



Scottish Power Renewables

CARRICK WINDFARM

Appendix 4.1 - Proposed Offsite Access Route:
Appraisal





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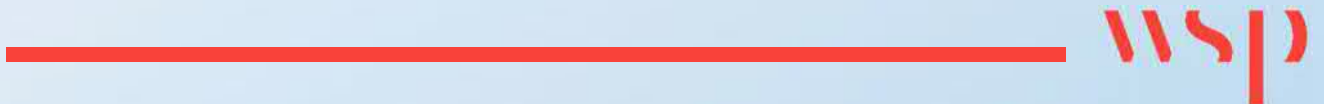
OFFSITE ACCESS APPRAISAL

APPENDIX C.1

LANDSCAPE AND VISUAL MITIGATION LIST

1

CARRICK WINDFARM - PROPOSED OFFSITE ACCESS ROUTE: APPRAISAL



1 CARRICK WINDFARM - PROPOSED OFFSITE ACCESS ROUTE: APPRAISAL

1.1 INTRODUCTION

- 1.1.1. Onshore windfarm developments typically require minor highways upgrade works to allow abnormal loads and construction vehicles access to the remote locations. These minor works are not assessed as part of an Environmental Impact Assessment (EIA), as they are rarely likely to lead to significant effects. In this instance, ScottishPower Renewables (hereafter referred to as ‘the Applicant’), have considered that it would be prudent to undertake a discrete appraisal to determine whether any potential significant effects are likely, in relation to any potential highways upgrades to the proposed offsite access route associated with Carrick Windfarm (hereafter referred to as the ‘Proposed Development’).
- 1.1.2. This Appraisal identifies any potential likely significant effects as a result of the proposed offsite access route to the Proposed Development.

1.2 ACCESS TO SITE

- 1.2.1. It is proposed that the wind turbines for the Proposed Development would be delivered to the King George V Dock in Glasgow. The wind turbines would be moved from the dock to the Site under escort. From the King George V Dock, the wind turbines would be moved west along Kings Inch Drive to the M8, where they would travel east before travelling south along the M74/M6 to Carlisle. Here, the vehicles would turn and continue to travel north along the M6 to the A75 and U52w then on to the A714 where they would travel north and onto the C46W public road before accessing the Site.
- 1.2.2. Permanent access into the Site is proposed from two existing entrances to the Carrick Forest from the C46W public road. Both the access points will be constructed to the appropriate standards required, to facilitate access by both construction vehicles and abnormal loads.

1.3 PROPOSED OFFSITE ACCESS ROUTE TO BE APPRAISED

- 1.3.1. For the purposes of this Appraisal, the proposed offsite access route has been assessed from just after Bargrennan Bridge, running from the junction of the C46W and the A714 north to the junction of the C46W and the southernmost entrance to the Proposed Development (as illustrated on **Figure 1, Appendix A**). The route is approximately 25 kilometres (km) in length.
- 1.3.2. The C46W is a single carriageway road starting in the Dumfries and Galloway Council (D&GC) area and crossing into South Ayrshire Council (SAC) area as it travels north. The carriageway has the national speed limit in place, with inter-visible passing places located throughout its length. The carriageway width varies throughout, ranging from approximately 3 metres (m) up to 6.8m.
- 1.3.3. The C46W is a council road which is used by FLS for timber traffic. FLS manage the National Forests and land on either side of the road on behalf of the Scottish Government.

1.4 METHODOLOGY

- 1.4.1. The Appraisal methodology is as follows:
- identification of points of interest (POI);

- identification of works required;
- identification of design parameters;
- identification of existing environmental baseline;
- identification of potential impacts;
- identification of embedded mitigation; and
- Appraisal.

POINTS OF INTEREST

- 1.4.2. A route survey report was undertaken prior to this Appraisal. The route survey report identified POI along the C46W where potential highways upgrades may be required to accommodate the delivery of wind turbine components (shown within **Figure 2, Appendix A** and in greater detail in **Appendix B**). This proposed offsite access route has been considered due to the existing characteristics of the route through this section i.e., changes in carriageway widths and changes in both the horizontal and vertical alignments of the running surface.
- 1.4.3. The proposed offsite access route has been split by Local Authority areas in the first instance, before being split into 5km sections, as shown in **Figure 2, Appendix A**:
- D&GC – Section A (POI 36 to POI 43);
 - D&GC – Section B (PO 44 to POI 58);
 - SAC – Section A (POI 59 to POI 74);
 - SAC – Section B (POI 75 to POI 84); and
 - SAC – Section C (POI 85 to POI 94).
- 1.4.4. Following the identification of the POI and the potential works at the POI, design parameters were developed (as detailed in **paragraphs 1.4.9 - 1.4.10** below) and were considered within the Appraisal (see **Table 2-1**).

POTENTIAL WORKS

- 1.4.5. At this stage, the exact detail of the specific highways upgrade at each POI is unknown, however, it is anticipated that the majority of the works will occur in the highway boundary and would typically comprise of the following:
- trimming and removal of vegetation and trees;
 - carriageway widening in verge areas and regrading;
 - removing / lowering of stone walls;
 - removal of lighting column;
 - removal of telegraph pole and stay cables;
 - removal of road signs; and;
 - potential physical upgrade works to existing drainage at locations of carriageway widening / regrading / embankment regrading.
- 1.4.6. In addition to the above temporary construction compounds will be required to accommodate the works. The location and dimensions are unknown at this time and will be agreed with the council ahead of any works commencing.
- 1.4.7. Further detail on the works required at each POI are summarised in **Section 3** below and are also provided in detail in **Appendix C**. It should be noted that while there are works identified at each POI, environmental impacts are not anticipated as a result of these works at each POI.

- 1.4.8. With regards to bridges on the proposed access route, a review of the Electronic Service Delivery for Abnormal Loads (ESDAL) database has been undertaken and this did not highlight any known issues or constraints on the proposed access route. To confirm this, information on the likely vehicle set up for the abnormal loads was provided to all relevant stakeholders to confirm the suitability of the structures on the proposed route, with no issues identified. Further assessment of any affected structures would be undertaken at the appropriate time to assess their suitability for the candidate turbine and following confirmation of the component transportation method. This would be undertaken in full consultation with the relevant stakeholders.

DESIGN PARAMETERS

- 1.4.9. Until such time as a candidate wind turbine has been selected, it has been necessary to make a number of assumptions in relation to the design parameters of the potential works. As such, general design parameters for the proposed offsite access route have been identified to aid the Appraisal process. These include the following:
- new surface materials for widening sections will be made up to the appropriate standard as required by the Local Roads Authority, with all works undertaken to tie in with existing carriageway construction details;
 - widening on straight sections has been assumed at 4.5m (absolute minimum). Depending on carriageway gradient, curvature and method of transport, this can increase up to 6m at locations. With regards to widening on bends, again this will vary depending on carriageway gradient, bend radii and method of transport, this can vary between 5m and 7m;
 - a minimum clearance of 1.5m has been assumed on both sides of the carriageway running surface through straight sections. This is to allow for a clear running channel from obstructions such as vegetation and street furniture;
 - following agreement with the Local Authority, all walls and signage will only be temporarily removed and will be reinstated;
 - telegraph poles and other above ground utilities will be relocated or undergrounded as necessary; and
 - any earthworks associated with sections where the road is widened will be graded back to tie in with existing levels.
- 1.4.10. Following confirmation of the candidate wind turbine, all work on both site and public roads will adhere to the approved roads and transportation design guidelines. These guidelines will specify design criteria including, but not limited to road widths, acceptable gradients, running channel clearance, vertical curvature of the carriageway running surface and lateral crossfall. Any deviation from these guidelines would be agreed with both the wind turbine manufacturer, the Local Roads Authority and haulage contractor (if appointed at that time).

EXISTING ENVIRONMENTAL BASELINE

- 1.4.11. The existing environmental baseline was identified along the proposed offsite access route via a desktop exercise. Each environmental topic reviewed the following information to undertake this appraisal:
- Carrick Windfarm Route Survey Report (WYG, 2019);
 - Carrick Windfarm - Abnormal Load and Construction Access Route Review;

- WSP route review of the offsite access was undertaken by video survey on 29 September 2020¹; and
- Environmental Constraints Plan (**Figures 3a-b, Appendix A**).

1.4.12. The existing environmental baseline is detailed in **Table 3-1** below and also shown within the Environmental Constraints Plan (**Figures 3a-b, Appendix A**).

EMBEDDED MITIGATION

1.4.13. Embedded mitigation specific to the proposed offsite access route was identified, as shown in **Table 2-1** and also detailed in **Appendix C**.

APPROACH TO APPRAISAL

1.4.14. Following a review of the environmental constraints and taking into consideration the embedded mitigation (as detailed in **Table 2-1**), potential impacts were identified arising from the works required to upgrade the carriageway to facilitate access to the Proposed Development. The findings of this are captured in the Appraisal table, included in **Appendix C**.

1.4.15. A four-point scale was used to rate the likely potential effects. This scale follows the methodology set out in the EIAR and is as described below:

- **negligible** – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment;
- **minor adverse effect** – where the Proposed Development would result in a small deterioration of the existing environment;
- **moderate adverse effect** – where the Proposed Development would result in a noticeable deterioration of the existing environment; and
- **major adverse effect** – where the Proposed Development would result in a significant deterioration of the existing environment.

1.4.16. The potential for likely significant effects were identified in the Appraisal table (**Appendix C**) using a RAG (red, amber, green) rating as per the following definitions:

- **red**: Major adverse effect and therefore **significant**;
- **amber**: Moderate adverse effect and therefore **significant**; and
- **green**: Minor adverse effect and therefore **not significant**.

1.4.17. Any additional mitigation was applied where potential likely significant effects were highlighted.

1.4.18. The assessment considers significant effects of ‘**moderate and greater**’ significance to be significant (in line with the methodology presented within the EIAR). Any likely potential significant effects identified of **moderate or above** following additional mitigation will be carried into the EIAR.

1.4.19. The Appraisal allows for different POI along the offsite access works to be appraised against the following EIA disciplines:

- Landscape and Visual;

¹ It should be noted that this video is more recent than using Google Streetview.



- Hydrology, Hydrogeology and Geology and Soils;
- Ecology and Biodiversity;
- Ornithology;
- Noise; and
- Archaeology and Cultural Heritage.

1.4.20. Within this Appraisal, forestry is not being regarded as a receptor for EIA purposes.

1.4.21. Works to the proposed offsite access route is assessed in **Chapter 11: Traffic and Transport** chapter of the EIAR.

2 MITIGATION

EMBEDDED MITIGATION

2.1.1. Embedded mitigation comprises both design features and standard construction practices or legislative requirements including recommended published guidance from statutory bodies. These measures are assumed to be in place prior to assigning potential effects as part of the EIAR and effectively form part of the Proposed Development.

Table 2-1 below outlines the embedded mitigation proposed per environmental topic.

Table 2-1 – Embedded Mitigation / Further Survey Requirements

Environmental Topic	Embedded Mitigation / Further Survey Requirements
Landscape and Visual	<ul style="list-style-type: none"> - widening should be kept to the minimum width necessary - no excess; - no kerbs - keep informal edge appearance to reduce impact on rural character; - consider use of mounding/lips on sensitive side (generally south east) which will help screen views of the widened road from elevated locations within the Wild Land Area (WLA); - in less remote parts of the route, the reinstatement of stone walling where removed for access may also help reduce visibility of the widened route and integrate into the existing landscape character; - where parts of the route need to be unavoidably straightened going against the grain of the landscape, use of mounding / lips could be used to follow the natural contours to reduce the visual impacts; - grade out new earthwork slopes to tie into the existing landform; - in areas where broadleaf trees need to be potentially removed or cut back, an Arborculturalist will need to survey the trees to identify the quality and condition and advise on mitigation or avoidance; and - have regard to the guidance within NatureScot's² 'Constructed Tracks in the Scottish Uplands' (2nd Edition 2013, updated Sept 2015). Whilst focussing on new tracks, it still has valuable landscape and visual advice (as well as for biodiversity and geodiversity) relevant for this project.
Hydrology, Hydrogeology and Geology and Soils	<ul style="list-style-type: none"> - the adoption of the applicable good practice measures will be detailed in the Outline Construction Environmental Management Plan (CEMP) to reduce the impact of modification to surface water drainage patterns, with artificial drainage installed only where necessary and would, wherever practical, be installed in advance of ground being cleared of vegetation; - the adoption of the applicable good practice measures will be summarised in the Outline CEMP to reduce the probability of a

² Formerly known as Scottish Natural Heritage.

Environmental Topic	Embedded Mitigation / Further Survey Requirements
	<p>sedimentation and/or pollution incident occurring as a result of the carriageway widening, and also reduce the magnitude of any incident due to a combination of good site environmental management procedures;</p> <ul style="list-style-type: none"> - the design principles and adoption of the applicable good practice measures summarised in the Outline CEMP would reduce the soils losses and compaction of soil effects. Site monitoring would identify any areas where soil effects are noted and enable a fast response to minimise effect; and - any bridge upgrades would be designed and constructed following good practice techniques and would be of sufficient capacity to receive storm flows with an allowance for increased flows due to climate change.
Ecology and Biodiversity, Ornithology	<ul style="list-style-type: none"> - the undertaking of an ecological walkover in advance of works would allow the identification of any habitat, flora or fauna constraints and allow suitable mitigation measures to be designed to reduce the potential adverse effects; - any bespoke mitigation measures arising from the ecological walkover, together with standard measures relating to pollution prevention, biosecurity and other environmental good practice measures recommended by CIRIA and Scottish Environmental Protection Agency (SEPA), would reduce the potential adverse effects; and - avoid vegetation clearance in bird breeding season (March-August), or undertake pre-works Ecological Clerk of Works (ECoW) checks for nesting birds.
Noise	<ul style="list-style-type: none"> - during construction, works to be undertaken in accordance with the principle of Best Practicable Means (BPM) as defined in Section 72 of the Control of Pollution Act 1974 (CoPA).
Archaeology and Cultural Heritage	<ul style="list-style-type: none"> - to avoid impacts on the subsoil interface, no tree stump/root removal to take place; and - demarcation of assets and potential works required to avoid any direct impacts to the identified assets.

3 APPRAISAL SUMMARY

3.1.1. **Table 3-1** provides the following an overview:

- identifies the POI along each section of the proposed offsite access route;
- identifies potential works required at each POI;
- identifies the existing environmental baseline and any environmental constraints;
- identifies any embedded mitigation required;
- identifies any potential impacts (following embedded mitigation);
- details any likely potential significant effects as a result of the proposed offsite access route on the environment; and
- identifies any additional mitigation measures envisaged to avoid, prevent or reduce what might otherwise have been significant adverse effects on the environment.

3.1.2. Further details on the Appraisal can be found in **Appendix C**.

3.1.3. In summary, the information presented within this Appraisal demonstrates that the works required for the proposed offsite access route, with the embedded mitigation considered (as detailed **Table 2-1**, are unlikely to give rise to likely potential significant effects (moderate or above). Therefore, **no likely potential significant effects have been carried forward into the Carrick Windfarm EIAR**, as summarised in **Table 3-2**.

Table 3-1 – Appraisal Overview

Section of Proposed Offsite Access Route	POI	Overview of Proposed Offsite Access Route / Potential Works	Environmental Constraints (see Figures 3a and 3b, Appendix A)	Embedded Mitigation	Potential Impacts	Potential Likely Significant Effects	Additional Mitigation Required
D&GC – Section A	POI 36 to POI 43	<p>Carriageway width at or above minimum requirements on straight sections based on on-site observations.</p> <p>Potential requirement for localised widening at bends and at other locations of mitigation works.</p> <p>Potential removal / relocation of street furniture / telegraph poles.</p> <p>Vegetation / trees lining carriageway, likely requirement for this to be cut back or removed.</p> <p>Changes in both the vertical and horizontal alignment of the carriageway at locations through this section.</p> <p>Potential for localised carriageway widening,</p>	<p>- Within the Dumfries and Galloway Council administrative boundary.</p> <p>- This section of the C46W joins onto the A714.</p> <p>- This section of the proposed offsite access route goes through Glentool Forest.</p> <p>- Northern extent of this section is within the Galloway Forest Park.</p> <p>- Pockets of Ancient Woodland to the south, east and west of the route, near Glentool Village.</p> <p>- Within the Dumfries and</p>	See Table 2-1 above for topic specific embedded mitigation.	<p>Landscape and Visual:</p> <ul style="list-style-type: none"> - At POI 36, due to extent of widening this may result in some minor loss / cut back of broadleaf / mixed woodland and potentially small sections of stone walls which are a characteristic of this part of the route. However, it is considered it would be very localised and unlikely to create significant effects. - At POIs 37, 38, 39, 40, 42 and 43 there is the potential for minor impacts as tree works will be within commercial forestry edges. - At POI 41, there is the potential for very localised impacts on character and visual amenity of local residents through the road widening and loss of stone wall, plus tree canopy to be cut back. 	Following applying the embedded mitigation as identified in Table 2-1 above, there are no likely potential significant effects are anticipated.	None

Section of Proposed Offsite Access Route	POI	Overview of Proposed Offsite Access Route / Potential Works	Environmental Constraints (see Figures 3a and 3b, Appendix A)	Embedded Mitigation	Potential Impacts	Potential Likely Significant Effects	Additional Mitigation Required
		<p>over-run areas, embankment re-grading and carriageway re-grading.</p>	<p>Galloway Scenic Area.</p> <ul style="list-style-type: none"> - National Cycle Network (NCN) Route 7 runs along this stretch of the proposed offsite access route. – Pockets of peatland habitat (importance category 1) located to the south west of the proposed offsite access route. - A number of watercourses cross this section of the proposed offsite access route. - There are a number of residential properties within Glentroll Village (see Figure 3b, Appendix A). 		<p>Hydrology, Hydrogeology, Geology and Soils: No adverse impacts are anticipated as a result of the proposed works.</p> <p>Ecology and Biodiversity: No adverse impacts are anticipated as a result of the proposed works.</p> <p>Ornithology: Vegetation clearance has the potential to result in legal offences related to nesting birds, however following the application of embedded mitigation negligible impacts on ornithological features are anticipated.</p> <p>Noise:</p> <ul style="list-style-type: none"> - At POIs 36, 37, 38, 39, 40 and 41, there is potential for direct, short term, temporary, negative minor noise impacts during construction works at nearby sensitive receptors. - <p>Archaeology Cultural Heritage: It is anticipated to have no or negligible benefit or negative impact on cultural heritage features.</p>		

Section of Proposed Offsite Access Route	POI	Overview of Proposed Offsite Access Route / Potential Works	Environmental Constraints (see Figures 3a and 3b, Appendix A)	Embedded Mitigation	Potential Impacts	Potential Likely Significant Effects	Additional Mitigation Required
			Glentroll campsite is also located within this section of the proposed offsite access route.		Forestry: Tree removal may be required dependant on the extent of works required.		
D&GC – Section B	POI 44 to POI 58	<p>For the majority of this section, the carriageway width at or above minimum requirements on straight sections based on on-site observations, until POI58 where it drops to circa. 3.5m. Widening required at these locations.</p> <p>Potential requirement for localised widening at bends and at other locations of mitigation works.</p> <p>Potential removal / relocation of street furniture / telegraph poles.</p> <p>Vegetation / trees lining carriageway, likely</p>	<ul style="list-style-type: none"> - Within the Dumfries and Galloway Council administrative boundary. - Located within the Galloway Forest Park. - Within the Dumfries and Galloway Scenic Area. - Pockets of native woodland to the west of the proposed offsite access route. - Schedule 1 breeding species (osprey) located within this area. 	See Table 2-1 above for topic specific embedded mitigation.	<p>Landscape and Visual:</p> <ul style="list-style-type: none"> - At POI 46, potential impacts due to potential widening and re-grading works resulting in removal of forestry. This would potentially slightly open up this part of the route which already has an open aspect to the east so is quite visible from the wider landscape, albeit within commercial forestry extents. - At the other remaining POIs, there is potential for minor effects due to works largely within existing road corridor and tree works would be within commercial forestry extents. <p>Hydrology, Hydrogeology, Geology and Soils: No adverse impacts are</p>	Following applying the embedded mitigation as identified in Table 2-1 above, there are no likely potential significant effects are anticipated.	None

Section of Proposed Offsite Access Route	POI	Overview of Proposed Offsite Access Route / Potential Works	Environmental Constraints (see Figures 3a and 3b, Appendix A)	Embedded Mitigation	Potential Impacts	Potential Likely Significant Effects	Additional Mitigation Required
		<p>requirement for this to be cut back or removed.</p> <p>Changes in both the vertical and horizontal alignment of the carriageway at locations through this section. Potential for localised carriageway widening, over-run areas, embankment re-grading and carriageway re-grading.</p>	<ul style="list-style-type: none"> - Scheduled Monument: Suie Tollhouse (NX 3572 8655) located directly under the road of the proposed offsite access route. - Two undesignated assets: Suie Linn, Corn Drying Kiln (NX 36165 85966) located directly under the road of the proposed offsite access route. - NCN Route 7 runs along this stretch of the proposed offsite access route. - A Scottish Hill Track crosses the proposed offsite access route to the 		<p>anticipated as a result of the proposed works.</p> <p>Ecology and Biodiversity: No adverse impacts are anticipated as a result of the proposed works.</p> <p>Ornithology:</p> <ul style="list-style-type: none"> - Vegetation clearance has the potential to result in legal offences related to nesting birds, however following the application of embedded mitigation negligible impacts on ornithological features are anticipated. - At POIs 55, 56, 57, 58 and 59 vegetation clearance has the potential to result in legal offences related to nesting birds and major ground works could result in legal offences relating to a Schedule 1 breeding species (osprey). However, following the application of embedded mitigation to inform the legislative compliance of works (such as postponement/prohibition of 		

Section of Proposed Offsite Access Route	POI	Overview of Proposed Offsite Access Route / Potential Works	Environmental Constraints (see Figures 3a and 3b, Appendix A)	Embedded Mitigation	Potential Impacts	Potential Likely Significant Effects	Additional Mitigation Required
			<p>north of Loch Moan.</p> <ul style="list-style-type: none"> - Pockets of peatland habitat (importance category 1) to the east of the proposed offsite access route. - A number of watercourses cross this section of the route. Loch Moan is located to the west of the proposed offsite access route. 		<p>works with a nest exclusion zone), negligible impacts on ornithological features are anticipated.</p> <p>Noise: There are no potential impacts anticipated.</p> <p>Archaeology Cultural Heritage: without mitigation there is the potential to have direct impacts on a number of assets including; Scheduled Monument (Suie Tollhouse and an undesignated asset (Suie Linn, Corn Drying Kiln). Impacts from the potential works may result in a significant deterioration of the cultural heritage resource prior to mitigation.</p> <p>Forestry: Tree removal may be required dependant on the extent of works required.</p>		
SAC – Section A	POI 59 to POI 74	Carriageway width varies through this section, evidence of previous carriageway widening works at locations. Minimum width measured at circa. 3.5m at locations. Widening	<ul style="list-style-type: none"> - Within the South Ayrshire Council administrative boundary. - Located within the Galloway Forest Park. 	See Table 2-1 above for topic specific embedded mitigation.	<p>Landscape and Visual:</p> <ul style="list-style-type: none"> - There is the potential for minor effects due to works largely within existing road corridor and tree works would be within commercial forestry extents. 	Following applying the embedded mitigation as identified in Table 2-1 above, there are no	None

Section of Proposed Offsite Access Route	POI	Overview of Proposed Offsite Access Route / Potential Works	Environmental Constraints (see Figures 3a and 3b, Appendix A)	Embedded Mitigation	Potential Impacts	Potential Likely Significant Effects	Additional Mitigation Required
		<p>required at locations below required standard.</p> <p>Potential requirement for localised widening at bends and at other locations of mitigation works.</p> <p>Potential removal / relocation of street furniture / telegraph poles.</p> <p>Vegetation / trees lining carriageway, likely requirement for this to be cut back or removed.</p> <p>Changes in both the vertical and horizontal alignment of the carriageway at locations through this section.</p> <p>Potential for localised carriageway widening, over-run areas, embankment re-grading and carriageway re-grading.</p>	<ul style="list-style-type: none"> - A small pocket of Ancient Woodland is located adjacent to the east of the proposed offsite access route. - Schedule 1 breeding species (osprey) located within this area. - The Rig of Shalloch is located to the east of the proposed offsite access route. - Scheduled Monument: Rowantree Tollhouse and Inn (NX 3528 9040) located directly under the road of the proposed offsite access route. - Two undesignated 		<ul style="list-style-type: none"> - At POI 72, there is the potential for localised impact from widening and tree loss, due to sensitivity of visitor destination (Bell's Memorial), stone bridge and open character of this part of the route. <p>Hydrology, Hydrogeology, Geology and Soils: No adverse impacts are anticipated as a result of the proposed works.</p> <p>Ecology and Biodiversity: No adverse impacts are anticipated as a result of the proposed works.</p> <p>Ornithology:</p> <ul style="list-style-type: none"> - At POI 59, vegetation clearance has the potential to result in legal offences related to nesting birds and major ground works could result in legal offences relating to a Schedule 1 breeding species (osprey). However, following the application of embedded mitigation to inform the legislative compliance of 	<p>likely potential significant effects are anticipated.</p>	

Section of Proposed Offsite Access Route	POI	Overview of Proposed Offsite Access Route / Potential Works	Environmental Constraints (see Figures 3a and 3b, Appendix A)	Embedded Mitigation	Potential Impacts	Potential Likely Significant Effects	Additional Mitigation Required
		<p>Potential physical upgrade works to existing drainage at locations of carriageway widening / regrading / embankment regrading.</p>	<p>assets (Water of Minnock, Ree (NX 3573 8794) and Laigh Rowantree Bridge (NX 3530 9063) crossing the proposed offsite access route.</p> <ul style="list-style-type: none"> - A core path runs along this section of the proposed offsite access route. - South Ayrshire Local Landscape Area is located to the east of the proposed offsite access route. - A watercourse crosses this section of the proposed offsite access route at Laigh Rowantree Bridge. - There are three residential 		<p>works (such as postponement/prohibition of works with a nest exclusion zone), negligible impacts on ornithological features are anticipated.</p> <ul style="list-style-type: none"> - At the other remaining POIs, vegetation clearance has the potential to result in legal offences related to nesting birds, however following the application of embedded mitigation negligible impacts on ornithological features are anticipated. <p>Noise:</p> <ul style="list-style-type: none"> - At POIs 67, 68, 71, 72 and 73, there is the potential for direct, short term, temporary, negative minor noise impacts during construction works at nearby sensitive receptors. - <p>Archaeology Cultural Heritage: without mitigation there is the potential to have direct impacts on a number of assets including: Scheduled Monument (Rowantree</p>		

Section of Proposed Offsite Access Route	POI	Overview of Proposed Offsite Access Route / Potential Works	Environmental Constraints (see Figures 3a and 3b, Appendix A)	Embedded Mitigation	Potential Impacts	Potential Likely Significant Effects	Additional Mitigation Required
			properties located along the proposed offsite access route in this section (see Figure 3b, Appendix A).		<p>Tollhouse and Inn) and two undesignated assets (Laigh Rowantree Bridge, Water of Minnoch, Ree). Impacts from the potential works considered may result in a significant deterioration of the cultural heritage resource prior to mitigation.</p> <p>Forestry: Tree removal may be required dependant on the extent of works required.</p>		
SAC – Section B	POI 75 to POI 84	<p>Carriageway width varies through this section, evidence of previous carriageway widening works at locations. Minimum width measured at circa. 3.5m at locations. Widening required at locations below required standard.</p> <p>Potential requirement for localised widening at bends and at other locations of mitigation works.</p>	<ul style="list-style-type: none"> - Within the South Ayrshire Council administrative boundary. - Located within the Galloway Forest Park. - Located within the Carrick Forest. - A Wild Land Area is located to the east of the proposed offsite access route. 	See Table 2-1 above for topic specific embedded mitigation.	<p>Landscape and Visual:</p> <ul style="list-style-type: none"> - The potential widening and re-grading works would be discernible, creating a localised change to the character of this open and remote moorland section of the route. <p>Hydrology, Hydrogeology, Geology and Soils: No adverse impacts are anticipated as a result of the proposed works.</p> <p>Ecology and Biodiversity: No adverse impacts are anticipated as a result of the proposed works.</p>	Following applying the embedded mitigation as identified in Table 2-1 above, there are no likely potential significant effects are anticipated.	None

Section of Proposed Offsite Access Route	POI	Overview of Proposed Offsite Access Route / Potential Works	Environmental Constraints (see Figures 3a and 3b, Appendix A)	Embedded Mitigation	Potential Impacts	Potential Likely Significant Effects	Additional Mitigation Required
		<p>Potential removal / relocation of street furniture / telegraph poles.</p> <p>Vegetation / trees lining carriageway, likely requirement for this to be cut back or removed.</p> <p>Changes in both the vertical and horizontal alignment of the carriageway at locations through this section. Potential for localised carriageway widening, over-run areas, embankment re-grading and carriageway re-grading.</p> <p>Localised drainage issues lining the carriageway through this section.</p>	<ul style="list-style-type: none"> - This section of the proposed offsite access route is within the South Ayrshire Local Landscape Area. - The proposed offsite access route traverses through peatland habitat (importance category 1). - A watercourse runs parallel to the east of the proposed offsite access route. - There is one residential property located directly to the south of the proposed offsite access route in this section (see Figure 3b, Appendix A). 		<p>Ornithology:</p> <ul style="list-style-type: none"> - At POIs 75, 76, 79a and b, 80, 81, 82, 83 and 84, Vegetation clearance has the potential to result in legal offences related to nesting birds, however following the application of embedded mitigation negligible impacts on ornithological features are anticipated. - At the other remaining POIs, there is the potential for negligible impacts on ornithological features. <p>Noise:</p> <ul style="list-style-type: none"> - At POIs 75 and 76, there is the potential for direct, short term, temporary, negative minor noise impacts during construction works at nearby sensitive receptors. <p>Archaeology Cultural Heritage: It is anticipated to have no or negligible benefit or negative impact on cultural heritage features.</p>		

Section of Proposed Offsite Access Route	POI	Overview of Proposed Offsite Access Route / Potential Works	Environmental Constraints (see Figures 3a and 3b, Appendix A)	Embedded Mitigation	Potential Impacts	Potential Likely Significant Effects	Additional Mitigation Required
					Forestry: Tree removal may be required dependant on the extent of works required.		
SAC – Section C	POI 85 to POI 94	<p>Carriageway width varies through this section, which has been subject to widening works. Below required width at locations.</p> <p>Potential requirement for localised widening at bends and at other locations of mitigation works.</p> <p>Potential removal / relocation of street furniture.</p> <p>Vegetation / trees lining carriageway, likely requirement for this to be cut back or removed.</p> <p>Changes in both the vertical and horizontal alignment of the carriageway at locations through this section.</p>	<p>- Within the South Ayrshire Council administrative boundary.</p> <p>- Within the Galloway Forest Park.</p> <p>- A Wild Land Area is located to the east of the proposed offsite access route.</p> <p>- This section of the proposed offsite access route is within the South Ayrshire Local Landscape Area.</p> <p>- Native woodland located to the east of the proposed offsite access route (near the entrance</p>	See Table 2-1 above for topic specific embedded mitigation.	<p>Landscape and Visual:</p> <ul style="list-style-type: none"> - At POIs 85, 86 and 87, the potential widening and re-grading works would be discernible, creating a localised change to the character of this open and remote moorland section of the route. - At POIs 88, 89, 90, 91, 92, 93 and 94, there is a potential for a minor effect due to works largely within existing road corridor and tree works would be within commercial forestry extents. <p>Hydrology, Hydrogeology, Geology and Soils: No adverse impacts are anticipated as a result of the proposed works.</p> <p>Ecology and Biodiversity: No adverse impacts are anticipated as a result of the proposed works.</p>	Following applying the embedded mitigation as identified in Table 2-1 above, there are no likely potential significant effects are anticipated.	None

Section of Proposed Offsite Access Route	POI	Overview of Proposed Offsite Access Route / Potential Works	Environmental Constraints (see Figures 3a and 3b, Appendix A)	Embedded Mitigation	Potential Impacts	Potential Likely Significant Effects	Additional Mitigation Required
		<p>Potential for localised carriageway widening, over-run areas, embankment re-grading and carriageway re-grading.</p> <p>Localised drainage issues lining the carriageway through this section.</p>	<p>to the Proposed Development).</p> <ul style="list-style-type: none"> - A Cornish Hill Track crosses the proposed offsite access route and runs to the east. - A Scottish Hill Track crosses the proposed offsite access route and one of the tracks follows the route north along the C46W. - A Core Path and Carrick Forest Drive cross the proposed offsite access route. - Pockets of peatland habitat (importance category 1) to the east and west of the proposed offsite access route. 		<p>Ornithology:</p> <ul style="list-style-type: none"> - Vegetation clearance has the potential to result in legal offences related to nesting birds, however following the application of embedded mitigation negligible impacts on ornithological features are anticipated. <p>Noise:</p> <ul style="list-style-type: none"> - At POI 94, there is the potential for direct, short term, temporary, negative minor noise impacts during construction works at nearby sensitive receptors. <p>Archaeology Cultural Heritage: At POI 88, there is potential for a minor adverse impact on the existing Stinchar Bridge.</p> <p>Forestry: Tree removal may be required dependant on the extent of works required.</p>		

Section of Proposed Offsite Access Route	POI	Overview of Proposed Offsite Access Route / Potential Works	Environmental Constraints (see Figures 3a and 3b, Appendix A)	Embedded Mitigation	Potential Impacts	Potential Likely Significant Effects	Additional Mitigation Required
			<ul style="list-style-type: none"> - A number of watercourses cross this section and / or run parallel to the proposed offsite access route. - There is one residential property located near the entrance to the Proposed Development in this section (see Figure 3b, Appendix A). 				

