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Proposal Details				
Proposal Name:	Longman to Smithton Link Road			
Proposal Description:	The Longman to Smithton Link Road is a one way local road connection from Stadium Road, immediately east of the Longman Roundabout to the existing roundabout at Smithton forming the current junction between the A96 and Barn Church Road. As part of the A96 Inverness to Nairn dualling scheme this roundabout forms the northern dumbbell of the new Smithton grade separated junction with the new dual carriageway following an alignment to the south of the existing A96. From Stadium Road the Longman to Smithton Link Road runs south-east through the former Longman landfill site. At the Inverness to Aberdeen railway the route turns east running parallel to the railway before crossing the railway immediately north of the existing A96 Seafield Roundabout. Heading east from the railway the route takes the alignment of the existing A96 connecting to the Smithton Roundabout. This option requires the A96 dualling to be completed first.	Estimated Total Public Sector Funding Requirement:	Capital costs/grant £14 million (2012 prices excluding VAT)	
Background Information				
Geographic Context:	The A96 is a strategic trunk road which connects Inverness to Aberdeen, and the A9 is a strategic trunk road between the Central Belt and Northern Scotland. The A96 is single carriageway as it approaches Inverness but becomes a dual carriageway on approach to the Inverness Retail Park roundabout. The A9 on approach to and around Inverness is dual carriageway.		as it approaches Inverness but	
	Longman Junction is an at-grade roundabout to the North of Inverness on the A9 which connects the A9 to the A82 and Stadium Road. It is often subject to congestion as commuters from the North and East of Inverness,			

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	via Kessock Bridge and the A96 make their way to/from Inverness City Centre.
	Raigmore Interchange is of strategic importance to Inverness, connecting the A9 and the A96. It was built as a grade separated interchange between the A9, A96 and Milburn Road (B865) and is part of the route that traffic from the East takes into Inverness city centre.
Social Context:	The area around the proposed link road is former landfill, therefore does not have a social context.
Economic Context:	The area around the proposed link road is former landfill therefore does not have an economic context. However if it improves congestion at Raigmore Interchange and Longman Roundabout, there would be economic benefits for both local commuting traffic and strategic long distance traffic.
Planning Objectives	
Objective:	Performance against planning objective:
L1: Improve journey time and increase opportunities to travel, particularly by public transport, between Aberdeen and Inverness.	 L1 - Minor Benefit This option improves the North to East movement at Raigmore as it provides a dedicated link from Longman junction to the A96. Traffic modelling has shown journey time savings between Harbour Road and the A96 (9% reduction in the AM, 10% in the PM) and from the Harbour Road / Milburn Road Junction through Raigmore to the A96 (8% in the AM, 6% in the PM). However as the link is one way the benefits and journey times are not represented in the opposite direction so trips from Aberdeen to Inverness would see no benefits. Public transport from Inverness to Aberdeen travels through Raigmore and so would benefit from the journey time savings.

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or the road network hierarchy in addressing the conflict between longer distance and local traffic through rationalisation of local movements' use of Trunk Road junctions	This option will reduce the conflict between longer distance traffic and local traffic by removing the strategic A9 North to A96 movement from Raigmore Interchange. Traffic forecasts indicate a reduction in vehicle numbers on the A9 Southbound between Longman Roundabout and Raigmore Interchange, the southbound diverge at Raigmore Interchange, on the A96 at Raigmore Interchange and between Seafield Road and Barn Church Road. The reductions are seen in both peaks, but the effect is more pronounced in the AM peak. A slight increase in traffic on the A82 is shown with corresponding decreases on the local roads. This suggests that some of the conflict between long distance traffic and localised movements has been addressed by this option. However the effects are mostly local to the Longman/Raigmore area and only benefit the North to East and West to East movements.
L2.2: Reduce conflicts for longer distance and local traffic for planned development areas to the east.	L2.2 – Minor Benefit This option has been shown to reduce traffic on movements between the A9 North of Raigmore Interchange and the A96 at Raigmore Interchange. It would provide an alternative access to the planned development areas from North Inverness and North of the Kessock Bridge. However the link road is one way and so the benefits would only be realised on the North to East movement, therefore the reduction in the level of conflict between local and long distance traffic is likely to be minimal.
L3: Improve connectivity, particularly by public transport and active travel, between Inverness city centre and the growth area to the east including Inverness Airport	 L3 – Minor Benefit This option provides a new link that would be designed to include the provision for active travel and could also be used by public transport to reach Smithton, Inverness Airport and beyond. However it would only benefit those travelling from the North (for example from North Inverness and the Black Isle) to the A96 East via Raigmore Interchange, as trips from central Inverness are likely to use Milburn Road and Raigmore Interchange. Journey time savings associated with the reduction of traffic at Raigmore would also benefit public transport and could make the journey more appealing. Again the benefits would only be realised by traffic travelling from the North to the East via Raigmore Interchange, as the proposed link road is in one direction only.
L4: Improve safety for motorised and non-motorised users by reducing the accident rate at Trunk Road junctions	L4 – Minor Benefit This option reduces the total volume of traffic using Raigmore Interchange and the A96 eastbound exit from Raigmore, and so should have a positive impact on the accident rate at the junction and along the A96. However the reduction in traffic is only in the Eastbound direction and so the benefits will be limited.

