

Portland
energy recovery
facility

Environmental statement
Addendum
Appendices

Our ref: 10256 Portland ERF, East Weare / APD

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Dear Kevin

Phase 1 walkover of East Weare heritage features for proposed remedial vegetation clearance works.

Introduction

This letter report details a Phase 1 walkover survey of proposed works to clear vegetation, to aid in the repair of heritage features, including the East Weare battery above Portland Port. The aim of the walkover survey was to establish any ecological constraints that may be present within the footprint of the proposed works, and to make recommendations to enable the works whilst protecting ecological features of interest. The site is within the Isle of Portland Site of Special Scientific Interest and Isle of Portland to Studland Special Area of Conservation (SAC) and therefore, an assessment of the habitats was also requested by Dorset Natural Environment Team as part of the consultation process. The aim of the vegetation clearance works is to create access to the heritage features for repair and removal of risk factors and eventual curated public access and improved interpretation. This includes the clearance of pathways and the heritage feature itself, which has become overgrown.

Methods

The Phase 1 walkover survey was conducted on 13th July 2021, by experienced FPCR Ecologist Dale Cooper. Dale is a FISC level 4 botanist and has over 10 years' experience in surveying for protected species.

The survey was conducted using the methodology outlined in the Handbook for Phase 1 Habitat Survey (JNCC 2010)¹. This involved a systematic walkover of the site to classify the habitat types

¹ JNCC, (2010). Handbook for Phase 1 habitat survey – a technique for environmental audit, ISBN 0861396367.

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present (using the standardised Phase 1 Habitat classification system) and mapping these onto an base map. Each habitat was described based on the botanical merits and target notes used to record features of habitats of particular interest, as well as any sightings, evidence of, or potential for protected or notable species. A full botanical species list (*Appendix A*) was compiled during the survey, and a Phase 1 plan of all major habitat types produced (*Figure 1*). Where necessary, the abundance of species was quantified using the DAFOR scale, ranging from Dominant (D) (>75%) to Abundant (A) (75-51%), through Frequent (F) (50-26%) and Occasional (O) (25-11%) to Rare (R) (10-1%).

In addition to recording the habitats present, a search for signs or evidence of protected species including, but not limited to badgers, dormice, nesting birds and reptiles was also undertaken. An assessment of the suitability of habitats present within the survey area to support protected species in the absence of obvious evidence was also made.

