



Preliminary Ecological Walkover Report

**St Fillan's Parapet Replacement & Soffit Repairs
22-NSW-1201-027 / 01**

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Document Control Sheet

PROJECT NAME:	St Fillan’s Parapet Replacement & Soffit Repairs
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First Issue	Name: Clare Hutton Signature: [Redacted] Date: 05/05/2026	Name: Gavin Boyd Signature: [Redacted] Date: 02/06/2026	Name: Melanie Roxburgh Signature: [Redacted] Date:09/06/2026

Summary of Actions

ECOLOGICAL FEATURE	KEY ACTIONS AND TIMING	RISK RATING
Watercourse	Standard pollution prevention measures will be detailed within the scheme specific Environmental Scoping Assessment document to protect these watercourses during the works. These controls are applied across all NMC schemes. Works should be programmed during months of low water levels and rainfall (April to July) to reduce the likelihood of water levels rising and flooding causing pollution events.	Minor
Woodland	Loss or damage to the woodland within the proposed works area must be minimised, wherever possible. Removal must only take place where necessary, and any access routes must avoid habitats which are to remain in situ.	Minor
Grassland	Loss or damage to the grassland must be minimised, where possible. The grassland habitat should be reinstated where possible following completion of the works.	Minor
Bats	One dusk emergence survey must be undertaken on structure S1 between May and September. The survey will be undertaken with the aid of Night Vision Aid (NVA) equipment to assess the presence/likely absence of bats.	Moderate
Nesting Birds	If the works are to be undertaken within the breeding bird season (March to August inclusive) then a suitably qualified/experienced ecologist will be required to carry out a nesting bird check before works can proceed during the breeding bird season.	Moderate
Otter	Should the works be postponed during the course of construction, the elevated platform should be removed during that period. General construction safeguards should also be implemented to protect otters and other mammals which could be using the proposed works.	Moderate
Reptiles and amphibians	General construction safeguards for otter will also be applicable for reptiles and amphibians.	Minor
Fish	The proposed works should be programmed out with the migratory season (mid-October to early January and April to early June). Where this is not possible, sufficient passage through the watercourse must be maintained.	Moderate
Invasive Non-Native Species (INNS)	Operatives must be briefed with an INNS toolbox talk to raise awareness of the presence of such species and the appropriate working methodologies. Works within 7m of all stands of Japanese knotweed and 5m of stands of rhododendron should be avoided if possible. Should works be required within proximity to these species, then an INNS method statement will be required.	Moderate

Introduction

Amey Consulting, on behalf of Transport Scotland, working as part of the Network Management Contract (NMC) was instructed to undertake an initial assessment of ecological constraints in relation to parapet replacement and soffit repairs on the St Fillan's structure, located on Shore Road, Largs, North Ayrshire. The scheme extents are centralised at National Grid Reference (NGR) NS 19138 63712.

The proposed works entail:

Investigations for Cathodic protection design:

The scope of this concrete testing survey includes:

- Visual and hammer tapping survey of the entire deck soffit.
- Half-cell potential testing across the entire soffit area at 500 mm x 500 mm grid spacing to identify localized areas for further investigation/concrete testing.
- Concrete testing in localized test areas to determine the probability of corrosion activity occurring, including:
 - Cover meter tests
 - Chloride ion profiling
 - Carbonation testing
 - Surface resistivity testing
 - Concrete coring and testing for cement content.

Parapet Replacement:

The work includes:

- Removal of the existing aluminium parapets from both sides of the bridge and wing walls
- Hydrodemolition of section of parapet plinths and footpath
- Adding reinforcement bars and widening the parapet plinth
- Preparing concrete formwork and concrete casting
- Infill the excavated area and reinstate the footpath

Soffit Repair:

The work includes:

- The construction will take place in different stages. A strip of approximately 1.2m is demolished and repaired in each stage as stated below.
- Hydro-demolition of the existing cover to the soffit (approximately 65mm deep) and exposing the corroded reinforcement.
- Clean and remove surface corrosion of the longitudinal reinforcement.
- Adding new reinforcement bars by anchoring into the slab and sacrificial anodes to protect from further corrosion.
- Cover the reinforcement back by applying spray applied concrete.
- Installation of Impressed Current Cathodic Protection (ICCP).
- Repeat the process to repair the entire soffit.

