



Stafford Western Access Route

Major Scheme Business Case Addendum

June 2016

1. Introduction

This is an addendum to the Stafford Western Access Route (SWAR) Major Scheme Business Case (MSBC) report published in January 2015 and needs to be read in conjunction with this 2015 report. It provides an interim appraisal explaining how the scheme has changed since January 2015 and the impact of these changes as they relate to:

- The Strategic Case
- The Economic Case
- The Financial Case
- The Commercial Case
- The Management Case

Since 2015, the SWAR has been reviewed and now includes all three Sections (A, B and C) between Martin Drive, Doxey Road and A34 Foregate Street. Previously the 2015 business case focused on assessing the benefits of Section A and B, with Section C (Martin Drive to Doxey Road) already assumed to be delivered by developers. Table 1.1 summarises how the appraisal outcomes have changed.

Table 1.1: Changes to the Appraisal Outcomes

Case	2015 MSBC	2016 Addendum
The Strategic Case	No planning consent Traffic impact of Sections A and B assessed (assuming Section C in the do-minimum scenario)	Planning consent received Amendments to viaduct and junction design Traffic impact of the full route assessed (Sections A, B and C)
The Economic Case	Economic Impact: A high Benefit to Cost ratio of 2.67 and Net Present Value (NPV) of £58.9m (15% optimism bias) Environmental Impact: All potential impacts can be mitigated Social Impact: Large journey quality benefits, £1.8m accident savings and reduction in pedestrian severance	Economic Impact: A high Benefit to Cost ratio of 2.58 and NPV of £74m (15% optimism bias) Environmental Impact: Detailed EIA approved with planning application identifying no further significant impacts Social Impact: Additional severance issues highlighted and mitigated as part of the scheme
The Financial Case	Quantified Cost Estimate: £34.95m (Sections A and B) Section C delivered by developers through S278	Quantified Cost Estimate: £62m (Sections A, B and C) Sections A and B: £43.3m Section C: £18.7m
The Commercial Case	Preferred delivery option: Amey Reserve option: Midlands Highway Alliance (MHA) framework	No change
The Management Case	Project delivery: April 2016 to Sept 2018 Risk layer: £633,000 + Section C Dependencies: Planning consent, Section C delivery, land acquisition, Network Rail	Main construction period: Sept 2018 to 2020 (assuming CPO inquiry) Risk layer: £3.38m Dependencies: Funding package and land acquisition

2. The Strategic Case

The scheme that has been appraised is shown in Figure 2.1. Changes to the scheme since January 2015 include the following:

- Length and design of embankment and viaduct
- Amendments to the Doxey Road / Sainsbury's roundabout
- In response to the revised severance appraisal, additional pedestrian and cycle crossing points are provided along the route and also on local roads where traffic flows are predicted to increase

Since January 2015, the scheme objectives have not changed and there have been no changes to the policies in the Stoke-on-Trent and Staffordshire Local Enterprise Partnership Strategic Economic Plan. Planning consent has now been received in line with The Plan for Stafford Borough that has not been modified since its adoption in June 2014.

On 5th November 2015, the Planning Committee accepted the recommendation to approve the planning application by Staffordshire County Council for the construction of the SWAR, subject to the conditions reported on 24th December 2015. Planning permission for development was granted pursuant to powers under the Town and Country Planning Act 1990 and Regulation 3 of Town and Country Planning General Regulations 1992. The planning application was accompanied by an Environmental Statement.








The January 2015 MSBC traffic assessment compared the difference between completing Section C only and completing the full SWAR (i.e. measuring the impact of Sections A and B (assuming C is already complete). The revised assessment compares the difference between no SWAR and completing the full SWAR.

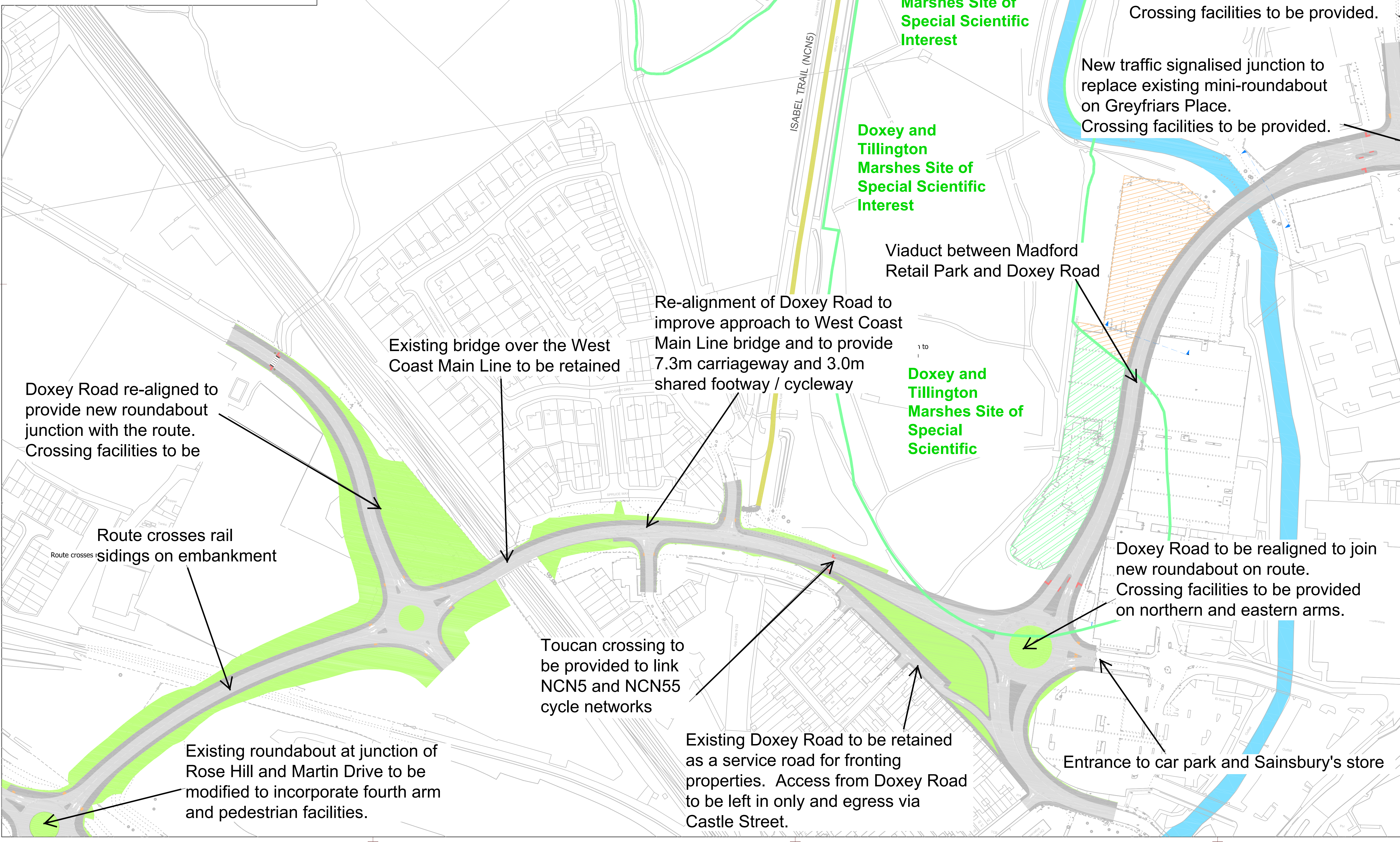
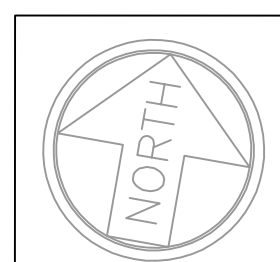
In summary, it is now forecast that completion of the SWAR will improve the overall performance of the local highway network, reducing overcapacity queued time by 42% and 39% in the 2033 AM and PM peaks respectively. It is expected to reduce traffic flows on bypassed roads and significantly improve journey times, particularly between the North and West of Stafford. Table 2.1 provides the predicted reduction in traffic flows in 2033 on key routes to be bypassed.

Table 2.1: Forecast Reduction in Traffic as a Result of Scheme (2033)

Roads Bypassed	% Reduction	
	AM Peak	PM Peak
Newport Road (east of Kingsway)	-19%	-13%
Station Road	-15%	-0%
Chell Road	-44%	-30%
Foregate Street (south of Western Access Route)	-48%	-56%
Doxey Road	-18%	-31%

KEY

-  Carriageway
-  Footway & Paved Areas
-  Grass Verge
-  Doxey & Tillington Marshes Site of Special Scientific Interest (SSSI)
-  Area of existing car park to be developed into wildlife habitat
-  Area of destroyed SSSI to be returned
-  Extent of viaduct structure



Existing signalised junction with Browning Street to be improved to accommodate dedicated left turn on southbound approach. Crossing facilities to be provided.

