

# *Archaeology Wales*

## **Land at Gungrog Farm, Welshpool (Powys)**

Archaeological Field Evaluation



By

Irene Garcia Rovira

Report No. 1666

# Archaeology Wales

## Land at Gungrog Farm Welshpool (Powys)

Archaeological Evaluation

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**April 2018**

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## ***Non-technical Summary***

*Archaeology Wales Ltd carried out an archaeological field evaluation from the 28<sup>th</sup> of March to the 4<sup>th</sup> of April at the request of J. Ross Developments Ltd. This programme of works was recommended by CPAT-DC – archaeological advisors for Powys County Council- in response to the proposal for the erection of 54 dwellings, formation of access roads and all associated works at land at Gungrog Farm, Welshpool SY21 7HF (SJ 2362 0833). The associated Planning Application No. is P/2018/0272.*

*A DBA carried out by CPAT in 2017 revealed that the proposed development area was used as open agriculture fields in post-medieval times. Furthermore, LiDAR imaging documented a number of possible earthworks within the area. This research was preceded by non-intrusive investigations in the form of a geophysical survey which indicated the presence of a number of anomalies of possible archaeological origin.*

*The programme of intrusive trial trench evaluation allowed for nine trenches to be excavated in locations where anomalies were defined by the geophysical survey. Trench 3 revealed the remains of post-medieval agricultural activity. Trench 5 was partly excavated due to the presence of underground services in the area. Post-medieval land drains were revealed in Trench 4 and 5. Trench 6 and 7 revealed the remains of a possible ditch following the topography of the area. These features could however be of natural origin, therefore, the result of sedimentation over sunken areas originated through the undulating character of the underlying geology.*

*All work conformed to Standard and Guidance for Archaeological Field Evaluation (CIfA 2014) and Standards and Guidance for Archaeological Artefact and Environmental Collection, Documentation Conservation and Research (CIfA 2014).*

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## 1. Introduction

In March 2018, Archaeology Wales was commissioned by J Ross Developments Ltd to carry out an archaeological field excavation on land at Gungrog Farm, Welshpool SY21 7HF (SJ 2362 0833). The associated Planning Application No. is P/2018/0272.

The archaeological field evaluation drew on the results obtained by a geophysical survey which defined the location of previously unrecorded archaeological features. It was agreed that the archaeological evaluation would test these anomalies by means of nine evaluation trenches. During the course of the evaluation Trench 5 was partly excavated as underground services were located in the area. All changes were consulted and agreed by CPAT-DC prior the commencement of works.

The field evaluation was carried out under the supervision of Jerry Bond, with Dr Erika Guttmann-Bond and James Weaver, all of Archaeology Wales. The project was managed by Dr Irene Garcia Rovira. The fieldwork was undertaken between the 28<sup>th</sup> of March to the 4<sup>th</sup> of April 2018.

All work conformed to *Standard and Guidance for Archaeological Field Evaluation* (CIfA 2014) and *Standards and Guidance for Archaeological Artefact and Environmental Collection, Documentation Conservation and Research* (CIfA 2014).

## 2. Site description and archaeological background

### 2.1 Location, Topography and geology

The site measures 2.17 hectares and is centred on SJ 2362 0833. The area is bounded by the Shropshire Union Canal to the east, and a small lane off the A483 to the north. The land is currently defined by an open field of improved grassland and lies 80m AOD (Figure 1).

The underlying geology is defined by the Nantglyn Flags Formation and comprises mudstone, siltstone and sandstone formed during the Silurian Period. The superficial soils are defined by Till, Devensian – Diamicton formed during the Quaternary Period (BGS 2018).

## **2.2 Archaeological and historical background**

A DBA prepared by CPAT in 2017 with regards to the planning application highlights the presence of past activity within and surrounding the proposed development area. The results of the DBA are summarised below:

### **Prehistoric Activity**

- In 2010, an archaeological excavation carried out by CPAT revealed a Mesolithic flint assemblage formed of 161 flint and chert artefacts, 1km SW of the development area (Jones and Gwilt 2014).
- A partly polished axe of Neolithic date was recovered in 1911 at Gungrog (Hankinson 2017).
- In 2006, CPAT revealed Bronze Age activity in the form of a cremation burial as well as Neolithic artefacts 1k NE of the proposed development (Grant and Jones 2006). Iron Age evidence in the form of gullied defining a field system were also identified during this excavation.

### **Roman Activity**

- In 1959, a number of Romano-British artefacts were discovered at Welshpool Smithfield. Other Roman finds in the vicinity of Welshpool have been identified and suggest the presence of Roman settlement in the area (Hankinson 2017).

### **Medieval and post-medieval activity**

- The proposed development is located NE of Welshpool though the area fell within the parish of Guilsfield. It is documented that the area was occupied by open field agriculture in the post-medieval period though it may have had its origins in the medieval period. Two names recorded within the Tithe map of 1840 suggest the presence of an open field. Traces of earthworks possibly relating to them have been identified in LiDAR imagery and documented in the DBA produced by CPAT in 2017.

- The Tithe map of 1846 documents a possible wharf on the canal bounding the eastern area of the site. However, there are no associated structures.

Furthermore, non-intrusive investigations in the form of a geophysical survey were carried out to assess the archaeological potential of the area in 2007. The geophysical survey located anomalies which are likely to be archaeological in nature (Figure 2).

### 3. Aims and Objectives

The objective of the intrusive trial trench evaluation was to locate and describe, by means of strategic trial trenching, archaeological features present within the development area. The work aimed to reveal the presence or absence of an archaeological resource, its character, distribution, extent, condition and relative significance. The work included an assessment of regional context within which the archaeological evidence rests and aimed to highlight any relevant research issues within national and regional research frameworks.

### 4. Methodology

The work was undertaken to meet the standard required by The Chartered Institute for Archaeologist's *Standard and Guidance for Archaeological Field Evaluation* (2014). The archaeological project manager in charge of the work was satisfied that all constraints to ground works had been identified, including the siting of live services and Tree Preservation Orders.

The agreed evaluation trenches were positioned to maximise the retrieval of archaeological information and to ensure that the archaeological resource was fully understood.

It was proposed that nine trenches, varying in size between 40 to 12 metres in length, were machine-excavated within the planned development area (Figure 2-3). The locations and dimensions of the trenches were agreed with CPAT-DC prior to the commencement of works, and targeted the results of a geophysical survey.

The presence of water mains meant that trenches 3 had to be relocated, while trenches 5 only partly excavated. These changes were agreed with CPAT-DC before



the commencement of works (Figure 3).

The evaluation trenches were excavated to the top of the archaeological horizon by a machine fitted with a toothless grading bucket under close archaeological supervision. All areas were subsequently hand cleaned using pointing trowels and/or hoes to prove the presence, or absence, of archaeological features and to determine their significance. The excavation of the minimum number of archaeological features was undertaken, to elucidate the character, distribution, extent and importance of the archaeological remains. As a minimum the small discrete features were fully excavated, larger discrete features were half-sectioned (50% excavated) and linear features had interventions excavated along their length, with 20% of the feature being excavated. Terminal ends of linear features and relationships with other features were investigated.

Sufficient excavation was undertaken to ensure that the natural horizon was reached and proven across the site.

## 5. Evaluation results

### **Trench 1 (Plates 1-2; Figures 3-4)**

Trench 1 was 12.5m in length and 1.5m in width and was orientated NNW/SSE. The natural substrate (102) was found 0.5m below the ground level. A sondage was cut (0.8m in depth) to verify the nature of the (102). The latter was defined by brown yellow silty clay and contained 5-15% of poorly sorted stones toward the NNW extreme of the trench. This deposit was overlaid by (103), a layer defined as yellow brown clayey silt with moderate stone inclusions interpreted as the subsoil. (103) was overlaid by the topsoil (100), a deposit of soft grey brown clayey silt encountered to a depth of 0.3m. Three fragments of brick were encountered within the topsoil. No archaeological features were revealed during the excavation of this trench.

