

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

Head of Service:	Dave Black
Date of sign off by Head Of Service/version:	11/06/18 Version 9 (Post OBC Submission)
Assessment carried out by (incl. job title):	Rachel Walker – Assistant Project Manager

Section 1 - Background

Description:	<p>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.</p> <p>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.</p> <p>The Scheme to improve the North Devon Link Road comprises:</p> <ul style="list-style-type: none"> • 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. <p>The junction improvements are required to enable housing developments to take place without having a material impact on the safety (and capacity) of the junctions. Although there are agreements with developers to contribute to the cost of the junction improvements, the funding would not be forthcoming until the development is firmly established or in some cases complete, so the housing developments are potentially stalling.</p> <p>The link improvements would upgrade the road width to 13.5 metres and would include a hatched metre strip through the centre of the road and the installation of average speed cameras. This would increase the overtaking opportunities from</p>
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	<p>approximately 10% to 50% and be an improvement in road safety.</p> <p>The Scheme has been split into two packages:</p> <ul style="list-style-type: none"> • Mainline works between South Molton and Barnstaple, including Landkey and West Buckland Junction Improvements, which requires an EIA and planning; and • Discrete junctions (Buckleigh Road, Heywood Road, Westleigh, Bishop’s Tawton and Borner’s Bridge), which are permitted development. <p>The scheme is currently being progressed through to submission of planning in October 2018 for the mainline works and Design, Specification, Contract & Selection Questionnaire (SQ) Preparation for the mainline works and discrete junctions.</p>	
<p>Reason for change/review and options appraisal:</p>	<p><u>Reason for change/review:</u></p> <p>The NDLR is the key strategic link connecting northern Devon to the rest of the country via the M5. Locally, there has been a long-term concern that the strategic transport connections to the northern Devon area are unsuitable for a developing economy. This has resulted in considerable pressure from the public, businesses and politicians for improvements to the road network. The northern Devon area has one of the lowest levels of economic performance in the country and there has been concern that poor connectivity is a key limitation to unlocking growth.</p> <p>The NDLR is predominantly single carriageway with limited opportunities for overtaking, has junctions with safety issues and limited scope to facilitate economic development.</p> <p>These issues lead to problems such as:</p> <ul style="list-style-type: none"> • Significant congestion at the key junctions, particularly at peak times; • Fluctuating journey times and perception that there is a lack of reliability between northern Devon and the wider transport network, especially the national network key access points at Junction 27 of the M5 and Tiverton Parkway railway station, particularly in the peak season. • Higher than average accident severity rate for collisions that occur on the NDLR when compared to other A roads in Devon; and • Poor network resilience, meaning even small scale works or incidents result in a road closure. <p>Improvements to the NDLR would facilitate Devon County Council’s Strategic aims, which are to:</p> <ul style="list-style-type: none"> • enhance the economic prosperity and competitiveness of northern Devon, both nationally and in line with other areas of Devon; and • support housing and employment development opportunities in northern Devon. 	

Options appraisal:

The process of option assessment has taken place over three years between 2015 and 2017. The culmination of this work has led to the identification of a scheme that optimises a range of criteria fulfilling the DfT and local objectives. It is affordable and deliverable within existing constraints.

To support the strategic aims, objectives have been developed. These reflect the differing issues identified, which are principally connectivity issues between Bideford and Barnstaple and between Barnstaple and the wider transport network.

An initial set of objectives for the NDLR scheme were defined in the Options Assessment Report dated October 2016.

The objectives were refined and agreed with key stakeholders at two Value Management Workshops held in April 2017 and October 2017.

The **Objectives** are:

- Reducing journey times for commercial and non-commercial journey purposes between:
- Barnstaple and Bideford, (Significant congestion occurs at the key junctions on the corridor particularly at peak times.)
- M5 and Barnstaple, (To improve connectivity between Bideford, Barnstaple and the wider transport network, including key access points to the national transport network (mainline stations at Tiverton Parkway, and Junction 27 of the M5), particularly in peak season)
- Improving highway safety through reducing the rate of fatal and serious accidents on the NDLR. (Accidents occur at various locations due to overtaking and junctions.)
- Improving network resilience through reducing the effects of accidents and incidents on the NDLR. (The nature of the road at 7.3 meters wide means any even small scale works or incident can mean a road closure.)
- These objectives are to be achieved while minimising adverse social and environmental impacts and, where possible, achieving net environmental benefits.