Existing signalised junction with Foregate Street to be widened to accommodate additional lanes. Crossing facilities to be provided.

New traffic signalised junction to replace existing mini-roundabout on Greyfriars Place. Crossing facilities to be provided.

Doxey and Tillington Marshes Site of Special Scientific Interest

Viaduct between Madford Retail Park and Doxey Road

Re-alignment of Doxey Road to improve approach to West Coast Main Line bridge and to provide 7.3m carriageway and 3.0m shared footway / cycleway

Doxey and Tillington Marshes Site of Special Scientific Interest

Doxey Road re-aligned to provide new roundabout junction with the route. Crossing facilities to be provided.

Existing bridge over the West Coast Main Line to be retained

Route crosses rail sidings on embankment

Doxey Road to be realigned to join new roundabout on route. Crossing facilities to be provided on northern and eastern arms.

Toucan crossing to be provided to link NCN5 and NCN55 cycle networks


Existing Doxey Road to be retained as a service road for fronting properties. Access from Doxey Road to be left in only and egress via Castle Street.


Existing roundabout at junction of Rose Hill and Martin Drive to be modified to incorporate fourth arm and pedestrian facilities.

Entrance to car park and Sainsbury's store

A	Aug 2015	Hatch updated to indicate crossing point on northern arm of Doxey Road Roundabout. Road markings updated.	JH
Rev	Date	Detail	By

Revisions



Staffordshire County Council
 working with 

The Built County - Highways
 1 Staffordshire Place
 C/O Wedgwood Building,
 Tipping Street
 Stafford, ST16 2DH

Stafford Western Access Route

Enhanced General Arrangement

Prepared	Produced	Checked	Scale
JM	JH	DS	1/1250
Grid Reference			Size
E391565 N323529			A1
Date	May 2015	Drawing No.	Revision
		SWAR/Planning/05	A
Status	PLANNING		

3. The Economic Case

The Economic Case follows WebTAG (Web-based Transport Analysis Guidance) which is the Department for Transport's transport appraisal guidance and toolkit. It assesses the impacts and the value for money implications of the 'core' scenario for the SWAR which is seen as the most likely future highway and development growth scenario. The Appraisal Summary Table in Appendix 3.1 provides a summary of all the monetised and qualitative impacts.

3.1 Economic Impact

The Benefit to Cost ratio (BCR) has been calculated by Atkins Consultants. All benefits and costs have been assessed over a 60-year project lifetime then discounted back to a common base year of 2010. Discount rates of 3.5% and 3.0% have been applied to benefits and costs for years 1-30 and 31-60 respectively. The optimism bias for the scheme remains at 15% based on the reasons stated in the January 2015 MSBC. The SWAR has not as yet reached full approval when a 3% optimism bias uplift will be applied.

Transport Economic Efficiency (TEE)

Table 3.1 presents the TEE benefits. The scheme produces substantial benefits amounting to £116.8 million. These benefits are mainly generated by travel time savings. The scheme will provide a shorter route for many trips providing both time savings and lower vehicle operating costs. The reduced congestion in the town centre resulting from the scheme will also provide time savings for traffic not directly using the new roads. Construction and maintenance delays have been taken into account.

Table 3.1: TEE Table

Economic Efficiency of the Transport System (TEE)						
Non-business: Commuting						
User benefits	ALL MODES	ROAD	BUS and COACH RAIL		OTHER	
	TOTAL	Private Cars and LGVs	Passengers	Passengers		
Travel time	38,325	38,325				
Vehicle operating costs	1,456	1,456				
User charges	0	0				
During Construction & Maintenance	-234	-234				
NET NON-BUSINESS BENEFITS: COMMUTING	39,547	39,547				
		(1a)				
Non-business: Other						
User benefits	ALL MODES	ROAD	BUS and COACH RAIL		OTHER	
	TOTAL	Private Cars and LGVs	Passengers	Passengers		
Travel time	46,601	46,601				
Vehicle operating costs	-1,308	-1,308				
User charges	0	0				
During Construction & Maintenance	-266	-266				
NET NON-BUSINESS BENEFITS: OTHER	45,027	45,027				
		(1b)				
Business						
User benefits		Goods Vehicles	Business LGVs	Cars & Passengers	Freight s	Passenger s
Travel time	37,656	17,758	19,898			
Vehicle operating costs	5,540	1,088	4,453			
User charges	0					
During Construction & Maintenance	-265		-265			
Subtotal	42,932	18,846	24,086			
		(2)				
Private sector provider impacts				Freight s	Passenger s	
Revenue	0					
Operating costs						
Investment costs						
Grant/subsidy						
Subtotal	0					
		(3)				
Other business impacts						
Developer contributions	-10,701					
NET BUSINESS IMPACT	32,231					
		(5) = (2) + (3) + (4)				
TOTAL						
Present Value of Transport Economic Efficiency Benefits (TEE)	116,806	(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

Public Accounts

Table 3.2 presents the public accounts. Investment costs are expected to be paid by the Stoke-on-Trent and Staffordshire LEP, through the Growth Deal, and Staffordshire County Council, therefore assuming no central government costs.

The scheme investment costs amount to £57.181m. The cost of maintenance compared to the do-minimum will result in an additional cost of £0.267 million. This is offset by developer contributions equating to £10.701m.

Table 3.2: Public Accounts

Public Accounts					
	ALL MODES TOTAL	ROAD INFRASTRUCTURE	BUS and COACH	RAIL	OTHER
Local Government Funding					
Revenue					
Operating Costs	267		267		
Investment Costs	57181		57181		
Developer and Other Contributions	-10701		-10701		
Grant/Subsidy Payments					
NET IMPACT	46747 (7)		46747		
Central Government Funding: Transport					
Revenue					
Operating costs					
Investment Costs					
Developer and Other Contributions					
Grant/Subsidy Payments					
NET IMPACT	0 (8)				
Central Government Funding: Non-Transport					
Indirect Tax Revenues	-132 (9)		-132		
TOTALS					
Broad Transport Budget	46,747 (10) = (7) + (8)				
Wider Public Finances	-132 (11) = (9)				

Notes: Costs appear as positive numbers, while revenues and 'Developer and Other Contributions' appear as negative numbers.
All entries are discounted present values in 2010 prices and values.

Analysis of Monetised Costs and Benefits

Table 3.3 presents the Analysis of Monetised Costs and Benefits from TUBA. Benefits relating to accidents and carbon emissions are added to the present value of TEE benefits to produce an overall PVB of £120.732 million. When combined with the PVC of £46.747 million, this results in a NPV of £73.984 million and a BCR of 2.58. The scheme therefore represents high value for money, based on DfT guidance (i.e. a BCR of greater than 2.0).

The benefits exclude journey time reliability and benefits generated during the inter-peak, weekend and overnight time periods are not included. Benefits to public transport are also not included even though public transport would benefit from the reduced congestion in the town centre. The PVB derived, therefore, may be considered conservative.

Table 3.3:
Analysis of Monetised Costs and Benefits

Noise	-400	(12)
Local Air Quality	2429	(13)
Greenhouse Gases	-33	(14)
Journey Ambience		(15)
Accidents	1,798	(16)
Economic Efficiency: Consumer Users (Commuting)	39,547	(1a)
Economic Efficiency: Consumer Users (Other)	45,027	(1b)
Economic Efficiency: Business Users and Providers	32,231	(5)
Wider Public Finances (Indirect Taxation Revenues)	132	- (11) - sign changed from PA table, as PA table represents costs, not benefits
Option Values		(17)
Present Value of Benefits ^(see notes) (PVB)	120,732	(PVB) = (12) + (13) + (14) + (15) + (16) + (1a) + (1b) + (5) + (17) - (11)
Broad Transport Budget	46,747	(10)
Present Value of Costs ^(see notes) (PVC)	46,747	(PVC) = (10)
OVERALL IMPACTS		
Net Present Value (NPV)	73,984	NPV=PVB-PVC
Benefit to Cost Ratio (BCR)	2.58	BCR=PVB/PVC

Note : This table includes costs and benefits which are regularly or occasionally presented in

Wider Economic Benefits

The SWAR directly unlocks 2,200 houses in the West of Stafford out of a total of 5,560 homes planned to be delivered by 2031 in Stafford Town. This represents a considerable investment by developers who will also be providing a new primary school, local centre and a significant financial contribution towards secondary education places. Growth in the West of Stafford also includes Doxey Road regeneration scheme that is being put forward for funding as part of Growth Deal 3 and is directly related to the delivery of Section C of the SWAR. As well as contributing to the forecast growth in homes and jobs, the regeneration scheme will secure 100 jobs; reclaim 19.5 acres of derelict land; and create high quality public open space.

