Impact Assessment

Version 2016



Assessment of:	North Devon Link Road Proposals for Improvement	
Service:	Planning, Transportation & Environment	

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Section 1 - Background

Description:	Devon County Council is developing a scheme to improve the section of the North Devon Link Road (NDLR) between Borner's Bridge Junction on the A361 north of South Molton and Buckleigh Road junction on the A39 north of Bideford.
	The proposed NDLR Strategy includes junction improvements and widening of sections of the A361 between Borner's Bridge Junction at South Molton and Buckleigh Road junction on the A39 north of Bideford. In October 2017 Cabinet recognised that the approved Strategy could not be delivered as a single scheme because of affordability constraints. Certain elements of the Strategy were prioritised to select the Scheme for submission in the OBC.
	The Scheme to improve the North Devon Link Road comprises:
	 7.5km of widening to upgrade the performance of the NDLR between South Molton and Barnstaple (16km); and Junction improvements to support sites identified for housing and employment opportunities in South Molton, Barnstaple and Bideford.
	The scheme received planning permission for the main works in January 2019, and the objection period for the Compulsory Purchase Order and the Side Roads Order for the main works has also now passed without objection. Subject to cabinet approval to award a contract, advance planting will take place in the 2019 winter season, to enable works to begin on site in 2020.

	Proposals for a pedestrian crossing at Landkey Junction and Bishop's Tawton Roundabout are currently being progressed in line with the scheme's ambition to provide, where possible, segregated pedestrian crossings along the length of the scheme. At Bishop's Tawton the preferred option is an underpass to the west of the roundabout, whilst at Landkey the preferred option is an overbridge (position and nature of ramps yet to be agreed).
Reason for change/review	Reason for change/review:
and options appraisal:	The rationale for the main scheme is outlined in the OBC, which can be found online here:
	The OBC was approved by cabinet for submission to the DfT, and subsequently by the DfT to progress to the Full Business Case stage.
	Subsequently, further changes have been proposed, in particular the inclusion of advance planting (which was a condition of planning following extensive consultation with statutory bodies) and the addition of two segregated pedestrian crossing facilities at Landkey and Bishop's Tawton in line with local requests and the scheme's commitment to, where possible, provide segregated pedestrian crossings along the length of the scheme.
	Options appraisal
	Details of the options appraisal to arrive at the need for the main scheme can be found in the OBC on the scheme website: <u>https://new.devon.gov.uk/ndlr/project-documents</u>
	Advance Planting
	The detail of the advance planting along the length of the scheme was agreed with stakeholders prior to the submission of planning application to ensure the application's success. Significant consultation was undertaken to come to the final design of the planting to ensure that environmental impacts are minimised. The planting therefore forms an essential condition of the planning permission and therefore the schemes success.
	Bishop's Tawton
	A full options appraisal was undertaken for the segregated crossing facility at Bishop's Tawton. Three options were investigated:
	 An at-grade signalised crossing An overbridge An underpass
	An at-grade signalised crossing was discarded for being unacceptably unsafe. Research indicates that there are a significant number of accidents caused by crossing violations where pedestrians fail to correctly judge the gaps between

high speed vehicles when crossing on a red light; a problem which is particularly acute in children, who make up a large proportion of the crossings seen at Bishop's Tawton due to the proximity of a school. An at grade crossing would also impact on traffic flow and could potentially put drivers at risk due to sudden breaking and an increasing chance that drivers will find themselves in "dilemma zones" where they are not sure whether to stop or keep going when approaching a changing light at high speed. A supplementary paper on accidents at signalised crossings on high speed roads can be found as an appendix to the Bishop's Tawton Consultation Report on the scheme website. For the signalised option the choice of the east or west side was equally unacceptable for the reasons detailed above.

An overbridge was considered on both sides of the roundabout and discarded on the basis of the environmental impact. The bridges would be lit and overlook local residents' homes; creating a high level of visual impact and potentially posing a privacy and security risk for local residents. An overbridge would also have the largest footprint of the three options due to the extensive ramps required to achieve the necessary clearance for vehicles to pass under the bridge deck. This, in turn impacts on the amount of land and vegetation clearance required. The long ramps would also require pedestrians to divert furthest from the desire line and may in turn lead to those crossing the road at grade. For these reasons it was considered that neither of the bridge options was suitable.