Results

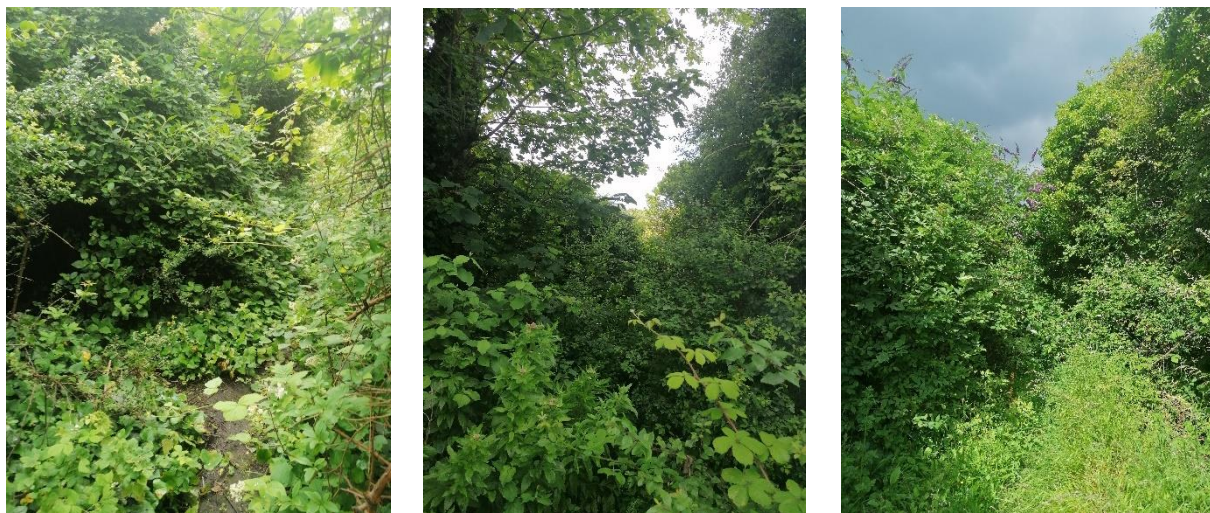
Habitats

The habitats identified within the survey comprised almost entirely of scrub, with a small pocket of calcareous grassland and short perennial, as well as bare ground and a building (gun battery heritage feature).

Scrub

The majority of access paths and gun battery building are covered in and surrounded by dense scrub, typical of the East Weare cliffs. The scrub is dominated by blackthorn *Prunus spinosa* with abundant bramble species *Rubus fruticosus agg.* and ivy *Hedera helix ssp. Hibernica*. Dogwood *Cornus sanguinea* is frequent and wayfaring tree *Viburnum lantana*, sycamore *Acer pseudoplatanus*, clematis *Clematis vitalba* and dog rose *Rosa canina* are all occasional. The ditch in front of the gun battery building is dominated by dense ivy and bramble. Bramble scrub also dominates on the edges where scrub cannot grow into rockier areas. Nettle *Urtica dioica*, patches are found where nutrient rich slumps have formed. Where scrub growth is overhanging and leaves clearer patches beneath, some woodland specialists are established including occasional pignut *Conopodium majus* and hart's-tongue fern *Asplenium scolopendrium*.





Photographs 1: Section of photographs of the scrub along the current partially accessible paths

Calcareous grassland

Calcareous grassland within the survey area was limited to one area (front gun mount) where scrub growth is prevented by a lack of or very shallow soils. This includes exposed rock and exposed areas of concrete that form the old gun battery building. These areas are almost ephemeral/short perennial in nature; however, the plant communities present suggest that calcareous grassland has begun to establish. The calcareous nature of the grassland is indicated by the presence of frequent upright brome *Bromus erectus*, lady's bedstraw *Galium verum* and salad burnet *Sanguisorba minor*, whilst other indicators including common restharrow *Ononis repens* and hoary plantain *Plantago media* are also present.

N.B. – a small area of late successional, closed-sward, calcareous grassland is present atop of the northern hand gun mount. The area was viewed briefly, but access is difficult so did not return. Area will not be impacted by the scrub clearance.

Short perennial

Short perennial communities again have a limited distribution on rocky or shallow substrates within the survey area, including in shadier areas beneath scrub growth along established tracks. Yorkshire fog *Holcus lanatus*, false oat-grass *Arrhenatherum elatius*, yellow-oat grass *Trisetum flavescens* and meadow fescue *Festuca pratensis* are all occasional, whilst the herb communities include frequent ribwort plantain *Plantago lanceolata*, agrimony *Agrimonia eupatoria* and creeping cinquefoil *Potentilla reptans*, occasional marjoram *Origanum vulgare*, hop trefoil *Trifolium campestre*, bird's-foot trefoil *Lotus corniculatus* and wood sage *Teucrium scorodonia* and rare shining cranesbill *Geranium lucidum*.



Photograph 2: Eastern (front) gun mount showing calcareous grassland, short-perennial and diverse scrub edge habitat

Bare ground and building

Areas of bare ground within the survey area were typically rock or rocky substrate where no plant communities were established. This included historic paths to the gun battery. The gun battery building itself is of stone and concrete construction, with some climbing plant species growing on it including clematis and mature ivy *Hedera helix ssp. helix*.

Protected species

No evidence of protected species was found within the survey area. However, the suitability of the habitats recorded during the walkover to support protected species is listed below:

- The scrub has potential to provide habitat for badgers, dormice, nesting birds and reptiles where ground cover is a mosaic of dense and open areas.
- Grassland and short perennial habitats are suitable habitat for reptiles.

