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# East Anglia ONE North and East Anglia TWO Offshore Windfarms

## Onshore Archaeology: Earthworks Report

Applicants: East Anglia ONE North Limited and East Anglia TWO Limited

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**Applicable to East Anglia ONE North and East Anglia TWO**



# EAST ANGLIA ONE NORTH AND EAST ANGLIA TWO OFFSHORE WINDFARMS, ONSHORE CABLE CORRIDOR AND SUBSTATION SITES, SUFFOLK

## ARCHAEOLOGICAL EARTHWORK IDENTIFICATION SURVEY

commissioned by Royal HaskoningDHV  
on behalf of East Anglia ONE North Limited and East Anglia TWO Limited

October 2020



Applicable to East Anglia ONE North and East Anglia TWO





**East Anglia ONE North and East Anglia TWO, Suffolk**



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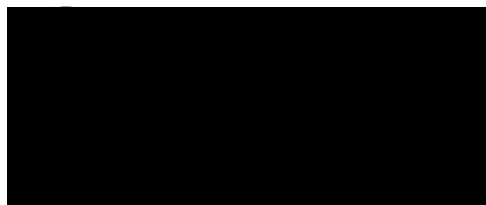
### PROJECT INFO:

HA Project Code **EAON18** / HAS No. **1360** / NGR **TM 46969 61918** / Parish **Leiston cum Sizewell, Aldringham cum Thorpe** / Local Authority **Suffolk** / OASIS Ref. **headland5-372931**

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Applicable to **East Anglia ONE North** and **East Anglia TWO**





## PROJECT SUMMARY

Headland Archaeology (UK) Ltd conducted a targeted archaeological earthwork identification survey at identified key locations within the onshore development area, on behalf of East Anglia ONE North Limited and East Anglia TWO Limited. The specific objectives were to ground-truth and record 35 possible features identified in an earlier desk-based assessment and identify any other previously unidentified features of potential archaeological significance. Three previously identified Heritage Assets were located and recorded. Nine were not visited due to ongoing agricultural activity (harvesting) or constraints on surface visibility (protective plastic covering, overgrown vegetation). The sites of the remaining assets were visited but could not be positively identified. Ten previously unidentified Heritage Assets were also located and recorded, the most noteworthy being a probable World War 2 anti-aircraft position.



