

PROJECT DEFINITION DOCUMENT (PDD)			
1. General Information			
Directorate	Economy	Portfolio/ Committee	Transport and Environment Finance and Resources
Project Title	Dudley Road Improvement	Project Code	CA-02715
Project Description	<p><u>Introduction</u></p> <p>Greater Icknield is identified as a key growth area within the Birmingham Development Plan (2017), with proposals to accommodate approx. 3,000 new homes along with other local facilities and employment opportunities. It is part of a wider growth corridor, and along with development sites in Sandwell, there is potential to deliver over 5,000 homes in the Greater Icknield and Smethwick area.</p> <p>To support the predicted growth this PDD seeks outline approval to the A457 Dudley Road Improvement project in the Soho & Jewellery Quarter, Ladywood and North Edgbaston Wards. The total estimated capital cost of the project is £29.464m.</p> <p>The scheme objectives are to enable access to key development sites which will bring forward 3000 new homes by:</p> <ul style="list-style-type: none"> • Providing increased capacity; • Improving accessibility into Birmingham City Centre; • Improving journey time reliability (including for public transport); • Providing safer infrastructure for all road users; • Providing facilities for cyclists; and • Reducing existing congestion that acts as a major barrier to growth both in Birmingham and throughout the West Midlands. <p><u>Location and Existing Situation</u></p> <p>The A457 Dudley Road corridor runs west to east through the eastern side of Birmingham. The corridor is approximately 2km long from Ladywood Middleway / Spring Hill junction on the Ring Road to Cape Hill near the boundary with Sandwell MBC. The A457 forms part of Birmingham's Strategic Highway Network and provides a key arterial route from the Black Country into central Birmingham. The road is heavily used by both local and through traffic and forms part of the emergency vehicle route to the M5 Motorway.</p> <p>The A457 Dudley Road is a heavily trafficked major route with over 30,000 vehicles per day which equates to around 2,000 vehicles during the peak hour. The corridor provides access to major employment sites, residential and health centres from Birmingham City Centre and Sandwell MBC and is a key route to the motorway network. As a major route the A457 Dudley Road is heavily utilised by buses, heavy goods vehicles (HGVs) and servicing vehicles, and due to its strategic nature the route also carries significant volumes of commuter traffic during the peak periods.</p> <p>Dudley Road provides access to the residential areas in Winson Green and Rotton Park together with serving as a route for existing businesses within the area. Major employers and developments in the area include: City Hospital, and HM Birmingham Prison.</p>		

Queuing regularly occurs in both directions during the AM and PM peak periods. From site observations delays are particularly bad during the PM peak in the westbound direction along the entire route with the focus being outside City Hospital. This is due to the existing highway layout, with parked cars restricting the route capacity to single lane, right turns blocking ahead traffic and several routes converging at one location. Because of the poor standard and inefficient operation of this section of the A457 Dudley Road for most of the day together with associated environmental deterioration and poor accessibility for public transport, users such as the freight operators, cyclists, pedestrians and private vehicle users see the corridor as a difficult route to and from the City.

There are a significant number of accidents along the road, with 113 recorded injury accidents in the period from 1st January 2011 to 31st December 2016, including 25 pedestrian casualties. The most common type of accident is driver error where the driver has failed to look properly when turning right from / to Dudley Road. The proposals seek to address this poor accident record through the implementation of signal controlled junctions and signalised pedestrian crossing.

Delay as a result of congestion can significantly add to business costs and discourage businesses from investing and locating in this area, as well as adversely impacting on access to employment opportunities for local residents.

Proposed developments taking place within the area will change the traffic pattern during the peak period causing an increase during the standard peak times. The majority of the City Hospital will be relocated to Smethwick creating

a super hospital 'Midland Metropolitan Hospital' which is expected to open in Grove Lane, late 2020. This relocation will pave the way for more housing (750 approx.) to be developed across the remaining City Hospital site.

