

Executive Summary

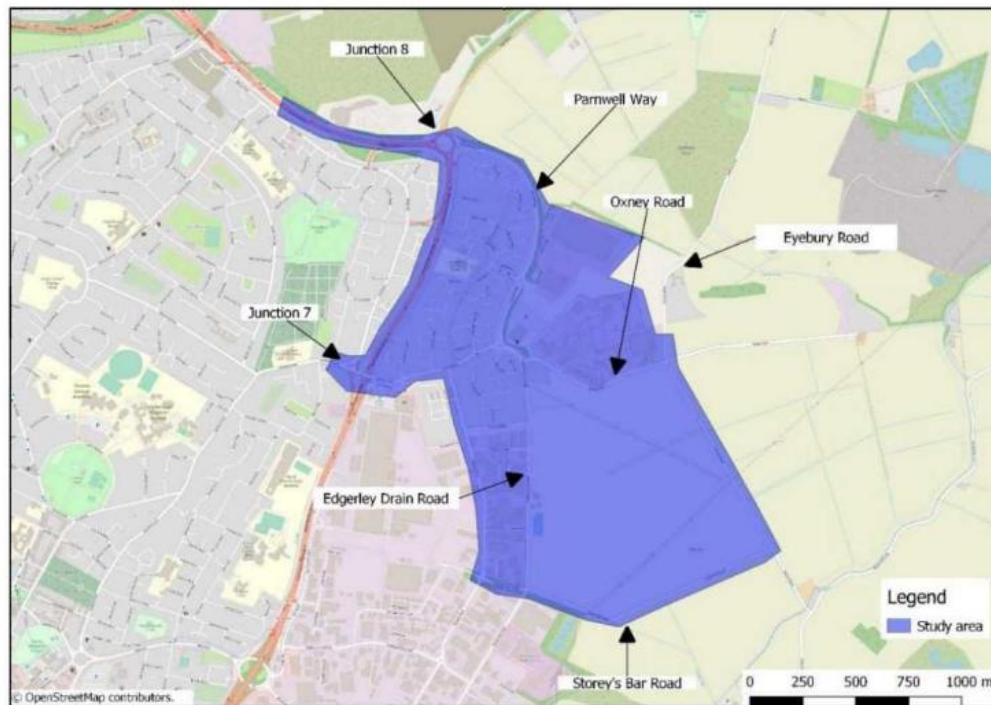
This Strategic Outline Business Case makes a strong strategic and economic case for the Fengate Access Study improvement schemes, which will return **High Value for Money**.

The package of schemes will add capacity to the highway network, addressing existing problems of peak hour congestion, and help to facilitate planned employment growth within Fengate.

The Peterborough Local Plan (adopted July 2019) sets out the overall vision, priorities and objectives for Peterborough up to 2036. The updated strategy identifies the required delivery of 19,440 new homes and 17,600 new jobs by 2036¹.

The largest employment allocation within Fengate is the Red Brick Farm site which covers 126,600 square metres. This is likely to be a mixture of B8 (Storage and Distribution) units and B2 (General Industry) unit with ancillary B1 office space.

The Fengate Access Study Area focuses on the north of Fengate, where the Red Brick Farm site is located. The study area is shown in the Figure overleaf, and considers Junction 7 and Junction 8 of the A1139 Fletton Parkway (key access to / from the parkway system), access routes into Fengate such as Parnwell Way and Oxney Road, and internal roads within Fengate such as Edgerley Drain Road and Storey's Bar Road.



Fengate Access Study Area

¹ <https://www.peterborough.gov.uk/council/planning-and-development/planning-policies/local-development-plan>

Planning discussions between the developer for the Red Brick Farm site and Peterborough City Council are well advanced, and the developers have the intention of meeting their highway obligations under any agreed planning conditions by October 2021. This provides Peterborough City Council with an opportunity to work alongside the developer to bring forward much needed employment at a time of economic uncertainty, whilst ensuring that the highway improvements associated with Red Brick Farm fit with wider requirements for the Fengate area.

