FULL BUSINESS CASE (FBC)

A. GENERAL INFORMATION

A1. General

Project Title (as per Voyager)	A457 Dudley Road Improvement Scheme Revised Scheme				
Voyager Code	CA-02715				
Portfolio / Committee	Transport & Environment Finance & Resources	Directorate	Place, Prosperity and Sustainability		
Approved by Project Sponsor	Phil Edwards 27/1/22	Approved by Finance Business Partner	Carl Tomlinson 20/1/22		

A2. Outline Business Case approval (10/11/2020 Cabinet Member)

A Project Definition Document (PDD) for the A457 Dudley Road Improvement Original Scheme was approved by Cabinet on 26th June 2018. This approval authorised the City Council to submit a funding bid to the Department for Transport (DfT). In December 2018, the DfT announced that the project had received funding to complete legal and procurement processes.

In light of the ongoing Covid-19 restrictions, and the Emergency Travel Plan (ETP), we have reviewed the Dudley Road Highway Improvement Scheme. The project team undertook a study in June 2020 to assess feasibility of making significant changes to the scheme in-line with the ETP and developed a Revised Main Scheme. The study was presented to the Leader, ward councillors and key stakeholders (NHS, Soho Loop Development, TfWM etc). All stakeholders were in agreement that the original scheme was to be shelved, with the Revised Main Scheme to be progressed and developed.

There has been ongoing dialogue with the DfT who remain supportive of a Revised Main Scheme and agreed to transfer £5.043m of funding ("the LEP funding") to the Greater Birmingham and Solihull Local Enterprise Partnership (GBSLEP) to facilitate development of the Revised Main Scheme to a "shelf ready" state including a GBSLEP FBC which was submitted in March 2021, subject to an initial revised OBC submission. The OBC was submitted to the GBSLEP on 7th October 2020 and the FBC was approved by the GBSLEP Project Board in September 2021.

The Revised Main Scheme has been further developed and an Outline Business Cases (OBC) for the A457 Dudley Road Improvement Revised Scheme was approved by Cabinet on 10th November 2020. The A457 Dudley Road Revised Main Scheme Update Report detailing the latest proposals was approved by Cabinet in March 2021.

A3. Project Description

Summary

The proposals for Dudley Road Improvements Revised Scheme are in accordance with policies set out in key City Council documents including the Birmingham Development Plan (BDP), Emergency Travel Plan (ETP) and the Greater Icknield Masterplan.

Greater Icknield is identified as a key growth area within the Birmingham Development Plan (2017), with proposals to accommodate new housing developments along with other local facilities and

employment opportunities. It is part of a wider growth corridor and along with development sites in Sandwell provide the potential to deliver over 3,000 new homes.

Background

A Project Definition Document (PDD) for the A457 Dudley Road Improvement Original Scheme was approved by Cabinet on 26th June 2018. This approval authorised the City Council to submit a funding bid to the Department for Transport (DfT). In December 2018, the DfT announced that the project had received funding to complete legal and procurement processes.

The PDD approved commencement of the land/property acquisition process and to make a Compulsory Purchase Order and Side Roads Order (CPO & SRO); the PDD approval also delegated authority to the Assistant Director, Transport and Connectivity to procure, appoint and place orders with a design and build contractor to carry out Early Contractor Involvement (ECI), design development, construction planning and detailed design.

On 14 May 2019, Cabinet approved Dudley Road Improvement Scheme – Land Requirements Report. This report authorised the making of CPO orders in respect to additional land required to deliver the scheme following the amendments to the scheme plan in relation to comments received during the consultation exercise.

In light of Covid-19 and the Emergency Transport Plan (ETP), the project team undertook a study in June 2020 to assess feasibility of making significant changes to the scheme in-line with the ETP and developed a Revised Scheme. The A457 Dudley Road Improvement Revised Scheme provides wider footways and new segregated cycle paths to cater for non-motorised users, the provision of a bus lanes along the corridor, alongside the carriageway realignment works to improve safety.

A bid to the Central Government's LUF was made in June 2021, with a financial contribution of £19.941m requested to undertake the Revised Main Scheme Delivery. This was approved on 27th October 2021.

The Revised Main Scheme is split into 3 elements:

- Development of a shelf ready scheme (including previous years expenditure) £5.515m (already approved)
- Western Road Junction Scheme Phase 1 Advanced Works £5.147m including revised risk allowance of £0.400m and updated Target Cost value (FBC approved and currently on site)
- Revised Main Scheme Delivery £21.473m including £19.941m capital funding secured from the Levelling Up Fund bid (approval sought in this FBC).

Scheme Details

The proposals are outlined below and shown on the scheme plan attached as Appendix D.

- Significant improvements to network efficiency and reducing congestion as part of the corridor designation;
- Significant benefits to public transport operations, by making improvements to the signalised junctions by `linking` the signals and providing bus detection measures to improve bus journey time;
- Provision of peak hour Bus Lanes both sides of the corridor where practical, together with Bus Lane enforcement cameras;
- Closure of Northbrook Street and new signalised junctions at Heath Street/Dudley Road and Steward Street/Spring Hill;
- Upgraded pedestrian crossings at all signalised junctions and 5 new pedestrian crossings;
- Cycle and pedestrian facilities on wide footways along the entire route length; this primarily will be in the form of a segregated cycling route on the north side of the corridor and shared

facilities where highway space is prohibitive. The cycling measures will also include toucan crossing facilities to create a link to the south side of the corridor;

- Realignment of junctions to reduce congestion and provide opportunities for multi-modal travel;
- Delivery of new foot bridge adjacent to Spring Hill Bridge.

A4. Scope

The delivery of highway improvements associated along the A457 Dudley Road corridor and side roads as set out in this FBC and shown on the scheme plan attached as Appendix D, including the acquisition of private land and property. The works to the Western Road Junction are excluded and form part of a separate report and are being undertaken as Phase 1 Advance Works. Works to Zone A (excluding City Road Junction) are to be delivered via the Cross-City Bus Scheme.

A5. Scope Exclusions

The project only includes the measures detailed in this FBC.

B. STRATEGIC CASE

This sets out the case for change and the project's fit to the Council Plan objectives

B1. Project Objectives and Outcomes

The case for change including the contribution to Council Plan objectives and outcomes

Existing Situation and Issues

The A457 Dudley Road is a heavily trafficked major route. The corridor provides access to major employment sites, residential and health centres from Birmingham city centre and Sandwell and provides a key route to the motorway network.

As a major route the A457 Dudley Road is heavily utilised by buses, heavy goods vehicles (HGVs), service vehicles, emergency services and general traffic, and due to its strategic nature, the route also carries significant volumes of commuter traffic during the peak periods.