Discussion

Proposals

Figure 1 demarks the proposed scrub clearance in order to gain access to the heritage feature. The removal is a combination of widening existing routes, which are still just about accessible but require cutting back to approximately 2m width and removing overhanging vegetation, and the cutting of a 2.5m wide path through largely blackthorn scrub to link up the existing paths and allow access around the perimeter of the feature.

Currently the feature can be accessed through a narrow track through the scrub from the main path. There is evidence across the feature that this access is frequently used by groups of people as a private area for drinking and other activities.

Habitats

Scrub accounts for the highest area of habitat within the survey area. The scrub composition is typical for the cliffs of Portland and consistent with the SSSI description in areas away from the man-made building and made ground around it. Bramble and ivy dominate over areas of hardstanding and tracks and ruderal species including nettle dominate in features such as the gun battery ditch, where nutrients are washed down and concentrate. The proposed works will include the removal of small areas of scrub to provide access to the gun battery and where scrub has encroached or covered the building itself. The NVC scrub community W22 forms part of the suite of NVC communities that comprise the Annex 1 habitat vegetated sea cliffs of the Atlantic and Baltic coasts. The coastal scrub habitats are also mentioned in the SSSI citation. Small scale removal of above ground growth to facilitate inspection and repair of the monument will not have any significant effects on the interest features of the protected sites.

The limited areas of calcareous grassland and short perennial habitats have formed where scrub cannot grow. Calcareous grassland is a priority habitat and also forms part of the designation for the Isle of Portland SSSI. Whilst being important, it is unlikely that any of this habitat will be impacted to the proposed clearance works. This is because it is present in areas that do not require clearance to facilitate access to or restore the gun battery. In the long-term it is likely that scrub clearance at the site will increase the quality and extent of the calcareous grassland present, creating an overall enhancement for biodiversity. Short perennial habitats will also be retained and not impacted by the works.

Protected species

No evidence of protected species was recorded during the walkover survey, however, the habitats present are suitable to support species including dormice, nesting birds and reptiles, that are difficult to record without targeted surveys. Dormice records were not returned in a desktop search for the nearby Portland ERF proposals in 2020 and are thought to be absent from the Isle of Portland. Therefore, their presence is ruled out.

The scrub provides habitat for a wide range of nesting bird species. Whilst no nests were recorded during the walkover survey, birds can build nests any time between March and September. Nesting birds are protected by the Wildlife and Countryside Act 1981 (as amended). To protect nesting birds during the works, all scrub clearance should either be undertaken outside of the nesting bird season (between October and February), or should be preceded by a nesting bird check by an experienced Ecologist. In this instance it would be possible to identify nests by a search prior to clearance commencing. An Ecological Clerk of Works (ECoW) would supervise the scrub clearance in case any nests were found during the works. If a nest was found all work should stop to establish a five-metre buffer zone around the nest. Works could only commence again once all birds had fledged from the nest.

Scrub edges and areas of grassland and short perennial provide suitable habitat for reptile species. There are records of common lizard *Zootoca vivipara*, and slow worm *Anguis fragilis* within one kilometre of the survey area. The majority of vegetation clearance is within dense scrub and limited to areas not suitable for reptiles, however, small areas of reptile habitat may require clearance which can be identified on the ground with the ECoW during the supervision. Removal of these habitats, if

required, should be carried out under ECoW supervision and the “strim and push” method should be used. This method requires a search by the ECoW, and phased strimming of vegetation to ensure reptiles move away first through disturbance from a high cut and then a low cut is made at least 30 minutes later to make the habitat unsuitable prior to full clearance.

Summary

The proposed vegetation clearance works to enable permanent access and restoration of the East Wear gun battery heritage feature, will result in the loss of small amounts of scrub. Whilst there are no constraints to the removal of this habitat itself, there is potential for impacts on nesting birds and reptiles in the absence of suitable mitigation. An ECoW will be present during scrub removal to check for nesting birds and supervise a strim and push exercise for reptiles in sensitive areas. With these methods employed, the ecological impacts of the works will be negligible. In the long term, there is likely to be a small ecological benefit arising from the scrub clearance works in the form of increased calcareous grassland establishing in cleared sections, and the woodland ground flora along the paths will benefit from increased light.

