Land at 11 Stirling Close, West Row, Mildenhall, Suffolk

Planning application: DC/13/0370/FUL

HER Ref: MNL 777

Archaeological Evaluation Report

(© John Newman BA MCIFA, 2 Pearsons Place, Henley, Ipswich, IP6 0RA)

(August 2016)

(Tel: 01473 832896 Email: johnnewman2@btinternet.com)

Site details for HER

Name: Land at 11 Stirling Close, West Row, Mildenhall, Suffolk, IP28 8QD

Clients: Mr R Smith

Planning authority: Forest Heath DC

Planning application ref: DC/13/0370/FUL

Development: Erection of chalet type dwelling

Date of fieldwork: 19 August, 2016

Event ref: ESF 24541

HER ref: MNL 777

OASIS ref: johnnewm1-260490

Grid ref: TL 6776 7541

Site area: 150m^2 (footprint area)

Recent land use: Garden

Contents

Summary: Mildenhall, land at 11 Stirling Close, West Row (MNL 777, TL 6776 7541*) evaluation trenching for a single new dwelling plot in the area defined as the historic core of West Row did not reveal any archaeological features and the few stray finds were of recent date (John Newman Archaeological Services for Mr R Smith).*

1. Introduction & background

1.1 Mr S Inglis on behalf of his client Mr R Smith commissioned John Newman Archaeological Services (JNAS) to undertake the archaeological evaluation works on the site of a single new dwelling development at 11 Stirling Close, West Row, Mildenhall (see Fig. 1). The evaluation requirements were set out in a Brief, following the granting of planning application DC/13/0370/FUL, set by Mr J Rolfe of the Suffolk CC Archaeological Service (SCCAS) with the aim of gaining a representative sample by trial trenching of the development area concerned. The Written Scheme of Investigation for the archaeological evaluation (see Appendix II) was subsequently prepared by JNAS in order to gain a conditional discharge and allow the trenching to go ahead before any other ground works are undertaken.

1.2 West Row is a historic hamlet within the large parish of Mildenhall on the eastern side of the Fens in west Suffolk with the proposed development site being located towards the southern side of the hamlet and c1000m west of the historic Fen edge and 550m north of the River Lark. The area of the Fens is also well known for containing extensive evidence for earlier prehistoric activity in particular dating to the period before increasingly wet conditions from the Iron Age onwards forced a retreat to the Fen edge with Roman period activity also being well represented in the latter area. This earlier prehistoric activity was particularly sensitive to minor changes in the topography of the Fens making full use of any slightly raised areas in order to exploit the rich natural resources that were available nearby with this site lying just above 5m OD. Soils across the Suffolk part of the Fens are generally of a light sandy or peaty type with the underlying drift geology being free draining sands and gravels between outcrops of chalk. Pockets of peat, with the potential to contain preserved palaeo-environmental evidence, also exist where hollows have been created in the sands and gravels though the continual lowering of local ground water levels has degraded many of these pockets. In the recent past this site has been part of a garden and was soft, though very desiccated and hard, ground.

1.3 Archaeological interest in this planned development was generated by its location within the area defined in the County Historic Environment Record (HER) as the historic core of West Row (HER MNL 676) where heritage assets of medieval and Post medieval date might be anticipated.

2. Evaluation methodology

2.1 The 150m^2 area of the planned dwelling footprint was trenched to an agreed plan (see Fig. 2). The trenching was carried out using a medium sized 360 machine equipped with a 1200mm wide flat bucket, though at the start of the evaluation the upper level had to be broken up with a toothed 500mm bucket, which was under archaeological supervision at all times and any indistinct areas were hand cleaned as necessary to improve clarity.

2.2 The sides and base of the trench and the upcast spoil were examined visually and scanned briefly with a metal detector for any finds as the evaluation progressed and any potential features were investigated. Site visibility for features and finds is considered to have been good during the evaluation which was undertaken under generally dry and sunny conditions. At the end of the evaluation the location of the trench was plotted from nearby mapped features and as the works progressed a full photographic record in digital format (see Appendix I) was taken.