Works are programmed to commence as soon as possible and are set to continue for 4-6 weeks. According to the current design, night works are expected to be required.

Due to the scope of the works and the nature of the scheme extent, a Preliminary Ecological Walkover Report is considered to provide an appropriate level of detail at this stage.

Methodology

A desk study was undertaken to identify ecological constraints within the vicinity of the proposed development/works. The following data sources were reviewed:

- OS mapping and aerial photos to identify habitat features and waterbodies within 0.25km
- NatureScot Sitelink¹ to identify any ecologically designated sites within 2km of the proposed works.
- NBN Atlas² data to identify protected and priority species within 2km.
- Ancient Woodland inventory Scotland³ to identify Ancient Woodland within site extents.

An ecological walkover survey was undertaken by Amey Assistant Ecologist Lauren Clelland MSc and Technician Kayleigh Neil MSc on 27th April 2026 to record habitats and identify protected, notable and invasive species. The field survey was undertaken following the Version 2 UK Habitat Classification system outlined in the UK Habitat Classification Document⁴. The habitats present were categorised and assessed for their potential to support protected or priority species and the presence of invasive species.

The ecological walkover survey also utilised various protected species survey methodologies, including:

- Preliminary Roost Assessment (Collins, 2023⁵)

Constraints

By their very nature, ecological surveys can only assess a site or particular species at a set point in time, thus providing a snapshot of the environment and not a definitive evaluation. Every effort has been taken to provide an accurate assessment of the habitats or species surveyed. However, presence and population sizes of species can change over time and therefore the accuracy of this report will be affected by time and seasonality constraints. It is recommended that this survey is refreshed if the scheme design changes significantly in a way that will impact the surrounding habitats.

Biological records obtained from third parties do not represent a full and complete species list for the area. Not all areas within the biological records search will have been surveyed, so lack of records do not represent a lack of species present. They are mostly given by individuals on an ad-hoc basis, often meaning that there are areas of deficiency in the data.

Additionally, the Chartered Institute of Ecology and Environmental Management (CIEEM) issued advice on the lifespan of ecological reports and surveys in 2019. Whilst this will vary on a case-by-case basis, this survey report is likely to be valid for 12 months. After this time, a professional ecologist should be consulted on the validity of this report.

Results and Interpretation with Implications for Works

Table 1 summarises the relevant findings of the ecological desk study and site visit. The relevant wildlife legislation is provided in Appendix A. Photographs are provided in Appendix B. An ecological constraints map is provided in Appendix C.

¹ NatureScot Sitelink (<https://sitelink.nature.scot/map>)

² NBN Atlas (2023). The National Biodiversity Network. Accessed online <https://nbnatlas.org/>.

³ Scotland's Environment Map. Accessed online: <https://map.environment.gov.scot/sewebmap/>.

⁴ ukhab – UK Habitat Classification

⁵ Collins, J. (ed.) (2023) Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th edn). The Bat Conservation Trust, London.

Table 1 - Ecological Constraints and Opportunities with Implications for Works.