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L5.1: Improve the operational performance of the Trunk road network and junctions on the A9 and A96 as they approach Inverness from the Kessock Bridge; south of Inshes and the Smithton Roundabout.	L5.1 – Minor Benefit This option will divert traffic from the A9, between Longman Roundabout and Raigmore Interchange, and on the A96 between Raigmore Interchange and Smithton Roundabout. Traffic modelling highlights a reduction in traffic and improved journey times in the Longman / Raigmore area, however the effects are localised and only occur on the North to East movements. Further North on the A9 at the Kessock Bridge or South at Inshes junction there is little impact, with journey times changes between the two range from a 2% increase to a 2% decrease.
L5.2: Improve the operational performance of the secondary network and junctions where this may improve the operation of the Trunk road network	L5.2 - Neutral This option provides improvements to the operation of the secondary road network through a direct improvement to Raigmore Interchange. Therefore this option does not benefit this objective.
Implementability Appraisal	
Technical:	Approximately 1.5km of the proposed link road is through the site of the former Longman Landfill site. This would present a significant technical and environmental challenge to the construction of this option. The alignment of this option includes a crossing of the Inverness to Aberdeen railway at a high skew angle. This option is dependent on the implementation of the proposed grade separated junction at Smithton as part of the A96 Inverness to Nairn dualling scheme. This would enable the existing A96 single carriageway at Smithton Roundabout to form part of this new link road.
Operational:	There are no factors which might adversely affect the ability to operate the proposal over its projected life with major additional costs.
Financial:	The implementation of this option would be subject to funding availability and other competing priorities throughout Scotland such as Scottish Government, developers or The Highland Council.

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Public:	Implementation of this proposal should be taken forward in consultation with Network Rail.	
STAG Criteria		
Criterion	Assessment Summary	Supporting Information
Note – all STAG ratings for	Global and Local Air Quality – Major Impact.	The route mainly lies within the former Longman Landfill and as a result there are only a few residential receptors within the study area, located to the north of the roundabout connecting Barn Church road to the A96 at Seafield. Other receptors include the Inner Moray Firth (SAC), Inner Moray Firth (SPA) and Longman and Castle Stuart Bays (SSSI). The route moves the existing traffic closer to these receptors and at some points through the Longman and Castle Stuart Bays SSSI and Inner Moray Firth (SPA) & Ramsar. During construction and operation there is the potential for an impact on air quality, with nitrogen deposits at the SAC/SPA potentially worsening and exceeding EU limit values for NOx. In order to determine whether it is feasible to mitigate against and reduce the level of these impacts, further work will need to be undertaken including incorporating the traffic data into an air quality model. This would help to determine the level of impact at each sensitive receptor and allow a review of potential mitigation options to be considered.
	Cultural Heritage – Small Minor Impact.	The new road infrastructure associated with this link, including a large embankment to the west, has the potential to impact on the setting of Seafield, a Category B Listed Building. It is likely that potential impacts on Seafield could be reduced through mitigation such as design of the alignment and associated infrastructure to minimise visual intrusion and through landscape planting.
	Noise & Vibration – Small Minor Impact.	The route mainly lies within the former Longman Landfill and as a result there are only a few residential receptors within the area, located to the north of the roundabout connecting Barn Church road to the A96 at Seafield. As this option moves traffic closer to the residents at Seafield, there is the potential that there will be an impact on noise at these receptors during both construction and operation. It is likely that potential impacts could be reduced through mitigation such as adherence to construction best practice, noise barriers and lower noise road surfacing.