The key project milestones are set out in the Table beneath. To meet this ambitious schedule, and subject to approval from the CPCA Board, Peterborough City Council are requesting permission to move straight from Strategic Outline Business Case to Full Business Case.

Key Project Milestones

Timescale	Milestone Activity
September 2020	Strategic Outline Business Case and Option Assessment Report submitted to CPCA for review. Approval sought for release of funding for Detailed Design and Full Business Case.
October 2020	Subject to approval, funding secured to undertake Full Business Case and Detailed Design.
November - December 2020	Detailed Design and Full Business Case commence. Stakeholder and Public Consultation undertaken.
March 2021	Full Business Case and Detailed Design submitted to CPCA for review and approval sought for release of funding for construction.
June 2021 – October 2021	Construction starts with Oxney Road / Edgerley Drain Road Roundabout (estimated 14 week construction programme)
October 2021 – October 2022	Construction of remaining schemes within the Package 1.

This Strategic Outline Business Case is set out in compliance with the DfT's Five Case Business Case Model.

Strategic Case

The Strategic Case has considered the policy context in which a scheme for this location has been developed. As well as policy, the need for intervention is explained, which includes existing peak hour congestion and associated delay that compromise local growth aspirations:

The policy review and data on existing issues has been used to identify scheme objectives, and different schemes, forming packages of potential improvement options, have been assessed against these objectives using the DfT's Early Assessment Sifting Tool (EAST). The Primary scheme objectives are set out beneath.

- **Tackle congestion and reduce delay:** Tackle congestion at key pinch points across the Study Area and reduce delay in to the Fengate area
- **Support Peterborough's Growth Agenda and facilitate the development of the Red Brick Farm site:** Ensure that the planned employment growth at Red Brick Farm is accommodated.

The Strategic Case concludes with details of the preferred package of schemes (Package 1) which is the subject of this Business Case. Full details of the modelling and assessment work undertaken to identify the preferred package of schemes can be found in the Fengate Access Study Option Assessment Report (OAR).

Package 1 consists of the following schemes:

- Creation of a roundabout at the junction of Oxney Road / Edgerley Drain Road
- Traffic Signal Improvements (including an initial Smart Junctions Trial) at the junction of Edgerley Drain Road / Storey's Bar Road / Vicarage Farm Road.
- Traffic Signal Improvements at Junction 7 of the A1139 Frank Perkins Parkway (A1139 Frank Perkins Parkway / Oxney Road / Eastfield Road)
- Creation of a third lane southbound on the A15 Paston Parkway approach to Junction 8 (A1139 Frank Perkins Parkway / A15 Paston Parkway / A1139 Eye Road / Parnwell Way).

The location of each of these schemes is shown in the Figure beneath.



Package 1 Scheme Locations

Economic Case

The Economic Case demonstrates the scheme achieves a Benefit to Cost Ratio of 2.7, and offers **High Value for Money** based on transport user benefits alone. A breakdown of the scheme BCR is provided in the Table beneath.

TUBA BCR Assessment

Value (£'000s) 2010 prices, benefits discounted to 2010	
Benefits	
Greenhouse Gases	104
Consumer Users (commuting)	9,173
Consumer Users (Other)	2,734
Business Users/Providers	3,352
Indirect Taxes	-197
Present Value of Benefits (PVB)	15,166
Costs	
Broad Transport Budget	5,609
Present Value of Costs (PVC)	5,609
Net Benefit / BCR Impact	
Net Present Value (NPV)	9,557
Benefit / Cost Ratio (BCR)	2.704

The Present Value of Benefits used in the assessment have been derived from the SATURN based Peterborough Transportation Model 3 (PTM3), and used to assess the impact of the scheme in future years. Results from this modelling were then assessed using the Transport User Benefits Appraisal (TUBA, 1.9.13) tool to calculate a scheme BCR. The **Present Value of Benefits** for the scheme are **£15,166** in 2010 prices.

The present value of costs used in the Economic Assessment is based upon a scheme cost estimate, and have been calculated in line with WebTAG guidance over a 60 year assessment period. The **Present Value of Costs** for the scheme are **£5,609** in 2010 prices.