New housing is vital to increase labour supply and attract investment in Stafford which has a small number of jobseekers but strong growth potential. 2,200 new homes will support around 9,500 direct (construction), indirect (suppliers providing goods, services and materials) and induced (supported by increased spending) jobs. These new homes will also contribute around £22m in additional taxes (local and national) and around £60m increased spend in local shops and services.

The 2,200 new homes are located close to Stafford rail station and in addition to new highway capacity the SWAR will provide important, footway / cycle links and bus connectivity, allowing residents to conveniently access rail services.

Delivery of the SWAR will help to realise the benefits of HS2 classic compatible services that are planned to serve the rail station from 2026. With a proposed journey time of 64 minutes to London, HS2 has the potential to attract significant investment to the town and regenerate the area around the rail station, making it a significant gateway to Stafford. As demand for rail travel grows, the SWAR will be vital in alleviating congested conditions particularly around the station and importantly help manage the local impact of future planned development. The SWAR could also form an access to new areas of rail station parking that will be needed once HS2 serves the town.

3.2 Environmental Impact

The Environmental Statement produced for the planning application for the SWAR that was submitted and approved in 2015 replaces the environmental impact assessment provided in the January 2015 MSBC. The Environmental Statement was prepared to comply with the EIA Regulations which implement the European Council Directive 2011/92/EU (hereafter referred to 'the EIA Directive'). The approach is consistent with DMRB guidance Volume 11 and Interim Advice Note (IAN) 126/09.

All environmental impacts required to be assessed under WebTAG are included in the planning application Environmental Statement. The results are provided in the Environmental Statement Non-Technical Summary in Appendix 3.2 and summarised in the Appraisal Summary Table in Appendix 3.1. No additional residual adverse impacts were identified through this process compared to the January 2015 MSBC taking into account proposed mitigation measures.

3.3 Social Impact

Out of the TEE benefits amounting to £116.806 million over the 60-year project lifetime, £84.574 million is attributable to benefits for commuters and other users (see Table 3.1). This is a sensible proportion as, whilst business users have a higher value of time, consumer users form a significantly higher proportion of total road users. These benefits are generated by travel time and vehicle operating cost savings which will have benefits for personal affordability.

Benefits related to journey quality, accidents and security have been assessed in the planning application Environmental Statement under 'Vehicle Travellers' and severance issues have been reviewed under 'Pedestrians, Cyclists, Equestrians and Community Assets'. Further details are provided in the Environmental Statement Non-Technical Summary provided in Appendix 3.2

The only significant changes reported, compared to the January 2015 MSBC relate to 'severance'. The following improvements to pedestrian and cycle infrastructure are proposed to mitigate the negative impact of the SWAR on amenity levels and community severance:

- A toucan crossing will be incorporated into the A34 Foregate Street / Greyfriars Place signalised junction. This replaces the existing crossing currently located to the south of the junction and provides a facility for cyclists
- New informal pedestrian crossing facilities at Madford Retail Park to cross Greyfriars Place between Tenpin bowling and Halfords and across the car park entrance to Lidl and Curry's. Infrastructure will be installed to turn them into controlled crossings, if required later
- A new toucan crossing for pedestrians and cyclists at Madford Retail Park to cross Greyfriars Place which the Scheme joins into
- A new toucan crossing for pedestrians and cyclists to the north of the new roundabout at the Doxey Road / Stafford Western Access Route / Sainsbury's entrance to assist people crossing the Scheme
- A new toucan crossing for pedestrians and cyclists to cross the Doxey Road adjacent to Timberfields and Castletown and aligning with The Isobel Trail (NCN 5)
- New informal pedestrian crossing facilities at each arm of the roundabout at the Doxey Road/ Stafford Western Access Route to the west of Castletown
- An existing public right of way runs parallel to Martin Drive to the north; this will be rerouted slightly to tie in with the Martin Drive / Rose Hill / Stafford Western Access Route roundabout to provide a crossing point for users and a better link with the Greenway (NCN 55)
- New informal pedestrian crossing facilities at each arm of the roundabout at Martin Drive / Rose Hill / Stafford Western Access Route
- A new toucan crossing for pedestrians and cyclists to be able to cross Kingsway in the vicinity of the walk / cycle route to Castle Street
- A new toucan crossing for pedestrians and cyclists to cross Kingsway adjacent to the A518 Newport Road / Kingsway roundabout
- New signalised pedestrian crossing facilities at the junction of the A518 Newport Road and West Way, if required later

4. The Financial Case

The cost of implementing the SWAR and incremental costs of maintaining and operating it have been estimated. The Quantified Cost Estimate for the scheme is £62m, including forecast inflation. The costs have increased since the publication of the January 2015 MSBC as a result of the following:

- At the request of the developer, Section C is now included within the detailed design process, rather than assuming it will be delivered through a S278
- Progress of detailed design of Sections A and B, taking into account ground and utility investigations, early contractor involvement, a review of risks and new inflation forecasts. Construction costs have increased mainly due to the complex ground conditions needed to extend the viaduct

As a consequence, additional funding is required through the 2016 round of Growth Deal awards as part of the funding package being proposed for the Doxey Road regeneration scheme. There is also now a greater level of private sector investment than previously expected. The funding package is summarised in Table 4.1.

Table 4.1: Funding Package

Funding Sources	Funding level (£m)
LGF secured for Sections A and B only	£24.3m
LGF secured for sustainable transport provision associated with the SWAR	£0.5m
Additional LGF funding required as part of the Doxey Road regeneration scheme	£11m
Developer contributions (confirmed based on the level of development traffic using the SWAR)	£15.4m
County Council contribution (to be agreed by the Section 151 Officer and Cabinet)	£10.8m
TOTAL	£62m

4.1 Quantified Cost Estimate

The Quantified Cost Estimate consists of the most likely base cost, risk allowance and an assumption regarding inflation. The breakdown is provided in Table 4.2.

Table 4.2: Summary of Quantified Cost Estimate

Element	Cost Estimate £'000s
Base Cost	£53,691,611
Quantified Risk Assessment	£3,381,000
Inflation	£4,926,386
Total	£61,998,997

4.2 Funding Profile

Due to the required changes in the funding package and delays related to land acquisition, the funding profile has changed since the 2015 MSBC. The main construction period is now estimated to be between 2018 and 2020. The

funding profile that has been used to complete the economic impact appraisal in Section 3.1 is provided in Table 4.3.

Table 4.3: Funding Profile (excluding inflation)

Financial Year	Construction Costs	Land Costs	Other Costs / Fees	Total
2015/16	£80,940	£118,578	£1,178,093	£1,377,611
2016/17	£4,000,000	£920,000	£910,000	£5,830,000
2017/18	£3,300,000	£3,550,000	£205,000	£7,055,000
2018/19	£16,095,000	£225,000	£80,000	£16,400,000
2019/20	£13,235,000	£550,000	£115,000	£13,900,000
2020/21	£1,400,000	£2,350,000	£250,000	£4,000,000
2021/22	£0	£8,400,000	£110,000	£8,510,000
Total				£57,072,611

5. The Commercial Case

The Commercial Case has not changed since the publication of the 2015 MSBC. 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.