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Habitats and Biodiversity – Major Impact.	This option has the potential to result in the removal of habitat from the Inner Moray Firth (SPA) and Longman and Castle Stuart Bays SSSI. The new alignment is also closer to the Inner Moray Firth (SAC), Inner Moray Firth (SPA) and Longman and Castle Stuart Bays SSSI and this has the potential for disruption to foraging patterns and flightlines of qualifying species. Construction within the former Longman Landfill has potential to release contaminants which may impact on the internationally important sites. In addition there is potential for loss of bat habitat and trees with bat roost potential and loss of species listed in the National and Local Biodiversity Action Plans. It is likely that potential impacts could be reduced through mitigation such as adherence to SEPA's Pollution Prevention Guidelines, the erection of mammal proof fencing along the boundary of the carriageway, provision of suitable habitat for protected species (e.g. bat boxes), and sympathetic design of any lighting. However, as this option lies within the boundary of the former landfill site and is within close proximity to the SAC/SPA, SSSI and Important Bird Area it has the potential to require more specific mitigation.
Agriculture and Soils – No Benefit or Impact	There is a limited loss of low quality agricultural land.
Landscape & Visual – Moderate Impact.	There are changes to landscape character from the loss of existing woodland and scrub vegetation, most notably along the coastal fringe along the boundary between the Inverness Urban Fringe and Culloden LCA and Enclosed Firth LCT (traffic on the A96 is currently screened from this area by woodland). There is an alteration to the landform with the introduction of a new railway bridge and associated embankments, which creates a visual impact on the coastal Core Path, the Aberdeen to Inverness Railway Line, the Moray Firth and at Seafield Farm. The coastal Core Path is also severed by this option. It is likely that potential impacts could be reduced through mitigation such as sensitive design of the alignment and associated infrastructure (e.g. grading out of embankment slopes), landscape planting and where possible realignment of the Core Path.

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	Water Quality, Drainage and Flood Defence. • Water Quality – Major Impact. • Flood Risk – Moderate Impact.	Construction of this option has the potential to alter existing drainage patterns and there is potential for increased fine sediment supply and chemical pollution. In addition temporary increases in peak runoff and volume has the potential to increase flood risk. There is also potential for potential exposure/disturbance of contaminants and/or leachate from the former Longman Landfill and this would pose a High risk to localised water quality in the Moray Firth SAC and Inner Moray Firth SPA/Ramsar site. During operation the increase in impermeable area has the potential to result in permanent changes to the hydrological regime increasing flood risk. Any future increase in traffic volumes may result in increased volume of contaminated runoff and risk of accidental spillages as a result of vehicular collision. It is likely that some of the potential impacts could be reduced through mitigation, such as adherence to SEPA's Pollution Prevention Guidelines and construction best practice and the provision of Sustainable Drainage Systems (SUDS) and compensatory flood storage. However, as the junction associated with this option is construction within the boundary of the former landfill site and is within close proximity to the SAC/SPA it has the potential to require more specific and costly mitigation.
	Geology – Major Impact.	Contaminated land within the vicinity of the route option includes the Inverness to Lossiemouth fuel pipeline, the former Longman Landfill and the Aberdeen to Inverness Railway Line. As this option is constructed within the former Longman Landfill site, there is a significant potential for the exposure/disturbance of contaminants from this site. This would have an impact on groundwater quality. In addition potential impacts may arise from direct interaction and potential off-site removal of contaminated material. It is likely that some of the potential impacts could be reduced through standard mitigation such as adherence to construction best practice and establishment of appropriate health and safety measures for working with contaminated land. However, as the junction associated with this option is construction within the boundary of the former landfill site and is within close proximity to the SAC/SPA it has the potential to require more specific and costly mitigation.
	Social Inclusion & Integration – Moderate Impact / Minor Benefit.	A temporary increase in congestion and journey times during construction for roads in the study area is predicted. Generally the journey times across the network are likely to decrease and this is most noticeable when travelling north to east along the A9/A96, the A9 and around the Raigmore Junction. This will generally benefit the local communities and their ability to access local facilities to the east of the option including the Inverness Retail Park, the airport and the facilities and employment opportunities in the consented New Town development in Stratton East Inverness when developed. A core path will be severed by this option and this will have a negative impact on non-motorised users. It is likely that potential impacts during construction can be reduced through the use of traffic management systems and adequate signage of diversions. The potential impact on the Core Path during operation could be reduced through realignment or through provision of infrastructure to allow this path to cross

