



Invitation to Quote

1.0 Service required

Natural England is seeking a contractor to carry out winching/felling works at it's Yarner Wood site within the East Dartmoor NNR, and utilise the winched/felled material to create 180 leaky woody dam features, with one approximately every 10-20 meters along two separate watercourses totalling approximately 3km (see figure 1). Some of these will be bigger than others and made up of multiple trees, therefore there is no exact number needed and distance between features. It is expected this operation will be carried out with motor manual felling techniques and low-impact mobile winching technology, however some limited areas can be potentially accessible to low-impact machinery such as a circa 4 tonne digger to assist with manipulation of large woody debris material if appropriate. Winching trees over is preferred where possible uprooting trees or creating storm like splits simulating natural processes. All felled material required for the leaky dams is located within 20 meters of the target watercourse and varies from larger trees such as mature oak (circa 30-50cm dbh) to smaller diameter trees such as alder (circa 20-40cm dbh). The general principle is to winch / fell one or multiple large tree bank-to-bank across the target watercourse , leaving most of the structure in length, and utilising smaller cut material to 'back-fill' the attenuation feature created by the main felled tree, (See figure 2 below so for visual specification). There is an acknowledgement that due to the nature of the material used, each damlike feature will be different and will not fit an exact, engineered specification but will contribute to achieving the overall aim of this operation, which is to create site-scale re-naturalisation of the hydrology within Yarner Wood over time, which has been subjected to historical modification and drainage, to achieve biodiversity, carbon storage and flood mitigation benefits.

All trees to be winched/felled will be marked up by site manager prior to operation commencing in September 2024 following a site visit with the contractor, these will have been pre-surveyed by a separate contractor for protected, and SSSI citation species such as lichens and bats to ensure there is no net impact on biodiversity. For this reason, the target number of 180 structures may not be achievable due to the constraints. The contractor is required to be flexible in this regard.

A site visit with the woodland manager is recommended for this tender, and examples of existing woody leaky dam structures within the woodland are available to view to aid quote and operation planning.

2.0 Background

East Dartmoor Woods and Heaths National Nature Reserve (East Dartmoor NNR)

The East Dartmoor NNR comprises 365 hectares within the valley of the River Bovey catchment on the south east side of Dartmoor National Park, and the Yarner Wood part is one of England's oldest NNRs, designated in 1952. The valley is peri glacial and descends from a gorge with a significant torrent river, and multiple tributaries. Exposures of granite and culm measures occur throughout. Adjacent to open moor and broadleaf woodland the area is of international conservation importance and lies within the South Dartmoor Woods SSSI/SAC (1422ha), (Figure 1.2). The land is in joint ownership between Natural England, who manage several woodlands as part of the Bovey Valley Woodlands and heathlands including Yarner Wood and Trendlebere Down SSIs, and the Woodland Trust who manage Bovey Valley Woods.

The entire area offers opportunities to manage co-operatively for conservation at a landscape scale, in the spirit of the 'Lawton' principles (Lawton, 2010). The rich, diverse nature of the reserve is typified by the high number of habitat types and variable ground flora, ranging from dry Oak Woodland habitat and wet flushes on the valley side, to upland heathland, bog habitats and rich alluvial meadows within the valley. The NNR also features a mixture of Temperate Atlantic Rainforest including Ancient Semi Natural woodland (ASNW), Plantations on Ancient Woodland sites (PAWS), under active restoration, and naturalising secondary woodland and a variety of associated habitats. The river and brooks themselves not only add an important extra habitat but also help provide the humid environment required by bryophytes and ferns. Open ground consisting of old, streamside meadows and remnant ancient trees further increase the biodiversity found here supporting a number of notable species. This site also offers a rare opportunity to carry out and monitor bespoke natural flood management interventions in areas of ancient, SSSI/SAC semi-natural woodland, typically practised in secondary woodland, moorland and farmland. The aim will be to carry out significant proportions of the monitoring and surveying work by engaging volunteers through citizen science.

Wild Water Project

These works are part of a wider, multi-year project funded by the Dartmoor Headwaters Project in partnership with the Woodland Trust, Environment Agency and Dartmoor National Park aimed at storing more peak flood water in the upper Dartmoor catchments to alleviate downstream flooding. A copy of the project plan with financial information redacted is available on upon request.

The area lies within the East Dartmoor Land Recovery Area and we ask you be present at partner events show casing this work.

