

**Cambridgeshire Guided Busway**

*To:* Cabinet

*Date:* 27<sup>th</sup> April 2010

*From:* Acting Executive Director: Environment Services

*Electoral divisions:* The Hemingfords and Fenstanton, St Ives, Papworth and Swavesey, Willingham, Cottenham, Histon and Impington, Waterbeach, East Chesterton, King's Hedges, Petersfield, Trumpington, Gamlingay.

*Forward Plan ref:* Not applicable *Key decision:* No

*Purpose:* This report sets down for consideration by Cabinet the progress being made towards opening of the Cambridge to St Ives section of the busway and considers the way forward in the light of the current position.

*Recommendation:* Cabinet is asked to:

- i) note the progress that is being made towards sectional completion and the opening of the busway between Cambridge and St Ives and in particular, the current timescale from the contractor for addressing the notified defects;
- ii) confirm that the notified defects should be addressed satisfactorily before buses can run on the guideway and that whilst the maintenance track could follow the opening of the guideway, that could only be the case if a clear way forward to resolve the problems had been agreed

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## **1.0 BACKGROUND**

- 1.1 At its meeting on 16<sup>th</sup> March, Cabinet was advised of the reasons for the delay in the opening of the busway between Cambridge and St Ives. In essence it had not proved possible to put in place an agreement to provide for sectional completion as Bam Nuttall (BNL) were not clear in their commitment to rectify six key areas of work which had been notified as defects under the Contract.
- 1.2 These six issues are:
- 1 River Great Ouse Viaduct Expansion Joints;
  - 2 St Ives Park and Ride (P&R) surface ponding;
  - 3 Maintenance track flooding;
  - 4 Guideway shallow foundations;
  - 5 Thermal expansion gaps between the guideway beams;
  - 6 Rubber tyre infill between the guideway beams.
- 1.3 Some of these items require physical works to rectify them and for others, simply calculations and confirmation from the designers that the infrastructure will perform as planned and not present long term maintenance liabilities. Either way, these issues must be addressed if the busway is to be launched successfully.

## **2.0 PROGRESS**

- 2.1 Members will recall that a meeting at Chief Executive level had taken place immediately before the Cabinet meeting on 16<sup>th</sup> March. Further similar meetings were held on 30<sup>th</sup> March and 19<sup>th</sup> April. At the second of these meetings, BNL gave commitments to undertake the necessary design work to resolve the defects and where necessary to implement any construction work arising from that design work. Progress on this work has generally been slower than would have been liked, but following the latest meeting, further clarification of BNL's intentions has been received as well as a timescale for the required activities and works.
- 2.2 On this basis, the current status of each of these notified defects is set out below.
- 2.3 River Great Ouse
- BNL submitted their design proposal to address the defect in outline on 16<sup>th</sup> April and this is now being reviewed by our bridge engineers. BNL have restated their intention to install the joint. The current position from BNL is that all the technical and design work for this item will be

completed by 30<sup>th</sup> April. Thereafter, it will take a number of weeks to order the materials and undertake the required work.

#### 2.4 St Ives P&R

A meeting has been held with BNL's designers to discuss options for remedial measures and the designers have subsequently reported back on two of the options, at least one of which is viable and we believe relatively straightforward to implement. The next step will be for BNL to submit a formal proposal for a revised design, which, subject to its acceptance by our designers, can then be implemented. BNL have committed to complete this technical work by 19<sup>th</sup> May and have confirmed that when this design work is complete, they will implement the solution to address the ponding on the site as soon as possible. Again, given the likely nature of the solution, this work will take a number of weeks to complete.

#### 2.5 Maintenance Track

BNL submitted the results of the preliminary work by their designers on raising the maintenance track to the correct level and how the flood storage might be addressed on 19<sup>th</sup> April. This is now being reviewed. Achieving a solution that gives the best result while not impacting on flooding is likely to be an iterative process and this is the first step of what is likely to be a long process. Although there is no agreed solution as yet, BNL have agreed that once the solution has been defined and agreed, they will implement it. At this stage, BNL believe that the design work will be complete by the end of July. Subject to progress with the other items, the physical work on the maintenance track should be able to take place with buses running.

#### 2.6 Foundations

BNL undertook to put forward proposals for the soil testing that would allow calculations to be undertaken to assess the magnitude of this problem immediately after the Chief Executive meeting on 30<sup>th</sup> March. The respective experts met on 15<sup>th</sup> April and BNL have committed to finalise proposals by 23<sup>rd</sup> April after which the soil tests will be undertaken. Analysis of the samples will then follow to establish how much the susceptible soils may shrink in a dry period. BNL have committed to complete this work and the required calculations that will follow by mid June

#### 2.7 The results of this work may establish that the foundations are acceptable or at the other extreme, that work is required to avoid future settlement of the busway. The soil testing work is therefore on the critical path to the opening of the northern section of the busway. When this technical work is complete, BNL and the Council will need to agree how best to address the outcome.