ECOLOGICAL FEATURE	IMPLICATIONS FOR PROPOSED WORKS
Watercourse	Blackhouse Burn is present directly underneath the proposed works area (Appendix B, Photograph 1) and flows into the Firth of Clyde approximately 30m west of the proposed works area. The proposed works will directly impact Blackhouse Burn through the requirement for coffer dam and the installation of a temporary deck above the watercourse.
Woodland	Broadleaved woodland is present directly adjacent to the proposed works area (Appendix B, Photograph 2). Species included ash (<i>Fraxinus excelsior</i>), oak (<i>Quercus robur</i>) and sycamore (<i>Acer pseudoplatanus</i>). The proposed works have the potential to negatively impact this habitat through accidental damage or vegetation removal.
Grassland	Modified grassland is present directly adjacent to the proposed works area (Appendix B, Photograph 3). Species include cocksfoot (<i>Dactylis glomerata</i>), Yorkshire fog (<i>Holcus lanatus</i>), reed canary grass (<i>Phalaris arundinacea</i>), silver weed (<i>Potentilla anserina</i>), common hogweed (<i>Heracleum sphondylium</i>), catchweed bedstraw (<i>Galium aparine</i>). The proposed works have the potential to negatively impact this habitat through accidental damage or vegetation removal.
Bats	No records of bats were returned within 2km of the proposed works area. In 2025, the bridge structure was identified as having low bat roost potential as there was a 2-3cm wide gap on the bearing shelf that traversed the entire length of the bridge on both the northern and southern abutments (Appendix B, Photograph 4). Close inspection was not possible due to height, and it was not possible to determine if there was an internal cavity, therefore one emergence survey was undertaken on the 14th of May 2025. No bats were seen emerging or re-entering the feature and low levels of bat activity were recorded, with mainly bats foraging around the watercourse. Species recorded during the survey comprised of common pipistrelle (<i>Pipistrellus pipistrellus</i>) and soprano pipistrelle (<i>Pipistrellus pygmaeus</i>). As the bridge structure still has potential to support roosting bats, there is potential for roosting bats to be impacted by the proposed works.
Nesting birds	There are records of over 100 bird species within 2km of the proposed works area. Common species that have potential to use the proposed works area and the surrounding landscape include dipper (<i>Cinclus cinclus</i>), grey wagtail (<i>Motacilla cinerea</i>), house martin (<i>Delichon urbicum</i>), lapwing (<i>Vanellus vanellus</i>), mallard (<i>Anas platyrhynchos</i>) and oystercatcher (<i>Haematopus ostralegus</i>). No active nests were identified at the time of survey. However, the bridge structure, woodland, scrub and grassland habitats present within the proposed works area have the potential to support breeding birds. Should the proposed works be undertaken within breeding bird season (March to August inclusive), there is potential for the proposed works to impact these species negatively.

[Redacted]

ECOLOGICAL FEATURE	IMPLICATIONS FOR PROPOSED WORKS
Reptiles and amphibians	One record of common lizard (<i>Zootoca vivipara</i>) was returned within 2km of the proposed works area. No reptile hibernacula was identified at the time of survey. The scrub, woodland and riparian corridor habitats provide suitable opportunities for foraging, commuting and hibernating reptiles and amphibians. Vegetation clearance may negatively impact these species groups in the absence of mitigation.
Fish	According to information from the Ayrshire Rivers Trust, the Blackhouse Burn likely supports a population of brown trout (<i>Salmo trutta</i>) and possibly sea trout. Migration downstream to the sea occurs April to early June and migration upstream and spawning occurs mid-October to early January. Both brown trout and sea trout are listed as Priority Species on the UK Biodiversity Action Plan. In the absence of mitigation, the current timing of the proposed works in October may negatively impact this species by obstructing their upstream migration to their spawning grounds if undertaken from mid-October onwards.
Invasive Non-Native Species (INNS)	The INNS Japanese knotweed (<i>Reynoutria japonica</i>) and rhododendron (<i>Rhododendron ponticum</i>) were identified throughout the proposed works area (Appendix B, Photographs 6 and 7). In the absence of mitigation, any works within 5m of rhododendron or 7m Japanese knotweed may cause the spread of these species both on and off site.

Recommendations and Further Ecological Work Required

Appropriate recommendations based on the assessment of ecological features within the proposed works area is given in Table 2.

Table2 - Recommendations Based on Assessment of Ecological Features.

ECOLOGICAL FEATURE	RECOMMENDATIONS
Watercourse	Standard pollution prevention measures will be detailed within the scheme specific Environmental Scoping Assessment document to protect these watercourses during the works. These controls are applied across all NMC schemes. Works should be programmed during months of low water levels and rainfall (April to July) to reduce the likelihood of water levels rising and flooding causing pollution events. If works are required to take place at night and artificial lighting is required, this should be directed away from nearby watercourses in order to avoid impacting species which may use this habitat, including foraging bats, and otter.
Woodland	Loss or damage to the woodland within the proposed works area must be minimised, wherever possible. Removal must only take place where necessary, and any access routes must avoid habitats which are to remain in situ.
Grassland	Loss or damage to the grassland must be minimised, where possible. The grassland habitat should be reinstated where possible following completion of the works.
Bats	As the bat emergence survey remains valid for 18 months from the date of survey, and no bats were recorded emerging from or re-entering the structure, a repeat bat survey will not be required until the existing survey has expired. Directional lighting should be used for all construction activities where works are required at night to minimise the impact of temporary lighting on foraging and commuting bats. This will include avoiding light spill onto adjacent woodland parcels

