

GROWTH, ENVIRONMENT AND RESOURCES SCRUTINY COMMITTEE	AGENDA ITEM No. 4
29 AUGUST 2017	PUBLIC REPORT

Report of:	Simon Machen, Corporate Director of Growth and Regeneration	
Cabinet Member(s) responsible:	Councillor Peter Hiller, Cabinet Member for Growth, Planning, Housing and Economic Development	
Contact Officer(s):	Andy Tatt, Head of Peterborough Highway Services	Tel. 01733 453469

RESPONSE REPORT TO CALL-IN OF AN EXECUTIVE DECISION - APPROVAL FOR JUNCTION 18 (RHUBARB BRIDGE) HIGHWAY WORKS - AUG17/CMDN/30

R E C O M M E N D A T I O N S	
FROM: Simon Machen, Corporate Director of Growth and Regeneration	Deadline date: N/A
<p>It is recommended that the Growth, Environment and Resources Scrutiny Committee:</p> <ol style="list-style-type: none"> 1. Consider the response to the Call-in Request and decide to take no further action, in which case the original executive decision will be effective immediately. 2. To endorse the proposal that the Council has agreed to explore another temporary option to extend the life of the pedestrian/cycle bridges should this be technically and financially viable. Such changes would not affect the award of a £5.5m package of works to Skanska as requested in Executive Decision AUG17/CMDN/30. 	

1. ORIGIN OF REPORT

- 1.1 This report follows notification of the intention to call in Executive Decision AUG17/CMDN/30 - Junction 18 (Rhubarb Bridge) Highway Works.

2. PURPOSE AND REASON FOR REPORT

- 2.1 The purpose of this report is to respond to the issues raised in the Call-in Request relating to Executive Decision AUG17/CMDN/30 - Junction 18 (Rhubarb Bridge) Highway Works.

- 2.2 This report is for the Growth, Environment and Resources Scrutiny Committee to consider under its Terms of Reference No. Part 3, Section 4 - Overview and Scrutiny Functions, paragraph 3, Scrutiny, sub paragraph 3.3 Hold the Executive to account for the discharge of functions in the following ways:

(f) By exercising the right to call-in, for reconsideration, decisions made but not yet implemented by the Executive or key decisions which have been delegated to an officer.

- 2.3 The delivery of a £5.5m package of improvement works to Junction 18 of the A47 directly contributes to the council's priorities, in particular the priority to drive growth, regeneration and economic development. This is because a significant part of the proposed scheme is to increase capacity for vehicles to accommodate the planned growth of the city. This includes improving the efficiency of the traffic signals and an additional lane on one section of the roundabout to avoid

congestion.

3. **TIMESCALES**

Is this a Major Policy Item/Statutory Plan?	NO	If yes, date for Cabinet meeting	N/A
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4. **BACKGROUND AND KEY ISSUES**

4.1 Junction 18 is a fully signalised key interchange within the parkway network which provides access to the city centre via the A15 Bourges Boulevard, the north of Peterborough via the A15 Lincoln Road and the A47. Approximately 60,000 vehicles use the junction daily, 1,260 pedestrians and 540 cyclists. The junction includes six bridges which provide elevated access over the circulatory carriageway of Junction 18 and access beneath the A47 Soke Parkway via an underpass. The bridges were constructed in the 1970s as part of the New Town infrastructure.

The Local Transport Plan 4 (LTP4), which was considered by Scrutiny Committee and subsequently adopted by Council in January 2016, identifies Junction 18 as a scheme to be delivered within the period of the plan (2016-21). The proposed package of work that has been developed as a result of this and as part of Executive Decision AUG17/CMDN/30 will:

- Remove the pedestrian and cycle bridge and replace these structures with at-grade crossings. The LTP4 states that the removal of bridges is required because they require significant maintenance work each year, the cost of which is continuing to increase as the condition of bridges deteriorate further, and that maintenance work alone will be insufficient resulting in ultimate closure of the bridges. Appendix A provides a summary report detailing the current condition of the bridges.
- Increase capacity and reduce congestion. The capacity improvements would include widening on the north and east segments of the circulatory carriageway of the roundabout and on the westbound off-slip from the A47 and northbound A15 approaches. In addition, the exits onto the westbound A47 on-slip and A15 north would also be widened.
- The signals would be upgraded to run on a sophisticated system that would allow them to react on a real-time basis to varying levels of traffic from vehicles, pedestrians and cyclists including provision to cater for extreme traffic events.