6. The Management Case

6.1 Governance

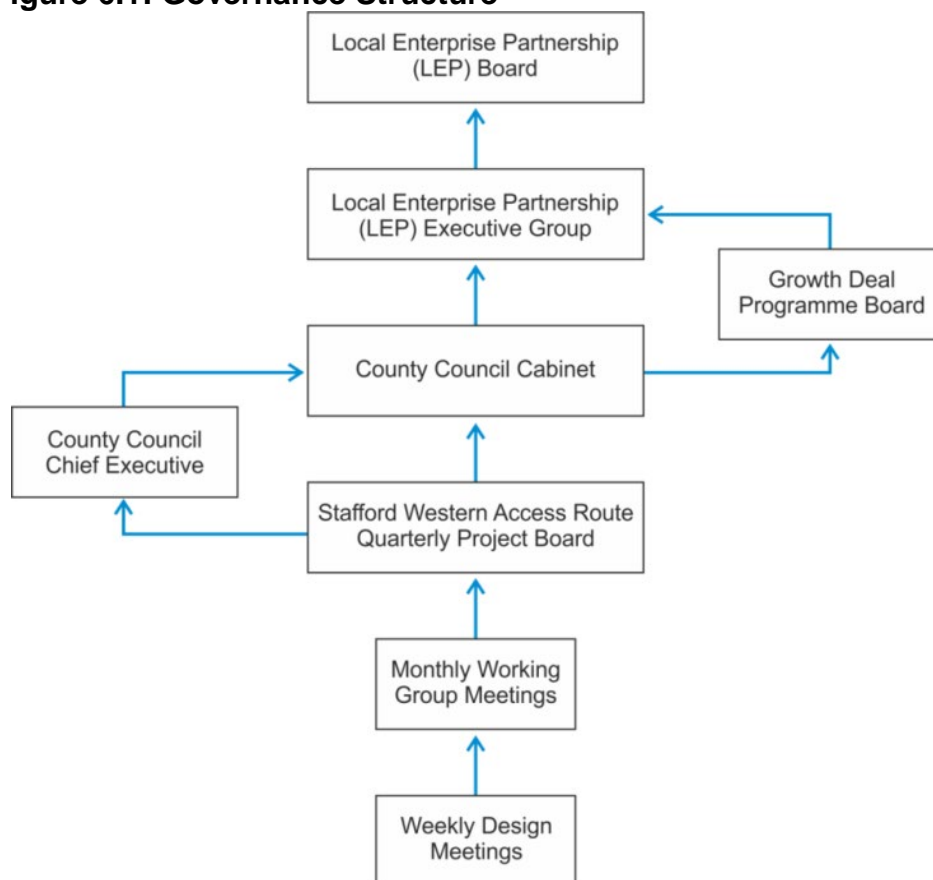
As shown in the Governance Structure provided in Figure 6.1, there continues to be a clear decision-making line to the LEP. County Councillor Winnington, the Cabinet Member for Economy, Environment and Transport, is a member of the SWAR Project Board to ensure that decisions made are reported to the 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 takes place through LEP Growth Deal Programme Board meetings and regular updates provided to the LEP.

The SWAR Project Board meets quarterly and is also 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 are reported to the Project Board. The working group meetings are 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 frequently take place include budget reviews, risk reviews and land acquisition meetings.

Figure 6.1: Governance Structure



6.2 Project Plan

For the purpose of this MSBC Addendum, it is assumed that the construction period will be between 2018 and 2020, assuming the need for a compulsory purchase order (CPO) public inquiry. However, this may not be the case meaning the programme beyond 2016/17 cannot as yet be confirmed. The various construction scenarios are summarised in Table 6.1.

Table 6.1: Key Milestones 2017/18 Onwards

Activity	Start	Finish
CPO process (no inquiry)	September 2016	September 2017
CPO process (with inquiry)	September 2016	September 2018
Construction – major works (CPO with no inquiry)	September / October 2017	2019
Construction – major works (CPO with inquiry)	September / October 2018	2020
Construction - major works (Sections A and B with no CPO process)	February / March 2017	August / September 2018

The key milestones for 2016/17 include the following:

- Completion of detailed design
- Planning conditions discharged
- Stoke-on-Trent and Staffordshire LEP July submission to DCLG for Growth Funds for the Doxey Road regeneration scheme
- Signed S278 confirming £15m developer contribution and phasing, as required to commence the CPO process
- Growth Funds confirmed for the Doxey Road regeneration scheme (expected Autumn 2016)
- CPO served and statutory process underway (assuming signed S278)
- Land purchased where agreement has been reached
- Contractor appointed
- Orders placed for statutory undertakers diversions
- Minor works completed on Sections A and B (depending on land acquisition)

6.3 Key Project Dependencies

The scheme programme is reliant on achieving the following key dependencies.

LEP Growth Deal (Local Growth Funds)

The Government has committed to investing £24.3m of Growth Deal funding for the Sections A and B of the SWAR. This was based on the County Council's first business case produced in 2010 which was the latest information available at the time of submitting the LEP's Strategic Economic Plan in 2014. At that time it assumed that Section C would be fully funded by the developer through a Section 278 Agreement.

Completion of the SWAR is now dependent on securing Local Growth Funds for Section C and the Doxey Road regeneration scheme through the Government's Growth Deal for Stoke-on-Trent and Staffordshire LEP that is expected to be announced in 2016.

Developer Contributions

It has been agreed that there will be developer contributions towards the SWAR in proportion to development traffic using the SWAR. It is agreed with all parties that the SWAR is a high priority as The Plan for Stafford Borough cannot be delivered without it. Nonetheless, Stafford Borough Council acknowledges that this may impact on the level of contributions in respect of other infrastructure and affordable housing associated with delivering housing in the West of Stafford Strategic Development Location (SDL).

The most significant land owner in the West of Stafford SDL is Lord Stafford's Estate (optioned to Taylor Wimpey) who accepts that a proportionate contribution to the SWAR should be made by the development according to traffic usage. This is currently expected to be around £15m. This payment will not be made until planning permission is granted and the housing development is under construction.

It is confirmed that the most appropriate way to secure that funding would be via an agreement under Section 278 of the Highways Act 1980. In accordance

with its terms, Section 278(5) would enable the County Council to place a charge on any land benefiting from the works to recover the outstanding sums. When the development has planning permission, the charged land would be a valuable asset capable of providing adequate security. The County Council could potentially forward fund the SWAR with funding from the S278 received at a later date.

In addition, the Section 278 agreement will require a bonding mechanism to be put in place to secure the funding set out in the agreement, prior to commencement of any development on Burleyfields. The precise amount of any bond in place at any one time will take into account the extent of the contribution and the agreed payment profile. In return, the developer will receive a binding commitment from the County Council to construct the SWAR so that they can deliver their housing.

Land Acquisition

Negotiations are taking place between the County Council and all land owners of the required land. However, it is not certain that acquisition will be possible through negotiation in all cases or within sufficient time to ensure that the construction of the SWAR is achieved by 2020. The County Council therefore needs to use its powers of compulsory purchase to ensure that there is sufficient certainty that the land can be obtained to deliver the SWAR.

On 19 November 2014, Staffordshire County Council Cabinet resolved, subject to necessary funding being in place, to make the Orders required to deliver the SWAR. This resolution will be reaffirmed by the Cabinet in September / October 2016 when members will be updated on the scheme and its delivery.

6.4 Risk Assessment and Management

Since the January 2015 MSBC, the risk register has developed into a detailed working document that is maintained and reviewed monthly by the Project Manager. Workshops were held in July and November 2015 to review the project risks, opportunities and proposed mitigation measures and another workshop is planned for 21st July 2016. New risks have been identified with mitigation measures identified, and have been allocated to the most appropriate owner. Risks that have the greatest impact on delivery have been closely monitored and managed. Outside of the formal workshops, risks have been continually reviewed and reported to the LEP. The main risks are currently as follows:

Construction / technical:

- Adverse weather conditions and flooding may affect the programme. Scheme costs and programme may be affected.
- Delays to construction as a result of statutory undertakers diversion /protection works. Early engagement has taken place to minimise this risk.

Financial:

- Not securing the additional funding required to deliver the full scheme. Local contributions have been significantly increased and a strong case is being made to secure additional LGF
- Land may need to be acquired using the CPO process however negotiations are ongoing to limit any potential delays to the programme.

Commercial:

- The mechanism for securing the funding from the main developer has been agreed, but not confirmed in a signed S278 agreement.