Scheme-Specific Objectives

The A457 Dudley Road Improvement Revised Scheme proposal supports the City Council's policy objectives, particularly for 'a prosperous city built on an inclusive economy' and 'tackling inequality and deprivation' by improving public transport and other links to employment, training opportunities and local services. Equally the scheme proposals complement and align with the vision, principles and objectives of the ETP and Active Travel Plan (ATP).

The A457 forms part of Birmingham's Strategic Highway Network and provides a key arterial route from the Black Country into Central Birmingham. The purpose of the proposed scheme is to remove constraints to economic growth by:

- Improving accessibility to the city centre, New Street Gateway and HS2 by reducing congestion and providing public transport priority.
- Improving Journey Time Reliability by reducing congestion.
- Improving accessibility to the proposed Icknield Port Loop development consisting of 1,400
 homes, supporting business, leisure and community uses at a waterside location. In addition,
 there are a number of derelict industrial areas along this corridor which the scheme will help
 to open up for investment opportunity.
- Improving local access to key employers in this area; including access to Birmingham City Hospital, and the Midland Metropolitan Hospital currently under construction.
- Improving air quality due to the reduced vehicle delays at junctions and as road users turn to alternative travel choices. Air quality monitoring is ongoing and any recommendations or issues arising from the assessment will be considered as part of the design development.

Existing trees will be retained wherever possible through the use of design or engineering solutions. Where impacts are unavoidable appropriate replacement trees will be planted.

- Improving environmental quality and reduced congestion within Dudley Road Local Centre
 making the centre more attractive to the market and supporting the role of the centre as a
 community focal point.
- Improving and encourage safe, secure and convenient access to and through the area for cyclists and pedestrians.

The scheme also supports development in the Smethwick area of Sandwell including housing schemes at Grove Lane, Windmill Eye, and Brindley Canalside. Furthermore, upon the completion of the Midland Metropolitan Hospital in Sandwell, the majority of the former City Hospital Site will be used for residential development and bring forward local facilities and further employment opportunities within the area.

City Council Objectives including ETP/ATP and the Draft Birmingham Travel Plan – Big Moves

The A457 Dudley Road Main Works project supports the policy objectives outlined in the City Council Plan and Budget 2018-2022 (as updated in 2019), including:

- `an entrepreneurial city to learn, work and invest in`, particularly `develop our transport infrastructure, keeping the city moving through walking, cycling and improved public transport`.
- `a great, clean and green city to live in`, particularly `improve the environment and tackle air pollution`.
- `strive to maximise the investment in the city and engage local employers to create quality jobs and opportunities for citizens.
- takes a leading role in tackling climate change.

The scheme proposals support the priorities of `A Clean Air Strategy for the City of Birmingham - Draft`

• `Improving the wider transport network to support smoother and faster journeys, whilst increasing the range of cleaner and environmentally/health-friendly journey options available to travellers`

The proposals also support the objectives of Birmingham Development Plan (BDP) 2031 including:

- 'To provide high quality connections throughout the city and with other places including encouraging the increased use of public transport, walking and cycling'.
- 'To create a more sustainable city that minimises its carbon footprint'.
- 'To encourage better health and wellbeing'.

The scheme supports the Additional Climate Change Commitments including the aspiration for the City Council to be net zero carbon by 2030, as agreed by Cabinet on 30th July 2019, following the declaration of a Climate Change Emergency passed by full City Council on 11th June 2019.

Combined Authority Objectives

The measures will support polices within the West Midlands Strategic Transport Plan, in particular:

- Economic Growth and Economic Inclusion: 'To accommodate increased travel demand by ... new sustainable transport capacity' and 'to improve connections to areas of deprivation'.
- Population Growth and Housing Development: 'To improve connections to new housing ... primarily through sustainable transport connections'.
- Environment: 'To help tackle climate change by ensuring a large decrease in greenhouse gases from the ... area's transport system'.

- Public Health: 'To significantly increase the amount of active travel' and 'to assist with the reduction of health inequalities'.
- Social Well-Being: 'to improve the accessibility of shops, services and other desired destinations for socially-excluded people'.

Birmingham Emergency Transport Plan

The proposals have been reviewed in the light of the Emergency Birmingham Transport Plan – A low carbon, clean air recovery after Covid-19' published in May 2020:

- Reallocating road space away from single occupancy private cars to create safe space for walking, cycling and social distancing while maintaining public transport provision.
- Transforming the city centre through the creation of walking and cycling routes alongside public transport services and limited access for private cars.
- Prioritising active travel in local neighbourhoods so that walking and cycling is the way most people get around their local area most of the time. Local areas should be places where people are put first, creating stronger communities with space for exercise and play.
- Managing demand through parking measures where land and space currently occupied by car parking is repurposed for walking, cycling and social distancing.

The Birmingham Connected White Paper

The Birmingham Connected White Paper sets out the following five guiding principles for transportation in the city.

- Efficient Birmingham Birmingham Connected will facilitate the city's growth agenda in the most efficient and sustainable way possible, strengthening its economy and boosting jobs.
- Equitable Birmingham Birmingham Connected will facilitate a more equitable transport system; linking communities together and improving access to jobs and services.
- Sustainable Birmingham Birmingham Connected will specifically reduce the impacts of air and noise pollution, greenhouse gas emissions and energy consumption.
- Healthy Birmingham Birmingham Connected will contribute to a general rising of health standards across the city through the promotion of walking and cycling and the reduction of air pollution.
- Attractive Birmingham Birmingham Connected will contribute to enhancing the attractiveness and quality of the urban environment in local centres, key transport corridors and the city centre.

The proposal will contribute either directly or indirectly to all these objectives but particularly by helping to facilitate the city's growth agenda within Greater Icknield.

Birmingham Emergency Transport Plan (2020) & Birmingham Transport Plan (2021)

The revised scheme has been developed to align with the Birmingham Emergency Transport Plan published in May 2020, which has identified new challenges and opportunities for travel that the Covid-19 pandemic has presented. New data indicates that during this period many of us are choosing to travel by walking and cycling, which has reduced congestion on the highway network and provided an opportunity to free up valuable road space for potential walking and cycling provisions alongside improved public transport travel as Birmingham builds on the recovery.

The proposals developed attempt to meet one or more of the following objectives to align with the vision, principles and objectives of the Emergency Plan. The following objectives are outlined in the Birmingham Transport Plan:

 Reallocating road space away from single occupancy private cars to create safe space for walking, cycling and social distancing while maintaining public transport provision.

- **Transforming the city centre** through the creation of walking and cycling routes alongside public transport services and limited access for private cars.
- **Prioritising active travel in local neighbourhoods** so that walking and cycling is the way most people get around their local area most of the time. Local areas should be places where people are put first, creating stronger communities with space for exercise and play.
- Managing demand through parking measures where land and space currently occupied by car parking is repurposed for walking, cycling and social distancing.