3. Results

3.1 The relevant details for the evaluation trench is summarised in the table below (see also Fig. 2 & Appendix I):

Trench	Orientation	Length (m)	Topsoil depth (mm)	Subsoil depth (mm)	Drift geology	Archaeological/ natural features & finds
1	Northwest-southeast	10	300	300 to 600 mid brown sand	Chalk with small pockets of degraded silty light brown chalk	No archaeological features and the only stray finds were of recent date
		10 (18m^2)	300	300 to 600		Overall trench depth 600mm to 900mm

Table 1: Trench details

3.2 The 10m long and 1.80m wide trench had a deposit profile comprising 300mm of topsoil over 300mm, at each end of the trench, to 600mm, in the central part, of mid brown sandy subsoil. In the upcast spoil the only stray finds were of recent date and typical for a former garden to a house of mid-20th century date and on archaeological features were revealed in the trench. In addition the metal detector search was hindered by the debris of recent date in the top and subsoil.

4. Conclusion

4.1 While this site is located towards the south-western edge of the historic hamlet of West Row no archaeological features were revealed in the evaluation trench with the underlying chalk showing a slightly undulating surface as the central part of the trench was 300mm deeper in the area of a gently sloping, natural, hollow. In addition the stray finds seen in the upcast spoil did not suggest any significant activity of pre 20th century date in this part of West Row though the area of the planned new dwelling examined was small.

4.3 Based on these evaluation results it is recommended that no further archaeological investigations should be required at the planned new dwelling adjacent to 11 Stirling Close, West Row, Mildenhall.

Archive- to be deposited with the Suffolk CC Archaeological Service under the HER ref: MNL 777.

Disclaimer- any opinions regarding the need for further archaeological work in relation to this proposed development are those of the author's alone. Formal comment regarding the need for further work must be sought from the official Archaeological Advisors to the relevant Planning Authority.

(Acknowledgements: JNAS is grateful to everyone on site for their close cooperation)