Alongside this, the Icknield Port Development Site and the Soho Loop Development Site are also being currently developed and positioned adjacent to the City Hospital Development on the Southside of the Dudley Road corridor. Both developments will bring forward more housing approximately 1200 for the Icknield Port and approximately 700 for the Soho Loop development Site.

The section of the Dudley Road corridor being considered for improvement is approximately 1.3km in length from the Spring Hill junction to the Winson Green Road junction. The road consists of a wide single carriageway marked with 4 narrow traffic lanes with some sections flaring out to three traffic lanes at the main junctions, there are a number of priority junctions located along the corridor. The route also crosses the West Coast Main Railway Line and both the Birmingham Main Line Canal and Soho Loop Canal.

Greater Icknield is identified as a key growth area within the Birmingham Development Plan (2017), with proposals to accommodate new homes along with other local facilities and employment opportunities. The wider growth corridor together with development sites in Sandwell, give the potential to deliver a total of over 5,000 homes in the Greater Icknield and Smethwick area.

These proposals will provide the much needed improvements to better manage the flow of traffic and access to development sites to support economic growth within Wards where the unemployment rate is nearly double the national average.

Previous Proposals

Proposals to improve this section of Dudley Road have been in place for a number of years. A Major Scheme Business Case was completed in 2004 and revised in 2009, however the project was deferred as other major schemes

such as the Northfield Relief Road, Selly Oak New Road and Chester Road Improvements were given higher priority.

Development of Current Project

Proposed Measures

The preferred project (Option 6) is shown in the attached drawing (**Appendix 2**) and contains the following main elements:

- Route widened to a dual carriageway with ghost right turn bays to allow junction movements;
- Increased capacity at signalised junctions (Winson Green Road / Dudley Road and Western Road / Dudley Road);
- New signalised junction (Heath Street / Dudley Road);
- Upgraded pedestrian crossings at key junctions;
- Cycle and pedestrian facilities on wide footways along entire route length this primarily will be in the form of segregated cycling route on the north side of the corridor and shared facilities where highway space is prohibited. The cycling measures will also include toucan crossing facilities to create a link to the south side of the corridor; and
- Realignment of junctions.

Capital Funding

The capital cost of the Project is estimated at £29.464m. Through the Greater Birmingham and Solihull Local Enterprise Partnership (GBSLEP), provisional approval to the outline business case was granted by the DfT as part of the GBSLEP local Growth Fund (LGF) programme of transport and connectivity projects in July 2014 with an allocation of £22.411m Local Growth Fund (LGF).

As a condition of the DfT funding a significant local contribution is required and their 'provisional approval' was based on a local contribution of approximately 25% of the project cost. The LGF contribution is currently capped at £22.411 million for this scheme leaving a balance of £7.053m for the City Council to fund from Prudential Borrowing £7.044m and a ITB allocation £0.009m.

Following provisional approval the GBSLEP have agreed an initial £0.5m to progress the development of the scheme, including Traffic Modelling, preparation of Major Scheme Business Case (MSBC), commencement of Compulsory Purchase Order (CPO) and progression to the City Council's FBC.

In light of the increasing construction costs nationally a review of the original scheme design was undertaken, which included consideration of a number of options and value engineering in line with the aims and objectives for the scheme. The cost estimate for the preferred scheme will be contained within the £29.464m budget allocation. The Project cost will be further reviewed as the scheme is developed up to FBC.

The DfT will not give formal approval and release funds until the City Council has secured Full Business Case approval, a confirmed CPO and tendered the works. The anticipated dates for the DfT approval are Summer 2020.

In the event the DfT do not approve their Full Business Case or the scheme does not proceed to construction, the DfT reserves the right to seek reimbursement from the Council of any payments made in respect of the grant award. The City Council has been providing quarterly project reports to update on progress and have met with DfT to discuss the programme and funding. The DfT continue to support the project and the risk of the project not proceeding is considered low, particularly as the land and property required for the project has now been significantly reduced and works affecting the Railway

have been removed from the scheme. A decision is anticipated from the DfT in 2020/21 and based on the current cost profile funding received up to that date will be in the region of £0.5m. In the event the project is not approved by the DfT or does not proceed to construction, any claw back of the £0.5m by the DfT and pay back of Prudential Borrowing of £0.264m will be identified from within the Directorate service budgets.