ECOLOGICAL FEATURE	RECOMMENDATIONS
	and waterbodies, following the principles laid out in 'Bats and artificial lighting in the UK' (BCT & ILP, 2018).
Nesting Birds	If the works are to be undertaken within the breeding bird season (March to August inclusive) then a suitably qualified/experienced ecologist will be required to carry out a nesting bird check before works can proceed during the breeding bird season. Nesting bird checks must be undertaken within 48 hours prior to any vegetation clearance works taking place. If works are delayed such that more than 48 hours has passed since the nesting bird check took place, then an update nesting bird check will be required. If any active nests are identified, then a 5m buffer (or as defined by the site ecologist, depending on the species present and site conditions) should be set around the nest and vegetation clearance works stopped within this buffer until an ecologist has determined that the nest has become inactive (which may take up to six weeks depending on the bird species present).
Otter	There is potential for otter to pass through the proposed works area opportunistically and be disturbed by the increased noise and vibrational disturbance. General construction safeguards should also be implemented to protect otters and other mammals which could be using the proposed works. These general construction safeguards shall include as a minimum: ▪ Open excavations should be fenced off and/or covered to avoid animals becoming trapped or injured. A mammal ladder (e.g. wooden plank) should be erected to allow any animals that may become trapped to escape. All excavations should be checked each morning to ensure no animals have become trapped overnight and an ecologist contacted for advice should any animals be encountered; ▪ Consideration should be given to where spoil is stored, mammal proof fencing should be considered if spoil is to be stored on site for long periods of time; ▪ Where lighting is required, hoods should be used, and lights directed at works and away from the surrounding environment; ▪ No equipment should be stored within suitable otter habitat; and If an otter is spotted on site, all activity should cease until it has passed. It should also be reported to the Ecology team.
Reptiles and amphibians	General construction safeguards for otter will also be applicable for reptiles and amphibians.
Fish	The proposed works should be programmed out with the migratory season (mid-October to early January and April to early June). Where this is not possible, sufficient passage through the watercourse must be maintained.
Invasive Non-Native Species (INNS)	Operatives must be briefed with an INNS toolbox talk to raise awareness of the presence of such species and the appropriate working methodologies. Works within 7m of all stands of Japanese knotweed and 5m of stands of rhododendron should be avoided if possible. Should works be required within proximity to these species, then an INNS method statement will be required.

Opportunities to Enhance

The following actions are recommended to maximise opportunities to enhance biodiversity in this area once the proposed works are complete:

- Scarify and seed the grassland with a wildflower grassland mix during reinstatement of the verge.
- Plant native, berry-bearing shrubs to fill in hedgerow gaps.

- Any removed trunks or branches should be repurposed as refugia piles either within or adjacent scrub within the proposed works. Further guidance on this can be found within the 'Measure 8: Log and Leaf Piles' section of NatureScot's Developing Nature Guidance document⁶.

⁶ [Consultation - Developing with Nature guidance | NatureScot](#)

Appendix A: Wildlife Legislation

The Conservation (Natural Habitats, &c.) Regulations 1994 (as amended) (Ref 7.2);

In Scotland, the European Union Habitats Directive is translated into law by the Conservation (Natural Habitats, &c.) Regulations 1994, commonly known as Habitats Regulations. This legislation covers the requirements for protecting designated sites (European Sites) and provides a legal framework for species requiring strict protection (European Protected Species). These regulations were last amended in 2019 and have since remained unchanged since the initial 2020 EIA. The relevant species protected under this legislation include:

