

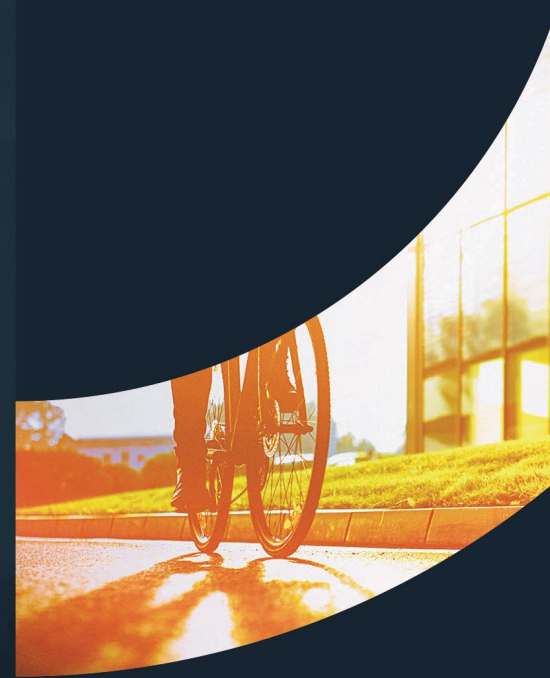


**GREATER
CAMBRIDGE
PARTNERSHIP**

Growing and sharing prosperity
— Delivering our City Deal —

Cambridge South East Transport (CSET) Phase 2

**Project Update
June 2021**



Agenda

- 1 Design refinements in response to EIA consultation comments
- 2 Environmental Impact Assessment
- 3 Assessment of Pink Route Variant
- 4 Shelford Railway Alignment
- 5 Next steps

