

City Deal and Growth Deal Programme Board

Business Case Approval Form

1. Project title and proposing organisation(s)

Lichfield Southern Bypass (Phase 3)

2. Decision date

November 2016

3. Decision summary: Recommendation etc.

On the assumption that sufficient funding is available, that the City Deal and Growth Deal Programme Board recommends:

- Spending of up to £260,000 for project development costs in Financial Year 2016/17 to mitigate against slippage of spending from the Growth Deal 1 and Growth Deal 2 programmes
- Funding will be switched from the existing Growth Deal 1 and 2 allocation
- Relevant funding will be repaid to the Growth Deal 1 and 2 projects at the appropriate date

4. Is the decision exempt from being publically reported by the LEP (if so please specify the reasons why)

No

5. Options appraisal

Background traffic growth and Local Plan development traffic will lead to heavy traffic flows and environmental problems in Lichfield's historic core. In the AM peak the largest delays are experienced on the A51 Western bypass, Birmingham Road, Sainte Foy Avenue and Walsall Road. Sainte Foy Avenue and Walsall Road are the least reliable routes during the AM peak. During the PM peak, London Road experiences the heaviest delays and the least reliable route is Trent Valley Road.

Constraints on economic growth without the scheme include:

- Access to existing and future local employment opportunities will be restricted by increasing levels of traffic congestion in the City centre;
- Investment suffers as prospective developers and residents are deterred from investing in the City.
- Existing businesses will find it increasingly difficult as road traffic congestion increases costs, reduces business productivity and impacts adversely on local investment plans.

At the Lichfield Local Plan Inquiry Staffordshire County Council provided evidence accepted by the Planning Inspectorate that the Plan proposals could only be made acceptable in transport terms if the Lichfield District Integrated Transport Strategy

was delivered within the plan period (to 2031). The key intervention included in this transport strategy is the completion of Lichfield Southern Bypass (Birmingham Road to London Road).

The preferred route is identified within the Lichfield District Local Plan Strategy 2008-2029 (adopted February 2015) in the following policies:

Core Policy 4: Delivering our Infrastructure

Core Policy 5: Sustainable Transport

Policy Lichfield 2: Lichfield Services and Facilities

Policy Lichfield 6: South of Lichfield

Two parts of the identified route have been completed to provide a perimeter road between Walsall Road and Birmingham Road, improving access to new housing. The preferred option will complete the remaining section of the route between Birmingham Road and London Road in order to unlock the transport benefits that will accrue from previous investment; access the emerging residential development

Other route options have been considered and confirmation of the preferred route will be formalised in an Options Appraisal Report to be completed by April 2017.

5.1. Strategic case

The objectives of the Lichfield Southern Bypass include:

- **Ensure the successful delivery of the local plan for Lichfield City in transport terms:** Unlock inward investment, regeneration and new development for new employment sites and new housing sites. Improve the efficiency of local labour markets by improving access to jobs
- **To reduce congestion in the City centre and reduce the impact of traffic on the historic core:** Reduce the impacts of transport on the local environment. Take into account environmentally sensitive areas
- **To improve access by sustainable modes and increase the attractiveness of these modes:** Improve health by encouraging active travel. Reduce carbon and other greenhouse gas emissions.

The project will directly contribute to the following SSLEP priorities:

- **Competitive Urban Centres:** enables significant housing, employment and retail growth opportunities in a main urban centre
- **Connected County:** completes the link between A461 Walsall Road and A5206 London Road and on to the trunk road network
- **Sector Growth:** supports growth in the business/professional service and retail sectors in a main urban centre
- **Skilled Workforce:** provides improved access to jobs for the local existing and future workforce through an enhanced network for all modes of transport.

Lichfield Southern Bypass Phase 3 will join the A5127 Birmingham Road at its junction with the A461 Falkland Road to form a fourth arm to the existing roundabout. The A461 Falkland Road forms part of the bypass that has already been completed. The route will then travel eastbound under the Cross City Line north of the preserved alignment for the Lichfield and Hatherton Canal to join the

A5206 London Road to the north of Marsh Lane. The proposal facilitates the canal restoration project and provides a distributor road for residential developments.

