# Appendix 2.2

Strategic Environmental Assessment (SEA) Monitoring Framework



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## Strategic Environmental Assessment (SEA) Monitoring Framework

## **Tables**

 Table 2.2.1:
 SEA monitoring framework – A9 Dualling, Project 7, Glen Garry to Dalwhinnie
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#### Appendix 2.2 – Strategic Environmental Assessment (SEA) Monitoring Framework

 Table 2.2.1:
 SEA monitoring framework – A9 Dualling, Project 7, Glen Garry to Dalwhinnie

A9 Dualling Programme – SEA Monitoring Framework – Design Section Constraints										
	A9 Des	sign Section – Central		Project 7, Glen Garry to Dalwhinnie						
SEA References: SEA Environmental Report – Section 5 Environmental Report Addendum – Section 3, Section 4 and: Appendix B (Detailed Assessment Matrices, Section C1) – Appendix C (Revised GIS Mapping – Ancient Woodland Inventory) – Appendix D (Indicative Junction Locations Constraints Review Tables) – Appendix E (HRA and Programme-level Appropriate Assessment (AA) Report) – Appendix F (Strategic Landscape Review) – Appendix G (Strategic Flood Risk Assessment)										
SEA Identified	Description of	SEA Comment	Recommendations	for later DMRB Stages	Record how a	ddressed at:				
Constraints	Constraint		DMRB Stage 2	DMRB Stage 3	DMRB Stage 2	DMRB Stage 3				
Special Area of Conservation (SAC)	Drumochter Hills SAC	Refer to Environment Report (ER) Addendum Appendix E – Habitats Regulation Appraisal (HRA) and Programme-level Appropriate	Embed range of strategic principles on biodiversity and avoidance of SAC/ SPA/ SSSI site boundaries and impacts where	Project level HRA/ AA must be completed and agreed with SNH in advance of Stage 3 Environmental Statement finalisation to inform final	Drumochter Hills SAC and SPA: At DMRB Stage 2, Project 7 mainline alignment and junction options were developed to avoid and	Drumochter Hills SAC and SPA: Minor encroachment into the SAC/ SPA from carriageway earthworks and drainage and temporary				
Special Protection Area (SPA)	Drumochter Hills SPA	Assessment (AA) Report The current A9 runs through a narrow corridor between SAC/ SPA site boundaries on either side	possible Secure early consultation with SNH to agree project level HRA Screening requirements for	preferred alignment design Project level HRA/ AA will need to demonstrate no adverse effects on site integrity for SAC and SPA	minimise encroachment into the Drumochter Hills SAC and SPA boundaries where possible	works areas for the mainline Dalnaspidal Junction, Dalnacardoch Estate access and				
Site of Special Scientific Interest (SSSI)	Drumochter Hills SSSI	The SSSI site boundaries envelop the SAC/ SPA boundaries and has no corridor through the centre, i.e. the current A9 runs directly through the SSSI SPA designated for breeding merlin and dotterel bird species SAC and SSSI designations cover upland peat, wetlands and rare habitats and vascular plant species and fluvial geomorphology (geodiversity) features (see Geological Conservation Review feature row below) Key issues for consideration include: • avoidance of SAC/ SPA boundaries wherever possible; • possible encroachment into SAC/ SPA site boundaries, including dualling alignment options and junction options at the northern and southern extents:	Screening requirements for alignment, junctions and drainage options through the Drumochter Hills site Consultation with Scottish Natural Heritage (SNH) to inform selection of the preferred dualling alignment and agree solutions at pinch points, approx. National Grid References (NGRs).: NN625775, NN626773, NN625775, NN626773, NN625778, NN626778, NN625782, NN626785, NN625782, NN626785, NN627789, NN639831, NN639838 SNH consultation to advise requirements for surveys and mitigation for qualifying interest species and to inform the approach to more detailed AA, as required to support DMRB3 detailed design and Environmental Statement	site integrity for SAC and SPA qualifying features and species To include means to address dualling through pinch points, potential run-off, pollution and sedimentation/ hydrological risks/ effects on SAC habitats and SSSI geomorphology/ geodiversity feature, with mitigation, management plans and exclusion zones/ timescales for qualifying species Will have to demonstrate effective consideration of ecological and hydrological connectivity between priority wetland/ peat habitats as well as peat habitat management and restoration plans Consultation with SNH, CNPA and other relevant stakeholders required on landscape and visual impacts assessment for preferred alignment and junction options in the vicinity of the Drumochter site	There are minimal hydrological connectivity issues related to DMRB Stage 2 options DMRB Stage 2 HRA Screening for the SAC identified potential for 'Likely Significant Effects (LSE)' on qualifying habitat features associated with Project 7 options; however the DMRB Stage 2 AA concluded No Adverse Effects on Site Integrity 'No AESI' which was accepted by SNH DMRB Stage 2 HRA for the SPA identified 'No LSE' with respect to supporting habitat issues for qualifying species (merlin, breeding), but could not be rule out LSE for breeding merlin, due to potential for temporary disturbance effects during the construction stage At DMRB Stage 2 no breeding merlin have been identified in proximity to the A9 (ref. Project 7	Drumochter Estate access tracks all require works in the SAC with local losses to permanent infrastructure Consultation meetings held with SNH and Cairngorms National Park Authority (CNPA) to discuss potential impacts, including winter resilience planting Habitats affected during temporary works will be protected via ground protection measures such as floating roads and reinstated to enable recovery where trafficked With respect to Drumochter Estate access, following mitigation, no significant residual impacts expected from small scale permanent habitat loss due to previously disturbed ground from Beauly Denny Line (BDL) construction phase HRA for the SAC identified a likely				