Birmingham Cycle Revolution

Birmingham Cycle Revolution is a 20 year initiative to make cycling an everyday way to travel in Birmingham over the next 20 years with 5% of all trips in the city to be made by bike by 2023 and to double this again to 10% by 2033. This will help to make the city healthier, greener, safer and less congested.

This initiative will start by improving cycling facilities within a 20-minute cycling time of Birmingham city centre, with 95km of improvements to existing routes and 115km of new cycle routes. It will also:

- Improve cycling conditions on popular routes into the city centre;
- Provide quiet cycling routes and 20mph areas within residential areas;
- Upgrade towpaths on canals;
- Develop new cycling green routes through parks and open spaces;
- Improve local links to cycle routes;
- Provide new secure cycle parking hubs;
- Develop cycle loan and hire schemes to make it easier for people to get started.

The proposals also support the objectives of BDP 2017 including:

- To provide high quality connections throughout the city and with other places including encouraging the increased use of public transport, walking and cycling.
- To create a more sustainable city that minimises its carbon footprint.
- To encourage better health and wellbeing,
- To take a leading role in tackling climate change.

West Midlands Combined Authority Objectives

The measures will support polices within the West Midlands Strategic Transport Plan, in particular:

- Economic Growth and Economic Inclusion: 'To accommodate increased travel demand by ... new sustainable transport capacity' and 'to improve connections to areas of deprivation'.
- Population Growth and Housing Development: 'To improve connections to new housing ... primarily through sustainable transport connections'.
- Environment: 'To help tackle climate change by ensuring a large decrease in greenhouse gases from the ... area's transport system'.
- Public Health: 'To significantly increase the amount of active travel' and 'to assist with the reduction of health inequalities'.
- Social Well-Being: 'to improve the accessibility of shops, services and other desired destinations for socially-excluded people'.

DfT/LUF Objectives

Through the Major Scheme Business Case (MSBC) DfT require local authorities to demonstrate the Strategic, Management, Economic, Commercial and Financial case for the project. This will involve demonstrating transport improvements are good value for money and drive economic growth, whilst balancing the need for sustainable travel. The Dudley Road project supports these key objectives as below:

- Design and build the scheme on time, to expected quality and within the initially agreed cost;
- Design and build the scheme in an open and collaborative partnership (between the City Council, Contractor and supply chain);

- Minimise disruption to the local community, businesses, stakeholders, non-motorised users and other road users:
- Liaise with, listen to and consider all the stakeholders throughout the scheme delivery;
- Achieve recognition from all partners that the scheme has been a complete success; and
- Promote all parties nationally and achieve major construction awards.

Equalities Analysis

An Equality Analysis has been carried out and is attached as Appendix E. The scheme is aimed at improving facilities for all road users including the local community and it is not envisaged that any user group will be adversely affected by the proposals.

B2. Project Deliverables

These are the outputs from the project eg a new building with xm2 of internal space, xm of new road, etc.

The project will:

- Deliver 2,500 metres of segregated/shared footway and cycleway to provide improved facilities for pedestrians and cyclists; and to provide safer infrastructure for all road users;
- Install a new pedestrian/cycle bridge and towpath access to the Soho Loop Canal at Spring Hill Canal Bridge;
- Provide 2 enhanced junctions to significantly improve network efficiency and reduce congestion as part of the corridor designation. Works to upgrade Western Road Junction have been approved as Phase 1 Advanced Works;
- Upgrading 13 bus shelters along Dudley Road corridor;
- Provide a new footpath and cycle track on the frontage of City Hospital and Birmingham Treatment Centre;
- Provide a new signalised access for key development sites to support regeneration initiatives through improved accessibility to the existing developments and;
- Contribute to the retention of existing business in the area as well as encouraging new investment.

B3. Project Benefits

These are the social benefits and outcomes from the project, eg additional school places or economic benefit.

Measure	Impact
List at least one measure associated with each of the objectives and outcomes in B1 above	What the estimated impact of the project will be on the measure identified – please quantify where practicable (eg for economic and transportation benefits)
Delivery of 2,500 metres of segregated/shared footway and cycleway to provide improved facilities for pedestrians and cyclists; and to provide safer infrastructure for all road users.	Safer cycle facilities to encourage more people to cycle, reducing traffic congestion and carbon emissions.
Provision of 2 enhanced junctions and 2 new junctions to significantly improve network efficiency and reduce congestion as part of the corridor designation and introduction of bus detection measures	To improve journey time reliability (including for public transport)
Provision of a new highway (segregated cycle/footway) on the frontage of Birmingham City Hospital to retain canopy cover and vegetation along the route. Replacement of low-quality trees with a selection of native species.	Improvement to air quality by minimising tree loss and landscaped areas. Replacement of low-quality trees with a selection of native species to enhance amenity biodiversity and ultimately improve air quality

Provision of a new signalised access for key development sites to support regeneration initiatives through improved accessibility to the existing developments and;

The proposals will contribute to the retention of existing business in the area as well as encouraging interest and investment

The proposals will encourage more sustainable modes of transport for trips to and from the city centre and particularly cycling as an alternative mode of transport within communities and social groups who do not view cycling as an option at present.

Reduce existing congestion that acts as a major barrier to growth both in Birmingham and throughout the West Midlands; improve north to south linkages for pedestrians and cyclists across the highway routes; improve journey time reliability (including for public transport) and provide high quality and continuous facilities for cyclists.

For major projects and programmes over £20m:

A detailed Benefits Register is attached at G5 below.

B4. Benefits Realisation Plan

Set out here how you will ensure the planned benefits will be delivered

The project will be monitored through the proposed bi-weekly progress meetings and Project Board meetings.

A highlight report is submitted to the monthly Capital Board to report on progress, finances and key risks/issues.

Upon completion and handover of the project, any additional assets will form part of the public highway network and handed back to Birmingham Highways Limited for maintenance.

There is a Monitoring and Evaluation Plan which is a requirement for the DfT. This evaluates the schemes performance by the use of ongoing monitoring data, tracking progress and the outcomes of the schemes. A benefit register table is provided in section G5 of this report.

B5. Stakeholders

A stakeholder analysis is set out at G4 below.

The Public Consultation for A457 Dudley Road Improvements Revised Scheme was carried out during November 2020 and an overview of this process is provided in Appendix H Consultation Report.

C. ECONOMIC CASE AND OPTIONS APPRAISAL

This sets out the options that have been considered to determine the best value for money in achieving the Council's priorities

C1. Summary of options reviewed at Outline Business Case

(including reasons for the preferred option which has been developed to FBC)

If options have been further developed since the OBC, provide the updated Price quality matrix and recommended option with reasons.

In light of Covid-19 and the ETP, a review of the scheme was undertaken which resulted in a Revised Scheme (Option 2) being produced that aligned with the ETP objectives and includes bus lanes and segregated cycling on the north side of the corridor and the inclusion to extend the scheme to the Sandwell boundary.

