

# Portfolio Holder Decision

## The Warwickshire County Council (Coton Bridge, Coton Road, Parish of Nether Whitacre) (Weight Restriction) Order 2021

<b>Portfolio Holder</b>	<b>Portfolio Holder for Transport and Planning</b>
<b>Date of decision</b>	<b>5 August 2021</b>
	<b>Signed</b>

<b>Decision taken</b>
<p>That the Portfolio Holder for Transport and Planning approves that the below named proposed Traffic Regulation Order be made as advertised:</p> <ul style="list-style-type: none"> <li>The Warwickshire County Council (Coton Bridge, Coton Road, Parish of Nether Whitacre) (Weight Restriction) Order 2021.</li> </ul>

<b>1. Reasons for decisions</b>								
<p>1.1 A copy of plan TR-11220 detailing proposals for an 18 tonnes weight limit on Coton Bridge can be found as Appendix B. Objections and comments were received to these proposals; the following tables detail the objections and comments received together with the officers' responses.</p>								
<table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <th colspan="2" style="background-color: #cccccc;">Emails/letters</th> </tr> <tr> <td style="text-align: center;">Total objections</td> <td style="text-align: center;">25</td> </tr> <tr> <td style="text-align: center;">Support in principle received</td> <td style="text-align: center;">2</td> </tr> </table>			Emails/letters		Total objections	25	Support in principle received	2
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Ref	Objections received	Total number of responses containing the comment						
A	Alternative route is unsuitable – increased HGV traffic through local villages.	23						
	Perceived issues with ease of access will have a detrimental							

B	effect on business for The Cedars	3
C	Air quality and noise levels will be affected in villages on the alternative route.	9
D	Increased risk of obstruction, damage and accidents on alternative route – including Station Road and the Green Man crossroads, Coleshill.	18
E	On-street parking narrows the carriageway in places along the alternative route, with the potential for damage to parked cars by larger vehicles and disruption to traffic flow	11
F	There is a risk of HGV drivers using ‘shortcuts’ instead of the signed alternative route, using narrower lanes with dangerous junctions and tight bends. Specifically, Halloughton Grange which has seen incidents with overhead cables being damaged by over-height vehicles using the lane.	9
G	Original designers / construction company for the bridge should be liable for repairs.	3
H	Costs of potential accidents and disruption will outweigh the costs involved of repairing / replacing the bridge.	2
I	County Council have been negligent in allowing the bridge to fall into disrepair; priority should be given to repairing / replacing the bridge.	10

Ref	Officer Comments in Response to Objections
A, B, C	<p>The weight limit for Coton Bridge is proposed based on the findings of a structural assessment and is necessary to ensure the structure can safely remain open to most traffic. Not imposing the restriction risks further structural damage and may result in the need for lower weight limits, a full road closure or could even result in a structural failure. It is accepted that the alternative route is longer and that increased HGV traffic will add to existing traffic on it with consequent impacts on emissions and amenity. However, it is considered that there is no alternative given the condition of the bridge and the risks of continued use by very heavy vehicles.</p> <p>It is our intention to either strengthen or replace the bridge, but we are at a very early stage in this process. A feasibility study is proposed to determine the most appropriate solution and an estimated cost. Due to the type of bridge and the nature of the defects, a replacement structure is likely to be required but we will also consider the feasibility of strengthening options as a medium-term solution. The extent of the work anticipated is beyond what we can deliver with our bridge maintenance budget and a funding bid application will be prepared once the feasibility study is complete. Once the bridge is</p>

	either strengthened or replaced, the weight limit will be removed.
D	<p>The effects of the introduction of a weight restriction and alternative route will be monitored, with the potential for further mitigation works to be investigated if necessary.</p> <p>Design work is currently under way as a separate scheme to upgrade the Green Man crossroads in Coleshill, on the alternative route, which would allow for ease of traffic flow through the junction.</p>
E	<p>The existing 7.5T environmental weight restriction in place on Coton Road is subject to an exemption which allows for access to properties and businesses within the area, and this and other traffic on the alternative route means that there is already a need for available carriageway width for the passing of HGVs. Where there are no formal parking restrictions in place, responsibility lies with the individual motorist to park in a manner which does not endanger other users of the public highway or cause an obstruction.</p>
F	<p>The weight restriction at the bridge itself will be signed with advance notice at suitable locations on either approach, ensuring that HGV drivers are informed before turning into Coton Road and therefore negating the need for any reversing or unsuitable turning manoeuvres. The alternative route will be clearly signed at all junctions along the route; consideration can also be given to including "Unsuitable for HGVs" signs at the entrance to other roads which may otherwise be used as shortcuts.</p>
G, H, I	<p>Coton Bridge is inspected for structural defects annually as part of Warwickshire County Council's routine inspection programme for highway structures. It is also subject to more rigorous inspections as it is a post-tensioned structure which puts it at greater risk of developing serious hidden defects than other bridge types. As a post tensioned structure, we are required to carry out detailed intrusive inspections every 18 years to check for defects within the bridge's main beams. The last of these detailed inspections was undertaken in 2019 and identified issues with the bridge's internal steel tendons that raised concerns about its long-term load bearing capacity. This subsequently led to a structural assessment being undertaken by our engineering partners at Atkins and Jacobs which found that the bridge can no longer safely carry full highway traffic loads and a weight restriction was recommended.</p> <p>A similar assessment carried out in 1994 found that the bridge edges were unable to sustain the loads from a vehicle accidentally mounting the footway and this led to the installation of the barriers currently in place to prevent vehicles from pulling onto the footways. The defects with the bridge's main beams were not identified at that time and so a weight restriction was not then required.</p> <p>Once the weight restriction is in place, it will apply to heavy goods vehicles with a plated maximum gross weight greater than 18 tonnes. This means that it will apply to both laden and unladen vehicles. This is so that the police can enforce weight restrictions without the need to take the vehicles to a weighbridge.</p> <p>It is our intention to either strengthen or replace the bridge, but we are at a very early stage in this process. A feasibility study is proposed to determine the most appropriate solution and an estimated cost. Due to the type of bridge and the nature of the defects, a replacement structure is likely to be required but we will also consider the feasibility of strengthening options as a medium-term solution. The extent of the work anticipated is</p>

beyond what we can deliver with our bridge maintenance budget and a funding bid application will be prepared once the feasibility study is complete. Once the bridge is either strengthened or replaced, the weight limit will be removed.