### **Trench 2 (Plate 3-4; Figures 3-4)**

Trench 2 was 18m in length and 1.5m in width and was orientated NNE/SSW. The natural substrate (202) was found 0.5m below the ground level. This deposit was

defined as a very heterogeneous till deposit and characterised as blue grey sandy silty clay with orange mottle. The nature of this deposit was interpreted as the resulting effect of a fluctuating water table. (202) included gravel deposits within it. The natural substrate was overlaid by (201), a layer of firm yellow brown silty clay with frequent small stone inclusions. (201) was overlaid by the topsoil (200), defined as a deposit of soft grey brown clayey silt encountered to a depth of 0.3m. No archaeological features were revealed during the excavation of this trench. Four fragments of blue and white ware dating to the late 19<sup>th</sup> to early 20<sup>th</sup> century were found within the topsoil. No archaeological features were revealed during the excavation of this trench.

### **Trench 3 (Plates 16-18; Figures 3-5)**

The position of Trench 3 was slightly altered due to the presence of water mains. The new position and size of the trench also targeted the geophysical anomaly detected during a previous survey of this field and was agreed by CPAT-DC.

Trench 3 was 21.3m in length and 1.5m in width and was orientated NNE/SSW. The natural substrate (302) was found 0.4m below the ground level. This deposit was defined as a very heterogeneous till deposit and characterised as blue grey sandy silty clay with orange mottle. The nature of this deposit was interpreted as the resulting effect of a fluctuating water table. The natural substrate was overlaid by (301), a layer of firm yellow brown sandy clay with frequent small stone inclusions. (301) was overlaid by the topsoil (300), defined as a deposit of soft grey brown clayey silt encountered to a depth of 0.3m.

A number of features were identified cutting through (302). These are described below:

- [312] was identified as a very shallow posthole with concave sides and base. The cut was 0.4m in diameter and was located at the northern extreme of the trench. The fill, (311), was c 0.06m in depth and consisted of soft mid-brown silty clay. The fill included a number of stones interpreted as packing stones.
- [310], [308], [306] and [304] were identified as furrows and characterised by sharp sides and an almost flat base. They were in average 0.55m to 0.65m in width and 1.5m in length (within the limits of the excavation area). In all

instances, these linear features were filled by mid-brown grey silty clay and contained occasional small angular stone inclusions. [306], [308] and [304] revealed the remains of blue and white wares. All the linear cuts were orientated NW/SE.

#### **Trench 4 (Plate 5-6; Figures 3-4)**

Trench 4 was 42m in length and 1.5m in width and was orientated NNE/SSW. The natural substrate (403) was found 0.3m below the ground level on the northern end of the trench. However, (403) was not revealed throughout the trench as this was overlaid by a deep deposit of colluvium (see below) which surpassed 1.5m in depth. (403) was defined as a very heterogeneous till deposit and characterised as blue grey sandy silty clay with orange mottle.

(402) was interpreted as a deposit either formed by colluvial or alluvial action (note that the trench is at the bottom of a slope and adjacent to a canal) and defined as firm yellow brown silty clay with occasional small angular stones. This deposit contained occasional charcoal flecks and exceeded 1.2m in depth on its southern end. A stone land drain (401) was cut through this deposit.

(403) and (402) were overlaid by the topsoil. The latter – (400) was a deposit of soft grey brown clayey silt encountered to a depth of 0.3m. Two fragments of brick and a fragment of blue and white ware dating to the late 19<sup>th</sup> to early 20<sup>th</sup> century were found within the topsoil.

#### **Trench 5 (Figure 3)**

The position and dimensions of Trench 5 were altered as the excavation the trench was hindered by existing underground services. A small area (not exceeding 2m in length) adjacent to a manhole was cut, revealing the remains of a land drain. The natural substrate (502) was defined by brown yellow silty clay and contained occasional small angular stone inclusions. This deposit was overlaid by (501), a layer defined as yellow brown clayey silt with moderate stone inclusions and interpreted as the subsoil. (501) was overlaid by the topsoil (500), a deposit of soft grey brown clayey silt encountered to a depth of 0.25m.

### **Trench 6 (Plate 12-13; Figures 3-5)**

Trench 6 was 14m in length and 1.5m in width and was orientated NW/SE. The natural substrate (602) was found 0.42m below the ground level. (602) was defined as a deposit of yellow brown silty clay with grey mottle. This deposit was cut by [604]. During its excavation it was difficult to determine whether [604] was a cut or a natural depression defined by the undulating geology filled as result of sedimentation processes. [604] was tentatively defined as a linear cut measuring 15m in length (within the trench) and 0.55m in width and was characterised by having shallow sides and a concave base. The cut was 0.4m in depth and was filled by (603), a deposit of friable red brown silty clay with red mottle.

The subsoil (601) was defined as soft grey brown silty clay with occasional stone inclusions and charcoal flecks. This deposit was encountered between 0.2m to 0.4m below the ground level and was overlaid by the topsoil (600). The latter was a deposit of dark red brown silty loam 0.2m in depth. No finds were recovered during the examination of this trench.

### **Trench 7 (Plate 10-11; Figures 3-5)**

Trench 7 was 14m in length and 1.5m in width and was orientated NW/SE. The natural substrate (703) was found 0.8m below the ground level. (703) was defined as a deposit of yellow brown sandy clay with grey mottle. This deposit was cut by [704]. During its excavation it was difficult to determine whether [704] was a cut or a natural depression defined by the undulating geology filled as result of sedimentation processes. [704] was tentatively defined as a linear cut measuring 15m in length (within the trench) and 0.55m in width and was characterised by having shallow sides and a concave base. The cut was 0.3m in depth and was filled by (702), a deposit of friable red brown silty clay with red mottle.

The subsoil (701) was defined as soft grey brown silty clay with occasional stone inclusions and charcoal flecks. This deposit was encountered between 0.3m to 0.4m below the ground level and was overlaid by the topsoil (700). The latter was a deposit of dark red brown silty loam 0.3m in depth. A fragment of brick was revealed during the removal of the topsoil.

### **Trench 8 (Plate 8-9; Figures 3-4)**

Trench 8 was 13m in length and 1.5m in width orientated NE/SW. The natural substrate (802) was observed 0.45m to 0.65m below the current ground level. It was comprised of gritty yellow grey clay with occasional small sub-angular stone inclusions.

This layer was overlaid by (801) – the subsoil – defined as slightly gritty plate grey silty clay encountered 0.3m to 0.45m below the ground level. (801) was overlaid by the topsoil (800) and identified as mid-grey brown clayey silt with occasional small angular stone inclusions.

No finds or features were revealed during the excavation and cleaning of this trench.

### **Trench 9 (Plate 14-15; Figures 3-4)**

Trench 9 was 16m in length and 1.5m in width and was orientated NNW/SSE. The natural substrate (902) was found between 0.6m to 1m below the ground level. This deposit was defined as a very heterogeneous till deposit and characterised as blue grey sandy silty clay with orange mottle. The natural substrate was overlaid by (901), a layer of firm yellow brown sandy clay with frequent small stone inclusions. (901) was overlaid by the topsoil (900), defined as a deposit of soft grey brown clayey silt encountered to a depth of 0.3m.

No finds and features were encountered during the excavation of this trench.

## **6. The Finds**

Although little artefactual material was recovered during the course of the fieldwork, the artefact assemblage does suggest activity on the site dating to post-medieval/modern chronologies.

Aside from Trench 3, all the artefactual material was recovered during topsoil stripping. Three fragments of brick were revealed within Trench 1, two fragments of blue and white ware dating to the late 19<sup>th</sup> to early 20<sup>th</sup> century were revealed within Trench 2 and four fragments within Trench 4, and a fragment of brick was recovered from the topsoil on Trench 7. Four fragments of blue and white ware dating to the

late 19<sup>th</sup> to early 20<sup>th</sup> century were exposed during the excavation of furrow in Trench 3.

## 7. Discussions and Conclusions

During the field evaluation, nine trenches of different dimensions were cut to examine a number of anomalies revealed during a geophysical survey. Trench 6 and 7 targeted a large linear anomaly located toward the southern end of the field. The field evaluation demonstrated that this anomaly corresponded to a large shallow depression. The latter was initially interpreted as the possible remains of a ditch, however, given the geological make-up and topography of the area, it was concluded that this feature might not be of human origin but instead the result of sedimentation processes over a sunken area defined by the underlying geology.

