

# AGENDA ITEM 9

## APPENDIX I

### ROUTE OPTIONS APPRAISAL

### PROJECT 11 DALRADDY TO SLOCHD

## Appendix I

Route Options Appraisal – Project 11, Dalraddy to Slochd		
Section	Route Options	Appraisal
Option 1	Widening to the southbound side of the existing carriageway (widening to the east)	<p><b>Access:</b></p> <ul style="list-style-type: none"> <li>• Least impact on important features within Craigellachie NNR.</li> <li>• Severe impact on core path LBS38 &amp; 39, the Aviemore Orbital Path (LBS30) and Right of Way HB83 linking Aviemore town with the Burma Road. The Speyside Way extension would be severely impacted for a short distance where it leaves Aviemore (ch4800).</li> <li>• Closure/loss of a number of reasonably important in-use at-grade crossings of the carriageway between Kinveachy and Carr-Bridge therefore careful consideration will be required as to how NMU crossings will be catered for in this area going forward.</li> <li>• Significant impacts at Slochd affecting the Slochd Lodge link road and NCN7 with further effects at Slochd summit where General Wade’s Military Road currently meets the A9. The existing at-grade crossing of the road here would be also lost.</li> </ul> <p><b>Landscape &amp; Ecology:</b></p> <ul style="list-style-type: none"> <li>• Reduced cut into the hillsides above the A9 with more building up on the eastern side resulting in greater tree and vegetation loss that currently screens the road.</li> <li>• Least impact on Craigellachie NNR.</li> <li>• Minor impact on B9152 south of Aviemore due to the need for embankments to support the new road. This is likely to result in either regrading of this road or large retaining walls at this point which may affect the experience of the road users.</li> <li>• Loss of several ponds and lochans that lie close to the carriageway. These will need to be mitigated for.</li> <li>• Considerable infill of land form would be required in the area of Avielochan north of Balnabruick Farm. The new landforms will come down to the A95. This will mean the loss of the trees and rough land adjacent to the roadside and the distinctive moraine landform. With care this can be recreated and the farmland replaced.</li> <li>• The Slochd is an important landmark and landform of the CNP. It acts as a major gateway to the park and it has a particularly strongly defined character wholly created by the passage through the hills. The proposed cutting through the Slochd is significant and there will be a major impact on the rock forms and the experience. The cut face required for the widening will remove large volumes of rock and the characteristic face and associated vegetation. In addition much of the developing woodland on the eastern side, which has grown up over the last 30 years will all be lost, though this can be allowed to come back with suitable design. It is unclear whether the ‘Soldiers head’ and the distinctive aspen tree both on the rock face will be lost or not.</li> </ul> <p><b>Community &amp; Private Assets:</b></p> <ul style="list-style-type: none"> <li>• This option brings the road closer to properties in Aviemore with a high impact in terms of property loss/demolition</li> <li>• 5 residential properties impacted through some form of demolition and 1 further impacted through land take</li> <li>• Land-take from 3 commercial properties, considered to be of slight impact</li> <li>• Land-take from 4 areas of land used by the community. All considered negligible or slight.</li> <li>• Negligible or slight impact on 6 agricultural land holdings, with a moderate or substantial impact on 1 other (24.1% of the total holding)</li> <li>• Least impact on Highburnside.</li> </ul>

Route Options Appraisal – Project 11, Dalraddy to Slochd		
Section	Route Options	Appraisal
Option 1A	As for Option 1 above with the exception of a short section to the south of Aviemore which is a 'hybrid' – <b>widening on both sides at Aviemore</b> to avoid properties in the area	<p><b>Access:</b></p> <ul style="list-style-type: none"> <li>As for Option 1. A very minor increase in impact on Right of Way HB83 at Lynwilg where the scale of earthworks are greater but is not significant.</li> </ul> <p><b>Landscape &amp; Ecology:</b></p> <ul style="list-style-type: none"> <li>As for Option 1 with slightly greater impact on NNR.</li> </ul> <p><b>Community &amp; Private Assets:</b></p> <ul style="list-style-type: none"> <li>As for option 1 but with a reduced impact in terms of property demolition but with loss of land for a greater number of properties.</li> <li>2 residential properties to be demolished and 9 residential properties impacted through land-take</li> <li>Land-take from 4 commercial properties. 3 considered negligible or slight</li> <li>Land-take from 4 areas of land used by the community. All considered negligible or slight.</li> <li>Negligible or slight impact on 6 agricultural land holdings, with a moderate or substantial impact on 1 other croft land (24.1% of the total holding)</li> </ul>

