## Arclid North Quarry, Congleton Road, Sandbach, Cheshire

Archaeological Desk-Based Assessment



Adrian Hadley BA (Hons) MA

Report No. 1302

Archaeology Wales Limited Rhos Helyg, Cwm Belan, Llanidloes, Powys, SY18 6QF Tel: +44 (0) 1686 440371 Email: admin@arch-wales.co.u

Email: admin@arch-wales.co.uk Web: www.arch-wales.co.uk

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Prepared For: Dulas Ltd

Edited by: Mark Houliston
Signed: Mark Hoult

Pacifican Managing Director

Position: Managing Director

Date: 23/1/15

Authorised by: Mark Houliston Signed: Mark Houliston

Position: Managing Director

Date: 4/2/15

Report No. 1302

By

Adrian Hadley BA (Hons) MA

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#### **Non-Technical Summary**

Archaeology Wales Ltd have been commissioned by Dulas Ltd to carry out an Archaeological Assessment for a proposed solar development at Arclid North Quarry, Sandbach, Cheshire.

The assessment indicates that the development site lies within an area of potential archaeological significance. Of note are artefacts indicative of prehistoric and Romano-British occupation, which have been discovered in an area centred on Arclid Quarry.

The results of the walkover survey, however, show that the proposed site has been previously quarried. The scheme will, therefore, have no physical impact on any in-situ archaeological remains.

Most buildings and sites recorded within the study area date from the post-medieval period. These include three, Grade II listed, seventeenth century farmhouses (Old Hall Farmhouse and Brickhouse Farms Nos.1&2) located within 150m of the proposed solar farm. An informal visual assessment undertaken during the site visit determined that of these, only Brickhouse Farm No. 2 and its associated outbuildings have any views of the site. The potential impact on the setting of these structures is likely to be negligible, particularly if proposed tree planting by the quarry goes ahead.

There are no scheduled monuments or registered gardens or battlefields recorded within 1km of Arclid North Quarry. In addition, no significant (undesignated) archaeological monuments have been identified in the area.

#### 1. Introduction

#### 1.1 Location and Scope of Work

The proposed development is located at Arclid North Quarry, Congleton Road, Sandbach, Cheshire, CW11 4SN (Fig.1). The original scheme comprised a proposed 2 megawatt solar farm within the northern part of the restored quarry. This was subsequently revised to a 1 megawatt farm, with the array relocated to the western corner of Arclid Quarry (Fig.2).

The development proposal has been submitted by Dulas Ltd (Unit 1 Dyfi Eco Park, Machynlleth, Powys, SY20 8AX) on behalf of Bathgate Silica Sand Ltd (Arclid Quarry, Sandbach). The local planning authority is Cheshire East Council.

An archaeological desk-based assessment has been carried out at the request of Dulas Ltd in advance of an application for full planning permission.

#### 1.2 Topography

The application area is situated approximately 0.5km to the north-east of Sandbach and some 6km to the west of Congleton. The M6 Motorway is located to the west of the development site (Plate 6). Jodrell Bank is situated some 8.5km to the north of Arclid Quarry (Plate 8).

The former sand extraction pits within Arclid North Quarry have been restored; notably with the creation of two lagoons either side of the processing plant (Plate 1). The northern part of the quarry has been built up considerably with material derived from washing and screening the sand. The made ground within the northern part of the quarry has also been landscaped, with extensive planting undertaken (Plate 7).

The scheme site is positioned some 400m to the west of the medieval village of Arclid and directly to the north of the medieval hamlet of Arclid Green (Plate 9). The southern boundary is defined by the A534, formerly the turnpike road between Sandbach and Congleton. There is post-medieval settlement along the southern side of Cogleton Road (A534) as well at the junction (at the western corner of the Arclid Quarry) with Homes Chapel Road (A5022).

The centre of the application area is approximately situated at NGR 377760 362160 (SJ 7776 6216). The development site is 60m-80m above Ordnance Datum.

#### 1.3 Mapped Geology

The regional geology as mapped by the British Geological Survey (1:50,000 scale) indicates that the bedrock geology is composed of halite stone and mudstone of the Wilkesley Halite Formation. The superficial geology consists of glacial till of Devensian Age, the most recent glacial period of the Pleistocene (*circa* 110,000 – 12,000 BCA). There are glacio-fluvial deposits of sand and gravel towards the centre of the site (between the two lagoons) as well as Flandrian Age fluvial deposits (12,000 BCA – Present) consisting of clay, silt, sand and gravels.