3.1.4. **Table 3-2** below provides a summary of the potential significant effects of the whole route for each environmental topic.

Table 3-2 – Cumulative Appraisal

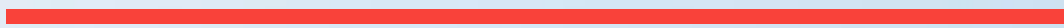
Environmental Topic	Cumulative Appraisal of the Whole Route
Landscape and Visual	No greater than minor landscape and visual effects have been identified for localised areas and the route as a whole, following application of the embedded mitigation. Whilst there will be localised minor changes, particularly outwith the commercial forestry in the more sensitive northern open moorland sections of the route, the type and limited extent of development combined with the embedded mitigation would ensure that when

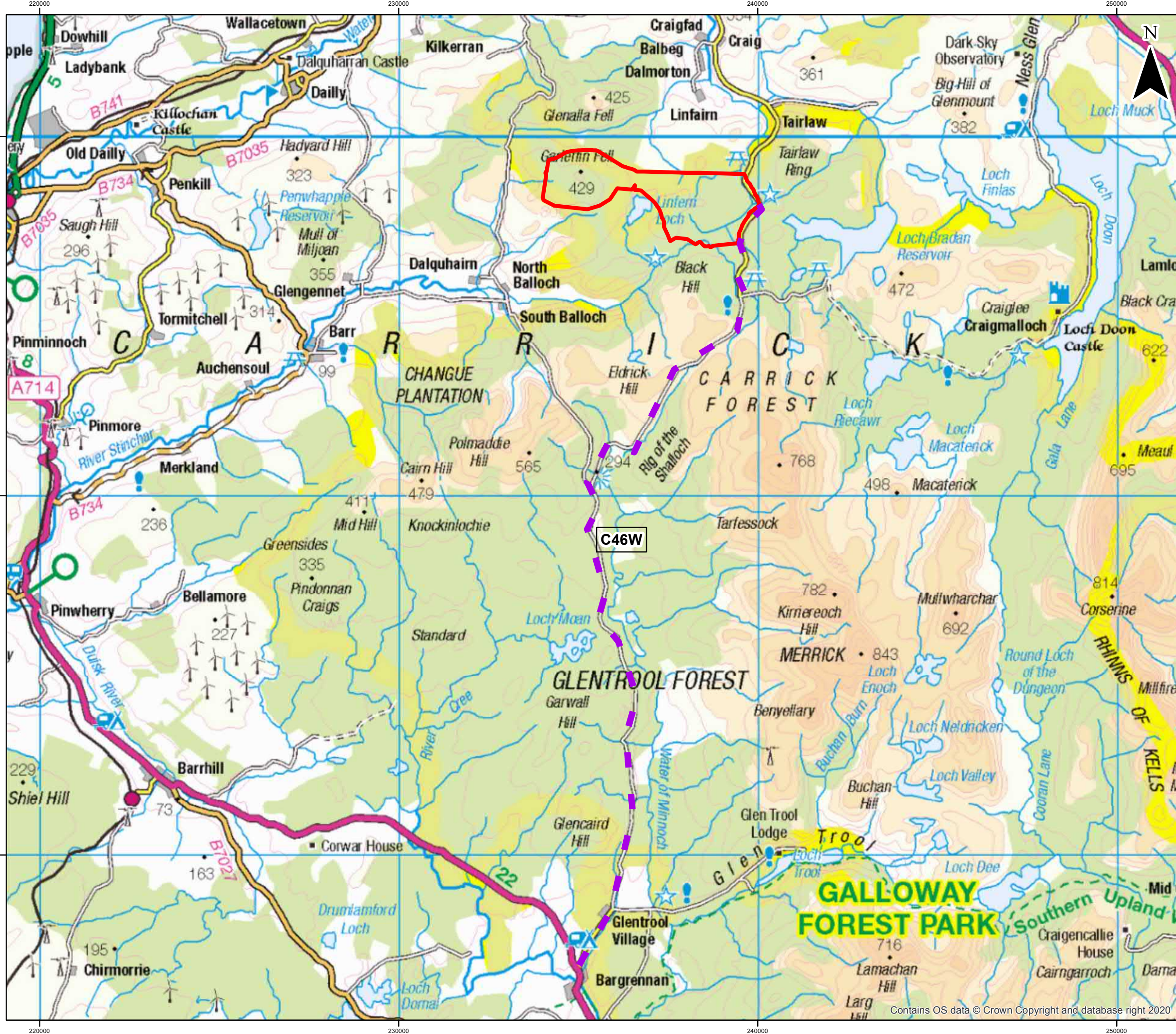


Environmental Topic	Cumulative Appraisal of the Whole Route
	considered cumulatively across the full length of the route there would not be any significant effects on landscape character or visual amenity.
Hydrology, Hydrogeology, Geology and Soils	Considering the works anticipated on the full length of the route, there are no potential significant cumulative effects anticipated to Hydrology, Hydrogeology, Geology and Soils.
Ecology and Biodiversity	Considering the works anticipated on the full length of the route, there are no potential significant cumulative effects anticipated to Ecology and Biodiversity.
Ornithology	Considering the works anticipated on the full length of the route, there are no potential significant cumulative effects anticipated to Ornithology.
Noise and Vibration	Considering the works anticipated on the full length of the route, there are no potential significant cumulative effects anticipated for Noise and Vibration.
Archaeology and Cultural Heritage	Considering the works anticipated on the full length of the route, there are no potential significant cumulative effects anticipated to Archaeology and Cultural Heritage.
Forestry	Considering the works anticipated on the full length of the route, there are no potential significant cumulative effects anticipated to Forestry.

Appendix A

FIGURES





Legend

- Offsite access route to Carrick Windfarm
- Site Boundary
- Council Boundary

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Rev	Date	By	Comment
A	08/10/2021	EC	First Issue.

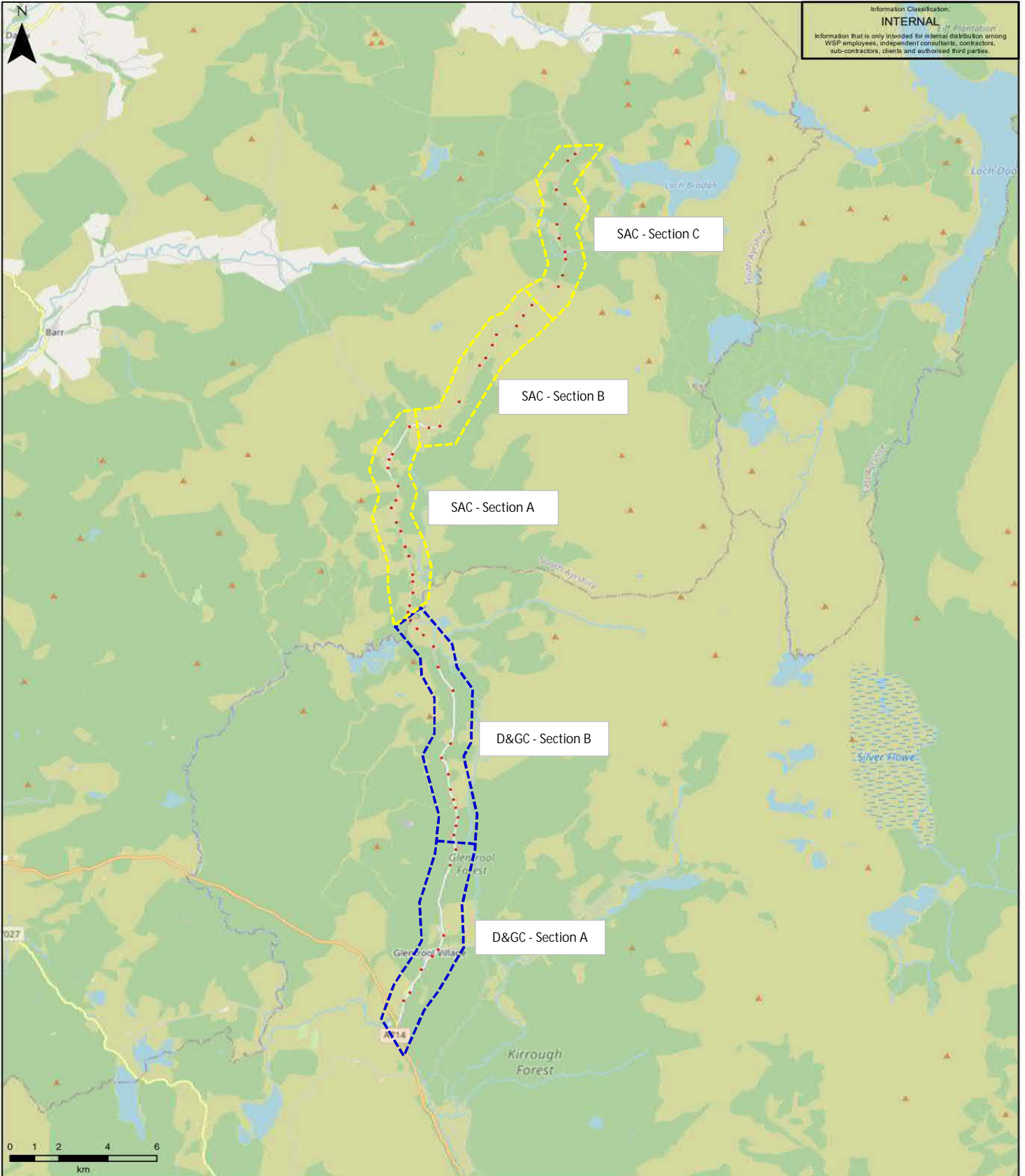


Carrick Wind Farm

Figure 1: Offsite Access Route to Carrick Windfarm

Drg No	CARRICK_WSP_I_215
Rev	A
Date	08/10/2021
Scale	1:100,000 @ A3

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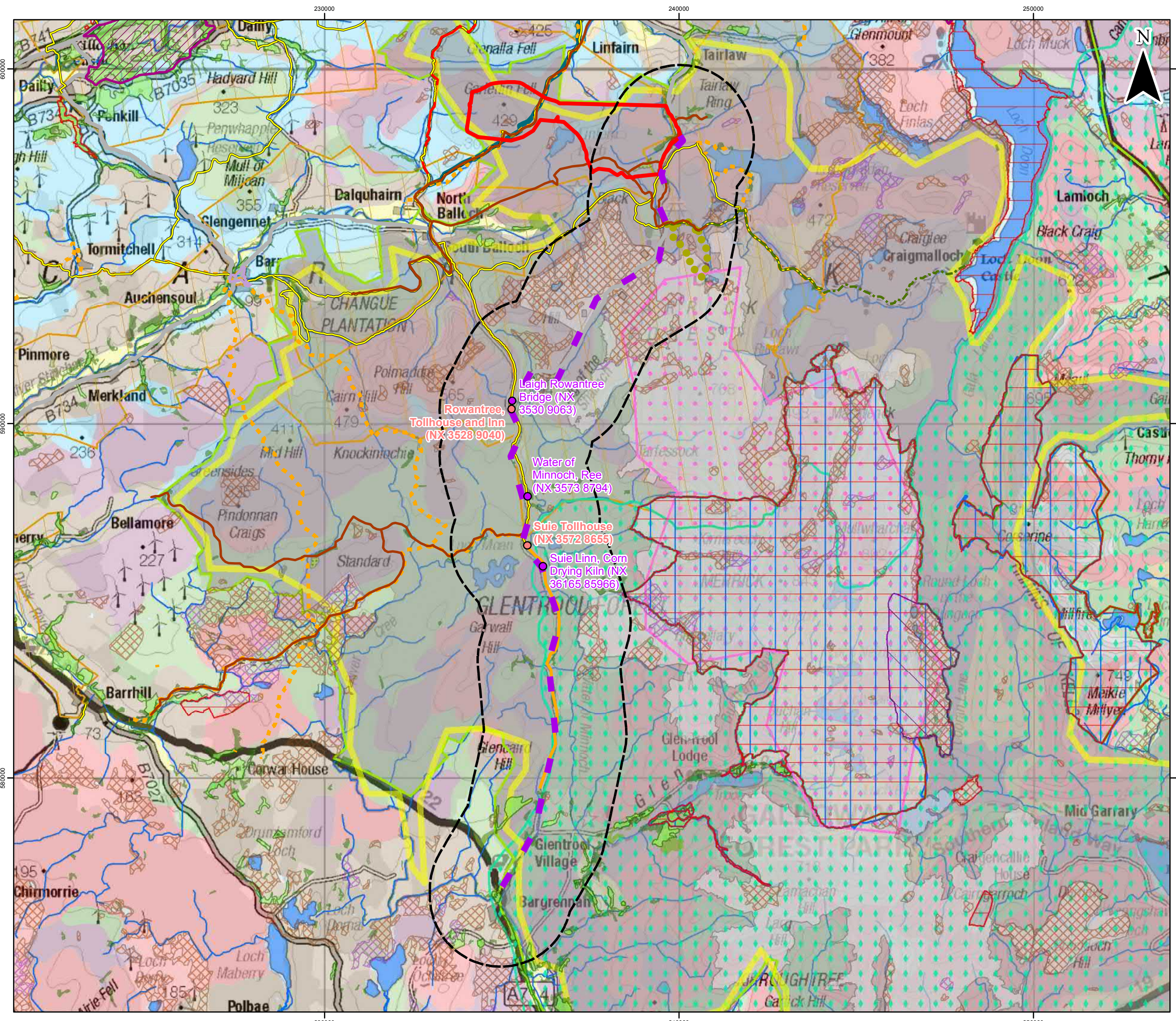


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- Legend :**
- Point of Interest (POI)
 - D&GC – Section A (POI 36 to POI 43)
D&GC – Section B (POI 44 to POI 58)
 - SAC – Section A (POI 59 to POI 74)
SAC – Section B (POI 75 to POI 84)
SAC – Section C (POI 85 to POI 94)

Title : Carrick Wind Farm - Route Sections
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Figure 2: Route Section Plan



Legend

- Offsite access route to Carrick Windfarm
- Site Boundary
- 2km buffer
- Site of Special Scientific Interest
- Special Area of Conservation
- RAMSAR Site
- Wild Land Area
- Conservation Area
- Garden and Designed Landscape
- Ancient Woodland Inventory
- Native Woodland
- Near-native Woodland
- Plantation on Ancient Woodland Site
- Core Path
- Other Path
- Scottish Hill Track
- Carrick Forest Drive
- Cornish Hill Trail
- Ayrshire Alps Cycle Park
- National Cycle Network - Route 7
- National Bylaw
- Old Road through Straiton Heritage Path
- Galloway Forest Park
- Biosphere Zone - Core Area
- Biosphere Zone - Buffer Area
- Biosphere Zone - Transition Area
- Dumfries and Galloway Scenic Area
- South Ayrshire Local Landscape Area
- Galloway Dark Skies Park Core Area
- Galloway Dark Skies Park
- Watercourse
- Waterbody

SNH Peatland Habitat - 2016

- Importance Category 1
- Importance Category 2

National soil map of Scotland

- Alluvial soils
- Brown soils
- Immature soils
- Lochs
- Mineral gleys
- Mineral podzols
- Montane soils
- Peat
- Peaty gleys
- Peaty podzols
- Scheduled Monument
- Undesignated Asset

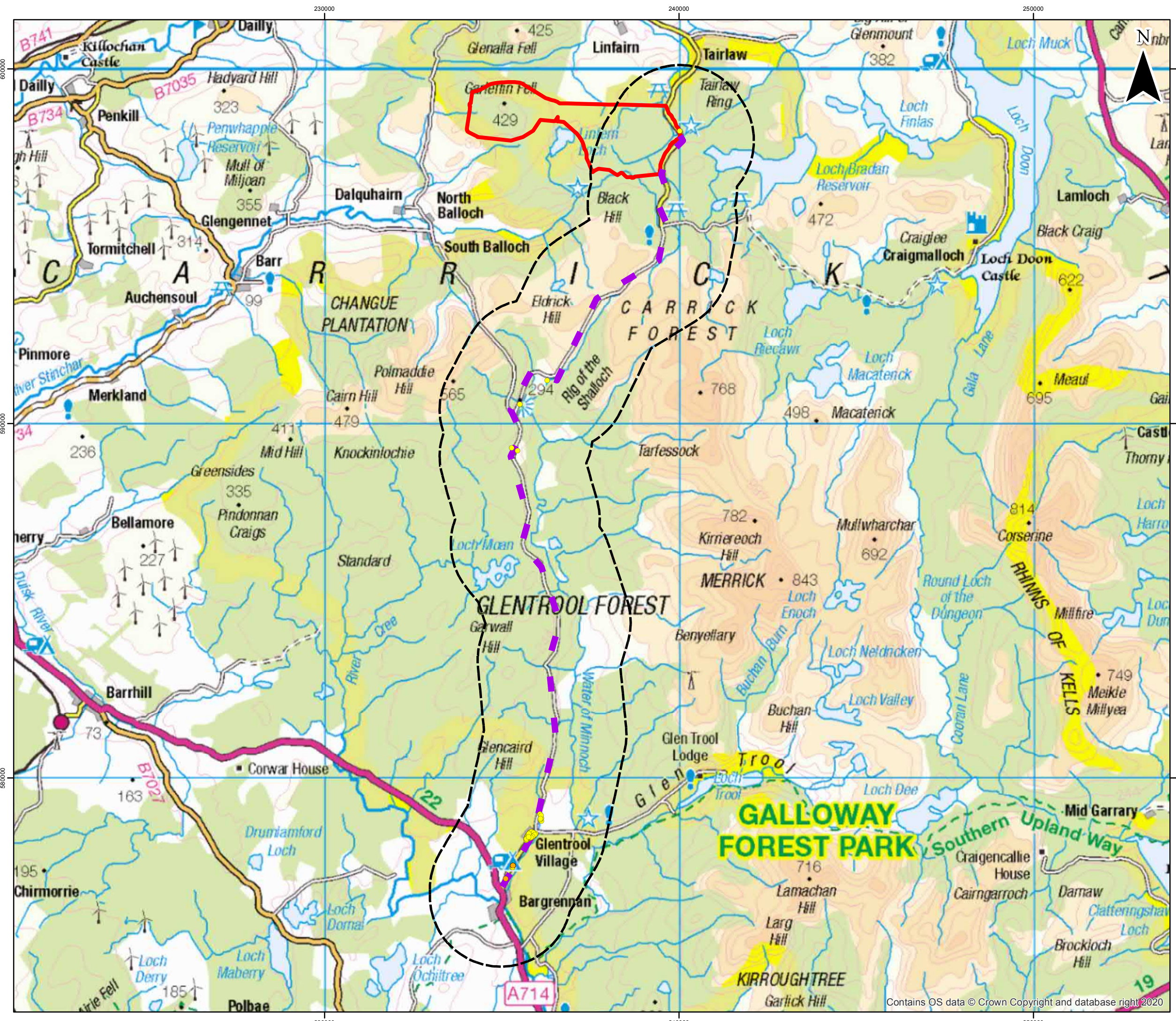
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Carrick Wind Farm
Figure 3a: Environmental Constraints

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Rev	A
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Legend

- Offsite access route to Carrick Windfarm
- Site Boundary
- 2km buffer

Sensitive Receptors

- Community (Sensitive)
- Temporary Residential
- Residential

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Carrick Wind Farm
 Figure 3b: Environmental Constraints
 - Residential Properties Within 300m
 of the Access Route

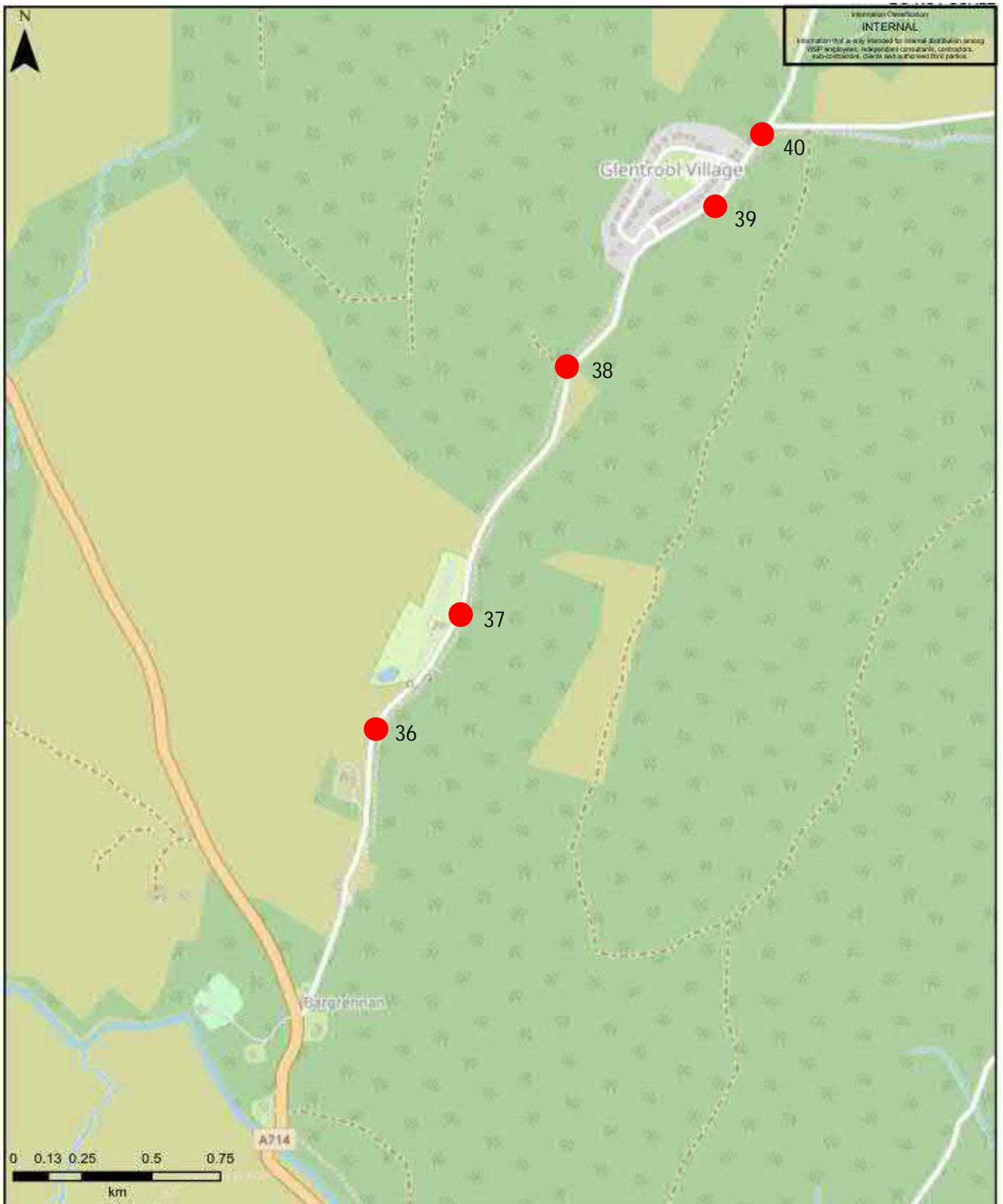
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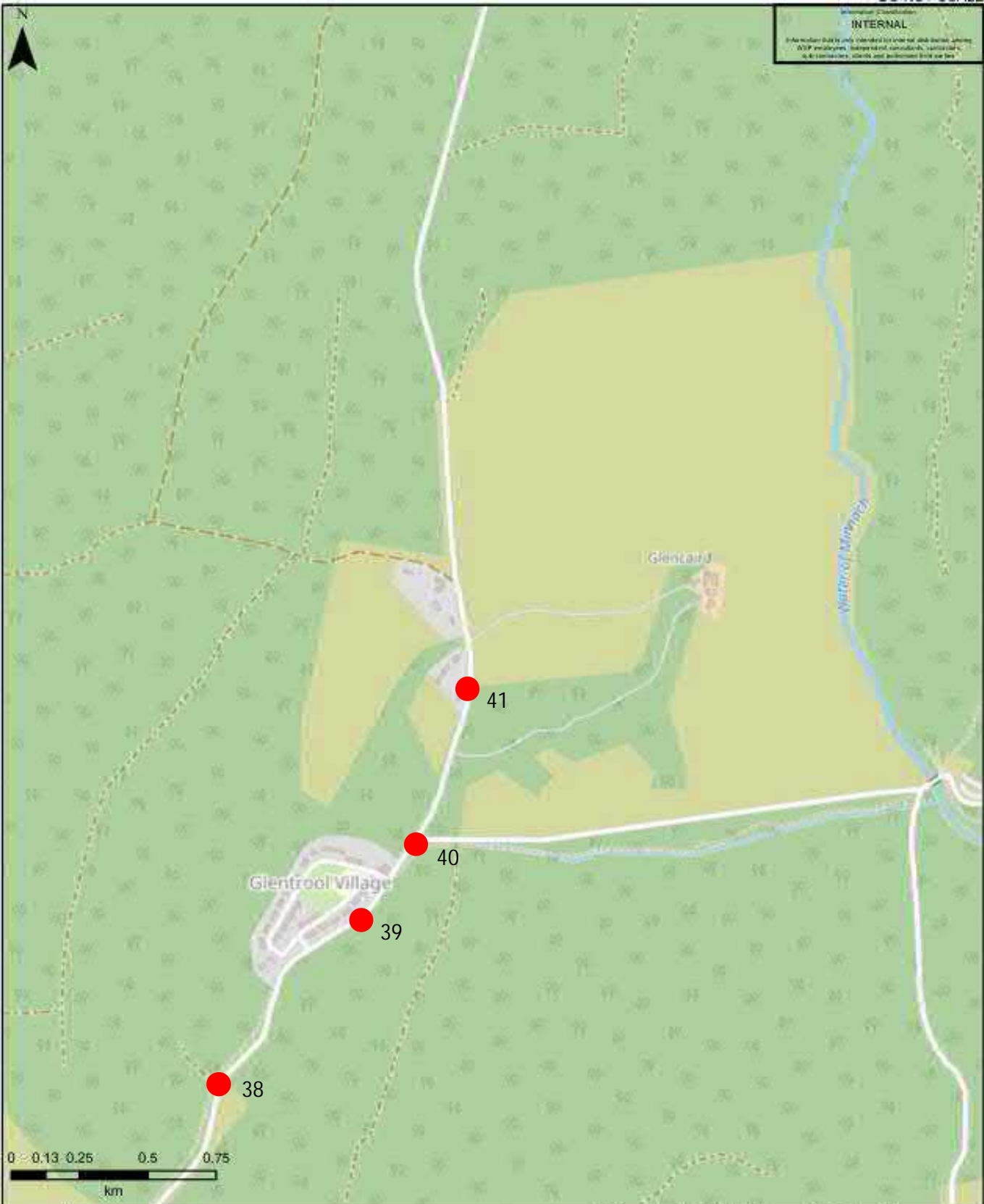
Appendix B

