



HIGHWAYS AGENCY

TECHNICAL NOTE – TN02

PROPOSED EXEMPLAR SITE, NW BICESTER - TRANSPORT ASSESSMENT

DRAFT 1

23 NOVEMBER 2010

PROJECT: HTT91273A/3289.1

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1 INTRODUCTION

- 1.1.1 The purpose of this note is to review and advise on the draft Transport Assessment (TA) produced by Hyder Consulting Ltd. (15 November 2010) on behalf of P3Eco Limited and A2 Dominion in support of their proposals for the 'Exemplar Site' at Home Farm, Bicester. This note also considers Hyder's Technical Note 2a: Trip Rates and Traffic Generations: Exemplar site which was provided to Parsons Brinckerhoff (PB) to support the draft TA on 18 November 2010.
- 1.1.2 It should be noted that there are sections within the TA marked "to be completed" and "to be confirmed". Also, the appendices were not available for review.
- 1.1.3 The Exemplar Site is the first phase of the 5,000 dwelling North West Bicester Eco-Town development. The number of Eco-Town development phases has not yet been defined. The TA only considers these 393 homes proposal, as opposed to the total 5,000 home Eco Town.
- 1.1.1 PB reviewed the Scoping Note for the Exemplar Site Transport Assessment and provided a detailed response (Technical Note 1) on the 21 September 2010. A number of concerns were raised within this note.

2 DEVELOPMENT PROPOSALS

- 2.1.1 The development proposals seek to develop 393 residential units (31% affordable - 122 units), offices (1,100m²), an Eco Business Centre (1,800m²), a primary and nursery school, a food store (550m²) and other associated facilities within 21.1 hectares.
- 2.1.2 The draft TA needs to clarify whether the additional facilities are adequate to support the proposed 393 homes and the fit into the overall Core Strategy of the Eco-Town; so that the planning and highways authorities can consider whether the 393 homes would put additional burden to the existing facilities of the community.

3 POLICY

- 3.1.1 As stated in our Technical Note 1, in addition to those listed, the draft TA ought to include DfT Circular 02/2007 Planning and the Strategic Road Network and DfT Guidance on Transport Assessment.

- 3.1.2 As noted in PB Technical Note 1, the Cherwell District Council Draft Core Strategy (February 2010) can only be considered as the best information available at the 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.
- 3.1.3 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 and the region. 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 EXISTING CONDITIONS

- 4.1.1 Section 3 discusses the existing conditions of the county network only. We have expressed our concern that the Study Area should be extended to include the Strategic Road Network (SRN) in the previous Technical Note 1. The capacity issues currently experiencing on SRN should be discussed.
- 4.1.2 Similarly, the Baseline Traffic Flows section only considers the county network. We have also highlighted the Baseline Traffic Flows section should include the SRN.
- 4.1.3 The Baseline Mode Share section reports the model share from two separate sources have differences. However, it should be recognise that the Household Survey relates to Bicester (as a town), whereas 2001 Census reports at ward level. The draft TA should clarify which set of data is being used in subsequent analyses.

5 PERSONAL INJURY ACCIDENT ANALYSIS

- 5.1.1 Section 3.10 sets out a summary of accidents by location and severity (for county road network only). The extent to which the proposed development will exacerbate existing accident rate at M40 Junctions 9 and 10 is not known and it is recommended that this information is included. On this basis, we consider that an appropriate safety review of these SRN junctions is undertaken, including the use of COBA accident rate assessment (where appropriate) which will enable the accident rate for these junctions to be compared to typical rates for the same junction type.

6 DEVELOPMENT PROPOSALS

- 6.1.1 Section 5.3 recognises the need to improve the walking and cycling routes along Bambury Road towards the town centre, and it is assumed that this will be delivered by Oxfordshire County Council as part of the town proposals. It is not clear when these facilities will be provided, or whether they would be in place in time to support the opening of the development. Further details about the phasing of the off-site measures should be outlined within the TA.
- 6.1.2 The scale of 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 or supporting documentation 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 Highways Agency (HA) must bear in mind that the combined residual traffic impact of 5,000 homes would have a significant operational and safety implications to the SRN.
- 6.1.3 Section 5.5 suggests that the layout of the proposed development has been designed not to encourage the use of the private car. The Exemplar Site 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.

- 6.1.4 Car-based travel would still likely be the dominant mode of travel in this initial phase. Outcommuting behaviour would remain until employment opportunity is emerged to address the imbalance of home vs. job in Bicester.

7 ACCESSIBILITY TO EXTERNAL FACILITIES

- 7.1.1 This chapter assesses the Exemplar Site in relation to its proximity to employment, shops, education, recreation and leisure facilities. It is suggested that the majority of facilities are located some distance away from the site to allow walking/cycling become the preferable mode of travel. Also, as suggested in the TA, the site is not very well connected to facilities by foot/cycle.
- 7.1.2 This section could also benefit from discussing the accessibility to the transport hubs.

8 TRIP GENERATIONS AND DISTRIBUTIONS

8.1 Trip Generation Methodology

- 8.1.1 The total person trip rates have been obtained from the TRICS database using the multi-modal survey sites. PB is satisfied that, as average trip rates, the person trips are robust. However, we have reservations on the application of these figures to derive the trip rates for the Exemplar Site. It is considered that the use of average trip rates with deductions for sustainability measures could result in overly optimistic trip rates for the proposed development at present. In view of this, consideration must be given to a sensitivity analysis using 85th percentile trip rates as the starting point.
- 8.1.2 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 will not be delivering as many of the supporting facilities at this phase of development would have implications to adopt these trip rates derived from the 2007 survey data. The 2001 Census data would be a more robust starting point on this basis.
- 8.1.3 Once the 2001 Census data has been applied, the calculations used to determine the person trip generation should be outlined in more detail. Currently it is not clear how the figures in this table have been calculated.
- 8.1.4 The TA has estimated the likely containment of household vehicle trips has been estimated for each journey purpose and proportioned for total trips made per household. The overall containment for the site is estimated at 17.4%. It is requested that further justification of this figure, relative to other comparable sites, be provided as part of the TA.
- 8.1.5 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. Any mode share assumptions will need to be monitored and enforced through the Travel Plan. The draft Travel Plan (Section 7) appears to be setting out a reasonable framework and targets. However, we would expect



the Travel Plan to discuss monitoring, sanctions and measures to rectify failed targets.

8.2 Traffic Distributions

- 8.2.1 Central Oxfordshire Transport Model (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 393 dwellings development at a local level. However, COTM would be a suitable tool to evaluate the Eco Town development in its entirety.
- 8.2.2 For the Exemplar Site, a more traditional approach of traffic distribution and assignment may be more cost effective and transparent.
- 8.2.3 The draft TA states that the resultant distributions of the Exemplar Site are included in Figures 8.1 and 8.2, however these figures are not included within the TA and so they cannot be considered.

9 TRAFFIC IMPACT

- 9.1.1 The growth rates take account of 3,000 new homes and associated jobs being delivered by 2016. It is requested that further details about the assumed trip generations and attractions for the Masterplan Site, as used within the SATURN model, are provided.
- 9.1.2 In terms of expected net increase in traffic volumes at M40 Junction 9 and Junction 10, some 73 additional two-way traffic movements are forecast to move through M40 Junction 9. Using this as a starting point, the potential impact of 5,000 homes at M40 Junction 9 could well be in the order to 1,000 trips.
- 9.1.3 The Operational Assessments have only been performed on Junctions 1-6 (see page 54). Given the proposed impact it is necessary for the assessment to be extended to include the SRN.