Bexhill to Hastings Link Road Technical Note No.H002A: Reduction in Road Width from 3.5m to 2.5m – CSP H23

April 2010

The Design and Access Statement states that the verge will be 3.5m wide in the urban area.

It is proposed to reduce this width to 2.5m as a cost saving measure. The reduced verge width facilitates a reduction in the scale of structures, including Chapel Path Underpass, Woodsgate Bridge and Ninfield Road Retaining walls. Glovers Farm Bridge would also be included in this list but is subject to another alternative design which retains the existing bridge rather than construct a new one.

TD 27/05 of the Highways Agency Design Manual for Roads and Bridges (DMRB) is the Standard used for the design of highway cross sections. The Standard allows a variable width for the verge of a single carriageway road as indicated in the Figure below, the choice of verge width is left to the discretion of the designer taking into account the local factors.



Single Carriageway

DMRB advises that 'The verge is important from a number of perspectives, including safety, the environment and when considering the initial cost and ongoing maintenance and operating costs. It can provide a separate route for non-motorised users (NMUs) on all-purpose roads and also offers an area to accommodate footways and other dedicated facilities to improve safety and convenience for these groups.'

The proposed width of 2.5m is sufficient for all these purposes, particularly as there are no NMU routes at the side of the carriageway on this section of the route.

DMRB also states that 'The verge offers an important component in highway drainage systems, including the storage of snow displaced from the carriageway. It offers an area to support utility plant and to house highway equipment. Congested verges with insufficient room for necessary roadside components present both safety and engineering difficulties.'

The proposed 2.5m verge is sufficient to accommodate the services and drainage required for the scheme without becoming congested. Reducing the verges from 3.5m to 2.5m does not compromise the sight lines required by the design standards.

Under these circumstances there are no design or safety reasons for maintaining a verge width of 3.5m.

The 2.5m verge width offers the following advantages:

• Reduced cost.

- The narrower verge reinforces the 40mph speed limit by making the road feel less wide without reducing safety.
- Reduced footprint of the scheme reduces the loss of land with the benefits of
 Loss loss of badger forgeing
 - Less loss of badger foraging
 - Less disturbance to existing land
 Possible to retain more vegetation
- Reduced carbon footprint as the overall construction effort is reduced due to the reduced size of the bridges
- Less maintenance effort due to reduced verge maintenance and smaller bridges hence reduced future cost and carbon footprint are reduced