Snags Valley Historic Environment Assessment

Project	Dorset Peatlands Project
Site NGR (centre) between areas	395160, 84005
Site area (combined)	6.54 ha.
Client	The Dorset Peat Partnership
Client contact	Grace Herve, Andrew Norris
Document Author(s)	Matthew Williams MCIfA
Document date	April 24





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Introduction

This report has been prepared by Matt Williams of Fearn Heritage and Archaeology. Matt is a Member of the Chartered Institute for Archaeologists (5721); a brief CV is provided in Appendix 1. The report has been produced to support a feasibility study for the restoration of selected peatland sites in Dorset. The project is part of the Nature for Climate Peatland Grant Scheme (NCPGS) which is being delivered by Natural England between 2021 and 2025.

This report focusses on two adjacent areas of peat known as Snags Valley. They will be assessed as a single site and referred to as a whole as 'the Site'; where it is helpful to assist descriptions the southern area will be referred to as 'Snags South' and the northern area 'Snags North' (Figure 1). They have been identified as potentially appropriate for restoration by the Dorset Peat Partnership (DPP), a sub-group of the Dorset Catchment Partnership. DPP were awarded a Discovery Grant in December 2021 from the NCPGS towards restoration of Dorset Heaths and Mires.

Thanks to Will Bond of Alaska Ltd, Grace Herve of the Dorset Wildlife Trust, Andrew Norris of Forestry England and Gareth Owen of the New Forest National Park for their help and guidance with this report.

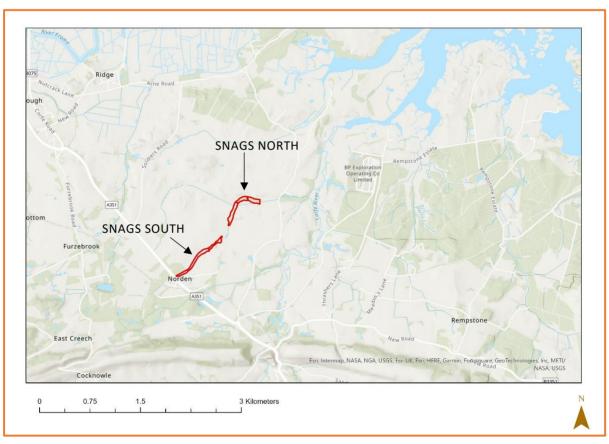


Figure 1 - Site boundary



Aims

The aims of this report are to:

- identify known heritage assets and potentially important historic features within the
 Site:
- assess the impact of restoration proposals;
- provide advice to avoid or minimise negative impact on heritage features, including methods for archaeological recording where appropriate and
- identify non-carbon benefits to heritage assets

Methodology

Guidance

The format of this assessment follows Annex 5 of the NCPGS: Restoration Grant Guide for Applicants 2023 Draft and the guidance included in the DPP Invitation to Quote.

Assessment methodology

The assessment methodology consisted of the following:

- Identify known historic features and past surveys
- Carry out additional scoping surveys where required
- Assess the importance of the assets and the impact of the proposed changes
- Produce recommendations and advice

Scales for the significance (importance) of a heritage asset, the level of impact and significance of the impact follow those defined in NCPGS Annex 5. In addition, a heritage asset value of 'very low' has been added to describe very common, Post Medieval landscape features such as drains, plantation ridge and furrow, and tracks. These are often recorded in the HER and inform on past use of the peatlands but are not considered important as they are not rare and usually modern.

Sources consulted

Heritage data sources for known assets were:

- Historic England National Record for the Historic Environment
- Dorset Historic Environment Record (DHER) (100m Site buffer)
- National Trust Historic Buildings Sites and Monuments Record (NT HBSMR)

Maps and data sources used to support existing information and identify new heritage features were:

- DHER events
- Environment Agency LiDAR data (2020)
- National Library of Scotland historic maps including 1st ed. 25" Ordnance Survey
- High resolution aerial photographs and Google satellite imagery

Where possible, the above data was collated in GIS using QGIS 3.6.

Potential heritage features from all sources were identified and transcribed into a shapefile layer. All new sites will be submitted to the Dorset HER.