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		<ul> <li>demonstration of, and SNH agreement on, suitable engineering solutions at pinch points where space is constrained by the Highland Mainline, Beauly Denny line and the River Truim (River Spey SAC);</li> <li>inclusion of suitable drainage and SuDS features, including consideration of impacts on drainage into SAC habitats and the Geological Conservation Review (GCR) feature, to the satisfaction of Scottish Environment Protection Agency (SEPA) and SNH;</li> <li>consideration of habitat impacts, including peat, Groundwater Dependent Terrestrial Ecosystems (GWDTE);</li> <li>opportunities to incorporate wildlife crossings;</li> <li>noise disturbance during bird breeding and nesting seasons;</li> <li>effective consideration of cumulative impacts within the site boundaries;</li> <li>landscape and visual impacts in a sensitive upland area;</li> <li>consideration of geodiversity features;</li> <li>provision of laybys and stopping places within the design solution</li> </ul>	SNH consultation to include consideration of drainage and SuDS requirements to address risks to SAC habitats and potent effects on SSSI geomorphology/ geodiversity feature SEPA should be included in discussion on levels of SuDS treatment, CAR requirements ar flood risk implications SSSI boundary is larger than the SAC/ SPA boundary and runs directly alongside the current A9 between approx. NGR: NN6287: and NN639838 DMRB2 alignment options desig should aim to minimise dualling footprint/ encroachment within th SSSI boundary Consultation with SNH and SEP required to agree more detailed local survey requirements/ furthe studies and assessment to determine habitat/ species impar and agree effective mitigation ar compensation measures for any unavoidable impacts on SAC/ SPA/ SSSI features and habitats Peat and GWDTE surveys (ecology and hydrology) will be required to inform DMRB3 HRA/ AA, drainage strategy, Environmental Statement and ar habitat management and restoration plans	mitigation, restoration or compensatory works required to the satisfaction of SNH, SEPA and CNPA d 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	ornithology surveys, 2015) and construction stage disturbance risks are expected to be manageable to a level that enables a conclusion of 'No AESI' via application of suitable exclusion periods or zones, which was accepted by SNH <b>Drumochter Hills SSSI:</b> At DMRB Stage 2, Project 7 mainline alignment and junction options were developed to minimise the overall footprint within the SSSI, whilst also aiming to avoid encroachment into the Drumochter Hills SAC/ SPA and River Spey SAC boundaries Given that the SSSI envelops the A9, some habitat impacts will be unavoidable National Vegetation Classification (NVC) surveys were undertaken to enable further assessment on qualifying habitat effects at DMRB Stage 3 Peat probing and targeted sampling has also been undertaken to inform DMRB Stage 3 EIA	significant effect (LSE) on dry heath, wet heath and blanket bog With respect to permanent infrastructure works, the AA concluded that, with mitigation, there would be no AESI HRA for the SPA identified LSE on breeding merlin. Due to temporary nature of works and potential impacts in proximity to an existing trunk road, the AA concluded that, with mitigation, there would be no AESI With respect to winter resilience (shelter belt) planting, the AA concluded replacement planting within the existing woodland extents or on A9 cut slope embankments would not result in AESI <b>Drumochter Hills SSSI:</b> The Environmental Statement considers potential impacts on SSSI notified features The assessment recognises that the A9 sits within the SSSI and some land will be lost to A9 Dualling infrastructure There is potential for breeding bird assemblage to be affected Consultation meetings held with SNH and CNPA to discuss potential impacts, On the basis of scale, temporary					