3.0 Specifications

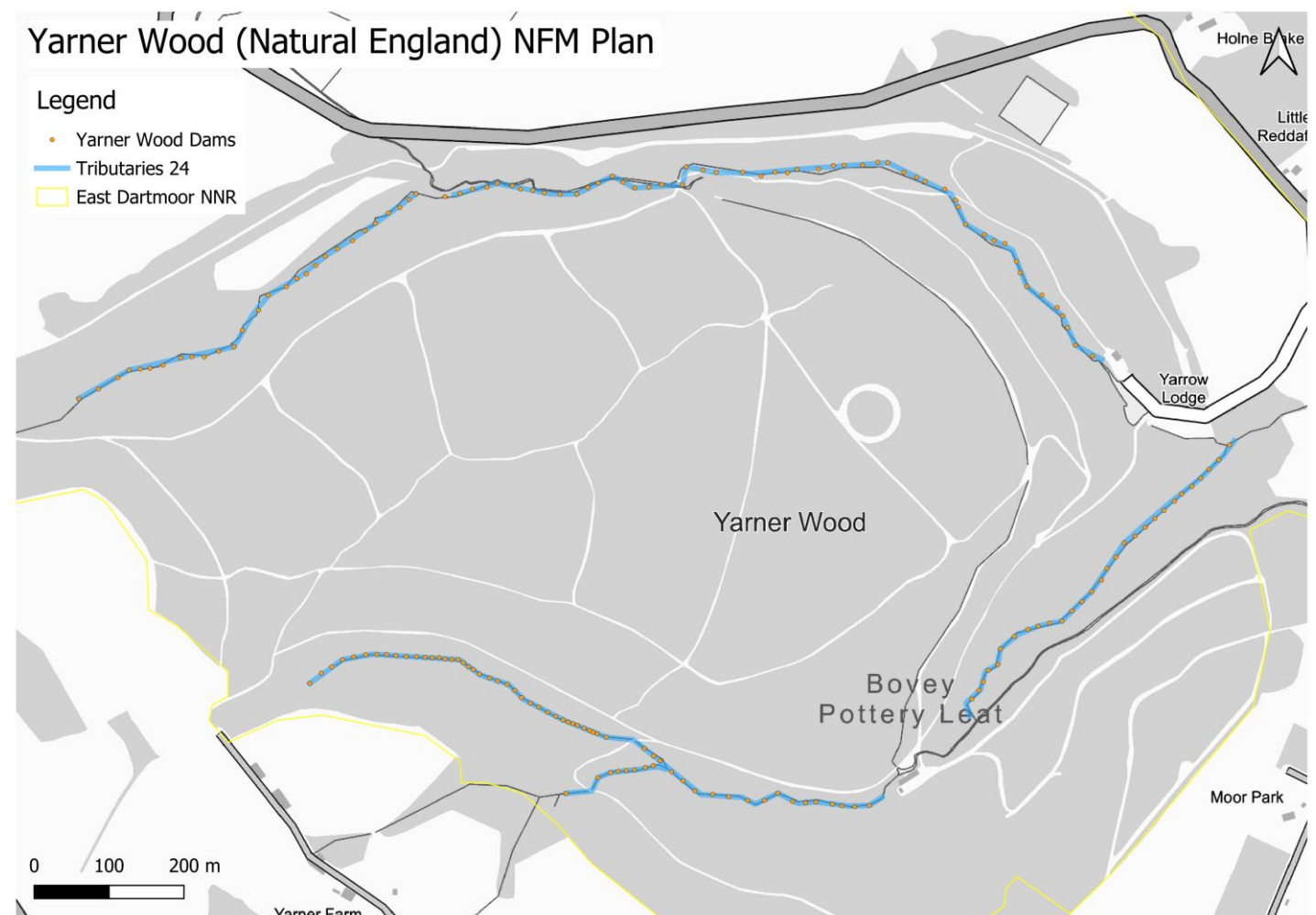


Figure 1 Location plan for installation of woody leaky dams at Yarner Wood

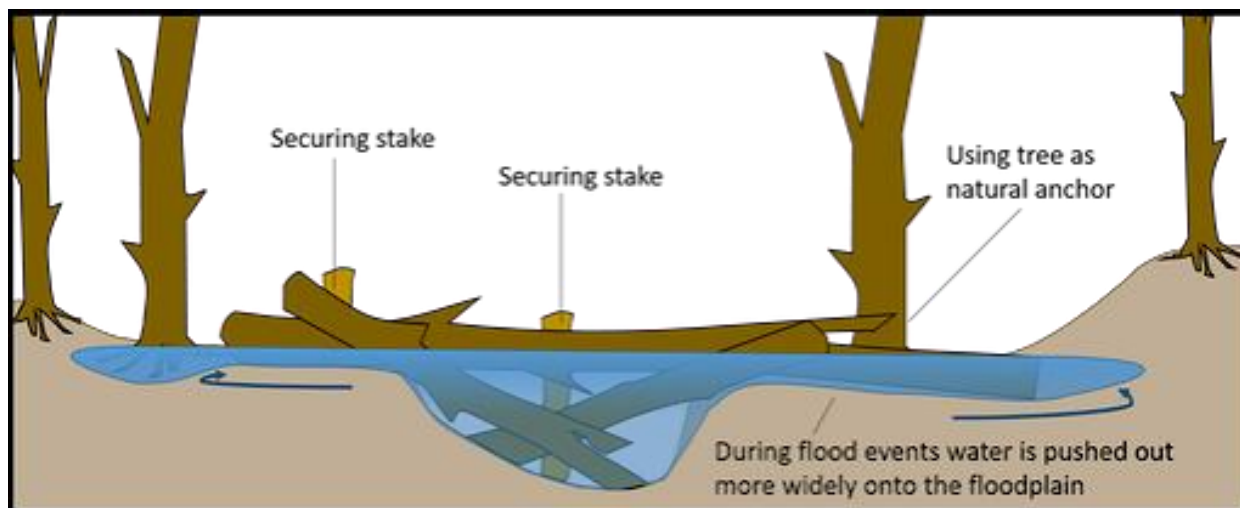


Figure 2 Indicative illustration of large leaky woody dam design

4.0 Timescale

Works are required to be carried out inclusive of the month September 2024, with potential to overrun into October 2024. Contractors are required to provide an estimate of time scales for completion of the operation.

Deadline for Responses: 01/05/2024

If you wish to quote for the above service please submit your response by **the date specified** using the contact details below. Please provide a total cost excluding VAT and estimate timescale for works within your written quote. Please note that email is the preferred method of response, but postal responses are also accepted.

Requested By:

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