An underpass was considered on both sides of the roundabout with the solution on the western side being the preferred option. The solution for the eastern side would have a far more significant impact on the surrounding landscape including the diversion of an existing water course. The land also rises up from the junction on this side so the ramps would need to be longer and would need a considerable change to the surrounding earthworks. This in turn would impact the amount of vegetation removal to achieve a suitable secure and safe approach path. For the western side the water course is no longer an issue, and as the land falls away from the junction the approach paths remain highly visible whilst having a minor impact on vegetation removal.

The underpass to the west was taken forward as the preferred option for a mini consultation which was held in Autumn 2018. The consultation provided valuable feedback on the choice of design and on amendments to the preferred design to maximise value and user friendliness. It is recognised that any segregated facility for non-motorised users is a significant structure and will impact on local residents and there is local concern regarding this. However, considerable thought has gone into the assessment of options, consultation process and research into alternatives. In addition, the consultation has identified a number of suggestions that will be taken forward where the design of the improvements can be modified to maximise the benefit of the scheme. Therefore, it is recommended that an underpass placed to the west of the roundabout remains the preferred option.

The following additional amendments are also recommended:

- That high-quality lighting is installed, and the possibility of additional measures such as anti-graffiti paint is considered;

- That the length of the 2-lane approach to the roundabout from the south is lengthened to increase the amount of stacking capacity available during peak hours;
- To introduce a white or yellow box on the A377 at the junction of Oatlands Avenue to give drivers safe and convenient access to the road network;
- That where ever possible high-quality landscaping is introduced, and
- That crossing points to the north and south of the roundabout are provided so that users to the east side of Bishop's Tawton Road can access the underpass on the western side of the roundabout.
A 3D flythrough of the layout is available on the scheme website.
Landkey Junction
Whilst Planning Permission was granted for an 'at grade' uncontrolled crossing for users of Footpath No. 4 at Landkey junction, the Parish Council felt that a more suitable link should be made to the Westacott Development. In line with the NDLR Strategy this would require the crossing to be either a bridge or underpass removing the need to cross at grade. To the north of the roundabout is the start of the watercourse known as Coney Gut which would impact on an underpass regardless of which side of the roundabout it was placed. Diversion of the Coney Gut has already been discussed with the Environment Agency and determined that this would not be acceptable. Therefore, the provision of an overbridge is considered to be the only solution that can be taken forward. The overbridge option at Landkey is still being developed at this time as the implications of various designs need to be understood, either on the environment or the new development

Section 2 - Key impacts and recommendations

Social/equality impacts:	Details of the social/equality impacts are provided in Chapters 6 and 7 of the Technical Appraisal Report, in the Environmental Assessment Report and the Outline Business Case available on the scheme website: <u>https://new.devon.gov.uk/ndlr/project-documents</u>
	An assessment of the social and distributional impacts of the scheme has been undertaken and is reported on in the Economic Case Chapter of the Outline Business Case.
	Advance Planting
	The impact of advance planting will result in a visual improvement not only for users of the road, but also those based nearby for whom the planting forms screening. It will also help maintain local wildlife habitats to the benefit of all in the local area.