POINT OF INTEREST LOCATIONS





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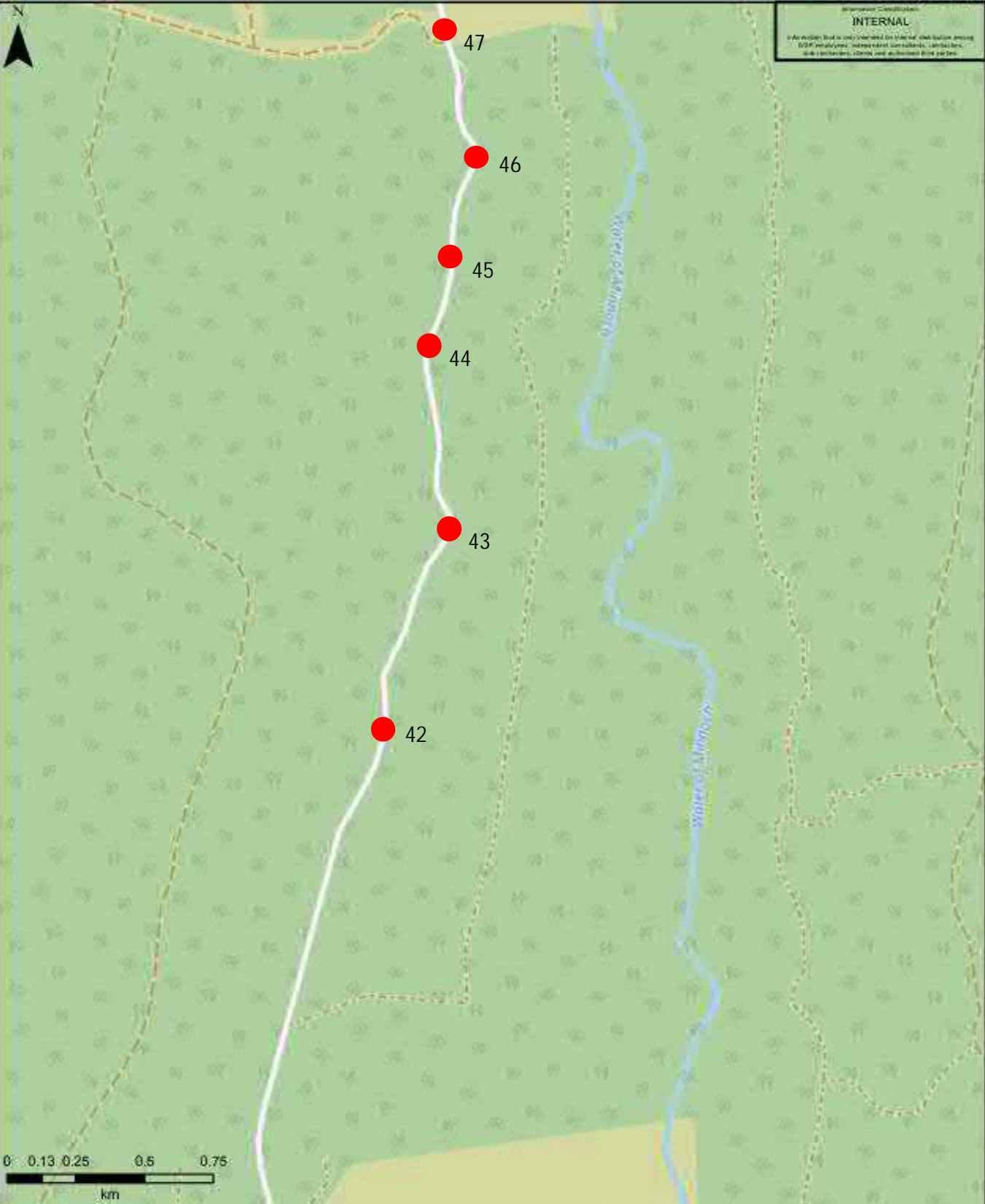
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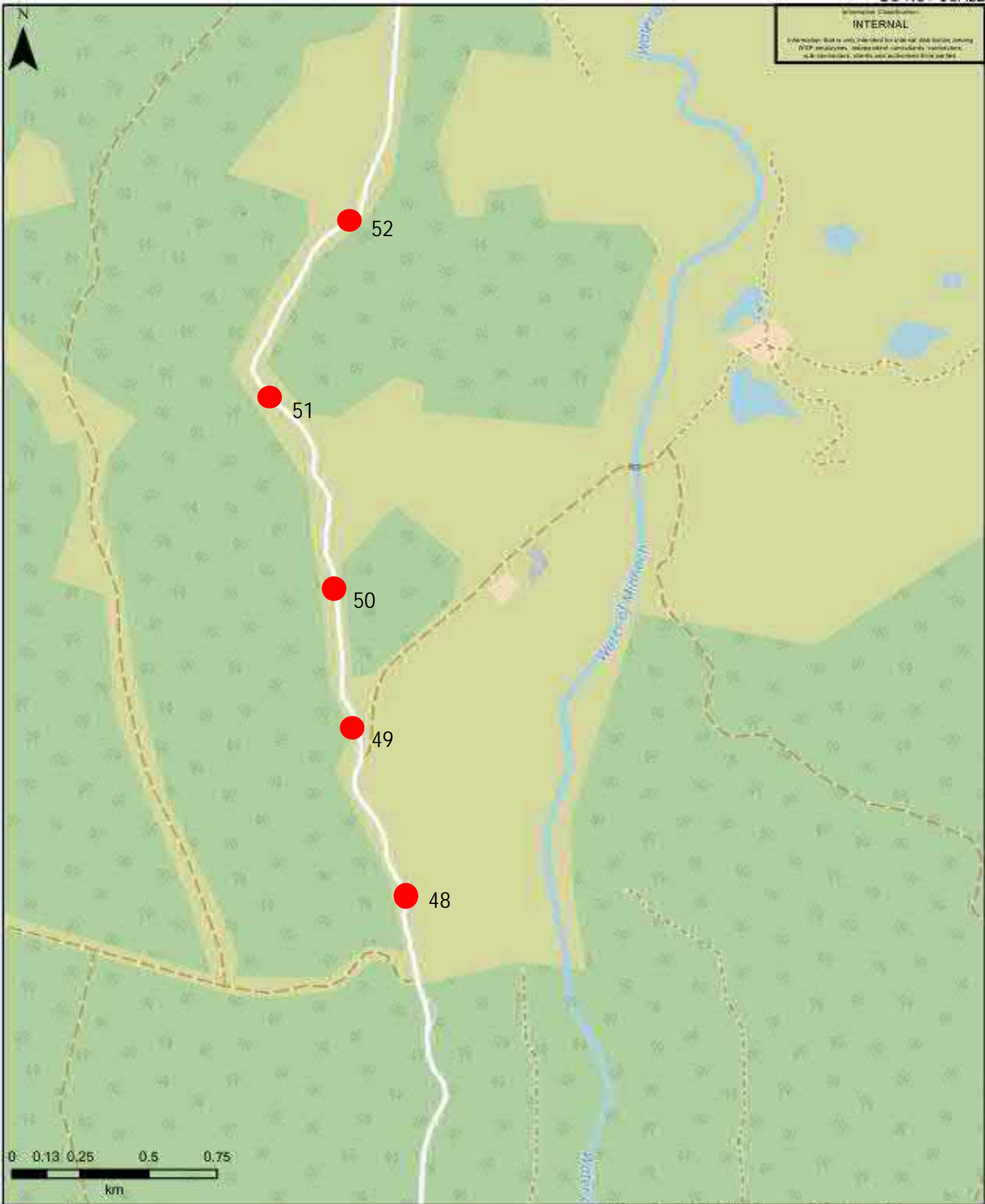
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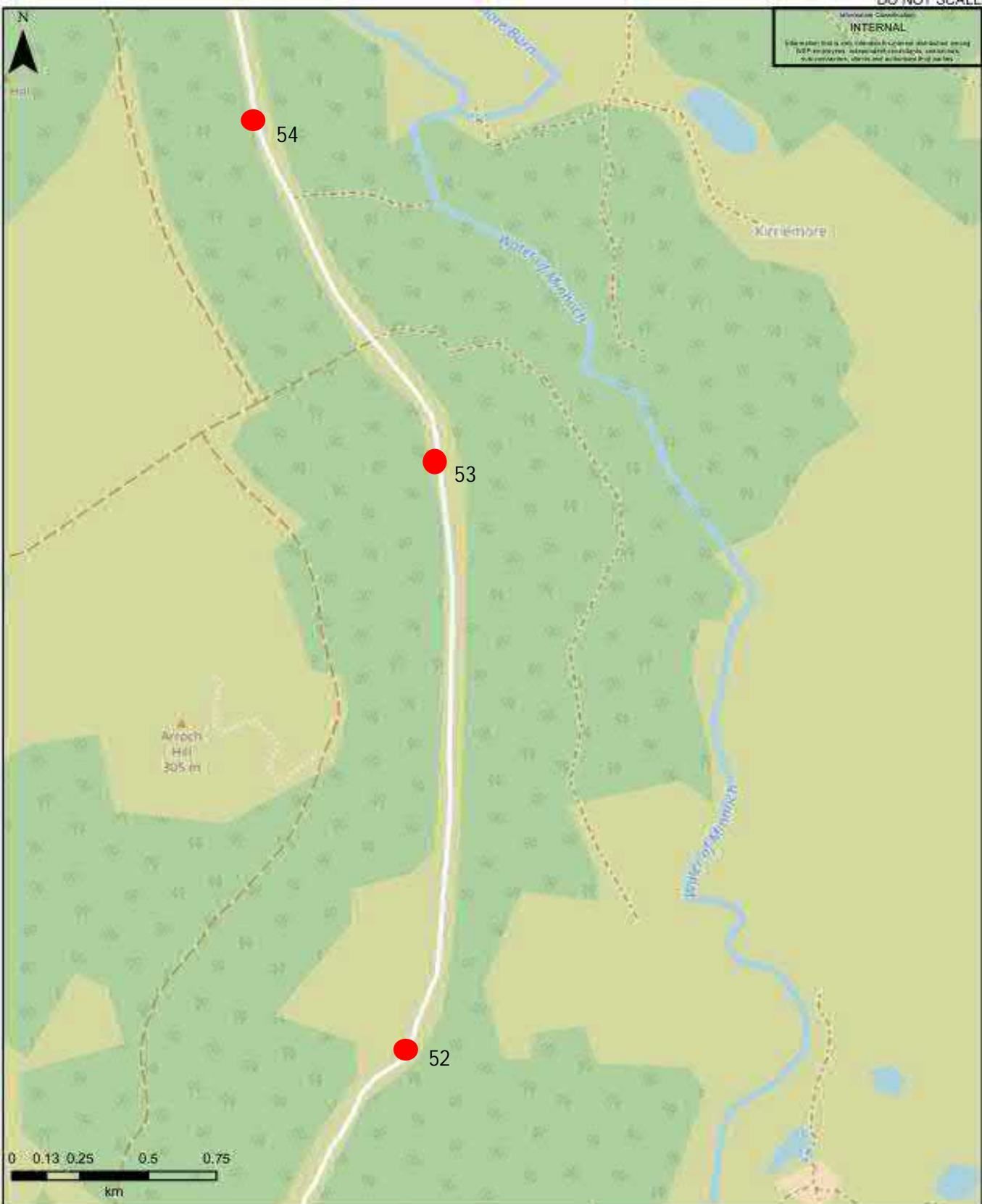
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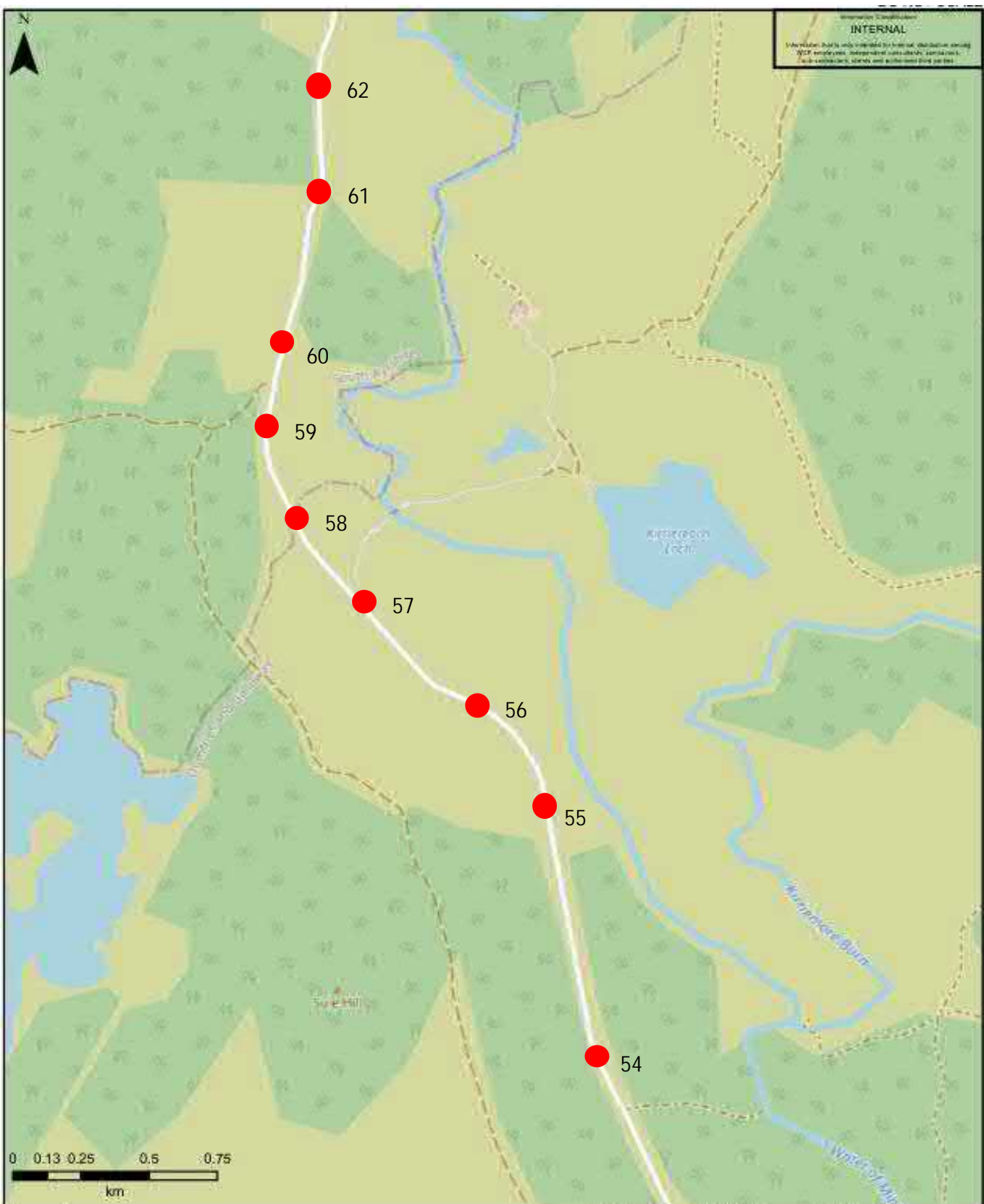
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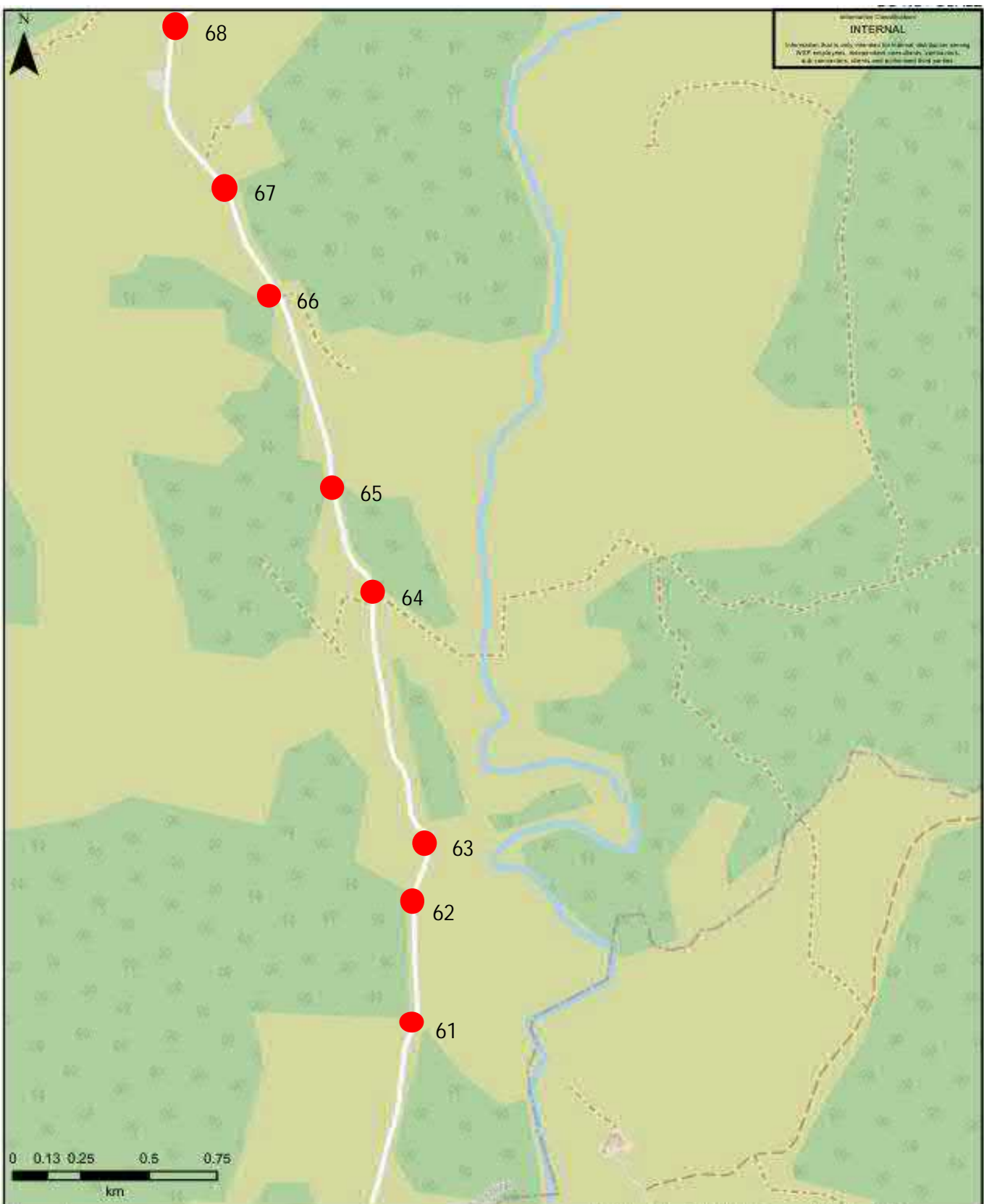
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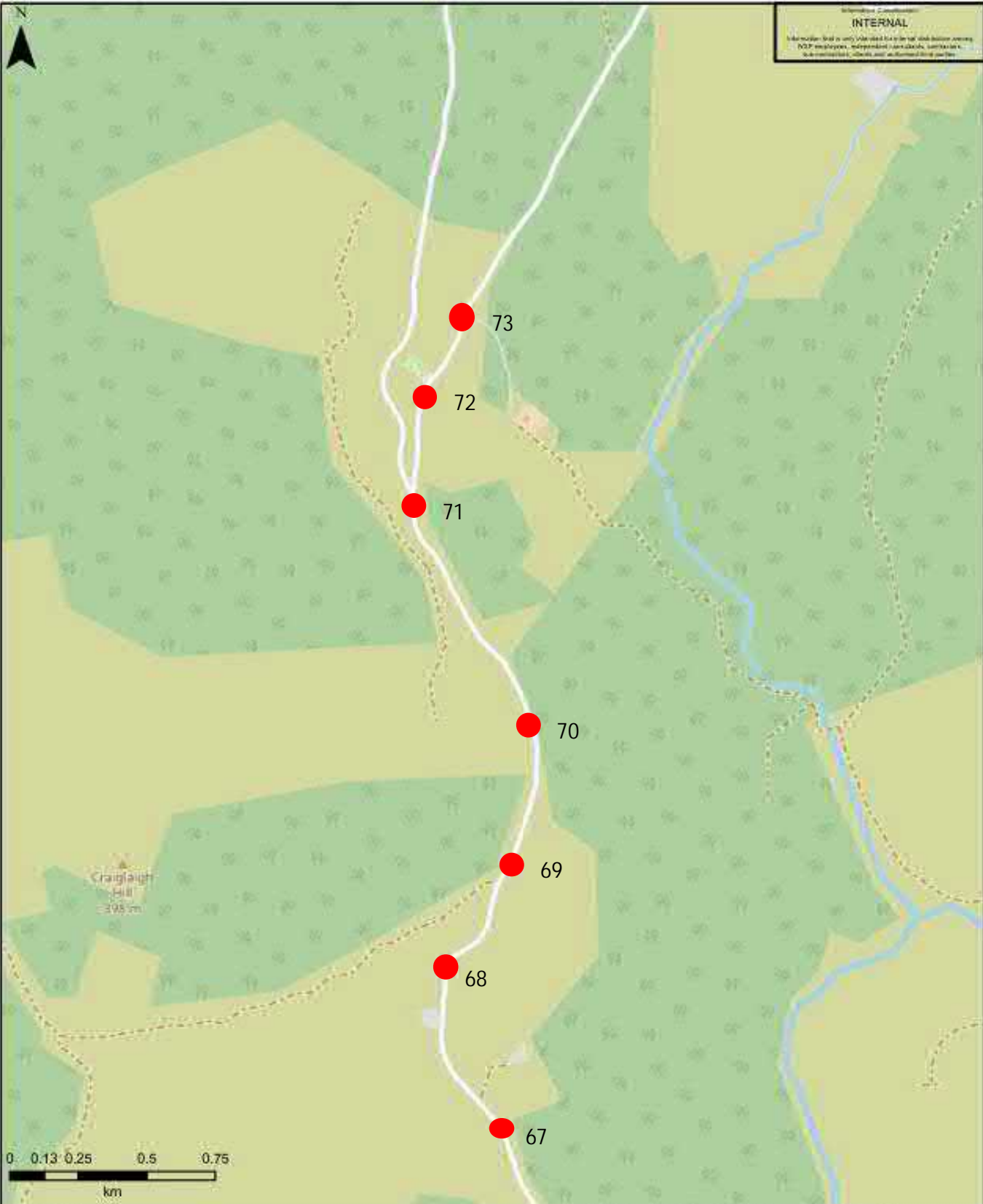
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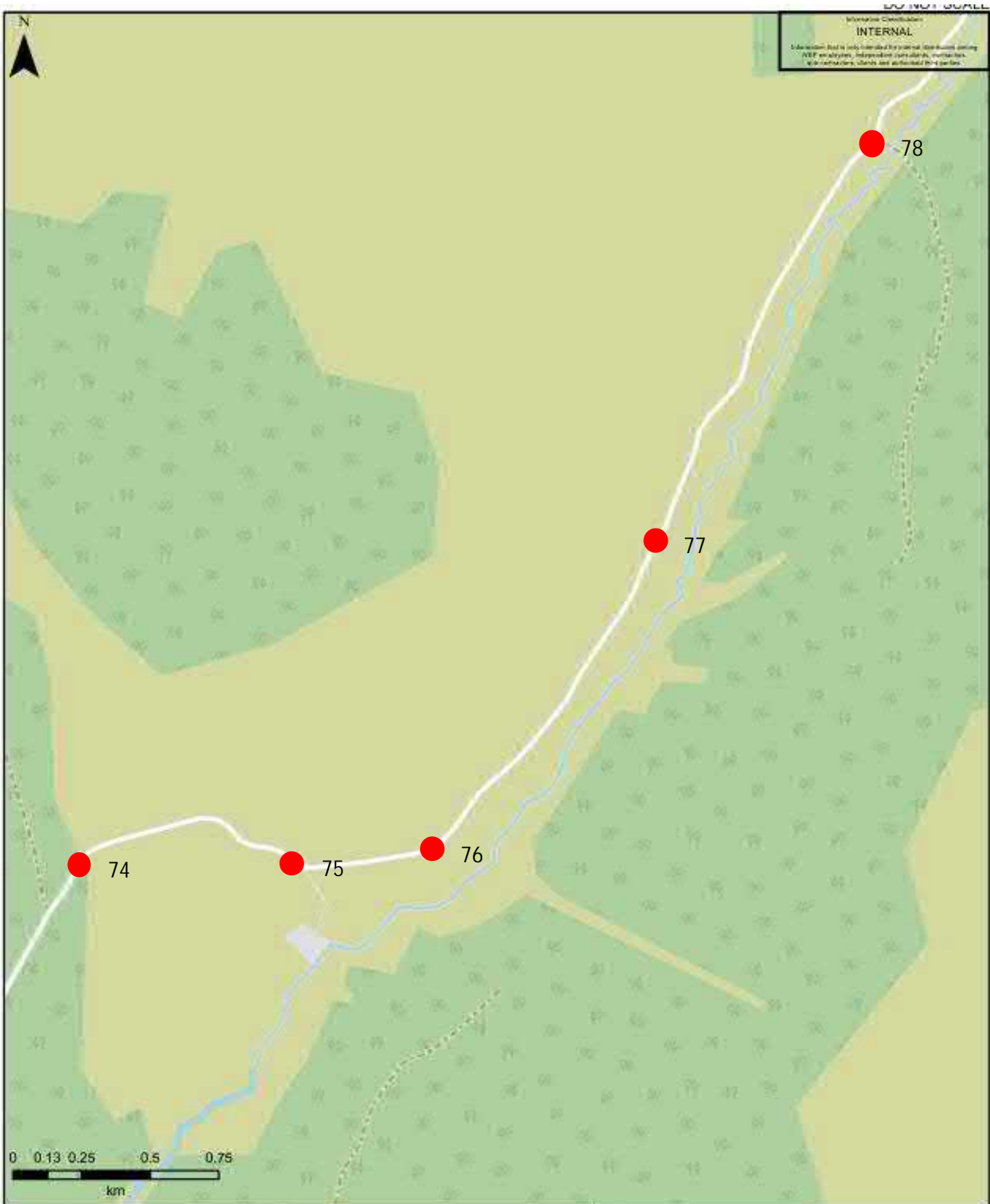
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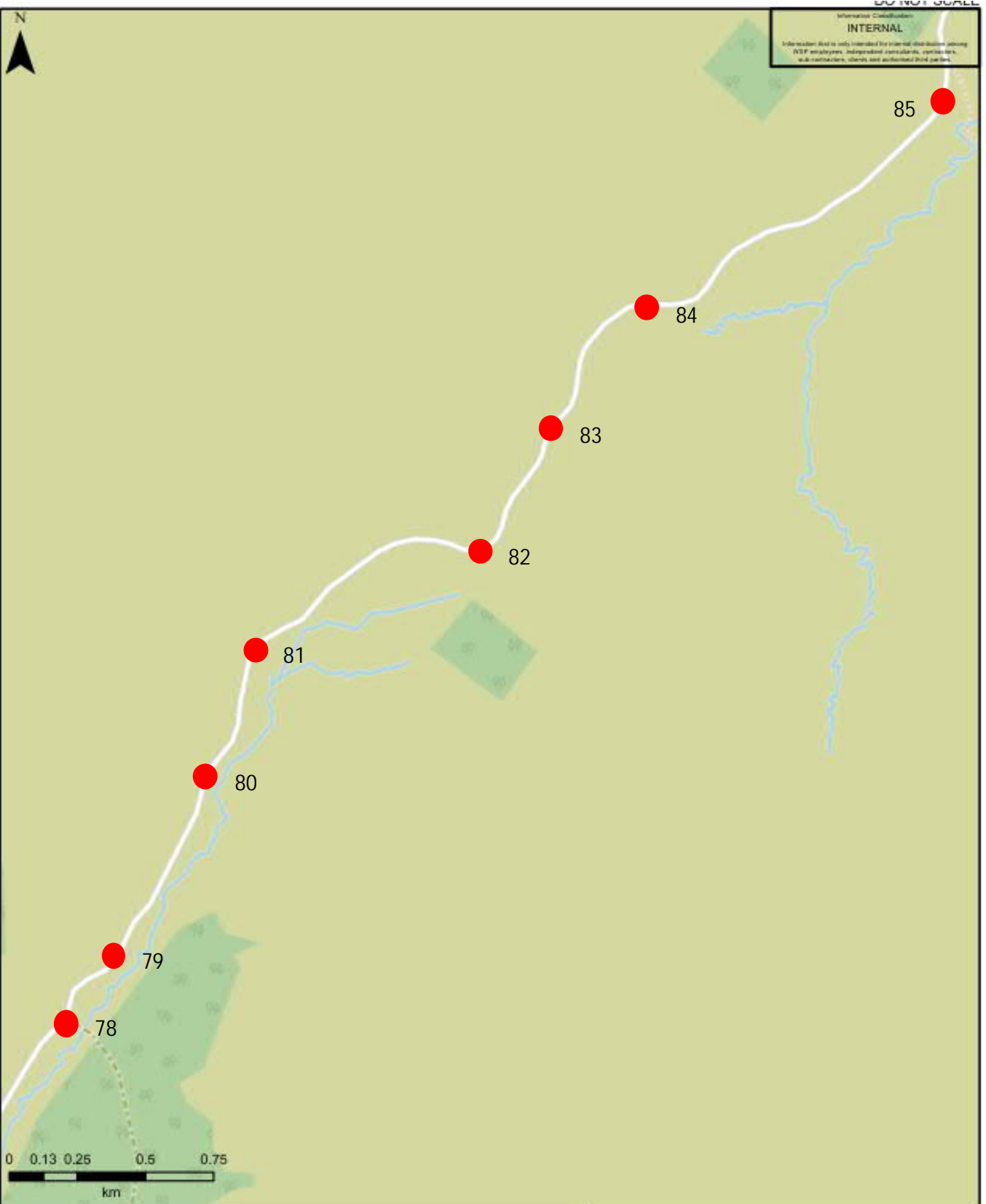


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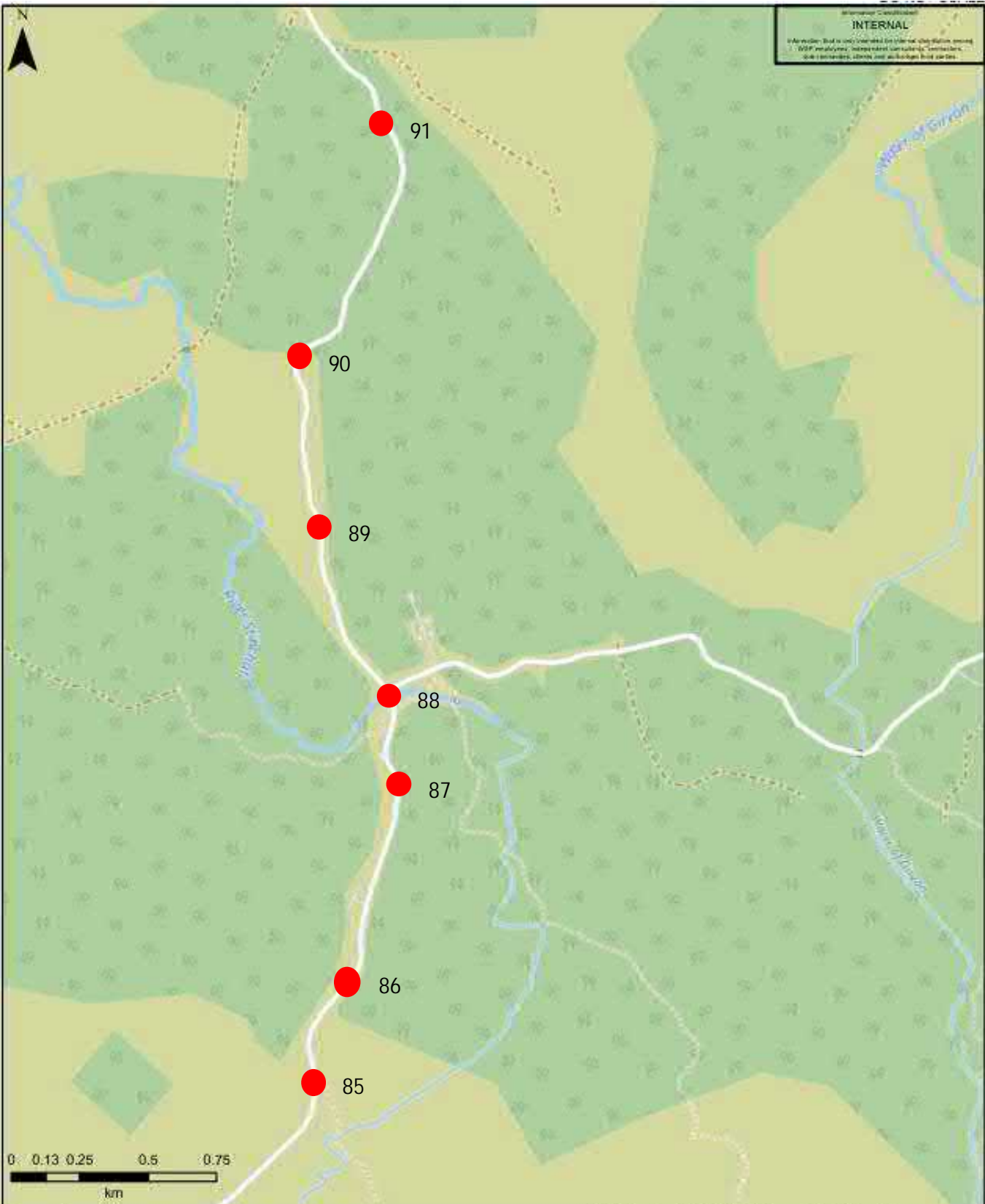
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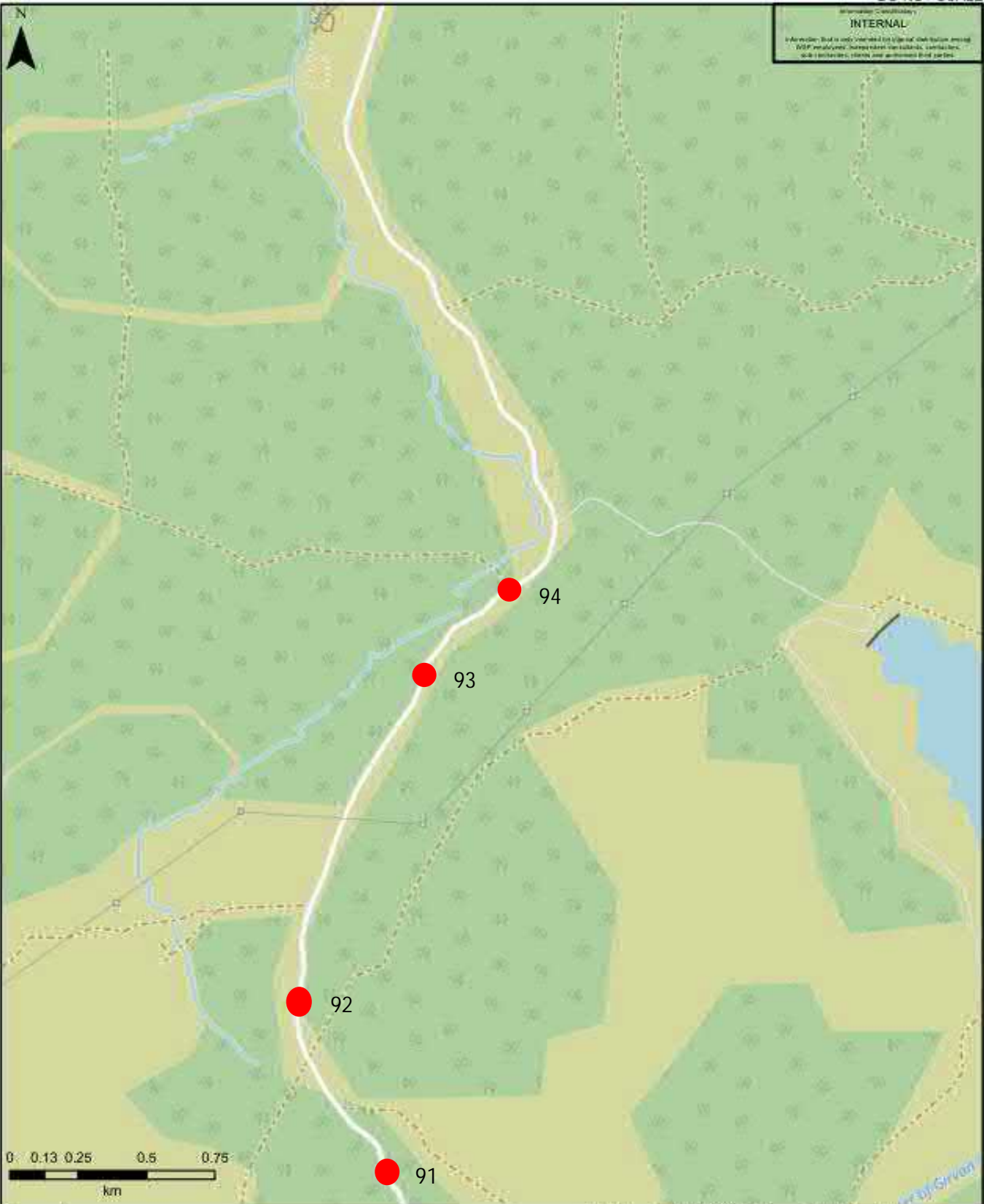