Following a public consultation in July 2016, the need for a scheme was agreed (with 95% of respondents agreeing the need for improvement to the road), and it was concluded that improvements to links and junctions between Bideford and South Molton should be presented as the preferred scheme option in the Strategic Outline Business Case (SOBC) submitted to the Department for Transport in late 2016. The process of deciding the preferred option is detailed further in the SOBC, which available on the scheme website: <https://new.devon.gov.uk/ndlr/project-documents>

Following the submission of the SOBC, further work was undertaken to develop the scheme option. Further details of the process used to develop the scheme option for assessment is provided in Chapter 4 of the Technical Appraisal Report

available on the scheme website: <https://new.devon.gov.uk/ndlr/project-documents>

A public consultation on the scheme option was held between the 9th June, 2017 and the 28th July, 2017.

Following the consultation further work was undertaken to identify a strategy for the improvement of the NDLR including:

- Assessment of the suggested alternative proposals that emerged from the public consultation to define the updated scheme proposals; and
- Distillation of the salient issues from a framework of many factors including costs, benefits and impacts on people and the environment in order to select The Scheme to be recommended for inclusion in the OBC.

An Outline Business Case (OBC) for The Scheme was submitted to the Department for Transport in December 2017.

Further details of the process used to identify a strategy for the improvement and select The Scheme is provided in the Public Consultation Report, Scheme Selection Report and Outline Business Case available on the scheme website:

<https://new.devon.gov.uk/ndlr/project-documents>

Section 2 - Key impacts and recommendations

Social/equality impacts:	<p>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: https://new.devon.gov.uk/ndlr/project-documents</p> <p>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.</p> <p><u>In summary:</u></p> <p>Commuting and other users will be impacted due to delays during construction and maintenance. The Scheme leads to journey time savings on the NDLR and vehicle operating cost benefits for business users due to reduced congestion brought about by increased capacity along the route.</p> <p>Improved alignment, improved overtaking opportunities, better separation and reduced accidents as well as localised enhanced views over the surrounding countryside would reduce driver stress.</p> <p>Increasing safe overtaking opportunities and removing right turns would reduce accidents.</p> <p>Overall vehicle operating costs would reduce because of the reduced congestion.</p> <p>Where land is required, there would be some impact on agricultural land due to land take, severance, increased management time resulting from altered field layouts and reduction in income from basic payment scheme. Properties may be affected where the widening is on that side of the road due to increased visibility and potential increase in noise. Properties may be devalued. Beneficial effects would result from the proposed improvements for businesses from improved access and improved journey times for business activities.</p> <p>The scheme affects a number of footpaths that cross the NDLR. These are being considered during the preliminary design stage. Beneficial effects would result from the improved provision for pedestrians at Borner's Bridge Junction, Bishop's Tawton and Heywood Road Roundabouts.</p>
Environmental impacts:	<p>A comprehensive assessment of the anticipated environmental effects of the 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: https://new.devon.gov.uk/ndlr/project-documents.</p> <p>All impacts are being further assessed through the Environmental Impact Assessment process. Fortnightly design team meetings with environmental consultants have ensured that where possible environmental impacts are mitigated.</p> <p><u>In summary:</u></p>

As the scheme is predominantly within the corridor of the existing road the largest adverse environmental impact will be during construction and at the year of opening.

Noise: Varying impacts between Negligible and Minor increases in noise impact levels. There are no properties currently predicted to show Moderate or Major impacts at this stage. Most of impacts relate to Landkey Junction (northwest of Landkey and around the proposed Westacott Development) and to Bishop's Tawton Roundabout.

Air quality: Overall, reductions in congestion at junctions lead to slight decreases in emissions per vehicle as a result of the more smoothly flowing traffic. The Scheme's impact on air quality has been assessed as neutral.

Greenhouse Gases: 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 through the area. Link improvements bring about vehicle speed increases, which in turn lead to vehicles consuming more fuel and marginally increasing CO2 emissions.

Cultural heritage: The highest environmental impacts will be on Castle Hill Registered Park and Garden during construction and operation due to the proposed overbridge at the West Buckland junction. The overall Historic Environment impact has been assessed as moderate adverse due to the impacts at the West Buckland Junction. 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.

Landscape: The overall Landscape impact for the Scheme has currently been assessed as moderate adverse. The improvements to Landkey, West Buckland and Borner's Bridge Junctions represent the highest impact and would result in minor permanent change to landform and loss of vegetation. 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.