The Scheme



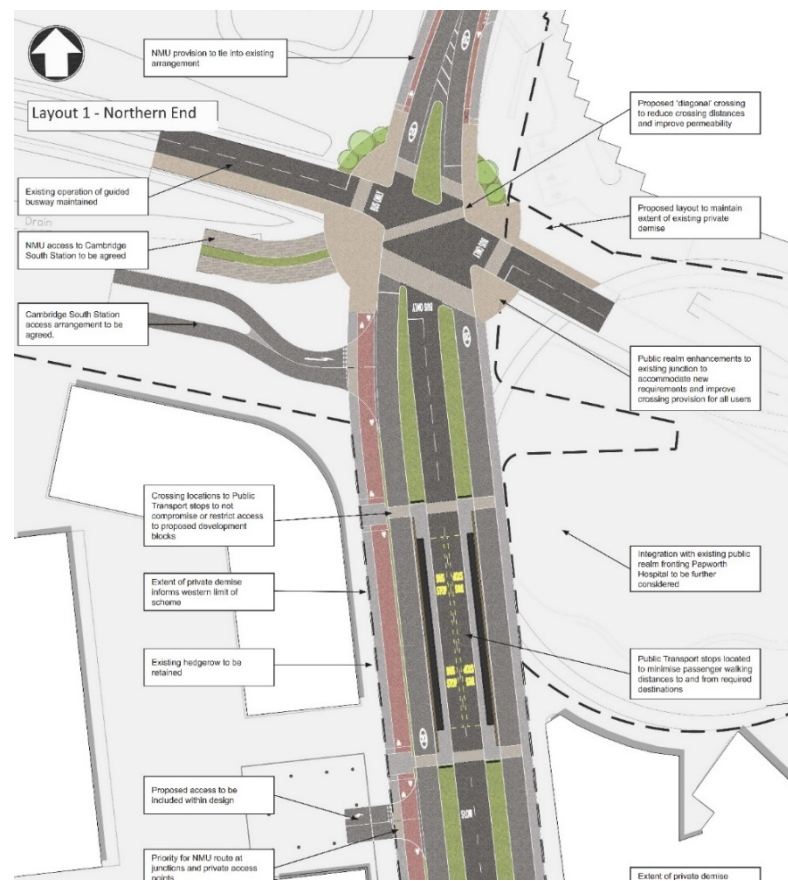
Design refinements

Changes made in response to EIA consultation comments

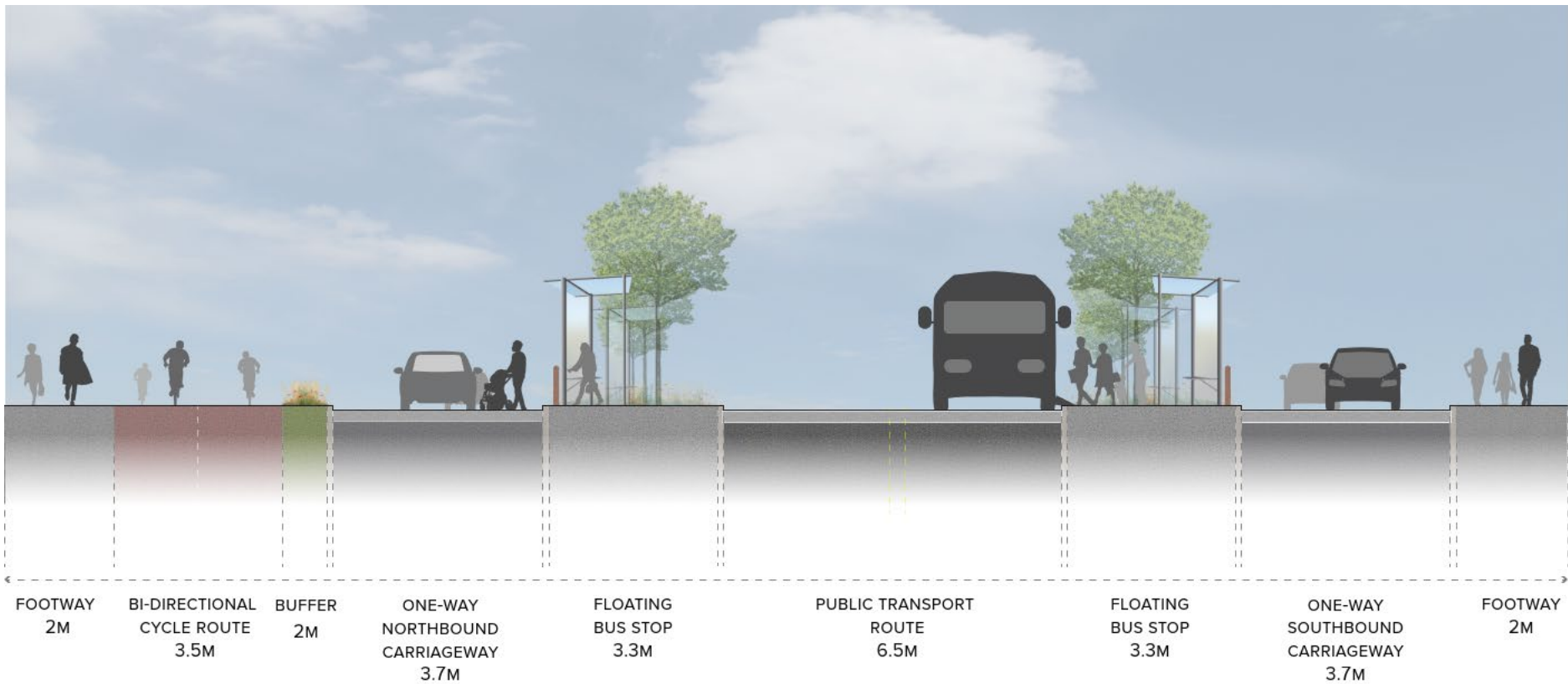


Design refinements – Francis Crick Avenue

- Segregation of the footway and cycle route along the western side of FCA
- Provision of a pedestrian footway along the eastern side of FCA
- Improved integration with Cambridge South Station and the Guided Busway junction for cyclists and pedestrians
- A mix of trees and hedges along FCA