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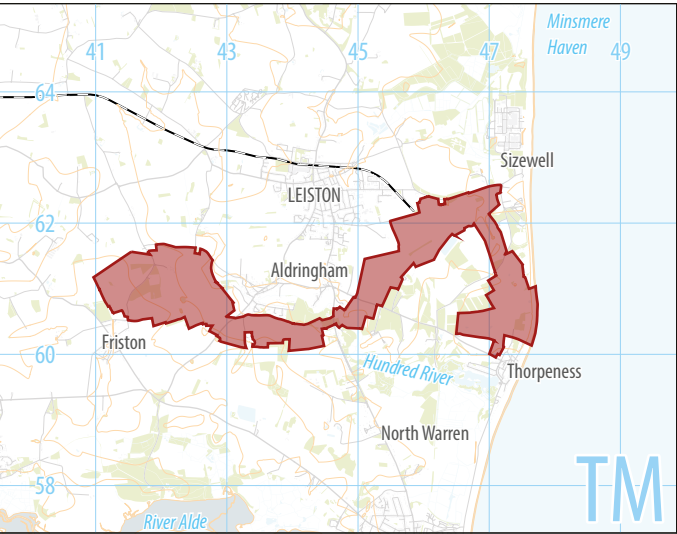
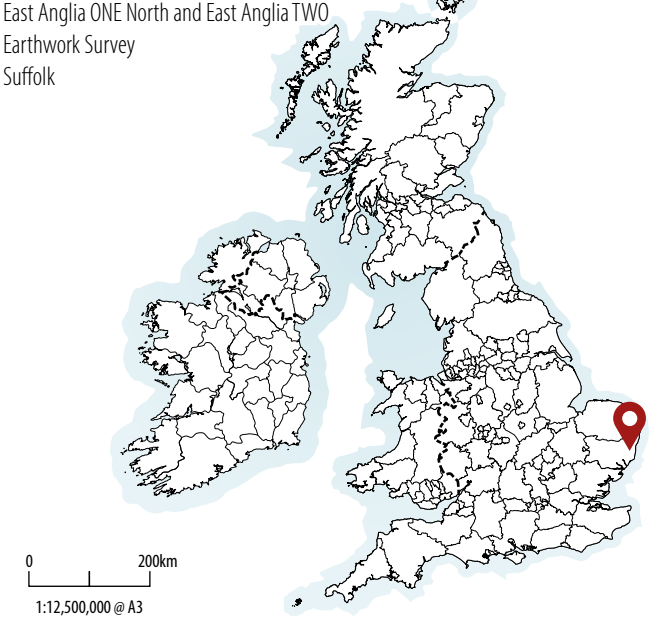
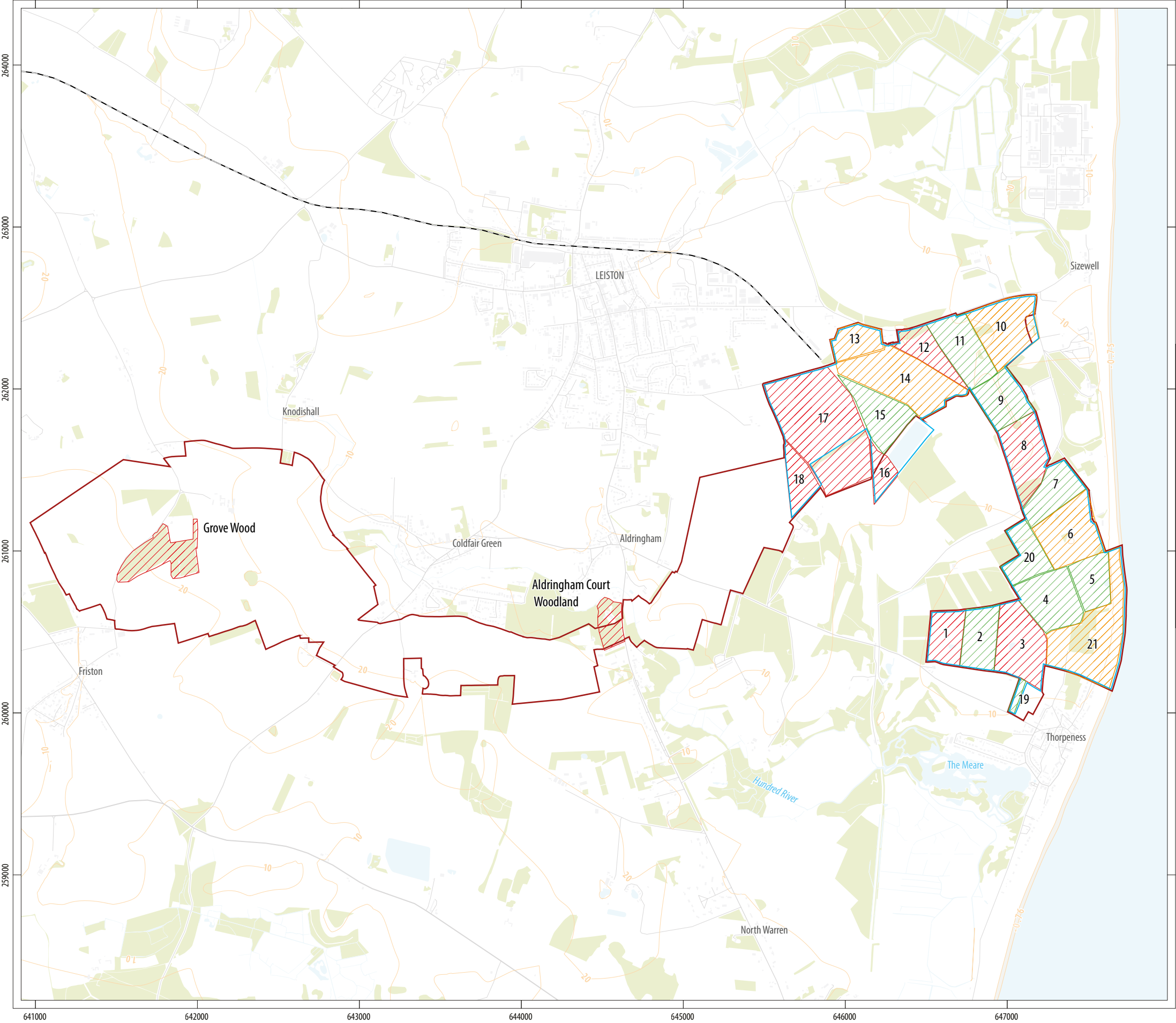
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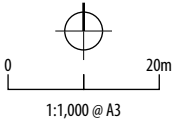




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- East Anglia TWO and East Anglia ONE North Onshore Development Area
- Earthwork Identification Survey Area
- not accessible
- surveyed
- part surveyed







# EAST ANGLIA ONE NORTH AND EAST ANGLIA TWO OFFSHORE WINDFARMS, ONSHORE CABLE CORRIDOR AND SUBSTATION SITES, SUFFOLK

## ARCHAEOLOGICAL EARTHWORK IDENTIFICATION SURVEY

### 1 INTRODUCTION

#### 1.1 LOCATION OF THE STUDY AREA

The archaeological earthwork identification survey covered the whole of the onshore development area from the point at which the cable makes landfall north of Thorpeness up to and Hawsell's Farm Aldringham (Illus 1). Two discrete areas, also within the onshore development area, at Aldringham Court Woodland and in Grove Wood were also included within the survey area.

#### 1.2 TOPOGRAPHY AND GEOLOGY

The underlying bedrock geology comprises Crag Group Sand. This is overlain across most of the survey area with superficial deposits of Lowestoft Formation Diamicton (sand, gravel, clay and silt) (NERC 2019). The soils are classified in the Soilscape 10 and Soilscape 7 associations which are characterised as freely draining slightly acid sandy soils and freely draining slightly acid but base rich soils respectively (Cranfield University 2018).

#### 1.3 PLANNING BACKGROUND

The proposed East Anglia ONE North and East Anglia TWO projects are Nationally Significant Infrastructure Projects (NSIP) that are being developed respectively by East Anglia ONE North Limited and East Anglia TWO Limited (the Applicants) both of whom are wholly owned subsidiaries of Scottish Power Renewables (SPR).

The targeted earthwork identification survey (EIS) was carried out in order to provide further information on the potential for surviving earthworks at identified key locations within the onshore development area. The archaeological EIS was primarily targeted on the stretch of the onshore development area between landfall

(north of Thorpeness) and Hawsell's Farm. It also included recently identified earthworks adjacent to Aldringham Court Woodland and potential features within Grove Wood, as well as surviving structural features including hardstanding areas, trackways and beach scaffolding.

