

APPENDIX C - REFINED EXTENSION ASSESSMENTS, STAGE 2

SPATIAL STRATEGY – URBAN EXTENSIONS TRAFFIC ASSESSMENT - NORTH BOURNEMOUTH

1. INTRODUCTION

The Sequential Assessment approach to future sustainable development first identified land potential within the existing Principal Urban Areas (PUA's). It then looked within other search areas initially adjacent to or as planned extensions to the PUA.

Within the Borough of Bournemouth this process identified a possible 51 Ha area for mixed residential and employment development at North Bournemouth. It was estimated that the site could accommodate approximately 1250 dwellings and 11 Ha of employment land.

This technical note considers the impact of the development from the transport perspective.

2. EXISTING HIGHWAY NETWORK

The area is located to the North of the existing residential and industrial developments served by Chesildene Drive/Woodbury Avenue/Jewell Road and Yeomans Way respectively. Chesildene Drive is the highest-class road and is identified as a Local Distributor Road within the Bournemouth District Wide Local Plan with the other roads unclassified. The proposal is also flanked to the North by the rural Throop Road and Holdenhurst Road routes.

The local strategic highway is the A3060 Castle Lane West County Distributor Road approximately 1 kilometre to the South of the proposed development site. This route forms one of the main cross-conurbation West/East corridors linking the A338 in the East to the A347 in the West. The A338 County Primary Route links the conurbation to Ringwood and Southampton by the A31 trunk road network. The A31 connects to the M27 to the East leading to the M3 and M25 for all London and South East destinations.

The A3060 is generally a single carriageway with signalised major junctions and carries in excess of 32,000 vehicles a day leading to severe congestion at peak periods.

Future Highway Schemes

The Bournemouth District Wide Local Plan at Policy 8.6 reserves a corridor for a future new road (Castle Lane Relief Road) between the A338 Spur Road and the A347 Northbourne Roundabout. This route would pass on the South side of the proposed development.

There are also Development Control Lines identified for localised on line improvements along Castle Lane West. The current and proposed commercial developments at Castle Point and Mallard Road will require further improvements to the Castle Lane West/Yeomans Road junction and Castle Lane West from Woodbury Avenue to the Cooper Dean roundabout.

3. PUBLIC TRANSPORT SERVICES

The closest rail station at Bournemouth Central is approximately 3.5 kilometres from the site and thus is not within walking distance. Services generally run at a frequency of two trains per hour in the peaks and one train per hour off peak. Direct services run to Wareham, Dorchester Weymouth, Poole, Southampton and Waterloo. Bournemouth Central Station has a high standard of facilities and is located at the Travel interchange with bus and coach services and taxi ranks.

Existing Bus Services

There are comprehensive bus services in the vicinity of the site including the following:

Yellow Buses

Circular services 33/34 -20min. Town Centre – Moordown- Winton – Bournemouth Hospital

Service 35 -30min. Town Centre–Charminster - Bournemouth Hospital - Boscombe

Service 31 -60min Town Centre. - Charminster – Bournemouth Hospital – Christchurch

Services 7/8 -60min. Boscombe- Bournemouth Hospital – Kinson via Moordown and Ensbury Park respectively

Wilts & Dorset

Service 165 30min. from Poole – Parkstone – Wallisdown – Moordown - Bournemouth Hospital

Of the services operating in the area the 33/34/165 and 35 services pass closest to the site via Chesildene Drive and Woodbury Avenue respectively approximately 250metres from the closet boundary of the site.

The other services running along Castle Lane are approximately 650metre from the closest boundary to the site.

Pedestrian and Cycle Network

This area forms part of the Greenbelt on the edge of the developed area.

New off-road pedestrian/cycle routes have been provided along Castle Lane West adjacent to the new Castle Point development and link to existing routes to the West. Enhanced pedestrian crossing facilities have also been provided as part of the associated major retail development works.

Future Public Transport Improvements

The Bournemouth Poole and Christchurch Local Plan (2001-2006), the Bournemouth, Dorset and Poole Structure Plan (2004) and the Bournemouth District Wide Local Plan (2002) all emphasis spatial and transportation measures to encourage a modal shift to public transport, walking and cycling and a reduction in the need to travel.

Measures include:

Supporting public transport, cycling and walking

Promoting bus priority

Implementing bus stop infrastructure improvements

Providing cycle lanes pedestrian routes and controlled crossings

Establishing new and safe routes to schools.

4. OPPORTUNITIES AND CONSTRAINTS

This section considers the opportunities and constraints for this area in terms of transport infrastructure.

Opportunities

Major development areas generally offer an opportunity to incorporate public transport facilities. Opportunity may exist for providing bus priority measures including bus only links for services to avoid delays on the existing network. Services 33/34/35/165 offer the greatest opportunity to increase services to Bournemouth and Poole Town Centres.

There is also opportunity to provide cycle/pedestrian routes through the development to link the existing routes on Castle Lane West and adjacent employment sites forming part of the overall development proposals.

Constraints

There are however considerable constraints. The most major is that the existing strategic highway network is already severely overloaded at peak times with further commercial and residential development already approved for the adjacent area. Earlier studies have indicated that current traffic demand cannot be met without major on-line improvements or provision of a new link road.

Even with the proposed modal shift to public transport any major development of the scale proposed e.g. 1250 dwellings and 11Ha of employment development would still lead to a significant increase in car trips and would therefore necessitate the provision of the new relief road. Furthermore the original relief road scheme proposed a 30 metre buffer strip, which with the construction of the road would severely restrict the remaining area available for development.

5. IMPACT OF THE DEVELOPMENT

The SE Dorset Traffic Model has been used to assess in more detail the impact of the above development proposes on the existing network. The model has been used to assess the Demand to Capacity ratios at the key junctions, which are seen as good indicators of local congestion on the network.

Not surprisingly this shows that North Bournemouth development leads to severe congestion on the main strategic corridor of Castle Lane West with all junctions ratios >150% saturation.

The model has also been run to consider the relief that could be provided by constructing sections of the Castle Lane Relief Road from the A338 to Yeomans Road, Muscliffe Lane and New Road Roundabout. This indicates that most relief appears to be provided by the construction of the full link although benefits are provided by the shortest link from the A338 to Yeomans Road. It is however recognised that a more detailed study would be needed to undertaken to fully substantiate a formal major scheme bid although this analysis does confirm the need for construction of a section of the Castle Lane Relief Road as a prerequisite of any development in North Bournemouth.