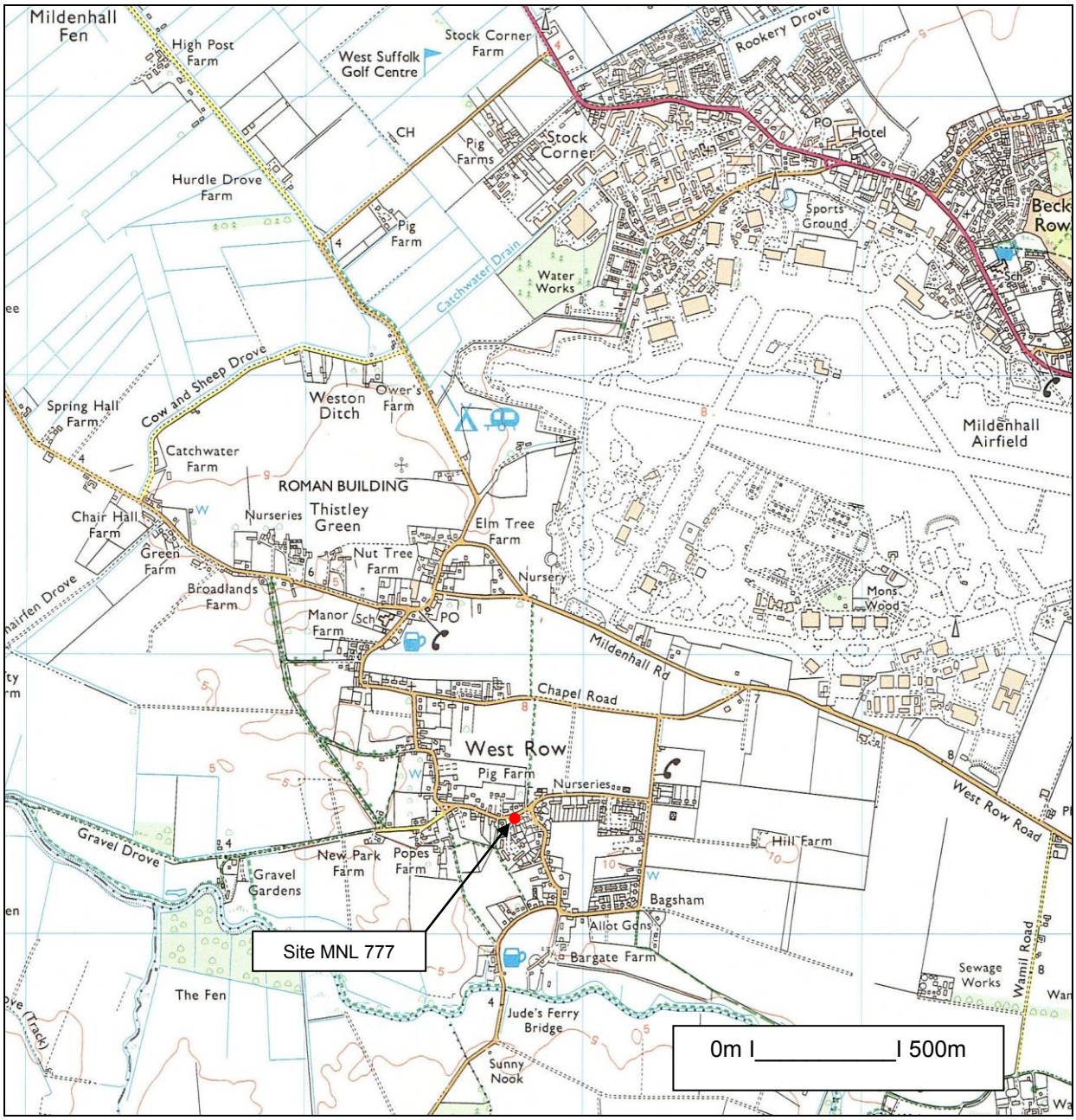


Fig. 1: Site location

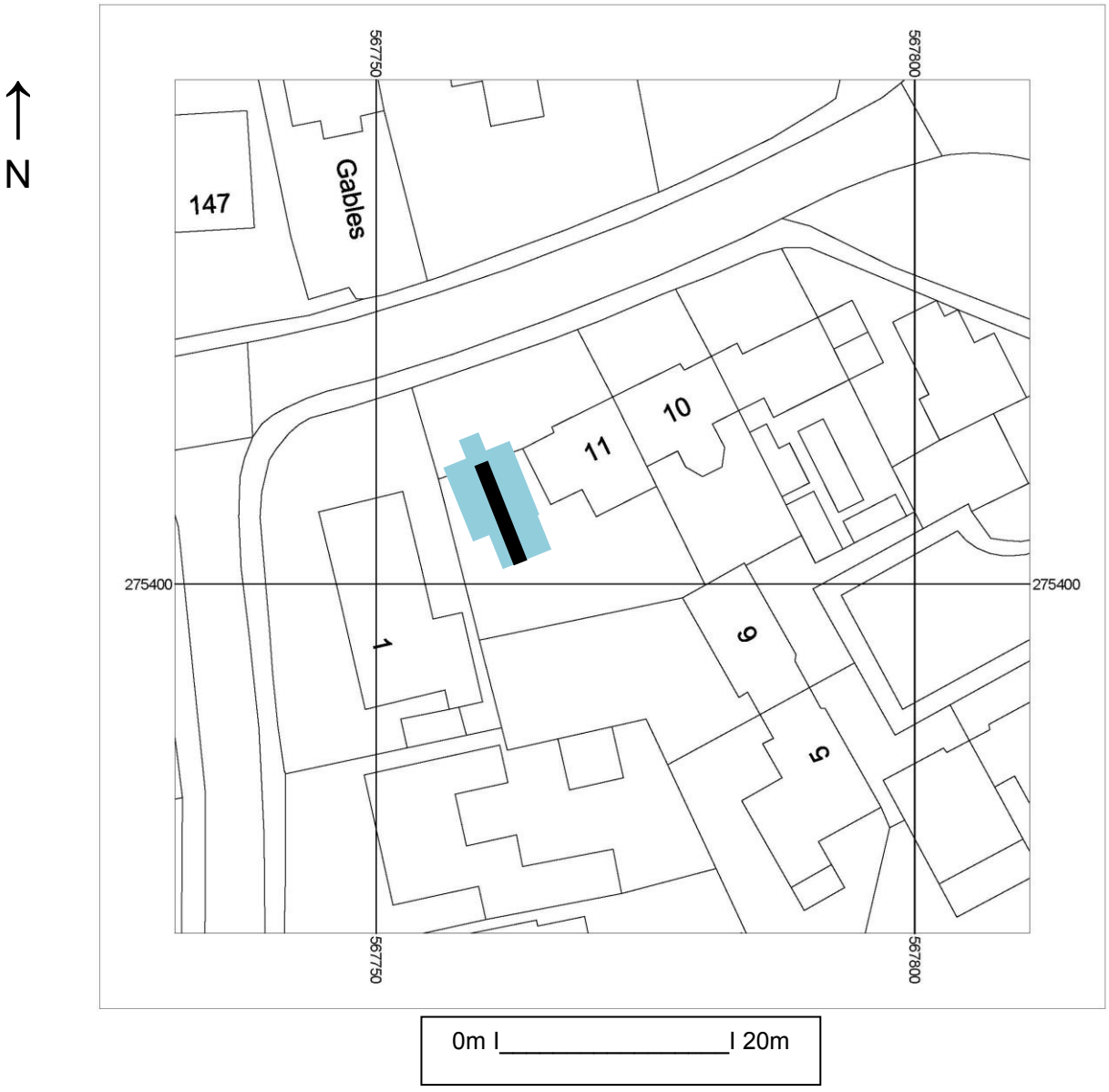


Fig. 2: Location of evaluation trench (light blue- new dwelling footprint)