#### 1.4 HISTORICAL BACKGROUND

During the Second World War, the Suffolk countryside was heavily fortified with defensive lines of pillboxes, barbed wire, roadblocks and anti-tank ditches along with coastal gun emplacements. An excellent guide to these defences can be found in Guides 1–4 of 'A Guide to the Second World War Archaeology in Suffolk' (Liddiard & Sims 2014), a brief summary of which is provided below.

The coastal defences were mainly constructed during 1940 in response to the threat of a German invasion. The beach defences were developed as a 'coastal crust' intended to hold the invader up for as long as possible. Behind the beach defences a series of anti-tank lines and fortified 'nodal points' were established linking towns and villages together to form a series of 'stop lines'. The purpose of the stop lines was threefold: to provide protective boundaries for British reserves moving to confront German forces; to act as bottlenecks for any motorised troops that had broken through the beach defences; and to form defensive static lines. By Autumn 1940, however, military consensus was that a static linear defence was unreliable and British strategy shifted to an all-round defence, with self-contained defended localities supported by mobile reserves.

By the beginning of 1941 only two stop lines were considered important for defensive strategy; the main Corps Line from Essex to Suffolk and the Back Line from Beccles in the north of East Anglia through to Colchester in the south. The Back Line was constructed in November 1940 and was the closest line to the development



area. The Back line comprised an inner defence line running roughly parallel to the coast between four and ten miles inland. It consisted of a series of defended localities (essentially 'nodal points') surrounded by barbed wire obstacles and deep, revetted trenches. The closest defended localities to the development area were the villages of Leiston and Saxmundham. The defences at Leiston were notable for the inclusion of six twelve-pounder naval guns to provide anti-tank fire, supplied by the local Garretts factory (ibid 2014:45). These defences were typically manned by Home Guard units and supported by reserves comprised of pioneers and training battalions and those not considered front line troops.

The Back Line continued to be reinforced throughout 1941 and was maintained throughout 1942. By the spring of 1943, however, a German invasion was considered highly unlikely and stop lines fell out of favour, with the lines abandoned completely or only retaining a residual role. Many of the pillboxes and defences were blocked or destroyed and only a few remain extant.

## 2 AIMS AND OBJECTIVES

The proposed East Anglia ONE North and East Anglia TWO projects will potentially impact upon known, recently identified and currently unknown archaeological remains of uncertain date or significance. Based upon the results of the earlier phases of archaeological work (eg Archaeological Desk-based Assessment (ADBA) and geophysical survey), the onshore cable route passes through a landscape of some archaeological interest.

The EIS sought to identify previously unknown features as well as to ground truth previously identified features and was primarily based on targeting features identified during research for the ADBA, and also evaluating areas for which there was no access at the time of the walkover survey or where visibility was obscured by crop or vegetation. The results of the EIS together with the geophysical survey results, trial trenching results and metal detecting results (all of which were subject to separate survey-specific Written Schemes of Development) will at the earliest opportunity, further inform the post-consent mitigation strategies in relation to the onshore archaeological and cultural heritage resource, as secured through the requirement of the draft DCO and OWSI.

The general aims of the EIS were to determine the survival, extent, form, date, condition and significance of any surviving visible, above ground heritage assets (including archaeological earthworks) within the survey area shown on Illus 1 and at the other specific sites identified by SCCAS. This included all potential features identified in the ADBA, as well as seeking to identify any previously unknown features in this area.

The specific objectives of the survey were to:

- › Ground-truth the features identified in the ADBA; record their extent, photograph them and describe their form, possible date, condition and significance; this may require further consultation of the HER, historic maps, aerial photography and LiDAR data on a case-by-case basis;

- › Identify any other visible (above ground) features of potential archaeological significance;
- › Produce a report on the results of the work for deposition with the Suffolk HER; and
- › Undertake a scheme of works that meets with the professional standards and guidance for archaeological work both nationally and within the area of the Suffolk HER.

General guidance relating to the EIS, recording, report preparation and archiving included that prepared by Historic England 2017 and the Chartered Institute for Archaeologists (2014a and b). More specific regional guidance (Gurney 2003) and the generic brief for an 'Archaeological Earthwork Identification Survey' provided by SCCAS (SCCAS 2019) was also adhered to.