Options considered in relation to the Revised Scheme are shown below:

Option 1 refers to the Original Scheme (Option 6),

Option 2 refers to the Revised Main Scheme following Covid-19 and ETP to be shelf ready by the end of March 2021,

Option 3 is to deliver the junction of Western Road in line with Option 2 as advanced works (Phase 1).

Option 4 is to cease the scheme to date.

The preferred option to deliver is Option 3 following approval of the Western Road Junction Phase 1 Advance Works FBC in March 2021.

C2. Evaluation of Key Risks and Issues

The full risks and issues register is included at the end of this FBC

An Outline Risks and Issues Register is attached at the end of this FBC, including risks during the development to Full Business Case stage.

Implementation of the Revised Main Scheme will require the closure and stopping up of the Northbrook Street/Dudley Road junction as a consequence of the loading/carriageway alignment restrictions imposed by the Lee Canal Bridge structural investigations. The proposed layout has previously been shared with both project stakeholders and council members and approved.

Additional land requirement of the Revised Scheme (if land is not acquired by negotiation) will require amendment to the existing CPO or even a new CPO/SRO and add potential delays to programme delivery.

Unauthorised and unsafe vehicular access to properties on Spring Hill / George Street West will be closed as a result of implementation of the scheme. Scheme proposals have been extensively detailed in the public consultation process and received no comment. Ongoing dialogue with BCC Highways to close unauthorised access prior to implementation.

The existing Lee Canal Bridge is an approximability 180 years old structure that requires assessment and monitoring with regards to implementation of the scheme. There is a risk that the highway works will have an increase load on the structure which may result in structural damage, CRT have requested a deed of indemnity from the City Council to cover mitigation. The risk will be managed by monitoring the movement on the bridge prior to and following construction to help identify if there is an existing issue and where the liability sits. Additional specialist investigations have been undertaken to provide a design solution.

C3. Other Impacts of the Preferred Option

Describe other significant impacts, both positive and negative

The proposals impact on private land and property, as well as affecting private means of access. An SRO and CPO were made in September and November 2019 respectively as part of the statutory process to secure private interests. Negotiations with land and property owners are ongoing alongside the SRO/CPO process with a view to mitigating the need for a Public Local Inquiry.

The existing CPO does not meet the requirements of the Revised Scheme as additional land is required; in particular, land required from the builders merchant adjacent to the Soho Loop Development to facilitate the new foot bridge and additional land required from the hospital to facilitate continuity of provision for segregated cycling. Therefore, the order will be held in abeyance to allow for negotiated agreements to be finalised and a new CPO will be advertised.

D. COMMERCIAL CASE

This considers whether realistic and commercial arrangements for the project can be made

D1. Partnership, Joint Venture and Accountable Body Working

Describe how the project will be controlled, managed and delivered if using these arrangements

The City Council is responsible for the delivery of A457 Dudley Road Improvement Scheme.

Funding will be redirected from DfT to GBSLEP. GBSLEP will fund circa 23% (£5.043m) of the Original Scheme DfT contribution (£22.411m), to enable development of the Revised Scheme.

A bid to the Levelling Up Fund (LUF) was made in June 2021 with a financial contribution of £19.941m secured from Central Government in October 2021 to deliver the Revised Main Scheme.

D2. Procurement Implications and Contract Strategy

What is the proposed procurement contract strategy and route? Which Framework, or OJEU? This should generally discharge the requirement to approve a Contract Strategy (with a recommendation in the report).

The Procurement Strategy for the Original Scheme delivery was approved by Cabinet on 26th June 2018 as part of the PDD. The works will be delivered using the City Council's Highways and Infrastructure Works Framework Agreement under Lot 4 (works over £0.5m).

As the scheme progressed, it was recommended by the DfT to consider ways to accelerate the delivery programme in order to facilitate an earlier spend profile. The method to implement this acceleration was to amend the Procurement Strategy to carrying out a single procurement exercise, to include Phase 1 (including Stage 1 - ECI and Stage 2 - Detail Design) and Phase 2 (Stage 3 - Works), with the progress to the final stage being subject to the works cost being within budget and DfT approving the MSBC, with the inclusion of a break clause at each stage. This would provide cost savings and accelerate the delivery programme to meet the DfT's request.

The main contractor was procured using a single, two phased (design and construction) contract and appointed in November 2019 to develop the detailed design and construction planning. Construction works were to follow completion of the detailed design, subject to:

- Approval of FBC
- Securing confirmed CPO and SRO
- DfT approval to the MSBC

In the event the above approvals are not secured the delivery contract will be terminated by giving notice to terminate the contractor's obligation to provide the works and discharge this contract.

In light of Covid-19, the scheme has been reviewed and as a result the Original Scheme will no longer progress and a Revised Scheme developed to replace it.

The existing contract was utilised to complete the Revised Scheme to a preliminary/detail design stage.

An option to deliver the Western Road junction improvements in conjunction with the Soho Loop development was approved by Cabinet in March 2021. Western Road Phase 1 – Advanced Works delivery will be undertaken using the existing contract. The Procurement Strategy for the delivery of the Revised Main Scheme works was approved by Cabinet in the March 2021 Cabinet Report.

In the event of the failure to agree a contract price with McPhillips (Wellington) Ltd, a procurement exercise(s) will be undertaken for the delivery of future phases of the Revised Main Scheme. This may result in up to 6 procurement exercises for individual work packages. The procurement route will be to advertise the opportunity on Find a Tender, Contracts Finder and www.finditinbirmingham.com. The evaluation criteria for each work package will be set based on its complexity with a higher quality weighting over price for more complex schemes with social value having a minimum weighting of 20%.

Birmingham Business Charter for Social Responsibility (BBC4SR).

McPhillips (Wellington) Ltd is a certified signatory to the BBC4SR and is providing actions proportionate to the value of the contract. These actions include employment opportunities which are monitored and managed during the contract period.

D3. Staffing and TUPE Implications

The management and delivery of the A457 Dudley Road Revised Main Scheme will be undertaken by officers within Transport and Connectivity supported by external consultants from the professional services framework.

