



**GREATER
CAMBRIDGE
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Report to: Greater Cambridge Partnership Executive Board

20th March 2019

Lead Officer: Peter Blake, Director of Transport

A10 FOXTON LEVEL CROSSING BYPASS AND PARKING AT FOXTON RAIL STATION

1. Purpose

- 1.1. This report sets out the review work undertaken on the Foxton Level Crossing and rail parking options in the vicinity of Foxton station.
- 1.2. The Executive Board agreed in February 2018 to a review of the Network Rail GRIP 2 work undertaken on the Foxton Level Crossing and further work to be undertaken towards the development of 'Outline Business Case' for a preferred option for a bypass of the crossing and the exploration of the opportunity for Foxton Station to act as a Transport Hub with a Park and Rail facility for onward rail trips into Cambridge and Cambridge North stations, and the proposed, future Cambridge South station.
- 1.3. Reducing journey time delays and promoting local rail services supports the Greater Cambridge Partnerships (GCP) vision of creating better, greener transport networks, connecting people to homes, jobs and study, and supporting economic growth.

2. Recommendations

- 2.1. The Executive Board is recommended to:
 - (a) Support the concept of additional rail station parking and the promotion of sustainable travel options at Foxton Station, and agree to consult the public on proposals and as part of that process, to develop an Outline Business Case.
 - (b) Note the report on removing the Foxton Level crossing but, recognising the wider traffic issues along the A10 corridor, refer the matter to the Combined Authority for its consideration as the Strategic Transport Authority for the area.

3. Officer Comment on Joint Assembly Feedback and Issues Raised

- 3.1. Details of feedback the Joint Assembly are set out in the report from the Joint Assembly Chair.
- 3.2. The Joint Assembly discussed the strategic priority of the Foxton level crossing and the Transport Hub schemes and the alignment with the GCP vision of promoting sustainable modes of travel. Subject to the Transport Hub being deliverable as a discrete project from the level crossing bypass then they were generally supportive of the approach.

- 3.3 A question at the Joint Assembly was raised regarding the impact of Foxton Level crossing on the rail capacity into and out of Cambridge. Network Rail have stated that the restriction in this location is caused by line capacity rather than level crossings. The Foxton Level crossing in isolation does not limit capacity of the overall rail service.
- 3.4 The issue of the level crossing's impact on the proposed Park and Rail site access was questioned by the Joint Assembly. Traffic surveys undertaken at the level crossing bypass as part of the development of the Strategic Outline Business Case demonstrate that the two schemes can be developed independently of each other. The issue of access / egress from any Park and Rail site will nevertheless remain an important consideration as part of scheme development.

4 Key Issues and Considerations

Background

- 4.1 The A10 south is currently heavily congested during the peak hours and the level crossing causes a significant delay to private vehicles commuting onwards to Cambridge. Delay, caused by the down time of the rail barrier, at the level crossing in the peak hour can be between 15 – 20 mins. Further services on the rail line stopping and passing through Foxton station are proposed by Network Rail and this will result in further delay at the level crossing.
- 4.2 Cambridge has seen above national average growth in rail passengers over the past decade including along the Cambridge line between Royston and Cambridge. With 62% growth at Cambridge station and 47% at Foxton, demand is continuing to grow on the rail network. Foxton Station currently has no private vehicle car parking and there is observed fly parking in the village using the rail line to commute into Cambridge and London.
- 4.3 The A10 currently takes around 16,000 vehicles per day in the Foxton area. The presence of a full barrier level crossing significantly limits the capacity of the route. Currently the Shepreth Branch line typically takes four trains an hour in each direction, one or two which stop at Foxton. The spacing of trains and volume of traffic means that queues do not always have the opportunity to clear the level crossing in peak periods.
- 4.4 Growth in traffic volumes forecast and the increase in service's using the Kings Cross line, stopping or passing through Foxton, will result in an increase delay and congestion at Foxton level crossing. Additional planned trains and the potential for East – West Rail, including expanding the rail line, could further impact upon journey times and reliability of the route.
- 4.5 The Foxton crossing had previously been developed to GRIP 2 stage which established the scope of the scheme and confirmed feasible options for the route. The Executive Board agreed to develop this work to further explore the case for removing the level crossing.

