

**FUTURE OF BRICK ARCHED FORMER RAILWAY BRIDGE, GREEN LANE, STUDLEY**

Relevant Portfolio Holder	Councillor Brandon Clayton
Portfolio Holder Consulted	Yes
Relevant Head of Service	Guy Revans - Head of Environmental and Housing Property Services
Report Author	Job Title: Engineering Team Leader Contact email: <a href="mailto:pete.liddington@bromsgroveandredditch.gov.uk">pete.liddington@bromsgroveandredditch.gov.uk</a> Contact Tel: 534108
Wards Affected	Greenlands
Ward Councillor(s) consulted	No
Relevant Strategic Purpose(s)	Communities which are safe, well maintained and green
Non-Key Decision	

**1. RECOMMENDATIONS**

The Executive Committee is asked to **RECOMMEND** that:

- 1) The 2023/24 Capital Programme is reduced by £113k to provide a total budget of £80k, for undertaking remedial works to the bridge structure as highlighted by the Principal Inspection; and
- 2) A budget of £5k for Warwickshire County Council to undertake Principal Inspections on a six-year cycle commencing 2029/30, and a General Inspection on a two-year cycle, commencing 2025/26, be included in the Medium-Term Financial Plan for future years, as shown below.

2025/26 - £5k	General Inspection
2027/28 - £5k	General Inspection
2029/30 - £5k	Principal Inspection
2031/32 - £5k	General Inspection
2033/34 - £5k	General Inspection
2035/36 - £5k	Principal Inspection
2037/38 - £5k	General Inspection
2039/40 - £5k	General Inspection

**2. BACKGROUND**

- 2.1 In the 1960s, the former Redditch Development Corporation, as part of their infrastructure needs for the New Town, wanted to purchase the former goods railway line that ran into Redditch from Evesham. Their

interest was limited to the section that fell within the Borough boundary but were cajoled by the Railway Company to having to also purchase the section within Studley. With this land unfortunately came the brick arched bridge structure that spans Green Lane.

- 2.2 These assets were eventually transferred to this Council from the then New Towns Commission, but alas, being located outside of the Borough, little attention was paid to them. However, some years ago, large sections of the brick soffit to the bridge structure suddenly displaced themselves, and were deposited on the carriageway below, luckily no vehicles or pedestrians were involved. Consequently, as the owner of this structure, this Council were then tasked with undertaking emergency remedial works in replacing the soffit brickwork, after temporarily closing the highway.
- 2.3 As time went by, the bridge structure gave 'cause for concern' to Borough Council Officers, as its structural integrity could not be assured, particularly with sections of the soffit brickwork failing previously. Although Officers undertook regular visual inspections of the bridge structure, a detailed analysis could not be readily ascertained.
- 2.4 As a result of these concerns, Officers proposed a scheme to remove the bridge asset in its entirety and providing in its place an at-level pedestrian/cycle way crossing, and provision of two building plots. The site also encompassed the vacant building site of No.65. The provision of the two building plots were the means of raising the finance to undertake the engineering works. The bridge itself had no particular historic interest and was classified as a purely standard structure.
- 2.5 Consequently, at the Council's Executive Committee meeting on 10 September 2019, Members recommended the following:
  - i) No. 65 Green Lane, Studley be declared surplus to requirements and Officers to dispose of the site;
  - ii) any HRA capital receipt achieved based on the current market value of No. 65 Green Lane, be used to increase the HRA stock;
  - iii) Option C - The Capital Engineering Scheme be approved, with Authority be delegated to the Head of Environmental Services to submit a detailed planning application to Stratford-on-Avon District Council (SDC), for the complete scheme. If successful, the Planning consent will include an outline approval for the erection of 2 No. 4 bed houses (attention is drawn to Appendix 2 - details of Option C);

- iv) the sites for the 2 No. 4 bed houses be marketed and the received monies, after deduction of the amount as described in ii) above, shall be used as Capital funds towards the cost of the Engineering Works;
  - v) the additional funds required to complete the Engineering Works be taken from the Capital Locality Scheme Budget, as the proposed works are of the nature that the budget was set up for in the first instance; and
  - vi) the estimated cost of the Engineering Works cannot be finalised at this time, as Officers are currently endeavouring to determine the most cost-effective method of disposing of the extensive surplus material from the excavated embankments. However, subject to the satisfactory outcome of this analysis the total Engineering Works should not exceed £200k.
- 2.6 Consequently, a Planning application was submitted to both SDC and this Authority, as the scheme covers both administration areas, the application being a hybrid, covering a detailed application for the highway works, and an outline application for the residential element.
- 2.7 Regrettably, the Planning application caused consternation with the local residents, with them believing that with the removal of the bridge structure would result in a number of adverse effects to the area. Partly as a result of these objections SDC Planning Officers advised that they were minded to refuse the application, and therefore suggested that we may consider withdrawing the application. This was the action ultimately taken by Borough Council Officers after liaising with Members.
- 2.8 With the failure of this development proposal, the Council is still left with an asset that is located outside of its administration boundary, offers no significant benefits to this Council's residents, and more importantly becomes a burden on financial resources.
- 2.9 Council Officers have held discussions with Warwickshire County Council Officers, suggesting two options. Firstly, that as the bridge lies within their County boundaries, they may consider a transfer of this asset, at no cost, and it be absorbed within their bridge assets. Secondly, if the first suggestion was negatively received, would they consider undertaking the required inspection regime required by ***Design Manual for Roads and Bridges - CS 450 - Inspection of Highway Structures***. It is imperative that the structure be inspected in accordance with CS 450, with any required remedial works undertaken as a result, as no records are available as to when, or if, the structure

## **Executive Committee**

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was subject to any previous inspection regime. Warwickshire County Council unfortunately did not accept our first proposal, but were prepared to accept our second.