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Constraints	Constraint		DMRB Stage 2	DMRB Stage 3	DMRB Stage 2	DMRB Stage 3				
		Separate consideration of SSSI features and consents will be required				nature of construction works and potential impacts in proximity to an existing trunk road, the Environmental Statement concluded that, with mitigation, there would be no significant damage to the SSSI and its notified features				
Special Area of Conservation (SAC)	River Spey SAC	Refer to ER Addendum Appendix E – HRA and Programme-level AA Report The River Spey SAC boundary starts within the Drumochter Hills area, as the River Truim, approx. NGR: NN629764, and meanders northwards towards the Insh Marshes (SAC crossing at approx. NGR: NN637814) Creates a particular constraint to the west of the current A9, included within the pinch points noted under the Drumochter Hills text above Any crossings of the River Spey SAC, or encroachment upon the SAC boundaries, will require consideration via project level HRA Drainage/ SuDS outfalls to the River Spey SAC, and its tributaries are also likely to require protected species and habitat survey for salmon/ lamprey spawning and fresh water pearl mussel beds, as well as otter	Embed range of strategic principles on biodiversity and avoidance of SAC site boundaries and impacts wherever possible Secure early consultation with SNH to agree project level HRA Screening requirements for drainage to/ possible encroachment on the River Spey SAC Consultation with SNH to determine alternative alignment option impacts on River Spey designations, to inform selection of the preferred dualling alignment SNH consultation to advise requirements for surveys and mitigation for qualifying interest species and means to address pollution/ sedimentation risks and effects on river geomorphology, to inform the approach to more detailed AA, as required to support DMRB3 detailed design and Environmental Statement SEPA should be included in	Project level HRA/ AA must be completed and agreed with SNH in advance of Stage 3 Environmental Statement finalisation to inform final preferred alignment design To include means to address potential run-off, pollution and sedimentation/ hydrological risks/ effects on river geomorphology, with mitigation, management plans and exclusion zones/ timescales for qualifying species In the event that encroachment is absolutely unavoidable at detailed design stage, consultation with SNH is required as early as possible to determine effective mitigation and/ or compensation measures to avoid adverse effects on site integrity Preferred alignment design and Environmental Statement to include appropriate record of consultation, all further studies undertaken and any mitigation or compensatory works required	At DMRB Stage 2, Project 7 mainline alignment and junction options were developed to avoid encroachment into the River Spey SAC boundaries There are numerous minor tributaries/ hillside runoff/ drainage channels that are crossed by the A9 mainline options; however, water quality and morphological impacts are not expected to result in AESI due to the required implementation of SuDS Potential for species disturbance during construction was identified as a possible issue but DMRB Stage 2 HRA identified measures to minimise risks to a level that would not result in AESI, e.g. avoidance of construction in proximity to the watercourse during salmon season Freshwater pearl mussel surveys were undertaken along the River Truim section of the Spey SAC and no freshwater pearl mussel were identified within the Project 7 extents, or immediately downstream	Consultation meetings held with SNH and Spey Fisheries to discuss potential impacts Minor encroachment from SuDS outfalls; drainage ditch connections and watercourse crossings/ realignments No significant residual impacts expected from small scale habitat loss due to temporary nature of works and embedded mitigation Road drainage incorporates a minimum of two levels of SuDS as embedded mitigation, and no exceedance of Environmental Quality Standards water quality threshold values are predicted Mammal ledges have been incorporated into watercourse crossings as embedded mitigation to provide safe crossing points for otter at 14 locations Buried bed culverts with natural bed material has been included as embedded mitigation o some watercourses to minimise impacts				