Agricultural activity dating to the late 19<sup>th</sup> century was testified in Trench 3 by four furrows. A shallow post-hole was also revealed in this trench; however, it has remained undated.

A deep deposit of colluvium/alluvium was evidenced in Trench 4. The latter would have formed due to its position within the landscape, at the bottom of a slope, and in close proximity to the canal. It was not possible to remove this deposit on its entirety as it surpassed the permitted depths of excavation.

Trench 1, 8 and 9 were devoid of any archaeological remains.

## 8. Bibliography

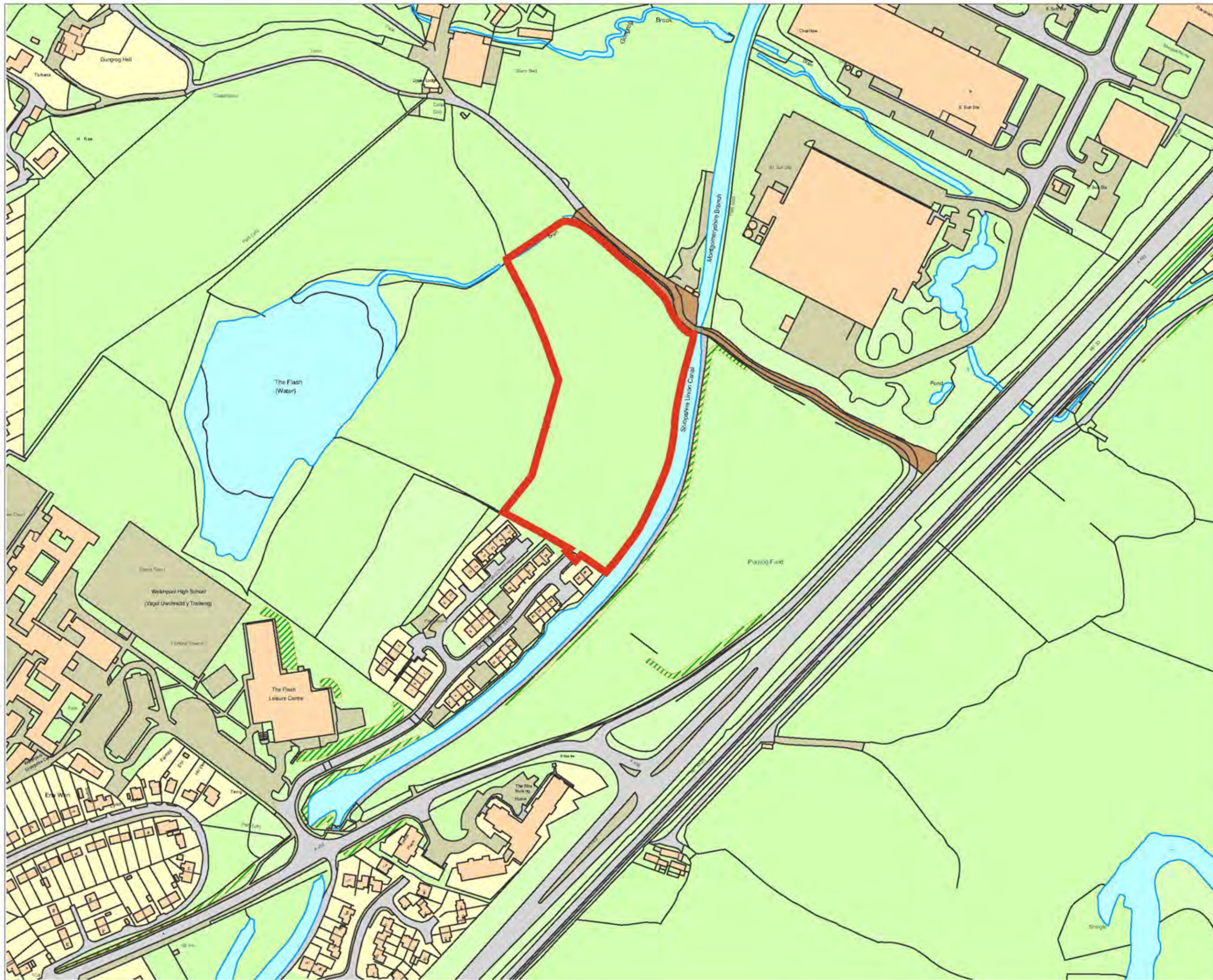
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[www.bgs.ac.uk/discoveringGeology/geologyOfBritain/viewer.html](http://www.bgs.ac.uk/discoveringGeology/geologyOfBritain/viewer.html)

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**APPENDIX I:**





**NOTES**

Do not scale from drawing. All figured dimensions in mm and to be checked on site.  
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rev.	description	date	by

status: Sketch

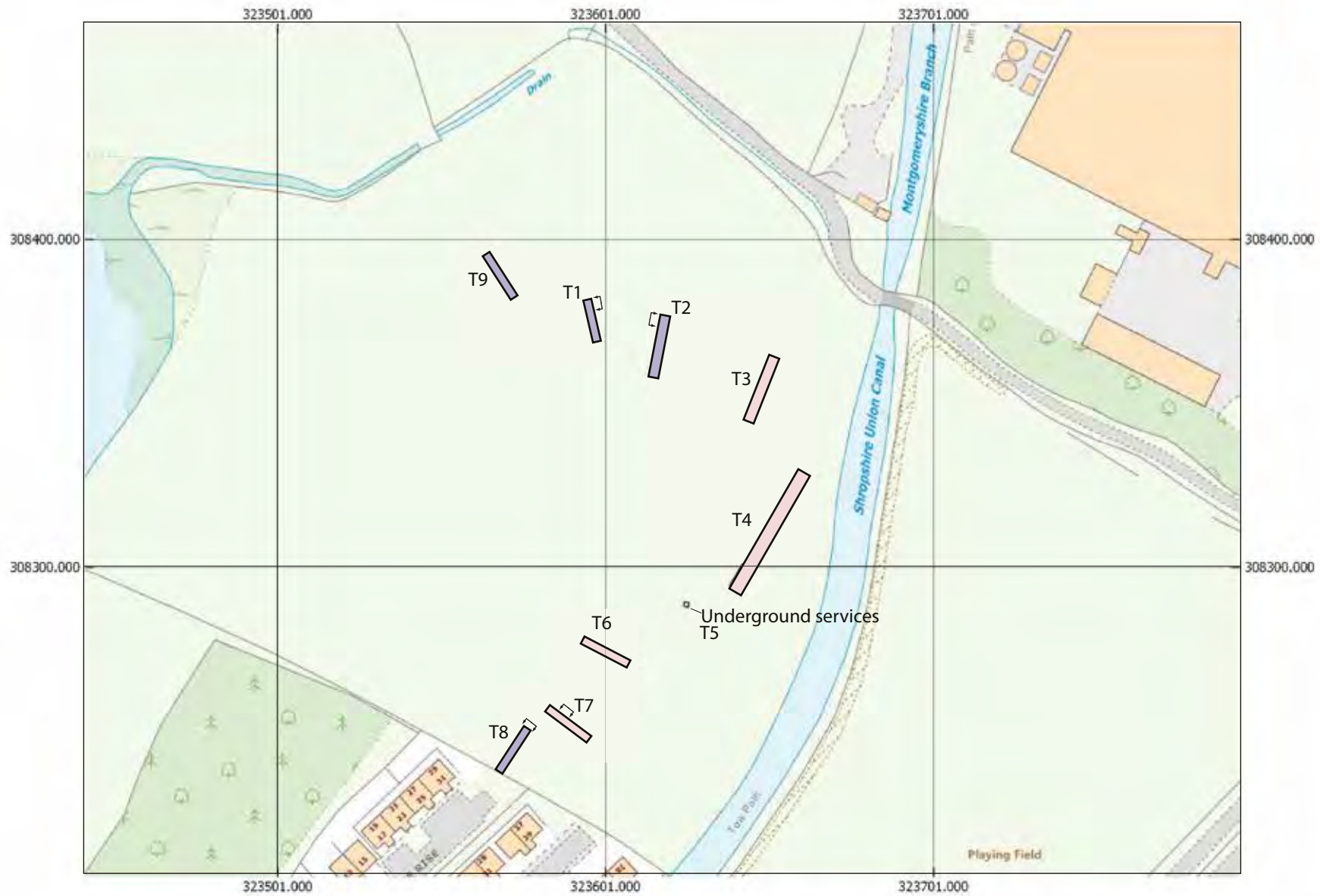
**Pickstockhomes**  
 17 Mile Oak, Malsbury Road, Cowesby, Shropshire, SY10 9GA  
 Tel. No. 01691 670788 www.pickstockhomes.com

project:  
 Land Adj Gallowtree Bank,  
 Gungrog Farm, Welshpool, Powys

drawing:  
 Site Location Plan

scale: 1:2500 @ A3	date: Dec 2017	drawn: MH
dwg no: 01112_P_SA_02	rev:	