Townscape: 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.

Biodiversity: 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

Water Quality/Flood Risk: Following the application of mitigation measures and following best practice guidelines, the

	<p>Scheme will result in negligible impacts across most of its extent. 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). 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.</p> <p>Groundwater: No significant impacts on abstractions are predicted.</p> <p>Geology and Soils: When adopting standard mitigation measures the environmental effects with regard to geodiversity and contaminated land are considered neutral with the exception of the construction of cuttings, embankments and bridge footings in areas of significant superficial deposits, which present a risk of instability and / or consolidation.</p> <p>A range of mitigation principles and strategies have been devised including the adoption of innovative and sustainable solutions. The strategies also include the adoption of compensatory measures to offset unavoidable impacts as well as the inclusion of opportunities for environmental enhancement in line with the scheme objectives.</p> <p>The mitigation principles and strategies are presented in Chapter 13 of the Environmental Assessment Report.</p>
Economic impacts:	<p>Details of the economic impacts 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.</p> <p>The districts of North Devon and especially Torridge are severely economically deprived, with the northern Devon economy falling behind other areas of the county. The districts have some of the lowest average weekly wages in the country. Torridge is ranked close to the lowest of work-placed earnings in Great Britain.</p> <p>Gross Value Added (GVA) per head in parts of northern Devon is just 60% of the UK as whole.</p> <p>The Scheme leads to journey time savings on the NDLR and vehicle operating cost benefits for business users due to reduced congestion brought about by increased capacity along the route.</p> <p>The Scheme would have a neutral impact on reliability as although the Scheme results in a large reduction in stress, flows are relatively low due to the single carriageway route.</p>
Other impacts (partner agencies, services, DCC policies, possible 'unintended consequences'):	<p>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 and have formally, responded to the public consultation. Details of their response is provided in the Public Consultation Report available on the scheme website: https://new.devon.gov.uk/ndlr/project-documents.</p>

	<p>They will also be consulted as part of the planning process.</p> <p>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.</p> <p>Traveller safety and the risks associated with traffic management will be assessed throughout the scheme development.</p>
<p>How will impacts and actions be monitored?</p>	<p>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.</p> <p>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.</p> <p>Future accident rates and their severity would be measured and compared against existing data to demonstrate that the current accident rates have been reduced.</p> <p>Accident rates and their severity would be measured and compared against the baseline and information from other similar schemes.</p> <p>The number of times diversion routes are required and the number of road closures due to maintenance or incidents will be recorded and monitored.</p> <p>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.</p> <p>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.</p> <p>Housing supply and delivery will be monitored against the Local Plan allocation.</p> <p>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.</p>

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

<p>People affected:</p>	<p>The 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.</p> <p>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.</p> <p>Information was gathered from the directly and indirectly affected landowners during the public consultation phase. Their views are summarised as follows:</p> <ul style="list-style-type: none"> • Residents living at Oatlands Avenue, between Portmore and Bishop’s Tawton Roundabouts, Holmacott and Swimbridge are concerned that widening closer to their properties would: <ul style="list-style-type: none"> ○ Increase noise pollution ○ Increase air pollution ○ Increase visibility of the NDLR ○ Devalue property <p>They are also concerned about blight.</p> • There are concerns that the proposed West Buckland Junction would impact the historic landscape of the Castle Hill Estate.
<p>Diversity profile and needs assessment of affected people:</p>	<p>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.</p> <p>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.</p>
<p>Other stakeholders:</p>	<p>Members of the public and organisations were given the opportunity to express their views on the 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: https://new.devon.gov.uk/ndlr/project-documents</p> <p>A Communications Plan has been produced which identifies Key Stakeholders, other stakeholders and consultees including local councils, specialist interest groups, businesses and organisations. Key Stakeholders include the Environment Agency, Natural England, Historic England, North Devon Council, Mid Devon Council and Torridge District Council. Consultation with Key Stakeholders has been undertaken throughout the scheme development process,</p>