Completion of Lichfield Southern Bypass is expected to improve the quality and reliability of travel within Lichfield, providing greater connectivity to employment and business markets, and reducing traffic congestion and journey times in the City centre. The new link will benefit the Friarsgate regeneration proposal and also provide access to the South of Shortbutts Lane Strategic Development Location which includes 450 dwellings. A further 900 new homes and 12 hectares of employment planned in southern Lichfield will benefit from improved access.

5.2. Economic case

Atkins consultants have produced a SATURN Lichfield Traffic Model developed specifically to appraise the Lichfield Southern Bypass. The Traffic and Economic Assessment Report (TEAR) June 2016, details the construction of the base model followed by the subsequent development of forecast models and analysis undertaken to determine the impact and economic benefits of the Lichfield Southern Bypass.

The TEAR compares the Do-Minimum and Do-Something forecasts for the future year scenarios and time periods. These forecasts have been used to identify the effects of the scheme on:

- Network performance;
- Traffic flows on links;
- Volume to Capacity (V/C) ratios for the Do-Minimum and Do-Something networks at key junctions across the study area;
- Journey Times; and
- Routeing.

The traffic impacts measured are for the Core scenario which is the most likely to occur based on the view of the County Council and District Council on development proposals.

The results demonstrate that between 2019 and 2041 without the bypass there will be a four-fold and more than 10-fold increase in overcapacity queued time in the AM peak and PM peak respectively. This relates to time spent queuing at junctions that are overcapacity. There is a corresponding reduction in average journey speeds over the same periods of 19% in the AM peak and 16% in the PM peak, however these results are expected given a 20% and 21% increase in trips in the AM and PM peak respectively. The scheme serves to reduce both the overcapacity queued time and total travel time for both peak periods in all forecast years – most significantly in the PM peak, particularly in the later forecast years where travel levels are higher. As would be expected, average journey speeds are therefore higher in all forecast years.

There will be reduced traffic congestion on a number of roads in Lichfield including A51 Upper St John Street, A5127 Birmingham Road and traffic sensitive local roads including Shortbutts Lane. In the City centre reduced traffic flow will help to provide better connectivity for pedestrians and cyclists including visitors travelling between the rail station and the City centre. The decrease in traffic flow on benefitting roads comprises a combination of strategic and local traffic.

Delivery of the bypass within the Local Plan period is key to the success of the Friarsgate regeneration scheme which is being funded by S&SLEP and GBSLEP. The congestion relief provided by the scheme will allow local highway and transport improvements to be delivered along the A5127 Birmingham Road Corridor that make Friarsgate acceptable. Key outputs to be delivered for Friarsgate include:

- 750 FTE jobs and £211M over 10 years GVA
- Leverage £65.4m private sector and housing (5162m²)

A total of 3,875 dwellings are planned to be delivered by 2031 and 1,350 of these are unlocked / directly accessed from the completed bypass (at Deanslade Farm, St John's and Cricket Lane Sites). The Lichfield Southern Bypass is an integral part of the planning application submitted in support of the St John's housing development and the developers (Persimmon) are funding the bulk of the scheme through a S278 agreement. This represents private sector leverage of around £12m for the road plus around £5.0m for a new primary school.

Employment development facilitated by the bypass in the City will yield outputs of:

- 30,000m² office (2500 jobs)
- 36,000m² retail development (1895 jobs) including Friarsgate (750 jobs)
- 12ha employment at Cricket Lane (1450 jobs unlocked)

Tourism is a major sector within the economy for Lichfield City and future traffic problems will constrain expansion of the tourism sector as the City will be less attractive for repeat visits. Key tourist draws such as the Cathedral, Guildhall and market square are located within the sensitive historic core.

The Lichfield Southern Bypass will support the City's growth of business and professional services and the location of Lichfield provides strong linkages to the logistics sector; in particular with regard to supply chains to the wider automotive sector.