Appendix I- Images

General view from north

Trench from north

Trench deposit profile

Land at 11 Stirling Close, West Row, Mildenhall, Suffolk

Written Scheme of Investigation for

Archaeological Evaluation

(© John Newman BA MCIFA, 2 Pearsons Place, Henley, Ipswich, IP6 0RA)

(Tel: 01473 832896 Email: johnnewman2@btinternet.com)

Site details

Name: Land at 11 Stirling Close, West Row, Mildenhall, Suffolk

Client: Mr J Simmons

Local planning authority: Forest Heath DC

Planning application ref: DC/13/0370/FUL

Proposed development: Erection of a chalet type dwelling

Proposed date for evaluation: tbc

Brief ref: SCCAS Brief for a Trenched Archaeological Evaluation _11 Stirling Close,, West Row, Mildenhall_DC/13/0370

Grid ref: TL 6778 7538

Contents

1. Introduction

1.1 Mr S Inglis on behalf of his client Mr J Simmons has commissioned John Newman Archaeological Services (JNAS) to undertake the archaeological site evaluation for a proposed single dwelling development that has received consent to go ahead. This written scheme of investigation (WSI) details the background to the archaeological requirements for planning application DC/13/0370/FUL and how JNAS will implement the requirements in the Brief for Archaeological Evaluation set by Mr J Rolfe of the Suffolk CC Archaeological Service (SCCAS). The WSI will also set out how potential risks will be mitigated. This proposed development concerns the construction of a single chalet type dwelling on land at 11 Stirling Close, West Row, Mildenhall.

1.2 The evaluation will be carried out to the standards set regionally in the *Standards for Field Archaeology in the East of England (EAA Occ. Papers 14, 2003),* locally in *Requirements for Archaeological Evaluation 2012 Ver. 1.3 (Suffolk CC)* and nationally in *Standards and Guidance for Archaeological Field Evaluation (Chartered Institute for Archaeologists 1994, revised 2001)*.

1.3 The evaluation as detailed in this document is the first phase of a programme of archaeological investigation secured by negative condition on planning consent DC/13/0370/FUL. Where the results of the evaluation indicate the presence of heritage assets further archaeological works will be required to mitigate the impact of the development on the historic environment. The SCCAS officer will identify the type and extent of works in a new brief necessary to adequately mitigate the impact of the proposed development. All further archaeological works, as recommended by SCCAS, must be undertaken in accordance with an additional WSI, submitted and approved by SCCAS and the LPA. All further archaeological investigations must be undertaken prior to commencement of development, unless specifically referenced as monitoring of groundworks in the approved WSI.

2. Location, Topography & Geology

2.1 West Row is a historic hamlet within the large parish of Mildenhall on the eastern side of the Fens in west Suffolk with the proposed development site (PDS) being located towards the southern side of the hamlet and c1000m west of the historic Fen edge and 550m north of the River Lark. The area of the Fens is also well known for containing extensive evidence for earlier prehistoric activity in particular dating to the period before increasingly wet conditions from the Iron Age onwards forced a retreat to the Fen edge with Roman period activity also being well represented in the latter area. This earlier prehistoric activity was particularly sensitive to minor changes in the topography of the Fens making full use of any slightly raised areas in order to exploit the rich natural resources that were available nearby with the PDS lying just above 5m OD. Soils across the Suffolk part of the Fens are generally of a light sandy or peaty type with the underlying drift geology being free draining sands and gravels

between outcrops of chalk. Pockets of peat, with the potential to contain preserved palaeo-environmental evidence, also exist where hollows have been created in the sands and gravels though the continual lowering of local ground water levels has degraded many of these pockets. At present the PDS is soft ground having been in use as part of a garden.

3. Archaeological & Historical Background

3.1 To quote from the relevant brief 'The proposed development lies within the historic settlement core of West Row, recorded on the County Historic Environment Record as MNL 676. As a result there is high potential for encountering evidence of early occupation at this location. The proposed works would cause significant ground disturbance that has potential to damage any archaeological deposits that exist.'
A site evaluation by trial trenching is therefore required to

- Identify the date, approximate form and purpose of any archaeological deposit, together with its likely extent, localised depth and quality of preservation.