Traffic Volume Projections

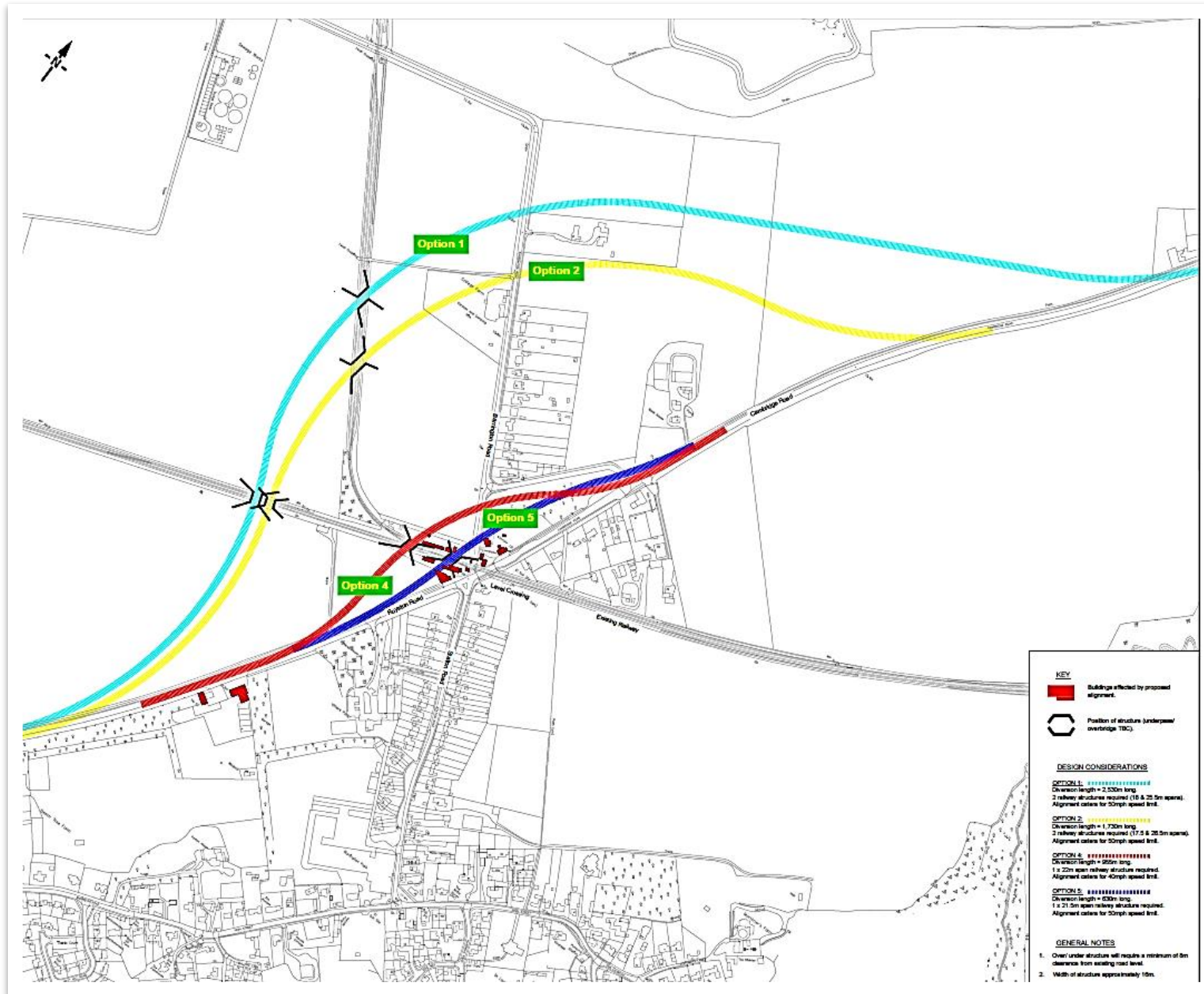
- 4.6 Traffic growth across South Cambridgeshire is forecast to increase generally by almost 40% in the morning peak by 2031, meaning time spent in congestion will more than double.
- 4.7 On the A10 in the Foxton area, traffic flows are predicted to rise between 23% (TEMPO growth) and 40% (wider South Cambridgeshire peak hour growth) to a total of up to 22,000 vehicle movements over a 24 hour period by 2031 with the removal of the level crossing. This growth will impact upon local communities and the wider transport network with careful management and mitigation.