Implementation of the road will also improve:

- Access to services and facilities through improved bus journey times and reliability on some radial routes;
- bus penetration into the South of Lichfield Strategic Development Allocation to encourage travel by sustainable modes;
- the quality of the City centre for residents, employees and visitors;
- road safety through a reduction in conflicts between vulnerable road users such as pedestrians and vehicles in the City centre;
- the provision of high quality pedestrian and cyclist facilities along the route to encourage active travel and improve residents health. The new facilities will link with existing infrastructure to provide a continuous safe cycle and pedestrian route to the City centre, the rail station and other services including a supermarket and leisure centre;
- vulnerable users of the route will benefit from modern lighting providing security and reducing fear of crime; and
- Access to the restored Lichfield and Hatherton Canal for leisure purposes which will also positively impact on health through increased physical activity. It will also enhance the tourist offer of Lichfield City.

Cars will be re-routed away from the City centre and will experience less stop/ start driving conditions as a result of reduced delays. Therefore the traffic will produce reduced emissions.

5.3. Commercial case

The preferred delivery option is to use the County Council's Infrastructure+ public/private partnership with Amey which has had the added benefit of facilitating significant early contractor involvement. There is also a reserve option to deliver the scheme through the Midlands Highway Alliance (MHA) framework which, if pursued, would not delay the start of construction. The County Council is confident that both options represent a modern approach to procurement that will provide value for money.

5.4. Financial case

The total cost is estimated to be £21.2m with an £8.7m required from Growth Deal, in addition to £0.3m Growth Deal 1 / 2 development funds. Costs include construction costs, environmental mitigation, Network Rail costs, land costs, statutory undertakings and Part 1 compensation claims. The funding requirements are provided in Table 1.

Table 1: Funding Requirements

Source	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	TOTAL
Growth Deal (unsecured)					7.9	0.8	8.7
Growth Deal 1/2		0.3					0.3
Local contribution	0.2		0.2				0.4
Private developer				5.4	4.6	1.8	11.8
Total	0.2	0.3	0.2	5.4	12.5	2.6	21.2

5.5. Management case

There will be a clear decision-making line to the LEP. County Councillor Winnington, the Cabinet Member for Economy, Environment and Transport, will be a member of the Project Board to ensure that decisions made are reported to the LEP via the County Cabinet Leader and Chief Executive who both sit on the LEP Board. LEP governance arrangements allow the LEP to hold delivery partners to account for progress against project milestones and budgets. This will take place through LEP Growth Deal Programme Board meetings and regular updates provided to the LEP.

The Project Board will meet quarterly and will be attended by the Senior Responsible Officer, James Bailey, Commissioner for Highways and the Built County; the Place Finance Manager in a project assurance role; Nick Dawson, Connectivity Strategy Manager, who is responsible for transport policy and strategy and the production of the business case and Amey's Project Manager, Dean Sergeant.

The outcome of weekly design meetings and monthly working group meetings will be reported to the Project Board. The working group meetings will be attended by County Council connectivity strategy, legal and finance representatives, a LEP

representative, the Senior Responsible Officer and the Amey Project Manager. Other meetings that will frequently take place include budget reviews and risk reviews.

5.6. Resource and VFM analysis

All transport benefits and costs have been assessed over a 60-year project lifetime then discounted back to a common base year (2010). Discount rates of 3.5% and 3.0% have been applied to benefits and costs for years 1-30 and 31-60 respectively.

Table 2 presents the TEE benefits as derived from TUBA. The scheme produces substantial benefits amounting to £50.5 million over the 60-year project lifetime. These benefits are generated by travel time savings, which amount to £44.1 million, combined with vehicle operating cost benefits of £6.4 million.