E. FINANCIAL CASE

This sets out the cost and affordability of the project

E1. Financial Implications and Funding

	Prior Years	2020/ 2021	2021/ 2022	2022/ 2023	Future Years	Total
	£'000	£'000	£'000	£'000	£'000	£'000
CAPITAL EXPENDITURE						
Developing a Shelf Ready Scheme (Inc Land Costs)	1,533	2,110				3,643
Land		310	1,562			1,872
Development Costs Total	1,533	2,420	1,562			5,515
Western Road						
Development/Fees			356			356
Junction Construction			1,340	1,842		3,182
Statutory Undertakers		691	518			1,209
Risk*				400		400
Western Road Junction Total		691	2,214	2,242		5,147
Revised Main Scheme Delivery						
Development/Fees			630	460	560	1,650
Construction				1,213	7,805	9,018
Lee Bridge Structural Improvements				1,000	1,140	2,140
Spring Hill Bridge				500		500
Statutory Undertakers				1000	1,991	2,991
Land				270	1,609	1,879
Monitoring & Evaluation					100	100
Ancillary Delivery Costs					150	150
CAVAT Assessment				345	390	735
TfWM Bus Shelters					185	185
Risk*					2,125	2,125
Revised Main Scheme Delivery Total			630	4,788	16,055	21,473
Total Capital Expenditure	1,533	3,111	4,406	7,030	16,055	32,135

CAPITAL FUNDING	Prior Years	2020/ 2021	2021/ 2022	2022/ 2023	Future Years	Total
	£'000	£'000	£'000	£'000	£'000	£'000
DfT GBSLEP	500	3,193	1,850			500 5,043
ITB Prudential Borrowing Scheme Development	9 1,024	(82)				9 942
Prudential Borrowing Western Rd Prudential Borrowing Main Scheme			511	1,789	2,000	2,300 2,000

Total Capital Funding	1,533	3,111	4,406	7,030	16,055	32,135
Levelling Up Fund			645	5,241	14,055	1,150 19,941
Transportation & Highways Capital Programme Western Rd Section 278 Contribution**			250 1,150			250

^{*} Risk budget allocation increased to meet revised Quantified Cost Risk Analysis Value

^{**} Section 278 Contribution from Soho Loop Development for Western Road Junction Highway Works (excluding Statutory Undertakers Fees and Commuted Sum Value)

				Later Years
	2021/22	2022/23	2023/24	(p.a.)
	£'000	£'000	£'000	£'000
REVENUE CONSEQUENCES				
Highways Maintenance				
Basic Highway Assets		2.1	2.8	39.0
Enhanced Highway Assets		4.3	5.7	(2.5)
Highway Horticulture (Parks)		0.0	0.2	0.3
Non-Highway Assets				(4.7)
Energy Cost		1.0	1.0	5.9
Footbridge				5.0
Net revenue consequences		7.4	9.7	43.0
REVENUE FUNDING:				
Corporate Policy Contingency		(7.4)	(9.7)	(43.0)
Total revenue funding		(9.7)	(9.7)	(43.0)
REVENUE CONSEQUENCES				
Prudential Borrowing				
Prudential Borrowing	79.2	95.8	108.0	283.0
Net revenue consequences	79.2	95.8	108.0	283.0
			100.0	
REVENUE FUNDING:				
Bus Lane Enforcement Surplus Income	(79.2)	(95.8)	(108.0)	(283.0)
Dus Lane Emolecment outplus income				
Total revenue funding	(79.2)	(95.8)	(108.0)	(283.0)

The previous table does not include operational income and expenditure from BLE. This is shown in the table below – see also Section E2.

	Estimated V	alue				
	Year 1	Year 2	Year 3	Year 4	Year 5	Total
	£	£	£	£	£	£
Bus Lane Enforcement Operational Income						
2 x BLE Cameras	37,824	15,480	13,869	12,438	10,827	90,438
Total Operational Sums	37,824	15,480	13,869	12,438	10,827	90,438
Bus Lane Enforcement Operational Expenditure						
Enforcement Costs BLEC	4,071	1,662	1,496	1,329	1,163	9,721
Processing Costs	10,960	4,474	4,026	3,579	3,132	26,170
Maintenance and Servicing of Cameras	5,000	5,000	5,000	5,000	5,000	25,000
Energy Costs	80	80	80	80	80	400
Total Operational Expenditure	20,111	11,215	10,602	9,988	9,375	61,291
Net Operational Surplus	17,713	4,265	3,267	2,450	1,452	29,147
NOTES						
(1) Staffing levels to be reviewed post-implementation based on a	actual change	s in workloa	ıd.			
(2) Operational Cost includes assessment & processing of PCN;						
(3) Introduction of cameras to suit A457 construction programme	(and decom	mission)				
(4) Values based on 2 x BLE Cameras, operating 20 days/month						

E2. Evaluation and comment on financial implications

Capital Costs

The Revised Scheme is split into 3 elements:

- Development of a shelf ready scheme (including previous years expenditure) £5.515m.
- Western Road Junction Scheme as Phase 1 Advanced Works £5.147m including revised risk allowance of £0.400m and updated Target Cost value.
- Revised Main Scheme Delivery £21.473m (£19.941m capital funding secured from the Levelling Up Fund bid).

Scheme Development - Expenditure of £5.515m is expected to have been incurred by the end of 2021/22.

Western Road Junction Phase 1 Advanced Works - The total estimated capital cost of the Western Road Junction Phase 1 Advanced Works is £5.147m including revised risk allowance of £0.400m and an updated Target Cost of £3.182m. Advance utility diversion works worth £0.979m have been funded from the overall GBSLEP contribution. The Western Road Junction Phase 1 Advanced Works require PB estimated at £2.300m. The cost of PB of £0.123m per annum (full year effect) will be funded from Bus Lane Enforcement net surplus income as set out in the Transportation and Highways Capital Programme 2021/22 – 2026/27 Annual Programme Update report approved by Cabinet on 9th February 2021. The total potential cost of PB for the Western Road Junction Phase 1 Advanced Works of £0.123m per annum (full year effect) is within the borrowing limits for the original scheme which is included within the approved Capital Programme.

Revised Main Scheme Works - The total estimated capital cost of the scheme is £21.473m. A bid of £19.941m from the Levelling Up Fund was submitted in June 2021 in order to progress the scheme to full implementation after the Commonwealth Games. PB of £2.000m has been allocated to an updated Quantified Cost Risk Assessment value (Appendix F). The cost of PB of £0.108m per annum (full year effect) will be funded from Bus Lane Enforcement net surplus income as set out in the Transportation and Highways Capital Programme 2021/22 – 2026/27 Annual Programme Update report approved by Cabinet on 9th February 2021. The total potential cost of PB for the Main Scheme of £0.108m per annum (full year effect) is within the borrowing limits for the original scheme which is included within the approved Capital Programme

The total estimated capital cost of £32.135m is an increase of £2.200m on the cost in the Update Report for the Dudley Road Improvement Revised Main Scheme approved by Cabinet on 16th March 2021, and includes the latest cost information from Western Road Junction Scheme Phase 1 Advanced Works and revised QRA assessment (Appendix F). Details of the capital cost and funding for the Original Scheme vs the Revised Scheme and the movement is shown in the table below.