5 Options

Foxton Level Crossing

- 5.1 The Options Assessment for the removal of the level crossing involved assessing eight bypass options each against a range of Strategic, Economic, Financial, Commercial and Management evaluation criteria taken from the DfT WebTAG Business Case Themes. To support the assessment process, high level desktop studies of current ecology, landscape/heritage value, geotechnical and air quality assessments, within the alignment areas of the eight bypass route options, were undertaken.
- 5.2 Of the eight bypass route alignment options assessed, four received a positive assessment score and are outlined in Figure 2 below. All four route alignment options would require further appraisal for provision of either an overbridge or underbridge infrastructure.
- 5.3 Assessed alignment options of Foxton level crossing bypass can be seen in Figure 2. The range of costs reported for the options are between £15,500,000 and £40,000,000 but vary significantly as some options involve bridges or underpasses. In general terms an underpass is a more expensive option. The BCR of the medium Option (Option 4), without a footbridge, has a BCR of 1.76. This reflects as a 'Medium Value for Money' (VfM) category using Department for Transport criterion.

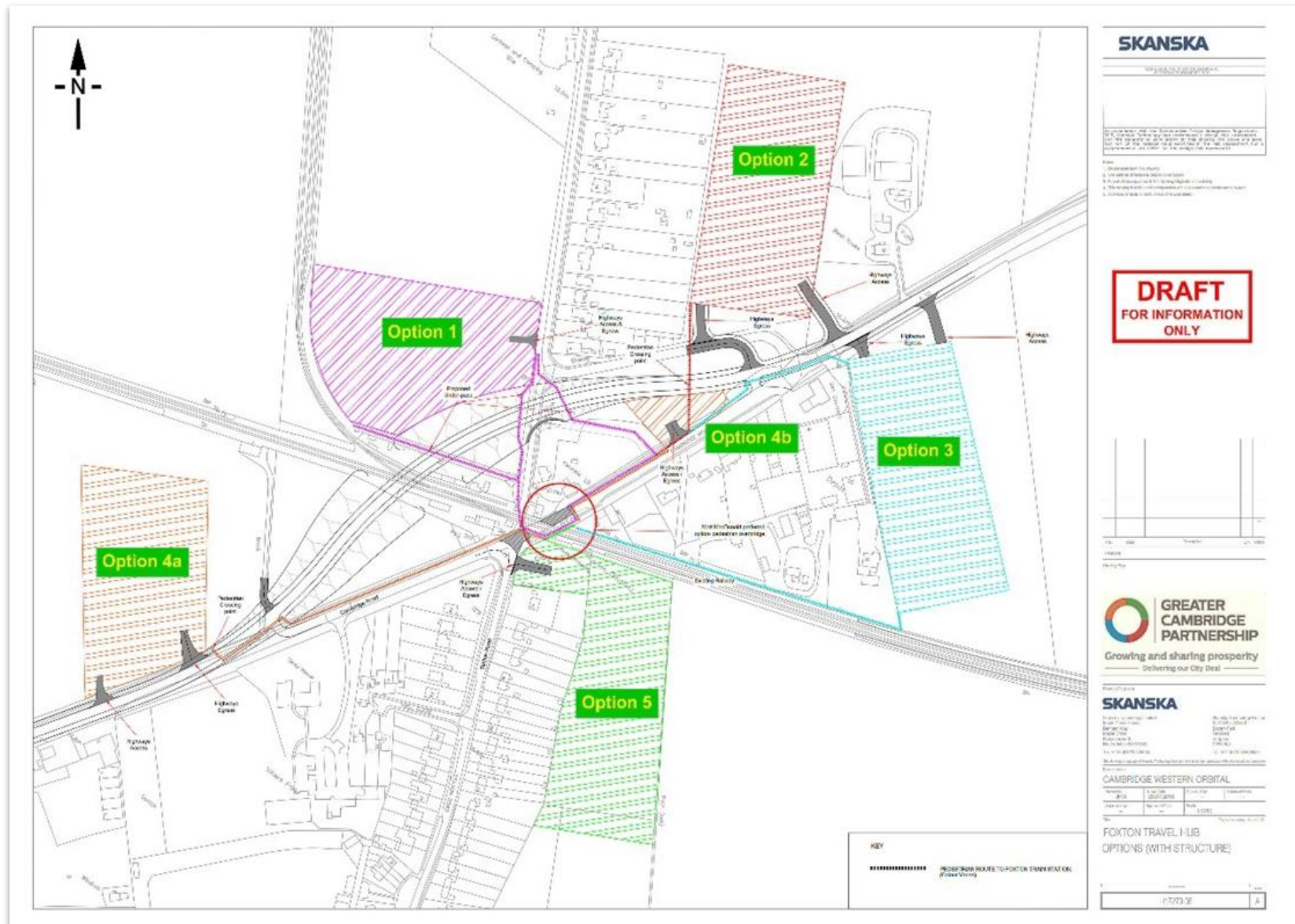
Figure 2: Alignment options of Foxton level crossing bypass