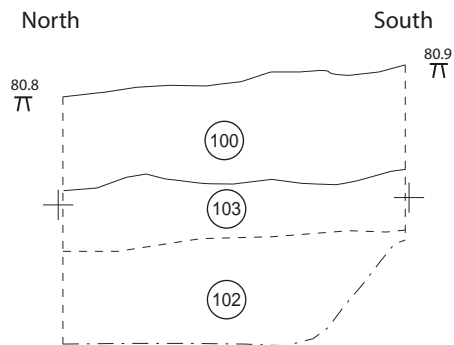


Representative sections

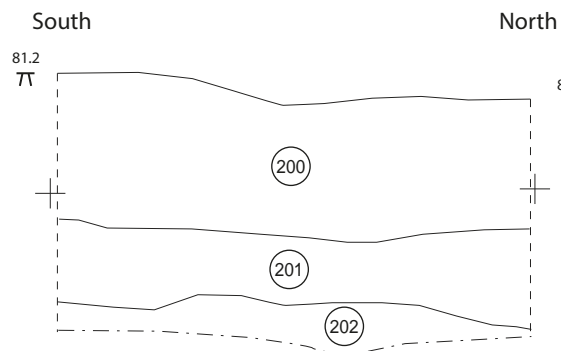
- Positive Trenches
- Negative Trenches

Figure 3  
Trench location plan

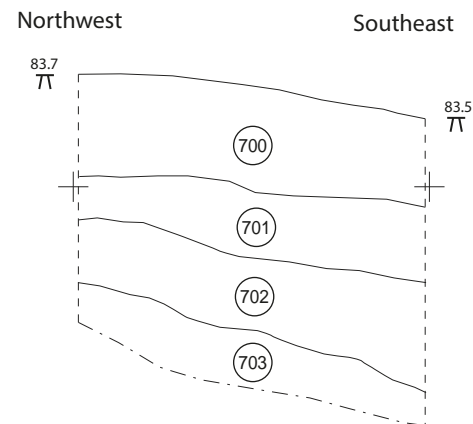
Representative section within Trench 1



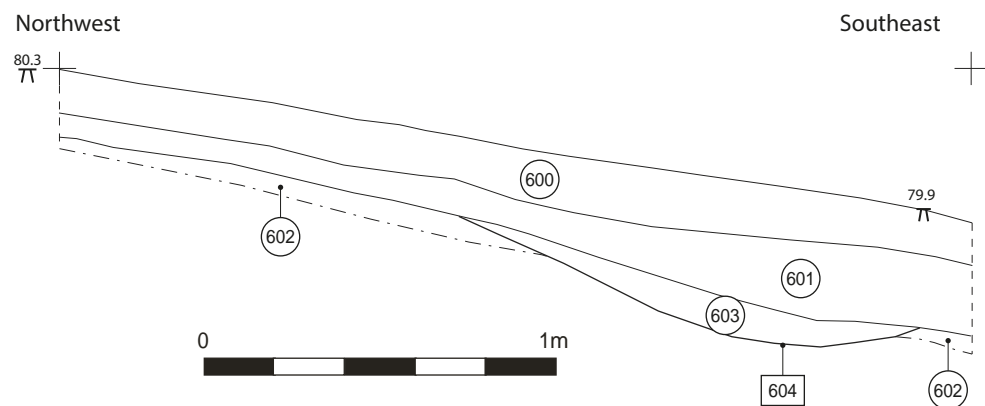
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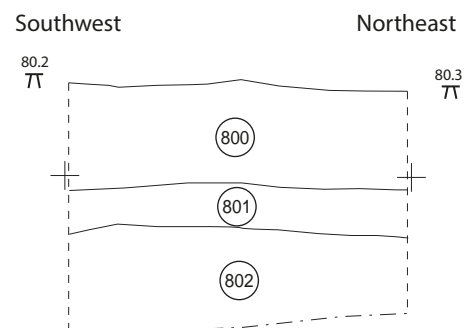
Representative section within Trench 7



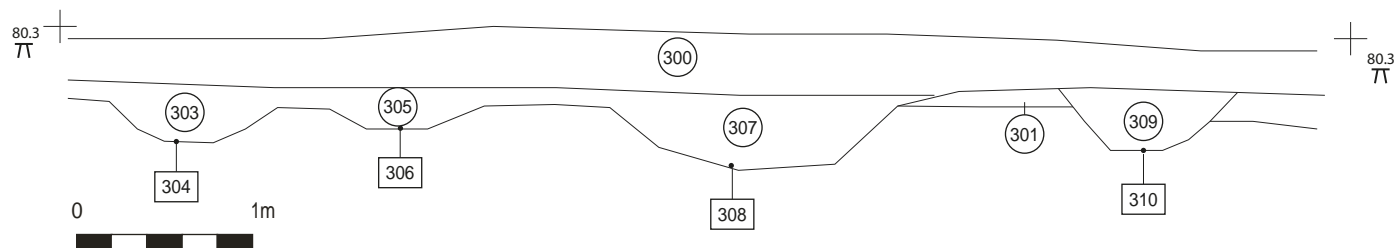
Section within Trench 6 showing shallow depression [604]



Representative section within Trench 8



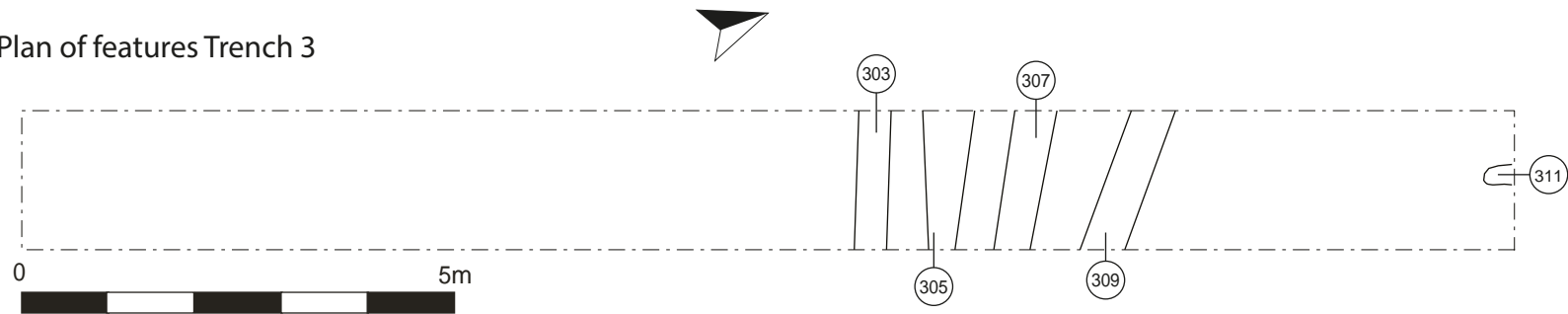
SE Facing section of [304], [306], [308], [310], Trench 3