	<p>including:</p> <ul style="list-style-type: none"> • Meeting with individuals; • Seeking comment on the Environmental Scoping Report; • Attendance at VM workshops; • Providing formal responses during the public consultation; • Seeking stakeholder responses on the EIA Scoping Opinion request; • Pre-app discussions. <p>Key stakeholders will be given further opportunity to express their opinions during the planning consultation stage.</p> <p>Neither the Environment Agency nor Natural England have any objections to the proposed improvements, however Historic England has serious concerns regarding the proposed new junction at West Buckland, as it is likely to result in significant harm to a number of designed vistas at the grade I Listed landscape of Castle Hill Estate. There have been several meetings with Historic England to address their concerns and determine a suitable solution for the West Buckland junction overbridge.</p> <p>Both Torridge District Council and North Devon Councils support the proposals, whilst Mid Devon District Council are disappointed that the proposals no longer include the Mid Devon District.</p>
<p>Consultation process:</p>	<p>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.</p> <p>In addition to the above public consultation, letters were sent to the owners / occupiers of land directly affected by the scheme proposals. A number of Key Stakeholders (especially relevant statutory bodies) were also engaged at earlier stages in the process, including attendance at a 'Value Management' workshop.</p> <p>More information on how the public consultation was carried out, and results of the public consultation are provided in the Public Consultation Report available on the scheme website: https://new.devon.gov.uk/ndlr/project-documents The key concerns expressed by Stakeholders and consultees were:</p> <ul style="list-style-type: none"> • Safety of the proposed wide single carriageway standard 2+1; • Safety of the proposed urban 2+2 carriageway standard; • Environmental impacts including, noise, visual, air quality and ecology; • Impacts of increased noise levels in particular the impact of the widening between Portmore and Lake Roundabouts and near Holmacott;

	<ul style="list-style-type: none"> • Effects on designed vistas at the grade I Listed landscape of Castel Hill Estate; • South Molton to Tiverton not being considered; • Dual carriageway not being considered; and • Alternative junction arrangements. <p>In response to the information gathered from the public consultation, further work was undertaken to identify a strategy for the improvement of the NDLR including:</p> <ul style="list-style-type: none"> • Assessment of the suggested alternative proposals that emerged from the public consultation to define the updated scheme proposals for each of the three sections; • Distillation of the salient issues from a framework of many factors including costs, benefits and impacts on people and the environment in order to select The Scheme to be recommended for inclusion in the OBC. <p>Further 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: https://new.devon.gov.uk/ndlr/project-documents</p> <p>Stakeholders and consultees will be given further opportunity to express their opinions during the planning consultation stage.</p>
<p>Research and information used:</p>	<p>The scheme takes into account the government design standards Design Manual for Roads and Bridges (DMRB) http://www.standardsforhighways.co.uk/ha/standards/dmr/index.htm and DfT 'Transport Analysis Guidance (TAG)'</p> <p>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.</p> <p>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.</p>

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):	<p>The 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.</p> <p>Some land owners may see a reduction in their land value due to the increased size and proximity of the road. Of the 563 respondents to the 2017 public consultation, 24% believed that they owned land that could be affected by the scheme. Land owners were also engaged with at public consultation exhibitions and through ongoing correspondence. In a number of instances, comments from land owners have informed updates to the scheme design.</p> <p>Crossing the live carriageway will become more difficult under the proposals due to an increase in road width.</p>	<p>An online consultation and public exhibitions were chosen to allow the full public demographic to be consulted.</p> <p>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.</p> <p>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.</p> <p>The proposed improvements to some of the junctions would be beneficial to the safe movement of all users.</p>
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.	<p>55% of the public consultation respondents were over 55 which indicates a good level of engagement with this group.</p> <p>Younger and older age groups 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 such as pedestrian crossing facilities at Heywood Road, Bishop's Tawton and Borner's Bridge Roundabouts.</p>
Disability (incl. sensory,	Disabled people who are less likely to drive a car could	5% of consultation respondents considered themselves to have

<p>mobility, mental health, learning disability, ill health) and carers of disabled people:</p>	<p>face increased severance from road widening.</p> <p>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).</p> <p>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.</p>	<p>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).</p> <p>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 such as pedestrian crossing facilities at Heywood Road, Bishop's Tawton and Borner's Bridge Roundabouts.</p>
<p>Culture/ethnicity: nationality, skin colour, religion and belief:</p>	<p>Neutral</p>	<p>Neutral</p>
<p>Sex, gender and gender identity (including Transgender & pregnancy/maternity):</p>	<p>Neutral</p>	<p>Neutral</p>
<p>Sexual orientation:</p>	<p>Neutral</p>	<p>Neutral</p>
<p>Other socio-economic factors such as families, carers, single people/couples, low income, vulnerability, education, reading/writing skills, 'digital exclusion' and rural isolation.</p>	<p>Northern Devon has a higher than average level of low-income residents who may be less likely to drive.</p> <p>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.</p>	<p>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 is considered neutral.</p> <p>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.</p>
<p>Human rights considerations:</p>	<p>Neutral</p>	<p>Neutral</p>

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".