Route Options Appraisal – Project 11, Dalraddy to Slochd		
Section	Route Options	Appraisal
Option 2	<p><b>Widening predominantly to the northbound side of the existing carriageway (widening to the west) with 3 exceptions where it will widen to the southbound side for a short section</b> (widening to the east) at:</p> <ul style="list-style-type: none"> <li>• Aviemore south junction</li> <li>• Loch Vaa</li> <li>• Slochd</li> </ul>	<p><b>Access:</b></p> <ul style="list-style-type: none"> <li>• Significant impact on the NNR (Loch Puladdern area particularly) but a reduced effect on paths located on the Macdonald Highland Resort side of the A9 and the Aviemore Orbital Path. The Speyside Way extension would be impacted for a short distance where it leaves Aviemore (ch4800) albeit less severely than in the case of Option 1.</li> <li>• As for previous options, potential for closure/loss of a number of reasonably important in-use at-grade crossings of the carriageway between Kinveachy and Carr-Bridge therefore careful consideration will be required as to how NMU crossings will be catered for in this area going forward.</li> <li>• As for previous options, significant impacts at Slochd affecting the Slochd Lodge link road and NCN7 with further effects at Slochd summit where General Wade’s Military Road currently meets the A9. The existing at-grade crossing of the road here would be also lost.</li> <li>• <u>May</u> present the lowest level of long term impacts upon NMU interests, however, this is highly dependent on the degree to which certain specific impacts can be mitigated – the Aviemore Orbital (LBS30,40 &amp; 41) for example.</li> </ul> <p><b>Landscape &amp; Ecology:</b></p> <ul style="list-style-type: none"> <li>• Significantly rock cut to west of road.</li> <li>• Embankments to the east required resulting in vegetation loss.</li> <li>• Greater loss of woodland including Ancient Woodland Inventory (AWI).</li> <li>• One particularly large cutting may result in physical loss of parts of Tor Beag Fort, a Scheduled Monument of national significance.</li> <li>• The junction options for Aviemore south and Granish are located further west and so tend to require greater areas of cut and woodland loss accordingly.</li> <li>• Road alignment through Slochd is broadly the same as Option 1 though there are some small differences in cutting and embankments.</li> </ul> <p><b>Community &amp; Private Assets:</b></p> <ul style="list-style-type: none"> <li>• Much lower impact on residential and commercial properties than other options.</li> <li>• Negligible impact on most residential properties with the loss of small areas of land the most significant impact. The exception is Kinveachy Lodge which would lose some out buildings along with the loss of land and access.</li> <li>• There are 2 properties on Station Road Carr-Bridge that lie to the West of the A9 on the road to the John Gordon &amp; Son Timber yard that are not mentioned in the community and private assets section. It is felt that these properties would be impacted by alignment option 2 so this should be revisited.</li> <li>• Minor impact on dis-used Timber Yard in Carr-Bridge which would lose slightly more land.</li> <li>• Land-take from 4 areas of land used by the community. 3 considered negligible or slight, with 1 considered slight or moderate – with 2.53ha taken from Craigellachie NNR</li> <li>• Alignment option 2 will have a medium/moderate impact on several agricultural land holdings, slightly higher than the other options. However it will have a much lesser impact on the croft at Carr-Bridge.</li> </ul>