Constraints and limitations

GIS data and rectified maps may not be accurate.



Desk Assessment

Site Description

The Site is managed by the National Trust and is currently under a Higher Tier Countryside Stewardship Agreement (ref AG00307327). SHINE data was not available for the Site. The Site comprises of two linear areas of peat along a narrow stream channel that runs north east from Norden into Poole Harbour. Snags South runs along the edge of Gallows Plantation and Snags North along the southern boundary of Middlebere Heath. A small stream runs down the channel (Figure 5); on the west side of the stream is woodland and wooded marsh, on the east are meadows (Figure 4 and Figure 6).

Five cores were taken in Snags South; the peat thickness varied from 90cm in the south, 26cm in the centre and 160cm in the north. Five cores were taken in Snags North, the thickness varied from 202cm to 152cm. The relatively thick deposits suggest that the area has remained waterlogged for a long time.

Previous Impacts

The western edge of Snags South is under the Gallows Plantation; tree roots may have damaged archaeological deposits in his area. Historic maps indicate that the rest of the Site has not been plantation.

The majority of the Site appears to have been natural drainage for the surrounding land. A track crosses Snags South and the two parts of the Site are separated by a building complex, pond and field. All these features may have affected archaeological remains within the Site. This may have caused erosion of archaeological deposits within and below the peat.

There are no historic landfill areas within the Site.

Known historic features and pasts surveys

The Site was within the Wild Purbeck project area. This project examined Historic England Archive and University of Cambridge aerial photographs, Environment Agency and Channel Coast Observatory LiDAR, and online imagery such as Google Earth. The data was inputted into the DHER. Various features around the centre and north of the Site were recorded during this project.

There are no scheduled monuments within 1km of the Site. The closest scheduled monuments are a group of barrows 1100m to the north-west, alongside Gallows Hill (A351) and a Roman villa site 1200m to the south-west. Neither monument is visible from the Site.

There are numerous parch marks and earthworks in the vicinity of Snag Valley that suggest prehistoric and Roman activity in the Valley. Waterlogged remains such as piers, fish traps and vessels, as well as environmental evidence, may be well preserved around the channel (M.Papworth pers.comm).

The only feature recorded within Snags South is a quarry known as 'coal pits' (NT HBSMR MNA136923); similar extraction pits are common across the area and are often marked on historic OS maps; it is considered of low importance and recorded as feature (1) in the gazetteer. There are numerous records close to the Site. A flint scatter (NT HBSMR MNA139057) was recorded during excavation of a pipe trench to the east of Snags North. The exact location of the scatter is not known but the pipe trench extends to the Site boundary. It is considered medium importance as it may indicate a prehistoric activity site within the area; it is recorded as feature (2) in the gazetteer. During construction of the Norden Park and Ride a NE-SW Roman ditch was recorded 40m to the west of the southern tip of Snags South (MWX2821) which was interpreted as a drainage ditch associated with the settlement at Norden. It is feature (3) in the gazetteer. Norden was an important Romano-British industrial settlement which produced Black Burnished pottery and shale bracelets (National Trust HBSMR MNA138274). The core of the settlement is thought to be 1.2km south of the Site (Cox and Hearne 1991, 79). A possible barrow and gallows



site is recorded 125m north-west of the Site on the north side of Gallows Hill A351 (NT HBSMR MNA137594).

Various Post Medieval drainage features are recorded in Snags North. One area of drainage extends into the east side of the site (MDO31375), and a ditch feature runs along the centre in the far east end of the site (MDO31373) (this is the stream within the channel in the Site). These features are numbered (4) and (5) respectively in the gazetteer. They are common types of drainage excavated in the late 19th and 20th centuries to enable plantation on the heaths and mires, and are therefore considered of very low importance. Approximately 60m to the east of Snags north is an area of earthworks recorded in the National Trust HBSMR (MNA139353); they were identified from aerial photographs and could be Romano-British or Prehistoric. As such they are considered of medium importance. They are recorded in the gazetteer as (6).