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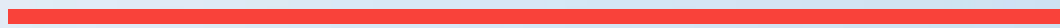
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Appendix C

OFFSITE ACCESS APPRAISAL






POI	WYG DWG No.	Location / Constraint	Image	Potential Works for Consideration	Embedded Mitigation / Further Survey Requirements	Potential Impacts	Likely Potential Effects
General Works							
N/A	N/A	C46W whole route	N/A	<p>General widening of carriageway in verge areas.</p> <p>Potential verge / embankment regrading.</p> <p>Potential physical upgrade works to existing drainage at locations of carriageway widening / regrading / embankment regrading.</p> <p>Temporary construction compounds will be required to accommodate the works. The location and dimensions are unknown at this time and will be agreed with the council ahead of any works commencing.</p>	<p>Landscape and Visual - The design will need to show that it is carefully integrated into the existing topography, minimising any cut and fill. See recommended landscape and visual mitigation options (Appendix C.1), if implemented these would likely reduce effects.</p> <p>Hydrology, Hydrogeology, Geology and Soils - The adoption of the applicable good practice measures in the Outline Construction Environmental Management Plan (CEMP) would reduce the impact of modification to surface water drainage patterns, with artificial drainage installed only where necessary and would, wherever practical, be installed in advance of ground being cleared of vegetation.</p> <p>The adoption of the applicable good practice measures as summarised in the Outline CEMP would reduce the probability of a sedimentation and/or pollution incident occurring as a result of the carriageway widening, and also reduce the magnitude of any incident due to a combination of good site environmental management procedures.</p> <p>The design principles and adoption of the applicable good practice measures summarised in the Outline CEMP would reduce the soils losses and compaction of soil effects. Site monitoring would identify any areas where soil effects are noted and enable a fast response to minimise effect.</p> <p>Ecology and Biodiversity -The undertaking of an ecological walkover in advance of works would allow the identification of any habitat, flora or fauna constraints and allow suitable mitigation measures to be designed to reduce the potential adverse effects.</p> <p>Any bespoke mitigation measures arising from the ecological walkover, together with standard measures relating to pollution prevention, biosecurity and other environmental good practice measures recommended by CIRIA and Scottish Environmental Protection Agency (SEPA), would reduce the potential adverse effects.</p> <p>Ornithology: N/A</p> <p>Noise: Construction: Works to be undertaken in accordance with the principle of Best Practicable Means (BPM) as defined in Section 72 of the Control of Pollution Act 1974 (CoPA).</p> <p>Archaeology and Cultural Heritage: Demarcation of assets and potential works to avoid any direct impacts to the following assets: - Laigh Rowantree Bridge (NX 3530 9063); - Water of Minnoch, Ree (NX 3573 8794); - Rowantree, Tollhouse and Inn (NX 3528 9040); - Suie Tollhouse (NX 3572 8655); and - Suie Linn, Corn Drying Kiln (NX 36165 85966).</p> <p>Forestry: N/A</p>	<p>Landscape and Visual - The parts of the routes within forested areas are less sensitive and any widening works will only create a minor impact. Works in the more exposed uplands in the north have the potential to create significant landscape and visual impacts.</p> <p>Hydrology, Hydrogeology, Geology and Soils - No adverse impacts anticipated as a result of the proposed works.</p> <p>Ecology and Biodiversity - it is anticipated that the proposed works could result in Negligible impacts to the existing ecological baseline.</p> <p>Ornithology - This would result in negligible impacts on ornithological features.</p> <p>Noise - Construction: Potential for direct, short term, temporary, negative negligible to minor noise and vibration impacts during construction works at nearby sensitive receptors.</p> <p>Archaeology and Cultural Heritage - without mitigation there is the potential to have direct impacts on a number of assets including: - Laigh Rowantree Bridge (NX 3530 9063); - Water of Minnoch, Ree (NX 3573 8794); - Rowantree, Tollhouse and Inn (NX 3528 9040); - Suie Tollhouse (NX 3572 8655); and - Suie Linn, Corn Drying Kiln (NX 36165 85966).</p> <p>Impacts from the potential works considered may result in a significant deterioration of the cultural heritage resource prior to mitigation.</p> <p>Forestry - It is anticipated that works within highway boundary will have little or no impact on forestry. Subject to clarification of boundary extents.</p>	<p>Minor adverse effect – where the Proposed Development would result in a small deterioration of the existing environment.</p> <p>Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.</p> <p>Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.</p> <p>Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.</p> <p>Minor adverse effect – where the Proposed Development would result in a small deterioration of the existing environment.</p> <p>Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.</p> <p>Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.</p>
				<p>Landscape and Visual: N/A</p> <p>Hydrology, Hydrogeology, Geology and Soils: The adoption of the applicable good practice measures in the Outline CEMP would reduce the impact of modification to surface water drainage patterns, with artificial drainage installed only where necessary and would, wherever practical, be installed in advance of ground being cleared of vegetation.</p> <p>The adoption of the applicable good practice measures as summarised in the Outline CEMP would reduce the probability of a sedimentation and/or pollution incident occurring as a result of the carriageway widening, and also reduce the magnitude of any incident due to a combination of good site environmental management procedures.</p>	<p>Landscape and Visual: N/A</p> <p>Hydrology, Hydrogeology, Geology and Soils - No adverse impacts anticipated as a result of the proposed works.</p>	<p>Landscape and Visual - Visual effect of re-grading likely to be within existing areas (not associated with widening) and won't be particularly noticeable.</p> <p>Hydrology, Hydrogeology, Geology and Soils - No adverse impacts anticipated as a result of the proposed works.</p>	<p>Minor adverse effect – where the Proposed Development would result in a small deterioration of the existing environment.</p> <p>Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.</p>

N/A	N/A	C46W whole route	N/A	Potential carriageway re-grading.	Ecology and Biodiversity: The undertaking of an ecological walkover in advance of works would allow the identification of any habitat, flora or fauna constraints and allow suitable mitigation measures to be designed to reduce the potential adverse effects.	Ecology and Biodiversity - it is anticipated that the proposed works could result in Negligible impacts to the existing ecological baseline.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
				Potential verge / embankment regrading.	Any bespoke mitigation measures arising from the ecological walkover, together with standard measures relating to pollution prevention, biosecurity and other environmental good practice measures recommended by CIRIA and SEPA, would reduce the potential adverse effects.		
				Potential physical upgrade works to existing drainage at locations of carriageway widening / regrading / embankment regrading.	Ornithology: N/A	Ornithology - This would result in negligible impacts on ornithological features.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
					Noise: Construction: Works to be undertaken in accordance with the principle of BPM as defined in Section 72 of the Control of Pollution Act 1974 (CoPA).	Noise - Construction: Potential for direct, short term, temporary, negative negligible to minor noise and vibration impacts during construction works at nearby sensitive receptors.	Minor adverse effect – where the Proposed Development would result in a small deterioration of the existing environment.
					Archaeology and Cultural Heritage: Demarcation of assets and potential works to avoid any direct impacts to the following assets: - Laigh Rowantree Bridge (NX 3530 9063); - Water of Minnoch, Ree (NX 3573 8794); - Rowantree, Tollhouse and Inn (NX 3528 9040); - Suie Tollhouse (NX 3572 8655); and - Suie Linn, Corn Drying Kiln (NX 36165 85966).	Archaeology and Cultural Heritage - without mitigation there is the potential to have direct impacts on a number of assets including: - Laigh Rowantree Bridge (NX 3530 9063); - Water of Minnoch, Ree (NX 3573 8794); - Rowantree, Tollhouse and Inn (NX 3528 9040); - Suie Tollhouse (NX 3572 8655); and - Suie Linn, Corn Drying Kiln (NX 36165 85966). Impacts from the potential works considered may result in a significant deterioration of the cultural heritage resource prior to mitigation.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
	Forestry: N/A	Forestry - It is anticipated that works within highway boundary will have little or no impact on forestry. Subject to clarification of boundary extents.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.				
N/A	N/A	C46W whole route	N/A	Potential localised carriageway re-grading.	Landscape and Visual: N/A	Landscape and Visual - Visual effect of re-grading likely to be within existing areas (not associated with widening) and won't be particularly noticeable.	Minor adverse effect – where the Proposed Development would result in a small deterioration of the existing environment.
				Potential verge / embankment regrading.	Hydrology, Hydrogeology, Geology and Soils: The adoption of the applicable good practice measures in the Outline CEMP would reduce the impact of modification to surface water drainage patterns, with artificial drainage installed only where necessary and would, wherever practical, be installed in advance of ground being cleared of vegetation. The adoption of the applicable good practice measures as summarised in the Outline CEMP would reduce the probability of a sedimentation and/or pollution incident occurring as a result of the carriageway widening, and also reduce the magnitude of any incident due to a combination of good site environmental management procedures.	Hydrology, Hydrogeology, Geology and Soils - No adverse impacts anticipated as a result of the proposed works.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
				Potential physical upgrade works to existing drainage at locations of carriageway widening / regrading / embankment regrading	Ecology and Biodiversity: The undertaking of an ecological walkover in advance of works would allow the identification of any habitat, flora or fauna constraints and allow suitable mitigation measures to be designed to reduce the potential adverse effects. Any bespoke mitigation measures arising from the ecological walkover, together with standard measures relating to pollution prevention, biosecurity and other environmental good practice measures recommended by CIRIA and SEPA, would reduce the potential adverse effects.	Ecology and Biodiversity - it is anticipated that the proposed works could result in Negligible impacts to the existing ecological baseline.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
					Ornithology: N/A	Ornithology - This would result in negligible impacts on ornithological features.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
					Noise: Construction: Works to be undertaken in accordance with the principle of BPM as defined in Section 72 of the Control of Pollution Act 1974 (CoPA).	Noise - Construction: Potential for direct, short term, temporary, negative negligible to minor noise and vibration impacts during construction works at nearby sensitive receptors.	Minor adverse effect – where the Proposed Development would result in a small deterioration of the existing environment.
					Archaeology and Cultural Heritage: Demarcation of assets and potential works to avoid any direct impacts to the following assets: - Laigh Rowantree Bridge (NX 3530 9063); - Water of Minnoch, Ree (NX 3573 8794); - Rowantree, Tollhouse and Inn (NX 3528 9040); - Suie Tollhouse (NX 3572 8655); and - Suie Linn, Corn Drying Kiln (NX 36165 85966).	Archaeology and Cultural Heritage - without mitigation there is the potential to have direct impacts on a number of assets including: - Laigh Rowantree Bridge (NX 3530 9063); - Water of Minnoch, Ree (NX 3573 8794); - Rowantree, Tollhouse and Inn (NX 3528 9040); - Suie Tollhouse (NX 3572 8655); and - Suie Linn, Corn Drying Kiln (NX 36165 85966). Impacts from the potential works considered may result in a significant deterioration of the cultural heritage resource prior to mitigation.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
					Forestry: N/A	Forestry - It is anticipated that works within highway boundary will have little or no impact on forestry. Subject to clarification of boundary extents.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.



N/A	N/A	C46W whole route	N/A	General cutting back of vegetation and tree canopy. No removal of trees / hedges etc. required.	Landscape and Visual: A tree survey should be undertaken by a qualified arboriculturist prior to any works so that any particularly valuable trees are identified and the health and growth of the trees is not compromised. See recommended landscape and visual mitigation options (Appendix C.1).	Landscape and Visual - Anticipate temporary localised landscape and visual effects only and that trees/plants will be allowed to regrow.	Minor adverse effect – where the Proposed Development would result in a small deterioration of the existing environment.
					Hydrology, Hydrogeology, Geology and Soils: N/A	Hydrology, Hydrogeology, Geology and Soils - No adverse impacts anticipated as a result of the proposed works.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
					Ecology and Biodiversity: N/A	Ecology and Biodiversity - it is anticipated that the proposed works could result in Negligible impacts to the existing ecological baseline.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
					Ornithology: Avoid vegetation clearance in bird breeding season (March-August), or undertake pre-works ecological clerk of works (ECoW) checks for nesting birds (to avoid legal non-compliance).	Ornithology - Vegetation clearance has the potential to result in legal offences related to nesting birds, however following the application of embedded mitigation negligible impacts on ornithological features are anticipated.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
					Noise: Construction: Works to be undertaken in accordance with the principle of BPM as defined in Section 72 of the Control of Pollution Act 1974 (CoPA).	Noise - Construction: Potential for direct, short term, temporary, negative negligible to minor noise and vibration impacts during construction works at nearby sensitive receptors.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
					Archaeology and Cultural Heritage: Demarcation of assets and potential works to avoid any direct impacts to the following assets: - Laigh Rowantree Bridge (NX 3530 9063); - Water of Minnoch, Ree (NX 3573 8794); - Rowantree, Tollhouse and Inn (NX 3528 9040); - Suie Tollhouse (NX 3572 8655); and - Suie Linn, Corn Drying Kiln (NX 36165 85966).	Archaeology and Cultural Heritage - without mitigation there is the potential to have direct impacts on a number of assets including: - Laigh Rowantree Bridge (NX 3530 9063); - Water of Minnoch, Ree (NX 3573 8794); - Rowantree, Tollhouse and Inn (NX 3528 9040); - Suie Tollhouse (NX 3572 8655); and - Suie Linn, Corn Drying Kiln (NX 36165 85966). Impacts from the potential works considered may result in a significant deterioration of the cultural heritage resource prior to mitigation.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
Forestry: N/A	Forestry - Impact dependent on detailed survey. Tree removal may be required dependent on extent of works required.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.					
Point of Interest (POI) Locations							
36	SPA028	C46W right turn adjacent to Glentool Campsite		Tree and vegetation removal. Potential removal / lowering of stone wall.	Landscape and Visual: A tree survey should be undertaken by a qualified arboriculturist prior to any works so that any particularly valuable trees are identified and the health and growth of the trees is not compromised. See recommended landscape and visual mitigation options (Appendix C.1), if implemented these would likely reduce effects.	Landscape and Visual - due to extent of widening this may result in some minor loss/cut back of broadleaf/mixed woodland and potentially small sections of stone walls which are a characteristic of this part of the route. However, it is considered it would be very localised and unlikely to create significant effects.	Minor adverse effect – where the Proposed Development would result in a small deterioration of the existing environment.
					Hydrology, Hydrogeology, Geology and Soils: N/A	Hydrology, Hydrogeology, Geology and Soils - No adverse impacts anticipated as a result of the proposed works.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
					Ecology and Biodiversity: The undertaking of an ecological walkover in advance of works would allow the identification of any habitat, flora or fauna constraints and allow suitable mitigation measures to be designed to reduce the potential adverse effects. Any bespoke mitigation measures arising from the ecological walkover, together with standard measures relating to pollution prevention, biosecurity and other environmental good practice measures recommended by CIRIA and SEPA, would reduce the potential adverse effects.	Ecology and Biodiversity - it is anticipated that the proposed works could result in Negligible impacts to the existing ecological baseline.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
					Ornithology: Avoid vegetation clearance in bird breeding season (March-August), or undertake pre-works ECoW checks for nesting birds (to avoid legal non-compliance).	Ornithology - Vegetation clearance has the potential to result in legal offences related to nesting birds, however following the application of embedded mitigation negligible impacts on ornithological features are anticipated.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
					Noise: Construction: Works to be undertaken in accordance with the principle of BPM as defined in Section 72 of the Control of Pollution Act 1974 (CoPA).	Noise - Construction: Distance between closest sensitive receptor (based on AddressBase data) and POI is ~120m. Potential for direct, short term, temporary, negative minor noise impacts during construction works at nearby sensitive receptors.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
					Archaeology and Cultural Heritage: N/A	Archaeology and Cultural Heritage - This option is anticipated to have no or negligible benefit or negative impact on cultural heritage features.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
					Forestry: N/A	Forestry - Impact dependent on detailed survey. Tree removal may be required dependent on extent of works required.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
37	N/A	C46W Left bend north of Glentool Campsite		Tree canopy to be cut back.	Landscape and Visual: N/A	Landscape and Visual - Minor effects due to works largely within existing road corridor and tree works would be within commercial forestry extents.	Minor adverse effect – where the Proposed Development would result in a small deterioration of the existing environment.
					Hydrology, Hydrogeology, Geology and Soils: N/A	Hydrology, Hydrogeology, Geology and Soils - No adverse impacts anticipated as a result of the proposed works.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
					Ecology and Biodiversity: N/A	Ecology and Biodiversity - it is anticipated that the proposed works could result in Negligible impacts to the existing ecological baseline.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
					Ornithology: Avoid vegetation clearance in bird breeding season (March-August), or undertake pre-works ECoW checks for nesting birds (to avoid legal non-compliance).	Ornithology - Vegetation clearance has the potential to result in legal offences related to nesting birds, however following the application of embedded mitigation negligible impacts on ornithological features are anticipated.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.

					<p>Noise: Construction: Works to be undertaken in accordance with the principle of BPM as defined in Section 72 of the Control of Pollution Act 1974 (CoPA).</p> <p>Archaeology and Cultural Heritage: N/A</p> <p>Forestry: N/A</p>	<p>Noise - Construction: Distance between closest sensitive receptor (based on AddressBase data) and POI is ~50m. Potential for direct, short term, temporary, negative minor noise impacts during construction works at nearby sensitive receptors.</p> <p>Archaeology and Cultural Heritage - This option is anticipated to have no or negligible benefit or negative impact on cultural heritage features.</p> <p>Forestry - Impact dependent on detailed survey. Tree removal may be required dependent on extent of works required.</p>	<p>Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.</p> <p>Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.</p> <p>Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.</p>
38	N/A	C46W series of bends south of Glentroot Village		Tree canopy to be cut back.	<p>Landscape and Visual: N/A</p> <p>Hydrology, Hydrogeology, Geology and Soils: N/A</p> <p>Ecology and Biodiversity: N/A</p> <p>Ornithology: Avoid vegetation clearance in bird breeding season (March-August), or undertake pre-works ECoW checks for nesting birds (to avoid legal non-compliance).</p> <p>Noise: Construction: Works to be undertaken in accordance with the principle of BPM as defined in Section 72 of the Control of Pollution Act 1974 (CoPA).</p> <p>Archaeology and Cultural Heritage: N/A</p> <p>Forestry: N/A</p>	<p>Landscape and Visual - Minor effects due to works largely within existing road corridor and tree works would be within commercial forestry extents.</p> <p>Hydrology, Hydrogeology, Geology and Soils - No adverse impacts anticipated as a result of the proposed works.</p> <p>Ecology and Biodiversity - it is anticipated that the proposed works could result in Negligible impacts to the existing ecological baseline.</p> <p>Ornithology - Vegetation clearance has the potential to result in legal offences related to nesting birds, however following the application of embedded mitigation negligible impacts on ornithological features are anticipated.</p> <p>Noise - Construction: Distance between closest sensitive receptor (based on AddressBase data) and POI is ~260m. Potential for direct, short term, temporary, negative minor noise impacts during construction works at nearby sensitive receptors.</p> <p>Archaeology and Cultural Heritage - This option is anticipated to have no or negligible benefit or negative impact on cultural heritage features.</p> <p>Forestry - Impact dependent on detailed survey. Tree removal may be required dependent on extent of works required.</p>	<p>Minor adverse effect – where the Proposed Development would result in a small deterioration of the existing environment.</p> <p>Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.</p> <p>Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.</p> <p>Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.</p> <p>Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.</p> <p>Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.</p> <p>Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.</p>
39	SPA029	C46W Glentroot Village		<p>Vegetation / tree canopy to be cut back.</p> <p>Minor carriageway widening / load bearing surface.</p> <p>Potential removal of lighting column.</p>	<p>Landscape and Visual: N/A</p> <p>Hydrology, Hydrogeology, Geology and Soils: The adoption of the applicable good practice measures as summarised in the Outline CEMP would reduce the probability of a sedimentation and/or pollution incident occurring as a result of the carriageway widening, and also reduce the magnitude of any incident due to a combination of good site environmental management procedures.</p> <p>The design principles and adoption of the applicable good practice measures summarised in the Outline CEMP would reduce the soils losses and compaction of soil effects. Site monitoring would identify any areas where soil effects are noted and enable a fast response to minimise effect.</p> <p>Carriageway widening will be undertaken within 20m of the Black Burn, which has a High risk of surface water flood risk at this location.</p> <p>Ecology and Biodiversity: The undertaking of an ecological walkover in advance of works would allow the identification of any habitat, flora or fauna constraints and allow suitable mitigation measures to be designed to reduce the potential adverse effects.</p> <p>Any bespoke mitigation measures arising from the ecological walkover, together with standard measures relating to pollution prevention, biosecurity and other environmental good practice measures recommended by CIRIA and SEPA, would reduce the potential adverse effects.</p> <p>Ornithology: Avoid vegetation clearance in bird breeding season (March-August), or undertake pre-works ECoW checks for nesting birds (to avoid legal non-compliance).</p> <p>Noise: Construction: Works to be undertaken in accordance with the principle of BPM as defined in Section 72 of the Control of Pollution Act 1974 (CoPA).</p> <p>Archaeology and Cultural Heritage: N/A</p>	<p>Landscape and Visual - Minor effects due to works largely within existing road corridor and tree works would be within commercial forestry extents.</p> <p>Hydrology, Hydrogeology, Geology and Soils - No adverse impacts anticipated as a result of the proposed works.</p> <p>Ecology and Biodiversity - it is anticipated that the proposed works could result in Negligible impacts to the existing ecological baseline.</p> <p>Ornithology - Vegetation clearance has the potential to result in legal offences related to nesting birds, however following the application of embedded mitigation negligible impacts on ornithological features are anticipated.</p> <p>Noise - Construction: Distance between closest sensitive receptor (based on AddressBase data) and POI is ~30m. Potential for direct, short term, temporary, negative moderate noise and vibration impacts during construction works at nearby sensitive receptors.</p> <p>Archaeology and Cultural Heritage - This option is anticipated to have no or negligible benefit or negative impact on cultural heritage features.</p>	<p>Minor adverse effect – where the Proposed Development would result in a small deterioration of the existing environment.</p> <p>Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.</p> <p>Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.</p> <p>Minor adverse effect – where the Proposed Development would result in a small deterioration of the existing environment.</p> <p>Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.</p>



40	N/A	C46W left bend directly north of Glentrool Village		Tree canopy to be cut back.	Forestry: N/A	Forestry - Impact dependent on detailed survey. Tree removal may be required dependent on extent of works required.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
					Landscape and Visual: N/A	Landscape and Visual - Minor effects due to works largely within existing road corridor and tree works would be within commercial forestry extents.	Minor adverse effect – where the Proposed Development would result in a small deterioration of the existing environment.
					Hydrology, Hydrogeology, Geology and Soils: N/A	Hydrology, Hydrogeology, Geology and Soils - No adverse impacts anticipated as a result of the proposed works.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
					Ecology and Biodiversity: N/A	Ecology and Biodiversity - it is anticipated that the proposed works could result in Negligible impacts to the existing ecological baseline.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
					Ornithology: Avoid vegetation clearance in bird breeding season (March-August), or undertake pre-works ECoW checks for nesting birds (to avoid legal non-compliance).	Ornithology - Vegetation clearance has the potential to result in legal offences related to nesting birds, however following the application of embedded mitigation negligible impacts on ornithological features are anticipated.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
					Noise: Construction: Works to be undertaken in accordance with the principle of BPM as defined in Section 72 of the Control of Pollution Act 1974 (CoPA).	Noise - Construction: Distance between closest sensitive receptor (based on AddressBase data) and POI is ~90m. Potential for direct, short term, temporary, negative minor noise impacts during construction works at nearby sensitive receptors.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
					Archaeology and Cultural Heritage: N/A	Archaeology and Cultural Heritage - This option is anticipated to have no or negligible benefit or negative impact on cultural heritage features.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
41	SPA030	C46W left bend 400m north of Glentrool Village	 	Vegetation / tree canopy to be cut back. Minor carriageway widening / load bearing surface at bends. Potential general carriageway widening in verge areas. Removal of telegraph pole and stay cables. Potential removal / lowering of stone wall. Assessment of bridge required to confirm suitability.	Landscape and Visual: See recommended landscape and visual mitigation options (Appendix C.1), if implemented these would likely reduce effects.	Landscape and Visual - potential very localised impacts on character and visual amenity of local residents through the road widening and loss of stone wall, plus tree canopy to be cut back.	Minor adverse effect – where the Proposed Development would result in a small deterioration of the existing environment.
					Hydrology, Hydrogeology, Geology and Soils: The adoption of the applicable good practice measures as summarised in the Outline CEMP would reduce the probability of a sedimentation and/or pollution incident occurring as a result of the carriageway widening, and also reduce the magnitude of any incident due to a combination of good site environmental management procedures. The design principles and adoption of the applicable good practice measures summarised in the Outline CEMP would reduce the soils losses and compaction of soil effects. Site monitoring would identify any areas where soil effects are noted and enable a fast response to minimise effect. Any bridge upgrades would be designed and constructed following good practice techniques and would be of sufficient capacity to receive storm flows with an allowance for increased flows due to climate change. Carriageway widening will be undertaken within 20m of the Black Burn, which has a High risk of surface water flood risk at this location.	Hydrology, Hydrogeology, Geology and Soils - No adverse impacts anticipated as a result of the proposed works.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
					Ecology and Biodiversity: The undertaking of an ecological walkover in advance of works would allow the identification of any habitat, flora or fauna constraints and allow suitable mitigation measures to be designed to reduce the potential adverse effects. Any bespoke mitigation measures arising from the ecological walkover, together with standard measures relating to pollution prevention, biosecurity and other environmental good practice measures recommended by CIRIA and SEPA, would reduce the potential adverse effects.	Ecology and Biodiversity - it is anticipated that the proposed works could result in Negligible impacts to the existing ecological baseline.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
					Ornithology: Avoid vegetation clearance in bird breeding season (March-August), or undertake pre-works ECoW checks for nesting birds (to avoid legal non-compliance).	Ornithology - Vegetation clearance has the potential to result in legal offences related to nesting birds, however following the application of embedded mitigation negligible impacts on ornithological features are anticipated.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
					Noise: Construction: Works to be undertaken in accordance with the principle of BPM as defined in Section 72 of the Control of Pollution Act 1974 (CoPA).	Noise - Construction: Distance between closest sensitive receptor (based on AddressBase data) and POI is ~25m. Potential for direct, short term, temporary, negative minor noise and vibration impacts during construction works at nearby sensitive receptors.	Minor adverse effect – where the Proposed Development would result in a small deterioration of the existing environment.





				Archaeology and Cultural Heritage: N/A	Archaeology and Cultural Heritage - This option is anticipated to have no or negligible benefit or negative impact on cultural heritage features.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
				Forestry: N/A	Forestry - Impact dependent on detailed survey. Tree removal may be required dependent on extent of works required.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
42	SPA031	C46W bends 2km north of Glentroot	 	Landscape and Visual: N/A	Landscape and Visual - Minor effects due to works largely within existing road corridor and tree works would be within commercial forestry extents.	Minor adverse effect – where the Proposed Development would result in a small deterioration of the existing environment.
				Hydrology, Hydrogeology, Geology and Soils: The adoption of the applicable good practice measures as summarised in the Outline CEMP would reduce the probability of a sedimentation and/or pollution incident occurring as a result of the carriageway widening, and also reduce the magnitude of any incident due to a combination of good site environmental management procedures.	Hydrology, Hydrogeology, Geology and Soils - No adverse impacts anticipated as a result of the proposed works.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
				Ecology and Biodiversity: The undertaking of an ecological walkover in advance of works would allow the identification of any habitat, flora or fauna constraints and allow suitable mitigation measures to be designed to reduce the potential adverse effects. Any bespoke mitigation measures arising from the ecological walkover, together with standard measures relating to pollution prevention, biosecurity and other environmental good practice measures recommended by CIRIA and SEPA, would reduce the potential adverse effects.	Ecology and Biodiversity - it is anticipated that the proposed works could result in Negligible impacts to the existing ecological baseline.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
				Ornithology: Avoid vegetation clearance in bird breeding season (March-August), or undertake pre-works ECoW checks for nesting birds (to avoid legal non-compliance).	Ornithology - Vegetation clearance has the potential to result in legal offences related to nesting birds, however following the application of embedded mitigation negligible impacts on ornithological features are anticipated.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
				Noise: Construction: Works to be undertaken in accordance with the principle of BPM as defined in Section 72 of the Control of Pollution Act 1974 (CoPA).	Noise - Sensitive receptors more than 1000m away from location. Construction: Potential for neutral construction impacts.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
				Archaeology and Cultural Heritage: N/A	Archaeology and Cultural Heritage - This option is anticipated to have no or negligible benefit or negative impact on cultural heritage features.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
				Forestry: N/A	Forestry - Impact dependent on detailed survey. Tree removal may be required dependent on extent of works required.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
43	SPA032	C46W Series of bends 2.7km north of Glentroot	  	Landscape and Visual: See recommended landscape and visual mitigation options (Appendix C.1), if implemented these would likely reduce effects.	Landscape and Visual - Minor effects due to works largely within existing road corridor and tree works would be within commercial forestry extents.	Minor adverse effect – where the Proposed Development would result in a small deterioration of the existing environment.
				Hydrology, Hydrogeology, Geology and Soils: The adoption of the applicable good practice measures in the Outline CEMP would reduce the impact of modification to surface water drainage patterns, with artificial drainage installed only where necessary and would, wherever practical, be installed in advance of ground being cleared of vegetation. The adoption of the applicable good practice measures as summarised in the Outline CEMP would reduce the probability of a sedimentation and/or pollution incident occurring as a result of the carriageway widening/new carriageway section, and also reduce the magnitude of any incident due to a combination of good site environmental management procedures.	Hydrology, Hydrogeology, Geology and Soils - No adverse impacts anticipated as a result of the proposed works.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
				The design principles and adoption of the applicable good practice measures summarised in the Outline CEMP would reduce the soils losses and compaction of soil effects. Site monitoring would identify any areas where soil effects are noted and enable a fast response to minimise effect.	Ecology and Biodiversity: The undertaking of an ecological walkover in advance of works would allow the identification of any habitat, flora or fauna constraints and allow suitable mitigation measures to be designed to reduce the potential adverse effects. Any bespoke mitigation measures arising from the ecological walkover, together with standard measures relating to pollution prevention, biosecurity and other environmental good practice measures recommended by CIRIA and SEPA, would reduce the potential adverse effects.	Ecology and Biodiversity - it is anticipated that the proposed works could result in Negligible impacts to the existing ecological baseline.
				Ornithology: Avoid vegetation clearance in bird breeding season (March-August), or undertake pre-works ECoW checks for nesting birds (to avoid legal non-compliance).	Ornithology - Vegetation clearance has the potential to result in legal offences related to nesting birds, however following the application of embedded mitigation negligible impacts on ornithological features are anticipated.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
				Noise: Construction: Works to be undertaken in accordance with the principle of BPM as defined in Section 72 of the Control of Pollution Act 1974 (CoPA).	Noise - Sensitive receptors more than 1000m away from location. Construction: Potential for neutral construction impacts.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
				Potential carriage way re-grading.		
				Potential verge / embankment regrading.		
Potential physical upgrade works to existing drainage at locations of carriage way widening / regrading / embankment regrading.						
Removal of road sign.						