Developer Contribution Sensitivity Test

It is anticipated that the package of schemes will be jointly funded by the CPCA and S106 Developer Contributions secured from the Red Brick Farm Site.

Discussions between Peterborough City Council and the Red Brick Farm Developers are well advanced, and it is considered highly likely that a significant developer contribution will be secured towards the cost of the package of schemes in the form of a S106 agreement, but details of the contribution have yet to be finalised, and consequently the level of developer contribution cannot be confirmed at this point.

However, a sensitivity test has been undertaken as part of the Economic Assessment to demonstrate the impact that the likely contribution will have on the package BCR. The sensitivity test has made the following changes to the schemes costs:

- The cost of the Oxney Road / Edgerley Drain Road Roundabout to be covered by a third party (developer contribution)
- A contribution of £325,000 towards the Traffic Signal improvements at the junction of Edgerley Drain Road / Storey's Bar Road / Vicarage Farm Road.

The updated Base Investment Cost then had the same levels of risk, inflation and Optimism Bias applied as the core scenario, and was discounted back to 2010 market prices using the same factors. The resultant BCR is shown in the Table beneath.

TUBA BCR Assessment – Developer Contribution Sensitivity Test

Value (£'000s) 2010 prices, benefits discounted to 2010	
Benefits	
Greenhouse Gases	104
Consumer Users (commuting)	9,173
Consumer Users (Other)	2,734
Business Users/Providers	3,352
Indirect Taxes	-197
Present Value of Benefits (PVB)	15,166
Costs	
Broad Transport Budget	4,682
Present Value of Costs (PVC)	4,682
Net Benefit / BCR Impact	
Net Present Value (NPV)	10,484
Benefit/Cost Ratio (BCR)	3.239

The Table demonstrates that the impact of a likely developer contribution towards the package cost will reduce the PVC to £4,682,000, increasing the scheme BCR to 3.2 which again offers **High Value for Money**.

Qualitative and quantitative assessments have also been undertaken for the following areas:

- Landscape
- Heritage
- Arboriculture
- Ecology
- Noise.

These assessments did not identify any significant concerns and will be considered in more detail during the detailed design process.

Financial Case

The Financial Case demonstrates that the scheme has been robustly costed in line with WebTAG guidance for this stage of assessment.

This Scheme Outturn Cost (including risk and inflation) is £5,869,582. This includes a 20% Risk Allowance, which is comprised of 10% construction risk and 10% COVID-19 related risk.

The initial scheme cost estimates are presented in the Table beneath.

Financial Case Scheme Cost Estimates

Description of Cost Type	Cost (£)
Base Investment Cost	4,599,343
Risk Adjusted Base Cost	5,499,211
Risk Adjusted Base Cost with Construction Industry Inflation (Outturn Cost)	5,869,582

It is anticipated that the full scheme Outturn Cost of £5,869,582 will be jointly funded by the CPCA from the Single Investment Fund and S106 Developer Contributions secured from the Red Brick Farm Site.

The level of developer contribution will be fully reported and accounted for within the Economic Case and Financial Case of the Full Business Case.

Peterborough City Council request that the Design Cost of £530,872 is released in advance of the funds required for construction, in order to undertake the Detailed Design and produce a Full Business Case. This work is provisionally programmed to be undertaken between November 2020 and March 2021, with a view to construction commencing on site in June 2021. These costs would then be reported as costs already incurred within the scheme cost estimates included within the Full Business Case.

This cost includes an allowance of £50,000 to undertake an innovative trial using real time data collection sensors at the Junction of Edgerley Drain Road / Storey's Bar Road / Vicarage Farm Road to directly control the traffic signal operation based on live network conditions (replacing MOVA).

Commercial Case

The Commercial Case demonstrates that the scheme can be reliably procured and implemented through existing channels whilst ensuring value for money in delivery of the scheme.

All phases of the scheme, including detailed design, construction and site supervision will be delivered in house by Peterborough Highway Services (PHS), who have been responsible for all planning and design work undertaken on the Fengate Access Study to date.