The Prudential Borrowing will be repaid over a period of 25 years and this will be funded from surpluses generated through Bus Lane Enforcement, in line with regulation, (please refer to Appendix 1 for further information). Further details of the use of Bus Lane Enforcement Surplus will be included in the revised Transportation and Highways Funding Strategy Report scheduled for July Cabinet.

It should be noted that a bid to the Housing Infrastructure Fund (HIF) for funding to support the scheme has been made totalling £5m. Should the bid be successful the Prudential Borrowing requirements will be revised down accordingly, reducing the call on revenue to service the borrowing.

Revenue Consequences

The Dudley Road scheme will 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 regime. The estimated net cost of including these newly created assets within the highway maintenance regime is £17,380 pa. The estimate will be reviewed as the design is developed and reported in the FBC report. This additional cost will be funded from the provision for Highways Maintenance held within Corporate Policy Contingency. The revenue implications associated with landscaping will be presented within the FBC when the proposals have been further developed.

Procurement

It is proposed to tender the works using the Council's Highways and Infrastructure Framework Agreement Lot 4 – Works above £500,000. It is proposed to engage a Design and Build Contractor with Early Contractor Involvement (ECI). The key stages of the procurement process with indicative dates are set out below:

- Pre-qualification (to reduce tenders down to 2 or 3) – early summer 2018
- Tender Period – summer 2018
- Evaluation – summer 2018
- Appoint Contractor – autumn 2018
- Stage 1 – ECI to support Design Development, Construction Planning and to agree a target cost – autumn 2018 to summer 2019
- Stage 2 - Detailed Design and firm up target cost – autumn 2019 to summer 2020
- FBC Approval – winter 2019
- DfT Approval – summer 2020
- Construction Lead in – autumn 2020
- Construction Period – Early 2021 to Mid 2022
- Post Implementation Review Mid 2023

The highway proposals impact on approximately 48 trees (to be confirmed at the detailed design stage). It is proposed to appoint an experienced contractor using the City Council's Landscape Construction Framework Agreement 2015-

	<p>2019 (or future replacement Framework) for the proposed landscaping, including tree removal and planting works. Tree and landscape measures will be developed at the design stage in accordance with the emerging new Tree Policy. Authority to appoint a Landscape Works Contractor will be sought at the FBC stage.</p> <p><u>Social Value</u></p> <p>Compliance with the Birmingham Business Charter for Social Responsibility (BBC4SR) is a mandatory requirement that will form part of the conditions of this contract. The contractors undertaking this project work under the Council's Highways and Infrastructure Framework Agreement are certified signatories to the BBC4SR and will provide additional actions proportionate to the value of each contract awarded. The actions will be monitored and managed during the contract period.</p> <p><u>PFI Contract Alignment</u></p> <p>Liaison will take place with the Highway Maintenance PFI Contractor through the design development stage to align, where possible, the Dudley Road works with planned maintenance work.</p>
<p>Links to Corporate and Service Outcomes</p>	<p><u>DfT Objectives</u></p> <p>Through the 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.</p> <p><u>City Council Objectives</u></p> <p>The Dudley Road project fully supports the Council Plan and Budget 2018+ priorities, specifically growing the creation of "Jobs and Skills" through investment in transport infrastructure and improved connectivity that supports new developments being built in Birmingham. The project also aligns with the GBSLEP Strategy for Growth, Strategic Economic Plan, the Movement for Growth 2026 Delivery Plan for Transport and the Birmingham Connected Transport Strategy.</p> <p><u>West Midlands Combined Authority Objectives</u></p> <p>The project supports the targets set out in the West Midlands Local Transport Plan 2011-2026 (LTP3) in terms of improving the economy, reducing emissions, providing equality of opportunity, and improving the local environment.</p> <p>The project will contribute to the following objectives in the West Midlands Combined Authority - Strategic Economic Plan (SEP):</p> <p>Economic growth <i>'To improve GVA for the region in line with the UK average'</i> by improving accessibility to unlock and remove barriers to growth, encouraging regeneration enabling job creation and economic development.</p> <p>Employment and Skills <i>'To improve the balance between the skills that businesses need and the skills of local people so that they have the skills and qualifications to access jobs'</i> by improving access to key services including education and training and helping people access jobs by sustainable travel;</p> <p>Accessibility <i>'To improve the connectivity of people and businesses to jobs and markets respectively'</i> by improving access to reducing congestion and delay the area's transport system and encouraging greater use of the most sustainable and low-carbon transport options;</p> <p>Land & Housing <i>'To improve the quantity of high quality, readily available development sites to high quality locations that meet housing and business</i></p>