					Archaeology and Cultural Heritage: N/A	Archaeology and Cultural Heritage - This option is anticipated to have no or negligible benefit or negative impact on cultural heritage features.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
					Forestry: N/A	Forestry - Impact dependent on detailed survey. Tree removal may be required dependent on extent of works required.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
					Landscape and Visual: N/A	Landscape and Visual - Minor effects due to works largely within existing road corridor and tree works would be within commercial forestry extents.	Minor adverse effect – where the Proposed Development would result in a small deterioration of the existing environment.
				Vegetation / tree canopy to be cut back and removed at locations.	Hydrology, Hydrogeology, Geology and Soils: The adoption of the applicable good practice measures in the Outline CEMP would reduce the impact of modification to surface water drainage patterns, with artificial drainage installed only where necessary and would, wherever practical, be installed in advance of ground being cleared of vegetation.		
				Minor carriageway widening / load bearing surface at bends.	The adoption of the applicable good practice measures as summarised in the Outline CEMP would reduce the probability of a sedimentation and/or pollution incident occurring as a result of the carriageway widening, and also reduce the magnitude of any incident due to a combination of good site environmental management procedures.	Hydrology, Hydrogeology, Geology and Soils - No adverse impacts anticipated as a result of the proposed works.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
				General carriageway widening in verge areas.	Any bridge upgrades would be designed and constructed following good practice techniques and would be of sufficient capacity to receive storm flows with an allowance for increased flows due to climate change.		
				Potential carriageway re-grading.	The design principles and adoption of the applicable good practice measures summarised in the Outline CEMP would reduce the soils losses and compaction of soil effects. Site monitoring would identify any areas where soil effects are noted and enable a fast response to minimise effect.		
				Potential verge / embankment regrading.			
				Potential physical upgrade works to existing drainage at locations of carriageway widening / regrading / embankment regrading.	Ecology and Biodiversity: The undertaking of an ecological walkover in advance of works would allow the identification of any habitat, flora or fauna constraints and allow suitable mitigation measures to be designed to reduce the potential adverse effects.	Ecology and Biodiversity - it is anticipated that the proposed works could result in Negligible impacts to the existing ecological baseline.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
				Assessment of bridge required to confirm suitability.	Any bespoke mitigation measures arising from the ecological walkover, together with standard measures relating to pollution prevention, biosecurity and other environmental good practice measures recommended by CIRIA and SEPA, would reduce the potential adverse effects.		
					Ornithology: Avoid vegetation clearance in bird breeding season (March-August), or undertake pre-works ECoW checks for nesting birds (to avoid legal non-compliance).	Ornithology - Vegetation clearance has the potential to result in legal offences related to nesting birds, however following the application of embedded mitigation negligible impacts on ornithological features are anticipated.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
					Noise: Construction: Works to be undertaken in accordance with the principle of BPM as defined in Section 72 of the Control of Pollution Act 1974 (CoPA).	Noise - Sensitive receptors more than 1000m away from location. Construction: Potential for neutral construction impacts.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
					Archaeology and Cultural Heritage: N/A	Archaeology and Cultural Heritage - This option is anticipated to have no or negligible benefit or negative impact on cultural heritage features.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
					Forestry: N/A	Forestry - Impact dependent on detailed survey. Tree removal may be required dependent on extent of works required.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
					Landscape and Visual: N/A	Landscape and Visual - Minor effects due to works largely within existing road corridor and tree works would be within commercial forestry extents.	Minor adverse effect – where the Proposed Development would result in a small deterioration of the existing environment.
				Vegetation / tree canopy to be cut back.	Hydrology, Hydrogeology, Geology and Soils: N/A	Hydrology, Hydrogeology, Geology and Soils - No adverse impacts anticipated as a result of the proposed works.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
					Ecology and Biodiversity: N/A	Ecology and Biodiversity - it is anticipated that the proposed works could result in Negligible impacts to the existing ecological baseline.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
					Ornithology: Avoid vegetation clearance in bird breeding season (March-August), or undertake pre-works ECoW checks for nesting birds (to avoid legal non-compliance).	Ornithology - Vegetation clearance has the potential to result in legal offences related to nesting birds, however following the application of embedded mitigation negligible impacts on ornithological features are anticipated.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
					Noise: Construction: Works to be undertaken in accordance with the principle of BPM as defined in Section 72 of the Control of Pollution Act 1974 (CoPA).	Noise - Sensitive receptors more than 1000m away from location. Construction: Potential for neutral construction impacts.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
					Archaeology and Cultural Heritage: N/A	Archaeology and Cultural Heritage - This option is anticipated to have no or negligible benefit or negative impact on cultural heritage features.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
44	SPA033	C46W right bend 3.2km north of Glentool					
45	N/A	C46W 3.4km north of Glentool					




					Forestry: N/A	Forestry - Impact dependent on detailed survey. Tree removal may be required dependent on extent of works required.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
46	SPA034	C46W bends 3.6km north of Glentroot		Vegetation / tree canopy to be cut back and removed at locations.	Landscape and Visual: See recommended landscape and visual mitigation options (Appendix C.1), if implemented these would likely reduce effects.	Landscape and Visual - potential impacts due to potential widening and re-grading works resulting in removal of forestry. This would potentially slightly open up this part of the route which already has an open aspect to the east so is quite visible from the wider landscape, albeit within commercial forestry extents.	Minor adverse effect – where the Proposed Development would result in a small deterioration of the existing environment.
				Minor carriageway widening / load bearing surface at bends.	Hydrology, Hydrogeology, Geology and Soils: The adoption of the applicable good practice measures in the Outline CEMP would reduce the impact of modification to surface water drainage patterns, with artificial drainage installed only where necessary and would, wherever practical, be installed in advance of ground being cleared of vegetation.	Hydrology, Hydrogeology, Geology and Soils - No adverse impacts anticipated as a result of the proposed works.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
				General carriageway widening in verge areas.	The adoption of the applicable good practice measures as summarised in the Outline CEMP would reduce the probability of a sedimentation and/or pollution incident occurring as a result of the carriageway widening/new carriageway section, and also reduce the magnitude of any incident due to a combination of good site environmental management procedures.	Ecology and Biodiversity: The undertaking of an ecological walkover in advance of works would allow the identification of any habitat, flora or fauna constraints and allow suitable mitigation measures to be designed to reduce the potential adverse effects.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
				Potential carriageway re-grading.	The design principles and adoption of the applicable good practice measures summarised in the Outline CEMP would reduce the soils losses and compaction of soil effects. Site monitoring would identify any areas where soil effects are noted and enable a fast response to minimise effect.	Any bespoke mitigation measures arising from the ecological walkover, together with standard measures relating to pollution prevention, biosecurity and other environmental good practice measures recommended by CIRIA and SEPA, would reduce the potential adverse effects.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
				Potential verge / embankment regrading.	Ecology and Biodiversity: The undertaking of an ecological walkover in advance of works would allow the identification of any habitat, flora or fauna constraints and allow suitable mitigation measures to be designed to reduce the potential adverse effects.	Ornithology - Vegetation clearance has the potential to result in legal offences related to nesting birds, however following the application of embedded mitigation negligible impacts on ornithological features are anticipated.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
				Potential physical upgrade works to existing drainage at locations of carriageway widening / regrading / embankment regrading.	Any bespoke mitigation measures arising from the ecological walkover, together with standard measures relating to pollution prevention, biosecurity and other environmental good practice measures recommended by CIRIA and SEPA, would reduce the potential adverse effects.	Noise - Sensitive receptors more than 1000m away from location. Construction: Potential for neutral construction impacts.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
					Ornithology: Avoid vegetation clearance in bird breeding season (March-August), or undertake pre-works ECoW checks for nesting birds (to avoid legal non-compliance).	Archaeology and Cultural Heritage - This option is anticipated to have no or negligible benefit or negative impact on cultural heritage features.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
					Forestry: N/A	Forestry - Impact dependent on detailed survey. Tree removal may be required dependent on extent of works required.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
47	N/A	C46W bends 4km north of Glentroot			Landscape and Visual: N/A	Landscape and Visual - Minor effects due to works largely within existing road corridor and tree works would be within commercial forestry extents.	Minor adverse effect – where the Proposed Development would result in a small deterioration of the existing environment.
					Hydrology, Hydrogeology, Geology and Soils: The adoption of the applicable good practice measures in the Outline CEMP would reduce the impact of modification to surface water drainage patterns, with artificial drainage installed only where necessary and would, wherever practical, be installed in advance of ground being cleared of vegetation.	Hydrology, Hydrogeology, Geology and Soils - No adverse impacts anticipated as a result of the proposed works.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
				Vegetation / tree canopy to be cut back.	The adoption of the applicable good practice measures as summarised in the Outline CEMP would reduce the probability of a sedimentation and/or pollution incident occurring as a result of the carriageway widening, and also reduce the magnitude of any incident due to a combination of good site environmental management procedures.	Ecology and Biodiversity - it is anticipated that the proposed works could result in Negligible impacts to the existing ecological baseline.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
				General carriageway widening in verge areas.	Ecology and Biodiversity: The undertaking of an ecological walkover in advance of works would allow the identification of any habitat, flora or fauna constraints and allow suitable mitigation measures to be designed to reduce the potential adverse effects.	Ornithology - Vegetation clearance has the potential to result in legal offences related to nesting birds, however following the application of embedded mitigation negligible impacts on ornithological features are anticipated.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
					Any bespoke mitigation measures arising from the ecological walkover, together with standard measures relating to pollution prevention, biosecurity and other environmental good practice measures recommended by CIRIA and SEPA, would reduce the potential adverse effects.	Noise - Sensitive receptors more than 1000m away from location. Construction: Potential for neutral construction impacts.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
	Ornithology: Avoid vegetation clearance in bird breeding season (March-August), or undertake pre-works ECoW checks for nesting birds (to avoid legal non-compliance).						
	Noise: Construction: Works to be undertaken in accordance with the principle of BPM as defined in Section 72 of the Control of Pollution Act 1974 (CoPA).						

					Archaeology and Cultural Heritage: N/A	Archaeology and Cultural Heritage - This option is anticipated to have no or negligible benefit or negative impact on cultural heritage features.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
					Forestry: N/A	Forestry - Impact dependent on detailed survey. Tree removal may be required dependent on extent of works required.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
					Landscape and Visual: N/A	Landscape and Visual - Minor effects due to works largely within existing road corridor and tree works would be within commercial forestry extents.	Minor adverse effect – where the Proposed Development would result in a small deterioration of the existing environment.
				Vegetation / tree canopy to be cut back and removed at locations.	Hydrology, Hydrogeology, Geology and Soils: The adoption of the applicable good practice measures in the Outline CEMP would reduce the impact of modification to surface water drainage patterns, with artificial drainage installed only where necessary and would, wherever practical, be installed in advance of ground being cleared of vegetation.	Hydrology, Hydrogeology, Geology and Soils - No adverse impacts anticipated as a result of the proposed works.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
				Potential general carriageway widening in verge areas.	The adoption of the applicable good practice measures as summarised in the Outline CEMP would reduce the probability of a sedimentation and/or pollution incident occurring as a result of the carriageway widening, and also reduce the magnitude of any incident due to a combination of good site environmental management procedures.		
				Potential carriageway re-grading.			
				Potential verge / embankment regrading.	Ecology and Biodiversity: The undertaking of an ecological walkover in advance of works would allow the identification of any habitat, flora or fauna constraints and allow suitable mitigation measures to be designed to reduce the potential adverse effects.	Ecology and Biodiversity - it is anticipated that the proposed works could result in Negligible impacts to the existing ecological baseline.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
				Potential physical upgrade works to existing drainage at locations of carriageway widening / regrading / embankment regrading.	Any bespoke mitigation measures arising from the ecological walkover, together with standard measures relating to pollution prevention, biosecurity and other environmental good practice measures recommended by CIRIA and SEPA, would reduce the potential adverse effects.		
				Removal of telegraph pole and stay cables.	Ornithology: Avoid vegetation clearance in bird breeding season (March-August), or undertake pre-works ECoW checks for nesting birds (to avoid legal non-compliance).	Ornithology - Vegetation clearance has the potential to result in legal offences related to nesting birds, however following the application of embedded mitigation negligible impacts on ornithological features are anticipated.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
					Noise: Construction: Works to be undertaken in accordance with the principle of BPM as defined in Section 72 of the Control of Pollution Act 1974 (CoPA).	Noise - Sensitive receptors more than 1000m away from location. Construction: Potential for neutral construction impacts.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
					Archaeology and Cultural Heritage: N/A	Archaeology and Cultural Heritage - This option is anticipated to have no or negligible benefit or negative impact on cultural heritage features.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
					Forestry: N/A	Forestry - Impact dependent on detailed survey. Tree removal may be required dependent on extent of works required.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
48	SPA035	C46W bends 4.3km north of Glentool, approach to junction towards Palgowan	 	Vegetation / tree canopy to be cut back and removed at locations. Potential general carriageway widening in verge areas. Potential carriageway re-grading. Potential verge / embankment regrading. Potential physical upgrade works to existing drainage at locations of carriageway widening / regrading / embankment regrading. Removal of telegraph pole and stay cables.	Hydrology, Hydrogeology, Geology and Soils: The adoption of the applicable good practice measures in the Outline CEMP would reduce the impact of modification to surface water drainage patterns, with artificial drainage installed only where necessary and would, wherever practical, be installed in advance of ground being cleared of vegetation. The adoption of the applicable good practice measures as summarised in the Outline CEMP would reduce the probability of a sedimentation and/or pollution incident occurring as a result of the carriageway widening, and also reduce the magnitude of any incident due to a combination of good site environmental management procedures. Ecology and Biodiversity: The undertaking of an ecological walkover in advance of works would allow the identification of any habitat, flora or fauna constraints and allow suitable mitigation measures to be designed to reduce the potential adverse effects. Any bespoke mitigation measures arising from the ecological walkover, together with standard measures relating to pollution prevention, biosecurity and other environmental good practice measures recommended by CIRIA and SEPA, would reduce the potential adverse effects. Ornithology: Avoid vegetation clearance in bird breeding season (March-August), or undertake pre-works ECoW checks for nesting birds (to avoid legal non-compliance). Noise: Construction: Works to be undertaken in accordance with the principle of BPM as defined in Section 72 of the Control of Pollution Act 1974 (CoPA).	Landscape and Visual - Minor effects due to works largely within existing road corridor and tree works would be within commercial forestry extents. Hydrology, Hydrogeology, Geology and Soils - No adverse impacts anticipated as a result of the proposed works. Ecology and Biodiversity - it is anticipated that the proposed works could result in Negligible impacts to the existing ecological baseline. Ornithology - Vegetation clearance has the potential to result in legal offences related to nesting birds, however following the application of embedded mitigation negligible impacts on ornithological features are anticipated. Noise - Sensitive receptors more than 1000m away from location. Construction: Potential for neutral construction impacts.	Minor adverse effect – where the Proposed Development would result in a small deterioration of the existing environment. Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment. Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment. Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment. Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
49	SPA036	C46W bends 4.4km north of Glentool, approaching Butter Burn		Vegetation / tree canopy to be cut back and removed at locations. Potential general carriageway widening in verge areas. Potential carriageway re-grading. Potential verge / embankment regrading. Potential physical upgrade works to existing drainage at locations of carriageway widening / regrading / embankment regrading.	Hydrology, Hydrogeology, Geology and Soils: The adoption of the applicable good practice measures in the Outline CEMP would reduce the impact of modification to surface water drainage patterns, with artificial drainage installed only where necessary and would, wherever practical, be installed in advance of ground being cleared of vegetation. The adoption of the applicable good practice measures as summarised in the Outline CEMP would reduce the probability of a sedimentation and/or pollution incident occurring as a result of the carriageway widening, and also reduce the magnitude of any incident due to a combination of good site environmental management procedures. Ecology and Biodiversity: The undertaking of an ecological walkover in advance of works would allow the identification of any habitat, flora or fauna constraints and allow suitable mitigation measures to be designed to reduce the potential adverse effects. Any bespoke mitigation measures arising from the ecological walkover, together with standard measures relating to pollution prevention, biosecurity and other environmental good practice measures recommended by CIRIA and SEPA, would reduce the potential adverse effects. Ornithology: Avoid vegetation clearance in bird breeding season (March-August), or undertake pre-works ECoW checks for nesting birds (to avoid legal non-compliance). Noise: Construction: Works to be undertaken in accordance with the principle of BPM as defined in Section 72 of the Control of Pollution Act 1974 (CoPA).	Landscape and Visual - Minor effects due to works largely within existing road corridor and tree works would be within commercial forestry extents. Hydrology, Hydrogeology, Geology and Soils - No adverse impacts anticipated as a result of the proposed works. Ecology and Biodiversity - it is anticipated that the proposed works could result in Negligible impacts to the existing ecological baseline. Ornithology - Vegetation clearance has the potential to result in legal offences related to nesting birds, however following the application of embedded mitigation negligible impacts on ornithological features are anticipated. Noise - Sensitive receptors more than 1000m away from location. Construction: Potential for neutral construction impacts.	Minor adverse effect – where the Proposed Development would result in a small deterioration of the existing environment. Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment. Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment. Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment. Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
					Archaeology and Cultural Heritage: N/A	Archaeology and Cultural Heritage - This option is anticipated to have no or negligible benefit or negative impact on cultural heritage features.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
					Forestry: N/A	Forestry - Impact dependent on detailed survey. Tree removal may be required dependent on extent of works required.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.

50	SPA037	C46W bends 4.9km north of Glentool, approaching Butter Burn		<p>Vegetation / tree canopy to be cut back and removed at locations.</p> <p>Potential general carriageway widening in verge areas.</p> <p>Potential carriageway re-grading.</p> <p>Potential verge / embankment regrading.</p> <p>Potential physical upgrade works to existing drainage at locations of carriageway widening / regrading / embankment regrading.</p> <p>Removal of road sign.</p>	Landscape and Visual: N/A	Landscape and Visual - Minor effects due to works largely within existing road corridor and tree works would be within commercial forestry extents.	Minor adverse effect – where the Proposed Development would result in a small deterioration of the existing environment.
					Hydrology, Hydrogeology, Geology and Soils: The adoption of the applicable good practice measures in the Outline CEMP would reduce the impact of modification to surface water drainage patterns, with artificial drainage installed only where necessary and would, wherever practical, be installed in advance of ground being cleared of vegetation.	Hydrology, Hydrogeology, Geology and Soils - No adverse impacts anticipated as a result of the proposed works.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
					The adoption of the applicable good practice measures as summarised in the Outline CEMP would reduce the probability of a sedimentation and/or pollution incident occurring as a result of the carriageway widening, and also reduce the magnitude of any incident due to a combination of good site environmental management procedures.		
					Ecology and Biodiversity: The undertaking of an ecological walkover in advance of works would allow the identification of any habitat, flora or fauna constraints and allow suitable mitigation measures to be designed to reduce the potential adverse effects.	Ecology and Biodiversity - it is anticipated that the proposed works could result in Negligible impacts to the existing ecological baseline.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
					Any bespoke mitigation measures arising from the ecological walkover, together with standard measures relating to pollution prevention, biosecurity and other environmental good practice measures recommended by CIRIA and SEPA, would reduce the potential adverse effects.		
					Ornithology: Avoid vegetation clearance in bird breeding season (March-August), or undertake pre-works ECoW checks for nesting birds (to avoid legal non-compliance).	Ornithology - Vegetation clearance has the potential to result in legal offences related to nesting birds, however following the application of embedded mitigation negligible impacts on ornithological features are anticipated.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
					Noise Construction: Works to be undertaken in accordance with the principle of BPM as defined in Section 72 of the Control of Pollution Act 1974 (CoPA).	Noise - Sensitive receptors more than 1000m away from location. Construction: Potential for neutral construction impacts.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
Archaeology and Cultural Heritage: N/A	Archaeology and Cultural Heritage - This option is anticipated to have no or negligible benefit or negative impact on cultural heritage features.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.					
Forestry: N/A	Forestry - Impact dependent on detailed survey. Tree removal may be required dependent on extent of works required.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.					
51	SPA038	C46W at Butter Burn		<p>Vegetation / tree canopy to be cut back and removed at locations.</p> <p>Potential general carriageway widening in verge areas.</p> <p>Potential carriageway re-grading.</p> <p>Potential verge / embankment regrading.</p> <p>Potential physical upgrade works to existing drainage at locations of carriageway widening / regrading / embankment regrading.</p> <p>Assessment of bridge required to confirm suitability.</p>	Landscape and Visual: N/A	Landscape and Visual - Minor effects due to works largely within existing road corridor and tree works would be within commercial forestry extents.	Minor adverse effect – where the Proposed Development would result in a small deterioration of the existing environment.
					Hydrology, Hydrogeology, Geology and Soils: The adoption of the applicable good practice measures in the Outline CEMP would reduce the impact of modification to surface water drainage patterns, with artificial drainage installed only where necessary and would, wherever practical, be installed in advance of ground being cleared of vegetation.	Hydrology, Hydrogeology, Geology and Soils - No adverse impacts anticipated as a result of the proposed works.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
					The adoption of the applicable good practice measures as summarised in the Outline CEMP would reduce the probability of a sedimentation and/or pollution incident occurring as a result of the carriageway widening, and also reduce the magnitude of any incident due to a combination of good site environmental management procedures.		
					Any bridge upgrades would be designed and constructed following good practice techniques and would be of sufficient capacity to receive storm flows with an allowance for increased flows due to climate change.	Ecology and Biodiversity - it is anticipated that the proposed works could result in Negligible impacts to the existing ecological baseline.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
					Ecology and Biodiversity: The undertaking of an ecological walkover in advance of works would allow the identification of any habitat, flora or fauna constraints and allow suitable mitigation measures to be designed to reduce the potential adverse effects.		
					Any bespoke mitigation measures arising from the ecological walkover, together with standard measures relating to pollution prevention, biosecurity and other environmental good practice measures recommended by CIRIA and SEPA, would reduce the potential adverse effects.	Ornithology - Vegetation clearance has the potential to result in legal offences related to nesting birds, however following the application of embedded mitigation negligible impacts on ornithological features are anticipated.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
					Ornithology: Avoid vegetation clearance in bird breeding season (March-August), or undertake pre-works ECoW checks for nesting birds (to avoid legal non-compliance).		
Noise: Construction: Works to be undertaken in accordance with the principle of BPM as defined in Section 72 of the Control of Pollution Act 1974 (CoPA).	Noise - Sensitive receptors more than 1000m away from location. Construction: Potential for neutral construction impacts.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.					
Archaeology and Cultural Heritage: N/A	Archaeology and Cultural Heritage - This option is anticipated to have no or negligible benefit or negative impact on cultural heritage features.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.					

					Forestry: N/A	Forestry - Impact dependent on detailed survey. Tree removal may be required dependent on extent of works required.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
52	SPA039	C46W, 300m north of Butter Burn			Landscape and Visual: N/A	Landscape and Visual - Minor effects due to works largely within existing road corridor and tree works would be within commercial forestry extents.	Minor adverse effect – where the Proposed Development would result in a small deterioration of the existing environment.
				Vegetation / tree canopy to be cut back and removed at locations.	Hydrology, Hydrogeology, Geology and Soils: The adoption of the applicable good practice measures in the Outline CEMP would reduce the impact of modification to surface water drainage patterns, with artificial drainage installed only where necessary and would, wherever practical, be installed in advance of ground being cleared of vegetation. The adoption of the applicable good practice measures as summarised in the Outline CEMP would reduce the probability of a sedimentation and/or pollution incident occurring as a result of the carriageway widening, and also reduce the magnitude of any incident due to a combination of good site environmental management procedures.	Hydrology, Hydrogeology, Geology and Soils - No adverse impacts anticipated as a result of the proposed works.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
				Potential general carriageway widening in verge areas.	Ecology and Biodiversity: The undertaking of an ecological walkover in advance of works would allow the identification of any habitat, flora or fauna constraints and allow suitable mitigation measures to be designed to reduce the potential adverse effects.	Ecology and Biodiversity - it is anticipated that the proposed works could result in Negligible impacts to the existing ecological baseline.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
				Potential physical upgrade works to existing drainage at locations of carriageway widening / regrading / embankment regrading.	Any bespoke mitigation measures arising from the ecological walkover, together with standard measures relating to pollution prevention, biosecurity and other environmental good practice measures recommended by CIRIA and SEPA, would reduce the potential adverse effects.	Ornithology - Vegetation clearance has the potential to result in legal offences related to nesting birds, however following the application of embedded mitigation negligible impacts on ornithological features are anticipated.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
					Noise: Construction: Works to be undertaken in accordance with the principle of BPM as defined in Section 72 of the Control of Pollution Act 1974 (CoPA).	Noise - Sensitive receptors more than 900m away from location. Construction: Potential for neutral construction impacts.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
					Archaeology and Cultural Heritage: N/A	Archaeology and Cultural Heritage - This option is anticipated to have no or negligible benefit or negative impact on cultural heritage features.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
					Forestry: N/A	Forestry - Impact dependent on detailed survey. Tree removal may be required dependent on extent of works required.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
53	SPA040	C46W, 1.7km north of Butter Burn		Vegetation / tree canopy to be cut back.	Landscape and Visual: N/A	Landscape and Visual - Minor effects due to works largely within existing road corridor and tree works would be within commercial forestry extents.	Minor adverse effect – where the Proposed Development would result in a small deterioration of the existing environment.
					Hydrology, Hydrogeology, Geology and Soils: N/A	Hydrology, Hydrogeology, Geology and Soils - No adverse impacts anticipated as a result of the proposed works.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
					Ecology and Biodiversity: N/A	Ecology and Biodiversity - it is anticipated that the proposed works could result in Negligible impacts to the existing ecological baseline.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
					Ornithology: Avoid vegetation clearance in bird breeding season (March-August), or undertake pre-works ECoW checks for nesting birds (to avoid legal non-compliance).	Ornithology - Vegetation clearance has the potential to result in legal offences related to nesting birds, however following the application of embedded mitigation negligible impacts on ornithological features are anticipated.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
					Noise: Construction: Works to be undertaken in accordance with the principle of BPM as defined in Section 72 of the Control of Pollution Act 1974 (CoPA).	Noise - Sensitive receptors more than 300m away from location. Construction: Potential for neutral construction impacts ;	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
					Archaeology and Cultural Heritage: N/A	Archaeology and Cultural Heritage - This option is anticipated to have no or negligible benefit or negative impact on cultural heritage features.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
					Forestry: N/A	Forestry - Impact dependent on detailed survey. Tree removal may be required dependent on extent of works required.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
				Landscape and Visual: N/A	Landscape and Visual - Minor effects due to works largely within existing road corridor and tree works would be within commercial forestry extents.	Minor adverse effect – where the Proposed Development would result in a small deterioration of the existing environment.	