	Bishop's Tawton Junction
	Providing an underpass at Bishop's Tawton will improve access for non-motorised users wishing to cross the road. The improvement will particularly benefit those with mobility impairments who may previously may not have been able to cross the road at grade, and children who are statistically more likely to be unable to cross roads at grade safely due to their reduced ability to correctly identify the gaps between traffic. This is especially pertinent as the Bishop's Tawton Roundabout is on the desire line for those travelling between Bishop's Tawton village to the south and Park School to the north.
	Landkey Junction
	Providing an overbridge at Landkey will provide a safe crossing for pedestrians primarily crossing the A361 travelling to or from Landkey village.
Environmental impacts:	A comprehensive assessment of the anticipated environmental effects of the full scheme is provided through an Environmental Assessment Report and summarised in the Economic Case Chapter of the Outline Business Case. The reports are available on the scheme website: <u>https://new.devon.gov.uk/ndlr/project-documents.</u>
	Advance Planting
	The rationale and benefits of the advance planting that has been agreed as a condition of planning permission is detailed in the Environmental Statement (ES) and was submitted as part of the schemes planning application. The planting will be undertaken in 2019 to give plants an opportunity to mature prior to the start of the scheme works in 2020 and is proposed purely from an environmental perspective to minimise the impact of the scheme. It is not anticipated that there will be any negative environmental impact associated with the advance planting.
	Bishop's Tawton Junction
	An underpass at Bishop's Tawton will result in some negative environmental impacts. These will largely be due to the removal of existing landscaping and the widening of the highway boundary. A full environmental assessment will be undertaken as part of the planning application process, which is due to take place in Summer 2019. One positive impact of the roundabout is the promotion of active travel; which may potentially result in the removal of cars from the highway. This in turn will have positive environmental impacts, especially during peak periods when queues are reported to form and idling engines impact air quality.
	Landkey Junction
	An overbridge at Landkey will result in some negative environmental impacts. These will largely relate to the on the ground footprint of the bridge, visual impacts (particularly relating to any cladding and lighting, and the removal of vegetation as a

	result of the scheme. As the design of the overbridge is not yet known it is to possible to state the extent of the environmental impacts. However, stakeholder consultation and further assessment will be undertaken as part of the planning application which will be submitted in 2019.
Economic impacts:	Details of the economic impacts for the full scheme are provided in Chapter 8 of the Technical Appraisal Report and in the Economic Case Chapter of the Outline Business Case available on the scheme website: https://new.devon.gov.uk/ndlr/project-documents.
	Advance Planting
	Advance planting will create no significant economic impacts.
	Bishop's Tawton Junction
	Providing an underpass Bishop's Tawton may create some very limited journey time savings for pedestrians as they no longer must detour or wait for a gap in traffic to cross the road. It is anticipated that the improvement in safety will also cause a reduction in potential accidents, which would produce some minor economic benefits.
	Landkey Junction
	Providing an overbridge at Landkey Junction will create no significant economic impacts, as the footfall for the overbridge is likely to be very low and does not form part of a commuting route for pedestrians.
Other impacts (partner agencies, services, DCC policies, possible 'unintended consequences'):	Key Organisations, particularly statutory bodies such as the Environment Agency, Natural England, Historic England, North Devon Council, Mid Devon Council and Torridge District Council, whose interests will be affected by the scheme, have been engaged as key stakeholders throughout the design process for the main scheme and Bishop's Tawton Junction and have formally, responded to the public consultation and the planning process. Details of their response is provided in the Public Consultation Report available on the scheme website: https://new.devon.gov.uk/ndlr/project-documents.
	Landkey Junction Overbridge is a new addition to the main scheme and will require further consultation with the above organisations.
	During construction there will, unavoidably, be some short-term delays to road users of the NDLR which may have knock- on consequences for nearby parts of the county road network. However, this potential impact is considered to be outweighed by the benefits offered by the scheme.
	Traveller safety and the risks associated with traffic management will be assessed throughout the scheme development.
How will impacts and actions be monitored?	Reduced journey times as a result of increased speed will be monitored through traffic monitoring data. Reduction in peak hour journey times will be considered.

Post construction surveys would be undertaken to measure if the perception of businesses and tourists using the NDLR as a gateway to northern Devon has improved.
Future accident rates and their severity would be measured and compared against existing data to demonstrate that the current accident rates have been reduced.
Accident rates and their severity would be measured and compared against the baseline and information from other similar schemes.
The number of times diversion routes are required and the number of road closures due to maintenance or incidents will be recorded and monitored.
Relevant impacts during the construction period, such as dust emissions, noise impacts and potential impacts on water quality will be monitored by the appointed contractor, and overseen by regulatory agencies, with remedial measures deployed as necessary.
A programme of post construction monitoring and mitigation will form part of the detailed scheme proposals and will be a requirement of the formal planning process.
Housing supply and delivery will be monitored against the Local Plan allocation.
Economic prosperity will be monitored by looking at wages and GVA to determine whether over time they become more in line with the average in the South West and national average figures compared to 2015 levels.