Table 2: TEE Table

Non-business: Commuting		ALL MODES	ROAD	BUS and COACH RAIL		OTHER
<u>User benefits</u>		TOTAL	Private Cars and LGVs	Passengers	Passengers	
Travel time		11,660		11,660		
Vehicle operating costs		2,075		2,075		
User charges		0		0		
During Construction & Maintenance		0		0		
NET NON-BUSINESS BENEFITS: COMMUTING		13,735	(1a)	13,735		
Non-business: Other		ALL MODES	ROAD	BUS and COACH RAIL		OTHER
<u>User benefits</u>		TOTAL	Private Cars and LGVs	Passengers	Passengers	
Travel time		16,708		16,708		
Vehicle operating costs		1,982		1,982		
User charges		0		0		
During Construction & Maintenance		0		-266		
NET NON-BUSINESS BENEFITS: OTHER		18,690	(1b)	18,424		
Business			Goods Vehicles	Business LGVs	Cars & Passengers	Freight s
<u>User benefits</u>						Passenger s
Travel time		15,685	6,145	9,540		
Vehicle operating costs		2,359	1,731	628		
User charges		0	0	0		
During Construction & Maintenance		0	0	0		
Subtotal		18,044	(2)	7,876	10,168	
Private sector provider impacts					Freight s	Passenger s
Revenue		0				
Operating costs						
Investment costs						
Grant/subsidy						
Subtotal		0	(3)			
Other business impacts						
Developer contributions			(4)			
NET BUSINESS IMPACT		18,044	(5) = (2) + (3) + (4)			
TOTAL						
Present Value of Transport Economic Efficiency Benefits (TEE)		50,469	(6) = (1a) + (1b) + (5)			

Notes: Benefits appear as positive numbers, while costs appear as negative numbers.
All entries are discounted present values, in 2010 prices and values

The complete bypass route provides direct time savings and lower vehicle operating costs for east-west movements of traffic as well as further savings for traffic not using the scheme itself, by reducing congestion in the City Centre.

Approximately 64% of the benefits accrue to consumer users (commuters and other personal trips) which is sensible as, whilst business users have a higher value of time, consumer users form a significantly higher proportion of total road users.

Substantial benefits are realised in all modelled time periods, with the greatest proportion of benefits accrued during the PM peak when junctions are most congested. The benefits do not include those generated during the weekend and

overnight time periods. Benefits to public transport have also not been included. Public transport would benefit from the reduced congestion in Lichfield City Centre. The PVB derived, therefore, may be considered conservative.

Table 3 presents the Analysis of Monetised Costs and Benefits table. Benefits relating to accidents are added to the present value of TEE benefits to produce an overall PVB of over £50.0 million. When combined with the PVC of £7.9 million, this results in a NPV of £ 42.0 million and a **benefit-cost ratio of 6.3**. The scheme therefore represents **very high value for money**, based on DfT guidance (i.e. a BCR of greater than 4.0).

Scheme costs used to inform the overall Value for Money (VfM) do not include the developer contribution required to build the majority of the phase 3 link. This is because this element of the scheme is included within the Do-Minimum scenario, with construction required as a condition of the granted planning application for the St. John's residential development.

Analysis of Monetised Costs and Benefits

Noise	TBC	(12)
Local Air Quality	TBC	(13)
Greenhouse Gases	TBC	(14)
Journey Ambience		(15)
Accidents	1,570	(16)
Economic Efficiency: Consumer Users (Commuting)	13,735	(1a)
Economic Efficiency: Consumer Users (Other)	18,690	(1b)
Economic Efficiency: Business Users and Providers	18,044	(5)
Wider Public Finances (Indirect Taxation Revenues)	-2,019	- (11) - sign changed from PA table, as PA table represents costs, not benefits
Option Values		(17)
Present Value of Benefits ^(see notes) (PVB)	50,020	(14) + (15) + (16) + (1a) + (1b) + (5) + (17) - (11)
Broad Transport Budget	7,929	(10)
Present Value of Costs ^(see notes) (PVC)	7,929	(PVC) = (10)
OVERALL IMPACTS		
Net Present Value (NPV)	42,091	NPV=PVB-PVC
Benefit to Cost Ratio (BCR)	6.31	BCR=PVB/PVC

Note : This table includes costs and benefits which are regularly or occasionally presented in monetised form in transport appraisals, together with some where monetisation is in prospect. There may also be other significant costs and benefits, some of which cannot be presented in monetised form. Where this is the case, the analysis presented above does NOT provide a good measure of value for money and should not be used as the sole basis for decisions.