54	N/A	C46W at Black Burn		<p>Vegetation / tree canopy to be cut back and removed at locations.</p> <p>Potential general carriageway widening in verge areas.</p> <p>Potential carriageway re-grading.</p> <p>Potential verge / embankment regrading.</p> <p>Potential physical upgrade works to existing drainage at locations of carriageway widening / regrading / embankment regrading.</p> <p>Assessment of bridge required to confirm suitability.</p>	<p>Hydrology, Hydrogeology, Geology and Soils: The adoption of the applicable good practice measures in the Outline CEMP would reduce the impact of modification to surface water drainage patterns, with artificial drainage installed only where necessary and would, wherever practical, be installed in advance of ground being cleared of vegetation.</p> <p>The adoption of the applicable good practice measures as summarised in the Outline CEMP would reduce the probability of a sedimentation and/or pollution incident occurring as a result of the carriageway widening, and also reduce the magnitude of any incident due to a combination of good site environmental management procedures.</p> <p>Any bridge upgrades would be designed and constructed following good practice techniques and would be of sufficient capacity to receive storm flows with an allowance for increased flows due to climate change.</p> <p>Ecology and Biodiversity: The undertaking of an ecological walkover in advance of works would allow the identification of any habitat, flora or fauna constraints and allow suitable mitigation measures to be designed to reduce the potential adverse effects.</p> <p>Any bespoke mitigation measures arising from the ecological walkover, together with standard measures relating to pollution prevention, biosecurity and other environmental good practice measures recommended by CIRIA and SEPA, would reduce the potential adverse effects.</p> <p>Ornithology: Avoid vegetation clearance in bird breeding season (March-August), or undertake pre-works ECoW checks for nesting birds (to avoid legal non-compliance).</p> <p>Noise: Construction: Works to be undertaken in accordance with the principle of BPM as defined in Section 72 of the Control of Pollution Act 1974 (CoPA).</p> <p>Archaeology and Cultural Heritage: N/A</p> <p>Forestry: N/A</p>	<p>Hydrology, Hydrogeology, Geology and Soils - No adverse impacts anticipated as a result of the proposed works.</p> <p>Ecology and Biodiversity - it is anticipated that the proposed works could result in Negligible impacts to the existing ecological baseline.</p> <p>Ornithology - Vegetation clearance has the potential to result in legal offences related to nesting birds, however following the application of embedded mitigation negligible impacts on ornithological features are anticipated.</p> <p>Noise - Sensitive receptors more than 1000m away from location. Construction: Potential for neutral construction impacts.</p> <p>Archaeology and Cultural Heritage - This option is anticipated to have no or negligible benefit or negative impact on cultural heritage features.</p> <p>Forestry - Impact dependent on detailed survey. Tree removal may be required dependent on extent of works required.</p>	<p>Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.</p> <p>Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.</p> <p>Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.</p> <p>Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.</p> <p>Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.</p>
55	SPA041	C46W 700m north of Black Burn		<p>Vegetation / tree canopy to be cut back and removed at locations.</p> <p>Potential general carriageway widening in verge areas.</p> <p>Potential carriageway re-grading.</p> <p>Potential verge / embankment regrading.</p> <p>Potential physical upgrade works to existing drainage at locations of carriageway widening / regrading / embankment regrading.</p> <p>Removal of road sign.</p>	<p>Landscape and Visual: N/A</p> <p>Hydrology, Hydrogeology, Geology and Soils: The adoption of the applicable good practice measures in the Outline CEMP would reduce the impact of modification to surface water drainage patterns, with artificial drainage installed only where necessary and would, wherever practical, be installed in advance of ground being cleared of vegetation.</p> <p>The adoption of the applicable good practice measures as summarised in the Outline CEMP would reduce the probability of a sedimentation and/or pollution incident occurring as a result of the carriageway widening, and also reduce the magnitude of any incident due to a combination of good site environmental management procedures.</p> <p>Ecology and Biodiversity: The undertaking of an ecological walkover in advance of works would allow the identification of any habitat, flora or fauna constraints and allow suitable mitigation measures to be designed to reduce the potential adverse effects.</p> <p>Any bespoke mitigation measures arising from the ecological walkover, together with standard measures relating to pollution prevention, biosecurity and other environmental good practice measures recommended by CIRIA and SEPA, would reduce the potential adverse effects.</p> <p>Ornithology: Avoid vegetation clearance and major works in bird breeding season (March-August), or undertake pre-works ECoW checks for nesting birds (to avoid legal non-compliance) including nesting osprey.</p> <p>Noise: Construction: Works to be undertaken in accordance with the principle of BPM as defined in Section 72 of the Control of Pollution Act 1974 (CoPA).</p> <p>Archaeology and Cultural Heritage: N/A</p>	<p>Landscape and Visual - Minor effects due to works largely within existing road corridor and tree works would be within commercial forestry extents.</p> <p>Hydrology, Hydrogeology, Geology and Soils - No adverse impacts anticipated as a result of the proposed works.</p> <p>Ecology and Biodiversity - it is anticipated that the proposed works could result in Negligible impacts to the existing ecological baseline.</p> <p>Ornithology - Vegetation clearance has the potential to result in legal offences related to nesting birds and major ground works could result in legal offences relating to a Schedule 1 breeding species (osprey). However, following the application of embedded mitigation to inform the legislative compliance of works (such as postponement/prohibition of works with a nest exclusion zone), negligible impacts on ornithological features are anticipated.</p> <p>Noise - Sensitive receptors more than 1000m away from location. Construction: Potential for neutral construction impacts.</p> <p>Archaeology and Cultural Heritage - This option is anticipated to have no or negligible benefit or negative impact on cultural heritage features.</p>	<p>Minor adverse effect – where the Proposed Development would result in a small deterioration of the existing environment.</p> <p>Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.</p> <p>Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.</p> <p>Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.</p> <p>Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.</p>



					Forestry: N/A	Forestry - Impact dependent on detailed survey. Tree removal may be required dependent on extent of works required.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
					Landscape and Visual: N/A	Landscape and Visual - Minor effects due to works largely within existing road corridor and tree works would be within commercial forestry extents.	Minor adverse effect – where the Proposed Development would result in a small deterioration of the existing environment.
					Hydrology, Hydrogeology, Geology and Soils: The adoption of the applicable good practice measures in the Outline CEMP would reduce the impact of modification to surface water drainage patterns, with artificial drainage installed only where necessary and would, wherever practical, be installed in advance of ground being cleared of vegetation. The adoption of the applicable good practice measures as summarised in the Outline CEMP would reduce the probability of a sedimentation and/or pollution incident occurring as a result of the carriageway widening, and also reduce the magnitude of any incident due to a combination of good site environmental management procedures.	Hydrology, Hydrogeology, Geology and Soils - No adverse impacts anticipated as a result of the proposed works.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
				Vegetation / tree canopy to be cut back and removed at locations. Potential general carriageway widening in verge areas. Potential carriageway re-grading. Potential verge / embankment regrading. Potential physical upgrade works to existing drainage at locations of carriageway widening / regrading / embankment regrading.	Ecology and Biodiversity: The undertaking of an ecological walkover in advance of works would allow the identification of any habitat, flora or fauna constraints and allow suitable mitigation measures to be designed to reduce the potential adverse effects. Any bespoke mitigation measures arising from the ecological walkover, together with standard measures relating to pollution prevention, biosecurity and other environmental good practice measures recommended by CIRIA and SEPA, would reduce the potential adverse effects.	Ecology and Biodiversity - it is anticipated that the proposed works could result in Negligible impacts to the existing ecological baseline.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
					Ornithology: Avoid vegetation clearance and major works in bird breeding season (March-August), or undertake pre-works ECoW checks for nesting birds (to avoid legal non-compliance) including nesting osprey.	Ornithology - Vegetation clearance has the potential to result in legal offences related to nesting birds and major ground works could result in legal offences relating to a Schedule 1 breeding species (osprey). However, following the application of embedded mitigation to inform the legislative compliance of works (such as postponement/prohibition of works with a nest exclusion zone), negligible impacts on ornithological features are anticipated.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
					Noise: Construction: Works to be undertaken in accordance with the principle of BPM as defined in Section 72 of the Control of Pollution Act 1974 (CoPA).	Noise - Sensitive receptors more than 800m away from location. Construction: Potential for neutral construction impacts.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
					Archaeology and Cultural Heritage: N/A	Archaeology and Cultural Heritage - This option is anticipated to have no or negligible benefit or negative impact on cultural heritage features.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
					Forestry: N/A	Forestry - Impact dependent on detailed survey. Tree removal may be required dependent on extent of works required.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
56	SPA042	C46W 1km north of Black Burn		Potential general carriageway widening in verge areas. Potential carriageway re-grading. Potential verge / embankment regrading. Potential physical upgrade works to existing drainage at locations of carriageway widening / regrading / embankment regrading.	Landscape and Visual: N/A	Landscape and Visual - Minor effects due to works largely within existing road corridor and tree works would be within commercial forestry extents.	Minor adverse effect – where the Proposed Development would result in a small deterioration of the existing environment.
					Hydrology, Hydrogeology, Geology and Soils: The adoption of the applicable good practice measures in the Outline CEMP would reduce the impact of modification to surface water drainage patterns, with artificial drainage installed only where necessary and would, wherever practical, be installed in advance of ground being cleared of vegetation. The adoption of the applicable good practice measures as summarised in the Outline CEMP would reduce the probability of a sedimentation and/or pollution incident occurring as a result of the carriageway widening, and also reduce the magnitude of any incident due to a combination of good site environmental management procedures.	Hydrology, Hydrogeology, Geology and Soils - No adverse impacts anticipated as a result of the proposed works.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
					Ecology and Biodiversity: The undertaking of an ecological walkover in advance of works would allow the identification of any habitat, flora or fauna constraints and allow suitable mitigation measures to be designed to reduce the potential adverse effects. Any bespoke mitigation measures arising from the ecological walkover, together with standard measures relating to pollution prevention, biosecurity and other environmental good practice measures recommended by CIRIA and SEPA, would reduce the potential adverse effects.	Ecology and Biodiversity - it is anticipated that the proposed works could result in Negligible impacts to the existing ecological baseline.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
					Ornithology: Avoid vegetation clearance and major works in bird breeding season (March-August), or undertake pre-works ECoW checks for nesting birds (to avoid legal non-compliance) including nesting osprey.	Ornithology - Vegetation clearance has the potential to result in legal offences related to nesting birds and major ground works could result in legal offences relating to a Schedule 1 breeding species (osprey). However, following the application of embedded mitigation to inform the legislative compliance of works (such as postponement/prohibition of works with a nest exclusion zone), negligible impacts on ornithological features are anticipated.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
					Noise: Construction: Works to be undertaken in accordance with the principle of BPM as defined in Section 72 of the Control of Pollution Act 1974 (CoPA).	Noise - Sensitive receptors more than 700m away from location. Construction: Potential for neutral construction impacts.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
					Archaeology and Cultural Heritage: N/A	Archaeology and Cultural Heritage - This option is anticipated to have no or negligible benefit or negative impact on cultural heritage features.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
					Forestry: N/A	Forestry - Impact dependent on detailed survey. Tree removal may be required dependent on extent of works required.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
57	N/A	C46W, priority junction 1.3km north of Black Burn		Potential general carriageway widening in verge areas. Potential carriageway re-grading. Potential verge / embankment regrading. Potential physical upgrade works to existing drainage at locations of carriageway widening / regrading / embankment regrading.	Landscape and Visual: N/A	Landscape and Visual - Minor effects due to works largely within existing road corridor and tree works would be within commercial forestry extents.	Minor adverse effect – where the Proposed Development would result in a small deterioration of the existing environment.
					Hydrology, Hydrogeology, Geology and Soils: The adoption of the applicable good practice measures in the Outline CEMP would reduce the impact of modification to surface water drainage patterns, with artificial drainage installed only where necessary and would, wherever practical, be installed in advance of ground being cleared of vegetation. The adoption of the applicable good practice measures as summarised in the Outline CEMP would reduce the probability of a sedimentation and/or pollution incident occurring as a result of the carriageway widening, and also reduce the magnitude of any incident due to a combination of good site environmental management procedures.	Hydrology, Hydrogeology, Geology and Soils - No adverse impacts anticipated as a result of the proposed works.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
					Ecology and Biodiversity: The undertaking of an ecological walkover in advance of works would allow the identification of any habitat, flora or fauna constraints and allow suitable mitigation measures to be designed to reduce the potential adverse effects. Any bespoke mitigation measures arising from the ecological walkover, together with standard measures relating to pollution prevention, biosecurity and other environmental good practice measures recommended by CIRIA and SEPA, would reduce the potential adverse effects.	Ecology and Biodiversity - it is anticipated that the proposed works could result in Negligible impacts to the existing ecological baseline.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
					Ornithology: Avoid vegetation clearance and major works in bird breeding season (March-August), or undertake pre-works ECoW checks for nesting birds (to avoid legal non-compliance) including nesting osprey.	Ornithology - Vegetation clearance has the potential to result in legal offences related to nesting birds and major ground works could result in legal offences relating to a Schedule 1 breeding species (osprey). However, following the application of embedded mitigation to inform the legislative compliance of works (such as postponement/prohibition of works with a nest exclusion zone), negligible impacts on ornithological features are anticipated.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
					Noise: Construction: Works to be undertaken in accordance with the principle of BPM as defined in Section 72 of the Control of Pollution Act 1974 (CoPA).	Noise - Sensitive receptors more than 700m away from location. Construction: Potential for neutral construction impacts.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
					Archaeology and Cultural Heritage: N/A	Archaeology and Cultural Heritage - This option is anticipated to have no or negligible benefit or negative impact on cultural heritage features.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
					Forestry: N/A	Forestry - Impact dependent on detailed survey. Tree removal may be required dependent on extent of works required.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.



58	N/A	C46W, 1.7km north of Black Burn Grid Ref 235673 586624		<p>General carriageway widening in verge areas.</p> <p>Potential carriageway re-grading.</p> <p>Potential verge / embankment regrading.</p> <p>Potential physical upgrade works to existing drainage at locations of carriageway widening / regrading / embankment regrading.</p>	Landscape and Visual: N/A	Landscape and Visual - Minor effects due to works largely within existing road corridor and tree works would be within commercial forestry extents.	Minor adverse effect – where the Proposed Development would result in a small deterioration of the existing environment.
					<p>Hydrology, Hydrogeology, Geology and Soils: The adoption of the applicable good practice measures in the Outline CEMP would reduce the impact of modification to surface water drainage patterns, with artificial drainage installed only where necessary and would, wherever practical, be installed in advance of ground being cleared of vegetation.</p> <p>The adoption of the applicable good practice measures as summarised in the Outline CEMP would reduce the probability of a sedimentation and/or pollution incident occurring as a result of the carriageway widening, and also reduce the magnitude of any incident due to a combination of good site environmental management procedures.</p>	Hydrology, Hydrogeology, Geology and Soils - No adverse impacts anticipated as a result of the proposed works.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
					<p>Ecology and Biodiversity: The undertaking of an ecological walkover in advance of works would allow the identification of any habitat, flora or fauna constraints and allow suitable mitigation measures to be designed to reduce the potential adverse effects.</p> <p>Any bespoke mitigation measures arising from the ecological walkover, together with standard measures relating to pollution prevention, biosecurity and other environmental good practice measures recommended by CIRIA and SEPA, would reduce the potential adverse effects.</p>	Ecology and Biodiversity - it is anticipated that the proposed works could result in Negligible impacts to the existing ecological baseline.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
					<p>Ornithology: Avoid vegetation clearance and major works in bird breeding season (March-August), or undertake pre-works ECoW checks for nesting birds (to avoid legal non-compliance) including nesting osprey.</p>	Ornithology - Vegetation clearance has the potential to result in legal offences related to nesting birds and major ground works could result in legal offences relating to a Schedule 1 breeding species (osprey). However, following the application of embedded mitigation to inform the legislative compliance of works (such as postponement/prohibition of works with a nest exclusion zone), negligible impacts on ornithological features are anticipated.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
					<p>Noise: Construction: Works to be undertaken in accordance with the principle of BPM as defined in Section 72 of the Control of Pollution Act 1974 (CoPA).</p>	Noise - Sensitive receptors more than 600m away from location. Construction: Potential for neutral construction impacts.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
					Archaeology and Cultural Heritage: N/A	Archaeology and Cultural Heritage - This option is anticipated to have no or negligible benefit or negative impact on cultural heritage features.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
					Forestry: N/A	Forestry - Impact dependent on detailed survey. Tree removal may be required dependent on extent of works required.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
59	N/A	C46W, approaching priority junction 1.9km north of black burn		<p>General carriageway widening in verge areas.</p> <p>Potential carriageway re-grading.</p> <p>Potential verge / embankment regrading.</p> <p>Potential physical upgrade works to existing drainage at locations of carriageway widening / regrading / embankment regrading.</p>	Landscape and Visual: N/A	Landscape and Visual - Minor effects due to works largely within existing road corridor within commercial forestry extents.	Minor adverse effect – where the Proposed Development would result in a small deterioration of the existing environment.
					<p>Hydrology, Hydrogeology, Geology and Soils: The adoption of the applicable good practice measures in the Outline CEMP would reduce the impact of modification to surface water drainage patterns, with artificial drainage installed only where necessary and would, wherever practical, be installed in advance of ground being cleared of vegetation.</p> <p>The adoption of the applicable good practice measures as summarised in the Outline CEMP would reduce the probability of a sedimentation and/or pollution incident occurring as a result of the carriageway widening, and also reduce the magnitude of any incident due to a combination of good site environmental management procedures.</p>	Hydrology, Hydrogeology, Geology and Soils - No adverse impacts anticipated as a result of the proposed works.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
					<p>Ecology and Biodiversity: The undertaking of an ecological walkover in advance of works would allow the identification of any habitat, flora or fauna constraints and allow suitable mitigation measures to be designed to reduce the potential adverse effects.</p> <p>Any bespoke mitigation measures arising from the ecological walkover, together with standard measures relating to pollution prevention, biosecurity and other environmental good practice measures recommended by CIRIA and SEPA, would reduce the potential adverse effects.</p>	Ecology and Biodiversity - it is anticipated that the proposed works could result in Negligible impacts to the existing ecological baseline.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
					<p>Ornithology: Avoid vegetation clearance and major works in bird breeding season (March-August), or undertake pre-works ECoW checks for nesting birds (to avoid legal non-compliance) including nesting osprey.</p>	Ornithology - Vegetation clearance has the potential to result in legal offences related to nesting birds and major ground works could result in legal offences relating to a Schedule 1 breeding species (osprey). However, following the application of embedded mitigation to inform the legislative compliance of works (such as postponement/prohibition of works with a nest exclusion zone), negligible impacts on ornithological features are anticipated.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
					<p>Noise: Construction: Works to be undertaken in accordance with the principle of BPM as defined in Section 72 of the Control of Pollution Act 1974 (CoPA).</p>	Noise - Sensitive receptors more than 600m away from location. Construction: Potential for neutral construction impacts.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
					Archaeology and Cultural Heritage: N/A	Archaeology and Cultural Heritage - This option is anticipated to have no or negligible benefit or negative impact on cultural heritage features.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
					Forestry: N/A	Forestry - Impact dependent on detailed survey. Tree removal may be required dependent on extent of works required.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.

60	SPA043	C46W, bends 2.1km north of Black Burn		<p>Vegetation / tree canopy to be cut back and removed at locations.</p> <p>General carriageway widening in verge areas.</p> <p>Potential carriageway re-grading.</p> <p>Potential verge / embankment regrading.</p> <p>Potential impact on existing drainage.</p>	Landscape and Visual: N/A	Landscape and Visual - Minor effects due to works largely within existing road corridor and tree works would be within commercial forestry extents.	Minor adverse effect – where the Proposed Development would result in a small deterioration of the existing environment.
					<p>Hydrology, Hydrogeology, Geology and Soils: The adoption of the applicable good practice measures in the Outline CEMP would reduce the impact of modification to surface water drainage patterns, with artificial drainage installed only where necessary and would, wherever practical, be installed in advance of ground being cleared of vegetation.</p> <p>The adoption of the applicable good practice measures as summarised in the Outline CEMP would reduce the probability of a sedimentation and/or pollution incident occurring as a result of the carriageway widening, and also reduce the magnitude of any incident due to a combination of good site environmental management procedures.</p>	Hydrology, Hydrogeology, Geology and Soils - No adverse impacts anticipated as a result of the proposed works.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
					<p>Ecology and Biodiversity: The undertaking of an ecological walkover in advance of works would allow the identification of any habitat, flora or fauna constraints and allow suitable mitigation measures to be designed to reduce the potential adverse effects.</p> <p>Any bespoke mitigation measures arising from the ecological walkover, together with standard measures relating to pollution prevention, biosecurity and other environmental good practice measures recommended by CIRIA and SEPA, would reduce the potential adverse effects.</p>	Ecology and Biodiversity - it is anticipated that the proposed works could result in Negligible impacts to the existing ecological baseline.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
					<p>Ornithology: Avoid vegetation clearance in bird breeding season (March-August), or undertake pre-works ECoW checks for nesting birds (to avoid legal non-compliance).</p>	Ornithology - Vegetation clearance has the potential to result in legal offences related to nesting birds, however following the application of embedded mitigation negligible impacts on ornithological features are anticipated.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
					<p>Noise: Construction: Works to be undertaken in accordance with the principle of BPM as defined in Section 72 of the Control of Pollution Act 1974 (CoPA).</p>	Noise - Sensitive receptors more than 500m away from location. Construction: Potential for neutral construction impacts.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
					Archaeology and Cultural Heritage: N/A	Archaeology and Cultural Heritage - This option is anticipated to have no or negligible benefit or negative impact on cultural heritage features.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
					Forestry: N/A	Forestry - Impact dependent on detailed survey. Tree removal may be required dependent on extent of works required.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
61	SPA044	C46W, bends 2.3km north of Black Burn		<p>Vegetation / tree canopy to be cut back and removed at locations.</p> <p>Potential general carriageway widening in verge areas.</p> <p>Potential carriageway re-grading.</p> <p>Potential verge / embankment regrading.</p> <p>Potential physical upgrade works to existing drainage at locations of carriageway widening / regrading / embankment regrading.</p> <p>Removal of road sign.</p>	Landscape and Visual: N/A	Landscape and Visual - Minor effects due to works largely within existing road corridor and tree works would be within commercial forestry extents.	Minor adverse effect – where the Proposed Development would result in a small deterioration of the existing environment.
					<p>Hydrology, Hydrogeology, Geology and Soils: The adoption of the applicable good practice measures in the Outline CEMP would reduce the impact of modification to surface water drainage patterns, with artificial drainage installed only where necessary and would, wherever practical, be installed in advance of ground being cleared of vegetation.</p> <p>The adoption of the applicable good practice measures as summarised in the Outline CEMP would reduce the probability of a sedimentation and/or pollution incident occurring as a result of the carriageway widening, and also reduce the magnitude of any incident due to a combination of good site environmental management procedures.</p>	Hydrology, Hydrogeology, Geology and Soils - No adverse impacts anticipated as a result of the proposed works.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
					<p>Ecology and Biodiversity: The undertaking of an ecological walkover in advance of works would allow the identification of any habitat, flora or fauna constraints and allow suitable mitigation measures to be designed to reduce the potential adverse effects.</p> <p>Any bespoke mitigation measures arising from the ecological walkover, together with standard measures relating to pollution prevention, biosecurity and other environmental good practice measures recommended by CIRIA and SEPA, would reduce the potential adverse effects.</p>	Ecology and Biodiversity - it is anticipated that the proposed works could result in Negligible impacts to the existing ecological baseline.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
					<p>Ornithology: Avoid vegetation clearance in bird breeding season (March-August), or undertake pre-works ECoW checks for nesting birds (to avoid legal non-compliance).</p>	Ornithology - Vegetation clearance has the potential to result in legal offences related to nesting birds, however following the application of embedded mitigation negligible impacts on ornithological features are anticipated.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
					<p>Noise: Construction: Works to be undertaken in accordance with the principle of BPM as defined in Section 72 of the Control of Pollution Act 1974 (CoPA).</p>	Noise - Sensitive receptors are ~490m away from location. Construction: Potential for neutral construction impacts.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
					Archaeology and Cultural Heritage: N/A	Archaeology and Cultural Heritage - This option is anticipated to have no or negligible benefit or negative impact on cultural heritage features.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
					Forestry: N/A	Forestry - Impact dependent on detailed survey. Tree removal may be required dependent on extent of works required.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
			Landscape and Visual: N/A	Landscape and Visual - Minor effects due to works largely within existing road corridor and tree works would be within commercial forestry extents.	Minor adverse effect – where the Proposed Development would result in a small deterioration of the existing environment.		

62	N/A	C46W, Priority junction 2.4km north of Black Burn	 	<p>General carriageway widening in verge areas.</p> <p>Potential carriageway re-grading.</p> <p>Potential verge / embankment regrading.</p> <p>Potential physical upgrade works to existing drainage at locations of carriageway widening / regrading / embankment regrading.</p>	<p>Hydrology, Hydrogeology, Geology and Soils: The adoption of the applicable good practice measures in the Outline CEMP would reduce the impact of modification to surface water drainage patterns, with artificial drainage installed only where necessary and would, wherever practical, be installed in advance of ground being cleared of vegetation.</p> <p>The adoption of the applicable good practice measures as summarised in the Outline CEMP would reduce the probability of a sedimentation and/or pollution incident occurring as a result of the carriageway widening, and also reduce the magnitude of any incident due to a combination of good site environmental management procedures.</p> <p>Ecology and Biodiversity: The undertaking of an ecological walkover in advance of works would allow the identification of any habitat, flora or fauna constraints and allow suitable mitigation measures to be designed to reduce the potential adverse effects.</p> <p>Any bespoke mitigation measures arising from the ecological walkover, together with standard measures relating to pollution prevention, biosecurity and other environmental good practice measures recommended by CIRIA and SEPA, would reduce the potential adverse effects.</p> <p>Ornithology: N/A</p> <p>Noise: Construction: Works to be undertaken in accordance with the principle of BPM as defined in Section 72 of the Control of Pollution Act 1974 (CoPA).</p> <p>Archaeology and Cultural Heritage: N/A</p> <p>Forestry: N/A</p>	<p>Hydrology, Hydrogeology, Geology and Soils - No adverse impacts anticipated as a result of the proposed works.</p> <p>Ecology and Biodiversity - it is anticipated that the proposed works could result in Negligible impacts to the existing ecological baseline.</p> <p>Ornithology - Vegetation clearance has the potential to result in legal offences related to nesting birds, however following the application of embedded mitigation negligible impacts on ornithological features are anticipated.</p> <p>Noise - Sensitive receptors are ~580m away from location. Construction: Potential for neutral construction impacts.</p> <p>Archaeology and Cultural Heritage - This option is anticipated to have no or negligible benefit or negative impact on cultural heritage features.</p> <p>Forestry - Impact dependent on detailed survey. Tree removal may be required dependent on extent of works required.</p>	<p>Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.</p> <p>Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.</p> <p>Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.</p> <p>Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.</p> <p>Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.</p> <p>Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.</p>
63	SPA045	C46W, bends 2.5km north of Black Burn	 	<p>Vegetation / tree canopy to be cut back and removed at locations.</p> <p>General carriageway widening in verge areas.</p> <p>Potential carriageway re-grading.</p> <p>Potential verge / embankment regrading.</p> <p>Potential physical upgrade works to existing drainage at locations of carriageway widening / regrading / embankment regrading.</p> <p>Removal of road sign.</p>	<p>Landscape and Visual: See recommended landscape and visual mitigation options (Appendix C.1), if implemented these would likely reduce effects.</p> <p>The adoption of the applicable good practice measures in the Outline CEMP would reduce the impact of modification to surface water drainage patterns, with artificial drainage installed only where necessary and would, wherever practical, be installed in advance of ground being cleared of vegetation.</p> <p>The adoption of the applicable good practice measures as summarised in the Outline CEMP would reduce the probability of a sedimentation and/or pollution incident occurring as a result of the carriageway widening, and also reduce the magnitude of any incident due to a combination of good site environmental management procedures.</p> <p>Ecology and Biodiversity: The undertaking of an ecological walkover in advance of works would allow the identification of any habitat, flora or fauna constraints and allow suitable mitigation measures to be designed to reduce the potential adverse effects.</p> <p>Any bespoke mitigation measures arising from the ecological walkover, together with standard measures relating to pollution prevention, biosecurity and other environmental good practice measures recommended by CIRIA and SEPA, would reduce the potential adverse effects.</p> <p>Ornithology: Avoid vegetation clearance in bird breeding season (March-August), or undertake pre-works ECoW checks for nesting birds (to avoid legal non-compliance).</p> <p>Noise: Construction: Works to be undertaken in accordance with the principle of BPM as defined in Section 72 of the Control of Pollution Act 1974 (CoPA).</p> <p>Archaeology and Cultural Heritage: N/A</p> <p>Forestry: N/A</p>	<p>Landscape and Visual - Minor effects due to works largely within existing road corridor and tree works would be within commercial forestry extents.</p> <p>Hydrology, Hydrogeology, Geology and Soils - No adverse impacts anticipated as a result of the proposed works.</p> <p>Ecology and Biodiversity - it is anticipated that the proposed works could result in Negligible impacts to the existing ecological baseline.</p> <p>Ornithology - Vegetation clearance has the potential to result in legal offences related to nesting birds, however following the application of embedded mitigation negligible impacts on ornithological features are anticipated.</p> <p>Noise - Sensitive receptors more than 700m away from location. Construction: Potential for neutral construction impacts.</p> <p>Archaeology and Cultural Heritage - This option is anticipated to have no or negligible benefit or negative impact on cultural heritage features.</p> <p>Forestry - Impact dependent on detailed survey. Tree removal may be required dependent on extent of works required.</p>	<p>Minor adverse effect – where the Proposed Development would result in a small deterioration of the existing environment.</p> <p>Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.</p> <p>Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.</p> <p>Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.</p> <p>Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.</p> <p>Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.</p>
					<p>Landscape and Visual: See recommended landscape and visual mitigation options (Appendix C.1), if implemented these would likely reduce effects.</p>	<p>Landscape and Visual - Minor effects due to works largely within existing road corridor and tree works would be within commercial forestry extents.</p>	<p>Minor adverse effect – where the Proposed Development would result in a small deterioration of the existing environment.</p>

66	N/A	C46W, crossroads junction 3.5km north of Black Burn		<p>Vegetation / tree canopy to be cut back.</p> <p>General carriageway widening in verge areas.</p> <p>Potential carriageway re-grading.</p> <p>Potential verge / embankment regrading.</p> <p>Potential physical upgrade works to existing drainage at locations of carriageway widening / regrading / embankment regrading.</p>	Landscape and Visual: N/A	Landscape and Visual - Minor effects due to works largely within existing road corridor and tree works would be within commercial forestry extents.	Minor adverse effect – where the Proposed Development would result in a small deterioration of the existing environment.
					<p>The adoption of the applicable good practice measures in the Outline CEMP would reduce the impact of modification to surface water drainage patterns, with artificial drainage installed only where necessary and would, wherever practical, be installed in advance of ground being cleared of vegetation.</p> <p>The adoption of the applicable good practice measures as summarised in the Outline CEMP would reduce the probability of a sedimentation and/or pollution incident occurring as a result of the carriageway widening, and also reduce the magnitude of any incident due to a combination of good site environmental management procedures.</p>	Hydrology, Hydrogeology, Geology and Soils - No adverse impacts anticipated as a result of the proposed works.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
					<p>Ecology and Biodiversity: The undertaking of an ecological walkover in advance of works would allow the identification of any habitat, flora or fauna constraints and allow suitable mitigation measures to be designed to reduce the potential adverse effects.</p> <p>Any bespoke mitigation measures arising from the ecological walkover, together with standard measures relating to pollution prevention, biosecurity and other environmental good practice measures recommended by CIRIA and SEPA, would reduce the potential adverse effects.</p>	Ecology and Biodiversity - it is anticipated that the proposed works could result in Negligible impacts to the existing ecological baseline.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
					<p>Ornithology: Avoid vegetation clearance in bird breeding season (March-August), or undertake pre-works ECoW checks for nesting birds (to avoid legal non-compliance).</p>	Ornithology - Vegetation clearance has the potential to result in legal offences related to nesting birds, however following the application of embedded mitigation negligible impacts on ornithological features are anticipated.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
					<p>Noise: Construction: Works to be undertaken in accordance with the principle of BPM as defined in Section 72 of the Control of Pollution Act 1974 (CoPA).</p>	Noise - Sensitive receptors are ~400m away from location. Construction: Potential for neutral construction impacts.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
					Archaeology and Cultural Heritage: N/A	Archaeology and Cultural Heritage - This option is anticipated to have no or negligible benefit or negative impact on cultural heritage features.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
					Forestry: N/A	Forestry - Impact dependent on detailed survey. Tree removal may be required dependent on extent of works required.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
67	N/A	C46W, crossroads junction 3.7km north of Black Burn		<p>Vegetation / tree canopy to be cut back.</p> <p>General carriageway widening in verge areas.</p> <p>Potential carriageway re-grading.</p> <p>Potential verge / embankment regrading.</p> <p>Potential physical upgrade works to existing drainage at locations of carriageway widening / regrading / embankment regrading.</p>	Landscape and Visual: N/A	Landscape and Visual - Minor effects due to works largely within existing road corridor and tree works would be within commercial forestry extents.	Minor adverse effect – where the Proposed Development would result in a small deterioration of the existing environment.
					<p>The adoption of the applicable good practice measures in the Outline CEMP would reduce the impact of modification to surface water drainage patterns, with artificial drainage installed only where necessary and would, wherever practical, be installed in advance of ground being cleared of vegetation.</p> <p>The adoption of the applicable good practice measures as summarised in the Outline CEMP would reduce the probability of a sedimentation and/or pollution incident occurring as a result of the carriageway widening, and also reduce the magnitude of any incident due to a combination of good site environmental management procedures.</p>	Hydrology, Hydrogeology, Geology and Soils - No adverse impacts anticipated as a result of the proposed works.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
					<p>Ecology and Biodiversity: The undertaking of an ecological walkover in advance of works would allow the identification of any habitat, flora or fauna constraints and allow suitable mitigation measures to be designed to reduce the potential adverse effects.</p> <p>Any bespoke mitigation measures arising from the ecological walkover, together with standard measures relating to pollution prevention, biosecurity and other environmental good practice measures recommended by CIRIA and SEPA, would reduce the potential adverse effects.</p>	Ecology and Biodiversity - it is anticipated that the proposed works could result in Negligible impacts to the existing ecological baseline.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
					<p>Ornithology: Avoid vegetation clearance in bird breeding season (March-August), or undertake pre-works ECoW checks for nesting birds (to avoid legal non-compliance).</p>	Ornithology - Vegetation clearance has the potential to result in legal offences related to nesting birds, however following the application of embedded mitigation negligible impacts on ornithological features are anticipated.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
					<p>Noise: Construction: Works to be undertaken in accordance with the principle of BPM as defined in Section 72 of the Control of Pollution Act 1974 (CoPA).</p>	Noise - Construction: Distance between closest sensitive receptor (based on Address Base data) and POI is ~165m. Potential for direct, short term, temporary, negative minor noise impacts during construction works at nearby sensitive receptors.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
					Archaeology and Cultural Heritage: N/A	Archaeology and Cultural Heritage - This option is anticipated to have no or negligible benefit or negative impact on cultural heritage features.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
					Forestry: N/A	Forestry - Impact dependent on detailed survey. Tree removal may be required dependent on extent of works required.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
			Landscape and Visual: See recommended landscape and visual mitigation options (Appendix C.1), if implemented these would likely reduce effects.	Landscape and Visual - Minor effects due to works largely within existing road corridor and tree works would be within commercial forestry extents.	Minor adverse effect – where the Proposed Development would result in a small deterioration of the existing environment.		