Francis Crick Avenue – cross-section



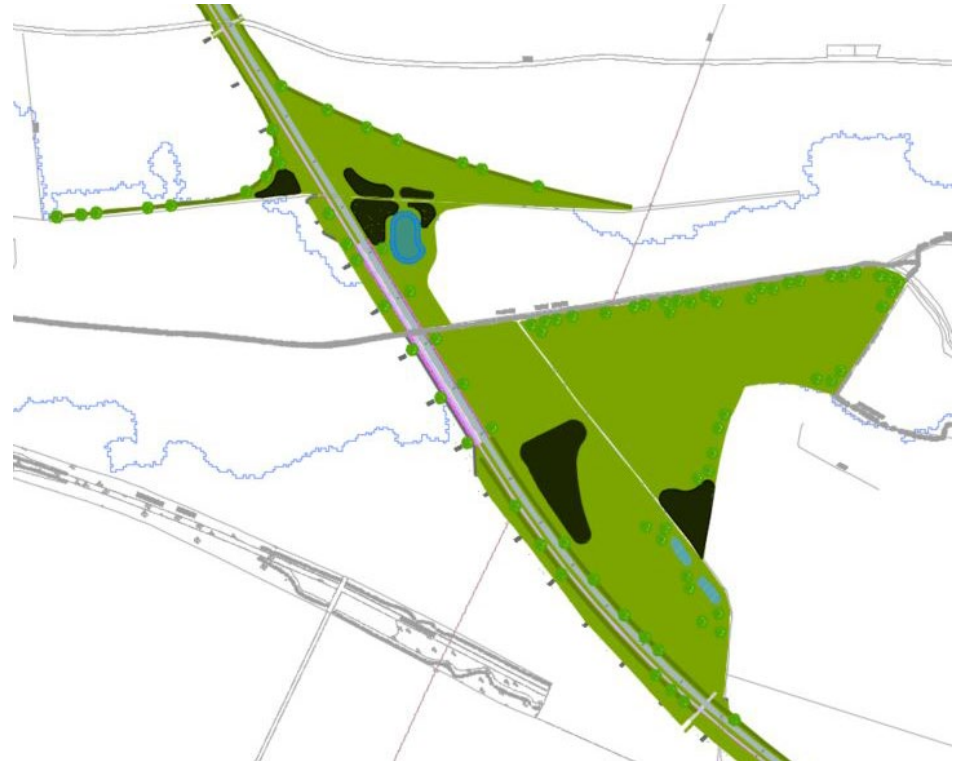
Design refinements – Nine Wells area

- Pedestrian and cycle access to Nine Wells Local Nature Reserve subject to landowner agreement
- Landscape planting in the Nine Wells area taking into account landowners' requirements



Design refinements – Landscaping and planting

- Landscape planting around bridge crossing over the River Granta near Stapleford featuring grass and scattered trees alongside the river
- Hedgerows interspersed with suitable tree species along sections of the route
- Picnic areas near the River Granta crossings subject to landowner agreement



Design refinements – Stops and crossings

- Stop layouts reconfigured to provide greater opportunity for landscaping
- Landscape design includes measures to reduce visual impact of stops and provide noise attenuation where appropriate
- Additional cycle storage incorporated into the design of stops
- Pegasus crossings for horse riders now included in the design



Design refinements – Travel hub and structures

- Travel hub capacity refined to 1,250 spaces with lower density of parking and enhanced landscaping
- Active travel paths connecting the Babraham Research Campus and Granta Park with the Travel Hub
- River Granta crossing structures reduced in height



Environmental Impact Assessment

Significant effects and main mitigation proposals
(SUBJECT TO FINALISATION OF THE EIA)



Significant effects

- There are likely to be **temporary** significant effects, during construction, on Great Crested Newts, and visual impacts in some locations
- Few **permanent** significant effects have been identified. However, on opening significant effects are expected on buried archaeology, landscape and visual impacts for some residents with properties near the route, staff at the Cambridge Biomedical Campus and users of some Public Rights of Way, roads and permissive paths
- By year 15 of operation, when the planting around the scheme has matured, the visual impact will have reduced, but there will still be three areas where significant effects are predicted:
 - Users of Restricted Byway Babraham 12/10 and residents of North Farm looking south-west
 - Residents on Sawston Road, Lynton Way and Stanley Webb Close and users of the existing cycleway on Sawston Road looking east towards the A11
 - Users of Footpath Babraham 12/4 looking south and south-east

Main mitigation measures

Topic	Main mitigation proposals
Air Quality	<ul style="list-style-type: none">• Standard Construction Good Practice. No operational mitigation required
Biodiversity	<ul style="list-style-type: none">• Construction Environmental Management Plan (CEMP)• Landscape and Ecological Management Plan (LEMP)• Requirement for pre-construction surveys• River Granta County Wildlife Site screened from the construction works• Badger setts directly or indirectly impacted by the scheme closed under licence from Natural England. Artificial sett to be provided to mitigate for loss of a main sett• Landscape design includes newly created areas of grassland and woodland. Once established, these will reduce habitat loss and fragmentation and will also enhance green corridors for the length of the route• New wetland habitat suitable for water voles in form of linear ponds included in design• Sensitive lighting strategy to reduce lighting impacts• Fencing, capture and translocation programme of Great Crested Newts (GCN) to be conducted under licence from Natural England• Mitigation for lost GCN habitat near Francis Crick Avenue to be confirmed – consultation ongoing with landowners• Hibernacula constructed within close proximity to GCN ponds, to provide additional habitat