Additional Survey

The following sources were analysed as additional survey:

Source	Site coverage	New feature ref
High-res aerial imagery	100%	None
EA LiDAR 1m res DTM	100%	None
1940s aerial imagery	100%	None
1887 25" Ordnance Survey	100%	None

Table 1

The high-resolution aerial photography shows the remnants of Gallows Plantation to the southeast of the Site and a line of trees following the northwest Site boundary. The majority of the Site is open with occasional trees. No additional features can be seen.

Historic maps show that the Site was not plantation (except for a small area along the edge of Snags South) and has remained open to the present day. The 1886 Ordnance Survey shows the land to the east as open fields with occasional field boundaries continuing west into the Site. These were visible as grown out boundaries during the Site visit (Figure 3). The Arne/Corfe Castle parish boundary follows the north edge of the Site; it kinks south between Gallows and Snags and it is this kink that forms the gap between the two parts of the Site. The land within the gap is an assortment of small enclosures and footpaths including a small area of deciduous woodland that appears to be associated with Snags Farm, which is just east of Snags North. Historic maps indicate a tramway linking Poole with the Swanage trainline and extensive clay pits to the west ran through the gap.

The 1947 aerial photographs clearly show the Site as open fields with occasional hedge boundaries. The line of the stream is very clear in the northern part of Snags North; this is recorded in the DHER (MDO31373) and is (5) in the gazetteer. No additional features were noted.

Site visit

A Site visit was carried out on 10th July 2023. The weather was bright but overcast. The reasons for the visit were to check if the earthworks at the northeast of the Site continued into the Site.

The west side of Gallows, on the west side of the stream, is wooded; several wood banks with mature trees were noted which do not continue onto the east side of the stream (Figure 3). These are visible on the modern OS map as field boundaries. A raised track or platform was noted 225m from Gallows Hill Road. It is ditched with a bank on the north side and about 6m wide (Figure 2). It did not continue onto the east side of the channel and the west extent was not seen. It is difficult to interpret or date this feature although it is in the approximate location of the curved enclosure around St Edwards cottage shown on the 1886 map. It is recorded as feature (7) in the gazetteer. It is considered of low importance.

The Site was generally very overgrown and access was difficult. No earthworks could be seen in the north of the Site, and no further features were noted.





Figure 2 – Bank on north side of feature (6). Looking east across the stream in Snags south.



Figure 3 – Grown out hedge boundaries in southwest area of Snags south. Looking west.



Figure 4 – Looking south along the west side of Snags south





Figure 5 - Channel looking south from north end of Snags south



Figure 6 - Looking north at east side of Snags north

Consultation

Steve Wallis, Senior Archaeologist at Dorset Council, was consulted by email on 17th July 2023, and sent a draft of this document on 28th July. Martin Papworth, National Trust Archaeologist, was consulted by email on 27th June 2023 and sent a draft of this document on 28th July. Comments from Steve and Martin have been integrated into this document.

Kat Hopwood-Lewis of Natural England provided general advice on Site visits and updated guidance advice throughout the project.



Gazetteer

Table 2 below lists the heritage features that may be affected by the works; they are shown in Figure 12.

No.	Resource(s)	Description	
1	Nat Trust HBSMR	Pit known as 'Coal Pits' (MNA13692)	
2	Nat Trust HBSMR	Flint scatter found during pipe trench watching brief (MNA139057)	
3	DHER	Roman ditch associated with settlement (MWX2821).	
4	DHER	Post Medieval drainage channel (MDO31373)	
5	DHER	Post Medieval drainage earthworks (MDO31375)	
6	Nat Trust HBSMR	Possible Romano-British or Prehistoric earthworks 60m east of Snags north (MNA139353).	
7	Site visit	Track or raised platform with bank and ditch on north side.	