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		Project level HRA/AA will need to demonstrate that it is possible to avoid adverse effects on site integrity in this constrained section Should include consultation with SEPA and Spey Fisheries Board on drainage, SuDS and CAR aspects – the River Truim is a designated part of the River Spey SAC so gravel/ shingle beds may be spawning sites	discussion on levels of Sustainable Drainage Syste (SuDS) treatment, Controlle Activities Regulation (CAR) requirements, flood risk implications and opportunitie improve provisions for fish passage Spey Fisheries Board should included in terms of protecte species/ spawning beds, etc	ed es to d be ed		within the Project 8 extents	on fish habitat and support permeability through the route SuDS outfalls to the SAC are designed as low velocity open grassed channels to minimise risk of scour and to accommodate river migration HRA for the SAC identified a LSE on Atlantic salmon, sea lamprey and otter. On the basis of temporary and localised nature of works, the AA concluded that, with mitigation including avoidance of certain works in proximity to the SAC during sensitive seasons, there would be no AESI FWPM are not present in this stretch of the SAC, HRA concluded no LSE and no AESI			
Geological Conservation Review Site (GCR)	Allt Dubhaig GCR	Is the qualifying geodiversity feature of the Drumochter Hills SSSI Lies to the west of the A9 at the Dalnaspidal end of the Pass of Drumochter, on the entrance to the SSSI site boundaries The GCR site is separated from the A9 by the HML railway, therefore no direct land take from the GCR is anticipated SNH have stressed the risks to this feature site relate to sedimentation from construction runoff and changes to drainage provisions, therefore a drainage impact assessment and	Secure early consultation wi SNH and SEPA to discuss drainage issues and options further studies and assessm requirements for this qualify geomorphology feature site Drumochter Hills SSSI SNH may be able to provide access to a BDL contact, as required a drainage impact assessment for that project Will require discussion with and SEPA on the level of ov SuDS provision required and construction stage pollution	s/ hent of the s SNH SNH <i>v</i> erall d	DMRB Stage 3 will likely be required to deliver a risk/ impact/ mitigation assessment report to satisfy SNH (the BDL project was required to do so) DMRB Stage 3 Environmental Statement will have to demonstrate effective consideration of construction stage risks, environmental management and pollution control measures to avoid and minimise runoff risks to this feature site	A desk-based assessment was carried out at Stage 2 and no direct encroachment on the GCR was identified as being associated with A9 dualling or junction provision in the vicinity However, the potential for indirect impacts related to construction stage works were identified for further consideration via DMRB Stage 3 EIA. It was noted that SNH would require this, with specific consideration of sediment runoff controls; however, this was not included within the	No direct encroachment on the GCR Additional land has been identified around the permanent works extents to provide for temporary construction stage works, including sediment controls, settlement lagoons and the like (construction stage SuDS) DMRB Stage 3 does not design construction stage controls, these are up to the Contractor; however, it is considered that sufficient land has been made available to provide effective controls for GCR			