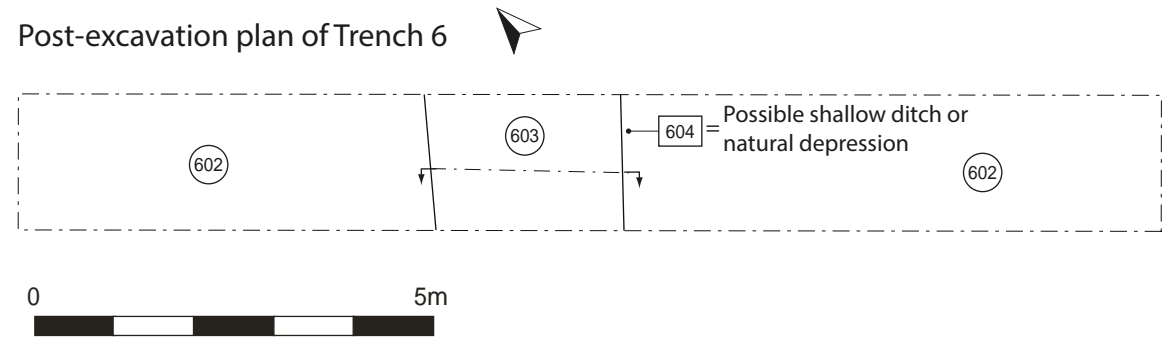
Note: all heights are metres above Ordnance Datum

Figure 4  
Section within Trenches  
1, 2, 3, 6, 7 & 8

Plan of features Trench 3



Post-excavation plan of Trench 6



Post-excavation plan of Trench 7

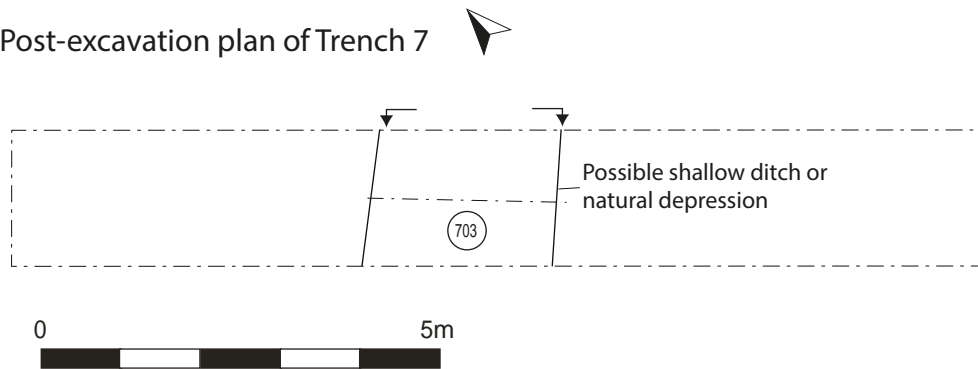


Figure 5  
Post-excavation plans  
of Trenches 3, 6 & 7

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**APPENDIX II:**



Plate 1. Trench 1 looking NNW.



Plate 2. Representative section of Trench 1 looking E.



Plate 3. Trench 2 looking SSW.



Plate 4. Representative section of Trench 2 looking W.





Plate 5. Trench 4 looking NE.



Plate 6. Representative section of Trench 4 looking SE.



Plate 7. Trench 4, land drain, looking se.



Plate 8. Trench 8 looking SW.



Plate 9. Representative section of Trench 8 looking NW,



Plate 10. Trench 7 looking SE.



Plate 11. Representative section of Trench 7 looking N.



Plate 12. Trench 6 looking NW.

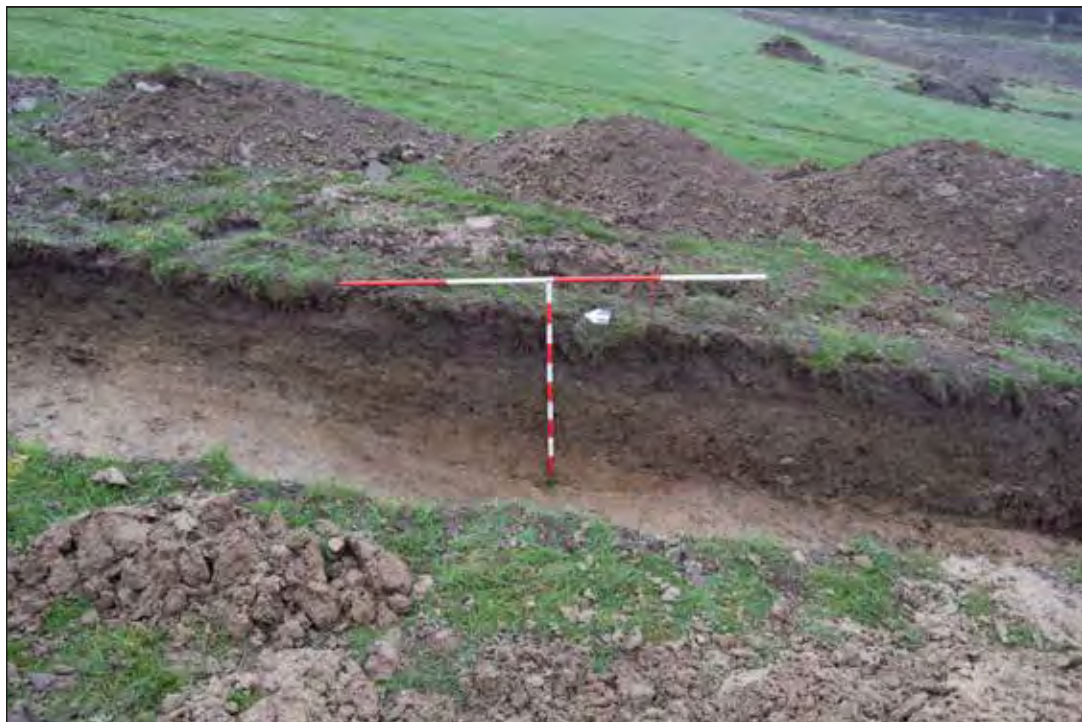


Plate 13. Representative section of Trench 6 looking NE.



Plate 14. Trench 9 looking NNW.



Plate 15. Representative section of Trench 9 looking N E.



Plate 16. South facing section of [312]. Trench 3.



Plate 17. East facing sections of [304] and [306]. Trench 3.



Plate 18. East facing sections of [308] and [310]. Trench 3.



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**APPENDIX III:**

**WRITTEN SCHEME OF INVESTIGATION**

**FOR AN ARCHAEOLOGICAL**

**EVALUATION**

**AT LAND OF GUNGROG FARM, WELSHPOOL (POWYS)**

**Prepared for:**

**Pickstock Homes**

**Planning Application Number: P/2018/0272**

**Project No: 2604**

**21<sup>st</sup> of March 2018**



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Figure 1. Site location

Figure 2. Trench Location

## *Summary*

*A recommendation for an Archaeological Evaluation has been made by Clwyd-Powys Archaeological Trust Development Control (henceforth CPAT-DC), archaeological advisors for Powys County Council, regarding the proposal for the erection of 54 dwellings, formation of access roads and all associated works at land at Gungrog Farm, Welshpool SY21 7HF (SJ 2362 0833).*

*This Written Scheme of Investigation (WSI) details a programme of intrusive trial trench evaluation to be undertaken by Archaeology Wales at the request of Pickstock Homes.*

*A DBA carried out by CPAT in 2017 revealed that the proposed development area was used as open agriculture fields in post-medieval times. Furthermore, LiDAR imaging documented a number of possible earthworks within the area. This research was preceded by non-intrusive investigations in the form of a geophysical survey in the area which indicated the presence of a number of anomalies of possible archaeological origin.*

*The programme of intrusive trial trench evaluation which allows for nine trenches will be undertaken prior to the determination of a planning application for the development. The associated Planning Application No. is P/2018/0272.*

*All work will be undertaken in accordance with the standards and guidelines of the Chartered Institute for Archaeologists (2014).*

## **1. Introduction and planning background**

A recommendation for an Archaeological Evaluation has been made by Clwyd-Powys Archaeological Trust Development Control (henceforth CPAT-DC), archaeological advisors for Powys County Council, regarding the proposal for the erection of 54 dwellings, formation of access roads and all associated works at land at Gungrog Farm, Welshpool SY21 7HF (SJ 2362 0833).

This Written Scheme of Investigation (WSI) details a programme of intrusive trial trench evaluation to be undertaken by Archaeology Wales at the request of Pickstock Homes.