Main mitigation measures

Topic	Main mitigation proposals
Climate Change and Carbon	<ul style="list-style-type: none">• Use of electric powered buses during operation to reduce carbon emissions• Follow the high level approach defined within Publicly Available Specification (PAS) 2080 to reduce greenhouse gas emissions as far as practicable• Solar panels used on travel hub to provide power for operational requirements of the hub.
Historic Environment	<ul style="list-style-type: none">• Targeted archaeological investigation to record archaeological assets prior to their removal or partial removal as a result of the scheme construction• The Granta River Crossing at Stapleford reduced in height to minimise its presence in the landscape• Scheme design has avoided the addition of any feature that would impact the openness of views along avenue at Babraham, therefore minimising impact
Landscape and Visual Impact	<ul style="list-style-type: none">• Tree-lined hedgerow, woodland belts, grassland to integrate the scheme into its landscape setting<ul style="list-style-type: none">- Tree planting along Francis Crick Avenue- Trees and hedgerow along the public transport route- Tree planting and landform north and south of the route north of Coppice Avenue- Woodland at each end of the River Granta Crossing at Stapleford- Tree planting and hedgerow around and within Travel Hub. Woodland around northern and southern parking zones- Bunds along route to provide additional screening where effective

Main mitigation measures

Topic	Main mitigation proposals
Noise and Vibration	<ul style="list-style-type: none">• Low noise surface (Thin Surface Course System) for dedicated public transport route• Acoustic barriers and bunds in key areas where the dedicated route alignment approaches nearest noise sensitive receptors (including receptors at Hinton Way, Haverhill Road, North Farm, residential development west of Sawston Road stop)• Construction noise and vibration mitigation to include application of Best Practicable Means• Temporary acoustic barriers or solid site hoardings proposed to reduce noise impacts from operation of satellite construction compounds at the closest affected receptors
Traffic and Transport	<ul style="list-style-type: none">• PT vehicles are segregated from all highway users (walkers and cyclists)• Realignment of the DNA path designed to avoid increase in journey length where possible• During construction there will be approved routes for construction traffic that avoid village centres.