APPENDIX A

	Original Scheme PDD	Revised Scheme OBC	Revised Scheme Update Report	Revised Scheme FBC	Movement from Update Report to FBC
	£	£	£	£	£
CAPITAL EXPENDITURE					
Capital Costs	29,464	29,935	29,935	32,135	2,200
Total Capital Expenditure	29,464	29,925	29,935	32,135	2,200
CAPITAL FUNDING:					
Department for Transport	22,411	500	500	500	0
Prudential Borrowing	7,044	5,533	5,733	5,242	(491)
ITB	9	9	9	9	0
GBSLEP	0	5,043	5,043	5,043	0
External Funding/ Levelling Up Fund	0	16,850	16,850	19,941	3,091
Transportation & Highways Capital Programme	0	0	0	250	250
Section 278 Contribution - Western Rd	0	2,000	1,800	1,150	-650
Total Capital Funding	29.464	29,935	29,935	32,135	2,200

Funding has been identified from the Levelling Up Fund in order for the scheme to progress to full implementation after the Commonwealth Games. A bid of £19.941m was submitted in June 2021 and secured in November 2021.

In the event the GBSELP FBC is not approved or the full scheme does not proceed to construction, the GBSLEP reserves the right (but is not obliged) to seek reimbursement from the City Council of any payments made in respect of the £5.043m LGF grant advance, to the extent that such funding has not been utilised to fund capital expenditure to support the scheme (including land assembly). Funding of any subsequent claw back of grant will have to be identified from within existing sources (including receipts from directly related land disposals). The GBSELP continue to support the project and the risk of the project not delivering against the key outputs, summarised below, by the end of March 2021 is deemed low.

Revenue Implications

The Revised Main Scheme will both change and create assets that will form part of the highway upon completion of the project. As such they will need to be maintained within the overall highway maintenance programme. The costs have not changed from the March 2021 Update Report of ± 0.043 m per annum of which, ± 0.010 m relates to the Western Road Phase 1 Advanced Works. This cost will be funded from the provision for highways maintenance held within Corporate Policy

Contingency. The detailed design will be developed by the appointed design and build contractor with a view to minimising the future maintenance liability to the City Council.

The provision of a new footbridge adjacent to the existing Spring Hill bridge will result in additional revenue implications with an initial estimated value of approximately £0.05m per annum to cover the remaining life of the Highways PFI contract to 2035. A review of the revenue implications for the new footbridge is being undertaken by the Network Change Team (utilising cost intelligence from the Peddimore scheme) however, worst-case forecasts are within existing project budgets. This will be funded from the provision for highways maintenance held within Corporate Policy Contingency.

The Update Report in March 2021 included City Council funding of £5.733m (£5.724m of Prudential Borrowing (PB) and £0.009m of Integrated Transport Block Funding (ITB)). The estimated City Council contribution required for the Revised Scheme in this FBC has reduced to £5.242m of which £5.233m will be PB and the balance of £0.009m ITB. The PB requirement is split between Scheme Development (£0.942m), Western Road Junction Phase 1 Advanced Works (£2.003m) and the Main Scheme (£2.297m). The cost of existing PB of £0.052m per annum and estimated additional future borrowing costs of £0.231m per annum associated with Western Road Junction Phase 1 Advanced Works and the Revised Main Scheme will be funded from Bus Lane Enforcement net surplus income as set out in the Transportation and Highways Capital Programme 2021/22 – 2026/27 Annual Programme Update report approved by Cabinet on 9th February 2021. The total potential cost of PB for the Revised Scheme of £0.283m per annum is within the borrowing limits for the Original Scheme which is included within the approved Capital Programme.

Bus Lane Enforcement (BLE)

The City Council will be responsible for ongoing BLE operations, and income will be generated from Penalty Charge Notices (PCNs) issued as part of the enforcement regime. This income will be used in the first instance to cover the operational costs of enforcement including cameras, associated equipment and administration costs. Any surpluses generated will be used in line with applicable regulations. The estimated income and expenditure based upon the proposed enforcement regime assumes the maximum of two cameras and experience from BLE schemes already in operation within the city.

These costs will include employing staff specifically for BLE enforcement, including:

- Employing staff specifically for camera enforcement;
- on-going running costs for the cameras including maintenance, servicing, energy and licences;
- maintenance costs in ensuring that the sites remain compliant with the standards for signing and road markings under the latest version of Traffic Signs Regulations and General Direction (TSRGD), which are required for offence capturing;
- operational costs (processing and administration) of the PCNs;
- replacement of the cameras and associated equipment in future years;
- cost of decommissioning the cameras.

The City Council will manage the cameras as part of the wider enforcement camera network. To ensure that the income is sufficient to fund the costs of enforcement the level of penalty notices issued will be monitored closely and operational resources reviewed/adjusted accordingly.

The table in Section E1 shows a summary of the estimated income and expenditure based upon the proposed enforcement regime, which assumes the maximum of two cameras, and experience from bus lane enforcement schemes already in operation within the city. This shows that over the first five years of operation of the cameras, income from PCNs is estimated at £0.090m, with operating and

maintenance costs of £0.061m, leaving a retained surplus of £0.029m. Ongoing financial viability for the BLE will be reviewed on an annual basis. Any surpluses generated will be used in accordance with applicable regulations, which is in line with the strategy for utilising the sums generated from bus lane enforcement as outlined in the Transportation and Highways Capital Programme 2021/22 – 2026/27 Annual Programme Update report approved by Cabinet on 9th February 2021.

E3. Approach to Optimism Bias and Provision of Contingency

The overall total estimated capital cost of implementing the Revised Main Scheme Delivery is £21.073m which includes an allocation for contingency and risk deemed enough to address any unforeseen works, based on risk assessment workshop and updated Quantified Risk Assessment.

E4. Taxation

Describe any tax implications and how they will be managed, including VAT

There should be no adverse VAT implications for the City Council in this scheme as the maintenance of highways is a statutory function of the City Council such that any VAT paid to contractors or on the acquisition of land is reclaimable.

As this is a construction project, the requirements of HMRC's Construction Industry Tax Scheme will be included in the contract documentation to ensure the Council's compliance.

F. PROJECT MANAGEMENT CASE

This considers how project delivery plans are robust and realistic

F1. Key Project Milestones	Planned Delivery Dates
The summary Project Plan and milestones is attached at G1 below	
Contractor appointed (As per PDD approval)	November 2019
Detailed Design commenced	January 2021
Detail Design complete	October 2021
Full Business Case approval	January 2022
TROs advertised	March/April 2022
Works commence	February 2022
Works complete	March 2024
Date of Post Implementation Review	May 2025

F2. Achievability

Describe how the project can be delivered given the organisational skills and capacity available

The programme involves standard highway engineering works, and the City Council has significant experience of successfully project managing and implementing projects of this nature. To support the in-house team additional external professional services have been engaged through existing frameworks where required. As part of the original contract a Design and Build contractor was appointed to undertake the design development, detailed design and ECI as the first phase and delivery subject to agreeing the target cost and approval of funding being the second phase. The original contract will continue to be used to progress the scheme to being shelf ready and construction should the opportunity arise to deliver the Western Road/Dudley Road junction as an earlier phase (Phase 1). See separate Cabinet report on the same agenda.