The weight limit for Coton Bridge is proposed based on the findings of the structural assessment and is necessary to ensure the structure can safely remain open to most traffic. Not imposing the restriction risks further structural damage and may result in the need for lower weight limits, a full road closure or could even result in a structural failure.

## 2. Background information

- 2.1 Coton Bridge, on Coton Road between Marston and Whitacre Heath, was originally constructed in 1894, and then in 1957 the abutments were strengthened and the deck replaced, making the bridge effectively 64 years old. The type of bridge deck chosen at the time would have been of a modern design, but as time has passed defects have been discovered in these post tensioned structure bridges, where the post tensioned tendons can be vulnerable to corrosion and severe deterioration. At the time of the construction, the risks of deterioration to the tendons would not have been known about and are only identifiable from carrying out intrusive inspections which puts it at greater risk of sudden failure than other bridge types and because of this it is subject to an enhanced regime of routine inspections.
- 2.2 During the last inspection, concerning defects were found with the tendons within the bridge's concrete beams. Most notable of these defects was that several tendons were found to have become loose instead of being under tension as intended in its original design. As a result, a structural assessment has been carried out by the consultants on WCC's Professional Services Framework and this concluded that the bridge is no longer able to safely carry unrestricted vehicle loads.
- 2.3 An earlier assessment found that the bridge's edges are under strength which led to the installation of the traffic signals and vehicle barriers that are currently in place to protect the weak footways from accidental loading. This latest assessment has found that the bridge's main beams, beneath the carriageway, are also under strength and a permanent 18 tonne weight restriction is required to minimise the risk of structural damage or failure. Not imposing this weight limit could risk structural failure of the bridge. A feasibility study has been commissioned to investigate if the bridge could be strengthened or needs replacing and to estimate the costs of restoring this route to carry full highway loading. Given the nature of the defects, it is likely that the structure will need replacing. Any solution will most likely exceed the annual bridge maintenance budget, and specific funding would have to be identified and allocated for works to bring the bridge back to full strength. At present it is not possible to provide timescales until a solution has been identified.
- 2.4 Coton Road is already within the area covered by an environmental weight limit of 7.5T under the provisions of The Warwickshire County Council (Various Roads, Lea Marston, Nether Whitacre and Shustoke) (Prohibition of Commercial Vehicles of over 7.5 Tonnes) Order 1987. This allows specific exemptions, including for loading/unloading access to properties within the restricted area; as a structural weight limit for reasons of road safety, the proposed 18 Tonne restriction would NOT be subject to access exemptions.

- 2.5 Recent traffic counts adjacent to the bridge on Coton Road have shown that the 5-weekday average for vehicles over 18T is 74v/pd Northbound, and 87v/pd Southbound (these figures exclude weekends when there is less movements). The diversion route proposed will have an impact on the surrounding roads with an increased number of heavy vehicles over 18T, which will have a longer route along the main A4097,A446 and the B4114. However, this route is already used by a significant amount of heavy traffic and it is considered that this route is suitable for such traffic and has the capacity for additional traffic without causing traffic disruption. Blythe Road and Station Road will have increased heavy vehicle traffic movements which will have an environmental effect on residents living on that route, unfortunately there is no other alternative route for heavy vehicles to use to access The Cedars.
- 2.6 Proposals were advertised and consulted upon in accordance with statutory procedure on the 18<sup>th</sup> March 2021, with consultation open until the 9<sup>th</sup> April 2021.
- The statutory criteria for decisions on making Traffic Regulation Orders are included as **Appendix A**.
  - Drawings showing published proposals for the weight restriction and alternative route are found in **Appendix B**.
  - Copies of objections and comments received can be found in **Appendix C**.

### 3. Financial implications

- 3.1 Costs associated with the introduction of a weight restriction on Coton Bridge (including legal costs, consultation and potential implementation) would be expected to be under £10k.
- 3.2 All costs are funded from existing Structural Maintenance budgets.
- 3.3 A feasibility study is proposed to investigate further the costs associated with repairing or replacing the existing bridge structure.

### 4. Environmental implications

- 4.1 The longer alternative route would increase emissions and add to existing impacts on amenity. However, these impacts are outweighed by the risks arising from the condition of the bridge, and the impacts would be even greater if further deterioration of the bridge were to require even lower limits or a total road closure.

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<b>Assistant Director</b>	David Ayton-Hill, Assistant Director for Communities
<b>Lead Director</b>	Mark Ryder, Strategic Director for Communities
<b>Lead Member</b>	Wallace Redford, Portfolio Holder for Transport and Planning

<b>Urgent matter?</b>	No
<b>Confidential or exempt?</b>	No
<b>Is the decision contrary to the budget and policy framework?</b>	No

### List of background papers

None

### Members and officers consulted and informed

Portfolio Holder – Councillor Wallace Redford

Corporate Board – Mark Ryder

Legal – Ian Marriott

Finance – John Stansfield

Equality – Keira Rounsley

Democratic Services – Paul Williams

Councillors – Leaders of the Party Groups, Communities OSC Chair & Spokespersons

Local Member(s): Councillor Andy Jenns