Junction Options – Project 11, Aviemore South		
Junction Option	Description	Appraisal
A02	<ul style="list-style-type: none"> <li>Single Span Square <b>Overbridge</b></li> <li>Maintains alignment of B9152</li> <li>Half Cloverleaf</li> </ul>	<p><b>Access:</b></p> <ul style="list-style-type: none"> <li>No direct impacts noted. Potential encroachment towards Speyside Way Extension.</li> </ul> <p><b>Landscape &amp; Ecology:</b></p> <ul style="list-style-type: none"> <li>Highly urbanised with the half cloverleaf layout forming an eye catching feature in the landscape.</li> <li>Cuts through aspen woodland that has an important population of aspen hoverfly (a Cairngorms Nature Action Plan (CNAP) priority species, Red listed and on the Scottish Biodiversity List (SBL)) as well as other Ancient Woodland Inventory (AWI) oak woods.</li> </ul> <p><b>Community &amp; Private Assets:</b></p> <ul style="list-style-type: none"> <li>Slight impact on 3 agricultural land holdings</li> </ul>
A09	<ul style="list-style-type: none"> <li>Single Span Square <b>Overbridge</b></li> <li>Maintains alignment of B9152</li> <li>Diamond (left/right stagger)</li> </ul>	<p><b>Access:</b></p> <ul style="list-style-type: none"> <li>No direct impacts noted. Potential encroachment towards Speyside Way Extension.</li> </ul> <p><b>Landscape &amp; Ecology:</b></p> <ul style="list-style-type: none"> <li>Smallest land-take of all options with the fewest overall landscape and ecological effects and the best opportunities for effective mitigation.</li> <li>Potential to offset woodland planting that will disguise its layout and the visibility of the overbridge.</li> <li>Avoids both the aspen woodland and oak woodland though it does run through other birch woodland of lower quality.</li> </ul> <p><b>Community &amp; Private Assets:</b></p> <ul style="list-style-type: none"> <li>Slight impact on 1 residential property</li> <li>Slight impact on 3 agricultural land holdings</li> </ul>
A18	<ul style="list-style-type: none"> <li>3 Span Square <b>Overbridge</b></li> <li>Realignment of B9152</li> <li>Diamond (left/right stagger)</li> </ul>	<p><b>Access:</b></p> <ul style="list-style-type: none"> <li>No direct impacts noted. Potential Encroachment on Speyside Way Extension.</li> </ul> <p><b>Landscape &amp; Ecology:</b></p> <ul style="list-style-type: none"> <li>Greatest land-take of all options and would require the most significant changes to the local landscape through realignment of the existing B9152 and extended slip roads. Not clear what will happen to redundant B9152 but there is potential to remove the redundant section and plant to enhance woodland connectivity.</li> <li>Greatest effect of all options on local landscape although the complexity of the layout to some extent mitigates this.</li> <li>Greatest effect of all options on the distinctive landscape setting for loch Alive due to loss of woodland and changes to landform. It also cuts through the middle of the aspen woodland.</li> </ul> <p><b>Community &amp; Private Assets:</b></p> <ul style="list-style-type: none"> <li>Negligible/Slight impact on one residential property and 1 other residential property demolished</li> <li>Slight impact on 3 agricultural land holdings</li> </ul>

Junction Options – Project 11 Granish (Aviemore North)		
Junction Option	Description	Appraisal
C18	<ul style="list-style-type: none"> <li>Compatible with <b>northbound</b> widening only</li> <li>Single span <b>Underbridge</b></li> <li>Diamond (left/right stagger)</li> </ul>	<p><b>Access:</b></p> <ul style="list-style-type: none"> <li>Significant impact on Non-Motorised User interests, General Wade’s Military Road (GWMR) specifically. GWMR has no specific Non-Motorised User (NMU) status at this point but having crossed the road interconnects with a network of other routes.</li> </ul> <p><b>Landscape &amp; Ecology:</b></p> <ul style="list-style-type: none"> <li>There is loss of mainly birch woodland to both sides of the road and a significant cutting into the landform to facilitate the underbridge.</li> <li>The underbridge limits the visual impact of bridge structures, especially from the view of A9 users and this would be an acceptable fit within the landscape once mitigation planting has matured.</li> </ul> <p><b>Community &amp; Private Assets:</b></p> <ul style="list-style-type: none"> <li>Substantial impact on 1 residential property and moderate impact on 1 other, both as a result of land-take</li> <li>Slight impact on 3 agricultural land holdings</li> <li>Slight impact on forestry operations</li> </ul>
C31	<ul style="list-style-type: none"> <li>Compatible with <b>southbound</b> widening only</li> <li>Single span <b>Underbridge</b></li> <li>Diamond (left/right stagger)</li> </ul>	<p><b>Access:</b></p> <ul style="list-style-type: none"> <li>As for C18 (above) but located further east due to the road alignment.</li> <li>This option (and option C34) have the greatest impact on NMU interests, GWMR specifically.</li> </ul> <p><b>Landscape &amp; Ecology:</b></p> <ul style="list-style-type: none"> <li>As for C18 (above) but located further east due to the road alignment.</li> </ul> <p><b>Community &amp; Private Assets:</b></p> <ul style="list-style-type: none"> <li>Substantial impact on 1 residential property, resulting in demolition</li> <li>Slight impact on 3 agricultural land holdings</li> <li>Slight impact on forestry operations</li> </ul>