The cumulative impact of the capacity improvements would be to increase the overall capacity of the junction by up to 18% in the morning peak time and up to 24% in the afternoon peak time. There are currently 60,000 vehicles per day using the junction, with 52,541 vehicles observed during a recent (2016) 12-hour traffic survey (7am to 7pm). During that survey the morning peak hour (8am to 9pm) traffic flows were observed at 4,919 vehicles, and which are forecast to increase to 5,047 vehicles by 2021 and 5,537 vehicles in 2031. This represents a 2% (by 2021) and 12% (by 2031) increase in baseline traffic flows respectively. The corresponding PM peak hour (5pm-6pm) flows were observed at 5,178 vehicles and are forecast to increase to 5,311 vehicles by 2021 and 5,745 by 2031, respectively representing a 2% and 11% increase in traffic.

The public engagement activity that is currently underway with user groups and the public is designed to gather views on the detailed design of the proposed scheme included in LTP4 to ensure it works in the best way possible for pedestrians, cyclists, motorists and all other users. As a result of this ongoing engagement the council is currently exploring a temporary option, which is to explore the technical and financial feasibility of re-assigning the proportion of the overall budget allocated to demolish the footbridges to instead make significant repairs to the bridges. The aim of this is to keep them in operation for the next 5 or so years. This would however only be a short term solution as the bridges will have to be replaced at some point in the future and this option will result in a more costly scheme overall.

At the time of writing this report detailed feasibility work is being undertaken. If following this investigation we are able to extend the life of the bridges within the existing allocated budget, the council would then use that time to attempt to seek external funding opportunities to pay for replacement bridges. However, if we are unable to extend the life of these structures we would

have to go ahead with the scheme proposed, with the detailed design amended to take into account feedback from consultation. This would not prevent bridges being constructed in the future and we would commit to try and identify the necessary funding if this were the case.

The council recently submitted a £3.85m National Productivity Investment Fund (NPIF) bid to the Department for Transport (DfT) towards de-congestion improvements at Junction 18. The funding available from the DfT has been specifically designed to target schemes that either: ease congestion; unlock job creation opportunities; or, enable the delivery of new housing developments. Thus, the funding opportunity was not available towards maintenance or pedestrian/cycle structures, and therefore the bid focussed on the decongestion benefits of the present Junction 18 proposal. The council understands that it will learn if this bid has been successful in autumn.

Crucially, irrespective of whether the council is able to replace the footbridges or not, pedestrian crossings will need to be installed. This is because there would still be a period of time with no operational bridges preventing people from crossing the junction.

Regardless of the specific details of the final scheme it is necessary to allocate a £5.5m package of works to Skanska as detailed in Executive Decision AUG17/CMDN/30. The existing Peterborough Highway Services contract with Skanska is felt to be the most suitable delivery mechanism for this scheme because: there will be reduced procurement costs by using an existing framework contract; improved project management and cost certainty through the utilisation of a target cost style of contract; and reduced construction costs through 'Early Contractor Involvement' (ECI) at the design stage to manage and mitigate more effectively any potential build issues with the design.

- 4.2 The LTP4 is a statutory document that the council produces every five years. The LTP4 covers the short term period 2016 to 2021 and significant work goes into producing this document, including gathering information to inform which schemes should be brought forward during the time period covered by the plan.
- 4.3 The detailed reasons for the call-in request and responses detailing why this matter should not be called in are set out below:

Reason one: The need to replace Rhubarb Bridge has been flagged up in the council's Local Transport Plan programme of works for a number of years. However, no detail of what is proposed to replace the current bridge has been published. Local ward councillors have asked officers on numerous occasions to ensure that before any final decision was made, local people were properly consulted on the options available.

Response to reason one: The Local Transport Plan 4 (LTP4), which was considered by Scrutiny Committee and adopted by Council, detailed the council's intention to deliver a scheme to remove Rhubarb Bridge. Furthermore the LTP4 specifically states that this scheme would 'see the removal of the pedestrian and cycle bridge over Junction 18 and under the A47. This footbridge will be replaced with at-grade pedestrian/cycle crossings, incorporated into the traffic signals on Junction 18' (Page 94 and 95). The LTP4 was presented and discussed at the Sustainable Growth and Environment Capital Scrutiny Committee on 6 of January 2016, Cabinet on 18 January 2016 and then adopted at Full Council on 27 January 2016. No comments were recorded in these meetings in relation to this junction.

In addition, the proposed scheme was listed in the MTFs 2017/18 (phase two) which was subject to public consultation from 27 January 2017 to 6 March 2017. During this period further details were requested about this scheme and it was clarified at Council that the scheme would involve removal of the pedestrian and cycle bridges to be replaced by at-grade crossings.