Table 2



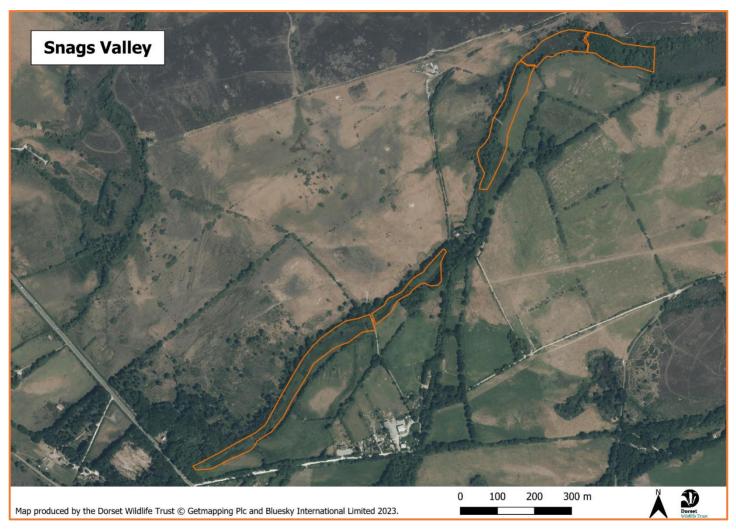
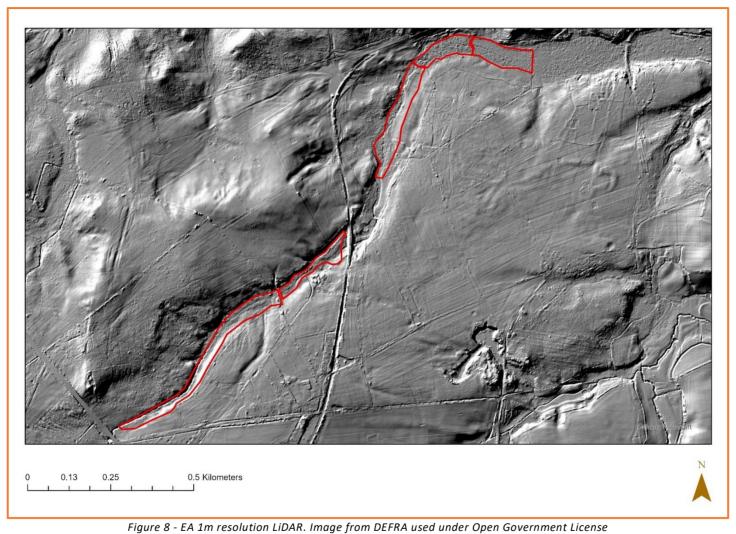


Figure 7 - High resolution AP of the Site. Image produced by the Dorset Wildlife Trust ©Getmapping and Bluesky International Ltd 2022







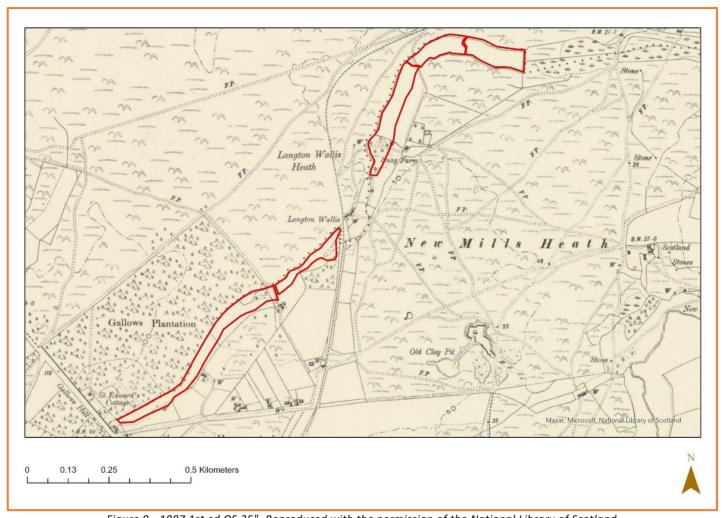


Figure 9 - 1887 1st ed OS 25". Reproduced with the permission of the National Library of Scotland



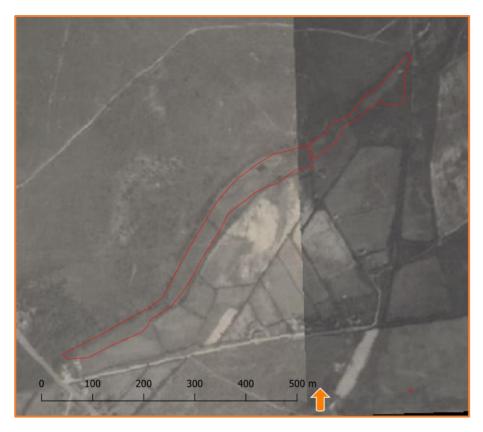


Figure 10 – 1947 aerial image of Snags south. Reproduced with the permission of the National Library of Scotland