	<p>Describe any actual or potential negative consequences.</p> <p>(Consider how to mitigate against these).</p>	<p>Describe any actual or potential neutral or positive outcomes.</p> <p>(Consider how to improve as far as possible).</p>
<p>Reduce waste, and send less waste to landfill:</p>	<p>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 audit statement, which includes measures used to minimise the generation of waste during the construction process, will be produced as part of the planning submission.</p>	
<p>Conserve and enhance biodiversity (the variety of living species):</p>	<p>Improvements of junctions would result in:</p> <ul style="list-style-type: none"> • 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 important species such as bats, birds, hazel 	<p>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.</p>

	dormouse, otters and reptiles.	
Safeguard the distinctive characteristics, features and special qualities of Devon's landscape:	<p>Improvement of junctions would result in the following landscape impacts:</p> <ul style="list-style-type: none"> • 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 north-west 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 views opened up to traffic from residential properties to the south due to loss of vegetation; and • The loss of woodland vegetation and agricultural land at Landkey Junction. <p>There would be some minor impact on the confluence of two minor water courses to the northwest of Borner's Bridge Junction arising from realignment of stream channels and extensions to culverts. After establishment of new vegetation, changes would be</p>	In some instances, the new screening provided would reduce the visual impact of the road more than the current situation.

	<p>less perceptible.</p> <p>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.</p> <p>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</p>	
<p>Conserve and enhance the quality and character of our built environment and public spaces:</p>	<p>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.</p>	
<p>Conserve and enhance Devon's cultural and historic heritage:</p>	<p>Improvements of junctions would result in:</p> <ul style="list-style-type: none"> • 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; • The construction work at the West Buckland 	

	<p>Junction would cause a largely temporary increased visual intrusion into the valley landscape until screen planting matures; and</p> <ul style="list-style-type: none"> • 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. <p>The construction of road widening would cause:</p> <ul style="list-style-type: none"> • 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. <p>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.</p> <p>The trustees of the estate and Historic England have been consulted with throughout the design process.</p>	
<p>Minimise greenhouse gas emissions:</p>	<p>Link improvements bring about vehicle speed increases, which in turn lead to vehicles consuming more fuel and marginally increasing CO2 emissions.</p>	<p>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 through the area</p>
<p>Minimise pollution (including air, land, water, light and noise):</p>	<p>Varying impacts between Negligible and Minor increases in noise impact levels.</p>	<p>Overall, reductions in congestion at junctions lead to slight decreases in emissions per vehicle as a result of the more</p>

	<p>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).</p> <p>At the Borner's Bridge Junction, the junction improvement would result in change in flow dynamics and the requirement for additional floodplain compensation.</p> <p>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.</p>	<p>smoothly flowing traffic.</p> <p>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.</p>
<p>Contribute to reducing water consumption:</p>	<p>Increased water consumption from activities during construction.</p>	<p>Reduction in water consumption during maintenance holiday.</p>
<p>Ensure resilience to the future effects of climate change (warmer, wetter winters; drier, hotter summers; more intense storms; and rising sea level):</p>	<p>Neutral</p>	<p>Neutral</p>
<p>Other (please state below):</p>		<p>An Environmental Impact Assessment Report, which details the environmental impacts and mitigation measures considered for the scheme, is available on the scheme website: https://new.devon.gov.uk/ndlr/project-documents.</p> <p>All impacts are being further assessed through the Environmental Impact Assessment.</p> <p>An environmental management plan and construction</p>

		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.
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Section 4c - Economic impacts

	Describe any actual or potential negative consequences. (Consider how to mitigate against these).	Describe any actual or potential neutral or positive outcomes. (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 with other areas of Devon and support housing and employment development opportunities in northern Devon by: <ul style="list-style-type: none"> • 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.
Impact on employment levels:	No specific impact identified at this stage	
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.	

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: https://new.devon.gov.uk/ndlr/project-documents .
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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 area be improved through what is being proposed? And how, in conducting the process of procurement, might that improvement be secured?	<p>The primary objectives of the scheme will all have positive effects on the economic, social and environmental well-being of the area.</p> <p>In preparing the specific scheme designs, the standard County Council procurement rules will be followed.</p>
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