- Evaluate the likely impact of past land uses, and the possible presence of masking colluvial/alluvial deposits.

- Establish the potential for the survival of environmental evidence.

- Provide sufficient information to construct an archaeological conservation strategy, dealing with preservation, the recording of archaeological deposits, working practices, timetables and orders of cost.

4. Aims of the Site Evaluation

4.1 As outlined in section 3 above the archaeological potential of the PDS relates to its location within the historic hamlet of West Row where evidence for activity of medieval and early Post medieval date can be anticipated; in addition evidence for prehistoric and Roman period activity may also be present. The aim of the evaluation is therefore to examine the specified sample of the proposed development area with an evaluation trench under controlled conditions so, if archaeological deposits are revealed they can be sampled and characterised. With this information a strategy can then be formulated for their possible preservation in situ or, failing that, the systematic recording of these deposits and the associated working practices, timetables and orders of cost.

5. Methodology

5.1 The proposed development is for a single residential dwelling on land at 11 Stirling Close, West Row. If the evaluation results prove to be positive an HER

search of the area within 500m of the PDS will be commissioned from SCCAS and the relevant invoice number will be included in the report and the evaluation results will be interpreted in relation to known nearby known archaeological sites and finds.

5.2 The Brief requires 10m of 1.80m wide trenching, this will be undertaken using a 1/1.20m wide toothless ditching bucket on a suitably sized machine operated by an experienced driver with a trench plan as set out below. The machine will be closely supervised by an experienced archaeologist as the overburden is removed in shallow spits to the top of any archaeological deposits that are present, where hand investigation will start, or to expose the underlying natural geology which will be further hand cleaned and examined. The spoil will be stored adjacent to the excavated trench with top and sub soil kept separate to allow for subsequent sequential backfilling. No trenches will be backfilled until the relevant officer at SCCAS has been consulted and should any modification to the trench layout be required due to any unforeseen circumstances, such as local services, then SCCAS will be contacted immediately. A metal detector search will be carried out by an experienced operator at all stages of the evaluation in and around the trench. The upcast spoil will also be closely examined for unstratified artefacts as evidence for past activity in rural areas in particular is often as evident via artefact scatters as by undisturbed archaeological deposits.

5.3 Site records will be made under a continuous and unique numbering system of contexts under overall site event and HER numbers obtained from the Suffolk CC HER beforehand. All contexts will be numbered and finds recorded by context. Conventions compatible with the county HER will be used throughout the monitoring. Site plans will be drawn at 1:20 or 1:50 as appropriate and sections at 1:10 or 1:20 (all on plastic drawing film) and related to OS map cover. Sections will be levelled to a datum OD. A photographic record in high resolution digital images will be made of the site and exposed features.

5.4 As necessary and to define archaeological deposits exposed surfaces will be trowelled clean before appropriate hand investigation and recording. Exposed archaeological features will be sampled at standard levels with care being taken to cause minimum disturbance to the site consistent with evaluation to a level adequate to properly form a subsequent mitigation strategy. Significant features such as solid or bonded structural remains, building slots or post holes (where fills are sampled) will have their integrity maintained (and during backfilling). Otherwise for discrete, contained, features, sampling will be at 50%- possibly rising to 100% if requested, and 1m wide sampling slots across linear features. If human burial evidence is revealed the SCCAS Officer will be informed and the clear presumption must be to preserve such remains in situ with minimum disturbance during this evaluation stage. If this is not possible then a Ministry of Justice licence will be obtained prior to full on site recording (total 100% sampling if a cremation deposit) and removal of the remains followed by examination by the relevant specialist and possibly scientific dating. If human remains do have to be recorded, removed from site and reported on

then these works will add an additional cost to the evaluation works which may involve radiocarbon dating (in this case the likelihood of revealing human burial evidence is assessed as being low).

5.5 All finds will be collected and processed unless any variation is agreed with the relevant SCCAS Officer. Finds will be assessed by recognised period specialists and their interpretation will form an integral part of the overall report. Finds will be stored according to ICON guidelines with specialist advice/treatment sought for fragile ones. Every effort will be made to gain the deposit of the site finds to the SCCAS Store under their relevant HER code and site numbering for future reference. If this is not possible then the SCCAS Officer will be consulted over any requirements for additional recording (which may have an additional cost implication). Any discard policy will be discussed and agreed with the relevant SCCAS Officer.