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Principal Ecologist

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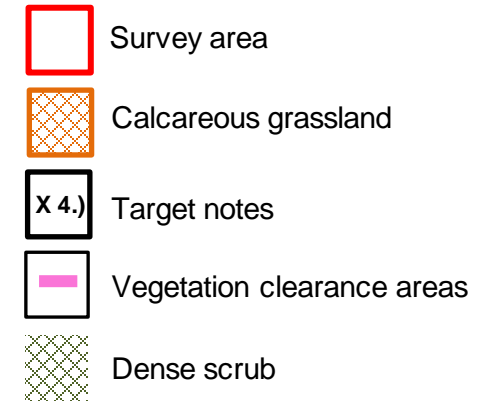
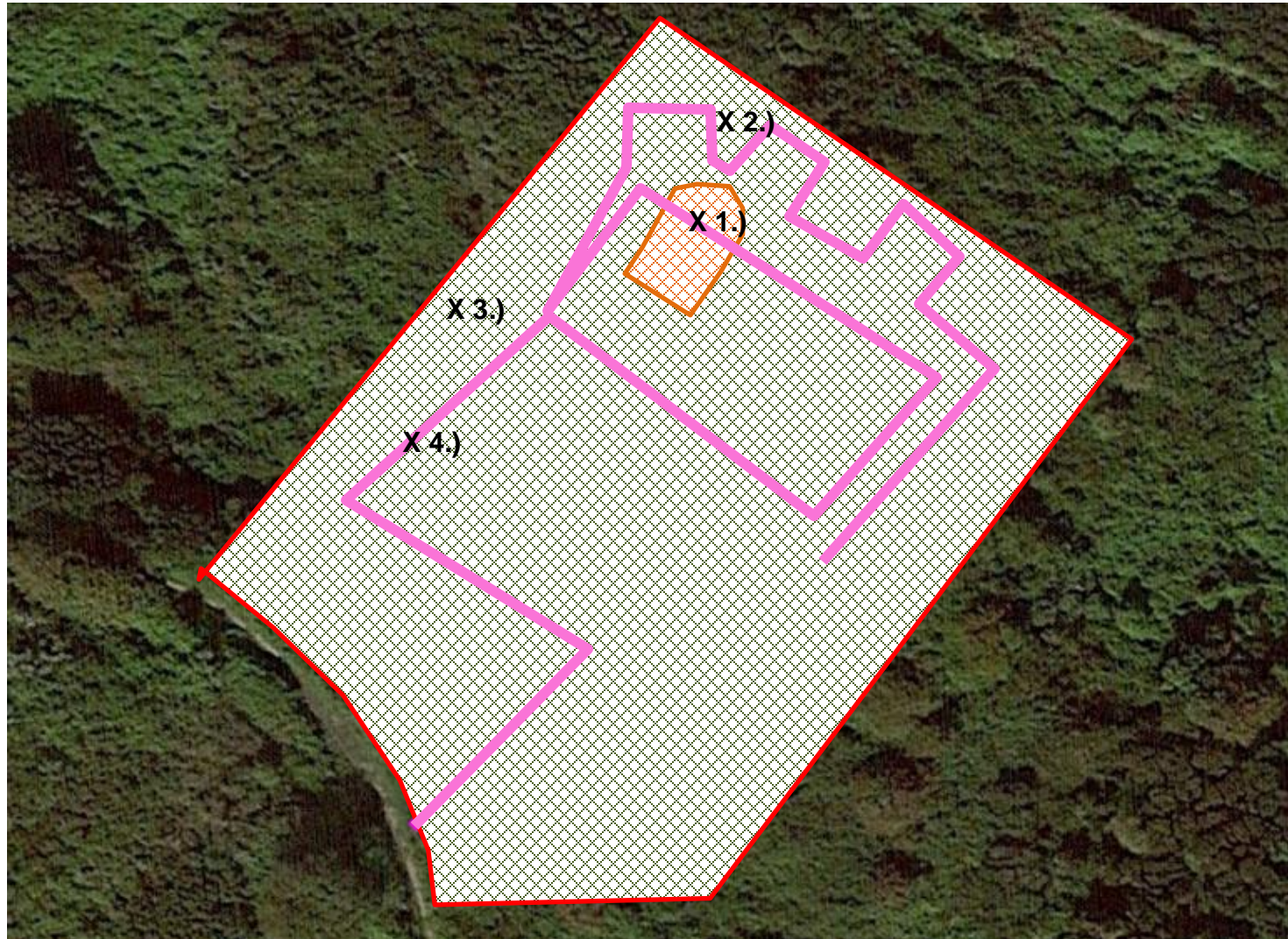