6.5 Communication Plan and Stakeholder Management

The Statement of Community Involvement submitted as part of the planning application in June 2015 provides details of all consultations that have taken place since the first community events in December 2009 and January 2010 when initial scheme options were considered. It includes an updated Communication Plan. Consultations and stakeholder management that has taken place since the publication of the Statement of Community Involvement in June 2015 includes the following:

- Responses to the planning application
- Public information boards on the line of the proposed route
- West of Stafford Strategic Development Location masterplan meetings organised by Stafford Borough Council
- Saint Gobain development meetings
- Meetings with other land owners along the route
- Castletown and Castlefields Residents' Association meetings
- Stafford Rotary Club presentation
- Network Rail meeting
- Western Power Distribution meetings
- Environment Agency and Staffordshire Wildlife Trust meetings
- Updates provided to local councillors and Member of Parliament

Appendix 3.1

Stafford Western Access Route

Appraisal Summary Table (June 2016)

APPENDIX 3.1: APPRAISAL SUMMARY TABLE

Date produced: May 2016

Contact:

Name of scheme:		STAFFORD WESTERN ACCESS ROUTE				Name	Nick Dawson		
Description of scheme:		New highway required to deliver development in Stafford. The road is a 7.3 metre wide, two lane, single carriageway road, approximately 1.2km in length between Martin Drive, Doxey Road and A34 Foregate Street.				Organisation	SCC		
						Role	Promoter		
Impacts	Summary of key impacts	Assessment							
		Quantitative		Qualitative	Monetary £(NPV)	Distributional 7-pt scale/ vulnerable grp			
Economy	Business users & transport providers The scheme generates large overall benefits for business users from travel time and vehicle operating cost savings. These are slightly offset by the increased delays to business users during construction of the scheme valued at £765,249 (MSBC 2015). Potential additional inter-peak benefits equate to £17.1m for all users (MSBC 2015).	Value of journey time changes(£000's)		£37,656		-	£32,231,000	Moderate Beneficial	
		Net journey time changes (£000's)							
		< 2min	2 to 5min	> 5min					
		£2,260	£20,334	£15,062					
Reliability impact on Business users	The introduction of the new route and the resultant reduction in congestion through the town centre would improve the Business Users reliability through Stafford due to a reduction in flow break-down. (based on 2015 MSBC)			-		-	£5,490,050		
Regeneration	Stafford has a relatively small scale of deprivation and the scheme is likely to provide most benefit to a relatively confined area. It is therefore not appropriate to consider Stafford as a regeneration area.			Not assessed		-	-		
Wider Impacts	The level and type of benefits does not meet the requirement for a quantified wider impact assessment. The scheme directly unlocks 2,200 houses and Doxey Road regeneration scheme. This will support around 9,500 direct (construction), indirect (suppliers providing goods, services and materials) and induced (supported by increased spending) jobs. These new homes will also contribute around £22m in additional taxes (local and national) and around £60m increased spend in local shops and services.			Not assessed		-	-		
Environmental	Noise	The monetary assessment is based on the 2015 MSBC which identified a slight adverse impact. A more detailed noise assessment was completed for the planning application in June 2015 which confirms this conclusion.	Total population assessed in 2033 = 3,101; people annoyed without scheme = 1,039; people annoyed with scheme = 1051. Net increase of 12 people annoyed in long term with scheme. (based on 2015 MSBC)				-	-£399,648	Slight Adverse
	Air Quality	The monetary assessment is based on the 2015 MSBC which identifies a slight adverse impact. The assessment completed for the planning application confirms this. The scheme does not result in any exceedances of air quality criteria, and additionally there are no Air Quality Management Areas affected by the scheme.	Assessment Score PM ₁₀ :+32, NO ₂ : +163, Emissions NO _x : -11 tonnes (based on 2015 MSBC)				-	PM ₁₀ NPV:£1.54m, NO _x emissions NPV: £0.006m. Total: £1.55m	Slight Adverse
	Greenhouse Gases	The planning application for the scheme confirms the low impact of the scheme on greenhouses gases	Change in non-traded carbon over 60y (CO2e)		527 tonnes (2015 MSBC)		-	-£32,886	
			Change in traded carbon over 60y (CO2e)		0				
	Landscape	The landscaping scheme was updated as part of the planning application process. Loss of wet woodland will be compensated by additional planting. Benefits will be gained from a new wildlife habitat adjacent to the SSSI. There will be sensitive landscaping along the route include low maintenance native species. There will be no impact on levels of tranquillity in the area.					Slight Beneficial	-	
	Townscape	The assessment has been reviewed as part of the planning application process. The 16 historic buildings in the area will not be directly impacted. The route diverts traffic away from locally distinctive traditional terraced houses at Castletown. The height of elevated sections will not adversely affect the townscape. During scheme operation, there will have no impact on Foregate & St.George's Conservation Areas and Victoria Park.					Neutral	-	
	Historic Environment	The assessment has been reviewed as part of the planning application process which concludes that an Archaeological Strategy should be completed due to the unknown level of remains, including a Level 2 Building Recording of the undesignated Universal factory. There will be a reduction in traffic in the Conservation Area. Impact on the SSSI water meadow and dismantled railway lines is neutral. It is considered that the potential for an adverse impact is low and mitigation will be delivered if appropriate.					Slight Adverse	-	
	Biodiversity	All habitats and species have been evaluated as part of the EIA. A small area of willow carr woodland and an area of destroyed SSSI will be affected. In response, a restored area of SSSI and the flood compensation area in the SSSI will both provide habitat improvements. Five year post monitoring of birds is proposed; a swamp habitat is included in restoration proposals; Saint Gobain bat boxes will be replaced; a toad and mammal tunnel created; and new lighting will reduce light spill. Construction activities will be managed appropriately.					Neutral / Slight beneficial	-	
Water Environment	The assessment has been reviewed as part of the planning application process. There will not be an adverse impact on water resources with restoration of part of the SSSI having a positive effect by allowing more rain water infiltration. Flood modelling shows that the proposed flood compensation area will result in a reduction of properties at risk of flooding. With appropriate mitigation, contamination is not expected to have an impact, however additional ground investigations will continue.					Neutral	-		

Social	Commuting and Other users	The scheme generates large overall benefits for commuter and other users from travel time savings as a result of the scheme. These are slightly offset by an increase in vehicle operating cost and delays during the construction of the scheme.	Value of journey time changes(£000's)		£84,926	-	£84,574,000	Moderate Beneficial
			Net journey time changes (£000's)					
			<2min	2 to 5min	> 5min			
			£5,096	£45,860	£33,970			
	Reliability impact on Commuting and Other users	The introduction of the new route and the resultant reduction in congestion through the town centre would improve the Commuting and Other Users reliability through Stafford due to a reduction in flow break-down. (based on 2015 MSBC)				-	£10,728,985	
	Physical activity	The additional number of pedestrians and cyclists is expected to be insignificant as a result of new walking and cycling facilities along the access route. However, complimentary sustainable measures are likely to encourage additional walk and cycle journeys.				Neutral	-	
	Journey quality	The assessment has been reviewed as part of the planning application. Frustration will be reduced as road layout, geometry, network conditions and ability to make good progress are all better with the new route, with reduced fear of accidents. There will be more open views along the new route.				Large Beneficial	-	
	Accidents	The introduction of the scheme is forecast to reduce personal injury accidents across the study area by around 8 across the 60 year appraisal period. (based on 2015 MSBC)	Accident / Casualty Savings (over 60 year appraisal) PIA's = -8, Fatal Casualties = 1, Serious Casualties = 5, Slight Casualties = -9			-	£1,798,000	Moderate Beneficial
	Security	Existing routes in the town are well lit with CCTV and good informal surveillance. New route will be designed to a high standard as regards security with good informal surveillance as passing through existing residential and retail areas.				Neutral	-	-
	Access to services	The scheme does not include any proposed improvements or alterations to bus services. However the new road will facilitate better bus penetration of new housing sites and improve bus access to the town centre, complemented by wider sustainable transport measures.				Neutral	-	-
	Affordability	There will be vehicle operating cost (VOC) savings for all users equating to £5.688m. The majority of residents will experiencing no change in VOCs.				Slight Beneficial	-	Moderate Beneficial
	Severance	The assessment has been reviewed as part of the planning application. There is moderate relief from severance on Chell Road and Doxey Road. Crossing facilities will be provided where new severance has been identified as a result of increased traffic flows. This includes A34 Foregate Street, A518 Castle Bank, West Way, A518 Newport Road (West Way to Kingsway) Kingsway and locations along the SWAR.				Moderate beneficial	-	Moderate Beneficial
	Option and non-use values	This scheme will not create a step change in the service level of a transport mode therefore has not been assessed.			Not assessed	-	-	
Public Accounts	Cost to Broad Transport Budget	The scheme will be publicly funded mainly through the LEP Growth Deal and a local contribution from the County Council. There will be broader maintenance costs of £267,000. There will also be a £15.4m private funding contribution.				-	£46,747,000	
	Indirect Tax Revenues	The scheme leads to reduced vehicle operating costs, as people use the shorter link road route. This feeds through to an overall decrease in indirect tax revenues.				-	-£132,000	

Appendix 3.2

Stafford Western Access Route

Non-Technical Summary of the Environmental Statement (June 2015)

Stafford Western Access Route

Non-Technical Summary of the Environmental Statement

June 2015



Introduction

The Environmental Statement

This document is the Non-Technical Summary of the Environmental Statement for the proposed Stafford Western Access Route herein referred to as 'the Scheme'.