Section 3 - Profile and views of stakeholders and people directly affected

People affected:	The main scheme will affect everyone travelling along the NDLR between Bideford and South Molton and all users of the side roads adjoining the NDLR. As a key strategic route, it is relevant to road users at a national, regional and local scale. 85% of respondents to the 2017 public consultation agreed there was a need to improve the NDLR between South Molton and Bideford.
	It will also affect local residents directly affected by land acquisition and those indirectly affected by visual impact and noise, change in vehicle movements, etc.
	At Bishop's Tawton, a public consultation was held and advertised to local residents who may be impacted by the scheme through a letter drop. The responses gave valuable insight to the views of those living locally and offered several suggestions for improvement to the proposals. The consultation also highlighted some concerns from local residents. As the underpass would pass under the road drivers are unlikely to be impacted by the scheme. Local residents and bodies will be further consulted during the planning process.
	At Landkey, the main people affected are likely to be those living in Landkey Village. Landkey Parish Council were the group that originally proposed a crossing at this location and will continue to be consulted throughout the scheme development and planning process.
Diversity profile and needs assessment of affected	Given the nature of the scheme, it would have no impact on the diversity profile of affected people. Consideration has been given to non-motorised users, rather than focussing on vehicles alone.
people:	The adequacy of the current proposals was tested through public consultation, the results of which influenced the selection of The Scheme and changes to the detailed design of the scheme.
Other stakeholders:	Members of the public and organisations were given the opportunity to express their views on the main scheme via an online consultation and at public exhibitions. The results of the public consultation are provided in the Public Consultation Report available on the scheme website: <u>https://new.devon.gov.uk/ndlr/project-documents</u>
	A further public consultation was held regarding the Bishop's Tawton proposals to give members of the public the chance to comment on the underpass proposals. The report on the consultation can be found on the scheme website: https://new.devon.gov.uk/ndlr/project-documents
	Members of the public were also given the opportunity to comment during the planning process for the main scheme and will be able to comment further on the Landkey and Bishop's Tawton proposals during the relevant planning applications due to be submitted in 2019.

Consultation process:	For the main scheme, online and exhibition events were chosen to enable the widest practical public demographic to be consulted, especially considering the geographic spread of potential road users. Four exhibitions and a week-long unmanned exhibition were held. Alternative formats of documents and assistance for those who needed this was available at exhibitions or on request through the Customer Service Centre channels.
	In addition to the above public consultation, letters were sent to the owners / occupiers of land directly affected by the scheme proposals. Key Stakeholders (especially relevant statutory bodies) were also engaged at earlier stages in the process, including attendance at a 'Value Management' workshop.
	Details of the process used to develop the preferred Scheme is provided in the Public Consultation Report and Scheme Selection Report available on the scheme website: <u>https://new.devon.gov.uk/ndlr/project-documents</u>
	Stakeholders and consultees were given further opportunity to express their opinions during the planning consultation stage.
	Advanced Planting
	The nature of the advanced planting along the route was agreed with key environmental stakeholders prior to the submission of the planning application, following a period of extended consultation and involvement in the design process. This resulted in no objections being raised by environmental stakeholders during the planning process.
	Bishops Tawton Junction
	A pedestrian facility at this location was first proposed following comments from the 2017 consultation on the main scheme proposals, where members of the public suggested that such a facility should be provided. An options assessment was then undertaken to reach an underpass option, which was presented in a further public consultation in autumn 2018. The consultation responses provided valuable feedback on the proposals. It is recognised that any segregated facility for non-motorised users is a significant structure and will impact on local residents and there is local concern regarding this. However, considerable thought has gone into the assessment of options, consultation process and research into alternatives. In addition, the consultation has identified a number of additional comments that will be taken forward where the design of the improvements can be modified to maximise the benefit of the scheme.
Research and information used:	The scheme takes into account the government design standards Design Manual for Roads and Bridges (DMRB) http://www.standardsforhighways.co.uk/ha/standards/dmrb/index.htm and DfT 'Transport Analysis Guidance (TAG)'
	A Strategic Outline Business Case (SOBC) was submitted to the DfT in October 2016. In response to the SOBC the DfT responded with a letter to confirm the decision of Ministers to provide the remainder of the funding contribution from the DfT totalling £1.5m for development work on the NDLR up to and including the production of an Outline Business Case