A DBA carried out by CPAT in 2017 revealed that the proposed development area was used as open agriculture fields in post-medieval times. Furthermore, LiDAR imaging documented a number of possible earthworks within the area. This research was preceded by non-intrusive investigations in the form of a geophysical survey in the area which indicated the presence of a number of anomalies of possible archaeological origin.

The programme of intrusive trial trench evaluation which allows for nine trenches will be undertaken prior to the determination of a planning application for the development. The associated Planning Application No. is P/2018/0272.

The methodology set out in this WSI follow on from the brief prepared by CPAT-DC and has been agreed with CPAT-DC in its capacity as archaeological advisors to Powys County Council. CPAT-DC- has recommended that an intrusive archaeological evaluation of the development area is undertaken prior to the determination of the planning application to mitigate the impact of the proposed development on the archaeological resource.

This WSI has been prepared by Dr Irene Garcia Rovira, Trainee Project Manager, Archaeology Wales Ltd (henceforth - AW) at the request of Pickstock Homes.

The purpose of the proposed programme of intrusive trial trench evaluation is to provide the local planning authority with the information that they have requested from the client in response to their planning application, the requirements for which are set out in Planning Policy (revised edition 9, November 2016), Section 6.5 and Technical Advice Note (TAN) 24: The Historic Environment (2017).

All work will be undertaken to the standards and guidance set by the Chartered Institute for Archaeologists (2014). AW is a Registered Organisation with the CIfA.

## **2. Site Description**

The site measures 2.17 hectares and is centred on SJ 2362 0833. The area is bounded by the Shropshire Union Canal to the east, and a small lane off the A483 to the north. The land is currently defined by an open field of improved grassland and lies 80m AOD (Figure 1)

The underlying geology is defined by the Nantglyn Flags Formation and comprises mudstone, siltstone and sandstone formed during the Silurian Period. The superficial soils are defined by Till, Devensian – Diamicton formed during the Quaternary Period (BGS 2018).

## **3. Archaeological background**

A DBA prepared by CPAT in 2017 with regards to the planning application highlights the presence of past activity within and surrounding the proposed development area. The results of the DBA are summarised below:

### **Prehistoric Activity**

- In 2010, an archaeological excavation carried out by CPAT revealed a Mesolithic flint assemblage formed of 161 flint and chert artefacts, 1km SW of the development area (Jones and Gwilt 2014).
- A partly polished axe of Neolithic date was recovered in 1911 at Gungrog (Hankinson 2017).
- In 2006, CPAT revealed Bronze Age activity in the form of a cremation burial as well as Neolithic artefacts 1k NE of the proposed development (Grant and Jones 2006). Iron Age evidence in the form of gullied defining a field system were also identified during this excavation.

### **Roman Activity**

- In 1959, a number of Romano-British artefacts were discovered at Welshpool Smithfield. Other Roman finds in the vicinity of Welshpool have been identified and suggest the presence of Roman settlement in the area (Hankinson 2017).

### **Medieval Activity and post-medieval activity**

- The proposed development is located NE of Welshpool though the area fell within the parish of Guilsfield. It is documented that the area was occupied by open field agriculture in the post-medieval period though it may have had its origins in the medieval period. Two names recorded within the Tithe map of 1840 suggest the presence of an open field. Traces of earthworks possibly relating to them have been identified in LiDAR imagery and documented in the DBA produced by CPAT in 2017.
- The Tithe map of 1846 documents a possible wharf on the canal bounding the eastern area of the site. However, there are no associated structures.

Furthermore, non-intrusive investigations in the form of a geophysical survey were carried out to assess the archaeological potential of the area in 2007. The geophysical survey located anomalies which are likely to be archaeological in nature.

## **4. Objectives**

This WSI sets out a program of works to ensure that the intrusive trial trench evaluation will meet the standard required by The Chartered Institute for Archaeologist's *Standard and Guidance for Archaeological Field Evaluation* (2014).

The objective of the intrusive trial trench evaluation will be to locate and describe, by means of strategic trial trenching, archaeological features that may be present

within the development area. The work will elucidate the presence or absence of archaeological material, its character, distribution, extent, condition and relative significance. The work will include an assessment of regional context within which the archaeological evidence rests and will aim to highlight any relevant research issues within national and regional research frameworks.

The intrusive trial trench evaluation will result in a report that will provide information of sufficient detail to allow informed planning decisions to be made which can safeguard the archaeological resource. Preservation *in situ* will be advocated where at all possible, but where engineering or other factors result in loss of archaeological deposits, preservation by record will be recommended.

## **5. Timetable of works**

### **5.1. Fieldwork**

The programme of intrusive trial trench evaluation will be undertaken prior to the determination of the planning application associated with the proposed development. The work is proposed to start in 27<sup>th</sup> of March 2018. Archaeology Wales will update CPAT-DC with the exact date.

### **5.2. Report delivery**

The report will be submitted to Pickstock Homes, and to CPAT-DC within three months of the completion of the fieldwork. A copy of the report will also be sent to the regional HER (see section 8.2 for details).

## **6. Fieldwork**

### **6.1. Detail**

The work will be undertaken to meet the standard required by The Chartered Institute for Archaeologists' *Standard and Guidance for Archaeological Field Evaluation* (2014).

The archaeological project manager in charge of the work will satisfy him/herself that all constraints to ground works have been identified, including the siting of live services and Tree Preservation Orders.

The agreed evaluation areas will be positioned to maximise the retrieval of archaeological information and to ensure that the archaeological resource is understood.

It is proposed that 9 trenches, will be machine-excavated within the planned development area (Figure 2). The exact positioning of the trenches will depend on the position of any extant services or other obstructions that come to light during the initial phase of ground works but will follow the design set in Figure 2. The locations and dimensions of the trenches will be agreed with CPAT-DC prior to the commencement of works, and will target the results of a geophysical survey.

<b>TRENCH</b>	<b>MEASURES</b>	<b>LOCATION 1</b>	<b>LOCATION 2</b>
<b>1</b>	12.5m x 1.5m	E323594 N308380	E323598 N308369
<b>2</b>	12.5m x 1.5m	E323615 N308389	E323619 N308377
<b>3</b>	21m x 1.5m	E323653 N308363	E323646 N308344
<b>4</b>	41m x 1.5m	E323662 N308330	E323642 N308295
<b>5</b>	20.5m x 1.5m	E323631 N308305	E323625 N308285
<b>6</b>	12m x 1.5m	E323596 N308278	E323607 N308271
<b>7</b>	12m x 1.5m	E323593 N308254	E323593 N308248
<b>8</b>	12m x 1.5m	E323576 N308250	E323569 N308240
<b>9</b>	15m x 1.5m	E323565 N308395	E323573 N308382

The evaluation trenches (Trenches 1-9) will be excavated to the top of the archaeological horizon by a machine fitted with a toothless grading bucket under close archaeological supervision. All areas will be subsequently hand cleaned using pointing trowels and/or hoes to prove the presence, or absence, of archaeological features and to determine their significance. The excavation of the minimum number of archaeological features will be undertaken, to elucidate the character, distribution, extent and importance of the archaeological remains. As a minimum small discrete features will be fully excavated, larger discrete features will be half-sectioned (50% excavated) and long linear features will be sample excavated along their length to 20% of total- with investigative excavations distributed along the exposed length of any such feature and to investigate terminals, junctions and relationships with other features. Should this percentage excavation not yield sufficient information to allow the form and function of archaeological features/deposits to be determined full excavation of such features/deposits will be required.

Sufficient excavation will be undertaken to ensure that the natural horizons are reached and proven, where this can be practically and safely achieved. If safety reasons preclude manual excavation to natural, hand augering may be used to try to assess the total depth of stratification within each area. The depth of the excavation will conform to current safety requirements. If excavation is required below 1.2m the options of using shoring will be discussed with Pickstock Homes and CPAT-DC.

Where potentially significant archaeological features be encountered during the course of the evaluation then CPAT-DC and Pickstock Homes Planning will be informed at the earliest possible opportunity. CPAT-DC may subsequently request that further archaeological work is undertaken in order to fully evaluate areas of significant archaeological activity. Such work may require the provision of additional time and resources to complete the archaeological investigation.



## 6.2. Recording

Recording will be carried out using AW recording systems (pro-forma context sheets etc) using a continuous number sequence for all contexts.