## 3 METHODOLOGY

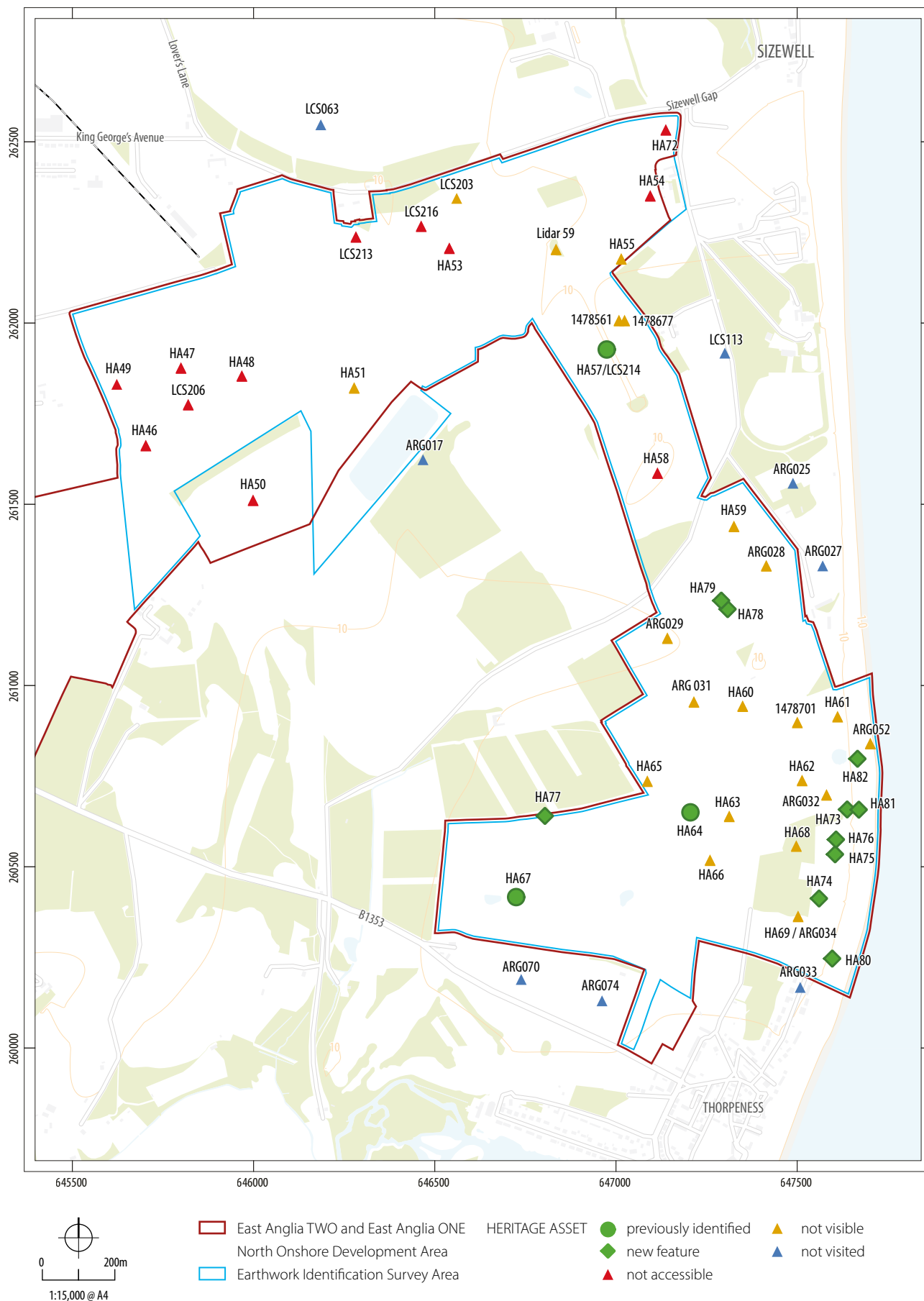
### 3.1 STUDY AREAS

The survey area comprised 21 fields and two woodland areas (Illus 1). Some parts of the survey area could not be accessed at the time of the survey due to fields or parts of fields being in crop, overgrown, covered with plastic or containing livestock. Best efforts were made to survey as much as possible, including working from field tracks, and revisiting fields containing livestock. Nine fields were surveyed in full, five were partly surveyed and seven were not surveyed. The Client advised that there was no permission to access Aldringham Court Woodland and Grove Wood at the time of the survey, and these areas were not visited. Eight of the previously identified heritage assets listed in the WSI (Headland Archaeology 2019, Para 6.4) were in fact outside the survey area and were not visited. These were LCS113 and 119; and ARG 017, 025, 027, 033, 070 and 074. Table 1 below describes the condition of each field, identifies whether it was accessed, and shows which previously identified heritage assets are located within it. This is further illustrated in Illus 2.

The walkover survey route was pre-mapped to 50m transects wherever possible. Three surveyors followed these routes using handheld GPS ('Navigation' Grade GPS – Garmin Etrex 10 with accuracy of  $\pm 3-5$ m), identifying any potential heritage assets. This included targeted visits to the 34 previously identified heritage assets identified in the ADBA within the earthwork identification area (See Table 1 and Illus 2).

Potential features were located by GPS, then photographed and described in compliance with the requirements of a Level 2 survey (as defined by Historic England in Understanding the Archaeology of Landscapes 2017). Where appropriate, survey-grade GPS (Trimble R10 with accuracy of  $\pm 15$ mm) was used to delineate the extents and key breaks of slope in greater detail.

All archaeological features were photographed using a digital SLR camera, to capture the condition and nature of any remains, as well as placing them in their broader context. Further images captured the condition of all fields prior to the commencement of survey. A



ILLUS 2 Plan of Earthwork Identification Area showing heritage assets





## East Anglia ONE North and East Anglia TWO, Suffolk

register of all photographic images was kept and will form part of the project archive.

A written description of features was recorded, including their form, condition and extent, as well as any indication of function.

**TABLE 1** Field access and associated Heritage Assets

FIELD	DESCRIPTION	ACCESSED/SURVEYED	PREVIOUSLY IDENTIFIED HERITAGE ASSET
1	Under new crop, enclosed by electric fence	Not accessed	HA67 (part)
2	Under stubble	Surveyed	HA67 (part)
3	Under plastic	Not accessed	—
4	Under stubble	Surveyed	HA63 HA64 HA65 HA66
5	Under crop	Surveyed from tracks	ARG032 148701 HA61 HA62
6	Under stubble	Part surveyed, SE corner under crop	HA60
7	Under stubble	Surveyed	ARG028 HA59
8	Under crop	Not accessed	HA58
9	Under stubble	Surveyed	1478561 1478677 HA57/LCS214
10	Under crop	Southern edge surveyed from tracks, rest not accessed	HA54 HA55
11	Under stubble	Surveyed	LCS203 LF59
12	Contained livestock (30 Horses). Revisited next day with no change	Not accessed	HA53 LCS 216
13	Dense nettles	Eastern edge surveyed, rest not accessed	—
14	Ploughed soil, overgrown to NE	Part surveyed, NE side inaccessible	LCS 213
15	Heavy scrub	Surveyed	HA51
16	Dense nettles	Not accessed	—