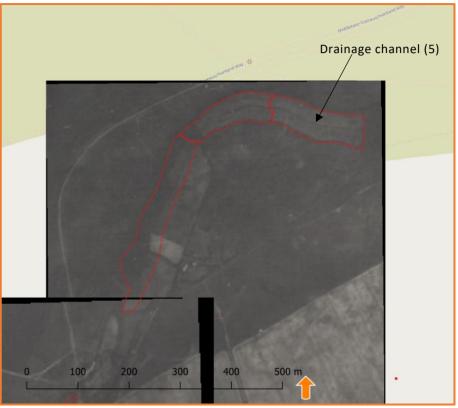


Figure 11 - 1947 aerial image of Snags north. Reproduced with the permission of the National Library of Scotland



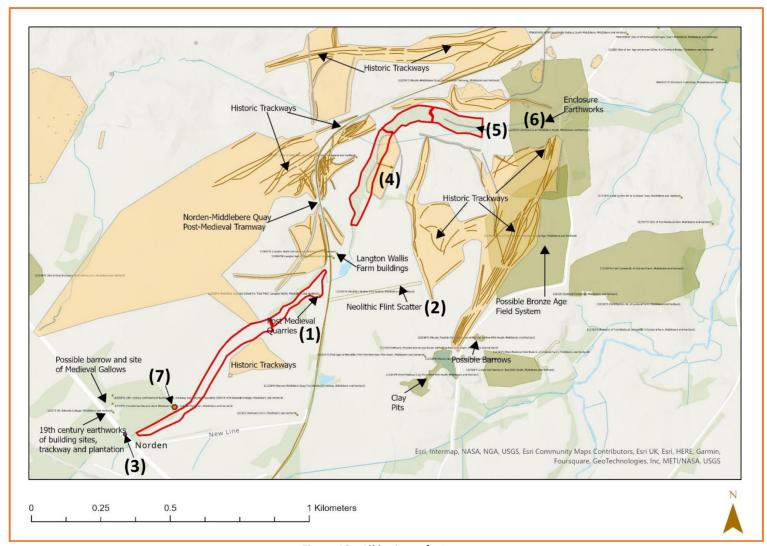


Figure 12 - All heritage features.



