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Technical Note: Site Walkover and Recommendations Site: 87 Commercial Road, Rhydyfro

Introduction

Our client (the Applicant) Mr Martin Evans has applied to Neath Port Talbot council for planning permission to reconstruct a river bank retaining wall at the above site.

Comments from the planning ecologist were received and stated that prior to determination of the application the following information is required to inform the decision:

1. **Assessment of ecology of the river.** An assessment of the potential effects on the ecology of the river is required. This will include identification of any protected aquatic species. The Upper Clydach River is a SINC and while the proposed structure will probably not adversely affect it the type of stone used and the construction work may.
2. **Biodiversity enhancement.** In line with the general principles set out in SPG: Biodiversity and Geodiversity (May 2018) and the Environment Wales Act (2016) the application should demonstrate how biodiversity enhancement is to be achieved. For a scheme such as this, this could be achieved through planting appropriate native plants among the stonework.

Methodology

Koru Ecology Associates was commissioned to complete a walkover survey of the site and provide appropriate recommendations to address the above comments.

Diana Clark MSc MCIEEM of Koru Ecology Associates completed the survey on 17th August 2021. Photographs of the site were taken and a plant species list was made. Where appropriate, notes were taken to describe the site and it's condition, as well as potential impacts on ecology.

Results

The site comprises the eastern bank of the Afon Egel, just above the confluence with the Afon Clydach. The Site forms the western edge of the property, which largely comprises a tarmac hard-standing yard and associated garage buildings, beyond which is Commercial Road. To the west,

on the far side of the Afon Egel, there is an area of woodland associated with a residential property garden, largely comprising hazel *Corylus avellana* with occasional holly *Ilex aquifolium*, sycamore *Acer pseudoplatanus* and cherry laurel *Prunus laurocerasus*. The A474 crosses the Afon Egel to the north of the site.

The site itself comprises a collapsed earth and stone bank with other debris present (see Figures 1 and 2). Vegetation is rather sparse in places, species include false oat-grass *Arrhenatherum elatius*, Yorkshire-fog *Holcus lanatus*, cleavers *Gallium aparine*, groundsel *Senecio vulgaris*, common nettle *Urtica dioica*, nipplewort *Lapsana communis*, herb-Robert *Geranium robertianum*, creeping buttercup *Ranunculus repens*, broad-leaved willowherb *Epilobium montanum*, dandelion *Taraxacum* sp., oil-seed rape *Brassica napus* ssp. *oleifera*, ivy-leaved toadflax *Cymbalaria muralis*, garlic mustard *Alliaria petiolata*, hart's-tongue *Asplenium scolopendrium*, spear thistle *Cirsium vulgare*, common ragwort *Jacobaea vulgaris*, redshank *Persicaria maculosa*, greater plantain *Plantago major*, ribwort plantain *P. lanceolata*, hedge bindweed *Calystegia sepium* and broad-leaved dock *Rumex obtusifolius*.

Japanese knotweed *Reynoutria japonica* and Himalayan balsam *Impatiens glandulifera* are present along much of the site length (see Figures 2 and 3), although it is noted that some of the knotweed to the north has been treated.

Several alder trees are present towards the northern end of the site (see Figure 3 below). None of these trees have any features suitable for roosting bats.

Assessment

The following assessment points have been made:

1. **Otters and water voles.** The site is suitable for otters to pass through and this species has been recorded nearby. The site is unsuitable for holts, due to its exposed and disturbed nature. The site is unsuitable for water voles due to lack of deep water, appropriate bankside vegetation for feeding and shading caused by woodland on the western bank.
2. **Bats.** No features suitable for roosting bats have been identified on the site. However, the site is likely to form part of a wider area of suitable foraging habitat for this species group. Appropriate recommendations with regards to foraging / commuting bats are given below.
3. **Birds.** The woody vegetation and earth banks on the western side of the stream, together with the alder trees on the eastern bank have potential for nesting birds. However, the alder trees are not scheduled for removal, therefore impacts on nesting birds associated with this feature are not expected. Vegetation on the western bank will also be untouched by the works. The presence of dippers *Cinclus cinclus* has been highlighted within the local area. This species uses fast-flowing, often tree-lined rivers in upland areas, and may forage on the river bed. Due to the small site size and short-term temporary nature of the works, significant impacts on this species are considered unlikely, however additional comments in relation to potential disturbance on the western bank are given in the recommendations section below.
4. **Fish and aquatic invertebrates.** The Construction Method Statement (CMS) (RB Planning, 2021) states that all works will be completed between 15th April and 15th October (paragraph 2.17), as per government guidelines. In addition, further methods of working are outlined in the same paragraph, in order to reduce to a minimum any impacts on the river. Further, a dry works area will be created prior to works commencing, in order to protect the river (including fish and invertebrates) from sediment runoff (see paragraph 2.9). Gabion basket stone will be gritstone or similar, to ensure erosion is minimal. Additional comments are given in the recommendations section below.
5. **Plants.** The plant community associated with the site is unremarkable and of little current value. The presence of Japanese knotweed and Himalayan balsam reduce the value

further and should be addressed during the works. This is discussed further in the recommendation section below.

Recommendations

The following recommendations are given in relation to the proposed works:

1. **A Japanese knotweed and Himalayan balsam management plan must be agreed** prior to the works commencing, then carried out as stated. The plan should include a) methods by which the works will take place to ensure no spread of these species will occur (including precautions such as equipment washing, appropriate disposal of any material removed from the site etc) and b) methods by which any residual stands of either species will be dealt with following completion of the works. The management plan does not have to be complex and can be incorporated within an updated CMS if that is preferred.
2. **Works to be limited to daylight hours only**, in order to minimise impacts on commuting and foraging bats.
3. **A tool box talk by an appropriately competent ecologist** should be given to contractors immediately prior to works commencing. This should cover a) potential presence of birds associated with the western bank and the need to avoid any direct disturbance in this area, b) presence of alder trees on the eastern bank and the need to protect these during the works, and c) presence of fish and aquatic invertebrates in the river and requirement to retain the dry work area and sediment trap throughout the works.
4. **Ecological Clerk of Works (ECoW) provision by an appropriately competent ecologist**, most importantly during the establishment of the dry works area, and also during and following the works. This can be limited to an initial visit during set-up (tool box talk carried out at the same time), an interim visit during the works (or as required) and a follow-up visit once works have been completed.
5. **Provision of some ecological enhancement to the site.** The biggest way ecological enhancement can be achieved is via appropriate treatment of Japanese knotweed and Himalayan balsam, as already discussed. In addition, further enhancement can be achieved most easily by including soil within the gabion baskets, followed by appropriate planting on top and above the raised block wall to the south. An off-the-peg gabion basket solution can be found [here](#) (other suppliers available). Appropriate woody species would include hazel, alder and willow, which would also provide some level of screening. Alternatively, plants could be left to regenerate naturally, and/or species such as purple loosestrife *Lythrum salicaria* could be added. Options for installing bat and bird boxes are limited due to the amount of disturbance likely to take place around the garage area and are therefore not deemed appropriate for this project.

Assuming the above recommendations are carried out as stated, it is considered that the project will comply with planning policy and address the planning ecologists comments given in the introduction to this technical note.

Figure 1. Collapsed bank, looking south.



Figure 2. Collapsed bank, looking north.



Figure 3. Alder trees to the north.



Figure 4. Stone wall to the north, on the western bank.



Figure 5. Breeze block wall to the south, on the eastern bank.



Figure 6. Woodland vegetation and exposed roots on lower western bank.