5.6 Where appropriate palaeoenvironmental samples will be taken for processing and assessment by a specialist conversant with regional archaeological standards and research agendas. The sampling, processing and assessment will follow as detailed in *Environmental Archaeology: A Guide to the Theory and Practice of Methods, from Sampling and Recovery to Post Excavation* (English Heritage, 2011, second edition). In accordance with standard practice bulk samples of 40 litres (or 100% of the deposit where less) will be taken from a representative cross section of archaeological deposits of all periods (respecting defined fills within features), in consultation with the relevant SCCAS Officer (and RSA if the deposits merit more targeted advice) including deposits that cannot be immediately dated by their artefact content, so the state of preservation and full archaeological and palaeoenvironmental potential of the deposits can be assessed and any further sampling, should further field work take place, be systematically planned and fully costed. Archaeological deposits of all types may reveal valuable data through the processing and assessment of samples with high priority features including the primary fills of pits, wells and cesspits, layers of middens, occupation surfaces and structural features as well as other discrete activity areas, contents of hearths, ovens, and other craft related or industrial structures. In addition more generalised settlement and land use features such as ditches may also yield valuable and informative data when sampling is undertaken systematically as the sum of all the assessment results can add considerably to the interpretation of a site and its landscape. Through an integrated study of all the data recovered from the evaluation the results from the assessment of the samples will be reviewed in terms of:

- What is the quality and state of preservation of charred plant remains, mineralised plant and animal related remains, small vertebrates and industrial residues such as evidence for iron working (contributing to the fullest interpretation of the evaluation results and to aid the planning of any further field work- if any RC dates are required on features containing suitable material but no easily dateable finds then this will incur an additional cost though this is a rare occurrence on small scale evaluations).

- What is the concentration of macro-remains (to inform sampling strategy in any further field work), in particular how might bulk sampling inform the interpretation of burial deposits.

- Can any patterning or similarities/differences be ascertained between deposits from different periods represented on site, similarly can any useful comparisons be made with undated and unphased deposits (to aid interpretation of the evaluation results and help in the study of undated deposits which may otherwise be overlooked and which may via sampling yield material for RC dating)

- Do waterlogged deposits exist on site, if so is there potential for palaeoenvironmental data from preserved insects or pollen and do such deposits contain organic material suitable for RC dating from samples taken as advised by the relevant soil specialist (who would also coordinate the assessment for pollen and insect remains), the RSA will also be consulted in such cases in conjunction with the relevant SCCAS Officer. Incremental column samples will be taken should waterlogged deposits be revealed in close consultation with the evaluation soils specialist with 10-20 litre sample sizes which will be sub-sampled for preserved pollen, insects, diatoms, preserved parasite eggs etc. If waterlogged wood is encountered it will ideal to leave in situ, if it has to be lifted it will be packed while wet in black polythene and stored at 5C until it can be transferred to a specialist for species identification, assessment and potential for RC dating is undertaken (should RC dating be required in the evaluation on such deposits this will be covered within the resources agreed for the first date but will take time to obtain, examination of the topographic location of the site indicates that the presence of waterlogged deposits is unlikely unless particularly deep features are present).

- Deep blanket type deposits resulting from both natural and human derived actions and events can yield valuable land use and palaeoenvironmental information. In particular such deposits can form at the base of a slope, if located in the evaluation the relevant SCCAS Officer and RSA will be consulted over monolith sampling and assessment by the relevant evaluation specialist (the composition of such deposits may give information on past land use in the area through a study of the soil matrix notwithstanding additional data if it is waterlogged)

5.7 An archive of all records and finds will be prepared consistent with the principles in *MoRPHE*. This archive will be deposited with the Suffolk CC HER within 3 months of working finishing on site under the relevant HER number and following the guidelines outlined in *'Archaeological Archives in Suffolk- Guidelines for preparation and deposition'* (SCCAS Conservation Team 2015*)*. As necessary the site digital

archive will deposited with the Archaeology Data Service (ADS) within the agreed allowance for the monitoring and reporting works.

5.8 The evaluation report will be consistent with the principles of *MoRPHE* and this report will summarise the methodology employed and relate the archaeological record directly to the aims of this WSI and section 4 above in particular. The report will give an objective account of the deposits and stratigraphy recorded and finds recovered with an inventory of the latter. The report will include an assessment of palaeoenvironmental remains recovered from palaeosols and cut features in relation to both dated and undated features and in terms of patterning across the site.