As the decision to remove the pedestrian and cycle bridge and replace this with at-grade crossings has already been taken through the council adopting the LTP after consultation, decision AUG17/CMDN/30 is seeking authority to award a £5.5m package of works to Skanska Construction UK Limited in line with the council's decision making process. The public

engagement activity that is currently underway with user groups and the public is on the detailed design of the proposed scheme to ensure it works in the best way possible for pedestrians, cyclists, motorists and all other users, rather than to consider alternative options.

Reason two: We are told in the decision notice that alternative options were considered but they are dismissed as being too expensive. No detail of any alternative option has been published, no information on them was ever given to ward councillors and certainly no public consultation on them has ever taken place. This bridge is at a strategic junction at the intersection of four council wards and is an important route in the north of the city for pedestrians and cyclists.

Response to reason two: The information included in the decision notice refers to initial investigations that were undertaken, as part of the development of LTP4, which found the cost of constructing replacement pedestrian and cycle bridges at this junction to be prohibitive. As such the LTP4 made clear that the scheme would involve removing the pedestrian and cycle bridges and replacing them with at-grade crossings.

The council agrees that this is an important route for all users. As such the council is currently undertaking a period of public engagement to ensure that user groups and the public are able to express their views on the detailed design to ensure it works in the best way possible for pedestrians, cyclists, motorists and all other users. As a result of this exercise the council has, as detailed above, committed to exploring a temporary option to extend the life of the bridges for a short period of time.

Reason three: There is currently consultation on the Council's preferred option of installing at grade crossings. The public is effectively being informed what has already been decided, rather than being consulted on it. This impression is made all the more obvious by the fact that Cllr Hiller signed the decision notice to award the contract and implement the scheme before the main public consultation drop in event had been held: it took place on the evening of Weds 9 August. So there is no possibility that views expressed by the public at this event have been taken into account in making the decision.

Response to reason three: The decision to install at-grade crossings was taken as part of the adoption of the LTP4 and the MTF5 2017/18 phase two proposals, both of which were considered by Scrutiny Committee and agreed by Council. The CMDN signed by Cllr Hiller (AUG17/CMDN/30) is seeking authority to award a £5.5m package of works to Skanska Construction UK Limited in line with the Council's decision making process. This process requires that all decisions in excess of £500k and/or have a significant impact on two or more wards in Peterborough are classed as 'key' and should therefore be placed on the Forward Plan and be decided by the relevant Cabinet Member.

As detailed above (response to reason two) public engagement is currently underway and the response to this engagement will inform the detailed design. This includes exploring a temporary option to extend the life of the bridges for a short period of time.

Reason four: Making a decision before public consultation has been completed is clearly not acting "for a proper purpose and in the interests of the public (para d) of article 11 of the council constitution). Acting in such a way is clearly not a fair or correct procedure (para f) of article 11). There is no evidence of what other options were considered or any detail of their costings and members of the public (or indeed ward councillors) were not consulted on any of them (para a) of section 11).

Response to reason four: As detailed above the decision to install at-grade crossings was taken as part of the adoption of the LTP4 and the MTF5 2017/18. The CMDN signed by Cllr Hiller (AUG17/CMDN/30) is seeking authority to award a £5.5m package of works to Skanska Construction UK Limited in line with the Council's decision making process.

5. CONSULTATION

5.1 The decision to remove the pedestrian and cycle bridges and replace them with at-grade

crossings is detailed in the LTP4. The LTP4 was subject to a period of public consultation that included: directly sending a leaflet, outlining the proposals for LTP4, to key stakeholders and interested parties (254 in total) and providing hard copies at the Town Hall and Bayard Place; publicising the consultation on the council website and social media (Facebook and Twitter); placement of an advertisement in the local newspaper, Peterborough Telegraph and coverage on local radio; and, daytime and evening 'drop in' events held at the Town Hall. The LTP4 was presented and discussed at the Sustainable Growth and Environment Capital Scrutiny Committee on 6 of January 2016 and then adopted at Full Council on 27 January 2016. No comments were recorded in the minutes of these meetings that expressed any concern about this scheme.

In addition consultation on the proposed scheme took place as part of the MTFs 2017/18 phase two earlier this year. This was adopted by Council, alongside the £5.5million budget, on 8 March 2017 with a majority of 37 for, 12 against, 5 abstentions.

The Council is currently undertaking a period of public engagement to ensure that user groups and the public are able to express their views on the detailed design to ensure it works in the best way possible for pedestrians, cyclists, motorists and all other users. This includes ongoing discussion with the Disability Forum to ensure the final scheme supports the needs of users.