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		mitigation/ pollution control plan will be required	and environmental management		DMRB Stage 2 options assessment	protection In terms of permanent infrastructure, all road surface runoff will be filtered via 2 levels of SuDS treatment before discharge to local watercourse				
Historic Environment including Unscheduled Archaeology	Scheduled Monuments and Listed Buildings identified by SEA are discussed below	Unscheduled archaeology was outwith the scope of route-wide SEA studies and should be considered at an early stage in consultation with Historic Scotland and the relevant Local Authority archaeology teams CNPA also have an interest in non- designated historic features and gardens within the Park boundaries	Secure early consultation with Historic Environment Scotland, CNPA and Local Authority archaeology or heritage team and obtain historic environment records to determine the location of any locally important sites and features Route alignment studies to be informed by consultations to avoid such sites in the first instance, and to determine scope of further studies where avoidance is not possible	Preferred alignment design and Environmental Statement to include appropriate record of consultation, all further studies undertaken and any mitigation required for unscheduled archaeology	DMRB Stage 2 included consultation with Local Authority Historic Environment team and Historic Environment Scotland Walkover surveys were commissioned to develop further appreciation of the area's archaeological potential Project 7 mainline alignment and junction options may impact on unknown buried archaeological remains; however, risk is considered low	Walkover surveys were undertaken to assess current condition of assets and identify previously unrecorded assets Non-designated cultural heritage assets were identified and assessed during DMRB Stage 3 EIA Specific mitigation required for impacted assets is outlined in the Schedule of Environmental Commitments Any further archaeological works requirements will be determined in consultation with the local authorities				
Scheduled Monuments (SM)	Dalwhinnie, Wade Bridge Approx. NGR: NN638827	feature His Unlikely to be directly affected by A9 dualling; however, it is located within the 200m wide corridor	Secure early consultation with Historic Scotland and other relevant stakeholders (as agreed with Transport Scotland and the A9 Dualling Environmental Steering Group) to determine	Preferred alignment design and Environmental Statement to include appropriate record of consultation, all further studies undertaken and any mitigation required	Since the SEA stage, project boundaries have been redefined and Wade Bridge is now located within the Project 8 extent and is therefore covered in the Project 8 Stage 2 study	Asset is now located within the Project 8 extent and is therefore covered in the Project 8 Environmental Impact Assessment				
Listed Building (LM) (Cat B)	Dalwhinnie, Wade Bridge LB 339627	Embed range of strategic principles on historic environment and avoidance where possible May have to be included as a sensitive visual	Steering Group) to determine alternative alignment option impacts on this heritage feature, to inform selection of the preferred dualling alignment		study Potential impacts on the setting of the asset were identified Outline recommendations for	Asset has been de-scheduled and is now not a Scheduled Monument Setting assessment was carried out on Wade Bridge Project 8 mitigation includes				



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		receptor and assessed for impact on setting – requires discussion with Historic Scotland	Seek agreement on whether or additional studies are required DMRB Stage 3 assessment of visual impact/ impact on setting	or	mitigation were presented	sensitive design of embankment and placement of A9 signage Historic recording also proposed to record the asset's current setting				
Cairngorms National Park (CNP)	This entire section is within the CNP boundaries	CNPA have a duty to promote and enhance the natural and/ or cultural heritage via any developments within the Park boundaries (ref. National Park Aim 1) Key issues noted above for avoidance of designated site boundaries and impacts are likely to take precedence; however, CNPA will require effective consideration of non-designated natural heritage sites, protected species, geodiversity, non-motorised user (NMU), access, layby and landscape/ visual issues within this sensitive corridor section	Ensure early and ongoing consultation with CNPA on the range of design and environme issues and options to secure th advice and agreement on the preferred dualling alignment Will require detailed consultation to work with CNPA to determin their requirements for additional studies on landscape/ visual effects assessments and mitigation to inform DMRB3	ntal eir appropriate record of consultation, all further studies undertaken and any mitigation required	CNPA were consulted regularly through the DMRB Stage 2 options development and assessment process, including via the A9 Environment Steering Group (ESG) and Landscape Forum Approach to Landscape Assessment has been tailored to include consideration of the Special Landscape Qualities of the CNP, as well as providing CNPA with cross- sections for each developed option Landscape and Visual receptors considered in Stage 2 assessment were all acceptable to CNPA, as was the ecological survey rationale agreed via the A9 ESG	Consultation continued with CNPA through the DMRB Stage 3 EIA Representative visual receptors were agreed for assessment, the Special Landscape Qualities of the CNP were considered, earthworks slope, SuDS and structures design aesthetic and planting mitigation have all been taken into account at DMRB Stage 3 to avoid and minimise adverse landscape and visual effects where possible Three Project 7 Laybys include connections to NMU routes, Balsporran car park is retained and design of each has been informed by Landscape Architects				
Peat Soils	Peaty soils identified throughout this section	Entire section runs through an upland area with peat soils and other wetland habitats identified as qualifying features and/ or priority habitats within SAC and SSSI boundaries Embed strategic principles approach to avoid losses of peat soils where possible. Notes on avoiding SAC boundaries and minimising footprint within SSSI boundaries also relevant	Secure early consultation with SEPA and SNH to determine alternative alignment option impacts on peat soils, to inform selection of the preferred dualli alignment and to determine requirements for additional surveys and studies to inform p habitat management and restoration plans Should also include consultation	ng undertaken, any mitigation or compensatory works required, and an agreed peat habitat management and restoration plan in accordance with applicable guidance	Information presented in Stage 2 options assessment was primarily based on James Hutton Institute information or limited ecological survey sample probing Feedback received from SNH/ SEPA/ CNPA on peat information requirements is noted for inclusion with DMRB Stage 3 EIA Commissioned DMRB Stage 2	Peat and GWDTE issues fully considered and assessed via DMRB Stage 3 design development and EIA Peat surveys were carried out for the project and adjacent areas Peat depth maps created and used in the environmental assessment, as well as design development process				



