

REPORT REFERENCE: 1.0

## **EXECUTIVE**

DECISION MAKER: EXECUTIVE COUNCILLOR NAME:

Cllr W S Webb

DATE OF MEETING: 02/12/2009

**SUBJECT:** Jobson's Footbridge, Pinchbeck

**DECISION REFERENCE**: 01657

**REPORT BY:** Assistant Director (Highways & Traffic)

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IS THE REPORT EXEMPT? No

IS REPORT CONFIDENTIAL? No

IS IT A KEY DECISION? Yes

**DIVISION(S) AFFECTED** Spalding Elloe / Spalding West

# **SUMMARY**

Jobson's Bridge is a four span timber structure (27.3m) that carries a County Maintained footpath over the Vernatt's Drain in the parish of Pinchbeck.

Inspections have determined that there is serious rot to the main structural support members on this 70 year old structure.

A Feasibility Study has been carried out on the options available and consultation has been carried out with the Parish Council and the residents.

The proposal is to replace the structure with a steel painted warren truss which provides the lowest whole life cost and is DDA compliant.

### **DISCUSSION & OPTIONS**

### Introduction

- Jobson's footbridge is a four span timber footbridge with a total span of 27.3m that carries a County Maintained footpath over the Vernatt's Drain in the parish of Pinchbeck near Spalding.
- The bridge is over 70 years old. Lincolnshire County Council took ownership of the bridge in 1987, when the condition of the structure deteriorated and repairs were required and no other body could be identified or would admit to having liability and responsibility for its upkeep.
- 3 The bridge is not a listed structure nor is it in a conservation area.
- 4 A major strengthening scheme was carried out to the piers in 2003 when steel sleeves and bracing were installed, to mitigate the affects of rot in the piers at the waterline.
- A General Inspection in October 2007 identified rotten timber deck planks that required replacement. An order was placed with the Lincolnshire County Council Term Contractor to replace the defective deck planks. When the deck planks were removed it became apparent that there was serious rot to the three main longitudinal support beams that support the deck planks, estimated as affecting up 30% of the structural capacity of the members.
- A scheme brief was prepared in August 2008 and a design commenced to replace the structure. Pinchbeck Parish Council was informed about the County Council proposals in a letter dated 11 November 2008.
- The works to replace the bridge were programmed to start on site in September 2009 but in June 2009 residents raised concerns over the County Council proposal to replace the bridge with a new structure and questioned the consultation process.
- The Client Services Manager and Executive Councillor (Highways & Traffic) attended a special meeting convened by Pinchbeck Parish Council on 28 July 2008 to hear the concerns of the Parish Council and residents and to explain the County Council's proposals.
- In acknowledgement of the Parish Council concerns that there was some confusion about the terminology used in the initial consultation letter, the County Council decided to delay the works to give the residents and Parish Council an opportunity to engage further with the designers.
- The County Council commissioned its private sector partner to carry out a full feasibility report on all the options available to the County Council. The objective of the report was to assess the feasibility and cost of repairing or replacing the existing bridge with a new bridge that is attractive, requires minimal maintenance and is robust in relation to vandalism. Seven options were identified including 'do nothing' and three of these options were discounted as unsuitable after an initial appraisal. The four remaining options were priced on initial capital costs and inspection and maintenance costs, giving an overall ranking in terms of whole life cost rank.
- 11 On 19 October 2009 the Client Services Manager attended a Pinchbeck Parish Council meeting and presented the findings of the Feasibility Report to the Parish Council and residents, in the presence of the Executive Councillor (Highways & Traffic) and the

- Local County Council Member. Copies of the Feasibility Report were circulated to those present.
- At the Parish Council Meeting the views of the Parish Council and local residents were noted and a discussion took place on the merits and disbenefits of the options available. The Executive Councillor promised the Parish Council that he would give due consideration to the views of the Parish Council and residents and inform the Parish Council of his decision.