70	N/A	C46W, 850m north of Craigenrae		<p>Vegetation / tree canopy to be cut back.</p> <p>General carriageway widening in verge areas.</p> <p>Potential carriageway re-grading.</p> <p>Potential verge / embankment regrading.</p> <p>Potential physical upgrade works to existing drainage at locations of carriageway widening / regrading / embankment regrading.</p>	Landscape and Visual: N/A	Landscape and Visual - Minor effects due to works largely within existing road corridor and tree works would be within commercial forestry extents.	Minor adverse effect – where the Proposed Development would result in a small deterioration of the existing environment.
					<p>The adoption of the applicable good practice measures in the Outline CEMP would reduce the impact of modification to surface water drainage patterns, with artificial drainage installed only where necessary and would, wherever practical, be installed in advance of ground being cleared of vegetation.</p> <p>The adoption of the applicable good practice measures as summarised in the Outline CEMP would reduce the probability of a sedimentation and/or pollution incident occurring as a result of the carriageway widening, and also reduce the magnitude of any incident due to a combination of good site environmental management procedures.</p>	Hydrology, Hydrogeology, Geology and Soils - No adverse impacts anticipated as a result of the proposed works.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
					<p>Ecology and Biodiversity: The undertaking of an ecological walkover in advance of works would allow the identification of any habitat, flora or fauna constraints and allow suitable mitigation measures to be designed to reduce the potential adverse effects.</p> <p>Any bespoke mitigation measures arising from the ecological walkover, together with standard measures relating to pollution prevention, biosecurity and other environmental good practice measures recommended by CIRIA and SEPA, would reduce the potential adverse effects.</p>	Ecology and Biodiversity - it is anticipated that the proposed works could result in Negligible impacts to the existing ecological baseline.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
					<p>Ornithology: Avoid vegetation clearance in bird breeding season (March-August), or undertake pre-works ECoW checks for nesting birds (to avoid legal non-compliance).</p>	Ornithology - Vegetation clearance has the potential to result in legal offences related to nesting birds, however following the application of embedded mitigation negligible impacts on ornithological features are anticipated.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
					<p>Noise: Construction: Works to be undertaken in accordance with the principle of BPM as defined in Section 72 of the Control of Pollution Act 1974 (CoPA).</p>	Noise - Sensitive receptors more than 600m away from location. Construction: Potential for neutral construction impacts.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
					Archaeology and Cultural Heritage: N/A	Archaeology and Cultural Heritage - This option is anticipated to have no or negligible benefit or negative impact on cultural heritage features.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
					Forestry: N/A	Forestry - Impact dependent on detailed survey. Tree removal may be required dependent on extent of works required.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
71	SPA048	Unclassified Road, 1.2km north of Craigenrae	 	<p>Vegetation / tree canopy to be cut back.</p> <p>General carriageway widening in verge areas.</p> <p>Potential carriageway re-grading.</p> <p>Potential verge / embankment regrading.</p> <p>Potential physical upgrade works to existing drainage at locations of carriageway widening / regrading / embankment regrading.</p>	Landscape and Visual: N/A	Landscape and Visual - Minor effects due to works largely within existing road corridor and tree works would be within commercial forestry extents.	Minor adverse effect – where the Proposed Development would result in a small deterioration of the existing environment.
					<p>The adoption of the applicable good practice measures in the Outline CEMP would reduce the impact of modification to surface water drainage patterns, with artificial drainage installed only where necessary and would, wherever practical, be installed in advance of ground being cleared of vegetation.</p> <p>The adoption of the applicable good practice measures as summarised in the Outline CEMP would reduce the probability of a sedimentation and/or pollution incident occurring as a result of the carriageway widening, and also reduce the magnitude of any incident due to a combination of good site environmental management procedures.</p>	Hydrology, Hydrogeology, Geology and Soils - No adverse impacts anticipated as a result of the proposed works.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
					<p>Ecology and Biodiversity: The undertaking of an ecological walkover in advance of works would allow the identification of any habitat, flora or fauna constraints and allow suitable mitigation measures to be designed to reduce the potential adverse effects.</p> <p>Any bespoke mitigation measures arising from the ecological walkover, together with standard measures relating to pollution prevention, biosecurity and other environmental good practice measures recommended by CIRIA and SEPA, would reduce the potential adverse effects.</p>	Ecology and Biodiversity - it is anticipated that the proposed works could result in Negligible impacts to the existing ecological baseline.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
					<p>Ornithology: Avoid vegetation clearance in bird breeding season (March-August), or undertake pre-works ECoW checks for nesting birds (to avoid legal non-compliance).</p>	Ornithology - Vegetation clearance has the potential to result in legal offences related to nesting birds, however following the application of embedded mitigation negligible impacts on ornithological features are anticipated.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
					<p>Noise: Construction: Works to be undertaken in accordance with the principle of BPM as defined in Section 72 of the Control of Pollution Act 1974 (CoPA).</p>	Noise - Construction: Distance between closest sensitive receptor (based on Address Base data) and POI is ~275m. Potential for direct, short term, temporary, negative minor noise impacts during construction works at nearby sensitive receptors.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
					Archaeology and Cultural Heritage: N/A	Archaeology and Cultural Heritage - This option is anticipated to have no or negligible benefit or negative impact on cultural heritage features.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
					Forestry: N/A	Forestry - Impact dependent on detailed survey. Tree removal may be required dependent on extent of works required.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
			Landscape and Visual: See recommended landscape and visual mitigation options (Appendix C.1), if implemented these would likely reduce effects.	Landscape and Visual - potential localised impact from widening and tree loss, due to sensitivity of visitor destination (Bell's Memorial), stone bridge and open character of this part of the route.	Minor adverse effect – where the Proposed Development would result in a small deterioration of the existing environment.		

72	SPA049	Unclassified Road, at Bell Memorial Car Park		<p>Vegetation / tree canopy to be cut back and removed at locations.</p> <p>General carriageway widening in verge areas.</p> <p>Potential physical upgrade works to existing drainage at locations of carriageway widening / regrading / embankment regrading.</p> <p>Relocation of road sign.</p> <p>Assessment of bridge required to confirm suitability.</p>	<p>The adoption of the applicable good practice measures in the Outline CEMP would reduce the impact of modification to surface water drainage patterns, with artificial drainage installed only where necessary and would, wherever practical, be installed in advance of ground being cleared of vegetation.</p> <p>The adoption of the applicable good practice measures as summarised in the Outline CEMP would reduce the probability of a sedimentation and/or pollution incident occurring as a result of the carriageway widening, and also reduce the magnitude of any incident due to a combination of good site environmental management procedures.</p> <p>Any bridge upgrades would be designed and constructed following good practice techniques and would be of sufficient capacity to receive storm flows with an allowance for increased flows due to climate change.</p>	<p>Hydrology, Hydrogeology, Geology and Soils - No adverse impacts anticipated as a result of the proposed works.</p>	<p>Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.</p>
73	N/A	Unclassified Road, priority junction 150m north of Bell Memorial Car Park		<p>Vegetation / tree canopy to be cut back.</p> <p>General carriageway widening in verge areas.</p> <p>Potential verge / embankment regrading.</p> <p>Potential physical upgrade works to existing drainage at locations of carriageway widening / regrading / embankment regrading.</p>	<p>Landscape and Visual: N/A</p> <p>The adoption of the applicable good practice measures in the Outline CEMP would reduce the impact of modification to surface water drainage patterns, with artificial drainage installed only where necessary and would, wherever practical, be installed in advance of ground being cleared of vegetation.</p> <p>The adoption of the applicable good practice measures as summarised in the Outline CEMP would reduce the probability of a sedimentation and/or pollution incident occurring as a result of the carriageway widening, and also reduce the magnitude of any incident due to a combination of good site environmental management procedures.</p> <p>Ecology and Biodiversity: The undertaking of an ecological walkover in advance of works would allow the identification of any habitat, flora or fauna constraints and allow suitable mitigation measures to be designed to reduce the potential adverse effects.</p> <p>Any bespoke mitigation measures arising from the ecological walkover, together with standard measures relating to pollution prevention, biosecurity and other environmental good practice measures recommended by CIRIA and SEPA, would reduce the potential adverse effects.</p>	<p>Landscape and Visual - Minor effects due to works largely within existing road corridor and tree works would be within commercial forestry extents.</p> <p>Hydrology, Hydrogeology, Geology and Soils - No adverse impacts anticipated as a result of the proposed works.</p> <p>Ecology and Biodiversity - it is anticipated that the proposed works could result in Negligible impacts to the existing ecological baseline.</p> <p>Ornithology - Vegetation clearance has the potential to result in legal offences related to nesting birds, however following the application of embedded mitigation negligible impacts on ornithological features are anticipated.</p> <p>Noise - Construction: Distance between closest sensitive receptor (based on AddressBase data) and POI is ~260m. Potential for direct, short term, temporary, negative minor noise impacts during construction works at nearby sensitive receptors.</p> <p>Archaeology and Cultural Heritage - This option is anticipated to have no or negligible benefit or negative impact on cultural heritage features.</p>	<p>Minor adverse effect – where the Proposed Development would result in a small deterioration of the existing environment.</p> <p>Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.</p> <p>Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.</p> <p>Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.</p> <p>Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.</p>

					Forestry: N/A	Forestry - Impact dependent on detailed survey. Tree removal may be required dependent on extent of works required.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
					Landscape and Visual: N/A	Landscape and Visual - Minor effects due to works largely within existing road corridor and tree works would be within commercial forestry extents.	Minor adverse effect – where the Proposed Development would result in a small deterioration of the existing environment.
					High risk of river flooding is noted at this location within the Water of Minnoch. The removal of the vegetation could have an adverse impact on the flooding risk. The adoption of the applicable good practice measures in the Outline CEMP would reduce the impact of modification to surface water drainage patterns, with artificial drainage installed only where necessary and would, wherever practical, be installed in advance of ground being cleared of vegetation. The adoption of the applicable good practice measures as summarised in the Outline CEMP would reduce the probability of a sedimentation and/or pollution incident occurring as a result of the carriageway widening and bridge works, and also reduce the magnitude of any incident due to a combination of good site environmental management procedures. Any bridge upgrades would be designed and constructed following good practice techniques and would be of sufficient capacity to receive storm flows with an allowance for increased flows due to climate change.	Hydrology, Hydrogeology, Geology and Soils - No adverse impacts anticipated as a result of the proposed works.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
				Vegetation / tree canopy to be cut back and removed at locations. General carriageway widening in verge areas. Potential physical upgrade works to existing drainage at locations of carriageway widening / regrading / embankment regrading. Potential carriageway re-grading. Relocation of road sign. Assessment of bridge required to confirm suitability. Removal of bridge guardrail.	Ecology and Biodiversity: The undertaking of an ecological walkover in advance of works would allow the identification of any habitat, flora or fauna constraints and allow suitable mitigation measures to be designed to reduce the potential adverse effects. Any bespoke mitigation measures arising from the ecological walkover, together with standard measures relating to pollution prevention, biosecurity and other environmental good practice measures recommended by CIRIA and SEPA, would reduce the potential adverse effects.	Ecology and Biodiversity - it is anticipated that the proposed works could result in Negligible impacts to the existing ecological baseline.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
					Ornithology: N/A	Ornithology - Vegetation clearance has the potential to result in legal offences related to nesting birds, however following the application of embedded mitigation negligible impacts on ornithological features are anticipated.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
					Noise: Construction: Works to be undertaken in accordance with the principle of BPM as defined in Section 72 of the Control of Pollution Act 1974 (CoPA).	Noise - Sensitive receptors more than 500m away from location. Construction: Potential for neutral construction impacts.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
					Archaeology and Cultural Heritage: N/A	Archaeology and Cultural Heritage - This option is anticipated to have no or negligible benefit or negative impact on cultural heritage features.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
					Forestry: N/A	Forestry - Impact dependent on detailed survey. Tree removal may be required dependent on extent of works required.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
					Landscape and Visual: See recommended Landscape and Visual mitigation options (Appendix C.1), if implemented these would likely reduce effects. In addition, an understanding of whether it is planned to retain this area as open moorland or if forestry is planned will help determine potential effects further – in terms of landscape character and screening.	Landscape and Visual - the potential widening and re-grading works would be discernible, creating a localised change to the character of this open and remote moorland section of the route.	Minor adverse effect – where the Proposed Development would result in a small deterioration of the existing environment.
					The adoption of the applicable good practice measures in the Outline CEMP would reduce the impact of modification to surface water drainage patterns, with artificial drainage installed only where necessary and would, wherever practical, be installed in advance of ground being cleared of vegetation. The adoption of the applicable good practice measures as summarised in the Outline CEMP would reduce the probability of a sedimentation and/or pollution incident occurring as a result of the new section of carriageway/carriageway widening, and also reduce the magnitude of any incident due to a combination of good site environmental management procedures. The design principles and adoption of the applicable good practice measures summarised in the Outline CEMP would reduce the soils losses and compaction of soil effects. Site monitoring would identify any areas where soil effects are noted and enable a fast response to minimise effect.	Hydrology, Hydrogeology, Geology and Soils - No adverse impacts anticipated as a result of the proposed works.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
				Vegetation / tree canopy to be cut back and removed at locations. General carriageway widening in verge areas.			







74



SPA050


Unclassified Road, 900m north of Bell Memorial Car Park

75	SPA051	Unclassified Road, 1.4km northeast of Bell Memorial Car Park		<p>Potential carriageway re-grading.</p> <p>Potential physical upgrade works to existing drainage at locations of carriageway widening / regrading / embankment regrading.</p> <p>Removal of road signs.</p>	<p>Ecology and Biodiversity: The undertaking of an ecological walkover in advance of works would allow the identification of any habitat, flora or fauna constraints and allow suitable mitigation measures to be designed to reduce the potential adverse effects.</p> <p>Any bespoke mitigation measures arising from the ecological walkover, together with standard measures relating to pollution prevention, biosecurity and other environmental good practice measures recommended by CIRIA and SEPA, would reduce the potential adverse effects.</p>	<p>Ecology and Biodiversity - it is anticipated that the proposed works could result in Negligible impacts to the existing ecological baseline.</p>	<p>Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.</p>
76	SPA052	Unclassified Road, 1.7km northeast of Bell Memorial Car Park		<p>Vegetation / tree canopy to be cut back and removed at locations.</p> <p>General carriageway widening in verge areas.</p> <p>Potential carriageway re-grading.</p> <p>Potential verge / embankment regrading.</p> <p>Potential physical upgrade works to existing drainage at locations of carriageway widening / regrading / embankment regrading.</p> <p>Relocation of road sign.</p>	<p>Landscape and Visual: See recommended Landscape and Visual mitigation options (Appendix C.1), if implemented these would likely reduce effects. In addition, an understanding of whether it is planned to retain this area as open moorland or if forestry is planned will help determine potential effects further – in terms of landscape character and screening.</p> <p>The adoption of the applicable good practice measures in the Outline CEMP would reduce the impact of modification to surface water drainage patterns, with artificial drainage installed only where necessary and would, wherever practical, be installed in advance of ground being cleared of vegetation.</p> <p>The adoption of the applicable good practice measures as summarised in the Outline CEMP would reduce the probability of a sedimentation and/or pollution incident occurring as a result of the carriageway widening, and also reduce the magnitude of any incident due to a combination of good site environmental management procedures.</p> <p>Biodiversity and Conservation: The undertaking of an ecological walkover in advance of works would allow the identification of any habitat, flora or fauna constraints and allow suitable mitigation measures to be designed to reduce the potential adverse effects.</p> <p>Any bespoke mitigation measures arising from the ecological walkover, together with standard measures relating to pollution prevention, biosecurity and other environmental good practice measures recommended by CIRIA and SEPA, would reduce the potential adverse effects.</p>	<p>Landscape and Visual - the potential widening and re-grading works would be discernible, creating a localised change to the character of this open and remote moorland section of the route.</p> <p>Hydrology, Hydrogeology, Geology and Soils - No adverse impacts anticipated as a result of the proposed works.</p> <p>Ecology and Biodiversity - it is anticipated that the proposed works could result in Negligible impacts to the existing ecological baseline.</p>	<p>Minor adverse effect – where the Proposed Development would result in a small deterioration of the existing environment.</p>
					<p>Ornithology: Avoid vegetation clearance in bird breeding season (March-August), or undertake pre-works ECoW checks for nesting birds (to avoid legal non-compliance).</p> <p>Noise - Construction: Works to be undertaken in accordance with the principle of BPM as defined in Section 72 of the Control of Pollution Act 1974 (CoPA).</p> <p>Archaeology and Cultural Heritage: N/A</p> <p>Forestry: N/A</p>	<p>Ornithology - Vegetation clearance has the potential to result in legal offences related to nesting birds, however following the application of embedded mitigation negligible impacts on ornithological features are anticipated.</p> <p>Noise - Construction: Distance between closest sensitive receptor (based on AddressBase data) and POI is ~320m. Potential for direct, short term, temporary, negative minor noise impacts during construction works at nearby sensitive receptors.</p> <p>Archaeology and Cultural Heritage - This option is anticipated to have no or negligible benefit or negative impact on cultural heritage features.</p> <p>Forestry - Impact dependent on detailed survey. Tree removal may be required dependent on extent of works required.</p>	<p>Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.</p> <p>Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.</p> <p>Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.</p> <p>Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.</p>
					<p>Landscape and Visual: See recommended Landscape and Visual mitigation options (Appendix C.1), if implemented these would likely reduce effects. In addition, an understanding of whether it is planned to retain this area as open moorland or if forestry is planned will help determine potential effects further – in terms of landscape character and screening.</p> <p>The adoption of the applicable good practice measures in the Outline CEMP would reduce the impact of modification to surface water drainage patterns, with artificial drainage installed only where necessary and would, wherever practical, be installed in advance of ground being cleared of vegetation.</p> <p>The adoption of the applicable good practice measures as summarised in the Outline CEMP would reduce the probability of a sedimentation and/or pollution incident occurring as a result of the carriageway widening, and also reduce the magnitude of any incident due to a combination of good site environmental management procedures.</p>	<p>Landscape and Visual - the potential widening and re-grading works would be discernible, creating a localised change to the character of this open and remote moorland section of the route.</p> <p>Hydrology, Hydrogeology, Geology and Soils - No adverse impacts anticipated as a result of the proposed works.</p>	<p>Minor adverse effect – where the Proposed Development would result in a small deterioration of the existing environment.</p> <p>Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.</p>



77	N/A	Unclassified Road, bends 2.2km northeast of Bell Memorial Car Park		<p>General carriageway widening in verge areas.</p> <p>Potential physical upgrade works to existing drainage at locations of carriageway widening / regrading / embankment regrading.</p>	<p>Ecology and Biodiversity: The undertaking of an ecological walkover in advance of works would allow the identification of any habitat, flora or fauna constraints and allow suitable mitigation measures to be designed to reduce the potential adverse effects.</p> <p>Any bespoke mitigation measures arising from the ecological walkover, together with standard measures relating to pollution prevention, biosecurity and other environmental good practice measures recommended by CIRIA and SEPA, would reduce the potential adverse effects.</p>	<p>Ecology and Biodiversity - it is anticipated that the proposed works could result in Negligible impacts to the existing ecological baseline.</p>	<p>Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.</p>
					Ornithology: N/A	Ornithology - This would result in negligible impacts on ornithological features.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
					Noise: Construction: Works to be undertaken in accordance with the principle of BPM as defined in Section 72 of the Control of Pollution Act 1974 (CoPA).	Noise - Sensitive receptors more than 1000m away from location. Construction: Potential for neutral construction impacts.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
					Archaeology and Cultural Heritage: N/A	Archaeology and Cultural Heritage - This option is anticipated to have no or negligible benefit or negative impact on cultural heritage features.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
					Forestry: N/A	Forestry - Impact dependent on detailed survey. Tree removal may be required dependent on extent of works required.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
78	N/A	Priority Junction 300m south of proposed site access 1		<p>General carriageway widening in verge areas.</p> <p>Potential physical upgrade works to existing drainage at locations of carriageway widening / regrading / embankment regrading.</p>	<p>Landscape and Visual: See recommended Landscape and Visual mitigation options (Appendix C.1), if implemented these would likely reduce effects. In addition, an understanding of whether it is planned to retain this area as open moorland or if forestry is planned will help determine potential effects further – in terms of landscape character and screening.</p> <p>The adoption of the applicable good practice measures in the Outline CEMP would reduce the impact of modification to surface water drainage patterns, with artificial drainage installed only where necessary and would, wherever practical, be installed in advance of ground being cleared of vegetation.</p> <p>The adoption of the applicable good practice measures as summarised in the Outline CEMP would reduce the probability of a sedimentation and/or pollution incident occurring as a result of the carriageway widening, and also reduce the magnitude of any incident due to a combination of good site environmental management procedures.</p> <p>Ecology and Biodiversity: The undertaking of an ecological walkover in advance of works would allow the identification of any habitat, flora or fauna constraints and allow suitable mitigation measures to be designed to reduce the potential adverse effects.</p> <p>Any bespoke mitigation measures arising from the ecological walkover, together with standard measures relating to pollution prevention, biosecurity and other environmental good practice measures recommended by CIRIA and SEPA, would reduce the potential adverse effects.</p>	<p>Landscape and Visual - the potential widening and re-grading works would be discernible, creating a localised change to the character of this open and remote moorland section of the route.</p> <p>Hydrology, Hydrogeology, Geology and Soils - No adverse impacts anticipated as a result of the proposed works.</p> <p>Ecology and Biodiversity - it is anticipated that the proposed works could result in Negligible impacts to the existing ecological baseline.</p>	<p>Minor adverse effect – where the Proposed Development would result in a small deterioration of the existing environment.</p> <p>Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.</p> <p>Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.</p> <p>Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.</p> <p>Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.</p> <p>Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.</p>
					Ornithology: N/A	Ornithology - This would result in negligible impacts on ornithological features.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
					Noise: Construction: Works to be undertaken in accordance with the principle of BPM as defined in Section 72 of the Control of Pollution Act 1974 (CoPA).	Noise - Sensitive receptors more than 1000m away from location. Construction: Potential for neutral construction impacts.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
					Archaeology and Cultural Heritage: N/A	Archaeology and Cultural Heritage - This option is anticipated to have no or negligible benefit or negative impact on cultural heritage features.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
					Forestry: N/A	Forestry - Impact dependent on detailed survey. Tree removal may be required dependent on extent of works required.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
					Landscape and Visual: See recommended Landscape and Visual mitigation options (Appendix C.1), if implemented these would likely reduce effects. In addition, an understanding of whether it is planned to retain this area as open moorland or if forestry is planned will help determine potential effects further – in terms of landscape character and screening.	Landscape and Visual - the potential widening and re-grading works would be discernible, creating a localised change to the character of this open and remote moorland section of the route.	Minor adverse effect – where the Proposed Development would result in a small deterioration of the existing environment.




79a	N/A	Series of Bends East of Aldric Hill		Vegetation / tree canopy to be cut back and removed at locations.	The adoption of the applicable good practice measures as summarised in the Outline CEMP would reduce the probability of a sedimentation and/or pollution incident occurring as a result of the new section of carriageway/carriageway widening, and also reduce the magnitude of any incident due to a combination of good site environmental management procedures.	Hydrology, Hydrogeology, Geology and Soils - No adverse impacts anticipated as a result of the proposed works.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.	
				General carriageway widening in verge areas.	The good practice measures would also reduce the impact of modification to surface water drainage patterns, with artificial drainage installed only where necessary and would, wherever practical, be installed in advance of ground being cleared of vegetation.			
				Potential verge / embankment regrading.	The design principles and adoption of the applicable good practice measures summarised in the Outline CEMP would reduce the soils losses and compaction of soil effects. Site monitoring would identify any areas where soil effects are noted and enable a fast response to minimise effect.			
				Potential carriageway re-grading.	Ecology and Biodiversity: The undertaking of an ecological walkover in advance of works would allow the identification of any habitat, flora or fauna constraints and allow suitable mitigation measures to be designed to reduce the potential adverse effects.			
				Potential physical upgrade works to existing drainage at locations of carriageway widening / regrading / embankment regrading.	Any bespoke mitigation measures arising from the ecological walkover, together with standard measures relating to pollution prevention, biosecurity and other environmental good practice measures recommended by CIRIA and SEPA, would reduce the potential adverse effects.			
					Ornithology: Avoid vegetation clearance in bird breeding season (March-August), or undertake pre-works ECoW checks for nesting birds (to avoid legal non-compliance).			Ornithology - Vegetation clearance has the potential to result in legal offences related to nesting birds, however following the application of embedded mitigation negligible impacts on ornithological features are anticipated.
Noise: Construction: Works to be undertaken in accordance with the principle of BPM as defined in Section 72 of the Control of Pollution Act 1974 (CoPA).	Noise - Sensitive receptors more than 1000m away from location. Construction: Potential for neutral construction impacts.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.						
Archaeology and Cultural Heritage: N/A	Archaeology and Cultural Heritage - This option is anticipated to have no or negligible benefit or negative impact on cultural heritage features.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.						
Forestry: N/A	Forestry - Impact dependent on detailed survey. Tree removal may be required dependent on extent of works required.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.						
79B	SPA053	Series of Bends East of Aldric Hill			Vegetation / tree canopy to be cut back and removed at locations.	Landscape and Visual: See recommended Landscape and Visual mitigation options (Appendix C.1), if implemented these would likely reduce effects. In addition, an understanding of whether it is planned to retain this area as open moorland or if forestry is planned will help determine potential effects further – in terms of landscape character and screening.	Landscape and Visual - the potential widening and re-grading works would be discernible, creating a localised change to the character of this open and remote moorland section of the route.	Minor adverse effect – where the Proposed Development would result in a small deterioration of the existing environment.
						General carriageway widening in verge areas.	The adoption of the applicable good practice measures in the Outline CEMP would reduce the impact of modification to surface water drainage patterns, with artificial drainage installed only where necessary and would, wherever practical, be installed in advance of ground being cleared of vegetation.	Hydrology, Hydrogeology, Geology and Soils - No adverse impacts anticipated as a result of the proposed works.
79B	SPA053	Series of Bends East of Aldric Hill		Potential verge / embankment regrading.	The adoption of the applicable good practice measures as summarised in the Outline CEMP would reduce the probability of a sedimentation and/or pollution incident occurring as a result of the carriageway widening, and also reduce the magnitude of any incident due to a combination of good site environmental management procedures.	Ecology and Biodiversity - it is anticipated that the proposed works could result in Negligible impacts to the existing ecological baseline.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.	
				Potential carriageway re-grading.	Ecology and Biodiversity: The undertaking of an ecological walkover in advance of works would allow the identification of any habitat, flora or fauna constraints and allow suitable mitigation measures to be designed to reduce the potential adverse effects.			
				Potential physical upgrade works to existing drainage at locations of carriageway widening / regrading / embankment regrading.	Any bespoke mitigation measures arising from the ecological walkover, together with standard measures relating to pollution prevention, biosecurity and other environmental good practice measures recommended by CIRIA and SEPA, would reduce the potential adverse effects.			
				Removal of road sign.	Ornithology: Avoid vegetation clearance in bird breeding season (March-August), or undertake pre-works ECoW checks for nesting birds (to avoid legal non-compliance).			
					Noise: Construction: Works to be undertaken in accordance with the principle of BPM as defined in Section 72 of the Control of Pollution Act 1974 (CoPA).			
					Archaeology and Cultural Heritage: N/A			
	Forestry: N/A	Forestry - Impact dependent on detailed survey. Tree removal may be required dependent on extent of works required.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.					
					Landscape and Visual: See recommended landscape and visual mitigation options (Appendix C.1).	Landscape and Visual - the potential widening and re-grading works would be discernible, creating a localised change to the character of this open and remote moorland section of the route.	Minor adverse effect – where the Proposed Development would result in a small deterioration of the existing environment.	

