



Pirbright Arch – Feasibility Study

**Local Committee (Woking)
28 February 2007**

KEY ISSUE:

To consider two proposals for improved pedestrian access and safety within Pirbright Arch, Brookwood.

SUMMARY:

A feasibility study of possible safety and access improvements for pedestrians using Pirbright Arch has been carried out. Two possible improvement schemes have been put forward. The recommended option is Option 2, which involves alterations to footways on each side of the arch, together with improved carriageway markings and signs

CONSULTATIONS:

County Councillors Elizabeth Compton (Brookwood & St Johns), Mike Nevins (Pirbright) and Woking Borough Councillor Philip Goldenberg (Brookwood) have been briefed on the Feasibility Study.

OFFICER RECOMMENDATIONS:

The Committee is asked to agree

- (i) That the final decision on any proposals lies with the Local Committee (Guildford)**
- (ii) That the Local Committee (Woking) support improvements at Pirbright Arch (Guildford)**
- (iii) That the Local Committee (Woking) would provide a financial contribution towards the cost of Option 2 to the value of 50% of the final scheme costs.**

INTRODUCTION and BACKGROUND

1. Surrey County Council's Traffic Systems group were commissioned by the West Area Transportation Service (Guildford) to carry out a Feasibility Study into considering options for and impacts of proposed improvements at the existing traffic signal controlled junction of A324 Pirbright Arch to provide a safer environment for pedestrians.
2. The existing pedestrian and traffic flows are indicated within the Feasibility Report as Annex A.

ANALYSIS AND COMMENTARY

Feasibility Study

- 3 The Feasibility Study is attached as Annex A but a brief resume' of the report has been highlighted below.

Surveys

- 4 Pedestrian and traffic surveys were undertaken at the location including all turning movements using the roads either side of the arch.
- 5 The assessment of the operation of the current and modified signal arrangements was assessed using Linsig as the study tool. The results are indicated in Annex A Appendix 1.

Proposed Options

6. The Feasibility Study has evaluated two possible improvement options for pedestrians at the Pirbright Arch. However there are benefits and concerns with both options.
- 7 **Option 1** is to reconfigure the existing controller to provide a separate pedestrian phase as well as some additional improvements.
 - Relocation of the existing posts and erection of additional push-button units and pedestrian indicators.
 - Kerbside call/cancel pedestrian indicators (as per Puffin type operation).
 - Pedestrian on-crossing microwave detectors.
 - Optionally, the provision of a Vehicle Message Sign activated by the signal controller to advise pedestrian stage operating.
 - Alteration to footways at each end of the arch to accommodate waiting pedestrians.
 - Carriageway markings to improve delineation between pedestrians and vehicles and to encourage pedestrians to keep within their designated space.
 - General upgrading and refurbishment of existing signs and carriageway markings.

- 6 **Option 2** has the same improvements as Option 1 except there is not the installation of a 'longitudinal Puffin Crossing'. Therefore, the existing 3-way traffic light control system would remain unchanged.
- 7 Both options are indicated within the Feasibility Study Report in Annex A as Drawing Numbers 536001 01 and 536001 02 located in Appendix 3

There are advantages with both options, but also concerns.

Option	Advantage	Concern
1	Improvement for pedestrians, at either end of Arch, improved 'walkway' with the protection of a pedestrian phase drainage and delineation line. Approach signing and lining improved.	Additional delays on all three traffic signalled arms predicted as up to 22 minutes in the am peak period. Delays will cause traffic to use other routes, most likely Cemetery Pales
2	Advantages as 1 but without the pedestrian phase.	'Walkway' still remains at 0.8m wide and traffic can be intimidating when stuck between brick wall and vehicle

- 8 With the above table in mind, it is recommended that Option 2 is adopted as a 'balance' of improving the environment for pedestrians without compromising severe delays to traffic and therefore creating additional problems within the vicinity as well as on other local roads such as Cemetery Pales.