	<i>needs</i> ' by improving access to unlock areas of land to be developed for both industrial and housing use.
Project Benefits	<p>The proposals will improve the Dudley Road corridor for all users and provide better access to development sites. 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. This will encourage mode-shift away from cars for shorter trips, so reducing congestion, carbon use and greenhouse gas emissions.</p> <p>Certain measures such as improvements to the key junctions together with linking the signalised junctions will reduce delay along the corridor and benefit public transport pedestrians and improve road safety.</p> <p>The measures will also encourage Birmingham regeneration initiatives through improved accessibility to the existing developments.</p> <p>It is also considered that improvements to the Dudley Road will facilitate wider economic benefits to the area contributing to the retention of existing business in the area as well as encouraging interest and investment.</p>
Project Deliverables	<p>The project will:</p> <ul style="list-style-type: none"> • Deliver significant improvements to improve network efficiency and reduce congestion as part of the corridor designation; • Deliver significant benefits to public transport operations, by making improvements to the signalised junctions and ensure that they are linked along the corridor to improve bus journey time and other supporting measures; • 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 interest and investment.

Key Project Milestones (see Appendix C for further details)	Planned Delivery Date
Options Appraisal for Highway Scheme	November 2017
DfT feedback (<i>provisional date</i>)	March 2018
Obtain approval to PDD from Cabinet	June 2018
Traffic Model Development for Highway Scheme	June 2018
DfT Business Case Development for Highway Scheme	July 2018
City Council Full Business Case for Highway Scheme	December 2019
Site Works Start for Highway Scheme	January 2021
Site Works Start for Highway Scheme	Mid 2022
Post Implementation Review	Mid 2023

Dependencies on other projects or activities	<p>Delivery of the measures will depend primarily on a successful outcome from the MSBC bid submitted to DfT expected in April 2020. The DfT require works tenders to be returned prior to signing off the MSBC to ensure the works cost is within the allocated budget.</p> <p>Delivery of specific measures such as waiting restrictions and turning prohibitions will be subject to the advertisement Traffic Regulation Orders. Traffic Management Plans will also need to be approved by City Council Officers.</p>
Achievability	<p>The programme involves standard highway engineering improvements, and the City Council has significant experience of successfully project managing and implementing projects of this nature. Additional resources will be obtained from external consultants through existing frameworks if required. It is proposed to appoint a Design and Build contractor to undertake the design development, detailed design and construction and to also provide ECI.</p> <p>There will be a need to liaise with both Network Rail and the Canal and River Trust as the proposals require reconfiguration of the carriageway and footway over both rail and canal bridges, however there is no overall widening of the bridges proposed.</p> <p>The need for Traffic Regulation Orders (TRO), particularly to amend parking and loading restrictions, could affect the deliverability of some elements of the project due to possible objections to the TRO. The public consultation programmed for Spring / Summer 2018 will give a good indication of public views on the TRO proposals.</p> <p>A Compulsory Purchase Order is proposed to secure private land / property interests. Working with Legal and Democratic Services the project team has experience of CPO's for projects of this type e.g. Selly Oak New Road.</p>