Junction Options – Project 11 Granish (Aviemore North)		
Junction Option	Description	Appraisal
C21	<ul style="list-style-type: none"> <li>Compatible with <b>northbound</b> widening only</li> <li>Single span <b>Underbridge</b></li> <li>Half Dumbbell and cloverleaf with roundabout</li> </ul>	<p><b>Access:</b></p> <ul style="list-style-type: none"> <li>Limited impact on Non-Motorised User interests, General Wade’s Military Road (GWMR) specifically. GWMR has no specific Non-Motorised User (NMU) status at this point but having crossed the road interconnects with a network of other routes.</li> </ul> <p><b>Landscape &amp; Ecology:</b></p> <ul style="list-style-type: none"> <li>Formal and more eye catching junction than C18/31 especially from surrounding higher areas.</li> <li>Underpass will mitigate this to a limited extent but more so from more local views.</li> <li>Encroachment into surrounding areas is greater because of the clover leaf design of the western exit/access. This means greater loss of woodland and encroachment over the Alt na Criche burn.</li> <li>The roundabout on the eastern side will require street lighting which is a direct impact on the landscape.</li> </ul> <p><b>Community &amp; Private Assets:</b></p> <ul style="list-style-type: none"> <li>Slight impact on 1 residential property as a result of land take</li> <li>Slight impact on 3 agricultural land holdings</li> <li>Slight impact on forestry operations</li> </ul>
C34	<ul style="list-style-type: none"> <li>Compatible with <b>southbound</b> widening only</li> <li>Single span <b>Underbridge</b></li> <li>Half Dumbbell and cloverleaf with roundabout</li> </ul>	<p><b>Access:</b></p> <ul style="list-style-type: none"> <li>This option (and option C31) have the greatest impact on NMU interests, GWMR specifically.</li> </ul> <p><b>Landscape &amp; Ecology:</b></p> <ul style="list-style-type: none"> <li>As for C21 (above), however, the encroachment is less on the western side and more on the east one.</li> <li>Greater overall impact than the C18/31 options.</li> </ul> <p><b>Community &amp; Private Assets:</b></p> <ul style="list-style-type: none"> <li>Substantial impact on 1 residential property, resulting in demolition</li> <li>Slight impact on 3 agricultural land holdings</li> <li>Slight impact on forestry operations</li> </ul>

Junction Options – Project 11 Black Mount (Carr-Bridge)		
Junction Option	Description	Appraisal
D02	<ul style="list-style-type: none"> <li>Compatible with <b>northbound</b> widening only</li> <li>Single span <b>Overbridge</b></li> <li>Diamond (left/right stagger)</li> <li><b>Significant realignment</b> of A938 Carr-Bridge Road</li> </ul>	<p><b>Access:</b></p> <ul style="list-style-type: none"> <li>Significant re-alignment of A938 access road, removal of bends, and changed traffic priority/intersection may have a potential impact on traffic speeds on road A938/Slochd</li> <li>Significant loss of amenity for NCN7 users on A938 and Slochd Road due to scale of junction infrastructure.</li> </ul> <p><b>Landscape &amp; Ecology:</b></p> <ul style="list-style-type: none"> <li>Over bridge and raised slip road embankments add a new elevated engineered feature into a distinctively flat landform, especially to the south of the road. Offset to a small extent by the raised moraine feature to the south which will be incorporated into the final junction.</li> <li>Significant impact on the open broad landscape character and significant visual impact for road users as well as NMUs using the NCN7 route.</li> <li>Slip roads and T junctions allows for longer lengths of road which can be blended better into the local landscape.</li> <li>Minor road from Carr-Bridge towards Slochd is relocated to the north which encroaches into woodland and heathland in this area.</li> </ul> <p><b>Community &amp; Private Assets:</b></p> <ul style="list-style-type: none"> <li>Slight impact on 1 agricultural land holding</li> <li>Slight/moderate impact on forestry operations</li> <li>Impact on Slochd housing and business, Slochd junction to north would be removed and would have to utilise Black Mount junction instead. Slochd road usage is restricted by bridge with 3tonne weight limit and consideration required in terms of snow gate location.</li> </ul>
D12	<ul style="list-style-type: none"> <li>Compatible with <b>southbound</b> widening only</li> <li>Single span <b>Overbridge</b></li> <li>Diamond (left/right stagger)</li> <li><b>Significant realignment</b> of A938 Carr-Bridge Road</li> </ul>	<ul style="list-style-type: none"> <li>As for D02 above</li> </ul>