6. ANTICIPATED OUTCOMES OR IMPACT

- 6.1 It is anticipated that the decision to authorise the issue of a work package to Skanska Construction UK Limited should proceed as outlined in Executive Decision AUG17/CMDN/30. This will enable the Council to implement the decision made in the LTP4 and MTFs 2017/18 both of which were scrutinised and agreed by Council.

7. REASON FOR THE RECOMMENDATION

- 7.1 The recommendation to proceed with decision AUG17/CMDN/30 will enable the Council to implement the decision made in the LTP4 and MTFs 2017/18 both of which were scrutinised and agreed by Council.

Decision AUG17/CMDN/30 seeks authority to award a £5.5m package improvement works at junction 18 to Skanska. This decision does not outline the detailed design which will be finalised once feedback from stakeholders and residents has been reviewed and the design updated accordingly. In line with the commitment outlined by this report this may see the inclusion of an option to undertake works to extend the life of the bridges whilst seeking to secure external funding to provide a permanent replacement.

8. ALTERNATIVE OPTIONS CONSIDERED

- 8.1 Not to deliver a programme of works at this junction: this option has been ruled out because the need to undertake an improvement scheme at this junction was included in the LTP4 and MTFs 2017/18, both of which were scrutinised and agreed by Council.

9. IMPLICATIONS

Financial Implications

- 9.1 There are no new financial implications as a result of Executive Decision AUG17/CMDN/30 because a £5.5million budget for these works and the outline scheme including the removal of bridges was agreed as part of the MTFs 2017/18 budget by Council in March 2017.

Legal Implications

- 9.2 The Highways Act 1980 provides that, the highway authority for a highway maintainable at the public expense, is under a duty to maintain the highway. This requires that the highway has to be maintained so that it is reasonably passable by the ordinary traffic of the area. Failure to identify a timely programme of works could result in a risk that the Council may not meet its statutory duty

to maintain the highway.

In addition the legal implications of not approving the A47 Junction 18 Programme of Works outlined in this document may mean that the Council cannot meet its strategic transport and highway priorities for Peterborough that have been accepted in the LTP4 and MTFS 2017/18 also accepted by Council.

Equalities Implications

- 9.3 An Initial Screening Equality Impact Assessment Summary has been undertaken which shows that there is 'no specific impact' on any of the identified user groups other than those with a disability. This is because the removal of the bridges and introduction of at-grade crossings will be of detriment to some disability groups i.e. blind and partially sighted given that they are now crossing live traffic lanes. However the at-grade facilities will benefit mobility impaired users as there are no ramps to negotiate. Overall, it is considered that there would be a neutral impact.

Rural Implications

- 9.4 No specific implications are noted in relation to this report.

Crime and Community Safety Implications

- 9.5 A member of Cambridgeshire Constabulary's Crime Prevention Design Team has been actively involved in the current public engagement activity taking place as part of this scheme and will be inputting their views as appropriate to inform the final detailed design.

10. BACKGROUND DOCUMENTS

Used to prepare this report, in accordance with the Local Government (Access to Information) Act 1985

- 10.1 *Peterborough's Local Transport Plan 4 (LTP4):*
<https://www.peterborough.gov.uk/upload/www.peterborough.gov.uk/council/jobs-and-careers/schools-and-education/strategies-polices-and-plans/strategies-polices-and-plans/strategies-polices-and-plans/strategies-polices-and-plans/strategies-polices-and-plans/strategies-polices-and-plans/LongTermTransportStrategyAndLocalTransportPlan4-April2016.pdf?inline=true>

Medium Term Financial Strategy 2017/18 (MTFS):
<https://www.peterborough.gov.uk/upload/www.peterborough.gov.uk/council/consultations/PhaseTwoBudgetProposals-201718.pdf?inline=true>

Council Papers 8 March 2017:
<http://democracy.peterborough.gov.uk/documents/s30386/9a.%20Council%208%20March%202017%20Budget%20Book.pdf>

11. APPENDICES

- 11.1 Appendix A: Summary of the pedestrian/cycle structures at Junction 18

Appendix A

Summary of the pedestrian/cycle structures at Junction 18

Junction 18 is a fully signalised key interchange within the parkway network which provides access to the City Centre via the A15 Bourges Boulevard, the north of Peterborough via the A15 Lincoln Road and the A47. Approximately 60,000 vehicles use the junction daily, 1,260 pedestrians and 540 cyclists. The junction includes six individual pedestrian/cycle bridges that together provide the only access over the circulatory carriageway of Junction 18 and access beneath the A47 Soke Parkway via an underpass. The bridges are complex structures made up of over 30 piers and 20 beams that were constructed in the 1970's during the 'New Town' phase of development. Figure one shows the current bridge and underpass layout.

