AGENDA ITEM 6

APPENDIX 2

A9 DUALLING PROCESS

ROUTE AND JUNCTION OPTIONS APPRAISAL

Appendix 2 – Route and Junction Options Appraisal

Route Options	Widening	River Crossing (River Garry)	Bruar/ Calvine Junction	Appraisal
Option 1	Online widening to the south with a small section widened to the north past Calvine	Demolition and replacement of existing Pitaldonich Bridge with a wider bridge in same location	***Options 1 & 2 Northbound:*** Slip roads (for exiting the A9 or for joining the A9 heading northwards towards Inverness) connecting to existing B847 via new connector road and junction, vehicles would then pass under the A9 via the existing underbridge to reach Bruar and Pitagowan ***Option 1 & 2 Southbound:*** Slip roads (for exiting the A9 or for joining the A9 heading southwards towards Perth) would connect to a new roundabout connecting to the B8079 and the B847 local roads.	***Access:*** This option has the highest overall impact on Non-Motorised Users (NMUs) including a roundabout on NCR7 and the highest impact on existing NMU routes. Issues can be addressed through mitigation. ***Landscape & Ecology:*** Compact option, small footprint with low landscape impact and intermediate visual impact with minimal loss of habitat to be addressed through mitigation. Overall this option has the lowest landscape and ecological impact. ***Community & Private Assets:*** Highest land take and number of land interests (owners) for residential, commercial and industrial property. It is lowest in terms of land take from agricultural, sporting, and forestry,
Option 2	As per Option 1 but with additional 3.4km widened to the north requiring larger cuttings than Option 1	As per Option 1		***Access:*** This option has the highest impact on conflict with existing NMU routes and includes a roundabout on NCR7. ***Landscape & Ecology:*** Excavation of slope to create a cutting resulting in loss of woodland – mitigation required. Long term intermediate landscape and visual impact from cutting. ***Community & Private Assets:*** Highest land take and number of land interests (owners) for residential, commercial and industrial property. It is intermediate in terms of land take from agricultural, sporting, and forestry,

Route Options	Widening	River Crossing (River Garry)	Bruar/ Calvine Junction	Appraisal
Option 3	Offline widening to the south, bringing the road closer to the River Garry	Retention of existing Pitaldonich Bridge and construction of additional wider bridge to the south	***Variant 3A:*** As per Options 1 and 2 but northbound junction and southbound roundabout are in a different position - further from Bruar/Pitagowan and closer to River Garry due to alignment of road widening.	***Access:*** This option includes a roundabout on NCR7 but generally has the lowest impact on NMUs. Issues can be addressed through mitigation. ***Landscape & Ecology:*** Large construction footprint with intermediate landscape impacts and loss of grassland and habitat connectivity requiring mitigation. Lower visual impact. ***Community & Private Assets:*** Highest land take for residential, commercial and industrial property, but impacts on less land interests (owners). It is intermediate in terms of land take from agricultural, sporting, and forestry,
			Variant 3B: Overbridge to cross A9 rather than underbridge with loop arrangement for northbound traffic instead of a connector road and junction. Slip roads would link to existing local roads with junctions – no roundabouts.	***Access:*** This option has the lowest levels of conflict on existing NMUs but a high impact on views from the road/route, this option has a junction rather than a roundabout on NCR7. ***Landscape & Ecology:*** The overbridge would be a dominant feature in the landscape impacting on views of and from the road. This option has the highest landscape and visual impact which cannot be mitigated. ***Community & Private Assets:*** Intermediate land take for residential, commercial and industrial property. It has the lowest impact on land take from agricultural, sporting, and forestry,
			Variant 3C: Underbridge to cross A9 (rather than overbridge as in Variant B) with loop arrangement for northbound traffic - loop road would be larger than that in Variant B due to alignment and topography. Slip roads would link to existing local roads with junctions - no roundabouts.	***Access:*** This option has the lowest levels of conflict on existing NMUs with a junction rather than a roundabout on NCR7. ***Landscape & Ecology:*** High construction footprint with large loop for slip road and elevation of road to enable underbridge. This will create a dominant feature in the landscape impacting on views of and from the road. Intermediate landscape and visual impacts. ***Community & Private Assets:*** Intermediate land take for residential, commercial and industrial property. It has the highest impact on land take from agricultural, sporting, and forestry,

Route Options	Widening	River Crossing (River Garry)	Bruar/ Calvine Junction	Appraisal
Option 4	As per Option 3 with additional widening to the north as per Option 2	As per Option 3	***Variant 4A*** *(as per Variant 3A)**:*** As per Options 1 and 2 but northbound junction and southbound roundabout are in a different position - further from Bruar/Pitagowan and closer to River Garry due to alignment of road widening.	***Access:*** This option includes a roundabout on NCR7 and has higher levels of impact on existing NMUs. Issues can be addressed through mitigation. ***Landscape & Ecology:*** Large construction footprint, intermediate landscape impacts and loss of grassland and habitat connectivity requiring mitigation. Excavation of slope to create cutting - loss of woodland, mitigation required. Long term intermediate landscape and visual impacts. ***Community & Private Assets:*** Lowest land take for residential, commercial and industrial property. It has an intermediate impact on land take from agricultural, sporting, and forestry,
			Variant 4B *(as per Variant 3B)**:*** Overbridge to cross A9 rather than underbridge with loop arrangement for northbound traffic instead of a connector road and junction. Slip roads would link to existing local roads with junctions – no roundabouts.	***Access:*** This option has the lowest levels of conflict on existing NMUs but a high impact on views from the road/route, this option has a junction rather than a roundabout on NCR7. Issues can be addressed through mitigation. ***Landscape & Ecology:*** The overbridge would be a dominant feature in the landscape impacting on views of and from the road. Excavation of slope to create a cutting resulting in loss of woodland – mitigation required. Long term intermediate landscape and visual impact from cutting. This option has the highest landscape and visual impact which cannot be mitigated. ***Community & Private Assets:*** Intermediate land take for residential, commercial and industrial property. It has the lowest impact on land take from agricultural, sporting, and forestry,
			Variant 4C*(as per Variant 3C)**:*** Underbridge to cross A9 (rather than overbridge as in Variant B) with loop arrangement for northbound traffic - loop road would be larger than that in Variant B due to alignment and topography. Slip roads would link to existing local roads with junctions - no roundabouts.	***Access:*** This option has low levels of conflict on existing NMUs with a junction rather than a roundabout on NCR7. ***Landscape & Ecology:*** High construction footprint with large loop for slip road and elevation of road to enable underbridge. This will create a dominant feature in the landscape impacting on views of and from the road. Intermediate landscape and visual impacts. Excavation of slope to create a cutting resulting in loss of woodland – mitigation required. Long term intermediate landscape and visual impact from cutting. ***Community & Private Assets:*** Intermediate land take for residential, commercial and industrial property. It has the highest impact on land take from agricultural, sporting, and forestry.