An Environmental Statement (ES) is a detailed report of the findings of an Environmental Impact Assessment (EIA) of a proposed development. It describes the existing environmental conditions and then predicts the effects of the Scheme on both the man-made and natural environment. The ES also gives detail of the measures proposed to reduce any negative impacts of the Scheme on the environment.

The ES is issued in accordance with EC Directive 85/337 (as amended by Directive 97/11/EEC) as applied by Section 105a of the Highways Act 1980, as amended.

The Town and Country Planning (Environmental Impact Assessment) Regulations 2011 (as amended 2015) requires that for certain developments an EIA is undertaken. In some cases, owing to a development's type or scale, an EIA is mandatory (Schedule 1). In other cases developments that do not meet the threshold of a Schedule 1 application may still require an EIA owing to their potential to give rise to significant environmental impacts (Schedule 2).

The Scheme falls beneath the threshold for a scheme under which a Schedule 1 application is required however as the Scheme may impact on a series of environmentally sensitive sites, in particular Doxey and Tillington Marshes Site of Special Scientific Interest (SSSI) and the functional floodplain of the River Sow. Staffordshire County Council have commissioned this EIA on a voluntary basis

We would welcome your comments on the Scheme. If you would like to view the complete ES, it is available to be viewed free of charge at the location listed at the end of this document.

The Proposed Scheme

Staffordshire County Council is seeking planning permission for development within the red line boundary (SWAR/PLANNING/02):

- Construction of new highway from Greyfriars Place to Doxey Road and Doxey Road to Martin Drive;
- Associated demolition of buildings at Saint Gobain; and
- Associated flood compensatory storage within Doxey and Tillington Marshes (SSSI).

The Highway Authority is permitted to carry out improvements within or adjacent to the existing local highway and therefore does not require planning permission for the areas within the blue line boundary (SWAR/PLANNING/02). This is in accordance with the Town and Country Planning (General Permitted Development) (England) Order 2015. This includes improvements and re-alignment of:

- Existing Doxey Road between West Coast Main Line and Castle Street, including provision of a new service road; and
- Greyfriars Place to A34 Foregate Street and along A34 Foregate Street to Browning Street.

The Scheme objectives are as follows:

- To provide high quality transport infrastructure required to deliver development in Stafford;
- Reduce congestion on routes into and around the town centre which act as a constraint on growth proposals; and
- Facilitate improved access by sustainable modes between housing growth areas and the town centre.

The Scheme will afford relief to Newport Road (east of Kingsway), Station Road, Chell Road, Foregate Street (south of the scheme) and Doxey Road. Although traffic is predicted to increase along some routes, overall performance of the local highway network will improve.

The Scheme will help to accommodate future development traffic in Stafford and, in particular, it will improve the access arrangements to proposed development sites in the West of Stafford that are included in the Adopted Local Plan. It will also enable the removal of through traffic from the town centre, creating improved conditions for bus services, pedestrians and cyclists and opening up further opportunities to provide complementary sustainable transport measures within and to the town centre.

The Scheme is illustrated in SWAR/PLANNING/05.

The new route will be a 1.2km, 7.3m wide, single carriageway road, between Martin Drive and A34 Foregate Street. It will be provided with a 3m wide shared footway/cycleway, good quality signage, lit to current design standards and subject to a 30mph speed limit. Key features of the Scheme include:

- A34 improved signal junctions at Browning Street and Foregate Street;
- New bridge over the River Sow;
- Viaduct over the River Sow flood plain;
- Complementary habitats created adjacent to the new road and Doxey and Tillington SSSI;

- New roundabout at the junction with Doxey Road and Sainsbury's;
- Service road for Doxey Road properties;
- Realignment of Doxey Road;
- Enhancements to the West Coast Main Line rail bridge;
- Roundabout at new junction with Doxey Road;
- At-grade crossing of redundant rail sidings;
- Fourth arm at existing Martin Drive junction; and
- Flood compensation area within Doxey and Tillington Marshes SSSI.

Construction

The scheme will be delivered in three sections as shown on drawing SWAR/PLANNING/07:

Section A: A34 Foregate Street to Timberfield Road/Doxey Road Junction (approximately 700 metres)

Section B: Along Doxey Road from Timberfield Road up to and including Doxey Road Rail Bridge (approximately 160m)

Section C: Doxey Road (west of the Rail Bridge) to Martin Drive, Castlefields (approximately 320 metres)

The anticipated construction period for Sections A and B is April 2016 to December 2017 and Section C is expected to be completed by September 2018 in association with an early phase of new housing. This has been based on Stafford Borough Council's Local Plan housing projections.

Environmental Effects

The impact of the proposals has been considered for both the natural and man-made environment. The Scheme design aims to avoid impacting on the local environment as far as it is practical to do so. Measures have also been included in the Scheme design to make improvements to the local environment where this is possible. The following sections summarise the environmental impacts, both positive and negative, and indicate the proposals to manage and improve the environment around the Scheme.

Construction Effects

During construction, impacts would initially result from vegetation clearance where tree removal is required leading to habitat loss. In addition, the Scheme will require the demolition of the non-designated Universal Factory (Saint Gobain) office building on Doxey Road, and an area of site designated for nature conservation, already subject to damage, will be permanently lost with replacement and enhancement provided as part of the Scheme.

Environmental effects that can occur during construction of a scheme of this scale could include:

- Construction noise and vibration;
- Generation of dust;
- Deposition of mud on roads;
- Accidental spillage of fuels, oils or other materials;
- Visual intrusion;
- Impacts on ecology and cultural heritage features;
- Driver Stress; and
- Severance and travel times for pedestrians and cyclists.

These have been considered in detail as part of the EIA, of which details follow in the sections below. Construction environmental impacts will be controlled and minimised through good site practice and dedicated environmental management, including a Construction Environmental Management Plan (CEMP). Areas of land required temporarily during construction would be returned to original use or landscaped after completion of construction. Throughout the construction works, liaison would be undertaken with the relevant authorities and local residents to keep them informed of the planned activities and respond to any comments and queries which arise.

Mitigation measures required to offset the impact of delays to drivers during construction are provided in the Vehicle Travellers Chapter.

Operational Effects

Upon completion of the Scheme, the new road will open to the public for general use.

Environmental effects that can occur from traffic flow changes during the Operation of a road scheme of this scale include:

- Potential for consequence to noise and air quality;
- Effects from routine maintenance / management practices, including landscape and vegetation management;
- Potential light spill from new road lighting;
- Impacts on landscape; and
- Journey quality for all road users.

These have been considered in detail as part of the EIA, of which details follow in the sections below. Environmental impacts of scheme operation will be controlled and minimised by design and incorporation of mitigation measures identified during EIA. Effects have been predicted and then measures put in place to remove or reduce the impact wherever possible.

Ecology and Nature Conservation

Ecological resources that have been considered as part of the Ecology and Nature Conservation assessment include Doxey and Tillington Marshes (SSSI). A small area of the existing SSSI would be permanently lost to accommodate the Scheme. Most of this is, however, currently classified as destroyed and is occupied by a car park. The Scheme provides the opportunity to restore this destroyed SSSI, and adjacent land, to habitats complementary to Doxey and Tillington Marshes SSSI. The proposed Flood Compensation Area will also provide habitat improvements to the SSSI.

Restoration, as agreed in principle with the Environment Agency and Staffordshire Wildlife Trust, will be a mix of wet woodland and scrub with associated swamp and ditches using the existing SSSI habitats as a template for restoration. The area of restored and new habitat created would be at least equivalent to that permanently lost as a result of the Scheme, culminating in a neutral/ minor beneficial effect on the habitats of Doxey and Tillington Marshes SSSI once planting has matured.

Construction will entail minor impacts on SSSI habitats adjacent to the route and the proposed Flood Compensation Area. Impacts will be minimised through adherence to good working practices and fully mitigated through habitat restoration. During Construction, noise from the road building works is likely to disturb breeding and wintering birds within the SSSI. This will be minimised through artificial screening/fencing and by timing works to avoid the most sensitive periods wherever possible. These effects will be a temporary during construction only. No significant operational adverse effects on the SSSI have been identified. Nevertheless, due to the uncertainties associated with the assessment of noise impacts of different bird species, a 5 year post construction monitoring of the SSSI breeding and wintering bird populations is proposed.

Other habitats and protected species outside of the SSSI have also been evaluated including aquatic, broadleaved woodland, poor semi-improved grassland, swamp, broadleaved plantation, bats, breeding and wintering birds, badgers, amphibians and reptiles. Replacement planting, additional grass verges, a Sustainable Drainage System (SuDS) and the inclusion of swamp habitat in the restoration proposals of the destroyed area of SSSI have been incorporated into the design to offset habitat loss in the long term. The bat boxes removed in the demolition of the buildings within the Saint Gobain site will be replaced as part of the proposals.