- 2.10 Consequently, the bridge structure was subject to a Principal Inspection (PI) which was undertaken on 14 February, with the results generally described, as follows. The full PI Report is available as a background paper:

### **Deck Elements**

<b>Element Name</b>	<b>Remedial Works</b>	<b>Priority</b>
Primary deck element	Recommend rebuilding the damaged section; repair should be keyed into the existing brickwork	High
Primary deck element	Recommend repointing and monitoring the defect at future inspections	Low
Primary deck element	Recommend repointing and pinning the arch ring, then monitoring the defect at future inspections	Medium
Primary deck element	Recommend repointing the missing and loose joints on both elevations	Low
Primary deck element	Recommend repointing the missing brick joints	Low
Primary deck element	Suggested work - investigate by cores taken through bricks at hollow-sounding areas to establish extent of non-contact with the second arch ring. Recommend that any areas found to be unbonded should be pinned and bonded back to the inner arch rings to eliminate separation of the arch ring	Medium

### **Load-bearing Substructure**

<b>Element Name</b>	<b>Remedial Works</b>	<b>Priority</b>
Abutments (including arch springing)	Recommend areas of hollowness checked by coring; consider grouting to fill voids. Monitor spalled areas at future inspections	Low
Abutments (including arch springing)	Recommend repointing the missing pointing	Low
Spandrel wall/head wall	Recommend repointing and monitoring cracks at future inspections	Low
Spandrel wall/head wall	Recommend repointing the missing pointing	Low

### **Safety Elements**

<b>Element Name</b>	<b>Remedial Works</b>	<b>Priority</b>
Handrail/parapets/safety fences	Install timber post and rail fencing to parapet ends to prevent access to wingwalls and steep drop	High

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Footway/verge/footbridge surfacing	Consider levelling and repair at transverse crack	Medium
	Recommend removal of sapling as soon as practical	

**Other Bridge Elements**

<b>Element Name</b>	<b>Remedial Works</b>	<b>Priority</b>
Wing walls	Recommendation - repair/re-bed after trees/ivy are dealt with	Medium
Embankments	These trees should be cut down and stumps treated to prevent regrowth	High

**3. FINANCIAL IMPLICATIONS**

- 3.1 In line with item 2.5 vi) a sum of £200k was re-allocated from the Capital Locality Scheme Budget to cover the anticipated Engineering Works. To date, £7k has already been committed, and with the proposed remedial works as itemised in 2.10 which are to be undertaken as soon as possible, irrespective of priority status, estimated to cost £80k, the remaining Capital budget of £113k can be considered as a saving.
- 3.2 With future Principle and General inspections being required to assess this asset in future years, there will undoubtedly be various remedial works required, which will need to be addressed.

**4. LEGAL IMPLICATIONS**

- 4.1 The Council, as owner of this asset, albeit located outside of its administrative boundary, has of course a responsibility to ensure its satisfactory condition and performance. Bridges have, like any other infrastructure assets such as roads, footways, culverts etc., a limited design life, and their repair and renewal become necessary due to wear and tear, damage, inclement weather and so forth. However, as the original live loading of goods trains has now been drastically reduced to only pedestrian traffic, resultant stresses should limit the deterioration in the structure itself.

**5. STRATEGIC PURPOSES - IMPLICATIONS**

**Relevant Strategic Purpose**

- 5.1 **Communities which are safe, well maintained and green** – The identified remedial works, when complete, will ensure the provision of a safe infrastructure asset.

**Climate Change Implications**

- 5.2 There are no climate change implications arising from this report.

**6. OTHER IMPLICATIONS**

**Equalities and Diversity Implications**

- 6.1 There are no equality implications arising from this report.

**Operational Implications**

- 6.2 In addition to the formal inspections required by **CS 450 - Inspection of Highway Structures**, periodical 'drive by' inspections will also be undertaken by Engineering and Design staff, to ensure that no adverse incidents have occurred.

**7. RISK MANAGEMENT**

- 7.1 Adherence to **CS 450 - Inspection of Highway Structures**, together with the additional 'drive by' inspections will mitigate any possible claims from the general public.

**8. APPENDICES and BACKGROUND PAPERS**

Appendix 1 - Site Location Plan.

Appendix 2 - Original Capital Engineering Scheme

Principle Inspection Report undertaken by Warwickshire County Council

**Executive Committee**

**12 September 2023**

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**9. REPORT SIGN OFF**

<b>Department</b>	<b>Name and Job Title</b>	<b>Date</b>
Portfolio Holder	Councillor Brandon Clayton	26 July 2023
Lead Director/Head of Service	Guy Revans - Head of Environmental and Housing Property Services	18 July 2023
Financial Services	Peter Carpenter Director of Finance	19 July 2023
Legal Services	Principal Solicitor	15 August 2023
Policy Team	Emily Payne Engagement and Equalities Advisor	20 July 2023