FIELD	DESCRIPTION	ACCESSED/SURVEYED	PREVIOUSLY IDENTIFIED HERITAGE ASSET
17	Under crop	Not accessed	LCS 206 HA46 HA47 HA48 HA49 HA50
18	Under plastic	Not accessed	—
19	Under stubble	Surveyed	—
20	Under stubble	Surveyed	ARG029 ARG032
21	Overgrown bracken and brambles	Partially surveyed, western side not accessed	ARG034 ARG052 HA68 HA69
Aldringham Court Woodland	No permission to access	Not visited	—
Grove Wood	No permission to access	Not visited	—

## 4 RESULTS

### 4.1 PREVIOUSLY IDENTIFIED HERITAGE ASSETS

Of all the previously identified heritage assets targeted during the previous walkover (Headland Archaeology 2019, Para 6.4), only three were positively identified on the ground this time (Illus 2). Several World War II related features that may form part of ARG028, ARG032 or ARG052 were encountered, but have been recorded as new assets (see following section). This allowed more detailed location and recording of individual remains that may comprise part of one or more of the overall HER assets. All other assets within the survey area were visited (where accessible) but could not be seen.

#### HA57 (Illus 3)

LiDAR features associated with LCS214 were recorded in Field 9 centred at NGR TM 46975 61925. This asset was previously described as a double-ditched enclosure and probably associated boundary ditches and trackways, of unknown date, visible as cropmarks on aerial photographs. During the walkover, this asset was identified as a depression in the ground with a variation in scrub and weed growth. The feature measured approximately 20m x 40m. It is possible that the feature is related to former quarrying.

#### HA64 (Illus 4)

A LiDAR feature which was not evident during previous walkover was observed during the current survey. The feature was identified towards the west side of Field 4, centred at NGR TM 47206 60648. It was visible as a clear, rounded dip in the field approximately 7m



ILLUS 3 South-west facing view of HA57    ILLUS 4 North-west facing view of HA64





in width, with significant variation in vegetation growth. The dip appeared to extend to the west beyond the field boundary. It is possible that the feature is related to former quarrying.

### HA67 (*Illus 5*)

This asset was described as a possible group of small circular features, maybe related to agricultural activity, located in Fields 1 and 2. The features were originally identified from aerial imagery and LiDAR. During the fieldwork, this was observed as a single rectilinear depression at the western edge of Field 2, roughly 10m in width and 21m long, and up to 1m deep, centred at NGR TM 46734 60433. There was no indication of age or function.

## 4.2 PREVIOUSLY UNIDENTIFIED HERITAGE ASSETS

Ten previously unidentified heritage assets were identified during the survey. Each new asset has been given an HA number and are described below (see also *Illus 2*). Some of these assets are likely to represent parts of ARG028, ARG032 or ARG052, see note above.

### HA73 (*Illus 6–8*)

Located in the north-east corner of Field 21 was a concrete structure constructed of breeze blocks. Standing to eight courses high with the upper course consisting of rounded capping, the structure is rectangular with a surviving narrow 'L-shaped' corridor at the south facing elevation. The feature is 8.00m along its N-S axis and 5.00m E-W. Walls are 0.50m thick and held together with rebar and mortar. A rusted, round iron girder projects 2.00m from the western wall and rests on a slightly off-centred pillar, measuring 0.50m x 0.50m x 1.50m. There is a possible low entrance or fire step at the eastern edge, though this may just be remnants of a wall collapse.

The north-east elevation was damaged, there was possibly a similar entrance to that on the eastern edge on this side, but the condition of this elevation was too poor to be certain. Overall, the structure was in fair to good condition. The breeze blocks have held their form since construction and the iron girder was complete. There were limited areas of collapse, and the structure was stable, albeit with overgrown brambles in both the interior and exterior. Vegetation cover hindered a complete survey of the structure which was a World War II coastal battery.

The battery in Field 21 was originally constructed for an 18-pounder field gun positioned to fire upon Sizewell beach. The emplacement was built in May or early June 1940 when the gun itself was moved to Thorpeness from Kessingland, further to the north. This battery formed part of the 'coastal crust' and acted as a first line of defence against invasion. This was one of five heavy guns (either 18 pounders or 4-inch ex Naval guns) placed along vulnerable parts of the Suffolk coast and sited so they could fire directly onto the beaches. The one at Thorpeness was nick-named 'John', the others were 'Matthew', 'Mark', 'Luke' and 'St Peter'. The emplacement itself is of simple design, but the existence of the girder in the middle is unusual and it is not clear if this was part of the original design or an unsuccessful attempt at removal ([www.worldwar2heritage.com](http://www.worldwar2heritage.com)).

Down slope from the emplacement along the beach were four extant irregular concrete blocks forming a rough circle. These were around 1.2m in diameter, approximately 40m from the base of the cliffs to the west and 150m from the sea. These remains are in poor condition and obscured by bracken and grass growth. These remains are interpreted as probably being associated with the stronghold defence, now out of situ from hill slide.

Most likely forms part of ARG032 or ARG052.