(OBC), which was submitted to the DfT on December 2017 and approved in May 2018. DCC has now received a further £4 million to develop a Full Business Case (FBC).
National guidance and procedures have been followed to carefully define and assess a wide range of environmental risks, which guided the scheme development and assessment and included the identification of avoidance, mitigation, compensation and enhancement measures and any monitoring requirements.

Background Analysis This section describes how relevant questions and issues have been explored during the options appraisal.

Section 4a - Social Impacts

Giving Due Regard to Equality and Human Rights

The local authority must consider how people will be affected by the service, policy or practice. In so doing we must give due regard to the need to:

- Eliminate unlawful discrimination, harassment and victimisation
- Advance equality of opportunity and
- Foster good relations.

Where relevant, we must take into account the protected characteristics of age, disability, gender, gender reassignment, pregnancy and maternity, marriage and civil partnership, sexual orientation, race, and religion and belief.

This means considering how people with different needs get the different services they require and are not disadvantaged, and facilities are available to them on an equal basis in order to meet their needs; advancing equality of opportunity by recognising the disadvantages to which protected groups are subject and considering how they can be overcome.

We also need to ensure that human rights are protected. In particular, that people have:

- A reasonable level of choice in where and how they live their life and interact with others (this is an aspect of the human right to 'private and family life').
- An appropriate level of care which results in dignity and respect (the protection to a private and family life, protection from torture and the freedom of thought, belief and religion within the Human Rights Act and elimination of discrimination and the promotion of good relations under the Equality Act 2010).
- A right to life (ensuring that nothing we do results in unlawful or unnecessary/avoidable death).

The Equality Act 2010 and other relevant legislation does not prevent the Council from taking difficult decisions which result in service reductions or closures for example, it does however require the Council to ensure that such decisions are:

- Informed and properly considered with a rigorous, conscious approach and open mind, taking due regard of the effects on the protected characteristics and the general duty to eliminate discrimination, advance equality and foster good relations.
- Proportionate (negative impacts are proportionate to the aims of the policy decision)
- Fair
- Necessary

- Reasonable, and
- Those affected have been adequately consulted.

Characteristics	Describe any actual or potential negative consequences (e.g. disadvantage or community tensions) for the groups listed. (Consider how to mitigate against these).	Describe any actual or potential neutral or positive outcomes for the groups listed. (Consider how to advance equality/reduce inequalities as far as possible).
All residents (in general):	 The entire scheme would have adverse impacts on travellers during the construction phase, in particular due to the increase in construction vehicles, traffic management and diversion routes. Some road closures may be required. At Bishop's Tawton particularly, some land owners may see a reduction in their land value due to the increased 	An online consultation and public exhibitions were chosen to allow the full public demographic to be consulted for the main scheme. All travellers will benefit from improved journey times, perceived reliability, reduced accident severity and Wider Economic Impacts as a result of improved connectivity. Improved alignment, better separation and reduced accidents would reduce driver stress.
	 size and proximity of the road. It is anticipated that any change in value will be small due to the nature of the works and the aspiration to introduce high quality planting to screen properties from the road. Crossing the live carriageway will become more difficult under the proposals due to an increase in road width 	A strategic aim of the scheme is to improve the economy of northern Devon. The benefits of a more prosperous economy will be felt by all groups. With regards to deprivation and lack of opportunities the area significantly lags behind the rest of the country in terms of Social Mobility. The scheme would have a positive impact on social mobility.
	along the length of the scheme, though the improvements at Landkey and Bishop's Tawton will provide a segregated route, removing the need to cross the live carriageway entirely at these locations.	The proposed improvements to some of the junctions would be beneficial to the safe movement of all users. The impact of the proposed segregated crossings would be improved access for local residents, who would no longer have to cross a live carriageway.
Age (from young to old):	Younger and older age groups who are less likely to drive a car could be more impacted by the severance caused by the increased size of the road along the length of the scheme where segregated crossings have not been proposed.	55% of the public consultation respondents were over 55 which indicates a good level of engagement with this group. At the Bishop's Tawton consultation, a number of responses were provided to an informal consultation held by the local school, which provided information on the behaviour of children locally.