The scheme will be procured using a Target Cost payment mechanism. This incentivises both parties to work together to reduce cost through a pain / gain mechanism. To ensure that the procurement remains commercially competitive and offers value for money, all subcontract packages will be subject to competitive tendering.

Procuring the scheme directly through the PHS contract enables Peterborough City Council to appoint a contractor in an efficient manner. Using PHS' in-house delivery capability offers the following benefits over alternative procurement routes.

- PHS is reliable and has a **proven track record** of delivering major schemes successfully, and this serves as a positive indicator of future performance.
- The scheme can be **procured far quicker** than would be the case with alternative procurement routes. As well as reducing the procurement costs for the procuring authority, the project benefits will be realised sooner.
- The integrated delivery model creates a **single point of responsibility** and encourages **more effective collaboration** between client, designer and contractor to reduce costs. As the scheme has been identified, planned and designed within PHS, continuity can be assured through to construction, and any issues identified on site can be quickly resolved by the design team.
- A well-established supply chain is already in place which provides **Value for Money**. All subcontract packages will be competitively tendered to ensure best value, and will be put to a minimum of three tenderers where possible.
- **Strong performance is highly incentivised** as all schemes delivered within the PHS contract contribute to a suite of KPIs which impacts on the term of the contract. Consistent good performance is rewarded with contract term extensions whereas consistently poor performance would see a reduction in the contract term.
- The contract duration and **strong collaborative relationship** encourages both parties to work towards long term gain rather than short term commercial gain.

Management Case

The Management Case demonstrates that Peterborough City Council, through the PHS Framework, has the necessary experience and governance structure to successfully manage the delivery of the package of schemes.

The Council, through PHS, have successfully delivered the following highway improvement schemes in recent years. The Staniland Way Roundabout has been included as an example of the contract's ability to deliver due to the similarities it bears to the proposed roundabout at Oxney Road / Edgerley Drain Road.

- Staniland Way Roundabout (Werrington) - £0.5m
- Junction 20 Improvement Scheme (A47 Soke Parkway / A15 Paston Parkway) - £5.7m



Staniland Way Roundabout (post scheme)

Delivery of the scheme will be managed by a Project Team led by a PCC Project Manager, and consisting of all the key project delivery partners. The Project Team will be responsible for the daily running of the project, coordinating with all key stakeholders, and managing the delivery programme.

The existing PHS Project Board will be used to oversee the continued development and delivery of the scheme by the Project Team, and to make key decisions relating to the delivery of the project. The Project Board will be supported by technical specialists, and key stakeholders will be invited to attend as necessary.

Every month the Project Manager will also submit a highlight report to the CPCA recording what progress has been made and whether there are any new risks that could impact the scheme.

An online public and stakeholder consultation exercise on the final package of schemes will be undertaken prior to completion of the Detailed Design. No residents are adversely affected by the proposed schemes. All other communication with key stakeholders and the public will be coordinated by a designated Project Liaison Officer who will be based with the project delivery team.

A Risk Register was produced during project initiation to identify potential risks and to evaluate factors that could have a detrimental effect on the project. The Risk Register is a live document and is reviewed regularly at progress meetings and updates are reported to the CPCA through the monthly Highlight Reports.

Details about how the scheme will be monitored and evaluated against the objectives are shown within the Management Case, and include a range of quantitative and qualitative data collection methods that will be undertaken at one, three and five years post scheme opening.

Summary

This Outline Business Case makes a strong strategic and economic case for the Fengate Access Study Improvements, which will return **High Value for Money**.

The Business Case demonstrates that the scheme has been carefully costed based on the information available, can be efficiently procured through existing commercial channels whilst proving value for money, and that the necessary mechanisms are in place to ensure that delivery of the scheme can be successfully managed on behalf of the Cambridgeshire and Peterborough Combined Authority.

This package of schemes will directly facilitate the Red Brick Farm development, along with wider growth in Fengate, and provide much needed employment opportunities in the uncertain wake of COVID-19.