Junction Options – Project 11 Black Mount (Carr-Bridge)		
Junction Option	Description	Appraisal
D07	<ul style="list-style-type: none"> <li>• Compatible with <b>northbound</b> widening only</li> <li>• Single span <b>Overbridge</b></li> <li>• Half cloverleaf</li> <li>• <b>Significant realignment</b> of A938 Carr-Bridge Road</li> </ul>	<ul style="list-style-type: none"> <li>• As for D02 and D12 above</li> </ul>
D51	<ul style="list-style-type: none"> <li>• Compatible with <b>southbound</b> widening only</li> <li>• Single span <b>Overbridge</b></li> <li>• Half cloverleaf</li> <li>• <b>Significant realignment</b> of A938 Carr-Bridge Road</li> </ul>	<ul style="list-style-type: none"> <li>• As for D02, D12 and D07 above</li> </ul>

Junction Options – Project 11 Black Mount (Carr-Bridge)		
Junction Option	Description	Appraisal
D03	<ul style="list-style-type: none"> <li>Compatible with <b>southbound</b> widening only</li> <li>Single span <b>Overbridge</b></li> <li>Diamond</li> <li><b>Restricted Movement</b> (no access to/from south on A938)</li> <li><b>Minor realignment</b> of A938 Carr-Bridge Road</li> </ul>	<p><b>Access:</b></p> <ul style="list-style-type: none"> <li>As for previous options, minor re-alignment of A938 access road, removal of bends, and changed traffic priority/intersection may have a potential impact on traffic speeds on road A938/Slochd</li> <li>Reduced scale of junction infrastructure may have a lesser impact on amenity for NCN7 users on A938 and Slochd Road.</li> <li>Potential reduction in vehicle movements may benefit NCN7 users and assist in reducing occurrence of known speeding issue on A938 through Carr-Bridge.</li> </ul> <p><b>Landscape &amp; Ecology:</b></p> <ul style="list-style-type: none"> <li>As for previous options but with a far smaller land take encroaching least into surrounding areas.</li> </ul> <p><b>Community &amp; Private Assets:</b></p> <ul style="list-style-type: none"> <li>Slight impact on 1 agricultural land holding</li> <li>Slight impact on forestry operations</li> <li>Impact on Slochd housing and business, Slochd junction to north would be removed and would have to utilise Black Mount junction instead. Slochd road usage is restricted by bridge with 3tonne weight limit and consideration required in terms of snow gate location.</li> <li>Restricted junction - all traffic travelling to/from the Slochd on A9 from the south to Slochd or to the south from the Slochd would have to utilise the Granish junction.</li> </ul>
D13	<ul style="list-style-type: none"> <li>Compatible with <b>northbound</b> widening only</li> <li>Single span <b>Overbridge</b></li> <li>Diamond</li> <li><b>Restricted Movement</b> (no access to/from south on A938)</li> <li><b>Minimal realignment</b> of A938 Carr-Bridge Road</li> </ul>	<p><b>Access:</b></p> <ul style="list-style-type: none"> <li>Minimal re-alignment of A938 access road, removal of bends, and changed traffic priority/intersection may have a potential impact on traffic speeds on road A938/Slochd which also serves as NCN7</li> <li>Reduced scale of junction infrastructure may have a lesser impact on amenity for NCN7 users on A938 and Slochd Road.</li> <li>Potential reduction in vehicle movements may benefit NCN7 users and assist in reducing occurrence of known speeding issue on A938 through Carr-Bridge.</li> </ul> <p><b>Landscape &amp; Ecology:</b></p> <ul style="list-style-type: none"> <li>As for previous options but with a far smaller land take encroaching least into surrounding areas.</li> </ul> <p><b>Community &amp; Private Assets:</b></p> <ul style="list-style-type: none"> <li>As for Option D03</li> </ul>