## 2.8 Beam expansion gaps

The respective experts have had a number of discussions on this subject and a revised analysis is now being produced. The outcome of this is closely linked to the issue of the foundations as the combined effect of thermal expansion and settlement, which might occur during a hot dry period, need to be considered.

2.9 BNL have agreed to complete this technical work by 5<sup>th</sup> May and when complete, the best means of addressing the issue will be determined.

## 2.10 Rubber Tyres

A Designer's Risk Assessment and Fire Safety Report have been submitted with the appropriate design certificates as BNL committed to at the last Chief Executive meeting on 30<sup>th</sup> March. These have been reviewed by Atkins fire safety expert and comments returned to BNL. A revised Risk Assessment that incorporates the actions from the Fire Safety Report was submitted on 20<sup>th</sup> April and is now being assessed. Some minor works may be required as a result of this and it is anticipated that a check may need to be made on the depth of the capping layer over the rubber tyres to ensure it is in accordance with the design.

## 2.11 Summary

In summary, whilst there has been some progress on the technical work by BNL, this has been slower than was anticipated at the time of the last Cabinet report. This means that at this stage, it is still not possible to indicate an opening date for the northern section of the route. However, clear dates for completion of the outstanding work have now been given by BNL and once the actions noted in this report have been completed, it will be possible to move towards such a date. BNL's commitment to complete the remaining technical work as soon as possible is therefore encouraging.

2.12 A further report on progress will be made to the May Cabinet meeting at which a clearer timeline should be possible as long as key actions are undertaken. Detailed programmes for resolution of each of the issues will also be developed and these will be reviewed on a weekly basis by the Council and BNL.

## **3.0 THE WAY FORWARD**

3.1 Given the progress noted above, it is appropriate that the Council review and confirm its position and approach on how the notified defects are dealt with.

3.2 In terms of the specific defects that have been notified, it remains the case that the busway is largely physically complete and if the overarching priority was to achieve an opening of the busway at the

earliest possible date, then handover could be accepted from BNL without resolution of the defects with almost immediate effect. This is the position BNL are pushing the Council to adopt, suggesting that the defect issues can then be dealt with in parallel with buses running. In such a case though, the Council would be accepting all the risks and liabilities inherent in these defects, and therefore this is not a course that officers could advise.

- 3.3 In the case of the River Great Ouse Viaduct expansion joints, the guideway shallow foundations and the thermal expansion gaps between the guideway beams for example, there is an as yet unquantifiable risk that significant future maintenance would be necessary. The St Ives Park and Ride site has not been built to the quality specified or what the public would expect, and a flooded maintenance track is simply not fit for purpose.
- 3.4 The Council's position to date has been that notified defects need to be addressed prior to buses running. The one exception to this is the maintenance track where works could take place whilst buses are running as long as a way forward to address the problems was agreed.
- 3.5 Cabinet is therefore asked to confirm that the notified defects should be addressed satisfactorily before buses can run on the guideway and that whilst the maintenance track could follow the opening of the guideway, that could only be the case if a clear way forward to resolve the problems had been agreed.

## **4.0 IMPLICATIONS**

### **4.1 Resources and Performance**

Finance and risk management – the report sets out the issues preventing the opening of the northern section of the busway and the consequences were the Council to accept the busway without these defects being addressed. The busway is a high profile project and whilst the Council is keen to secure beneficial use as soon as possible, this should not be at any cost, particularly in terms of future maintenance liabilities. At present, whilst the notified defects are not expected to cost a very large amount of money to rectify, that is not yet clear, particularly for the foundations and beam gaps issue and so resolving these technically is essential to protect the Council's interests.

### **4.2 Statutory Requirements and Partnership Working**

There are no significant implications for any of the headings within this category.

### **4.3 Climate Change**

The busway will provide a good alternative to use of the car for travel

into Cambridge, St Ives, Huntingdon and other villages along the route. When operational, it is expected to significantly increase the bus patronage in this corridor and as such assist in our objectives to reduce the emission of greenhouse gasses from vehicles.

The buses which are already running run on bio fuel and this also has environmental benefits. These environmental benefits have been partly secured as a result of the guided buses currently running on ordinary roads, where it has believed even on the existing services, patronage has increased. Patronage will increase significantly further when the busway is fully operational.

The busway also has a high quality track alongside that is available for pedestrians and cyclists and this again will increase its environmental benefits. This is already being well used and usage will increase when the scheme is formally open.

#### **4.4 Access and Inclusion**

The busway will provide good public transport and cycle/foot links between St Ives, the intervening villages and Cambridge. This will open up travel opportunities by increasing the quality of bus services in those communities and benefit particularly those without use of a car.

#### **4.5 Engagement and Consultation**

There are no significant implications for any of the headings within this category.

<b>Source Documents</b>	<b>Location</b>
Agenda and Minutes, Cabinet 1/3/2005, 7/2/06, 13/6/06, 11/7/06, 16/10/07, 16/12/08, 29/9/09, 16/3/10 Cambridgeshire Guided Busway Order	CGB Team Office, Old Police House, Shire Hall, Cambridge