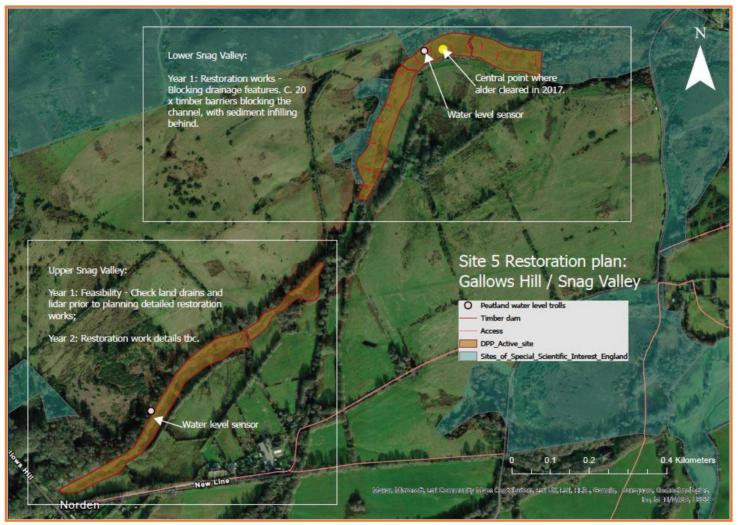


Figure 13 - Restoration proposals



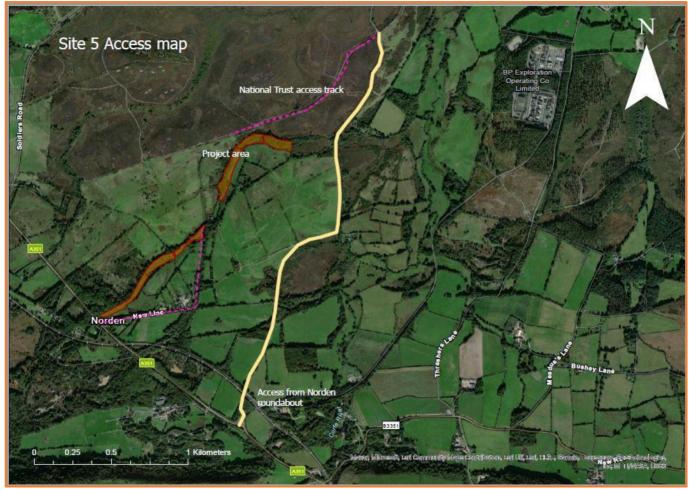


Figure 14 - Site access proposals



Impact Assessment

Restoration proposals

A plan of the proposals is shown in Figure 13 and the access proposals are shown in Figure 14. The restoration proposals involve:

• Inserting c.15-20 timber dams in Snags north

Further restoration work is proposed in Snags south following this work.

Potential impacts

The following will physically impact archaeological features:

- Tracking, turning or driving (especially in wet conditions)
- Excavating the side of the channel to key in the timber dams

The works will cause temporary noise and visual impact during the operation phase. The restoration will result in very minor changes to the appearance of the landscape by creating standing water. The majority of the works will be screened by existing trees. No permanent significant visual impact is anticipated.

Potential benefits

Raising the water level may help to preserve unknown waterlogged archaeological deposits within the area, this could include buried remains relating to the earthworks (5).

Assessment

The restoration proposals are focussed in the north of the Site. Access is along an existing tarmac track (yellow route in Figure 14) and a National Trust track across the heath to the west of the Site (purple route in Figure 14).

Features (1), (2), (3), (6) and (7) will not be directly impacted by restoration. Feature (5) will be blocked and flooded, but the form will remain after the works and the overall impact is considered very low. The drainage features (4) will not be impacted if access is from the west (the National Trust track), although the site visit suggested that this would be difficult. If access is across (4) then tracking and turning should be kept to a minimum. These recommendations are shown as Area 1 in the mitigation plan. The records of the features within the DHER and other sources will suffice as a record prior to any impact and no further mitigation is recommended.

The access routes run close to the flint scatter (2) and Roman ditch (3), and run through the earthworks (6). There may be buried remains in the vicinity of these features, and it is likely that there are extant earthworks in (6). It is important that machines stick to agreed routes in these areas. This recommendation is included in the mitigation table.

The flint scatter (2), Roman ditch (3) and possible prehistoric or Romano-British earthworks (6) suggest that there may be buried archaeological remains in the area. It is therefore recommended that there is archaeological monitoring (watching brief) of any excavations (such as keying in timber dams) associated with any restoration or temporary works. Particular care should be taken if the National Trust access track (Figure 14) needs widening or altering, as it runs through the area of Prehistoric/Romano-British earthworks. These recommendations are included in the mitigation table.

Mitigation

A recommendation area has been identified within the Site to protect archaeological features during the work (Figure 15)

Area	Recommendations	Heritage assets
1	Post Medieval drainage earthworks. Machines should track directly across the area and avoid turning or any movements that may disturb the ground.	(5)
All	Any excavation associated with the restoration works and temporary works should be archaeologically monitored.	Unknown buried remains associated with (2), (3), (6)
All	Machines and vehicles should stick to agreed routes. This is particularly important when crossing area of Earthworks (6)	Earthworks (6)