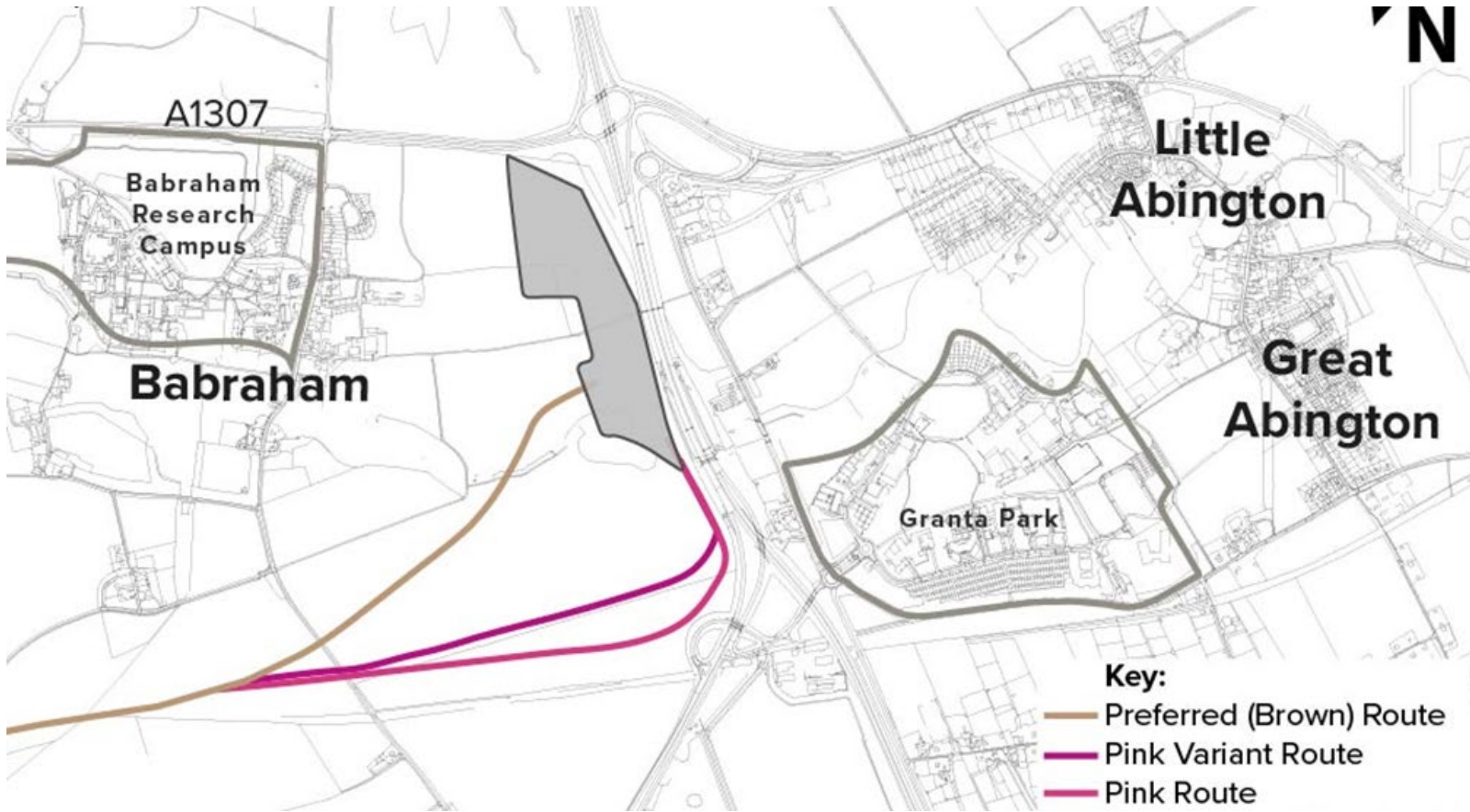
Main mitigation measures

Topic	Main mitigation proposals
Water Resources and Flood Risk	<ul style="list-style-type: none">• No vegetation clearance within the riverbed or banks except as required (eg. Remove trees where bridge is being constructed)• Requirement that temporary bridges will not impact the riverbeds or banks• No storage or stockpiling within flood zones during construction• Site compound to be located away from surface water courses and outside of flood zones 2 and 3• Site must sign up for Environment Agency flood warning service• SuDS drainage embedded within design to ensure runoff has sediment settlement• Ground Investigation is ongoing which will identify whether there is contamination associated with former landfill sites. If present, risk will be mitigated (either treatment, removal or breaking pathway to contaminant source)• Flood compensation areas (mitigation embedded within the design)
Resources and Waste	<ul style="list-style-type: none">• Outline Site Waste Management Plan to ensure that waste is managed in accordance with the waste hierarchy and other relevant legislative requirements• Construction Environmental Management Plan to be updated during detailed design to cover pollution control, materials storage, waste handling, emergency planning and incident control• Draft Spoil Management Strategy which sets out how soils are to be managed in accordance with Defra's Code of Practice to be developed during detailed design

