Canal & River Trust
Making life better by water

Land north of Chirk Tunnel (South Portal)

Proposed Removal of Existing Railings and Replacement with New Railings and Gates

Net Biodiversity Benefit Plan

30 July 2024

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Project Introduction and Description of Proposed Works

About Canal & River Trust

We are the charity responsible for looking after and bringing to life 2,000 miles of canals & rivers. Our waterways contribute to the health and wellbeing of local communities and economies, creating attractive and connected places to live, work, volunteer and spend leisure time. These historic, natural and cultural assets form part of the strategic and local green-blue infrastructure network, linking urban and rural communities as well as habitats. By caring for our waterways and promoting their use we believe we can improve the wellbeing of our nation.

In addition to the statutory functions of navigation, the Trust is also required to:

- Conserve waterway heritage;
- Promote and enable rural and urban regeneration;
- Maintain and enhance leisure, recreation, tourism and education opportunities for the public; and
- Facilitate waterway transport.

Introduction

On 17 January 2024, Canal & River Trust (hereafter referred to as 'the Trust') submitted an application for planning permission and conservation area consent for the installation of new railings and gates, at land north of Chirk Tunnel, Castle Road, Chirk, Wrexham, LL14 5BS. The existing life-expired railings, which are in a poor condition, enclose an area of land above Chirk Tunnel's south portal, preventing access to the land by the public and the fall risks associated with the sheer drop at the tunnel portal.

Planning permission (reference CHI P/2024/0046) and conservation area consent (reference CHI P/2024/0045) was granted by Wrexham County Borough Council on 25 March 2024, subject to conditions.

Condition 3 attached to the planning permission states:

"No development shall commence until a detailed plan to provide net benefit for biodiversity (NBB) has been submitted to and approved in writing by the Local Planning Authority. The measures shall be fully implemented within six months of the erection of the fencing, and shall be retained thereafter for the lifetime of the development."

Reason: "To ensure the development delivers net benefit to biodiversity in accordance with Policy 9 of Future Wales and Paragraph 6.4.5 of Planning Policy Wales (Edition 12)."

This document seeks to provide sufficient detail of the net biodiversity benefits of the proposals to allow discharge of Condition 3.

Description of the Consented Development

The consented development comprises the installation of approximately 120 metres of new railings to replace the existing life-expired railings. The majority of the new railings will reflect other 'estate style' railing installations within the broader World Heritage Site, such as at Trevor and Llantysilio. Vertical railings will be installed to the viewing area, similar in height and appearance to those which they replace. A new vehicular access gate will be installed where there is currently a failed section of railing.

The location of the proposed development is shown in Figure 1 overleaf.



Figure 1 - Map showing the site location (red line)

Relevant Legislation and Planning Policy

This section sets out the legislative and planning policy requirements for the development.

Environment (Wales) Act 2016

As a statutory undertaker, under the Environment (Wales) Act 2016, the Trust is classed as a Public Authority. Section 6 Biodiversity and resilience of ecosystems duty, of the Act states:

"(1) A public authority must seek to maintain and enhance biodiversity in the exercise of functions in relation to Wales, and in so doing promote the resilience of ecosystems, so far as consistent with the proper exercise of those functions.

(2) In complying with subsection (1), a public authority must take account of the resilience of ecosystems, in particular the following aspects—

(a) diversity between and within ecosystems;

(b) the connections between and within ecosystems;

(c) the scale of ecosystems;

(d) the condition of ecosystems (including their structure and functioning);

(e) the adaptability of ecosystems."

Planning Policy Wales (Edition 12)

Chapter 6 of Planning Policy Wales (PPW) 12[1] specifies that "Enhancement must be secured by delivering a biodiversity benefit primarily on site or immediately adjacent to the site, over and above that required to mitigate or compensate for any negative impact."

Paragraph 6.4.5 of Planning Policy Wales (PPW) 12 sets out that "Planning authorities must seek to maintain and enhance biodiversity in the exercise of their functions. This means development should not cause any significant loss of habitats or populations of species (not including non native invasive species), locally or nationally and must work alongside nature and it must provide a net benefit for biodiversity and improve, or enable the improvement, of the resilience of ecosystems."

The concept of net biodiversity benefit (NBB) is defined as: "development should leave biodiversity and the resilience of ecosystems in a significantly better state than before, through securing immediate and long term, measurable and demonstrable benefit, primarily on or immediately adjacent to the site".

