

Boardwalk entrance archway environmental statement

The proposed archway will be erected over the boardwalk to the beach at Swansea University's Bay Campus. The site is adjacent to Crymlyn Burrows SSSI (200m to the SSSI boundary) and while the archway will not have an impact on the site's features it is sited in sand dune habitat, a priority habitat both nationally and locally. The dune on which the boardwalk sits is relatively dynamic, with regular movement of sand, although this is limited in the area for the archway – it is being sited next to an interpretation panel which has been in place since 2017 without any issues of deposition or erosion.

1. SSSI Citation

Crymlyn Burrows is one of the last remaining sections of the Swansea Bay Coastline which has remained substantially unmodified by industrial development. Over the past one hundred and fifty years, parallel sand dune ridges have developed at right angles to the River Neath and these are continuing to accumulate at the present time. Salt water is able to gain access to the system at high tide via the river channel, with the result that the dunes are interspersed by tongues of saltmarsh. These grade westwards into wet dune slacks and carr woodland.

Several plant species with local distribution occur within the site including rock sea lavender *Limonium binervosum*, dittander *Lepidium latifolium*, rock hutchinsia *Hornungia petraea*, round leaved wintergreen *Pyrola rotundifolia*, Dutch rush *Equisetum hyemale* and the variegated horsetail *Equisetum variegatum*. The rare fen orchid *Liparis loeselii* was found occasionally within the slacks until the late 1990s, whilst the sea stock *Matthiola sinuata* which was re-recorded in 1964 following its earlier disappearance, is now widespread along the strandline and in the dunes. A population of the rare Field Wormwood *Artemisia campestris* can also be found in the north of the site.

The rare strandline beetle *Eurynebria complanata* has been recorded from the site, and there are many other interesting sand dune invertebrate species present including dune tiger beetle *Cincindella hybrida*. This part of the Neath estuary is also used by part of the population of small waders overwintering in Swansea Bay.

2. The proposed entrance archway sculpture

Although the proposed location for the archway sculpture is in an area of sand dune the chosen site is over a heavily used footpath, already modified by the presence of the boardwalk. The area is of limited botanical interest, being almost entirely dominated by marram grass to either side, while the path itself is bare sand. The priority species (and SSSI feature) sea stock has been planted nearby and although away from the site of the archway will be marked and protected from accidental damage.

The access route for installation also runs along this heavily used path, so there is minimal chance of any disturbance of sensitive habitat or species.

2.1 Birds

It is highly unlikely that there are any nests in the vicinity of the installation due to the regular use by the public and unsuitability of the habitat. If the installation does take place during the nesting season, to be entirely sure that no nests are present the area will be searched by the University's biodiversity officer before construction would be allowed to proceed.

The upper beach of the SSSI has an important high tide shorebird roost from autumn to spring. Due to the beach profile and high levels of human activity in the immediate vicinity of the boardwalk, the roost is found further east, and because the archway is a small unlit structure set back from the beach over a busy path it will cause no impact to roosting birds.

The construction of the archway is also unlikely to have an impact on the roost as it is being built offsite, with the fixing on site being undertaken by hand, no power tools are to be used and no vehicles taken onto the boardwalk. As an additional precaution, periods of high spring tides will be avoided for the erection process.

2.2 Bats

No flight lines or foraging areas will be impacted by the installation of the archway sculpture. No buildings are associated with the archway sculpture. Impacts to bats are considered to be negligible.

2.3 European protected Species (EPS)

There are no records of EPS in the vicinity of the proposed archway.

2.4 Invasive Non-Native Species (INNS).

Invasive non-native species are mapped across the site, with a management plan detailing how they will be controlled / eradicated. A specific search for invasive species has been carried out and there are none in the vicinity of the proposed archway.

2.5 Biodiversity Enhancements.

The Dynamic Dunescape project at Crymlyn has already delivered significant habitat enhancements – including, large scale dune slack scraping, invasive species and native scrub control. Other biodiversity enhancements have been undertaken by Swansea University, through the implementation of the site management plan (attached) particularly focussed on invasive species control – Japanese knotweed, holm oak, sea buckthorn and cotoneaster are now largely under control, with major efforts underway to eradicate *Rosa rugosa* (15 large patches buried and numerous small bushes sprayed) (funded by Swansea University, BugLife and NRW's Biodiversity Ecosystem Resilience Fund). Community engagement has been integral to the Dynamic Dunescape project and the purpose of the archway sculpture at Crymlyn is to encourage public enjoyment and engagement with nature at this sand dune location.

Furthermore, once installed, due to the suitability of the habitat and high level of public use, there will be further planting of native sand dune species in the area surrounding the archway using locally collected seed of sea stock, sea holly, sea spurge and vipers bugloss.

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