Foxton Rail Station Parking

- 5.4 Foxton Park and Rail Executive Board Report (Mott MacDonald) summarises the conclusions from the options assessment carried out to date. This concluded that Foxton would be the best site for a Park and Rail site between Royston and the M11 providing commuter journeys into Cambridge.
- 5.5 The scheme has progressed through a series of optioneering steps. The aim of this process was to determine an appropriate location for the proposed Park and Rail scheme. The process began by identifying the need for intervention and investment in a Park and Ride transport hub along the A10 Royston to Cambridge.
- 5.6 Location specific options were initially identified based on the ability to provide sufficient land to accommodate the estimated number of required parking spaces as modelled. Additional options were identified that included an option to utilise land already in the ownership of CCC and an option to the south of Foxton Station. The options were assessed against each of the selected themes based on the appraisal of the criteria and sub-criteria. The option assessment process considers 6 potential sites in the vicinity of Foxton. Assessed locations for a Park and Rail Transport Hub at Foxton can be seen in **Figure 3**.
- 5.7 Demand modelling has been undertaken and forecast that there is a significant suppressed demand for a Park and Rail Transport Hub at Foxton to cater for approximately 400 spaces which could rise to 715 spaces in 2031 (including demand generated from the opening of Cambridge South Station). The range of costs reported for the options are between £4,290,000 and £5,580,000 (a further breakdown of the costs are available in the SOBC report). Based on the initial BCR values for all four short listed options, the Foxton Park and Rail Transport Hub scheme has a BCR above 2 falling into a 'High value for money' category using Department for Transport criterion.

Figure 3: Foxton Park and Rail Options with Level Crossing Bypass



6 Next Steps and Milestones

- 6.1 Public Consultation would commence in September 2019.
- 6.2 Development of an Outline Business Case as appropriate.
- 6.3 Refer the work developing proposals for removing the level crossing to the Combined Authority, as the strategic transport authority for the area, in the context of a wider A10 review

7 Implications

- 7.1 Local members, statutory stakeholders, Parish Councils and some local stakeholders have been consulted.