Figure one:



Current challenges:

The existing bridges have been repaired for a number of years however the deterioration of the structures has now reached a point where repairs are becoming increasingly more difficult and uneconomical. The structural issues include:

Piers – There are over 30 piers to the structure and these have been subject to numerous repair attempts due to cracking and high chloride content causing corrosion. These repairs have had the effect of moving the problem to the remaining original concrete of which there is a diminishing amount. The design of the piers attracts a weak point on the inside corners of the fork and there is cracking at these points which demonstrates the stresses that the piers are under. The piers are also at risk from impact loadings from traffic. If a HGV was to run off the road and hit one of the piers the likely outcome would be the collapse of the bridge as the piers would not resist significant impact.

Beams – The beams carry the footbridge over 20 spans and some have structural properties with inherent explosive failure that are showing signs of cracking and have high chloride content at the beam ends. Some of the beams are also low enough to be at risk of impact from errant HGVs which could act to dislodge a beam.

Landings - At the junction of many of the precast beams there are insitu concrete landings which show signs of corroding reinforcement and deterioration of the concrete. The worst of these are at the major hubs of the beams

on each side. The repair of these landings will require them, and therefore the bridge, to be closed for a considerable time.

Bearings – The bearings are past their design life and causing unwanted excess strain to the beams and piers.

Joints – The joints have major drainage problems which leaves them saturated for most of the winter. This exacerbates the corrosion problems with the structure.

Parapet railings – The parapet railings are not up to standard for a foot/cycleway bridge and are suffering from anchorage problems.

The following images highlight some of the structural issues:

Figure two: The top of the slender piers that carry the landing and main beam is basically splitting due to poor concrete and corroded reinforcement. The smooth sections are previous repairs that are showing signs of cracking. These areas have now been wrapped in kevlar.



Figure three: This photograph shows the original workmanship faults of the insitu concrete material and the bearing pad in very poor condition



Figure four: Sheets of poor concrete have spalled from the piers exposing the corroded reinforcement



Figure five: Concrete falling from the piers and repairs already showing signs of delamination



Figure six: Very significant cracking to already repaired areas of the fork of the piers where stresses are at their maximum.



In addition there are a number of non-structural issues to take into account. These include:

Capacity - Junction 18 is frequently operating at capacity during peak periods, with frequent queuing on all approaches. The capacity improvements would include widening on the north and east segments of the circulatory carriageway of the roundabout and on the westbound off-slip from the A47 and the northbound A15 approaches. In addition, the exits onto the westbound A47 on-slip ("up and over" towards Junction 17) and A15 northbound would also be widened.

The signals, previously installed in the mid 1990's, would be upgraded to run on a sophisticated system that would allow them to react on a real-time basis to varying levels of traffic including provision to cater for extreme traffic events.

The cumulative impact of the capacity improvements would be to increase capacity of up to 18% in the AM peak and up to 24% in the PM peak.

Crime - There have been a number of recorded crimes at this junction, namely around the underpass area, including muggings and stabbings. As a result there is a perception of crime in the area exacerbated by the isolated location of the underpass.

Pedestrian surveys have been carried out at various times and it has been noted that pedestrians are taking risks by crossing at grade across the busy slip roads to avoid using the bridges. This is becoming more noticeable where there are desire line paths worn into the adjoining verges under the A47.

The task of using the footbridges is an onerous one as it increases the route by a considerable distance including fairly steep ramps which do not comply with the latest DDA requirements (as superseded by the 2010 Equalities Act)

Maintenance undertaken:

Significant maintenance works have been undertaken including concrete repairs in the early 1990's. Extensive testing and investigation works were undertaken in 1993, 1998 and 1999 which led to extensive repairs to the piers and landings in 2001 and 2006. Over the last ten years further works have taken place including: spalling concrete taken off piers, surfacing and railing repairs; extensive concrete repairs to staircase and local piers; concrete repairs to piers followed by carbon fibre wrapping; and, concrete repairs to piers followed by carbon fibre wrapping, and footpath resurfacing.

The footbridges are now at the stage where small scale repairs as above are no longer effective. If they are to remain, major structural elements need strengthening / replacing as part of an extensive and costly programme of works. In addition most of the repair works that could be completed whilst keeping the bridge open have been exhausted. The remaining areas of defective concrete are largely in areas where the required works would necessitate a bridge closure. This has been avoided as there is no alternative route for pedestrians.

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