

Suggested walkway for improving the safety of pedestrians and vehicles on the Pangbourne approach to the Whitchurch Bridge

The report by PBA dated September 2016 on Options for Highway Widening on the Pangbourne approach to the bridge makes clear the large number of constraints – planning, environmental, landownership and flood defence – facing the designer.

Of the options studied, the authors home in on Option C as a feasible one. This provides a very modest degree of highway widening and two discrete pedestrian refuges, only one of which is on the curving part of the roadway. These would help pedestrians to pass each other, but the refuge is available for only about 30% of the length of the curve – odds of 1 to 3 against the pedestrian. I am also concerned that pedestrians would be distracted by the alternation of narrower and wider conditions as they proceed. In short, I do not feel that Option C is a good solution, for either pedestrian or vehicle safety.

The risk to pedestrians from traffic is clearly greatest on the curved part of the roadway (*the report agrees, see extract on next page*) and I think a much better solution would be to separate the footway from the roadway over this length. This could be done by constructing a raised walkway, about 50 metres in length, routed to avoid most of the trees, as indicated on the **sketch plan on page 3**. The route is shown straight for simplicity – a curving alignment would be aesthetically preferable.

Here are some further comments:

1. This suggestion builds on that of Jean Bull for ‘a skywalk through the trees’. Earlier today Geoff Weir and I visited the site and many of these comments result from our discussions.
2. The suggested walkway would take pedestrians away from the road for the whole of its curved length, the most hazardous part, thereby improving conditions for pedestrians where it matters most.
3. The roadway would be widened to occupy the existing footway width along the whole of the curved part of the road, exactly where extra road width is most needed.
4. The southern of the two Option C pedestrian refuges should be built, if possible, to provide a transition between the walkway and the narrow existing footway.
5. The walkway would need to be high enough for its underside to be above the soffit level of the flood arch, in order to satisfy flood defence criteria. It appears that this can readily be achieved by having the grade of the walkway matching that of the existing footway. This would give a gentle gradient, as at present.

6. To satisfy the Environment Agency's requirements that the walkway structure should present the minimum resistance to flood flow and also occupy a minimum of flood storage volume, steel support columns are suggested, with columns founded on buried concrete pads, configured to minimise root damage.
7. The walkway structure should display a visual connection with the bridge, I suggest, by being constructed in steel and painted white. The side barriers could even be designed to reflect the latticework of the refurbished bridge girders. Alternatively, they could be designed to sympathise with the battered white railings, which probably have a long life ahead. Visually, the curvature of the alignment would be a vital element.
8. For pedestrians walking northwards, an attractive new view of the upstream side of the bridge would become visible for the first time.
9. The walkway would be on land owned by the Surgery, who would clearly need to be happy with the idea for it to be considered further.
10. There is a gas service cabinet, shown on the plan near the southern end of the walkway, which might need to be relocated.
11. The increase in vehicle speeds resulting from widening part of the road might need to be counteracted by re- installing a speed bump/platform.

Richard Wingfield, MICE (retired), 28th November 2016

Extract from PBA report, Para 2.1.2:

The footway on the west side of the road is also narrow, making it difficult for pedestrians to pass one another (particularly for pushchairs and wheel chairs). Pedestrians are generally required to step out onto the road in order to pass one another. The road and footway are generally at their narrowest at the bend in the road so vehicles are naturally closer to the footway at this point, which makes pedestrians feel unsafe when using the route.

See next page for Sketch Plan.



WHITCHURCH BRIDGE

TIE IN WITH BRIDGE DECK FOOTWAY

5.2m

1.5m

5.2m

SUGGESTED WALKWAY

Sketch by
RMW
28-11-16

B471 Northbound

B471 Southbound

EXISTING ARCH UNDER ROAD

RETAINING WALL / GEOTEXTILE REQUIRED.
DETAILS TO BE CONFIRMED IN DESIGN STAGE

GAS CABINET

RETAINING WALL / GEOTEXTILE REQUIRED.
DETAILS TO BE CONFIRMED IN DESIGN STAGE

PROPOSED CARRIAGEWAY WIDTH

EXISTING FOOTWAY & CARRIAGEWAY WIDTHS

SOUTHERN REFUGE

The Dolphin
Adventure Centre