		Younger and older age groups who are less likely to drive a car will feel a lesser benefit from the road improvement aspects of the main scheme, though they may feel some benefit from improved NMU facilities such as pedestrian crossing facilities. At the additional improvements proposed at Landkey and Bishop's Tawton younger and older residents may feel the benefit of the segregated crossings more highly, as they are more likely to travel on foot. This is particularly true at Bishop's Tawton, were surveys show that a high proportion of pedestrians currently crossing the roundabout at grade are children.
Disability (incl. sensory, mobility, mental health, learning disability, ill health) and carers of disabled people:	Disabled people who are less likely to drive a car could face increased severance from road widening. Consultation responses highlighted concerns of parents caring for disabled children in houses near to the proposed scheme, who felt that their children's wellbeing may be disproportionately compromised by an increase in local traffic (due to increases in noise and a reduction in air quality).	 5% of consultation respondents considered themselves to have a disability. In addition, a number of respondents (who will not be captured in the above 5%) raised concerns on behalf of others with a disability (for example children). Disabled people who are less likely to drive a car will feel a lesser benefit from the scheme, though they may feel some benefit from improved NMU facilities, including those proposed at Landkey and Bishop's Tawton. Air quality and noise assessments have been undertaken and show that the effect of the scheme, once built, will be neutral in the case of air quality and negligible to minor in the case of noise.
Culture/ethnicity: nationality, skin colour, religion and belief:	Neutral	Neutral
Sex, gender and gender identity (including Transgender & pregnancy/maternity):	Neutral	Neutral

Sexual orientation:	Neutral	Neutral
Other socio-economic factors such as families, carers, single people/couples, low income, vulnerability,	Northern Devon has a higher than average level of low- income residents who may be less likely to drive.	Consultation materials were presented using language that was non-technical, with diagrams used to demonstrate more complex technical information, to improve the accessibility of the material to all education levels.
education, reading/writing skills, 'digital exclusion' and rural isolation.		Due to proposed NMU facilities that remove the need to cross the live carriageway, the impact on low income residents less likely to own a car across the entire scheme is considered neutral. In the instances of Bishop's Tawton and Landkey the impact of including the additional segregated crossings will be a net positive benefit.
		The strategic aim of enhancing the local economy in northern Devon could result in a reduction of unemployed and low- income residents as well paid job opportunities become more available. The 'trickle down' effect of an improved economy could also have a positive impact on other socio-economic factors.
Human rights considerations:	Neutral	Neutral

Section 4b - Environmental impacts

An impact assessment should give due regard to the following activities in order to ensure we meet a range of environmental legal duties.

The policy or practice does not require the identification of environmental impacts using this Impact Assessment process because it is subject to (please select from the table below and proceed to the 4c, otherwise complete the environmental analysis table):

Devon County Council's Environmental Review Process for permitted development highway schemes.
Planning Permission under the Town and Country Planning Act (1990).
Strategic Environmental Assessment under European Directive 2001/42/EC "on the assessment of the effects of certain plans and programmes on the environment".