### HA74 (*Illus 9*)

A circular depression in Field 21, approximately 27m in diameter. During World War II the north coast of Suffolk was at the front line of Britain's defences and was heavily fortified (Liddiard and Sims 2014). This feature was a possible bomb crater from the 1940s, though it is obscured by a hedgerow to the north.

### HA75 (*Illus 10*)

Located approximately 100m west of the cliff edge in Field 21, a possible trench was identified running N-S. Seen as a single depression with dimensions of 18m x 3.5m, this feature is likely to have been a World War II trench used for coastal defences. Most likely forms part of ARG032 or ARG052.

### HA76 (*Illus 11*)

Rectangular impression to the north of HA75 in Field 21. Measures approximately 4m x 3m and is partly covered in moss. Possible buried structure or hard standing. Most likely forms part of ARG032 or ARG052.

### HA77 (*Illus 12*)

A large dip in the NW corner of Field 2, aligned N-S and running towards the northern field boundary. Most likely a natural feature. It is possible that the feature is related to former quarrying.

### HA78 (*Illus 13*)

A large, circular depression along the northern edge of Field 6. It measures approximately 40m in diameter, and up to 1m deep. The vegetation is markedly different here and the area has clearly been avoided by farmers. This feature is most likely related to former quarrying and is marked as 'Pit (Disused)' on the 1971 Ordnance Survey 1:2,500 Plan.

### HA79 (*Illus 14*)

A linear dip crossing the field boundary between Fields 6 and 7. The dip runs from NW to SE, terminating in circular dip HA78. It is approximately 30m wide and 100m long. This feature may relate to previously identified asset ARG028 (a World war II slit trench) but is 150m to the south-west of the previously recorded location and so has been recorded as a new feature.



**ILLUS 5** East facing view of HA67    **ILLUS 6** North facing view of HA73





### HA80 (Illus 15)

Remains of a concrete structure to the SE corner of Field 21. The feature measures 1.0m x 0.5m, and approximately 0.3m in depth visible above ground level. The top slopes down into the sea. Possible remains of a slipway or similar, but in poor condition.

### HA81 (Illus 16)

Raised earthworks east of HA73, adjacent to beach in Field 21. Bumpy ground and four visible concrete fragments in an area of around 10x8m. Possible tumble from nearby wartime remains. Most likely forms part of ARG032 or ARG052.

### HA82 (Illus 17)

Four concrete blocks on the beach approximately 40m from the base of cliffs in Field 21. Overgrown and possibly not in situ, likely related to nearby wartime remains. Most likely forms part of ARG032 or ARG052.

## 5 CONCLUSIONS

The areas surveyed retained very little evidence of archaeology in relation to previously identified Heritage Assets. This is likely due to a combination of factors:

- › Heritage Assets which were identified from crop marks through aerial photography in fields which have since been ploughed, may now be lost on the surface.
- › LiDAR survey can distinguish variation in topography to 2cm, a variation which would not necessarily be evident to the naked eye from ground level.
- › Variation in crop cover or other plant growth could have obscured some remains.

The three previously identified heritage assets that were confirmed by this survey (HA57, HA64 and HA67) were all buried features and would require geophysical or intrusive investigation to ascertain a more detailed understanding of their form and function. This is true also for the newly identified assets HA74, HA75, HA76, HA77, HA78 and HA79, although in some of these cases a reasonable guess of their function has been made. The potential for any of these to significantly progress the understanding of human activity in this area is likely to be limited.

The upstanding or tumbled remains of assets HA73, HA80, HA81 and HA82 relate to World War II activity and are likely to form part of HER entities ARG032 or ARG052. There is some potential for these assets to

inform understanding of World War II activity in this area with further investigation. This could take the form of vegetation removal and detailed historic building recording or possibly targeted excavation. Further archival research may also provide detailed information concerning these structures, potentially minimising the need for intrusive work.

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**ILLUS 7** North facing view of HA73    **ILLUS 8** North facing view of HA73    **ILLUS 9** North facing view of HA74





**ILLUS 10** North facing view of HA75    **ILLUS 11** North facing view of HA76





ILLUS 12 East facing view of HA77    ILLUS 13 North-west facing view of HA78





ILLUS 14 Noth-west facing view of HA79    ILLUS 15 West facing view of HA80  
ILLUS 16 West facing view of HA81    ILLUS 17 North-west facing view of HA82