Future Wales: The National Plan 2040

Future Wales – the National Plan 2040[2] provides a national development framework to 2040, incorporating elements of climate resilience and developing strong ecosystems. Policy 9 – Resilient Ecological Networks and Green Infrastructure describes how Welsh Government will work with key partners to identify, protect and create ecological networks, as well as identifying opportunities where green infrastructure can be maximised.

Planning authorities are required to secure the "maintenance and enhancement of biodiversity (to provide a net benefit), the resilience of ecosystems and green infrastructure assets...as part of development proposals through innovative, nature-based approaches to site planning and the design of the built environment".

[1] Welsh Government (2024) Planning Policy Wales, Edition 12. Available from: Planning Policy Wales - Edition 12 (gov.wales) [Accessed: 04/06/2024]
[2] Welsh Government (2021) Future Wales The National Plan 2040. Available from: Update to Future Wales - The National Plan 2040 (gov.wales) [Accessed: 04/06/2024]

Nature Recovery Action Plan for Wales 2020-21

The Nature Recovery Action Plan for Wales[3] includes the Welsh Government's commitment to reversing the decline of biodiversity in Wales and the action required to meet this commitment.

Natural Resources Wales Area Statements

Area Statements are produced by Natural Resources Wales (NRW) to assist "planners to understand environmental issues, priorities and opportunities in their particular area and, based on that information, help them identify strategic actions and policies to address through the planning system". The county of Wrexham is included in the North East Wales Area Statement[4], which includes the following five themes:

- Climate emergency: resilience and adaptation
- Develop and improve urban/rural green infrastructure
- Increasing woodland cover for social, environmental and economic benefits
- Promoting the resilience of ecosystems in maintaining and enhancing biodiversity
- Protecting water and soil through farming and sustainable land management

Local Planning Policy

Wrexham County Borough Local Development Plan 2013-2028 [5] includes the following objectives and policies relevant to the proposals:

- Objectives SO09 and SO10, which relate to the protection and sustainable management of natural resources, and the promotion of green infrastructure.
- Policy SP14: Natural Environment, where natural resources will be protected, conserved and enhanced by development proposals.
- Policy SP19: Green Infrastructure, which requires development to create new connectivity of green and blue infrastructure, or improve existing connections.
- Policy NE1: International and National Nature Conservation Designations, and Policy NE2: Local Designations for Nature Conservation and Geological Importance, which protect the nature conservation value of designated nature conservation sites, habitats and species.
- Policy NE3: Trees, Woodlands and Hedgerows, requiring the conservation and management of hedgerows, trees and woodland, with development that significantly negatively affects such features not permitted. Development affecting all existing and new proposed woodlands must also "Support proposals which assist in the respectful and appropriate use and protection of woodlands and boundary edges".

[3] Welsh Government (2020) The Nature Recovery Action Plan for Wales 2020 – 21. Available from: The Nature Recovery Action Plan for Wales 2020 to 2021 (gov.wales) [Accessed: 04/06/2024]
[4] Natural Resources Wales (unknown) North East Wales Area Statement. Available from: Natural Resources Wales / North East Wales Area Statement [Accessed: 04/06/2024]
[5] Wrexham County Borough Local Development Plan 2013-2028 (adopted 20 December 2023) available from Wrexham County Borough Council

Baseline Conditions

An assessment of the baseline conditions of the development site and adjacent habitats within the ownership of the Trust was carried out, in order to assess the current condition of the habitats to be affected, and to understand how a NBB could be achieved. The appraisal included a desk study to identify any relevant nature conservation designations and a site visit to formally record the habitats present. The methodology and results of the appraisal are as follows. The site was visited on the 16 May 2024 by Canal & River Trust Ecologist Jenny Spelling. Jenny is an experienced ecologist and a full member of the Chartered Institute for Ecology and Environmental Management.

Results

There are no statutory designated sites within the Application Site. Within 500 metres of the application site, the following statutory and non-statutory designated sites are present:

- Afon Dyfrdwy (River Dee) Site of Special Scientific Interest (SSSI) (Wales and England) 240 metres south
- Afon Dyfrdwy a Llyn Tegid / River Dee and Bala Lake Special Area of Conservation (SAC) (Wales and England) 240 metres south
- Castell y Waun a'i Barcdir / Chirk Castle and Parkland SSSI (Wales) 418 metres west
- Coed Y Camlas/Canal Wood Local Wildlife Site and Ancient Woodland 375 metres north.
- Multiple parcels of Ancient Woodland within 500 metres, with the closest being 255 metres south.

Based on the very limited scale of the proposal and distance from each of the designated sites, no designated sites are likely to be affected by the proposals.