Appendix A: Botanical Species List

Common name	Scientific name
agrimony	<i>Agrimonia eupatoria</i>
bird's-foot trefoil	<i>Lotus corniculatus</i>
blackthorn	<i>Prunus spinosa</i>
bramble species	<i>Rubus fruticosus</i> agg.
burnet saxifrage	<i>Pimpinella saxifraga</i>
bush vetch	<i>Vicia sepium</i>
clematis	<i>Clematis vitalba</i>
cocksfoot	<i>Dactylis glomerata</i>
common restharrow	<i>Ononis repens</i>
common sorrel	<i>Rumex acetosa</i>
creeping bent	<i>Agrostis stolonifera</i>
creeping cinquefoil	<i>Potentilla reptans</i>
creeping thistle	<i>Rumex acetosa</i>
crested dog's tail	<i>Cynosurus cristatus</i>
dog rose	<i>Rosa canina</i>
dogwood	<i>Cornus sanguinea</i>
eyebright	<i>Euphrasia officinalis</i>
false oat-grass	<i>Arrhenatherum elatius</i>
germander speedwell	<i>Veronica chamaedrys</i>
great willowherb	<i>Epilobium hirsutum</i>
hart's-tongue fern	<i>Asplenium scolopendrium</i>
hawthorn	<i>Crataegus monogyna</i>
hedge bedstraw	<i>Galium mollugo</i>
hemp agrimony	<i>Eupatorium cannabinum</i>
herb robert	<i>Geranium robertianum</i>
hoary plantain	<i>Plantago media</i>
hoary plantain	<i>Plantago media</i>
hop trefoil	<i>Trifolium campestre</i>
ivy	<i>Hedera helix</i> ssp. <i>Hibernica</i>
lady's bedstraw	<i>Galium verum</i>
marjoram	<i>Origanum vulgare</i>
meadow fescue	<i>Festuca pratensis</i>
meadow vetchling	<i>Lathyrus pratensis</i>
nettle	<i>Urtica dioica</i>
pignut	<i>Conopodium majus</i>
prickly sow-thistle	<i>Sonchus asper</i>
ragwort	<i>Jacobaea vulgaris</i>
ribwort plantain	<i>Plantago lanceolata</i>
rough meadow grass	<i>Poa trivialis</i>
salad burnet	<i>Sanguisorba minor</i>
shining cranesbill	<i>Geranium lucidum</i>
sycamore	<i>Acer pseudoplatanus</i>
upright brome	<i>Bromus erectus</i>
wayfaring tree	<i>Viburnum lantana</i>
wild madder	<i>Rubia peregrina</i>
wood sage	<i>Teucrium scorodonia</i>

yellow-oat grass	<i>Trisetum flavescens</i>
Yorkshire fog	<i>Holcus lanatus</i>

Figure 1: Phase 1 plan with proposed clearance works overlay



Target notes:

- 1.) Calcareous grassland will not require removal here as on top of gun battery structure, only scrub will be cleared in this area
- 2.) Ditch with bramble scrub and dense ivy cover
- 3.) Small area of calcareous grassland away from scrub clearance path
- 4.) Short perennial habitats present under scrub, particularly on existing pathways