Pink Route Variant

Assessment of alternative alignment proposed in responses to EIA consultation





Assessment findings

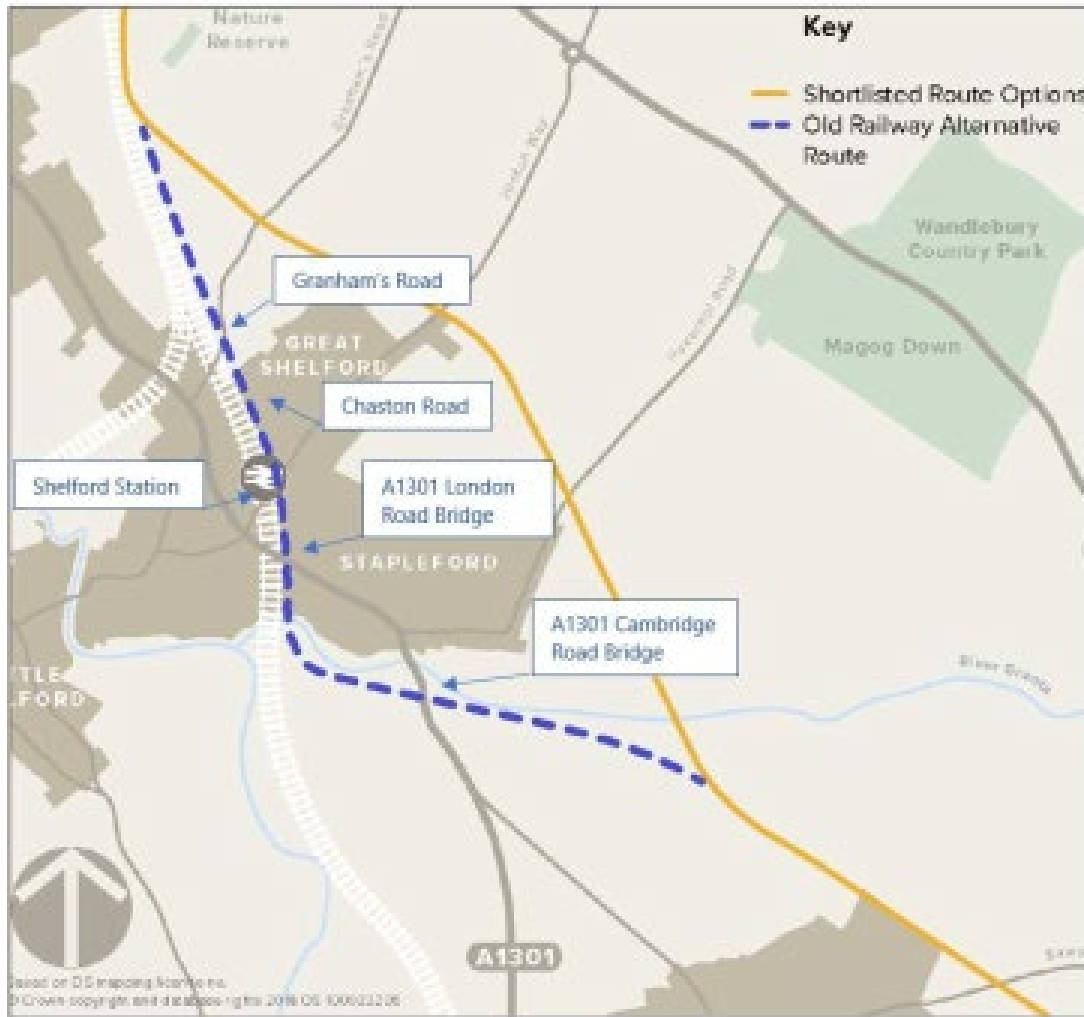
- Assessment published as an appendix to Joint Assembly papers
- **Environment** – The Pink Route Variant does not provide any environmental benefits of a magnitude that makes this route preferable in comparison to the Brown Route
- **Costs** – The estimated construction costs for the Brown Route and PRV are similar
- **Benefits** – The increased route distance of the PRV results in longer journey times. Lower time savings contribute to a 9% (£6.25M) reduction in benefits for the PRV when compared with the Brown Route
- **Benefit Cost Ratio** – Although the difference in BCR of the PRV compared to the Brown Route is marginal (0.07), it remains the same as the difference between the Brown Route and Pink Route reported in the Outline Business Case, which contributed to the Brown Route being recommended as the preferred option



Shelford Railway Alignment

Atkins independent review





Atkins independent review

- GCP commissioned Atkins to conduct an independent review of the WSP, Mott MacDonald and i-Transport documents regarding the Shelford Railway Alignment (SRA)
- Atkins report published as an appendix to Joint Assembly papers
- Atkins consider the information presented in the 2020 Mott MacDonald report to be a fair assessment at feasibility stage. Based on the information presented in the documents, the SRA has been considered not to be a viable alternative relating to Segregation; Land acquisition; Deliverability; and Cost
- Atkins consider that whilst segregation is one of the key scheme objectives, it is acknowledged that design compromise would be required at selected locations to overcome localised constraints and therefore it is not considered to be a 'show stopper' that rules out the feasibility of the SRA at this stage