Habitat Survey

Photographs of the site and descriptions of relevant habitats are provided in Table 1 below.

Table 1: Habitat Descriptions

Photograph	**Description of habitat and likely impacts from proposals**
	Habitat adjacent to railings, eastern section. Hardstanding and bare ground of footpath leading up from canal. Deciduous woodland comprising hazel *Corylus avellana*, field maple *Acer campestre*, beech *Fagus sylvatica*, ash *Fraxinus excelsior* and sycamore *Acer pseudoplatanus*. Ground cover including dog's mercury *Mercurialis perennis*, wood avens *Geum urbanum*, lesser celandine *Ficaria verna*, cow parsley *Anthriscus sylvestris*, and bramble *Rubus fruticosus* agg.. There will be a small amount of ground disturbance during removal of the existing railings and installation of the new railings. No trees or shrubs will be removed.

	Worn pathway from footpath towards canal. Causing damage to undergrowth within woodland area. Also refer to Figure 4. Installation of new railings should reduce the amount of ground disturbance from unauthorised access and allow the vegetation to recover.
	Grassland area and hardstanding within western section of the site. Grassland included cock's-foot *Dactylis glomerata*, rough meadow grass *Poa trivialis*, red fescue *Festuca rubra* and false oat-grass *Arrhenatherum elatius*. Herbs included white dead-nettle *Lamium album*, wood avens, and creeping buttercup *Ranunculus repens*, plus signs of improvement such as dandelion *Taracum officinale* and common nettle *Urtica dioica*. There will be a small amount of ground disturbance during removal of the existing railings and installation of the new railings.
	0.11 ha area of neutral grassland, with a small number of fruit trees on the western side. Most abundant grasses were cock's-foot and red fescue, with frequent rough meadow grass, false oat grass and Yorkshire-fog *Holcus lanatus*. Black knapweed *Centaurea nigra* and hogweed *Heracleum sphondylium* were found frequently within the grassland, with occasional creeping cinquefoil *Potentilla reptans*, germander speedwell *Veronica chamaedrys*, creeping and meadow buttercups *R. acris*, and bush vetch *Vicia sepium*. Species found rarely within the grassland included field woodrush *Luzula*

	*campestris*, common mouse-ear *Cerastium fontanum*, imperforate St. John's wort *Hypericum maculatum* and common sorrel *Rumex acetosa*. One patch of crosswort *Cruciata laevipes* was found. This grassland area fits within the description of UK Hab category g3c Other Neutral grassland or NVC type MG1e *Arrhenatherum elatius* grassland, *Centaurea nigra* sub-community. Also found within the grassland were anthills, indicating no recent ground disturbance. This grassland is unmanaged, but suffering some damage and disturbance from unauthorised pedestrian access and nutrient enrichment (likely from dog waste) along the tunnel portal wall. Installation of new railings should reduce the amount of ground disturbance from unauthorised access and allow the vegetation to recover.

Protected Species

The following species have been recorded within a 500 metre radius of the site:

- Otter *Lutra lutra*, water vole *Arvicola amphibius*, Hedgehog *Erinaceus europaeus* and polecat *Mustela putorius* records along the canal.
- Bird species at SJ2837: Tree Sparrow *Passer montanus*, Pied Flycatcher *Ficedula hypoleuca*, Lesser Redpoll *Acanthis cabaret*, Herring Gull *Larus argentatus*, Marsh Tit *Poecile palustris*, Dunnock *Prunella modularis*, Song Thrush *Turdus philomelos*, House Sparrow *P. domesticus*, Black-headed Gull *Chroicocephalus ridibundus*, Starling *Sturnus vulgaris*, Bullfinch *Pyrrhula pyrrhula*.
- Floating Water-plantain *Luronium natans.*

Given the limited scale and impact of the proposed development, no protected species are expected to be affected by the proposals.

Net Biodiversity Benefit Plan

Table 2 below describes the proposed habitat enhancement measures, which will be carried out within Trust-owned land, to ensure success of implementation and longevity of management. The location of proposed enhancements is provided in Figure 5 below, with Trust land ownership illustrated by the green boundary.