5.9 Any interpretation of the evaluation will be clearly separated from the objective account of the evaluation and its results and the results will be discussed with the relevant SCCAS Officer at an early stage in the reporting process following reporting on the day of the immediately apparent conclusions. The report will give a clear statement regarding the results of the site evaluation in relation to both the more detailed aims in section 4 above and their significance in the context of local HER records and of the Regional Research Framework (EAA Occ. Papers 3, 8 & 24, 1997, 2000 & 2011). There will be no further work on site until the evaluation results have been assessed and the SCCAS Officer has considered whether further archaeological works are required if this application receives consent. The report may give an opinion regarding the necessity for further evaluation work as appropriate. A draft pdf copy of the report will be presented to SCCAS following completion of the site works. Once accepted a bound hard copy will be provided for the County HER with a digital version on disc. As required the site evaluation will be registered on the OASIS online archaeological record before site works commence followed by submission of the final draft in .pdf format. An HER summary sheet will be completed and a summary prepared of any positive results for inclusion in the annual PSIAH round-up.

6. Risk Assessment

6.1 Protective clothing will be worn on site (hard hat, high visibility vest/coat, steel-toe cap boots, and ear muffs if required). A safe working method will be agreed with the machine operator for excavation of the trenches and examination of the up cast spoil while at the same time allowing efficient use of plant. Suitable clothing will be available to mitigate against extremes of weather.

6.2 Vehicles will be safely parked away from work areas and lines of access.

6.3 Discussion with the client's agent has already confirmed that there is no known, or likely, ground contamination and the discovery of underground services is unlikely. No overhead services impinge on the trench locations. Gloves and hand wash/wipes be available and any information on possible ground contamination revealed during the evaluation will be passed to finds and environmental specialists.

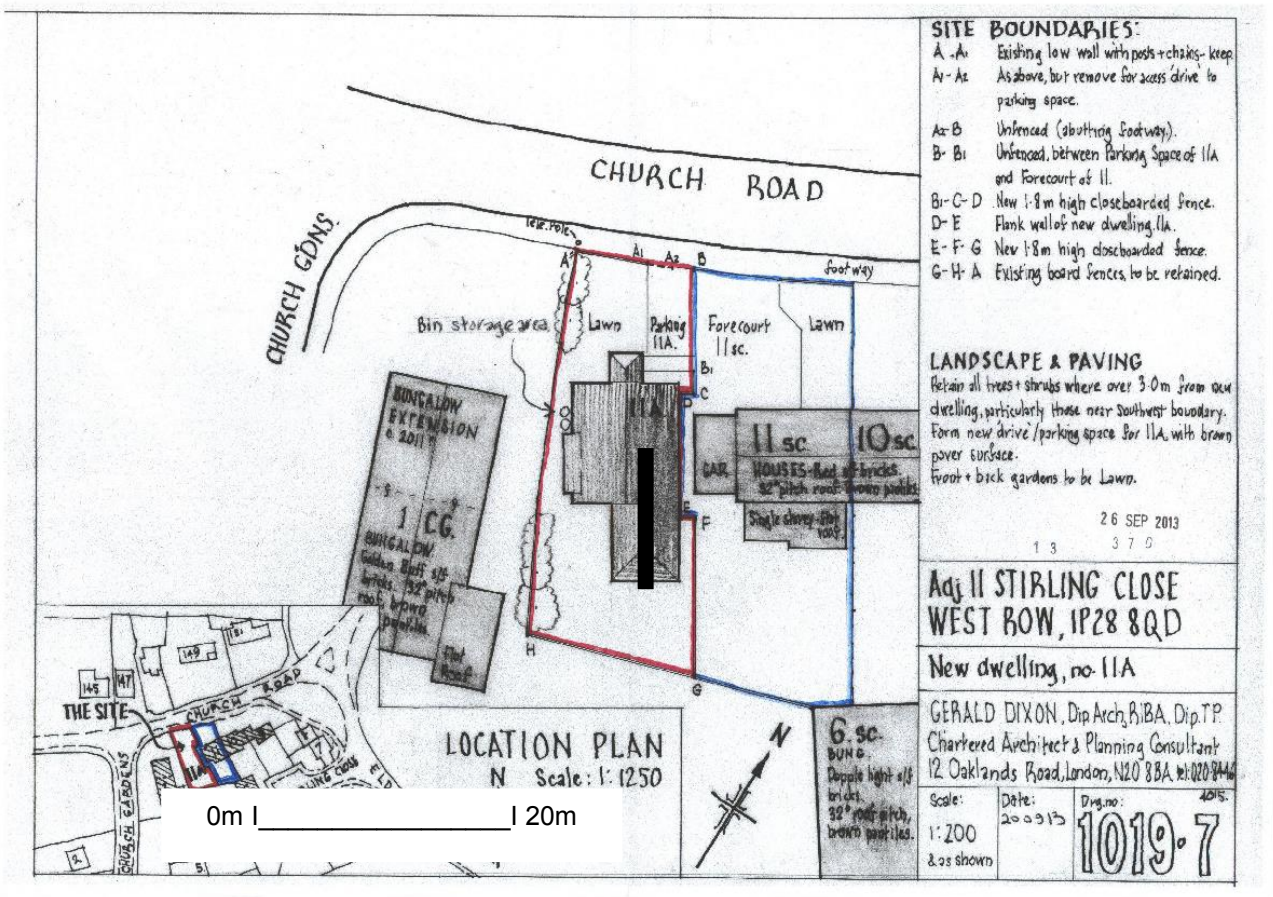
6.4 A fully charged mobile phone will be carried and a first aid kit will be taken to site.