Plans and sections will be drawn to a scale of 1:50, 1:20 and 1:10 as required and related to Ordnance Survey datum and published boundaries where appropriate.

All features identified will be tied in to the OS survey grid and fixed to local topographical boundaries.

Photographs will be taken in digital format with an appropriate scale, using a 12MP camera with photographs stored in Tiff format.

## 6.3. Finds

The professional standards set in the Chartered Institute for Archaeologists' *Standard and guidance for the collection, documentation, conservation and research of archaeological* (2014) will form the basis of finds collection, processing and recording.

All manner of finds regardless of category and date will be retained.

Finds recovered that are regarded as Treasure under *The Treasure Act* 1996 will be reported to HM Coroner for the local area.

Any finds which are considered to be in need of immediate conservation will be referred to a UKIC qualified conservator (normally Phil Parkes at Cardiff University).

## 6.4. Environmental sampling strategy

Deposits with a significant potential for the preservation of palaeoenvironmental material will be sampled, by means of the most appropriate method (bulk, column etc). Where sampling will provide a significant contribution to the understanding of the site AW will draw up a site-specific sampling strategy alongside a specialist environmental archaeologist. All environmental sampling and recording and will follow English Heritage's *Guidelines for Environmental Archaeology* (2002).

## 6.5. Human remains

In the event that human remains are encountered, their nature and extent will be established and the coroner informed. All human remains will be left *in situ* and protected during backfilling. Where preservation *in situ* is not possible the human remains will be fully recorded and removed under conditions that comply with all current legislation and include acquisition of licenses and provision for reburial following all analytical work. Human remains will be excavated in accordance with the Chartered Institute for Archaeologist's *Excavation and Post-Excavation Treatment of Cremated and Inhumed Human Remains: Technical Paper Number 13* (1993).

## 6.6. Specialist advisers

In the event of certain finds, features or sites being discovered, AW will seek specialist opinion and advice. A list of specialists is given in the table below although this list is not exhaustive.

Artefact type	Specialist
Flint	Kate Pitt (Archaeology Wales)
Animal bone	Richard Madgwick (Cardiff University)
CBM, heat affected clay, Daub etc.	Rachael Hall (APS)
Clay pipe	Hilary Major (Freelance)
Glass	Rowena Hart (Archaeology Wales)
Cremated and non-cremated human bone	Malin Holst (University of York)/Richard Madgwick (Cardiff University)
Metalwork	Kevin Leahy (University of Leicester)/ Quita Mold (Freelance)
Metal work and metallurgical residues	Dr Tim Young (GeoArch)
Neo/BA pottery	Dr Alex Gibson (Bradford University)
IA/Roman pottery	Jane Timby (Freelance)
Roman Pottery	Rowena Hart (Archaeology Wales)/ Peter Webster (Freelance)
Post Roman pottery	Stephen Clarke (Monmouthshire Archaeology)
Charcoal (wood ID)	John Carrot (Freelance)
Waterlogged wood	Nigel Nayling (University of Wales – Lampeter)
Molluscs and pollen	Dr James Rackham
Charred and waterlogged plant remains	Wendy Carruthers (Freelance)

### 6.6.1. Specialist reports

Specialist finds and palaeoenvironmental reports will be written by AW specialists, or sub-contracted to external specialists when required.

## 7. Monitoring

CPAT-DC will be contacted approximately five days prior to the commencement of archaeological site works, and subsequently once the work is underway.

Any changes to the WSI that AW may wish to make after approval will be communicated to CPAT-DC for approval on behalf of Planning Authority.

Representatives of CPAT-DC will be given access to the site so that they may monitor the progress of the field evaluation. No area will be back-filled, until CPAT-DC has had the opportunity to inspect it, unless permission has been given in advance. CPAT-DC will be kept regularly informed about developments, both during the site works and subsequently during post-excavation.

## 8. Post-fieldwork programme

### 8.1. Archive assessment

#### 8.1.1. Site archive

An ordered and integrated site archive will be prepared in accordance with: Management of Research Projects in the Historic Environment (MoRPHE) (Historic England 2006) upon completion of the project.

The site archive (including artefacts and samples) will be prepared in accordance with the National Monuments Record (Wales) agreed structure and deposited with an appropriate receiving organisation, in compliance with ClfA Guidelines (*Standard and guidance for the creation, compilation, transfer and deposition of archaeological archives*, 2014). The legal landowners consent will be gained for deposition of finds.

The paper and digital archive will be deposited with the National Monuments Record, RCAHMW including a copy of the final report. This archive will include all written, drawn, survey and photographic records relating directly to the investigations undertaken. NMR Digital archives will follow the standard required by the RCAHMW (RCAHMW, 2015). A copy of the digital archive only will also be lodged with the Historic Environment Record, Clwyd-Powys Archaeological Trust.

#### 8.1.2. Analysis

Following a rapid review of the potential of the site archive, a programme of analysis and reporting will be undertaken. This will result in the following inclusions in the final report:

- Non-technical summary

- Location plan showing the area/s covered by the field evaluation, all artefacts, structures and features found
- Plan and section drawings (if features are encountered) with ground level, ordnance datum and vertical and horizontal scales.
- Written description and interpretation of all deposits identified, including their character, function, potential dating and relationship to adjacent features. Specialist descriptions and illustrations of all artefacts and soil samples will be included as appropriate.
- An indication of the potential of archaeological deposits which have not been disturbed by the development
- A discussion of the local, regional and national context of the remains by means of reviewing published reports, unpublished reports, historical maps, documents from local archives and the regional HER as appropriate.
- A detailed archive list at the rear listing all contexts recorded, all samples finds and find types, drawings and photographs taken. This will include a statement of the intent to deposit, and location of deposition, of the archive.

## **8.2. Reports and archive deposition**

### **8.2.1. Report to client**

Copies of all reports associated with the intrusive trial trench evaluation, together with inclusion of supporting evidence in appendices as appropriate, including photographs and illustrations, will be submitted to Pickstock Homes, THE Local Planning Authority and the Development Control Archaeologist at Clwyd-Powys Archaeological Trust (Mark Walters [mark.walters@CPAT-DC.org.uk](mailto:mark.walters@CPAT-DC.org.uk) ) On approval the final report should be submitted in high resolution PDF format to the Historic Environment Record Officer (Gary Duckers [gary.duckers@CPAT-DC.org.uk](mailto:gary.duckers@CPAT-DC.org.uk) ), Clwyd-Powys Archaeological Trust for inclusion within the Historic Environment Record.

Archaeology Wales will obtain copies of the HER Deposition Guidance and HER Depositor Licence from the HER Officer (Gary Duckers [gary.duckers@CPAT-DC.org.uk](mailto:gary.duckers@CPAT-DC.org.uk) ) before any reports or archives are submitted to the Clwyd-Powys Archaeological Trust Historic Environment Record.

### **8.2.2. Additional reports**

After an appropriate period has elapsed, copies of all reports will be deposited with the relevant county Historical Environment Record, the National Monuments Record and, if appropriate, Cadw.

### **8.2.3. Summary reports for publication**

Short archaeological reports will be submitted for publication in relevant journals; as a minimum, a report will be submitted to the annual publication of the regional CBA group or equivalent journal.

#### **8.2.4. Notification of important remains**

Where it is considered that remains have been revealed that may satisfy the criteria for statutory protection, AW will submit preliminary notification of the remains to Cadw.

#### **8.2.5. Archive deposition**

The final archive (site and research) will, whenever appropriate, be deposited with a suitable receiving institution, usually the relevant Local Authority museums service. Arrangements will be made with the receiving institution before work starts.

Although there may be a period during which client confidentiality will need to be maintained, copies of all reports and the final archive will be deposited no later than six months after completion of the work.

Copies of all reports, the digital archive and an archive index will be deposited with the *National Monuments Record*, RCAHMW, Aberystwyth.

Wherever the archive is deposited, this information will be relayed to the HER. A summary of the contents of the archive will be supplied to CPAT-DC.

#### **8.2.6. Finds deposition**

The finds, including artefacts and ecofacts, excepting those which may be subject to the Treasure Act, will be deposited with the same institution, subject to the agreement of the legal land owners.