6. Consultation process

Lichfield District Council fully supports the delivery of the Lichfield Southern Bypass and has included the scheme in their Local Plan as required infrastructure. They have also included it within their project pipeline for GBSLEP.

The Lichfield and Hatherton Canal Trust also support the scheme as it facilitates the canal trusts' ambitions and regularly attend update meetings with Staffordshire County Council to share information.

Key Stakeholders who support this scheme include:

- Lichfield District Council
- Stoke-on-Trent and Staffordshire LEP
- Greater Birmingham and Solihull LEP
- Staffordshire County Council
- Network Rail – we are currently working towards an approval in principle for the outline design which is being progressed by consultants approved by Network Rail
- Lichfield and Hatherton Canal Trust

As the scheme is developed, consultations with key stakeholders and the public will take place via public open sessions, workshops, exhibitions, local press and in writing. Engagement throughout the process of design and delivery of the scheme will be important and will be undertaken in accordance with Staffordshire County Council's 'Pitching the Message' communication guidelines for engaging and responding to customers.

During any highway works we will:

- a. explain what we are doing
- b. notify stakeholders before work starts
- c. communicate the start and expected completion date
- d. explain what to expect – the impact on the customer
- e. keep people informed if we can't meet deadlines
- f. provide details of affected areas
- g. explain how traffic will be managed
- h. provide contact details for further enquiries