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		to peat issues SNH and SEPA will also require demonstration that GWDTE have been identified/ surveyed and assessed with effective mitigation/ compensation/ restoration plans, with reference to current guidance	on presence of, and further requirements on, GWDTE		Ground Investigations included a suite of peat probing to improve information available for Stage 3 Potential GWDTE areas were also considered via NVC habitat survey and mapping analyses to identify areas for further consideration	In doing so, areas of deep peat and GWDTE were avoided where possible In some places embankments were steepened to avoid areas of deep peat and other elements, such as SuDS and compensatory storage areas, were also re- located where possible Outline Peat Management Plan produced					
SEPA 1:200 year Flood Zone	Existing route crosses Flood Zone at various locations Approx. crossing NGRs: NN645733 NN626786 NN627789 NN629795 NN630795 NN633806 NN639831 NN639838	Refer to ER Addendum Appendix G (Strategic Flood Risk Assessment) Embed strategic principles approach to avoid encroachment in the flood zone Any loss of functional flood plain will require compensatory storage Flood zone areas principally around River Spey SAC (River Truim) and tributaries, and around the Allt Dubhaig GCR site and tributaries Preference would be to avoid encroachment in the flood zone; however, this stretch is bordered by the River Truim flood zone to the west side of the road and is unlikely to be avoided at all locations	Alignment studies should aim to strike a balance between avoidance of other constraints and the 1:200 year flood zone Secure early consultation with SEPA to determine alternative alignment option impacts and to determine requirements for flood risk assessment, SUDS drainage and CAR requirements Consider where drainage designs can include improved wildlife crossing and fish passage opportunities to secure multi- species benefit	Preferred alignment design and Environmental Statement to include appropriate record of consultation, all further studies undertaken and any mitigation or compensatory works required Incorporate appropriate drainage, compensatory storage and management measures to ensure no net change to flood risk Make recommendations to avoid works compounds within the functional floodplain where possible	At DMRB Stage 2, Project 7 mainline alignment and junction options and associated earthworks were developed to avoid and minimise encroachment upon the 200 year functional floodplain; however, given the constrained nature of the Drumochter Hills corridor, it was not completely avoidable Flood model has been developed for the River Truim, Allt Dubhaig and the section of the River Garry to enable informed assessment of varying/ cumulative changes to culvert sizes, etc.	Hydrology and flooding issues fully considered and assessed via Stage 3 design development and flood modelling, as reported in the FRA and Environmental Statement Stage 3 flood modelling was used to minimise loss of functional floodplain (construction and operational phases), and to inform culvert and watercourse crossing designs, as well as access track and SuDS locations Where earthworks encroachment into floodplain was unavoidable, modelling appropriately located compensatory storage areas using a volume-slices approach to ensure no net change to flood risk Consultation continued with SEPA and other ESG members					