#### Discussion

- The replacement of the bridge with a steel painted truss is the most cost effective solution when whole life costs are considered and is the second cheapest option. This is the preferred option with a scheme cost estimate of £120,000. The use of steel as a single material provides the cheapest maintainable solution and provides a design life of 120 years. A Pratt Truss is the cheapest option but the proposal is to use a Warren Truss since this solution offers improved aesthetics. This structure ensures compliance with the requirement to maintain access as a duty of care under the Highways Act and would allow a Disability Discrimination Act (DDA) compliant structure to be provided. The residents and Parish Council are still likely to object since the scheme would require the removal of the existing structure.
- 14 The 'do nothing' option would allow the retention of the bridge but for safety reasons the bridge would have to be closed. This option has been discounted since the County Council have a duty under the Highways Act 1980 to maintain access and could be challenged for failing to carry out its obligations.
- The replacement of the bridge with a similar style four span bridge in timber is the most expensive from a whole life cost aspect due to the need to have to replace every 40 years. The problems of installing and maintaining piers within a watercourse would still be present. This structure would allow a Disability Discrimination Act (DDA) compliant structure to be provided. The residents and Parish Council aspirations not fully met and they are still likely to object since the scheme would require the removal of the existing structure.
- The replacement of the bridge with steel and timber is the cheapest option but due to requirement to replace the timber elements every 40 years, does not offer the best whole life cost solution. A further drawback with this solution is the requirement for approach ramps to enable the bridge to comply with DDA requirements. The residents and Parish Council are still likely to object since the scheme would require the removal of the existing structure.
- The repair of the existing bridge to retain the existing character has been considered in detail. Since the three longitudinal support beams are rotten all the deck planks and handrails would have to be removed to release the main support beams. As the bridge is over 70 years old, there is a very real chance that the timber crossheads to the piers, that support the longitudinal beams, would also be affected by rot, since they are horizontal and form water traps. The only real way of determining the integrity of these piers would be to remove the whole deck. The stability of the piers would then be compromised. The logic of replacing a new timber deck onto 70 year old timber piers that have already incurred rot is flawed and this is not recommended. This solution would not allow the provision of a DDA compliant structure. Clearly to replace the existing bridge deck with a wider timber deck, that complied with DDA requirements, would require new wider support piers which then leads back to the Option C described below.

Option A –	Replacement with painted steel truss. Use of Warren Truss improves aesthetics as opposed to a Pratt Truss.
Advantages	Feasibility study confirms this as the cheapest whole life cost solution. Provides a structure with 120 year design life. Complies with the duty of care to maintain access under Highways Act 1980 and allows use of DDA compliant structure.
Disadvantages	Residents and Parish Council not satisfied.
Option B –	Do Nothing
Advantages	Retains structure and no cost incurred.
Disadvantages	Failure to comply with Highways Act 1980 and maintain access since structure would have to be closed.
Option C –	Replacement of bridge with new similar style bridge (Four span timber structure supported on reinforced concrete piers).
Advantages	Retains similar style and allows use of a DDA compliant structure.
Disadvantages	Most expensive whole life cost and only produces structure with 40 year design life. Residents and Parish Council partially satisfied.
Option D -	Replacement of bridge with steel and timber bridge.
Advantages	Cheapest initial capital cost and allows use of DDA compliant structure
Disadvantages	Timber elements of bridge only have 40 year design life and requires ramps to allow structure to be DDA compliant.
Option E -	Repair of whole timber deck on like for like basis
Advantages	Low initial capital cost. Residents and Parish Council would be satisfied.
Disadvantages	High risk that piers will have incurred rot. Maximum design life of 40 year of deck compromised by lesser design life of timber piers already 70 years old. Non compliant DDA structure. High maintenance liability.

# WHAT CONSULTATION UNDERTAKEN ON THE MATTERS FOR DECISION

Parish Council informed of proposals in a letter dated 11 November 2008 to Pinchbeck Parish Council

Feasibility Study circulated to all attendees at a Parish Council meeting on 19 October 2009

# HAS AN EQUALITY IMPACT ASSESSMENT BEEN CARRIED OUT?

No. Not applicable but proposed Option A is DDA compliant

#### MONITORING OFFICER COMMENTS

The recommendation is to replace a bridge carrying a county maintainable footpath. This decision is therefore within the remit of the Executive Councillor [Highways and Traffic] provided he has the delegated authority of the Leader.

# **DIRECTOR OF RESOURCES COMMENTS**

Approval of this report will commit the Council to £120,000 of expenditure replacing Jobson's Bridge with a painted steel truss. This expenditure will be funded from the existing Highways and Transportation capital programme.

# **RECOMMENDATIONS**

That Option A is approved as an Executive Councillor (Highways & Traffic) Decision.

### **REASONS FOR RECOMMENDATIONS**

Offers the best whole life cost solution that is also DDA compliant.

## **BACKGROUND PAPERS**

No Background Papers within Section 100D of the Local Government Act 1972 were used in the preparation of this report.

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