- Bats are classed as a European Protected Species (EPS) and as such it is an offence to deliberately or recklessly:
 - Kill, injure, capture or harass a bat;
 - disturb a bat whilst it is using any structure or place for shelter or protection, or in any way that impairs its ability to survive or breed, or significantly affects the local distribution or abundance of the species;
 - obstruct access to a roost site, or otherwise deny its use by bats;
 - damage or destroy a bat roost, irrespective of whether bats are present; and
 - keep transport, sell or exchange, or offer for sale or exchange, any wild bat (or part or derivative of one) obtained after 10 June 1994.
- Otter (*Lutra lutra*) are classed as EPS and as such it is an offence to deliberately or recklessly:
 - capture, injure or kill an otter;
 - harass an otter or group of otters;
 - disturb an otter in a holt; or an otter in any structure or place it uses for shelter or protection; disturb an otter while it is rearing or otherwise caring for its young;
 - obstruct access to a holt for otter; or other structure or place otters use for shelter or protection, or otherwise deny the animal use of that place;
 - disturb an otter in a manner or in circumstances likely to significantly affect the local distribution or abundance of the species; or
 - disturb an otter in a manner or in circumstances likely to impair its ability to survive, breed or reproduce, or rear or otherwise care for its young;
 - damage or destroy a breeding site or resting place of such an animal (whether or not deliberately or recklessly); and
 - keep, transport, sell or exchange, or offer for sale or exchange any wild otter (or any part or derivative of one) obtained after 10 June 1994.

The Wildlife and Countryside Act 1981 (as amended) (WCA) (Ref 7.3);

This legislation was implemented to repeal and re-enact with amendments the Birds Directive and Bern Convention. The legislation has since changed through the introduction of Scotland specific wildlife legislation. However, the 1981 Act still provides protection to various birds, animals and plants which are categorised in Schedules. The level of protection granted to each species is determined by the Schedule it is categorised by. This legislation was last amended upon the creation of the Wildlife and Natural Environment (Scotland) Act 2011 and has remained unchanged since the 2020 EIA.

The relevant species protected under this legislation include:

- All three reptile species in Scotland are granted limited protection making it an offence to:
 - Intentionally or recklessly kill or injure an adder (*Vipera berus*), slow worm (*Anguis fragilis*) and common lizard (*Zootoca vivipara*);
 - Partake in the trade of these species.
- All bird species are protected under this act making it an offence to recklessly, intentionally or knowingly cause or permit the following acts:
 - kill, injure or take a wild bird;
 - take, damage, destroy or interfere with a nest of any wild bird whilst it is in use or being built;
 - obstruct or prevent any wild bird from using its nest;
 - take or destroy an egg of any wild bird.
 - Bird species listed within Schedule 1 or 1A are afforded additional protection making it an offence to recklessly, intentionally or knowingly cause or permit the following acts:
 - disturb any wild bird whilst it is building a nest or is in, on, or near a nest containing eggs or young;
 - disturb any wild bird whilst lekking (where birds gather to display; applicable in Scotland to capercaillie (*Tetrao urogallus*) and ruff (*Calidris pugnax*));
 - disturb the dependent young of any wild bird;
 - harass any wild bird at any time (any harassment but particularly relevant to roosting birds outwith the breeding season); and
 - take, damage, destroy or interfere with a nest at any time that is habitually used by any wild bird.

This legislation also covers invasive and non-native species (INNS), making it an offence to:

- release an animal to a location outside its native range.
- allow an animal to escape from captivity to a location outside its native range.
- otherwise cause an animal not in the control of any person to be at a location outside its native range.
- plant, or otherwise cause to grow, a plant in the wild at a location outside its native range.