## 7 APPENDICES

### APPENDIX 1 PREVIOUSLY IDENTIFIED NON-DESIGNATED HERITAGE ASSETS WITHIN THE EARTHWORK IDENTIFICATION SURVEY AREA

DATASET	REFERENCE	NAME/TYPE	BRIEF DESCRIPTION	APPROXIMATE DATE	EASTING	NORTHING	IMPORTANCE	IDENTIFIED IN EIS?
HER	ARG 017	Second World War anti-glider ditches and military training activity on The Walks, Aldringham Common	An extensive network of Second World War anti-glider ditches is visible as earthworks on aerial photographs of The Walks, Aldringham Common. Traces of Second World War (and perhaps earlier) military training activity is also visible, as the earthworks of	Modern	646468	261621	Low	Not visited
HER	ARG 025	Coastal battery and associated features	A coastal battery and associated features of World War Two date, Aldringham cum Thorpe	Modern	647489	261556	Low	Not visited
HER	ARG 027	Strongpoint and possible command centre	A World War Two strongpoint and possible command centre, Aldringham cum Thorpe	Second World War	647571	261235	Low	Not visited
HER	ARG 028	Slit trench	A slit trench of World War Two date in Aldringham cum Thorpe parish	Second World War	647404	261328	Low	Possibly – recorded as HA79
HER	ARG 029	A World War Two weapons pit and probable slit trench	A World War Two weapons pit and probable slit trench in Aldringham cum Thorpe	Second World War	647137	261131	Low	Not visible
HER	ARG 031	Diver strip diver battery S2	A World War Two strongpoint and anti-aircraft battery, Aldringham cum Thorpe	Second World War	647210	260954	Low	Not visible
HER	ARG 032	Two World War Two strongpoints on Thorpeness Common (Mod)	Two World War Two strongpoints on Thorpeness Common, Aldringham cum Thorpe	Second World War	647570	260703	Low	Newly recorded assets HA73, HA75, HA76, HA81 and HA82 likely relate to this feature
HER	ARG 033	A World War Two chain home extra low station K164	Chain Home Extra Low Station K164, at Thorpeness, Aldringham cum Thorpe	Second World War to Cold War	647509	260165	Low	Not visited
HER	ARG 034	Diver strip diver battery S3	A World War Two Diver Battery site on Thorpeness Common, Aldringham cum Thorpe	Second World War	647480	260372	Low	Not visible
HER	ARG 052	World War Two coastal defences to the North of Thorpeness	World War Two coastal defences to the North of Thorpeness, Aldringham cum Thorpe	Second World War	647688	260842	Low	Newly recorded assets HA73, HA75, HA76, HA81 and HA82 likely relate to this feature
HER	ARG 070	Earthworks of World War Two anti-glider ditches north of Thorpeness Golf Course	Earthworks of World War Two anti-glider ditches are visible on aerial photographs on land to the north of Thorpeness Golf Course, Aldringham cum Thorpe	Second World War	646739	260187	Low	Not visited
HER	ARG 074	Possible World War Two activity	Possible World War Two activity in the form of a probable sports ground and possible underground air raid shelters is visible on aerial photographs on Thorpeness recreation ground, Aldringham cum Thorpe	Second World War	646962	260128	Low	Not visited
HER	LCS 063	Site of Second World War Diver anti-aircraft battery	A Second World War Diver anti-aircraft battery is visible as structures on aerial photographs. The site is now arable and there is no evidence that any elements survive; an evaluation in the area of the site noted large amounts of modern building material	Post-medieval to Second World War	646186	262545	Low	Not visited
HER	LCS 113	World War Two anti-tank ditch	A World War Two anti-tank ditch in Leiston and Aldringham cum Thorpe parish	Second World War	647301	261915	Low	Not visited





## East Anglia ONE North and East Anglia TWO, Suffolk

DATASET	REFERENCE	NAME/TYPE	BRIEF DESCRIPTION	APPROXIMATE DATE	EASTING	NORTHING	IMPORTANCE	IDENTIFIED IN EIS?
HER	LCS 203	Second World War training area and/or strong point	A Second World War training area and/or strong point is visible as earthworks and structures on 1940s aerial photographs. Recent photographs indicate that while much of the site was dismantled before the end of the war, some earthworks probably still survive	Second World War	646561	262342	Low	Not visible
HER	LCS 206	Site of Leiston Very High Frequency (VHF) Fixer Station	A World War Two direction finding (D/F) station (or a similar type of communications/navigation site), which remained in use into the Cold War period under the Rotor programme, is visible as a group of structures, connected by pathways, on aerial photographs	Second World War to Cold War	645830	261771	Low	Not accessible
HER	LCS 213	Diver strip diver battery S1	A Second World War Diver anti-aircraft battery is visible as structures and earthworks on aerial photographs. The site was dismantled at the end of the war, but parts of the trackways still survive, as may some of the hardstandings	Second World War	646286	262231	Low	Not accessible
HER	LCS 214	Site of double-ditched enclosure and probably associated boundary ditches and trackways of unknown date	A double-ditched enclosure and probably associated boundary ditches and trackways, all of unknown date, are visible as cropmarks on aerial photographs	Early Bronze Age to Roman	646969	261918	Low	Yes — see also HA57
HER	LCS 216	Earthworks of linear and rectilinear boundaries of unknown date, The Walks, Aldringham Common	Linear and rectilinear boundaries of unknown date are visible as earthworks on aerial photographs of The Walks, Aldringham Common	Unknown	646462	262264	Low	Not accessible
NRHE	1478561	Diver strip diver battery S15	Site of a Second World War heavy anti-aircraft (Diver) battery in the Diver Strip southeast of Prettyman's Whin. It was armed with four 3.7-inch Mark IIc guns equipped with Predictor BTL, and Radar AA No3 Mark V when it was deployed here on 24th November	Second World War	647000	262000	Low	Not visible
NRHE	1478677	Diver strip light anti-aircraft (diver) battery SA	Site of a Second World War light anti-aircraft (Diver) battery in the Diver Strip north at Sizewell Common. It was manned by 450 Battery of 135 Anti-Aircraft Artillery Regiment on 10th October 1944. The armament is not stated	Second World War	647009	262001	Low	Not visible
NRHE	1478701	Diver strip light anti-aircraft (diver) battery SD	Site of a Second World War light anti-aircraft (Diver) battery in the Diver Strip at Thorpe Ness. It was manned by 305 Battery of 98 Anti-Aircraft Artillery Regiment on 10th October 1944. The armament is not stated	Second World War	647500	260900	Low	Not visible