80	SPA054	Series of Bends East of Eldrick Hill 2		<p>Vegetation / tree canopy to be cut back and removed at locations.</p> <p>General carriageway widening in verge areas.</p> <p>Potential verge / embankment regrading.</p> <p>Potential carriageway regrading.</p> <p>Potential physical upgrade works to existing drainage at locations of carriageway widening / regrading / embankment regrading.</p> <p>Road sign to be removed.</p>	<p>The adoption of the applicable good practice measures in the Outline CEMP would reduce the impact of modification to surface water drainage patterns, with artificial drainage installed only where necessary and would, wherever practical, be installed in advance of ground being cleared of vegetation.</p> <p>The adoption of the applicable good practice measures as summarised in the Outline CEMP would reduce the probability of a sedimentation and/or pollution incident occurring as a result of the carriageway widening, and also reduce the magnitude of any incident due to a combination of good site environmental management procedures.</p> <p>Ecology and Biodiversity: The undertaking of an ecological walkover in advance of works would allow the identification of any habitat, flora or fauna constraints and allow suitable mitigation measures to be designed to reduce the potential adverse effects.</p> <p>Any bespoke mitigation measures arising from the ecological walkover, together with standard measures relating to pollution prevention, biosecurity and other environmental good practice measures recommended by CIRIA and SEPA, would reduce the potential adverse effects.</p> <p>Ornithology: Avoid vegetation clearance in bird breeding season (March-August), or undertake pre-works ECoW checks for nesting birds (to avoid legal non-compliance).</p> <p>Noise: Construction: Works to be undertaken in accordance with the principle of BPM as defined in Section 72 of the Control of Pollution Act 1974 (CoPA).</p> <p>Archaeology and Cultural Heritage: N/A</p> <p>Forestry: N/A</p>	<p>Hydrology, Hydrogeology, Geology and Soils - No adverse impacts anticipated as a result of the proposed works.</p> <p>Ecology and Biodiversity - it is anticipated that the proposed works could result in Negligible impacts to the existing ecological baseline.</p> <p>Ornithology - Vegetation clearance has the potential to result in legal offences related to nesting birds, however following the application of embedded mitigation negligible impacts on ornithological features are anticipated.</p> <p>Noise - Sensitive receptors more than 1000m away from location. Construction: Potential for neutral construction impacts.</p> <p>Archaeology and Cultural Heritage - This option is anticipated to have no or negligible benefit or negative impact on cultural heritage features.</p> <p>Forestry - Impact dependent on detailed survey. Tree removal may be required dependent on extent of works required.</p>	<p>Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.</p> <p>Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.</p> <p>Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.</p> <p>Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.</p> <p>Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.</p> <p>Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.</p>
81	SPA055	Series of Bends Northeast of Eldrick Hill		<p>Vegetation / tree canopy to be cut back and removed at locations.</p> <p>General carriageway widening in verge areas.</p> <p>Potential verge / embankment regrading.</p> <p>Potential carriageway regrading.</p> <p>Potential physical upgrade works to existing drainage at locations of carriageway widening / regrading / embankment regrading.</p> <p>Road sign to be removed.</p>	<p>Landscape and Visual: See recommended landscape and visual mitigation options (Appendix C.1).</p> <p>The adoption of the applicable good practice measures in the Outline CEMP would reduce the impact of modification to surface water drainage patterns, with artificial drainage installed only where necessary and would, wherever practical, be installed in advance of ground being cleared of vegetation.</p> <p>The adoption of the applicable good practice measures as summarised in the Outline CEMP would reduce the probability of a sedimentation and/or pollution incident occurring as a result of the carriageway widening, and also reduce the magnitude of any incident due to a combination of good site environmental management procedures.</p> <p>Ecology and Biodiversity: The undertaking of an ecological walkover in advance of works would allow the identification of any habitat, flora or fauna constraints and allow suitable mitigation measures to be designed to reduce the potential adverse effects.</p> <p>Any bespoke mitigation measures arising from the ecological walkover, together with standard measures relating to pollution prevention, biosecurity and other environmental good practice measures recommended by CIRIA and SEPA, would reduce the potential adverse effects.</p> <p>Ornithology: Avoid vegetation clearance in bird breeding season (March-August), or undertake pre-works ECoW checks for nesting birds (to avoid legal non-compliance).</p> <p>Noise: Construction: Works to be undertaken in accordance with the principle of BPM as defined in Section 72 of the Control of Pollution Act 1974 (CoPA).</p> <p>Archaeology and Cultural Heritage: N/A</p> <p>Forestry: N/A</p>	<p>Landscape and Visual - the potential widening and re-grading works would be discernible, creating a localised change to the character of this open and remote moorland section of the route.</p> <p>Hydrology, Hydrogeology, Geology and Soils - No adverse impacts anticipated as a result of the proposed works.</p> <p>Ecology and Biodiversity - it is anticipated that the proposed works could result in Negligible impacts to the existing ecological baseline.</p> <p>Ornithology - Vegetation clearance has the potential to result in legal offences related to nesting birds, however following the application of embedded mitigation negligible impacts on ornithological features are anticipated.</p> <p>Noise - Sensitive receptors more than 1000m away from location. Construction: Potential for neutral construction impacts.</p> <p>Archaeology and Cultural Heritage - This option is anticipated to have no or negligible benefit or negative impact on cultural heritage features.</p> <p>Forestry - Impact dependent on detailed survey. Tree removal may be required dependent on extent of works required.</p>	<p>Minor adverse effect – where the Proposed Development would result in a small deterioration of the existing environment.</p> <p>Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.</p> <p>Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.</p> <p>Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.</p> <p>Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.</p> <p>Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.</p> <p>Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.</p> <p>Minor adverse effect – where the Proposed Development would result in a small deterioration of the existing environment.</p>


82	SPA056	Series of Bends Northeast of Eldrick Hill 2	 <p>Vegetation / tree canopy to be cut back and removed at locations.</p> <p>General carriageway widening in verge areas.</p> <p>Potential verge / embankment regrading.</p> <p>Potential carriageway re-grading.</p> <p>Potential physical upgrade works to existing drainage at locations of carriageway widening / regrading / embankment regrading.</p> <p>3x road signs to be removed.</p> <p>3x posts to be removed.</p>	<p>The adoption of the applicable good practice measures as summarised in the Outline CEMP would reduce the probability of a sedimentation and/or pollution incident occurring as a result of the new section of carriageway/carriageway widening, and also reduce the magnitude of any incident due to a combination of good site environmental management procedures.</p> <p>The good practice measures would also reduce the impact of modification to surface water drainage patterns, with artificial drainage installed only where necessary and would, wherever practical, be installed in advance of ground being cleared of vegetation.</p> <p>The design principles and adoption of the applicable good practice measures summarised in the Outline CEMP would reduce the soils losses and compaction of soil effects. Site monitoring would identify any areas where soil effects are noted and enable a fast response to minimise effect.</p> <p>Biodiversity and Conservation: The undertaking of an ecological walkover in advance of works would allow the identification of any habitat, flora or fauna constraints and allow suitable mitigation measures to be designed to reduce the potential adverse effects.</p> <p>Any bespoke mitigation measures arising from the ecological walkover, together with standard measures relating to pollution prevention, biosecurity and other environmental good practice measures recommended by CIRIA and SEPA, would reduce the potential adverse effects.</p> <p>Ornithology: Avoid vegetation clearance in bird breeding season (March-August), or undertake pre-works ECoW checks for nesting birds (to avoid legal non-compliance).</p> <p>Noise: Construction: Works to be undertaken in accordance with the principle of BPM as defined in Section 72 of the Control of Pollution Act 1974 (CoPA).</p> <p>Archaeology and Cultural Heritage: N/A</p> <p>Forestry: N/A</p>	<p>Hydrology, Hydrogeology, Geology and Soils - No adverse impacts anticipated as a result of the proposed works.</p> <p>Ecology and Biodiversity - it is anticipated that the proposed works could result in Negligible impacts to the existing ecological baseline.</p> <p>Ornithology - Vegetation clearance has the potential to result in legal offences related to nesting birds, however following the application of embedded mitigation negligible impacts on ornithological features are anticipated.</p> <p>Noise - Sensitive receptors more than 1000m away from location. Construction: Potential for neutral construction impacts.</p> <p>Archaeology and Cultural Heritage - This option is anticipated to have no or negligible benefit or negative impact on cultural heritage features.</p> <p>Forestry - Impact dependent on detailed survey. Tree removal may be required dependent on extent of works required.</p>	<p>Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.</p> <p>Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.</p> <p>Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.</p> <p>Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.</p> <p>Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.</p> <p>Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.</p>
83	SPA057	Series of Bends East of Cairnadoch	 <p>Vegetation / tree canopy to be cut back and removed at locations.</p> <p>General carriageway widening in verge areas.</p> <p>Potential verge / embankment regrading.</p> <p>Potential carriageway re-grading.</p> <p>Potential physical upgrade works to existing drainage at locations of carriageway widening / regrading / embankment regrading.</p> <p>2x posts to be removed.</p>	<p>Landscape and Visual: See recommended landscape and visual mitigation options (Appendix C.1).</p> <p>The adoption of the applicable good practice measures in the Outline CEMP would reduce the impact of modification to surface water drainage patterns, with artificial drainage installed only where necessary and would, wherever practical, be installed in advance of ground being cleared of vegetation.</p> <p>The adoption of the applicable good practice measures as summarised in the Outline CEMP would reduce the probability of a sedimentation and/or pollution incident occurring as a result of the carriageway widening, and also reduce the magnitude of any incident due to a combination of good site environmental management procedures.</p> <p>Ecology and Biodiversity: The undertaking of an ecological walkover in advance of works would allow the identification of any habitat, flora or fauna constraints and allow suitable mitigation measures to be designed to reduce the potential adverse effects.</p> <p>Any bespoke mitigation measures arising from the ecological walkover, together with standard measures relating to pollution prevention, biosecurity and other environmental good practice measures recommended by CIRIA and SEPA, would reduce the potential adverse effects.</p> <p>Ornithology: Avoid vegetation clearance in bird breeding season (March-August), or undertake pre-works ECoW checks for nesting birds (to avoid legal non-compliance).</p> <p>Noise: Construction: Works to be undertaken in accordance with the principle of BPM as defined in Section 72 of the Control of Pollution Act 1974 (CoPA).</p> <p>Archaeology and Cultural Heritage: N/A</p> <p>Forestry: N/A</p> <p>Landscape and Visual: See recommended landscape and visual mitigation options (Appendix C.1).</p>	<p>Landscape and Visual - the potential widening and re-grading works would be discernible, creating a localised change to the character of this open and remote moorland section of the route.</p> <p>Hydrology, Hydrogeology, Geology and Soils - No adverse impacts anticipated as a result of the proposed works.</p> <p>Ecology and Biodiversity - it is anticipated that the proposed works could result in Negligible impacts to the existing ecological baseline.</p> <p>Ornithology - Vegetation clearance has the potential to result in legal offences related to nesting birds, however following the application of embedded mitigation negligible impacts on ornithological features are anticipated.</p> <p>Noise - Sensitive receptors more than 1000m away from location. Construction: Potential for neutral construction impacts.</p> <p>Archaeology and Cultural Heritage - This option is anticipated to have no or negligible benefit or negative impact on cultural heritage features.</p> <p>Forestry - Impact dependent on detailed survey. Tree removal may be required dependent on extent of works required.</p>	<p>Minor adverse effect – where the Proposed Development would result in a small deterioration of the existing environment.</p> <p>Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.</p> <p>Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.</p> <p>Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.</p> <p>Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.</p> <p>Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.</p> <p>Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.</p> <p>Minor adverse effect – where the Proposed Development would result in a small deterioration of the existing environment.</p>

84	SPA058	Series of Bends East of Cairnadoch 2		<p>Vegetation / tree canopy to be cut back and removed at locations.</p> <p>General carriageway widening in verge areas.</p> <p>Potential verge / embankment regrading.</p> <p>Potential carriageway regrading.</p> <p>Potential physical upgrade works to existing drainage at locations of carriageway widening / regrading / embankment regrading.</p> <p>2x road signs to be removed.</p>	<p>The adoption of the applicable good practice measures in the Outline CEMP would reduce the impact of modification to surface water drainage patterns, with artificial drainage installed only where necessary and would, wherever practical, be installed in advance of ground being cleared of vegetation.</p> <p>The adoption of the applicable good practice measures as summarised in the Outline CEMP would reduce the probability of a sedimentation and/or pollution incident occurring as a result of the carriageway widening, and also reduce the magnitude of any incident due to a combination of good site environmental management procedures.</p> <p>Ecology and Biodiversity: The undertaking of an ecological walkover in advance of works would allow the identification of any habitat, flora or fauna constraints and allow suitable mitigation measures to be designed to reduce the potential adverse effects.</p> <p>Any bespoke mitigation measures arising from the ecological walkover, together with standard measures relating to pollution prevention, biosecurity and other environmental good practice measures recommended by CIRIA and SEPA, would reduce the potential adverse effects.</p> <p>Ornithology: Avoid vegetation clearance in bird breeding season (March-August), or undertake pre-works ECoW checks for nesting birds (to avoid legal non-compliance).</p> <p>Noise: Construction: Works to be undertaken in accordance with the principle of BPM as defined in Section 72 of the Control of Pollution Act 1974 (CoPA).</p> <p>Archaeology and Cultural Heritage: N/A</p> <p>Forestry: N/A</p>	<p>Hydrology, Hydrogeology, Geology and Soils - No adverse impacts anticipated as a result of the proposed works.</p> <p>Ecology and Biodiversity - it is anticipated that the proposed works could result in Negligible impacts to the existing ecological baseline.</p> <p>Ornithology - Vegetation clearance has the potential to result in legal offences related to nesting birds, however following the application of embedded mitigation negligible impacts on ornithological features are anticipated.</p> <p>Noise - Sensitive receptors more than 1000m away from location. Construction: Potential for neutral construction impacts.</p> <p>Archaeology and Cultural Heritage - This option is anticipated to have no or negligible benefit or negative impact on cultural heritage features.</p> <p>Forestry - Impact dependent on detailed survey. Tree removal may be required dependent on extent of works required.</p>	<p>Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.</p> <p>Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.</p> <p>Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.</p> <p>Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.</p> <p>Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.</p> <p>Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.</p>
85	SPA059	Series of Bends Crawberry Rock Cairns	 	<p>Vegetation / tree canopy to be cut back and removed at locations.</p> <p>General carriageway widening in verge areas.</p> <p>Potential verge / embankment regrading.</p> <p>Potential physical upgrade works to existing drainage at locations of carriageway widening / regrading / embankment regrading.</p> <p>2x road signs to be removed.</p> <p>2x posts to be removed.</p>	<p>See recommended landscape and visual mitigation options (Appendix C.1).</p> <p>The adoption of the applicable good practice measures in the Outline CEMP would reduce the impact of modification to surface water drainage patterns, with artificial drainage installed only where necessary and would, wherever practical, be installed in advance of ground being cleared of vegetation.</p> <p>The adoption of the applicable good practice measures as summarised in the Outline CEMP would reduce the probability of a sedimentation and/or pollution incident occurring as a result of the carriageway widening, and also reduce the magnitude of any incident due to a combination of good site environmental management procedures.</p> <p>Biodiversity and Conservation: The undertaking of an ecological walkover in advance of works would allow the identification of any habitat, flora or fauna constraints and allow suitable mitigation measures to be designed to reduce the potential adverse effects.</p> <p>Any bespoke mitigation measures arising from the ecological walkover, together with standard measures relating to pollution prevention, biosecurity and other environmental good practice measures recommended by CIRIA and SEPA, would reduce the potential adverse effects.</p> <p>Ornithology: Avoid vegetation clearance in bird breeding season (March-August), or undertake pre-works ECoW checks for nesting birds (to avoid legal non-compliance).</p> <p>Noise: Construction: Works to be undertaken in accordance with the principle of BPM as defined in Section 72 of the Control of Pollution Act 1974 (CoPA).</p> <p>Archaeology and Cultural Heritage: N/A</p> <p>Forestry: N/A</p>	<p>Landscape and Visual - the potential widening and re-grading works would be discernible, creating a localised change to the character of this open and remote moorland section of the route.</p> <p>Hydrology, Hydrogeology, Geology and Soils - No adverse impacts anticipated as a result of the proposed works.</p> <p>Ecology and Biodiversity - it is anticipated that the proposed works could result in Negligible impacts to the existing ecological baseline.</p> <p>Ornithology - Vegetation clearance has the potential to result in legal offences related to nesting birds, however following the application of embedded mitigation negligible impacts on ornithological features are anticipated.</p> <p>Noise - Sensitive receptors more than 1000m away from location. Construction: Potential for neutral construction impacts.</p> <p>Archaeology and Cultural Heritage - This option is anticipated to have no or negligible benefit or negative impact on cultural heritage features.</p> <p>Forestry - Impact dependent on detailed survey. Tree removal may be required dependent on extent of works required.</p>	<p>Minor adverse effect – where the Proposed Development would result in a small deterioration of the existing environment.</p> <p>Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.</p> <p>Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.</p> <p>Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.</p> <p>Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.</p> <p>Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.</p>
				<p>Vegetation / tree canopy to be cut back and removed at locations.</p>	<p>Landscape and Visual: See recommended landscape and visual mitigation options (Appendix C.1).</p> <p>The adoption of the applicable good practice measures in the Outline CEMP would reduce the impact of modification to surface water drainage patterns, with artificial drainage installed only where necessary and would, wherever practical, be installed in advance of ground being cleared of vegetation.</p> <p>The adoption of the applicable good practice measures as summarised in the Outline CEMP would reduce the probability of a sedimentation and/or pollution incident occurring as a result of the carriageway widening, and also reduce the magnitude of any incident due to a combination of good site environmental management procedures.</p>	<p>Landscape and Visual - the potential widening and re-grading works would be discernible, creating a localised change to the character of this open and remote moorland section of the route.</p> <p>Hydrology, Hydrogeology, Geology and Soils - No adverse impacts anticipated as a result of the proposed works.</p>	<p>Minor adverse effect – where the Proposed Development would result in a small deterioration of the existing environment.</p> <p>Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.</p>

86	SPA060	Series of Bends Crawberry Rock Cairns 2		<p>General carriageway widening in verge areas.</p> <p>Potential verge / embankment regrading.</p> <p>Potential physical upgrade works to existing drainage at locations of carriageway widening / regrading / embankment regrading.</p> <p>1x road signs to be removed.</p>	<p>Ecology and Biodiversity: The undertaking of an ecological walkover in advance of works would allow the identification of any habitat, flora or fauna constraints and allow suitable mitigation measures to be designed to reduce the potential adverse effects.</p> <p>Any bespoke mitigation measures arising from the ecological walkover, together with standard measures relating to pollution prevention, biosecurity and other environmental good practice measures recommended by CIRIA and SEPA, would reduce the potential adverse effects.</p>	<p>Ecology and Biodiversity - it is anticipated that the proposed works could result in Negligible impacts to the existing ecological baseline.</p>	<p>Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.</p>
87	SPA061	Series of Bends Approaching Stinchar Bridge	 	<p>Vegetation / tree canopy to be cut back and removed at locations.</p> <p>Creation of over-run area on bend.</p> <p>General carriageway widening in verge areas.</p> <p>Potential verge / embankment regrading.</p> <p>Potential carriageway regrading.</p> <p>Potential physical upgrade works to existing drainage at locations of carriageway widening / regrading / embankment regrading.</p> <p>1x road signs to be removed.</p>	<p>Landscape and Visual: See recommended landscape and visual mitigation options (Appendix C.1).</p> <p>The adoption of the applicable good practice measures as summarised in the Outline CEMP would reduce the probability of a sedimentation and/or pollution incident occurring as a result of the new carriageway section/carriageway widening, and also reduce the magnitude of any incident due to a combination of good site environmental management procedures.</p> <p>The good practice measures would also reduce the impact of modification to surface water drainage patterns, with artificial drainage installed only where necessary and would, wherever practical, be installed in advance of ground being cleared of vegetation.</p> <p>The design principles and adoption of the applicable good practice measures summarised in the Outline CEMP would reduce the soils losses and compaction of soil effects. Site monitoring would identify any areas where soil effects are noted and enable a fast response to minimise effect.</p> <p>Ecology and Biodiversity: The undertaking of an ecological walkover in advance of works would allow the identification of any habitat, flora or fauna constraints and allow suitable mitigation measures to be designed to reduce the potential adverse effects.</p> <p>Any bespoke mitigation measures arising from the ecological walkover, together with standard measures relating to pollution prevention, biosecurity and other environmental good practice measures recommended by CIRIA and SEPA, would reduce the potential adverse effects.</p>	<p>Landscape and Visual - the potential widening and re-grading works would be discernible, creating a localised change to the character of this open and remote moorland section of the route.</p> <p>Hydrology, Hydrogeology, Geology and Soils - No adverse impacts anticipated as a result of the proposed works.</p> <p>Ecology and Biodiversity - it is anticipated that the proposed works could result in Negligible impacts to the existing ecological baseline.</p>	<p>Minor adverse effect – where the Proposed Development would result in a small deterioration of the existing environment.</p> <p>Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.</p> <p>Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.</p> <p>Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.</p> <p>Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.</p> <p>Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.</p> <p>Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.</p>
					<p>Landscape and Visual: N/A</p>	<p>Landscape and Visual - Minor effects due to works largely within existing road corridor and tree works would be within commercial forestry extents.</p>	<p>Minor adverse effect – where the Proposed Development would result in a small deterioration of the existing environment.</p>

					Forestry: N/A	Forestry - Impact dependent on detailed survey. Tree removal may be required dependent on extent of works required.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.	
90	SPA064	Double Bend West of Loch Skelloch			Landscape and Visual: N/A	Landscape and Visual - Minor effects due to works largely within existing road corridor and tree works would be within commercial forestry extents.	Minor adverse effect – where the Proposed Development would result in a small deterioration of the existing environment.	
					<p>The adoption of the applicable good practice measures in the Outline CEMP would reduce the impact of modification to surface water drainage patterns, with artificial drainage installed only where necessary and would, wherever practical, be installed in advance of ground being cleared of vegetation.</p> <p>The adoption of the applicable good practice measures as summarised in the Outline CEMP would reduce the probability of a sedimentation and/or pollution incident occurring as a result of the carriageway widening, and also reduce the magnitude of any incident due to a combination of good site environmental management procedures.</p>	Hydrology, Hydrogeology, Geology and Soils - No adverse impacts anticipated as a result of the proposed works.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.	
				Vegetation / tree canopy to be cut back and removed at locations.				
				General carriageway widening in verge areas.				
				Potential verge / embankment regrading.	Ecology and Biodiversity: The undertaking of an ecological walkover in advance of works would allow the identification of any habitat, flora or fauna constraints and allow suitable mitigation measures to be designed to reduce the potential adverse effects.	Ecology and Biodiversity - it is anticipated that the proposed works could result in Negligible impacts to the existing ecological baseline.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.	
				Potential physical upgrade works to existing drainage at locations of carriageway widening / regrading / embankment regrading.	Any bespoke mitigation measures arising from the ecological walkover, together with standard measures relating to pollution prevention, biosecurity and other environmental good practice measures recommended by CIRIA and SEPA, would reduce the potential adverse effects.			
				1x road signs to be removed.	Ornithology: Avoid vegetation clearance in bird breeding season (March-August), or undertake pre-works ECoW checks for nesting birds (to avoid legal non-compliance).	Ornithology - Vegetation clearance has the potential to result in legal offences related to nesting birds, however following the application of embedded mitigation negligible impacts on ornithological features are anticipated.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.	
	Noise: Construction: Works to be undertaken in accordance with the principle of BPM as defined in Section 72 of the Control of Pollution Act 1974 (CoPA).	Noise - Sensitive receptors more than 1000m away from location. Construction: Potential for neutral construction impacts.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.					
	Archaeology and Cultural Heritage: N/A	Archaeology and Cultural Heritage - This option is anticipated to have no or negligible benefit or negative impact on cultural heritage features.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.					
	Forestry: N/A	Forestry - Impact dependent on detailed survey. Tree removal may be required dependent on extent of works required.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.					
91	SPA065	Series of Bends Tairlaw Burn Dam	 		Landscape and Visual: N/A	Landscape and Visual - Minor effects due to works largely within existing road corridor and tree works would be within commercial forestry extents.	Minor adverse effect – where the Proposed Development would result in a small deterioration of the existing environment.	
					<p>The adoption of the applicable good practice measures in the Outline CEMP would reduce the impact of modification to surface water drainage patterns, with artificial drainage installed only where necessary and would, wherever practical, be installed in advance of ground being cleared of vegetation. A</p> <p>The adoption of the applicable good practice measures as summarised in the Outline CEMP would reduce the probability of a sedimentation and/or pollution incident occurring as a result of the carriageway widening, and also reduce the magnitude of any incident due to a combination of good site environmental management procedures.</p>	Hydrology, Hydrogeology, Geology and Soils - No adverse impacts anticipated as a result of the proposed works.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.	
				Vegetation / tree canopy to be cut back and removed at locations.				
				General carriageway widening in verge areas.				
				Potential verge / embankment regrading.	Any bridge upgrades would be designed and constructed following good practice techniques and would be of sufficient capacity to receive storm flows with an allowance for increased flows due to climate change.			
				Potential carriageway regrading.	Ecology and Biodiversity: The undertaking of an ecological walkover in advance of works would allow the identification of any habitat, flora or fauna constraints and allow suitable mitigation measures to be designed to reduce the potential adverse effects.	Ecology and Biodiversity - it is anticipated that the proposed works could result in Negligible impacts to the existing ecological baseline.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.	
				Potential physical upgrade works to existing drainage at locations of carriageway widening / regrading / embankment regrading.	Any bespoke mitigation measures arising from the ecological walkover, together with standard measures relating to pollution prevention, biosecurity and other environmental good practice measures recommended by CIRIA and SEPA, would reduce the potential adverse effects.			
Assessment of bridge required to confirm suitability.	Ornithology: Avoid vegetation clearance in bird breeding season (March-August), or undertake pre-works ECoW checks for nesting birds (to avoid legal non-compliance).	Ornithology - Vegetation clearance has the potential to result in legal offences related to nesting birds, however following the application of embedded mitigation negligible impacts on ornithological features are anticipated.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.					
2x road signs to be removed.	Noise: Construction: Works to be undertaken in accordance with the principle of BPM as defined in Section 72 of the Control of Pollution Act 1974 (CoPA).	Noise - Sensitive receptors more than 1000m away from location. Construction: Potential for neutral construction impacts.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.					

				Archaeology and Cultural Heritage: N/A	Archaeology and Cultural Heritage - This option is anticipated to have no or negligible benefit or negative impact on cultural heritage features.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
				Forestry: N/A	Forestry - Impact dependent on detailed survey. Tree removal may be required dependent on extent of works required.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
92	SPA066	Series of Bends West of Linnshalloch	 <p>Vegetation / tree canopy to be cut back and removed at locations.</p> <p>General carriageway widening in verge areas.</p> <p>Potential verge / embankment regrading.</p> <p>Potential physical upgrade works to existing drainage at locations of carriageway widening / regrading / embankment regrading.</p>	Landscape and Visual: N/A	Landscape and Visual - Minor effects due to works largely within existing road corridor and tree works would be within commercial forestry extents.	Minor adverse effect – where the Proposed Development would result in a small deterioration of the existing environment.
				<p>The adoption of the applicable good practice measures in the Outline CEMP would reduce the impact of modification to surface water drainage patterns, with artificial drainage installed only where necessary and would, wherever practical, be installed in advance of ground being cleared of vegetation.</p> <p>The adoption of the applicable good practice measures as summarised in the Outline CEMP would reduce the probability of a sedimentation and/or pollution incident occurring as a result of the carriageway widening, and also reduce the magnitude of any incident due to a combination of good site environmental management procedures.</p>	Hydrology, Hydrogeology, Geology and Soils - No adverse impacts anticipated as a result of the proposed works.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
				<p>Ecology and Biodiversity: The undertaking of an ecological walkover in advance of works would allow the identification of any habitat, flora or fauna constraints and allow suitable mitigation measures to be designed to reduce the potential adverse effects.</p> <p>Any bespoke mitigation measures arising from the ecological walkover, together with standard measures relating to pollution prevention, biosecurity and other environmental good practice measures recommended by CIRIA and SEPA, would reduce the potential adverse effects.</p>	Ecology and Biodiversity - it is anticipated that the proposed works could result in Negligible impacts to the existing ecological baseline.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
				<p>Ornithology: Avoid vegetation clearance in bird breeding season (March-August), or undertake pre-works ECoW checks for nesting birds (to avoid legal non-compliance).</p>	Ornithology - Vegetation clearance has the potential to result in legal offences related to nesting birds, however following the application of embedded mitigation negligible impacts on ornithological features are anticipated.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
				<p>Noise: Construction: Works to be undertaken in accordance with the principle of BPM as defined in Section 72 of the Control of Pollution Act 1974 (CoPA).</p>	Noise - Sensitive receptors more than 1000m away from location. Construction: Potential for neutral construction impacts.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
				Archaeology and Cultural Heritage: N/A	Archaeology and Cultural Heritage - This option is anticipated to have no or negligible benefit or negative impact on cultural heritage features.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
				Forestry: N/A	Forestry - Impact dependent on detailed survey. Tree removal may be required dependent on extent of works required.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
93	SPA067	Series of Bends Cairnwhapple Stone	 <p>Vegetation / tree canopy to be cut back and removed at locations.</p> <p>General carriageway widening in verge areas.</p> <p>Potential verge / embankment regrading.</p> <p>Potential physical upgrade works to existing drainage at locations of carriageway widening / regrading / embankment regrading.</p> <p>Removal 1x road sign.</p>	Landscape and Visual: N/A	Landscape and Visual - Minor effects due to works largely within existing road corridor and tree works would be within commercial forestry extents.	Minor adverse effect – where the Proposed Development would result in a small deterioration of the existing environment.
				<p>The adoption of the applicable good practice measures in the Outline CEMP would reduce the impact of modification to surface water drainage patterns, with artificial drainage installed only where necessary and would, wherever practical, be installed in advance of ground being cleared of vegetation.</p> <p>The adoption of the applicable good practice measures as summarised in the Outline CEMP would reduce the probability of a sedimentation and/or pollution incident occurring as a result of the carriageway widening, and also reduce the magnitude of any incident due to a combination of good site environmental management procedures.</p>	Hydrology, Hydrogeology, Geology and Soils - No adverse impacts anticipated as a result of the proposed works.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
				<p>Ecology and Biodiversity: The undertaking of an ecological walkover in advance of works would allow the identification of any habitat, flora or fauna constraints and allow suitable mitigation measures to be designed to reduce the potential adverse effects.</p> <p>Any bespoke mitigation measures arising from the ecological walkover, together with standard measures relating to pollution prevention, biosecurity and other environmental good practice measures recommended by CIRIA and SEPA, would reduce the potential adverse effects.</p>	Ecology and Biodiversity - it is anticipated that the proposed works could result in Negligible impacts to the existing ecological baseline.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
				<p>Ornithology: Avoid vegetation clearance in bird breeding season (March-August), or undertake pre-works ECoW checks for nesting birds (to avoid legal non-compliance).</p>	Ornithology - Vegetation clearance has the potential to result in legal offences related to nesting birds, however following the application of embedded mitigation negligible impacts on ornithological features are anticipated.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
				<p>Noise: Construction: Works to be undertaken in accordance with the principle of BPM as defined in Section 72 of the Control of Pollution Act 1974 (CoPA).</p>	Noise - Sensitive receptors more than 500m away from location. Construction: Potential for neutral construction impacts.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
				Archaeology and Cultural Heritage: N/A	Archaeology and Cultural Heritage - This option is anticipated to have no or negligible benefit or negative impact on cultural heritage features.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.
				Forestry: N/A	Forestry - Impact dependent on detailed survey. Tree removal may be required dependent on extent of works required.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.

94	N/A	Proposed Site Access		Landscape and Visual: N/A	Landscape and Visual - Minor effects due to works largely within existing road corridor and tree works would be within commercial forestry extents.	Minor adverse effect – where the Proposed Development would result in a small deterioration of the existing environment.	
				<p>The adoption of the applicable good practice measures in the Outline CEMP would reduce the impact of modification to surface water drainage patterns, with artificial drainage installed only where necessary and would, wherever practical, be installed in advance of ground being cleared of vegetation.</p>	Hydrology, Hydrogeology, Geology and Soils - No adverse impacts anticipated as a result of the proposed works.	Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.	
				<p>The adoption of the applicable good practice measures as summarised in the Outline CEMP would reduce the probability of a sedimentation and/or pollution incident occurring as a result of the carriageway widening, and also reduce the magnitude of any incident due to a combination of good site environmental management procedures.</p>			
				<p>Construction of access junction to manufacturers specifications.</p> <p>Vegetation / tree canopy to be cut back and removed at locations.</p> <p>General carriageway widening in verge areas.</p> <p>Potential verge / embankment regrading.</p> <p>Potential carriageway re-grading.</p> <p>Potential physical upgrade works to existing drainage at locations of carriageway widening / regrading / embankment regrading.</p>	<p>Ecology and Biodiversity: The undertaking of an ecological walkover in advance of works would allow the identification of any habitat, flora or fauna constraints and allow suitable mitigation measures to be designed to reduce the potential adverse effects.</p> <p>Any bespoke mitigation measures arising from the ecological walkover, together with standard measures relating to pollution prevention, biosecurity and other environmental good practice measures recommended by CIRIA and SEPA, would reduce the potential adverse effects.</p>	<p>Ecology and Biodiversity - it is anticipated that the proposed works could result in Negligible impacts to the existing ecological baseline.</p>	<p>Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.</p>
				<p>Ornithology: Avoid vegetation clearance in bird breeding season (March-August), or undertake pre-works ECoW checks for nesting birds (to avoid legal non-compliance).</p>	<p>Ornithology - Vegetation clearance has the potential to result in legal offences related to nesting birds, however following the application of embedded mitigation negligible impacts on ornithological features are anticipated.</p>	<p>Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.</p>	
				<p>Noise: Construction: Works to be undertaken in accordance with the principle of BPM as defined in Section 72 of the Control of Pollution Act 1974 (CoPA).</p>	<p>Noise - Construction: Distance between closest sensitive receptor (based on AddressBase data) and POI is ~255m. Potential for direct, short term, temporary, negative minor noise impacts during construction works at nearby sensitive receptors.</p>	<p>Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.</p>	
				<p>Archaeology and Cultural Heritage: N/A</p>	<p>Archaeology and Cultural Heritage - This option is anticipated to have no or negligible benefit or negative impact on cultural heritage features.</p>	<p>Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.</p>	
				<p>Forestry: N/A</p>	<p>Forestry - Impact dependent on detailed survey. Tree removal may be required dependent on extent of works required.</p>	<p>Negligible – where the Proposed Development would result in no discernible improvement or deterioration of the existing environment.</p>	

Appendix C.1

LANDSCAPE AND VISUAL MITIGATION LIST





Potential Landscape and Visual Mitigation Options

- Widening should be kept to the minimum width necessary – no excess;
- No kerbs – keep informal edge appearance to reduce impact on rural character;
- Consider use of mounding/lips on sensitive side (generally south east) which will help screen views of the widened road from elevated locations within the WLA;
- In less remote parts of the route, the reinstatement of stone walling where removed for access may also help reduce visibility of the widened route and integrate into the existing landscape character;
- Where parts of the route need to be unavoidably straightened going against the grain of the landscape, use of mounding/lips could be used to follow the natural contours to reduce the visual impacts;
- Grade out new earthwork slopes to tie into the existing landform;
- In areas where broadleaf trees need to be potentially removed or cut back, an Arborculturalist will need to survey the trees to identify the quality and condition and advise on mitigation or avoidance; and
- Have regard to the guidance within NatureScot's 'Constructed tracks in the Scottish Uplands' (2nd Edition 2013, updated Sept 2015). Whilst focussing on new tracks, it still has valuable landscape and visual advice (as well as for biodiversity and geodiversity) relevant for this project.



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