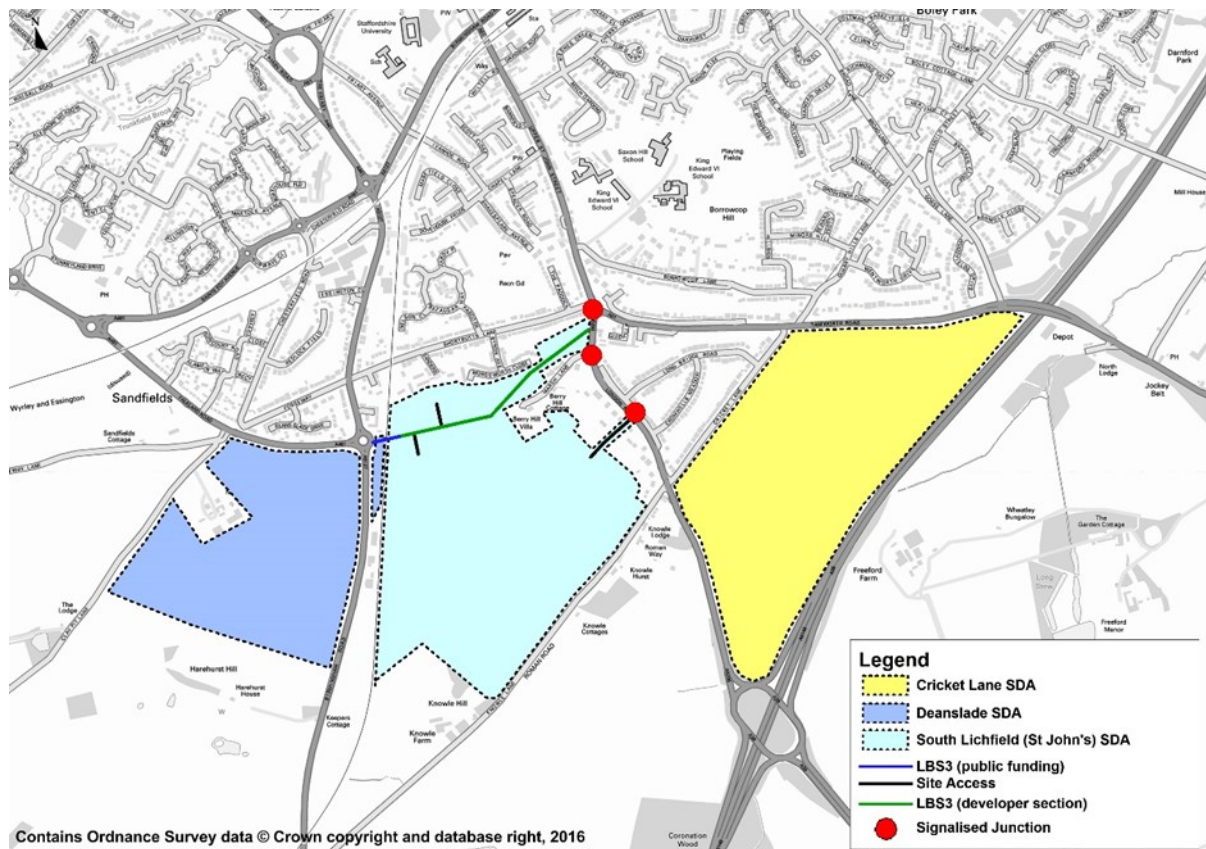
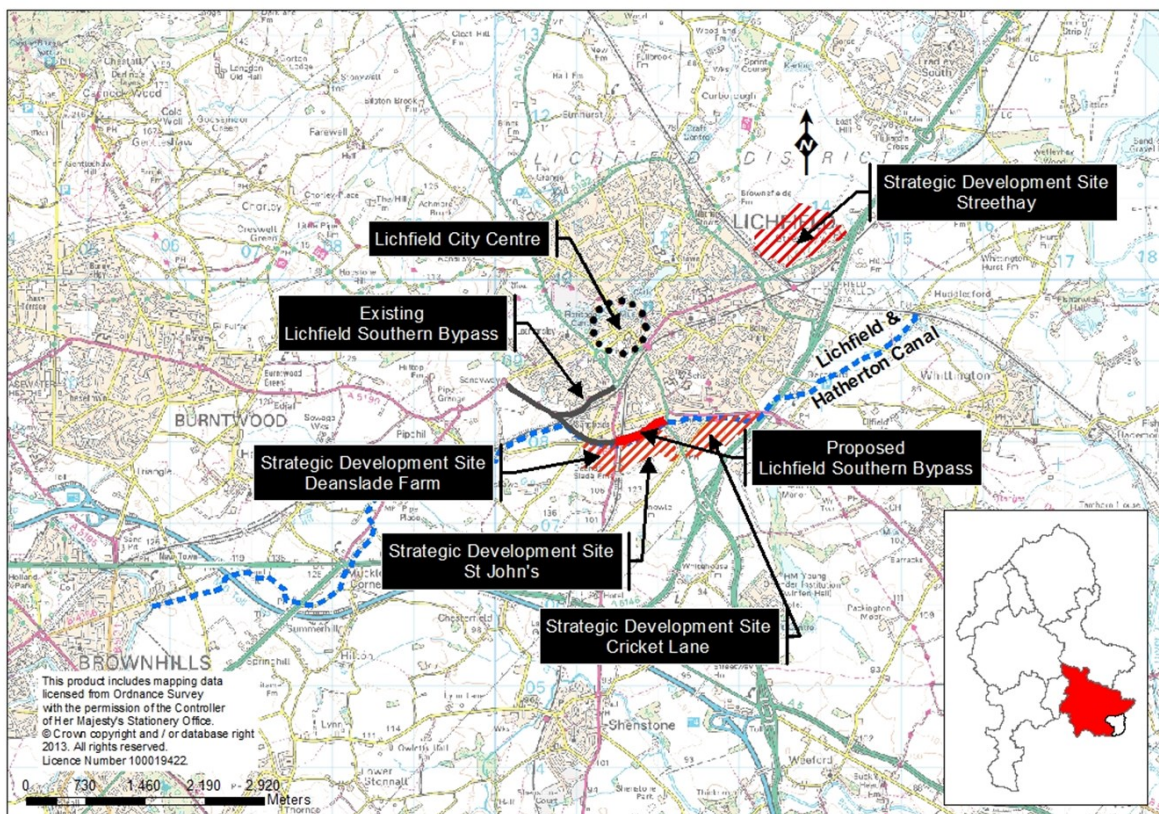
Communication will be vital particularly with regard to:

- i. changes to timescales
- j. changes to design
- k. changes to traffic control
- l. increased disruption

A Communication Plan will be produced as part of the full Business Case

7. Location of proposal

The project focuses on South Lichfield completing a through route between the A461 Walsall Road and the A5206 London Road, bypassing the historic City core.