Both Network Rail and the Canal and River Trust (CRT) are engaged as the proposals require reconfiguration and strengthening of the carriageway and footway over both rail and canal bridges. There is no overall widening over the Network Rail bridge, however the footways will be realigned to accommodate the widening of the carriageway.

Spring Hill Canal Bridge will require the construction of a new foot bridge, which will require engagement and approval from CRT via a Deed of Easement. Heads of Terms have been agreed and a licence is to be completed subject to approval of the FBC.

At the appropriate stage prior to delivery, Traffic Regulation Orders (TRO) will be required to amend parking and loading restrictions. The TRO process has been included in the delivery programme with an allowance for dealing with any objections received.

A CPO has been made to secure private land/property interests in accordance with the previous scheme, however a new CPO will be required for the revised scheme. Working with Legal and Democratic Services, the project team has experience of progressing CPO's for projects of this type e.g. Selly Oak New Road, Iron Lane Junction Improvement.

A City Council Arboricultural Officer will have input in the preparation of the landscape strategy as design and build progresses.

F3. Dependencies on Other Projects or Activities

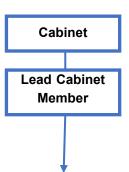
Delivery of the measures are subject to approval of LUF Bid in Autumn 2021 and GBSLEP approval of the submitted FBC.

F4. Officer Support						
Project Manager: Robert Warner – Senior Transport Delivery Officer Tel: n/a Email: robert.warner@birmingham.gov.uk						
Programme Manager:	Gavin Maciel – Transport Delivery Specialist Tel: 0121 675 4332 Email: gavin.maciel@birmingham.gov.uk					
Project Accountant:	Andy Price – Finance Manager Tel: 0121 303 7107 Email: Andy.R.Price@birmingham.gov.uk					
Project Sponsor:	Philip Edwards – Assistant Director Transport and Connectivity Tel: 0121 303 6467 Email: Philip.Edwards@birmingham.gov.uk					

F5. Project Management

Describe how the project will be managed, including the responsible Project Board and who its members are

Outline the proposed project management structure including roles and responsibilities.



Project Board

Project Sponsor Programme Manager Contracts Manager **Project Manager**

Commercial Manager **Project Accountant**

Assistant Director Transport and Connectivity, Philip Edwards

Head of Major Transport Projects, Paul Simkins Transport Delivery Specialist, Claire Steiner

Robert Warner & John Swift

Paul Taylor

Finance Manager, Andy Price

Project Assurance **Project Reporting** Structure

The A457 Dudley Road Improvement scheme will be managed in a similar way to Birmingham's LGF schemes. The scheme will be managed at senior level by a Project Board consisting of the Project Sponsor, Programme Manager, Contracts Manager, Project Manager, Principal Quantity Surveyor and Project Accountant. For the A457 Dudley Road Improvement scheme, the Project Sponsor will be Philip Edwards (Assistant Director Transport and Connectivity) and the Programme Manager will be Peter Parker (Head of Major Transport Projects). The Project Manager will be Robert Warner, while Finance will be represented by Andy Price (Finance Manager).

The Project Manager's responsibilities will include;

- Rigorous project monitoring throughout the life of the programme and reporting to the Project Board;
- Monthly review meetings will be held between the Project Manager, Framework Contract Manager and the appointed contractor, to ensure effective delivery against Key Performance Indicators (KPIs), Project Milestones, Objectives and Financial targets; and
- The Project Manager will ensure the detailed monitoring and reporting of any risks, issues or exceptions to the Project Board, throughout the duration of the scheme.

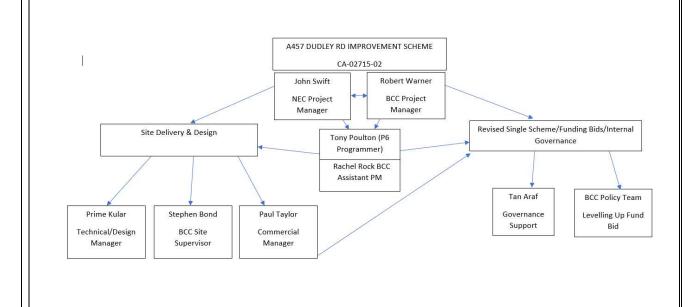
The Project Board will meet with pre-defined regularity and together they will be responsible for project control. They will make decisions within the scope of Cabinet approval and make appropriate decisions on any minor scope alterations. Any exceptional decisions, including decisions outside of the approved scope of the scheme, will be referred to the relevant Cabinet Member and if necessary, the full Cabinet.

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Two well established officer groups within the authority, the Transport & Highways Group (THG) and Transport & Highways Board (THB), will provide project assurance. They will scrutinise delivery, finances and procedures, providing challenge to the Project Manager and Project Board and recommendations for improvements where appropriate.

Role	Key Areas of Responsibility/Activity	Progress Review
Tier 1 – Project Board	 High level strategy. Monitoring progress against programme. Strategic decision-making. Setting forward work programme. Provision of instructions for corrective/mitigating actions. 	 Review of key issues and decisions as raised by Project Board. Monthly Project Board meetings where Project Management reports are reviewed, and relevant actions agreed.
Tier 2 – Project Management	 Day-to-day programme management. Meeting Programme objectives. Key link between the Project Board and Project Delivery Team. Main point of contact for external stakeholders and partners. 	 Monthly progress meetings. Preparation of progress reports to the Project Board. Project Sponsor attendance at Project Board.
Tier 3 - Project Delivery Team & Theme Leads	 Day-to-day project delivery across the areas of design, construction, finance, approvals and engagement. Public consultation exercises Main point of contact for contractor. 	 Preparation and submission of monthly progress reports to the Project Management. Regular progress meetings.

Delivery Team Structure:



The project will be managed in accordance with the council's standing orders, financial regulations and governance arrangements as set out in The Constitution. The project management arrangements will be in accordance with the Quality Management System which complies with the requirements of ISO 9001. The Transport Projects team within the Transport and Connectivity section of the Inclusive Growth Directorate will take the project management lead, and Transport Projects team holds Certificate Number: FS 506677 with the BSI for the "Provision of consulting and supervisory services for highway, road safety and transportation schemes, embracing design, project management and site supervision".