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Constraints	Constraint	SEA Comment	DMRB Stage 2		DMRB Stage 3	DMRB Stage 2	DMRB Stage 3				
Highland Mainline railway (HML railway)	No HML railway crossings of within this section HML railway is a key physical constraint running generally parallel to the west of the A9	Mainly an engineering constraint; however, will affect scale and location of dualling earthworks required within this constrained section of the route, particularly at the pinch points noted under the Drumochter Hills text above	Secure early consultation v relevant stakeholders (as a with Transport Scotland an A9 Dualling Environmental Steering Group) to determi alternative alignment option which clearly demonstrate railway constraints, and infi selection of the preferred d alignment CNPA may require identific HML railway as a sensitive receptor in this area for inc in visual impact assessment	agreed nd the l ine ons, HML form dualling cation of e visual clusion	Preferred alignment design and Environmental Statement to include appropriate record of consultation, all further studies undertaken and any mitigation required	At DMRB Stage 2, Project 7 mainline alignment and junction options and associated earthworks were developed to avoid encroachment upon the HML railway HML railway included as a receptor in DMRB Stage 2 Visual assessment study as recommended	Stage 3 design avoids encroachment upon the HML railway, including through the Pass of Drumochter where parapet and safety barrier is included due to proximity to HML and NCN7 Land made available for temporary construction works extends to the HML boundary in some locations HML users included as key visual receptors in assessment, design development and mitigation – representative HML viewpoints agreed with CNPA Access to HML crossings retained in dualling design				
Beauly Denny Power Line (BDL)	Runs generally parallel to the east of the current A9 in this section	Travelling north, the BDL crosses the A9 at Glen Garry dual carriageway at approx. NGR: NN715706, and again just north of Dalwhinnie at approx. NGR: NN647859 Between these crossings, the BDL follows the A9 route and adds a further fixed infrastructure constraint at the pinch points noted under the Drumochter Hills text above	Secure early consultation v relevant stakeholders (as a with Transport Scotland an A9 Dualling Environmental Steering Group) to determi alternative alignment optior which clearly demonstrate constraints, and inform sele of the preferred dualling ali SNH may be able to provid access to a Beauly Denny contact, as SNH required H AA and associated ecologi surveys, mitigation and res plans for that project	agreed nd the l ine DDS, BDL lection lignment de line HRA/ ical	Preferred alignment design and Environmental Statement to include appropriate record of consultation, all further studies undertaken and any mitigation required	At DMRB Stage 2, Project 7 mainline alignment and junction options and associated earthworks were developed to avoid encroachment upon the BDL and its exclusion zone/ wayleave No significant issues identified at DMRB Stage 2; however, proximity of BDL pylon bases do add to constrained nature of the Drumochter Hills corridor	BDL exclusion zone (c.15m) informed Stage 3 design constraints, particularly through the Pass of Drumochter where retaining walls are required to limit earthworks extents Former BDL access track to be made permanent northward from Drumochter Lodge to provide alternative estate access due to closure of direct access from A9 Track crossing of Allt Coire Chuirn kept on existing line Some areas of re-instated BDL track (i.e. filled in) identified within				



		A9 Dualling	Programme – SEA Monitoring	Framework – Design Section Con	straints					
	A9 Design Section – Central Project 7, Glen Garry to Dalwhinnie									
SEA References:         SEA Environmental Report – Section 5         Environmental Report Addendum – Section 3, Section 4 and:         Appendix B (Detailed Assessment Matrices, Section C1) – Appendix C (Revised GIS Mapping – Ancient Woodland Inventory) –         Appendix D (Indicative Junction Locations Constraints Review Tables) – Appendix E (HRA and Programme-level Appropriate Assessment (AA) Report) –         Appendix F (Strategic Landscape Review) – Appendix G (Strategic Flood Risk Assessment)										
SEA Identified	Description of	SEA Comment		for later DMRB Stages	Record how a	ddressed at:				
Constraints	Constraint		DMRB Stage 2	DMRB Stage 3	DMRB Stage 2	DMRB Stage 3 Outline Peat Management Plan for peat restoration potential				
Non-Motorised User (NMU)	National Cycle Network Route 7 (NCN7) Core Paths and hill walking tracks identified throughout this section	Refer to ER Addendum Section 4.3 NCN7 runs generally parallel and directly alongside to the west of the current A9 through the Drumochter Hills site (also forms part of the CNPA Core Path network) Refer to and embed strategic principles approach to NMU and cycling provisions CNPA is the access authority within the Park boundaries No formal NCN or Core Path crossings identified; however, these routes provide an additional constraint between the A9, HML railway and River Spey SAC NMUs to include pedestrians, cyclists and equestrians Non-motorised user (NMU) access may be impacted during construction and existing crossing points may be rationalised to provide safer crossing opportunities	CNPA and Sustrans likely to require assurance that any effects on NCN7 will be compensated within dualling works Secure early consultation with relevant stakeholders (as agreed with Transport Scotland and the A9 Dualling Environmental Steering Group) to determine alternative alignment option impacts on NCN7, Core Paths, and any other identified NMU routes and crossings, to inform selection of the preferred dualling alignment Consider opportunities to provide wildlife crossing opportunities to secure multi-species benefit and to link NCN7 to enhanced layby facilities Selection of preferred alignment to be informed by an 'access audit', as required by Chapter 6 of Transport Scotland's 'Roads for All: Good Practice Guidance for Roads' and a 'cycle audit', as required by Chapter 11 (see Fig. 11.1) of Transport Scotland's 'Cycling by Design' good practice guidance	Preferred alignment design and Environmental Statement to include appropriate record of consultation, all further studies undertaken and any mitigation or compensatory works required to ensure an equal or better standard of provision than existing DMRB3 EIA to include construction mitigation requirements on provision of appropriate diversionary routes and signage to maintain overall access provisions during construction	Consultation ongoing via A9 ESG and Access forums Potential impacts considered via DMRB Stage 2 assessments on Community & Private Assets and Effects on All Travellers Route-wide access strategy and project specific access studies also ongoing to consider implications in advance of Stage 3, in cognisance of the 'audit' requirements noted	Where affected by the Proposed Scheme, the NCN7 and Core Paths have been locally realigned Some areas will be widened with passing places to provide shared use access for SuDS maintenance, to access Balsporran Cottages and to access a HML level crossing Three new or replacement laybys with footpath links retain A9 connectivity to NMU routes Three new underpasses create safer crossings for NMUs There is potential for temporary disruption during construction, although mitigation has been identified to potentially include a local shuttle service during NMU closures				