	Describe any actual or potential negative consequences.	Describe any actual or potential neutral or positive outcomes.
	(Consider how to mitigate against these).	(Consider how to improve as far as possible).
Reduce waste, and send less waste to landfill:	The design development would look to refine the alignment design to reduce the volume of surplus earthworks without generating earthwork features that detract from the landscape characteristics. A waste management plan, which includes measures used to minimise the generation of waste during the construction process, was produced as part of the planning submission and can be found on the planning website (link available on the project website)	
Conserve and enhance biodiversity (the variety of living species):	 Improvements of junctions would result in: Potential loss of foraging habitat and disturbance from lighting on barbastelle bats which are qualifying feature of Exmoor and Quantocks Oakwoods SAC. Potential degradation and disturbance to habitats used by overwintering birds from Taw-Torridge Estuary SSSI; Potential impacts to two County Wildlife Sites, and three Unconfirmed Wildlife Sites, such as possible loss of habitat and degradation of quality and function of retained habitat; Direct loss and/or degradation to Biodiversity Networks, Habitats of Principle Importance in England and habitats included in Devon Biodiversity Action Plan along the Scheme; and Disturbance of key habitats for, and direct impacts to, protected and/or principally 	Standard mitigation measures will be implemented at the design phase to avoid impacts where possible and reduce potential impacts during construction and operation. Mitigation may include enhancing retained habitats, minimise the loss of key habitats, maintain key north/south dispersal corridors across the Scheme using culverts and structural planting, undertake compensation planting, appropriate lighting design to minimise effects on wildlife and design to include connectivity routes over the Scheme. Disturbance to ecological receptors as a result of construction would be a short-term impact. Opportunities for enhancement will also be sought across the Scheme. The impact on protected species is considered to be neutral based on the assumption that mitigation is fully implemented and species would be able to use habitats created on site once established. During construction and establishment of new habitats there would be suitable adjacent habitats that can be used by protected species in the short term.

	important species such as bats, birds, hazel dormouse, otters and reptiles.	
Safeguard the distinctive characteristics, features and special qualities of Devon's landscape:	 Improvement of junctions would result in the following landscape impacts: The minor permanent loss of woodland plantation within Castle Hill Registered Park and Garden. This would open up some views on traffic and construction activity mainly from nearby receptors; Improvement of West Buckland Junction would also result in permanent loss of agricultural land under the proposed embankments northwest of the junction, and permanent loss of woodland. New planting would re-establish the former local character and changes would be less perceptible; New embankments at West Buckland Junction would be better integrated but the changes on landform within the former green field would remain evident; The loss of some Monterey cypress at Bishop's Tawton Roundabout due to widening to the north and loss of vegetation and trees to the south to the rear of residential properties; and The loss of woodland vegetation and agricultural land at Landkey Junction. 	In some instances, the new screening provided would reduce the visual impact of the road more than the current situation. Works to the underpass to the south of Bishop's Tawton have been modified to reduce the impact as much as possible on the existing vegetation and trees.

	establishment of new vegetation, changes would be less perceptible. Widening of the road would result in minor permanent change to landform and loss of vegetation within highway boundary on both sides of the road, including woodland plantation within Gowlersmoor Plantation and Castle Hill Registered Park and Garden. This would open up some views on traffic and construction activity mainly from receptors close to the NDLR corridor.	
	Further refinement of the highway design through the iterative design process and in relation to enhanced landscape and ecology mitigation opportunities or additional mitigation measures could reduce the overall significance of adverse effects	
Conserve and enhance the quality and character of our built environment and public spaces:	The overall Townscape impact has been assessed as slight adverse. Improvements of junctions would result in slight change in views from some public rights of way surrounding Landkey Junction, West Buckland Junction and Borner's Bridge Junction, due to loss of vegetation that would exacerbate existing views and open up new views on road and traffic.	
Conserve and enhance Devon's cultural and historic heritage:	 Improvements of junctions would result in: A temporary impact due to the loss of tree screening on the settings of Castle Hill Registered Park and Garden; Goulds Leary Grade II Listed; Buckingham Leary Grade II Listed; and High Down Cottage Grade II Listed. The Castle Hill Registered Park and Garden is Grade I Listed, making it of national importance and high significance; 	

Minimise greenhouse gas emissions:	 The construction of road widening would cause: A temporary impact due to the loss of tree screening on Yeoland House, Grade II Listed; and A temporary increased visual intrusion into the valley landscape until screen planting matures. Following refinement of the highway design and additional sensitive detailed mitigation, particularly at the West Buckland Junction, it is anticipated that the significance of adverse effects would be reduced in the long term. The trustees of the estate and Historic England have been consulted with throughout the design process. Link improvements bring about vehicle speed increases, which in turn lead to vehicles consuming more fuel and marginally increasing CO2 emissions. 	The Scheme brings about a reduction in CO2 emissions per vehicle as a result of reduced congestion and more freely flowing traffic at junctions to the south of Barnstaple. This reduction is offset slightly by the increase in vehicle flows
	 The construction work at the West Buckland Junction would cause a largely temporary increased visual intrusion into the valley landscape until screen planting matures; and The proposed overbridge would be directly in vision of Buckingham Leary and would obscure views across the road to the Castle Hill estate side of the valley. Screen planting would eventually mature again and any impact is considered temporary from a visual perspective. 	