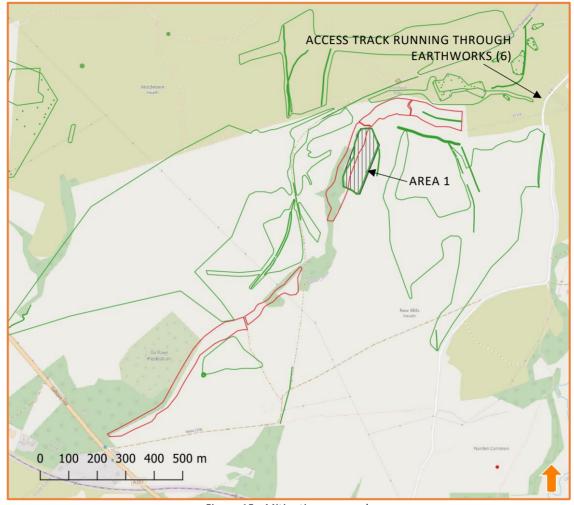


Figure 15 - Mitigation proposals



Site work plan

- 1. Site contractors should be made aware of heritage constraints prior to commencing on site preferably in a toolbox talk.
- 2. A copy of the map showing Area 1 and mitigation table should be available to the Site workers in the cabin.
- 3. Before and after pictures should be taken by the contractors and sent to DPP.

Contingencies

Should significant archaeological deposits be encountered during the works, such as waterlogged artefacts or features that may warrant preservation in situ, work in the affected area should stop and the National Trust Archaeologist should be contacted immediately so that mitigation plans can be agreed. Contact details are:

Dr Martin Papworth

Mobile:

Direct Line: 01747 873277

Email: martin.papworth@nationaltrust.org.uk

Archiving and data dissemination

07771 974394

New archaeological asset shapefiles will be sent to DHER

References

Cox, P. and Hearne, C. (1991) *The Archaeology of the Wytch Farm Oilfield, (1987-90)* Dorset Natural History and Archaeological Society

Environment Agency LiDAR data (2020) LIDAR Composite DTM 2020 - 1m - data.gov.uk accessed 14/11/22

Google Satellite $http://www.google.cn/maps/vt?lyrs=s@189&gl=cn&x=\{x\} &y=\{y\}&z=\{z\} accessed 19/06/23$

Historic England National Record for the Historic Environment data https://historicengland.org.uk/listing /the-list/open-data-hub/ accessed 19/06/23

Historic landfill sites https://www.data.gov.uk/dataset/17edf94f-6de3-4034-b66b-004ebd0dd010/historic-landfill-sites accessed 6/11/22

National Library of Scotland historic mapping https://geo.nls.uk/maps/ 14/06/23

National Trust HBSMR https://heritagerecords.nationaltrust.org.uk/map accessed 20/06/2023

Natural England data Countryside Stewardship data https://magic.defra.gov.uk/ MagicMap.aspx accessed 01/07/23

Open StreetMap https://tile.openstreetmap.org/{z}/{x}/{y}.png accessed 19/06/23



Appendix 1

MATT WILLIAMS MCIFA

Matt will be the project lead. He has worked in professional archaeology and heritage management for over 20 years, starting as an excavator and moving on to heritage planning consultancy, project management and heritage resource management. His CV is attached.

Matt currently works part time for the RSPB as the Reserves Archaeologist for England and Wales. One of his key roles is providing heritage management advice to RSPB Managers and Wardens. This includes advice on:

- peatland and heathland restoration;
- heritage risk of potential land acquisitions;
- potential physical impact of removing plantation, tree planting and excavating lagoons;
- impact of changing water levels when re-creating coastal wetlands;
- vegetation control on earthworks and historic buildings and
- planning advice

Matt is used to making swift assessments of the significance of heritage features and identifying the attributes that make them important. This is often done without a site visit, using HER data and images such as RSPB aerial photographs and online data (e.g. NLS online historic mapping).

Over the last two years Matt has been involved in RSPB projects to restore peatland and heathland. He has visited the peat restoration areas at Lake Vrynwy, where he gave an on-site presentation to RSPB ecologists and reserve staff on peat restoration techniques and the heritage resource. This covered how the heritage resource should be assessed and how to mitigate the potential impact of restoration techniques including blocking grips and re-profiling. The presentation used several on site examples. The resources for the presentation were:

- IUCN Peatland Restoration Techniques. An Introduction (2015)
- NCPGS Guide for Applicants (Jan 2022 draft)
- Peatlands and the Historic Environment (Historic England 2021)
- Cadw Peatland Restoration and the Historic Environment Guidance Note (2021 draft provided by Cadw)
- The Past and the Peat. Archaeology and peatland restoration on Exmoor (Bray 2015)

Matt is competent in GIS applications including ArcPro and QGIS, and is used to producing concise and focussed reports to strict deadlines.