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Project Sponsor	<p>Phil Edwards – Assistant Director for Transport & Connectivity</p> <p>Tel: 0121 303 6467 E-mail: philip.edwards@brimingham.gov.uk</p>
Proposed Project Board Members	<p>Project Sponsor – Phil Edwards</p> <p>Dudley Road Improvements Programme Manager – Peter Parker</p> <p>Principal Infrastructure Delivery Officer – Saaied Manzoor</p> <p>Project Accountant – Andy Price</p>

Head of City Finance (HoCF)	Simon Ansell	Date of HoCF Approval	
<i>Other Mandatory Information</i>			
Has project budget been set up on Voyager?			YES
Issues and Risks			YES (see attachment)

2. Options Appraisal Records

A review of the original proposal was undertaken through 2017 driven in part by increasing construction costs and the need to identify a scheme within the available budget that meets the key objectives to better manage traffic along the Dudley Road corridor and provide improved access to development sites. The review considered six options as follows:

Option 1 - Do Major (original option) + Bus Lane

Option 2 - Do Minimum

Option 3 - Do Something (Works to Northern Side of Rail Bridge) + Shared Cycling

Option 4 - Do Something (Works to Southern Side of Rail Bridge) + Segregated Cycling

Option 5 - Do Something + (Works to both Sides of Rail Bridge) + Shared Cycling

Option 6 - Do minimum plus Segregated Cycling Facility (No Works to Rail Bridge)

The six options were evaluated and this is summarised within the table below.

Option	Works	Fees	Stats	Land	Land Take Summary	Total	Objectives met?
Option 1 – Do Major + Bus Lane	£16.5m	£5m	£7.2m	£5.8m	Land take on both sides, including bridges	£34.5m	Dual carriageway along length. Improves facilities for all modes. However, inbound bus lane offers no benefits compared to existing journey times. Value for money unclear.
Option 2 – Do Min	£8.6m	£3m	£6m	£4.1m	Land take only required at Winson Green junction and southern side (Aberdeen Street to Western Road)	£21.7m	Dual carriageway between Aberdeen St and Western Rd. No works to bridges. No works between Western Rd and Spring Hill. Improves capacity. Retains connectivity and improves key junctions affected.

APPENDIX 1

Option 3 – Do Something Works to Northern Side of Rail Bridge + shared cycle	£16.5m	£5m	£7.2m	£5.8m	Land take on southern side, and rail bridge	£34.5m	Dual carriageway along length. Improves cycling facilities. Improves capacity and connectivity at key junctions.
Option 4 – Do Something Works to Southern Side of Rail Bridge + segregated cycle	£17.6m	£5m	£7.2m	£5.8m	Land take on southern side, and rail bridge	£35.6m	Dual carriageway along length. Improves cycling facilities. Improves capacity and connectivity at key junctions Segregated cycle link
Option 5 – Do Something Works to both Sides of Rail Bridge + Shared Cycle	£16.8m	£5m	£7.2m	£5.8m	Land take on southern side, and rail bridge	£34.8m	Dual carriageway along length. Improves cycling facilities. Improves capacity and connectivity at key junctions
Option 6 – Do Min + Segregated Cycling (No Works to Rail Bridge)	£14.265m	£3.699m	£6.5m	£5m	Land take only required at Winson Green junction and southern side (Aberdeen Street to Western Road)	£29.464m	Combination of Options 2 and 4. Dual carriageway along length. Improves capacity at key junctions. Adds cycle facility along entire route.

3. Option Recommended

Of the six options, Option 2 and Option 6 were taken forward for further development; the remaining options were excluded due to high overall scheme cost with no greater benefit. Option 2 was discounted as it did not provide segregated cycling facilities and did not provide necessary capacity improvements such as full length dual carriageway improvements. Of all the options, it is proposed that Option 6 is taken forward as it provides, on balance, the best value for money meeting the requirements to better manage traffic, provide improvements for pedestrians, cyclists and buses and access to development sites meeting all the scheme objectives.