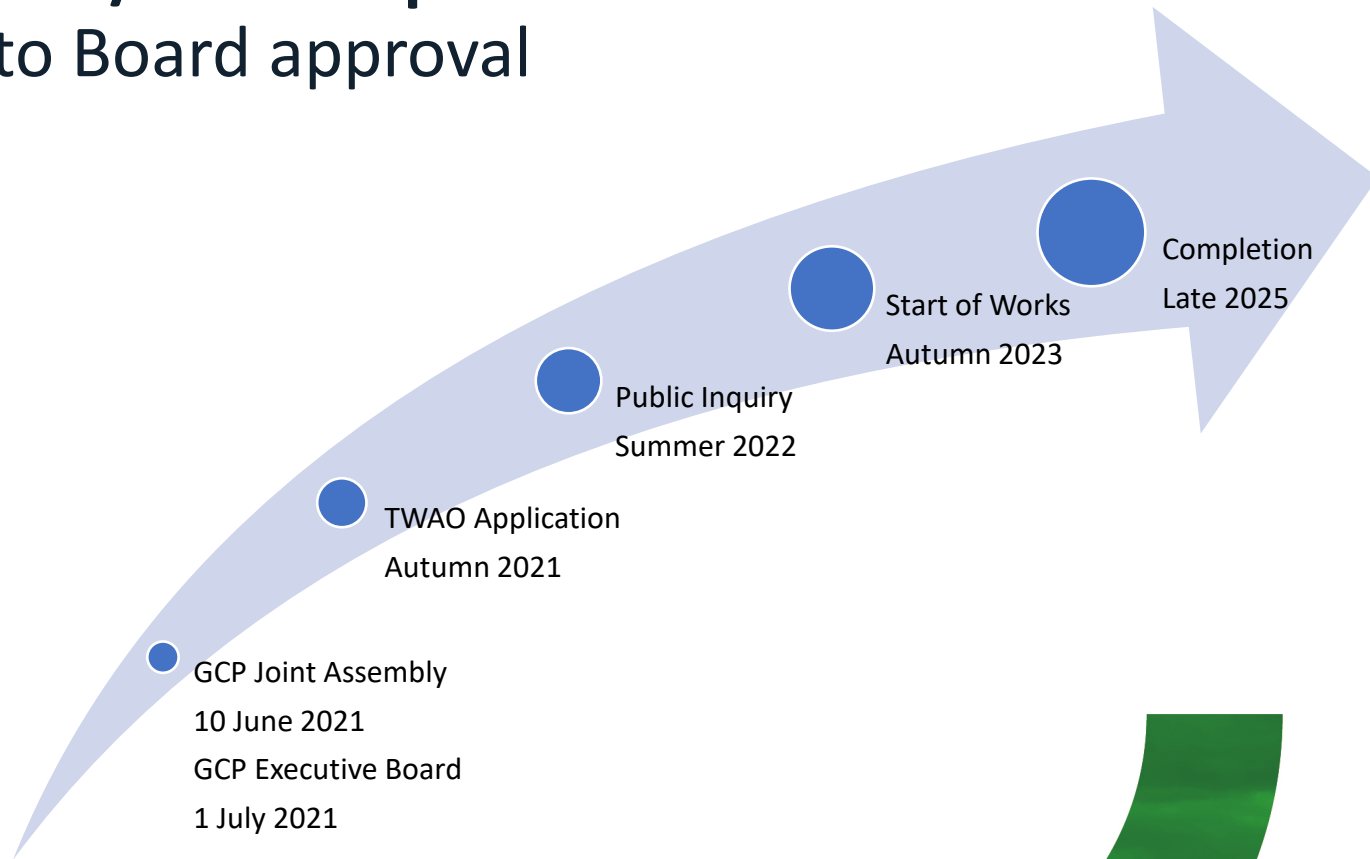
Atkins independent review

- Land acquisition, deliverability and cost are considered to be the major risks associated with the SRA, compared to the preferred route. The SRA would require the following:
 - Land acquisition, which would be subject to third party agreement and public scrutiny
 - Liaison with Network Rail and Anglian Water, which could increase risk given the potential timescales and complexities of the Network Rail GRIP process
- Mott MacDonald and i-Transport are in agreement that scheme cost for the SRA would be higher than the preferred route due to the complex rail interface requirement, together with land acquisition costs
- In summary, the scheme may be 'feasible' from the engineering perspective; however, based on the information presented, Atkins consider the risks associated with land acquisition, construction complexity and construction programme remain high and adversely impact on the scheme delivery



Programme/Next Steps

Subject to Board approval



Questions