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		the route option.
	Planning and Policies * *Due to the stage of the development proposals it is not possible to identify a STAG rating for planning and policies. The key policies where potential conflicts may occur have been identified.	Potential for conflict with Highland Wide Local Development Plan (HWLDP) Policy 5 which states that future supplementary guidance on the development of the Former Longman Landfill Site may include the requirement that developers will provide a 30 metre undeveloped corridor to safeguard the high pressure gas pipeline. Impacts on Moray Firth SAC, Inner Moray Firth SPA and Ramsar introduce a potential for conflict with Policies 57 and 58 and 72 of the HWLDP. Impacts on the Core Path could introduce a potential conflict with Policy 77 of the HWLDP.
Safety:	Moderate Benefit	Between 2000 and 2010 there were 9 slight accidents on the A96 between Raigmore and Smithton, and a further 10 slight accidents and 1 serious accident on the A9 between Raigmore and Longman. This option will remove some traffic from this section of the A96 and on Raigmore Interchange which will have a positive effect on the accident rate in the area.
Economy:	Moderate Impact	Journey time savings are localised and predominantly provide benefit to the North to East and West to East movements through Raigmore Interchange. Therefore there will be limited economic benefit associated with this option. The indicative economic appraisal (TUBA only) shows that the option would not necessarily provide sufficient economic benefits to justify investment with a Benefit to Cost Ratio (BCR) of approximately 0.7.

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Integration:	Minor Benefit	Transport Integration This option should have a positive effect on Journey times for buses from Inverness to Aberdeen and developments to the East as it has been shown to reduce journey times through Raigmore, this in turn would benefit connections on other routes. There are almost 300 buses ¹ that use Raigmore Interchange daily. There are currently no bus routes between Longman and Smithton so this option would provide an opportunity for new bus routes and active transport networks to encourage nonmotorised transport. However the benefits are localised and limited to the North to East movement. Transport & Land Use Integration This option provides some integration with growth areas to the East as it presents an alternative route from Inverness to the A96 and the planned development areas to the east. Policy Integration
Accessibility and Social Inclusion:	Moderate Impact / Minor Benefit.	This option does not conflict with national, regional or local transport policy. A temporary increase in congestion and journey times during construction for roads in the study area is predicted. Generally the journey times across the network are likely to decrease and this is most noticeable when travelling north to east along the A9/A96, the A9 and around the Raigmore Junction. This will generally benefit the local communities and their ability to access local facilities to the east of the option including the Inverness Retail Park, the airport and the facilities and employment opportunities in the consented New Town development in Stratton East Inverness when developed. A core path will be severed by this option and this will have a negative impact on non-motorised users. The reduction of traffic on the Milburn Road and A96 approaches to Raigmore Interchange contribute to an improvement in the operation of the junction itself by reducing the level of conflicting longer distance and local movements, leading to reductions in journey times for movements passing through the interchange.

¹ Based on Junction Turning Counts from November 2012.

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Rationale for Selection or Rejection of Proposal:	While this option performs well against some of the transport planning objectives there are significant technical challenges, and environmental impacts caused by the choice of route through the former Longman landfill site and in proximity to areas of environmental designation. The option would also not necessarily provide sufficient economic benefits to justify investment, and is therefore recommended for rejection.