The recommendation is to take forward the Do Minimum+ Segregated Cycling using the corridors and measures outlined in Option 6.

4. Budget Summary (Dudley Road Improvements)								
	Up to 31/03/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23 + PA	Totals
Capital Costs	£000s	£000s	£000s	£000s	£000s	£000s	£000s	£000s
Totals	209.0	64.0	500.0	1,080.0	8,406.0	11,950.0	7,255.0	29,464.0
Funding	£000s	£000s	£000s	£000s	£000s	£000s	£000s	£000s
Local Growth Fund / (DfT)	200.0	64.0	236.0	0.0	8,270.0	9,000.0	4,641.0	22,411.0
Prudential Borrowing	0.0	0.0	264.0	1,080.0	136.0	29,50.0	2,614.0	7,044.0
ITB	9.0	0.0	0.0	0.0	0.0	0.0	0.0	9.0
Totals	209.0	64.0	500.0	1,080.0	8,406.0	11,950.0	7,255.0	29,464.0

Note – The expenditure of £7,255m in 2022/23 + includes a provision for the Post Implementation Review in 2023/24.

	2015-19	2019/20	2020/21	2021/22	2022/23	2023/24 + PA
Revenue Consequences	£	£	£	£	£	£
Maintenance Costs Highways and Ground Maintenance (Parks)*	0.0	0.0	0.0	0.0	4,161	16,645
Electricity Costs *	0.0	0.0	0.0	0.0	183	735
* Costs Per Annum						
Total	0.0	0.0	0.0	0.0	4,344	17,380
Funding	£	£	£	£	£	£
Highways Maintenance held within the Corporate Policy Contingency	0.0	0.0	0.0	0.0	4,344	17,380
Total	0.0	0.0	0.0	0.0	4,344	17,380
Revenue Consequences						
Prudential Borrowing	0.0	15,162	77,877	85,907	260,075	414,405
Totals	0.0	15,162	77,877	85,907	260,075	414,405

Asset Management / Maintenance Implications

As part of the City Council's obligations under the Highway Maintenance and Management Private Finance Initiative (HMMPFI) contract, Highways have been formally notified of the proposed changes to the highway inventory arising from this scheme. The Project has been allocated SSD 5268.

Liaison will take place with the Highway Maintenance PFI Contractor through the design development stage to align, where possible, the Dudley Road works with planned maintenance work.

Maintenance Costs

The Dudley Road scheme will 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 regime. The estimated net cost of including these newly created assets within the highway maintenance regime is £17,380 pa. The estimate will be reviewed as the design is developed and reported in the FBC report. This additional cost will be funded from the provision for Highways Maintenance held within Corporate Policy contingency. Landscape revenue will be presented in the FBC once the landscaping proposals are further developed.

5. Key Risks and Issues

See Appendix 3

6. Project Development Requirements/Information			
Products required to produce Full Business Case	<ul style="list-style-type: none"> • More detailed assessment of revenue and maintenance cost implications; • Consultations with Ward Councillors and relevant Stakeholders; • Public consultations with residents and businesses; • Stage 1 and 2 Road Safety Audits; • Review of existing Traffic Regulation Orders and the changes required; • Implementation Programme to be further developed; • Traffic Management Approvals (TMP1); • Risk Analysis to be reviewed • Procurement of a Design and Build Contractor to progress the Site Investigation Works, design development, detailed design and target cost. • Commencement of the land/property negotiation and the Compulsory Purchase Order process. 		
Estimated time to complete project development	To take the project from PDD to FBC it is estimated a period of 24 months is required. This includes dialogue with the DfT to provide regular updates and secure approval.		
Estimated cost to complete project development	The estimated fees for development are £1,144,000. This is shown in the finance table of the Private Report.		
Funding of development costs	The development costs are funded from LGF/DfT (Major Transport Schemes Portfolio), the Integrated Transport Block and Prudential Borrowing as set out in the Budget Summary Table.		
Planned FBC Date	Winter 2019/20	Planned Date for Technical Completion	Mid 2023 (for Post Implementation Review)