The accountability for the contract will be with the Project Sponsor, the Assistant Director for Transport and Connectivity who chairs the A457 Dudley Road Project Board. The contract will be managed operationally by Robert Warner (BCC Project Manager) and John Swift (NEC Project Manager). The Council's Project Manager will report monthly on progress to the Project Board and will raise any issues arising relating to actual and forecast costs. To ensure the successful delivery of the contract within the available budget, an up to date scope for each stage of the commission will be agreed by the Project Board, with amendments agreed only in reasonable circumstances. Any changes to scope will be managed through formal change control procedures, as required by the contract.

Project Board

Project Sponsor: Assistant Director Transport and Connectivity, Philip Edwards

Programme Manager: Head of Major Transport Projects, Paul Simkins Capital Programme Manager: Transport Delivery Specialist, Gavin Maciel

Contracts Manager: Transport Delivery Specialist, Claire Steiner Project Manager: Transport Delivery Officer, Robert Warner

NEC Project Manager: John Swift Commercial Manager: Paul Taylor

Project Accountant: Finance Manager, Andy Price

An internal 'Project Definition Document' has been approved by the Council, including the Section 151 Officer and the Head of Procurement. This confirms that the procurement strategy in place is legally compliant and is likely to achieve the best Value for Money outcome.

G. SUPPORTING INFORMATION

(Please adapt or replace the formats as appropriate to the project)

G1. Project Plan

Detailed Project Plan supporting the key milestones in section F1 above

See section F1

G2. Summary of Risks and Issues Register

Risks should include Optimism Bias, and risks during the development to FBC Grading of severity and likelihood: High – Significant – Medium - Low

			Risk after	mitigation:
Risk or Issue		Mitigation	Severity	Likelihood
1.	The impact of coronavirus further delaying the scheme development	Forward planning of Key Stakeholder and Public Consultation Engagement	Medium	Low
2.	FBC not approved by GBSELP	Ongoing dialogue with GBSLEP on the development and progression of the project	Medium	Low
3.	Land Acquisition//CPO	Ongoing negotiations with landowners to in an attempt to reach agreement	Medium	Low
4.	Cost of further work to canal bridge	Undertake site investigation if required and complete AIP for approval	Medium	Low

For smaller schemes (Chief Officer approval up to £200k) use the above table.

For larger schemes (Cabinet or Cabinet Member approval) use the separate corporate Risk Register template.

G3. External Funding and Other Financial Details

Description of external funding arrangements and conditions, and other financial details supporting the financial implications in section E1 above (if appropriate)

Insert cumulative approvals table here if there are several schemes within one programme

See section E2

APPENDIX A

G4. Stakeholder Analysis					
Stakeholder	Role and Significance	How stakeholder relationships will be managed			
MP & local councillors	Local impact to ensure they are aware of the scheme should they be approached by their constituents	Regular email exchange / updates. Weekly updates through construction briefs (once construction has commenced).			
Bus operators (National Express)	End user	Ongoing engagement through Transport for West Midlands			
PFI contractor	Own and maintain the existing roads.	Notified of the project via internal processes.			
Department for Transport (Funding Body)	Primary funding body for the scheme	Updated quarterly			
NHS - Birmingham City Hospital	Neighbours affected by the widening scheme	Updates during detailed design, prior to construction and during works.			
General groups e.g. cycling and walking, bus users and resident groups	End user.	Updates during detailed design, prior to construction and during works.			
Emergency services	End user.	Updates during detailed design, prior to construction and during works.			
Taxi operators	End user	Updates during detailed design, prior to construction and during works.			

G5. Benefits Register

For major projects and programmes over £20m, this sets out in more detail the planned benefits. Benefits should be monetised where it is proportionate and possible to do so, to support the calculation of a BCR and NPSV (please adapt this template as appropriate)

Measure	Annual value	Start date	Impact	
List at least one measure associated with each of the outcomes in B1 above			What the estimated impact of the project will be on the measure identified	
(a) Monetised benefits:	£			
Journey times	£46.70M (60 Year NPV)	Upon completion of scheme	Journey time benefits through reduced congestion.	
Improved public transport	Not Quantified	Upon completion of scheme	Although not captured explicitly within the SATURN modelling it is anticipated that bus services would benefit from reduced congestion.	
Quality of the Urban Environment	Not Quantified	Upon completion of scheme	The provision of improved pedestrian and cycling access along with safer infrastructure would generate a beneficial impact on quality of the urban environment.	
Greenhouse gases	£0.35M (60 Year NPV)	Upon completion of scheme	Greenhouse gas benefits through reduced congestion and more efficient vehicle operation.	
Vehicle Operating Costs	£2.43M (60 Year NPV)	Upon completion of scheme	Vehicle operating cost benefits through reduced congestion and more efficient vehicle operation.	
(b) Other quantified benefits:	,			
Air Quality	Not Quantified	Upon completion of scheme	The proposed construction works will generate minor pollution.	
			Information available indicates the scheme has the potential to improve baseline Air Quality conditions in the locality on a long-term basis.	
Noise	Not Quantified	Upon completion of scheme	The proposed construction works will generate noise. Through the application of standard impact avoidance and mitigation measures, and effective management of noise emissions by the appointed contractor, the potential for such effects can be mitigated and controlled in the normal manner for a highway's infrastructure project.	
			Changes in road alignment and traffic flows on surrounding roads due to the Proposed Development, once operational, have the potential to impact upon adjacent noise sensitive receptors (NSR). Evidence from the TUBA outputs from the SATURN modelling suggests that there is negligible change (>1%) on traffic flows within the modelled area of influence.	

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Agglomeration	Not Quantified	Upon completion of scheme	Improvement in journey times likely to generate small positive benefit.
Move to more or less productive jobs	Not Quantified	Upon completion of scheme	Improvement in journey times likely to generate small positive benefit.
(c) Non-quantified benefits:	n/a		
Other environmental impacts e.g. townscape, biodiversity, historic environment and water.	TBC	Upon completion of scheme	This proposed scheme is not expected to result in significant environmental effects in these environmental categories based upon the EIA Screening Opinion.
Social impacts e.g. physical activity, journey quality, security, access to services, severance	TBC	Not Quantified	The provision of improved pedestrian and cycling access will encourage more walking and cycling and contribute positively to physical activity.
			The remaining social impacts identified are expected to be broadly neutral.

Other Attachments	
provide as appropriate	
provide as appropriate	
Appendix A – Full Business Case	
Appendix B – Risk Assessment	
Appendix C – Option Assessment Report	
Appendix D – Scheme Plans	
Appendix E – Equality Analysis	
 Appendix F – Quantified Cost Risk Assessment 	
 Appendix G – HMPE Land Appropriations 	
Appendix H – Consultation Outcome Report	
Appendix I – Delivery Plan & Programme	
Appendix J – HCNF Calculations	
Appendix K – CPO Plan	
 Appendix L - Highway Schemes Human Rights Statement 	
 Appendix M – Dudley Rd CAVAT Tree Assessment 	
 Appendix N – Landscape Design Proposal 	
Appendix O – Social Value Events	