8. Risk analysis

A Quantified Cost Risk Assessment and Risk Management Plan will be completed to inform the outline business case to ensure that all key risks are identified and

costed. Potential significant risks to the delivery of the scheme have been identified and include:

- Potential cost overruns
- Land assembly problems where land owner co-operation required
- Negotiations with Network Rail and possessions delays
- Delays obtaining planning permission for the road
- Potential canal issues or other environmental concerns
- Unforeseen ecological and ground condition issues

Other issues which may affect the delivery of bridgeworks such as ground conditions and flood risk have been fully investigated and are considered benign. Grounds investigations are currently being undertaken to mitigate the potential risks of overdesigning the structure, encountering poor ground conditions and water table problems.

The delivery of the bridgeworks is necessarily at the discretion of Network Rail although significant advanced notice (approximately 18 months) will be given to mitigate any possible issues. Rail possessions may be cancelled in times of rail emergency which cannot be foreseen. Early involvement and approvals from Network Rail have and will continue to be sought to reduce risk to delivery. The cost implications of a possession overrunning will be covered by an insurance policy.

9. Legal analysis

Relevant legal agreements with developers, landowners and Network Rail will be confirmed as the scheme progresses. Equal Opportunity Policy will be considered as part of the full business case.

10. Delivery

Growth Deal funding is required to assist in completing the remaining section of the route the majority of which consists of high cost bridgeworks to connect into Birmingham Road beneath the Cross City Line. Assuming that this funding is secured, works to deliver the link between Birmingham Road and London Road are estimated to start in April 2019, with the rail possessions required for the Cross City Line bridgeworks in December 2019. The link is expected to be open in 2020/21.

The County Council will use its Regulation 3 powers to secure planning permission for the whole route. There may be a need for the use of CPO powers to assemble the necessary land for the structure. It is expected that the County Council will construct the highway link to the eastern side of the new under rail bridge to London Road via a S.278 Agreement.

Accommodation works to facilitate the future reconstruction of the Lichfield and Hatherton Canal (when their funds allow) will be undertaken by agreement with the Canal Trust.

Local contributions towards the completion of Phase 3 have been assembled in the period 2002-2011 through a policy requirement for all developers to contribute proportionately towards the Lichfield Transport and Development Strategy (LTADS). Additional contributions (£12m) will be provided by the developers of the Strategic Development Location.

A Monitoring and Evaluation Framework will be developed for the scheme. The County Council will report on a standard set of measures in line with Department for Transport's guidance on a Monitoring and Evaluation Framework for Local Authority Major Schemes, September 2012. A final Monitoring and Evaluation Plan will be reported to the Project Board, submitted to the LEP and published on the website for the purpose of local accountability and transparency. It will include:

- Scheme background and context
- Scheme objectives and outcomes (and logic map)
- Data collection methods (sample size, mode and frequency of data collection. Include map showing spatial coverage of data collection)
- Resourcing and governance (who will be responsible for delivering the monitoring and quality assurance)
- Delivery plan (timeframe for data collection and reporting findings)
- Dissemination plan (communication of findings to stakeholders)
- A plan for assessing Benefits Realisation

Two monitoring and evaluation reports will be published following data collection one year after opening, once traffic flows have settled down, and five years after opening. Baseline data will be collected before scheme opening.

11. Timetable

The detailed programme will be confirmed in the full business case and will take into account availability of Growth Deal funds. At present, the indicative timetable is as follows:

- Outline major scheme business case – 2017
- Planning permission – 2018
- Land acquisition – 2019
- Rail possessions - 2019
- Construction completed - 2021
- Benefits calculated over a 60 year project lifetime

12. Author

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Lichfield Southern Bypass Phase 3 Traffic and Economic Assessment Report,
Staffordshire County Council, June 2016. Available on request

13. Decision details

For official use only – details of date considered by City Deal and Growth Deal Programme Board and any additional information for decision record