FINANCIAL IMPLICATIONS

- 9 The estimated cost of the Options are A £116,000 and B £80,000. Details of the breakdown of these costs are indicated in Annex A section 7.1 and 7.2. £10,000 is available through the Section 106 process which will enable the Local Transport Plan costs to be reduced by this amount.
- 10. However, as the location for the scheme is within Guildford, it is for the Local Committee for Guildford to dictate the final outcome for this scheme. The Local Committee for Woking may wish to support the scheme options with or without funding from its Local Transport Committee budget, but it is recommended that any commitment in funding by Woking should not be in excess of 50% of the total costs as indicated in section 7.1 and 7.2.

SUSTAINABLE DEVELOPMENT IMPLICATIONS

- 11. The improved accessibility through the Arch using Option 1 or 2 should make it feel safer for pedestrians to use, especially in the case of Option 1. This may encourage additional pedestrians to use the Arch instead of driving, which is in keeping with the County Council's Local Transport Plan (LTP) targets and indirectly the developing Climate Change Agenda.
- 12. However, the additional delays to traffic waiting at the traffic signal junction

go against the LTP targets in the form of added congestion.

CRIME & DISORDER IMPLICATIONS.

13. Both Options improve the safety of pedestrians using the Arch. However the existing lighting is good and no personal injury accidents have occurred within the Arch over the past three years.

EQUALITIES IMPLICATIONS

14. The improvements will assist with all pedestrians especially the school children the elderly and disabled users, as it will be easier to access the Arch providing freedom of movement to facilities either side of the railway line.

CONCLUSIONS AND REASONS FOR RECOMMENDATIONS

15. The pedestrian flow in the area and particularly through the Pirbright Arch is light even at peak periods, with maximum values recorded of just 20 and 29 morning and evening respectively. It should, however, be noted that the afternoon figure occurs at school time, about an hour before the evening traffic peak period.
16. Pedestrians walking through the arch are encouraged to use the 0.8m edge margin provided on the west side of Connaught Road, but there is insufficient width for construction of a formal footway, particularly as it could not accommodate two pedestrians passing. As it is, when this occurs there is no alternative to one party stepping out into the designated carriageway as gaps in traffic permit in order to pass by. A kerbed footway would present a significant trip hazard.
17. The environment is clearly unsuited to sharing pedestrian and vehicular use and is only sustainable due to the very low pedestrian usage.
18. There is little doubt that pedestrian safety would be improved by the provision of a controlled pedestrian stage through the arch for those prepared to wait for the pedestrian stage to appear as Option 1, but there are also advantages in the improvements made using Option 2.
19. The pedestrian crossing signals associated with a controlled crossing are not mandatory and pedestrians would therefore not be required to wait for the "Green Man" pedestrian stage when all vehicular movements would be stopped. Anyone walking through the arch during a vehicular stage is likely to be at greater risk as motorists would be less likely to expect to encounter a pedestrian in the arch during a vehicle stage.
20. Regrettably, experience suggests that with such high signal cycle times the delay to pedestrians would be so great that many would be likely to walk through the arch during a vehicle stage rather than wait for the pedestrian stage to appear.

21. The existing traffic signals are operating just over capacity during peak periods, due mainly to the considerable "Lost Time" required to provide the necessary clearance periods through the arch or competing traffic demands. However, peak hour traffic flows are relatively light and congestion and delay is just about manageable.
22. If the proposed signal and pedestrian arrangements were put in place as Option 1 it is predicted that there would be an anticipated high incidence of non-compliance by pedestrians and this must be taken into consideration when considering the benefits of the additional pedestrian stage against the disbenefits in terms of additional traffic delay which is predicted by the Linsig model.
23. However, there are improvements to be made with Option 2 without the disbenefit of the predicted traffic problems.
24. It should also be noted that a full consultation with the public and local businesses etc has not taken place and if this scheme were to proceed under either option, the views/comments of the local highway users would also need to be taken into account at a later stage.
25. Options 1 and 2 have been assessed using the rating system adopted by the County Council during the 2005/06 financial year. Neither scheme is currently within the Guildford LTS work programme, and the earliest date for construction is likely to be during or beyond the 2009/10 financial year.

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Accountable: Paul Fishwick, Senior Local Transportation Manager (Woking) and Kaz Banisaied Principal Engineer (Guildford)

Background Papers: None