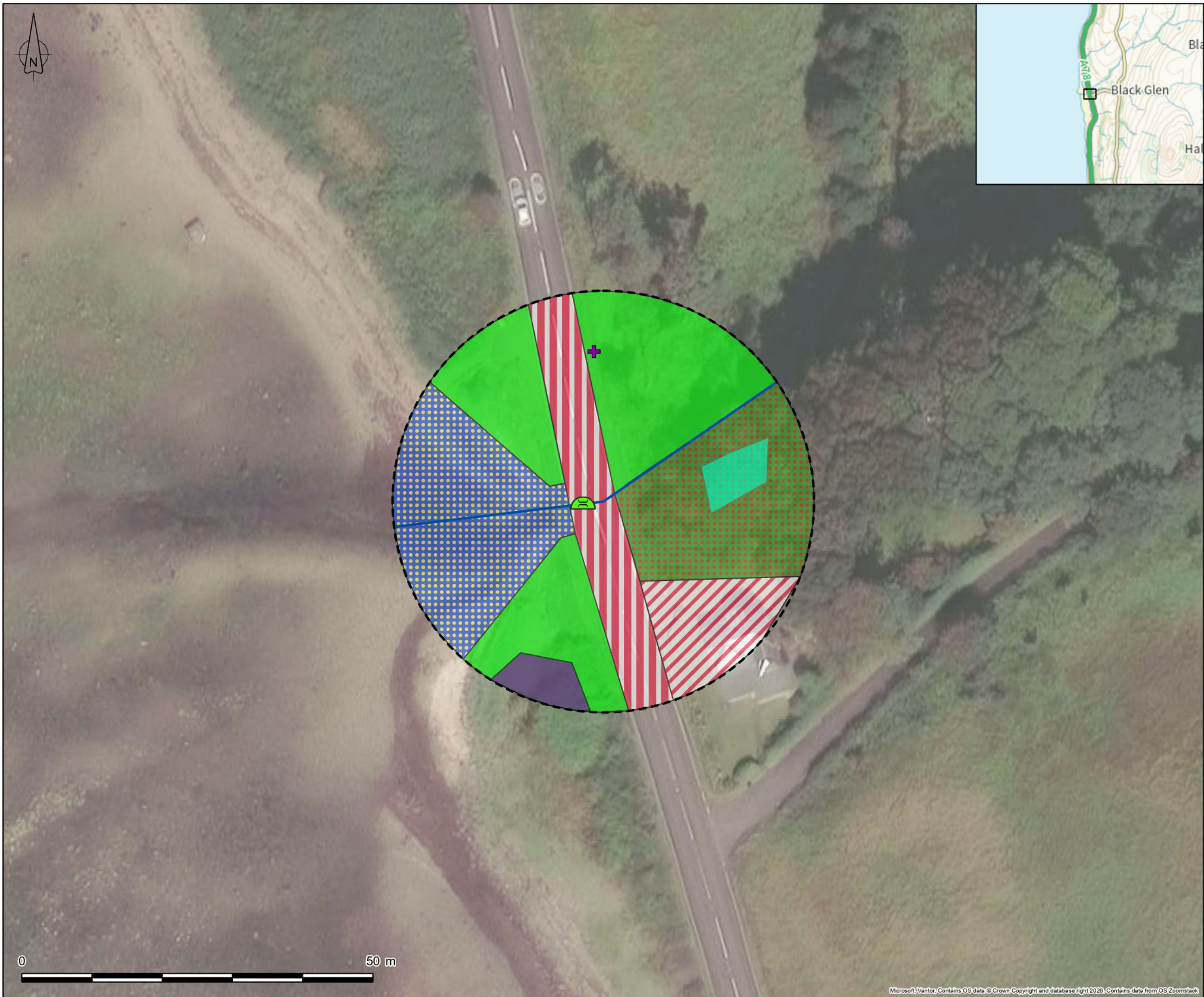
Appendix B: Photographs

PHOTOGRAPH	DESCRIPTION
	Photograph 1: Blackhouse Burn
	Photograph 2: Broadleaved woodland
	Photograph 3: Modified grassland

PHOTOGRAPH	DESCRIPTION
 [Redacted]	Photograph 4: Bridge structure
	Photograph 6: Japanese knotweed

PHOTOGRAPH	DESCRIPTION
	Photograph 7: Rhododendron

Appendix C: Ecological Constraints Map



Legend
 30m Buffer
Invasive Species - Plants
 Japanese Knotweed
 Japanese Knotweed
 Rhododendron
Bat Roost Potential - Structures
 Low
UK Habitat Classification
 g4 - Modified Grassland
 t2h - Beach
 u1 - Built-Up Areas and Gardens
 u1b - Developed Land, Sealed Surface
 w1g - Other Woodland, Broadleaved
 r2 - Rivers and Streams

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Client :

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St Fillian's Parapet Replacement

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UK Habitat Map

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