



Northumberland County Council

RECORD OF DECISION TAKEN BY SERVICE DIRECTOR - LOCAL SERVICES

Paul Jones

17th April 2020

Lynemouth East Road and Rail Bridge Weight Limit and Width Restriction

Cabinet Member: Glen Sanderson - Environment & Local Services

Purpose of Report

This report sets out the background to the proposed introduction of a weight and width limit on the C110 Lynemouth East Road and Rail Bridge

Recommendations

It is recommended that the C110 road over the River Lyne south east of the village of Lynemouth now has a '3 tonne weight limit' and a '6 foot 6 inch width restriction'.

Link to Corporate Plan

Living - "We want you to feel safe, healthy and cared for"

Enjoying - "We want you to love where you live"

Learning - "We want you to achieve and realise your potential"

Key Issues

1. The Lynemouth East Road and Rail Bridge was constructed in 1930 and is now close to the end of its serviceable life.
2. An inspection and survey of the bridge has indicated that the structure of the bridge is showing signs of disrepair.
3. Measures are therefore required to limit the use and resulting impact of those using the bridge.
4. The scheme will be funded from LTP allocation.

Delegated Decision

Background

Lynemouth East Road and Rail Bridge is a Hennebique type reinforced concrete structure which carries the C110 road over the River Lyne south east of the village of Lynemouth.

The bridge was constructed in 1930 in the style of French Engineer, Francoise Hennebique, a pioneer in the design and construction of reinforced concrete structures, involving the integration of separate structural elements into a single monolithic construction. The bridge has now been in operation for over 90 years and without major structural improvements, is reaching the end of its serviceable life.

An inspection and survey of the bridge indicated that overall the structure is in very poor condition, with significant defects present to most of the structure's elements.

Testing was conducted by NCC Highways Laboratory indicating that elements of the bridge contain high levels of chlorides resulting from de-icing salts and the surrounding marine environment. As such these parts of the structure are at risk of decay through corrosion caused by the presence of high concentrations of salts that cannot be removed.



Delegated Decision

Section loss and corrosion to central main beam at south abutment.



Deck soffit detail showing longitudinal cracking to base of main and secondary RC beams. Also note leachate staining and stalactite formation



Delegated Decision

The bridge has been identified as being under strength which is accelerating its decay. At present it is being closely monitored on a regular basis to ensure that it remains safe. This is a significant financial burden.

Action is needed to ensure the safety of the travelling public who cross the bridge and to prevent further degradation of the underlying structure. Further decay could ultimately cause the bridge to become unusable.

The bridge is beyond economical repair, the form of construction, defects apparent and presence of high levels of salts prevent this. Replacement of the bridge would cost in the order of £1million, and this is not recommended at this stage given other more pressing investment priorities, the limited requirement for HGV movements over the bridge, availability of an alternative route and, scope for introduction of weight and width restrictions to enable the serviceable life of the existing structure to be safely extended. It is therefore proposed that a weight and width restriction is applied to reduce future damage.

It is therefore proposed that a weight restriction (of 3 tonnes) and width restriction (of 6ft 6ins) is introduced on the C110 that crosses the Lynemouth East Road and Rail Bridge.

Whilst the physical restrictions are put in place it is intended to carry out some improvements for cyclists and pedestrians in the vicinity of the bridge.

Local Councillors have been notified of the proposal. Northumbria Police, other emergency services and relevant statutory consultees will be notified of these amendments as part of the process for making the permanent Orders.

Delegated Decision

Implications Arising out of the Report

Policy	Consistent with existing policies
Finance and value for money	Scheme will be financed from the 2019/20 - Bridges Structural Maintenance programme
Legal	Traffic Regulation Orders (reference TROM_172) Northumberland County Council (C110 Lynemouth Road and Rail Bridge Weight and Width limit) Order 2020
Procurement	Signage and road markings to meet Regulations for Traffic Regulation Orders
Human Resources	None
Property	None
Equalities (Impact Assessment attached) Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>	N/A
Risk Assessment	None
Crime & Disorder	Regulations in place to carry out enforcement.
Customer Consideration	A weight and width limit will protect the structure and will lead to a safer environment for all road users.
Carbon reduction	None
Wards	Lynemouth

Delegated Decision

Background papers:

File reference -

S:\Highways\PROJECT\17\HB17 Bridges Structural Maintenance

Lynemouth East Road and Rail Bridge Weight Restriction Report C110/03RY - Jan 2020

Appendix A – Location Plan of Lynemouth East Road and Rail Bridge

Author and Contact Details

Report Author **Terry Luck, Programme Engineer**

Delegated Decision

DECISION TAKEN

Title of Officer: Service Director, Local Services

Subject: Proposed introduction of a weight and width limit on the C110 Lynemouth East Road and Rail Bridge

Consultation: Not required for the introduction of weight and width restrictions which are proposed on road safety criteria. All statutory consultees have been notified of these proposed restrictions.

Decision Taken: To proceed with the introduction of a 3 tonne weight limit and a 6 foot 6 inch width restriction on the C110 road over the River Lyne south east of the village of Lynemouth.

Signature of Director



Date
20th April 2020

Delegated Decision

Appendix A

Location Plan of Lynemouth East Road and Rail Bridge