Table 2: Measures for Net Biodiversity Benefit

Habitat	Mitigation/Restoration Measures to be Implemented	Enhancement/Net Biodiversity Benefit Measures
Woodland	Minimise ground disturbance during replacement of railings. Allow natural regeneration of vegetation once construction complete.	Plant 15 x deciduous native whips of local provenance in areas previously disturbed by unauthorised access. Thorny species such as hawthorn *Crataegus monogyna* will be selected, to discourage future unauthorised access and mitigate a fall from height risk from the low wall above the tunnel portal.
Grassland	Minimise ground disturbance during replacement of railings. Allow natural regeneration of vegetation once construction complete.	Bring grassland into sensitive management, to encourage species diversity. This will comprise an annual 'hay' cut in late summer/early autumn each year, with arisings removed. This will be managed on an ongoing basis by the Trust, as per Trust standard procedures. Areas of grassland currently suffering from disturbance will be allowed to recover, once gated access is installed.

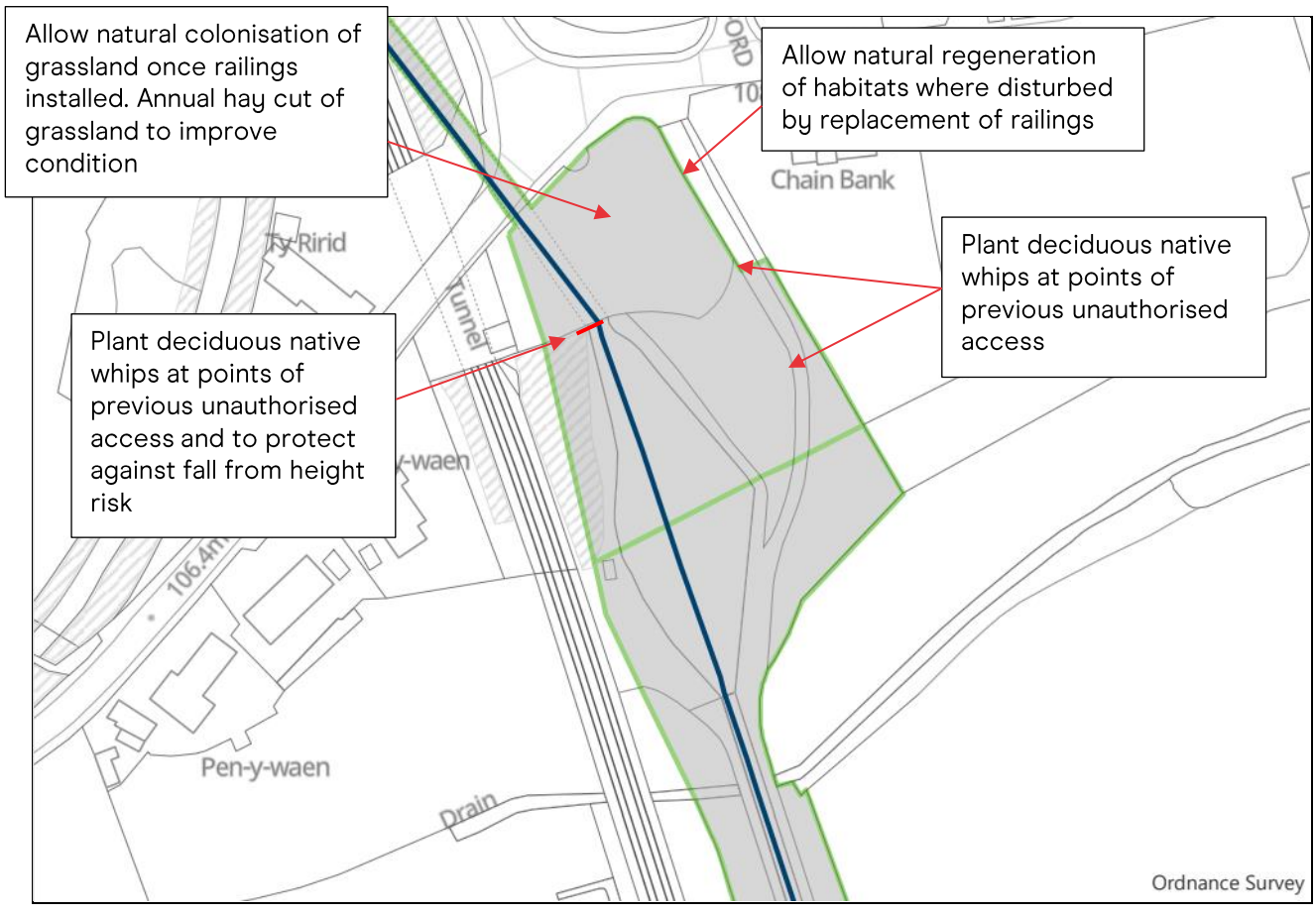


Figure 5 – Location of Proposed Habitat Enhancements.