### **9. Staff**

The project will be managed by Irene Garcia Rovira (AW Trainee Project Manager) and the fieldwork undertaken by James Weaver and Fran Ward (Archaeology Wales). Any alteration to staffing before or during the work will be brought to the attention of CPAT-DC and Pickstock Homes.

## **Additional Considerations**

### **10. Health and Safety**

#### **10.1. Risk assessment**

Prior to the commencement of work AW will carry out and produce a formal Health and Safety Risk Assessment in accordance with *The Management of Health and Safety Regulations 1992*. A copy of the risk assessment will be kept on site and be available for inspection on request. A copy will be sent to the client (or their agent as necessary) for their information. All members of AW staff will adhere to the content of this document.

## 10.2. Other guidelines

AW will adhere to best practice with regard to Health and Safety in Archaeology as set out in the FAME (Federation of Archaeological Managers and Employers) health and safety manual *Health and Safety in Field Archaeology* (2002).

## 11. Community Engagement and Outreach

Wherever possible, AW will ensure suitable measures are in place to inform the local community and any interested parties of the results of the site investigation work. This may occur during the site investigation work or following completion of the work. The form of any potential outreach activities may include lectures and talks to local groups, interested parties and persons, information boards, flyers and other forms of communication (social media and websites), and press releases to local and national media.

The form of any outreach will respect client confidentiality or contractual agreements. As a rule, outreach will be proportional to the size of the project.

Where outreach activities have a cost implication these will need to be negotiated in advance and in accordance with the nature of the desired response and learning outcomes.

## 12. Insurance

AW is fully insured for this type of work, and holds Insurance with Aviva Insurance Ltd and Hiscox Insurance Company Limited through Towergate Insurance. Full details of these and other relevant policies can be supplied on request.

## 13. Quality Control

### 13.1. Professional standards

AW works to the standards and guidance provided by the *Chartered Institute for Archaeologists*. AW fully recognise and endorse the Chartered Institute for Archaeologists' *Code of Conduct*, *Code of Approved Practice for the Regulation of Contractual Arrangements in Field Archaeology* and the *Standard and Guidance for archaeological watching briefs* currently in force. All employees of AW, whether corporate members of the Chartered Institute for Archaeologists or not, are expected to adhere to these Codes and Standards during their employment.

### 13.2. Project tracking

The designated AW manager will monitor all projects in order to ensure that agreed targets are met without reduction in quality of service.

## 14. Arbitration

Disputes or differences arising in relation to this work shall be referred for a decision in accordance with the Rules of the Chartered Institute of Arbitrators' *Arbitration Scheme for the Institute for Archaeologists* applying at the date of the agreement.

## 15. References

Chartered Institute for Archaeologists, 2014. Standards and guidance for the collection, compilation, transfer and deposition of archaeological archives.

Chartered Institute for Archaeologists, 2014. Standards and guidance for the collection, documentation, conservation and research of archaeological materials.

Chartered Institute for Archaeologists, 2014, Standard and Guidance for Archaeological Field Evaluation. Chartered Institute for Archaeologists.

English Heritage, 2002. Guidelines for Environmental Archaeology.

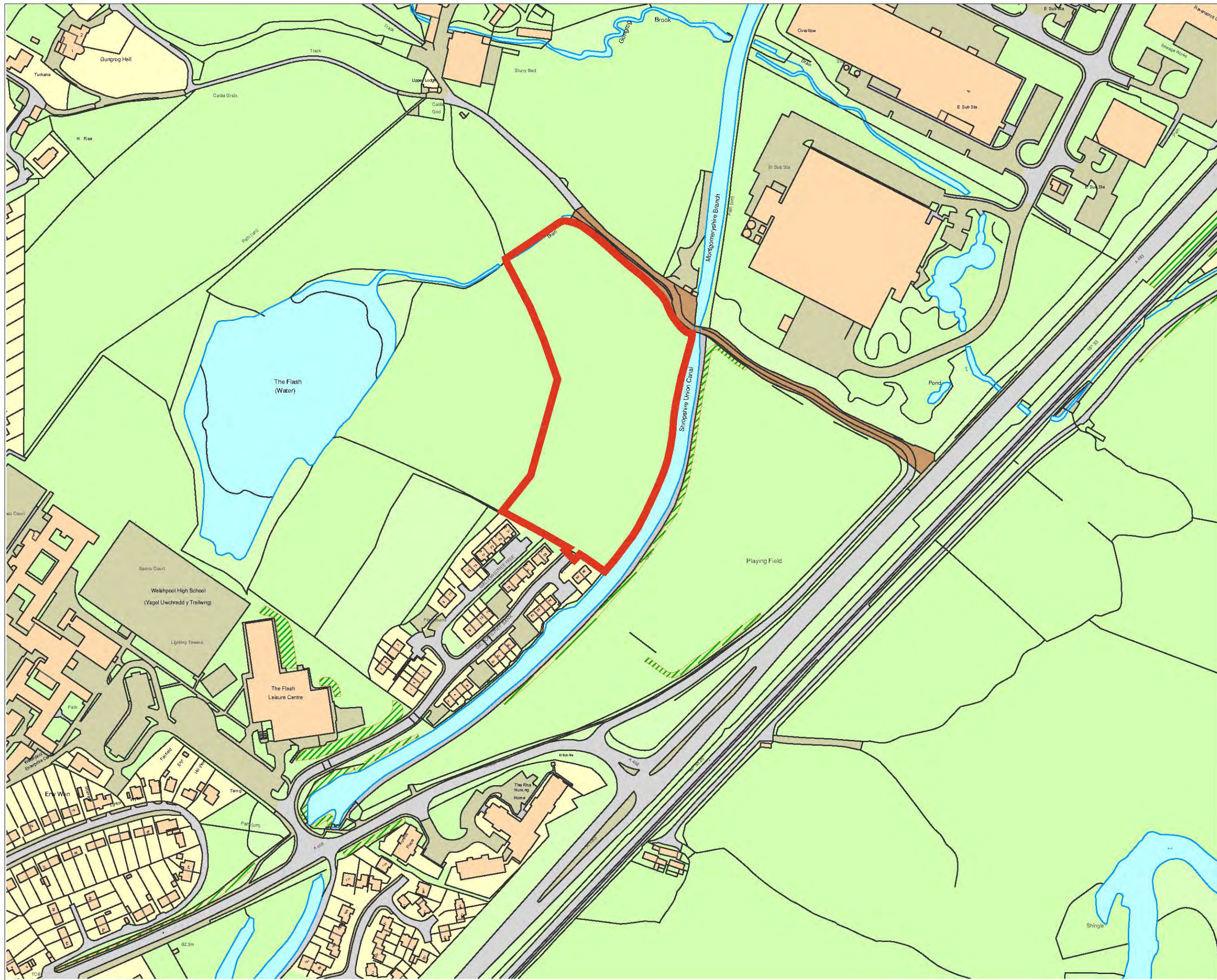
English Heritage, 2006. Management Of Research Projects in the Historic Environment (MORPHE).

Hankinson R. 2017. Gungrog Farm, Welshpool (Powys) Desk-Based-Assessment. CPAT report 1545.

McKinley, J., Roberts C., 1993, Excavation and post-excavation treatment of cremated and inhumed human remains, Technical Paper 13.

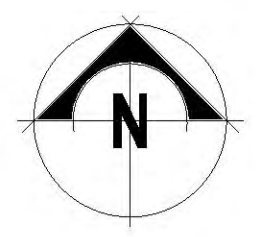
British Geological Survey: Geology of Britain viewer:

[www.bgs.ac.uk/discoveringGeology/geologyOfBritain/viewer.html](http://www.bgs.ac.uk/discoveringGeology/geologyOfBritain/viewer.html)



**NOTES**

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rev.	description	date	by

status: Sketch

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 Tel. No. 01691 670788 www.pickstockhomes.com

project:  
 Land Adj Gallowtree Bank,  
 Gungrog Farm, Welshpool, Powys

drawing:  
 Site Location Plan

scale: 1:2500 @ A3	date: Dec 2017	drawn: MH
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dwg no: 01112_P_SA_02	rev: .
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