

## NEAs SECTION 1 LOCAL PLAN

### MATTER 6 – Transport and Infrastructure

#### RESPONSES ON BEHALF OF GALLIARD HOMES

This response has been prepared by AECOM Development Planning on behalf of Galliard Homes following the invitation from the Inspector for written responses to the North Essex Authorities (NEAs) technical answers to the Inspector's questions of clarification on RTS Vision to Plan [EB/079] reference EXD/075. Comment has only been made where relevant on the questions raised by the Inspector and answers provided by the NEAs.

#### 5.1 Capital Cost (Questions 1 and 2)

##### *Calculation of Capital Cost Estimates*

The approach adopted by the NEAs applies a cost per km based on the typology and length of road considered. Similar approaches have been adopted by AECOM at outline scheme appraisal and where a range of options and routes need to be appraised and reviewed.

An optimism bias uplift has been applied to the capital costs for each route as a contingency in regard to the overall scheme costs and is in line with standard practice in estimating capital cost. The level of optimism bias applied is typical for a project at this stage and is in line with Department for Transport guidance for an outline business case. Given the nature of the improvements which represent standard civil engineering, the percentage uplift (40%) for contingency applied by the NEAs to the lower bound costs would appear reasonable.

As reported and summarised in Galliard Homes 'Further Response to Hearing Statements' (December 2019) a range of benchmark costs have been provided by the NEAs and others to review the appropriateness of the scheme costs proposed and this was also discussed further at the examination.

The conclusion drawn from this review and reinforced by the more detailed work now completed on Route 1 by the NEAs is that the costs provide a reasonable estimate for this stage of appraisal.

##### *Journey Times*

Average journey speeds of 40km/hr (c.25mph) through garden communities and 50-80 km/hr (c.30-50 mph) on inter-urban sections have been assumed by the NEAs to inform journey time estimates.

For the West of Braintree Garden Community (Route 3) segregated facilities will be provided which will allow higher speeds to be maintained through this urban area and therefore the speed assumed could reasonably be expected.

At the Matter 6 session of the 16<sup>th</sup> January, the NEAs reported that even in a congested scenario the A120 west would expect to be operating at an average speed of 50mph which is the upper end of the average speeds assumed by Jacobs and the NEAs in developing their end to end journey time forecasts. Furthermore, Highways England did not accord with the view that the capacity of the A120 West of Braintree was of concern in the local plan period and therefore that speeds would be materially affected.

The deliverability of journey times reported in the absence of Easton Park and associated infrastructure coming forward was also raised at the Matter 6 session of the 16<sup>th</sup> January. Representations made by Jacobs on behalf of the NEAs identified that between West of Braintree and Stansted improved journey times may be deliverable when compared with the current assumption of a route passing through Easton Park with associated stopping time.

In estimating journey times an allowance has also been included by Jacobs of 30 seconds per stop on average based on liaison with Go Ahead. The value is assumed to allow for the increased use of smart cards and contactless payment which are improving boarding speeds and is in line with dwell times used by AECOM on similar development schemes in the UK.

Overall the approach to estimating journey times adopted by Jacobs on behalf of the NEAs would appear reasonable at this stage of assessment and given the level of information available.

### **5.2 Revenue forecast and Mode Share (Questions 3,4 and 5)**

The transport modelling approach adopted appears reasonable and proportionate and follows industry standard practice in the development of travel demand forecasts by road based modes.

Further consideration to the method employed is considered below in regards to the NEAs response to Appendix A.

### **5.3 Operating costs (Question 6)**

Discussions between AECOM and Essex County Council Passenger Transport Team in 2016 on behalf of Galliard Homes regarding the annual cost per annum for operating a bus service to and from the West of Braintree Garden Community indicated a typical figure of £150,00 per annum. This was based on ECC's experience of running similar services in Essex.

The £225,000 per annum allowance by Jacobs on behalf of the NEAs therefore appears reasonable when allowing for inflation and the higher quality of vehicle proposed relative to a standard bus.

The vehicle costs identified in the note are also consistent with operating costs per annum adopted by AECOM for similar studies in the UK.

### **Appendix A – Modelling Approach (Question 7, 8, 9 and 10)**

The questions and responses set out in reference to Appendix A of the Rapid Transport Strategy pertain to the approach adopted by the NEAs in modelling forecast trip levels. These are also relevant to revenue forecasting (5.2). A detailed response has been provided by Jacobs on behalf of the NEAs to the questions raised on the modelling approach.

The use of a generalised cost model is a standard approach to forecasting the share and number of trips by private vehicles and public transport.

Information readily available to Jacobs has been used and whilst it has been argued by others that additional or updated data could have been collected and employed, consideration has to be given as to what is appropriate for this stage of modelling and if the method employed is appropriate, not if it could be improved or altered.

For example in relation to WoBGC, Jacobs use Census 2011 Journey to Work data as a starting point to consider travel trends for the Braintree area. Census 2011 data is an accepted and industry standard dataset for transport analysis. The use of alternative datasets and/or surveys as suggested at the Matter 6 session of the 16<sup>th</sup> January would provide a significantly smaller sample and what is considered a less reliable dataset with a greater margin of error. Furthermore, there have been no

significant changes in local circumstances in and around Braintree since 2011 that would suggest the 2011 Journey to Work dataset used is inappropriate.

The results provided give a clear indication of the potential patronage levels that may be achieved by the rapid transit system and how these flow through to the forecasting of revenue. The forecasts will be developed and refined through the collection of additional information and more detailed modelling at the next stage of the process, as greater certainty arises on the support for each Garden Community as part of the Local Plan process.

The method adopted by Jacobs, at what is a strategic stage of appraisal, appears as stated by the respondent proportionate and appropriate and is considered, based on our experience of similar proposals, to be in line with what would typically be expected as an evidence base for a Local Plan.