Construction activities will be managed to avoid light spill and disturbance to protected species through a CEMP and precautionary working approaches. In particular, timing of the works would avoid the most sensitive periods wherever possible. Measures have also been proposed to mitigate operational effects on protected species. For example, a toad and mammal tunnel located at the disused rail bridge (SJ 915 234) has been incorporated into the design to allow animals to cross the road safely during operation of the Scheme and new lighting will be fitted with flat glass to reduce light spill.

In summary, the Scheme has been designed to avoid or minimise impacts on ecological resources and measures have been proposed to reduce, mitigate and offset ecological impacts both during construction and operation of the Scheme. With these measures in place there would be no residual significant adverse effects and it is anticipated that the Scheme will have a positive impact on SSSI habitats and an overall neutral effect on protected and priority species.

Drainage and the Water Environment

The assessment of drainage and the water environment considers the effects to all rivers, streams, drainage ditches, and groundwater likely to be effected by the Scheme. This process shows that the construction and operation of the road would not result in any adverse impacts on the water resources of the local area.

The design of the proposed highway drainage systems, new culverts, channel diversions and floodplain compensation will be in accordance with the Design Manual for Roads and Bridges (DMRB) and Environment Agency consultation. Construction of the Scheme would be carried out under the control of a CEMP, to ensure compliance with current planning policies/regulations for the protection of water resources.

The breaking up of the car park and restoration of the area to marshland is considered to be a positive effect from the Scheme as it will allow more infiltration of rainwater in an area of marshland SSSI. A flood compensation area is proposed located within Doxey and Tillington Marshes SSSI around 2km northwest of the Scheme adjacent to the River Sow. Flood modelling was undertaken to assess the flood risk associated with the Scheme and the proposed flood compensation area. The results show a net (although small) reduction of properties at risk of flooding.

Landscape and Arboriculture

The Scheme utilises a combination of brownfield land, existing highway alignments and the southern fringes of open space associated with the meandering route of the River Sow and with the Doxey and Tillington Marsh SSSI.

During construction, significant landscape effects are limited to the Ancient Clay Farmlands which borders the Scheme immediately to the north and encompasses Doxey and Tillington Marshes SSSI. With the addition of woodland planting this would be diminished by the time the Scheme is in operation.

Of seventeen representative viewpoints used to assess the visual impact on the Scheme, eleven would not experience views of the Scheme. In the first year of operation viewers at four locations would experience a slight adverse effect, and the remaining viewpoints will experience a neutral or slight beneficial effect. With the use of landscaping and mitigation after 15 years of operation the impact of the works would be further reduced.

There are a number of mature trees (20-40 years old) located close to Doxey Road and adjacent to the River Sow. Where possible these would be retained, if removed compensatory planting would be required.

The Scheme would not result in significant harm to landscape or visual amenity within the study area and the urban edge of Stafford and there would be some beneficial effects on landscape and townscape character as a result of redevelopment of areas of derelict land and introduction of structure planting.

Cultural Heritage

The assessment of Cultural Heritage has considered archaeological remains, historic buildings, and the historic landscape.

Archaeology

While there are no designated archaeological heritage assets recorded within the area of the scheme or the surrounding vicinity, several areas of archaeological potential were identified on the site and the scheme has the potential to directly impact on archaeological assets. It has been agreed that the appointed archaeological consultant will prepare an Archaeological Strategy to detail the scale of archaeological works and the methodologies, standards and guidance to be followed. This Strategy will be prepared in close consultation with the County Council's Principal Archaeologist and, where appropriate the Historic England Regional Science Advisor for the West Midlands.

Built Heritage

There are sixteen designated historic building assets within the study area. The majority of these assets will not be directly impacted by the proposed scheme and indeed, the improved traffic flows may result in a reduced impact on the designated historic buildings and their setting during the operation of the scheme. However, the cultural heritage assessment has indicated two 19th century structures (a brick bridge and a brick sluice) which might experience a slight adverse impact following mitigation. The undesignated Universal Factory (Saint Gobain) complex on Doxey Road will be demolished as part of the Scheme; this significant impact will be mitigated through the preparation of a detailed Level 2 Building Recording in advance of any dismantling works. The details of this study will be contained within the Archaeological Strategy.

Two designated Conservation Areas (Foregate and St. George's) are classed as receptors of high importance. During construction works there may be a slight adverse effect upon the historic character of these areas, however, it is considered that once the Scheme is complete, changes in traffic flow and overall traffic volume may result in a slight beneficial effect on these sensitive areas of historic character.

Historic Landscape

The Scheme extends across six Historic Landscape Character Areas (HLCA) with a seventh (Victoria Park) lying immediately to the southeast of the Scheme. The Scheme is anticipated to have a slight adverse effect on the Doxey Marshes and Sow Valley HLCAs and a slight beneficial effect is anticipated at Victoria Park as a result of reduced traffic congestion in the town centre. No further effects are anticipated to HLCAs.

Noise and Vibration

During the construction works, noise will be generated by the operation of plant and activities such as vegetation clearance and excavation works. Good practice measures and temporary noise barriers will be adopted to alleviate construction noise to nearby residential properties; however, residual construction noise is

anticipated to be above thresholds for short periods of time in the immediate vicinity of the works.

The operation of the Scheme will have a limited effect on road traffic noise levels, with negligible increase in noise across the majority of the Scheme. Several properties are anticipated to experience an increase in noise levels as a result of the Scheme.

Geology, Soils and Contamination

For the most part the Scheme would be constructed on Glaciofluvial Sheet Deposits (Sand and Gravel) or Alluvium (Clay, Silt, Sand and Gravel). Peat deposits are also confirmed across the development area. It is considered that the superficial deposits are unsuitable for the foundations of the proposed viaduct and there is a potential compressibility and settlement risk that could occur following construction of the embankment on the peat deposits. Piles are therefore required for the construction of the Scheme.

On the basis of soil sampling and consideration of the past and present land uses of the area, there is low potential for encountering contaminated land on site, however further soils testing and ground gas monitoring will be undertaken prior to construction and appropriate remedial measures put in place if necessary.

Waste Management issues will be considered as part of a Site Waste Management Plan (SWMP, Appendix 2.3 of Environmental Statement), which would be developed prior to construction by the appointed contractor. Although a SWMP is not a statutory requirement, it follows best practice and ensures waste issues are dealt with in an appropriate and sustainable matter.

Air Quality

The demolition activities associated with the construction of the Scheme have been identified as a potential air quality issue. With the application of good practice construction control measures it would be possible to reduce the impacts of dust at all potentially sensitive receptors e.g. local residential properties. Overall with these measures in place the works should not have a significant effect on human health or Doxey and Tillington Marshes SSSI.

An air quality assessment has been carried out based on modelled traffic data. The results show that emissions of CO₂ within the Scheme in the opening year. However, the operational phase of the proposed Scheme is expected to have a negligible to slight beneficial impact on human health and the pollutant concentrations would be below air quality criteria. It can be considered that the Scheme would not have a significant effect on air quality.

There would be an increase in concentrations of nitrogen oxides and nitrogen deposition rates in a zone of the SSSI adjacent to the road as a result of the Scheme. The habitats affected by raised levels are, however, not thought to be highly sensitive to increase in nutrient levels; therefore the increase predicted is not expected to result in a significant adverse effect.

Pedestrians, Cyclists, Equestrians and Community Assets

The impacts on these users have been considered in terms of journey length, amenity and severance for the forecast years of 2018 and 2033. The study area does not contain a known horse culture and the urban character is unlikely to be attractive to equestrian users.

During construction there will be two pedestrian diversions resulting from the temporary closure of footpath 46 and on the Doxey Road adjacent to Castletown which will have a slight negative impact. Scheme construction is not expected to require any further pedestrian and cyclist diversions.

Once the scheme is built, the new route between the Doxey Road and Foregate Street will provide small journey length benefits for over 1700 households when travelling to Madford Retail Park and the adjacent area. A number of roads will experience increases in traffic flow that will cause severance for pedestrians crossing the road. New pedestrian and cyclist crossing facilities will be provided to mitigate this impact although slight residual negative impacts will remain. An increase in traffic flows will also lead to a reduction in amenity in terms of noise, dirt and exposure to traffic. Mitigation cannot be provided in an urban environment as pedestrians and cyclists need to travel alongside the road to access homes, services and facilities and to provide informal surveillance. Mitigation is not available for noise and landscape quality impacts to the level of amenity for users of the Isabel Trail and footpath 46.