Minimise pollution (including air, land, water, light and noise):	Varying impacts between Negligible and Minor increases in noise impact levels. Adverse effects are predicted where works are required in proximity to watercourses, where pollutants are more easily mobilised into watercourses or where works may interrupt flow regimes, reduce available floodplain storage or increase surface water runoff rates/volumes (in particular at the Bishop's Tawton, Portmore and Borner's Bridge Junctions). At the Borner's Bridge Junction, the junction improvement would result in change in flow dynamics and the requirement for additional floodplain compensation. Introduction of new roundabouts, which must be lit, will increase light pollution. There are no properties adjacent to the sites where new lighting is proposed and the impact of this is considered negligible. Lighting will have an impact on bats.	Overall, reductions in congestion at junctions lead to slight decreases in emissions per vehicle as a result of the more smoothly flowing traffic. During the Operational Phase, the Scheme will reduce congestion and the likelihood of traffic accidents on the route, therefore reducing the likelihood of accidental pollutant releases. The Scheme will also result in the general betterment of the drainage design, relative to the existing situation, therefore reducing the likelihood of flooding or of pollutants mobilising into watercourses.
Contribute to reducing water consumption:	Increased water consumption from activities during construction.	Reduction in water consumption during maintenance holiday.
Ensure resilience to the future effects of climate change (warmer, wetter winters; drier, hotter summers; more intense storms; and rising sea level):	Neutral	Neutral
Other (please state below):		An Environmental Impact Assessment Report, which details the environmental impacts and mitigation measures considered for the main scheme, is available on the scheme website: <u>https://new.devon.gov.uk/ndlr/project-documents</u> .

	An environmental management plan and construction environmental management plan are being produced to provide a framework for recording environmental risks, commitments and other environmental constraints and to identify the structures and processes that will be used to manage and control these aspects.
	All impacts for Bishop's Tawton and Landkey Junction Footbridge are being further assessed through the planning process.

Section 4c - Economic impacts

	Describe any actual or potential negative consequences.	Describe any actual or potential neutral or positive outcomes.
	(Consider how to mitigate against these).	(Consider how to improve as far as possible).
Impact on knowledge and skills:	No specific impact identified at this stage	The scheme would enhance the economic prosperity and competitiveness of northern Devon, both nationally and in line
Impact on employment levels:	No specific impact identified at this stage	with other areas of Devon and support housing and employment
Impact on local business:	There is the possibility that improving transport connections between northern Devon and the rest of the UK could make commuting to areas outside of northern Devon more attractive to residents in the local area.	 development opportunities in northern Devon by: Increasing overtaking opportunities from 10% to 50%, reducing journey times, reducing the potential for accidents and increasing resilience. Increasing capacity, reducing congestion and reducing the potential for accidents. The effect of investment aims to reduce peak hour journey times by between 10% and 20% by 2037 compared to a non-intervention scenario. Opening up key areas for development and accelerate growth in the Local Plan.

Section 4d -Combined Impacts

Linkages or conflicts between social, environmental and economic impacts:	Please refer to the Technical Appraisal Report, Environmental Assessment Report and Outline Business Case available on the scheme website: <u>https://new.devon.gov.uk/ndlr/project-documents.</u>
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Section 5 - 'Social Value' of planned commissioned/procured services:

How will the economic, social and environmental well-being of the relevant	The primary objectives of the scheme will all have positive effects on the
area be improved through what is being proposed? And how, in conducting	economic, social and environmental well-being of the area.
the process of procurement, might that improvement be secured?	
	In preparing the specific scheme designs, the standard County Council
	procurement rules will be followed.