A9 Dualling Programme – SEA Monitoring Framework – Design Section Constraints										
	A9 Des	sign Section – Central		Project 7,	Glen Garry to Dalwhinnie					
SEA References: SEA Environmental Report – Section 5 Environmental Report Addendum – Section 3, Section 4 and: Appendix B (Detailed Assessment Matrices, Section C1) – Appendix C (Revised GIS Mapping – Ancient Woodland Inventory) – Appendix D (Indicative Junction Locations Constraints Review Tables) – Appendix E (HRA and Programme-level Appropriate Assessment (AA) Report) – Appendix F (Strategic Landscape Review) – Appendix G (Strategic Flood Risk Assessment)										
SEA Identified	Description of	SEA Comment	Recommendatio	ns for later DMRB Stages	Record how a	ddressed at:				
Constraints	Constraint	SLA comment	DMRB Stage 2	DMRB Stage 3	DMRB Stage 2	DMRB Stage 3				
Wildlife Crossings	The existing A9 is considered to act as a barrier to species movement However, the location of any wildlife crossing opportunities was outwith the scope of the SEA	Embed the principle of 'multi-species benefits through route permeability' across all design sections	Identification and implementation of wildlife crossing provisions should be embedded within the consideration of drainage, watercourse crossings, NMU routes, junctions and other road and rail crossing opportunities Secure early consultation with SNH and CNPA on appropriate species and habitat survey requirements	Preferred alignment design and Environmental Statement to include appropriate record of consultation, all further studies and surveys undertaken and any mitigation, compensatory or improvement works required to deliver a suitable range of wildlife (e.g. mammals and fish) crossings and passes	Not specifically included in DMRB Stage 2 options development or assessment as culverts, crossings, etc. are designed at Stage 3 However, species surveys have been undertaken (in line with rationale agreed via A9 ESG), as well as reviews of Deer Vehicle Collision data, and morphological baseline surveys on watercourses to inform ecological inputs to Stage 3 design Opportunities to improve permeability through the route have been identified and will be considered further through DMRB Stage 3	Wildlife crossings have been included in the Stage 3 design These include otter ledges in watercourse culverts, dry culverts, widened watercourse crossings to include for deer passage and multi-use underpasses Mammal fencing has also been included in the design to guide animals to the appropriate crossing points 13 watercourse culverts have been designed to be suitable for fish passage through use of natural bed material within In total, there are 14 mammal crossings for species such as otter and 4 crossings for larger mammals such as deer in key locations where species have been recorded or where watercourse crossings can provide 'green' routes under the scheme				

