Power Road Enabling Works

TfL Lane Rental Industry Publication

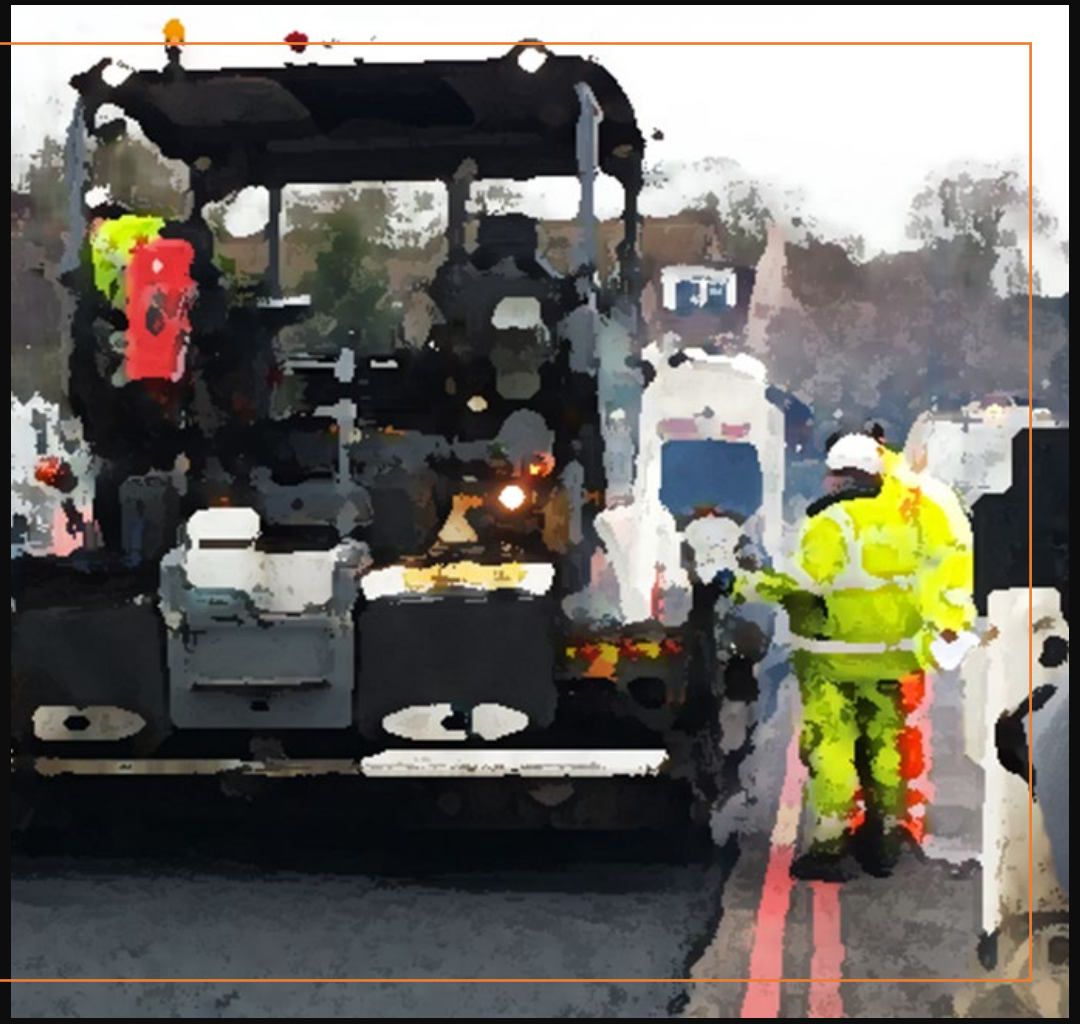
TRANSPORT FOR LONDON

Introduction

Power Road Bridge was built in the early 1920s and had reached the end of its operational life and needed repair. The original plan for replacement was to construct a new bridge alongside the existing structure and then, during a full closure of the A406 in both directions, the existing structure would be demolished and the replacement bridge would then be placed into position. This was not ideal given the amount of traffic on this road. To facilitate this without a full closure of the bridge, construction of a temporary highway alignment was required.

The Project

The temporary alignment was installed on the western side of the A406 Gunnersbury Avenue, between Larch Drive and the entrance to the Cemetery. This required a full depth construction (approx. 1000mm), including the provision of temporary kerbing, drainage and markings. Utility apparatus had to be considered and strengthened where applicable to ensure that traffic could pass over them. Upon completion of the project, the alignment was removed and the area reinstated back to footway and verge.



Outcomes

The project achieved its objective of allowing the Power Road Bridge to be fully demolished and reconstructed while maintaining traffic flow in both directions throughout the project and giving greater journey time reliability while the bridge works were undertaken.

Lessons Learnt

Consideration should be given on how access could be provided to utility covers that may be affected during the use of a temporary alignment. For this project, a traffic management design was produced to enable the closure of an additional lane which would allow access had it had been needed.

All utility covers should be surveyed/checked to ensure that they meet D400 loading requirements as part of the design process as most chambers in verges are built to a lower specification. Temporary strengthening works or protection may be required.

Consideration should be given to cycle access during the temporary layout and establish if extra temporary space can be designed to give safer cycling routes or additional space for pedestrians.

Conclusion

The project was delivered successfully to time and budget while mitigating reputational risks which may have happened had the original construction method been used. Using the additional space provided by the temporary road layout allowed the contractor the ability to carry out the demolition and reconstruction of the bridge whilst maintaining traffic flow in both directions.

All projects which require a reduction in any transport capacity should examine all options to provide measures to reduce the impact of the loss of capacity, whether this is the construction of temporary highway alignments, temporary footways/cycleways or shared space/services.

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TfL Lane Rental Scheme

Optimising customer journeys through the delivery of safer, innovative and sustainable roadworks