## APPENDIX 2 PREVIOUSLY UNRECORDED HERITAGE ASSETS WITHIN THE EARTHWORK IDENTIFICATION SURVEY AREA (SOURCE: ADBA)

REF	DESCRIPTION	CORRESPONDING AP/LIDAR FEATURES	EASTING	NORTHING	IMPORTANCE	IDENTIFIED IN EIS?
HA46	LiDAR feature not accessible during walkover, but some depressions visible in field.	LLF40 LF41 LF42 AP27 AP28 AP33 AP40 AP76 AP80	645703	261661	Low	Not accessible
HA47	Area around LCS206 – AP and LiDAR features not evident during walkover.	AP35 AP78 AP32 AP33 AP34 AP79 LF14	645800	261875	Low	Not accessible
HA48	Possible group of small circular features maybe related to agricultural activity.	AP31	645968	261853	Low	Not accessible
HA49	Circular feature.	AP41	645623	261829	Low	Not accessible
HA50	Area around ARG017 – AP features not evident during walkover.	AP42 AP74 AP77	645999	261510	Low	Not accessible
HA51	Lost field boundary now obscured by trackway.	LF15, AP43 AP44	646278	261820	Low	Not visible
HA53	LiDAR and AP feature evident during the walkover as a depression alongside the field boundary. Dense overgrowth present.	AP19 AP24, LF16 – LF20 LF58, 1ST EDITION MAP	646632	262224	Low	Not accessible
HA54	Possible circular feature – filled in pit?	AP20	647095	262350	Low	Not accessible
HA55	Row of pits?	AP25	647015	262176	Low	Not visible
HA57	LIDAR feature associated with LCS214.	LF43	646975	261925	Low	Yes
HA58	AP features evident during walkover as overgrown quarry pits.	AP2 AP18 AP22 AP23	647115	261585	Low	Not accessible
HA59	Field boundary.	AP17	647326	261438	Low	Not visible
HA60	LiDAR feature – not accessible during walkover, but evident as a depression in the field.	LF44, AP8 AP9 AP11 AP16	647350	260942	Low	Not visible
HA61	Triangular feature – possible field drain.	AP10	647612	260913	Low	Not visible
HA62	LiDAR features – not evident during walkover.	LF45	647514	260737	Low	Not visible
HA63	LiDAR features – not evident during walkover.	LF46	647313	260638	Low	Not visible
HA64	LiDAR features – not evident during walkover.	LF47	647206	260648	Low	Yes
HA65	Circular feature and possible field drain.	AP6 AP7	647087	260735	Low	Not visible
HA66	Ruins and traces of two structures.	AP3 AP4	647260	260517	Low	Not visible
HA67	LiDAR and AP features visible as depressions during walkover.	AP1 AP5 LF48 LF49	646873	260476	Low	Yes
HA68	Structure recorded on the 1st Edition OS map.	1ST EDITION MAP	647498	260556	Low	Not visible
HA69	Enclosure, field boundaries and structures.	AP12 AP14 AP15	647503	260362	Low	Not visible
HA72	Possible building identified on LiDAR images.	LF60	647138	262532	Low	Not accessible



### APPENDIX 3 NEWLY IDENTIFIED HERITAGE ASSETS WITHIN THE EARTHWORK IDENTIFICATION SURVEY AREA

REF	DESCRIPTION	EASTING	NORTHING
HA73	WWII concrete structure (likely part of ARG032 or ARG052)	647638	260655
HA74	Circular depression, possible bomb crater	647560	260410
HA75	Possible trench (likely part of ARG032 or ARG052)	647605	260532
HA76	Possible buried structure or hard standing (likely part of ARG032 or ARG052)	647607	260573
HA77	Dip in field. Possibly natural or related to quarrying	646804	260638
HA78	Circular depression. Probably quarry pit	647308	261208
HA79	Linear dip, possibly ARG028 (WWII slit trench)	647291	261232
HA80	Concrete structure. Possible slipway	647597	260655
HA81	Raised earthwork and concrete fragments (likely part of ARG032 or ARG052)	647670	260795
HA82	Concrete blocks (likely part of ARG032 or ARG052)	647667	260795



## APPENDIX 4 OASIS DATA COLLECTION FORM: ENGLAND

OASIS ID: *headland5-372931***PROJECT DETAILS**

<b>Project name</b>	EAST ANGLIA TWO AND EAST ANGLIA ONE NORTH OFFSHORE WINDFARMS, Archaeological Earthwork Identification Survey
<b>Short description of the project</b>	Headland Archaeology Ltd conducted a targeted archaeological earthwork identification survey at identified key locations within the onshore development area, on behalf of ScottishPower Renewables. The specific objectives were to ground-truth and record 35 possible features identified in an earlier desk-based assessment and identify any other previously unidentified features of potential archaeological significance. Three previously identified Heritage Assets were located and recorded. Nine were not visited due ongoing agricultural activity (harvesting) or constraints on surface visibility (protective plastic covering, overgrown vegetation). The remainder were visited but could not be positively identified. Ten previously unidentified Heritage Assets were also located and recorded, most noteworthy being a probable World War 2 anti-aircraft position.

**PROJECT LOCATION**

<b>Country</b>	England
<b>Site location</b>	SUFFOLK SUFFOLK COASTAL LEISTON EAST ANGLIA TWO AND EAST ANGLIA ONE NORTH OFFSHORE WINDFARMS, ONSHORE CABLE CORRIDOR AND SUBSTATION SITES, SUFFOLK
<b>Entered by</b>	[REDACTED]
<b>Entered on</b>	6 November 2019







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Applicable to **East Anglia ONE North** and **East Anglia TWO**