6.5 It is unlikely that any trench plus excavated feature depth will go below c1/1.3m from the present ground level. If any excavations need to go deeper measures such as stepping in the sides will be employed.

6.6 JNAS holds full insurance cover for archaeological site works from the specialist provider Towergate Risk Solutions covering Public & Products Liability, details can be supplied on request.

7. Specialists

Conservation:	Conservation Services
Faunal remains:	J Curl (Sylvanus Archaeology)
Human remains:	S Anderson (Freelance)
Metal detecting:	J Armes (experienced freelance)
Palaeoenvironmental samples:	V Fryer (Freelance)
Soils specialist	R Macphail (UCL)
Pre-historic flint:	S Bates (Freelance)
Pre-historic pottery:	S Percival (Freelance)
Post Roman ceramics & CBM:	S Anderson (Freelance)
Roman period small finds:	N Crummy (Freelance)
Roman period ceramics:	S Benfield (CAT)
Medieval coins:	M Allen (Fitzwilliam Museum)
Post Roman small finds:	JNAS



Proposed location of trial trench (10m x 1.80m)

OASIS ID: johnnewm1-260490

Project details	
Project name	Land at 11 Stirling Close, West Row, Mildenhall, Suffolk- Archaeological Evaluation Report
Short description of the project	Mildenhall, land at 11 Stirling Close, West Row (MNL 777, TL 6776 7541) evaluation trenching for a single new dwelling plot in the area defined as the historic core of West Row did not reveal any archaeological features and the few stray finds were of recent date.
Project dates	Start: 19-08-2016 End: 19-08-2016
Previous/future work	No / No
Any associated project reference codes	ESF 24541 - HER event no.
Any associated project reference codes	MNL 777 - Related HER No.
Any associated project reference codes	DC/13/0370/FUL - Planning Application No.
Type of project	Field evaluation
Site status	None
Current Land use	Other 5 - Garden
Monument type	NONE None
Significant Finds	NONE None
Methods & techniques	"'Sample Trenches"'
Development type	Small-scale (e.g. single house, etc.)
Prompt	Planning condition
Position in the planning process	After full determination (eg. As a condition)
Project location	
Country	England
Site location	SUFFOLK FOREST HEATH MILDENHALL LAND AT 11 STIRLING CLOSE, WEST ROW
Study area	200 Square metres
Site coordinates	TL 6776 7541 52.350623668769 0.463402070523 52 21 02 N 000 27 48 E Point
Height OD / Depth	Min: 5m Max: 6m

Project creators	
Name of Organisation	John Newman Archaeological Services
Project brief originator	Local Authority Archaeologist and/or Planning Authority/advisory body
Project design originator	John Newman
Project director/manager	John Newman
Project supervisor	John Newman
Type of sponsor/funding body	Developer
Project archives	
Physical Archive Exists?	No
Digital Archive recipient	Suffolk CC Archaeological Service
Digital Contents	"none"
Digital Media available	"Images raster / digital photography","Text"
Paper Archive recipient	Suffolk CC Archaeological Service
Paper Contents	"none"
Paper Media available	"Report"
Project bibliography 1	
Publication type	Grey literature (unpublished document/manuscript)
Title	Land at 11 Stirling Close, West Row, Mildenhall, Suffolk- Archaeological Evaluation Report
Author(s)/Editor(s)	Newman, J
Date	2016
Issuer or publisher	John Newman Archaeological Services
Place of issue or publication	Henley, Suffolk
Description	Loose bound client report and pdf
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