The scheme will provide pedestrian and cycle facilities along the route and provide safer connections to the National Cycle Network on the Doxey Road.

Vehicle Travellers

The Scheme has been designed to help accommodate future development traffic and reduce congestion in the town centre as part of a wider package of measures outlined in the Stafford Borough Integrated Transport Strategy.

The Scheme is anticipated to reduce driver stress on the wider local highway network. Drivers will experience enhanced views of the Doxey and Tillington Marshes SSSI with open views of the marshes along the whole route. High quality signage and road layout will be an essential part of the Scheme to avoid driver frustration and fear of accidents.

Drivers will experience some delay during parts of the construction period, and mitigation measures will be put in place to help offset the impact of these delays.

Planning Policy

The Scheme has been identified as key infrastructure in the new Local Plan to 2031 – ‘The Plan for Stafford Borough’ that was adopted in June 2014. The Scheme is specifically required to deliver Policy Stafford 1 – Stafford Town and Policy Stafford 3 – West of Stafford.

Consideration has been given to key national and local planning policy guidance. The Scheme has been designed, where practicable, to avoid or minimise environmental impacts through mitigation measures in accordance with policy.

Summary of Environmental Effects

The table provided on the following page summarises the specific environmental effects of the Scheme proposals relating to the environmental constraints.

Environmental Effects Summary Table:

Environmental Aspect	Potential Impacts	How the Effect Would be Reduced	Long Term Effect on the Environment
Ecology and Nature Conservation	Habitat loss including Doxey and Tillington Marshes SSSI, Aquatic Habitats, Broadleaved Woodland, Poor Semi-improved Grassland, Swamp, Broadleaved Plantation.	Unnecessary disturbance and loss of habitats is to be avoided. In addition, effected habitats would be replaced and restored where practical.	With these measures in place a beneficial impact is anticipated for all assessed habitats with a moderate beneficial effect anticipated to Doxey and Tillington Marshes SSSI.
	Potential disturbance to and injury/death of protected species during construction and operation of the Scheme.	To avoid disturbance to and injury/death of protected species construction activities will be managed through a CEMP and precautionary working approaches. Specific measures have also been proposed to mitigate operational effects.	With the mitigation measures in place a neutral effect is anticipated on protected species.

Environmental Aspect	Potential Impacts	How the Effect Would be Reduced	Long Term Effect on the Environment
Drainage and the Water Environment	Drainage and the water environment will be modified as a result of the Scheme. Realignment of Broad Meadow Drain and excavation of the flood compensation area has the potential for a slight to moderate adverse effect on surface water quality.	Site specific methodologies would be put in place for the realignment of Broad Meadow Drain, reproofing of Doxey Drain, and the placing of excavated material within Creswell Flash. The construction of a flood compensation area and the addition of SuDs will be included where practicable.	There would be no adverse effects to local water resources during construction or operation. The reinstatement of an area of marshland is considered to be a positive effect as a result of the Scheme with regards to groundwater.
Landscape	Landscape character and views would be modified through the removal of vegetation and the introduction of the new road layout.	Impacts on landscape character would be minimised through landscaping measures which will include woodland and semi-ornamental tree and scrub planting. This will partially screen views of the Scheme.	No significant adverse effect on landscape or visual receptors. A beneficial effect on the landscape/ townscape character is expected as a result of the redevelopment of areas of derelict land and the introduction of structure planting.
Cultural Heritage	Archaeological assets have been identified within the study area and further archaeological remains may be present within the site. There are a number of heritage receptors in proximity to the works with Universal factory and two 19 th century structures	A detailed archaeological strategy and phased programme of archaeological investigation as well as supervision of works by an archaeologist would be utilised where appropriate. Fencing off of effected historic buildings. Landscaping of the Scheme will provide	A slight adverse effect on archaeological and heritage receptors would be expected to remain. Works are anticipated to have a slight beneficial effect to Victoria Park and a number of historic buildings.

Environmental Aspect	Potential Impacts	How the Effect Would be Reduced	Long Term Effect on the Environment
	(a brick bridge and possible brick built sluice) experiencing potential adverse effects.	some screening as vegetation matures.	
Noise and Vibration	Increased noise levels affecting residential properties during construction works and operational road traffic.	Temporary noise barriers and best practise working methods to be detailed in a CEMP. No additional measures are proposed for noise levels during operation.	The majority of residential areas are predicted to experience negligible increases in noise levels; however, some receptors will experience minor to major increases in noise levels as a result of increased traffic flows. A number of properties are expected to experience a decrease in noise levels.
Geology, Soils and Contamination	There is potential to encounter contaminated land. This could lead to the contamination of landscaping areas and the dieback of vegetation. Works have the potential to result in the reduction in ground water and surface water quality.	Extensive ground investigation works and testing has been undertaken predominantly in the central and western areas which is currently being reviewed to inform detailed design and quantitative risk assessment. Good practice guidelines will be followed throughout construction. Design of drainage system will minimise effects of spillage during operation.	All potential adverse effects are reduced to negligible following mitigation.
Air Quality	Demolition and excavation activities associated with	Good practice guidelines and a Dust Management Plan will be utilised	There will be a negligible to slight beneficial effect to local residents. An

Environmental Aspect	Potential Impacts	How the Effect Would be Reduced	Long Term Effect on the Environment
	<p>construction of the Scheme are expected to produce large amounts of dust. Potential increase in road traffic emissions during operation.</p>	<p>during construction.</p> <p>No mitigation measures are proposed for road traffic emissions.</p>	<p>increase in NOx concentrations and nitrogen deposition rates at the SSSI is anticipated.</p> <p>However, as the area of SSSI affected by nitrogen deposition supports scrub and fen habitats which are not considered to be highly sensitive to increases in nitrogen levels the effect is not considered significant.</p>
<p>Pedestrians, Cyclists, Equestrians and Community Assets</p>	<p>Slight reduction in journey length when accessing Madford Retail Park. Positive and negative impacts on amenity at different locations. Creation of moderate or severe severance at 8 locations. Relief from severance at 5 locations.</p>	<p>A number of signalised and informal crossings are proposed along the scheme and affects roads to reduce severance by minimising delay.</p>	<p>Slight negative residual impact for severance as the delay and inconvenience to pedestrians and cyclists will still be more than at present with the mitigation in place. Amenity impacts in terms of noise, dirt and exposure to traffic will remain.</p>
<p>Vehicle Travellers</p>	<p>Views from the road will change as a result of the Scheme. Driver stress will change as a consequence of both the Scheme and the cumulative impact of significant housing and employment growth proposed</p>	<p>Landscape planting without restricting views from the road.</p> <p>Driver stress during construction will be mitigated through appropriate traffic management.</p> <p>The Scheme will reduce traffic flows on town centre</p>	<p>Views of the Doxey and Tillington Marshes SSSI will be opened up, providing a more pleasant driving experience long term.</p> <p>The Scheme will be delivered as part of a wider package of measures as proposed in the Stafford Borough Integrated Transport Strategy</p>

Environmental Aspect	Potential Impacts	How the Effect Would be Reduced	Long Term Effect on the Environment
	in the Local Plan. There will be higher 'driver stress' experienced without delivery of the Scheme.	roads.	2013 (to be delivered by 2033). This will help mitigate traffic levels which has been assessed as part of the evidence for The Plan for Stafford Brough

Viewing the Environmental Statement

You can view the Planning Application and Environmental Statement free of charge during normal office hours from 09:00 until 17:00 at the following locations:

Staffordshire County Council
Stafford Western Access Route Design Team
Floor 3, Staffordshire Place 1
Tipping Street
Stafford
ST16 2DH

Online by following the link: www.staffordshire.gov.uk/westernaccess

A copy of the ES may be purchased in printed form for £100 or in digital form on a CD for £20, by writing to the above address. The Environmental Statement is available to view freely at the Staffordshire County Council Planning Department at the above address.

Your Views

Your views are important. If you wish to support, comment on, or object to the proposed development, you can write to Staffordshire County Council as part of the Planning Application consultation.

The information you send us may need to be passed to colleagues within the Council, or agents acting on our behalf. We will assume that you are content for us to do this. Please ensure that if you want your name or response to be kept confidential, you state this clearly in your response. Confidential responses may be included in any statistical summary of numbers of comments received and views expressed.

Prepared for:



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If you would like this document in another language or format (e.g. large text), please contact us on 0300 111 8000 or email transport.planning@staffordshire.gov.uk

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