is subjected to the issue with Extent of Assessment being resolved.

14 ACCESS ARRANGEMENT

- 14.1 Identifying off-site works is another issue that has not be discussed in the Scoping Note. The masterplan of the Eco Town development would consider the site access strategy but the Exemplar Site only deals with the first phase of 350 units.
- 14.2 The scale of on-site and off-site infrastructure works associated with the Exemplar Site would be drastically different from the full development of the Eco Town. There are no planning policies from the draft Core Strategy to inform potential developer how the delivery of infrastructure will be achieved. There is no advice from Cherwell District Council that other similar modest scale Exemplar Sites could come forward as individual planning application. However, the HA must bear in mind that the combined residual traffic impact of 5000 homes would have a significant operational and safety implications to the SRN.
- 14.3 If the highway improvements on the SRN are to be developed, it is recommended that this follows the guidance within the Design Manual for Roads and Bridges. The assessment criteria should follow DfT Circular 02/2007.

15 PARKING PROVISION

- 15.1 Parking provision for a residential development is not a major issue. However, the Exemplar Site ought to set a high standard such that parking provision should only be determined after the sustainable travel measures have been considered. The level of parking is then identified to address the residual car-based trips.

16 SUSTAINABLE TRAVEL

- 16.1 This is an issue with the development of the Exemplar Site. The Exemplar Site of 350 units is not likely to achieve the critical mass to deliver a wide range of sustainable measures and infrastructures in order to realise the "Eco" status of the Eco Town. Until there is more evidence that sustainable travel measure can be delivered, the assessment ought to recognise this limitation and consider the potential impacts at strategic junctions on a higher agenda.
- 16.2 Car-based travel would still likely be the dominant mode of travel in this initial phase. Out-commuting behaviour would remain until employment opportunity is emerged to address the imbalance of home vs. job in Bicester.

17 TRAVEL PLANNING

- 17.1 Travel planning is required on this type of planning application. However, as the Exemplar Site development is flying under the Eco Town brand, travel planning should not be just a standalone document. Travel planning should and must be integrated into the masterplanning as well as the sustainable travel measures of the site.