The drift deposits have been quarried within the application area. Glacial till may however be encountered within the unexcavated strip of land along the quarry perimeter (in the vicinity of the proposed solar panels).

#### 2. Planning Policies and Guidance

#### 2.1 National Planning Policy Framework

The National Planning Policy Framework (NPPF) was published in March 2012. This document sets out the Government's planning policies for England. Key policies concerning archaeology and cultural heritage are summarised below.

The Requirement for Heritage Assessments:

In determining applications, local planning authorities should require an applicant to describe the significance of any heritage assets affected, including any contribution made by their setting. The level of detail should be proportionate to the assets' importance and no more than is sufficient to understand the potential impact of the proposal on their significance. As a minimum the relevant historic environment record should have been consulted and the heritage assets assessed using appropriate expertise where necessary. Where a site on which development is proposed includes or has the potential to include heritage assets with archaeological interest, local planning authorities should require developers to submit an appropriate desk-based assessment and, where necessary, a field evaluation. (NPPF Paragraph 128)

#### 2.2 Scheduled Ancient Monuments

A schedule has been kept since 1982 of monuments considered to be of national importance. These sites are legally protected under the Ancient Monuments and Archaeological Areas Act 1979. Sites identified as a scheduled monument are designated by the Secretary of State. Consent must be obtained from the Secretary of State for any works which affect a scheduled monument. English Heritage advises the Government on sites in England that should be included on the Schedule and on individual cases for Scheduled Monument Consent.

#### 2.3 Listed Buildings

The Secretary of State for Culture, Media and Sport holds a List of Buildings of Special Architectural or Historic Interest considered to be of national historical or architectural importance. The list is compiled under the Planning (Listed Buildings and Conservation Areas) Act 1990 on advice from English Heritage.

Listed Building Consent is required from English Heritage prior to any works being carried out on a Grade I or II\* listed property or structure. Listed Building Consent is required from the Local Planning Authority prior to any works being carried out on a Grade II listed property or structure. A listed building refers to the exterior and interior of the property/structure as well as any additional objects or structures within the curtilage of the building.

#### 2.4 Conservation Areas

A Conservation Area is an area considered worthy of preservation or enhancement because of its special architectural or historic interest, "the character or appearance of which it is desirable to preserve or enhance" as required by the Planning (Listed Buildings and Conservation Areas) Act 1990 (Sections 69 and 70). Conservation Areas give broader protection than listing individual buildings, and all features within the area, listed or otherwise, are recognised as part of its character.

#### 2.5 Historic Hedgerows

Hedgerows of historical and ecological and landscape value are protected by law under the Hedgerow Regulations (1997). The regulations protect important hedgerows through a system of notification to the local planning authority (LPA). Advice regarding the provisions of the regulations is given in 'The Hedgerow Regulations – A Guide to the Law and Good Practice'. The LPA must be given 42 days notice of the intention to remove a countryside hedgerow. If a hedgerow is deemed to be important under criteria outlined in Section 7 of Hedgerows Legislation Guide, the LPA have powers to serve a Hedgerow Retention Notice, requiring that the hedgerow is preserved.

#### 2.6 Registered Parks and Gardens

English Heritage holds a Register of Historic Parks and Gardens of Special Historic Interest. These Registered landscapes are graded I, II, or II\*, and include private gardens, public parks and other green spaces. Registration is a material consideration in planning terms, meaning that planning authorities must consider the impact of any proposed development on the special character of the landscape.

#### 2.7 Registered Battlefields

English Heritage holds a Register of Historic Battlefields. Unlike Listed Buildings and the Register of Parks and Gardens, Registered Battlefields are not currently graded as a means of ascribing relative significance. Registration is a material consideration in planning terms, meaning that planning authorities must consider the impact of any proposed development on the special character of the landscape.

#### 2.8 Locally Listed Buildings & Local Heritage Assets

Local Heritage Assets can include buildings, designed landscapes and elements of the natural environment. These are managed by local planning authorities, typically with the involvement or voluntary agreement of the local community.

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Locally Listed Buildings do not carry any statutory designation but are considered to be of regional or local importance. These buildings make a significant contribution to the character of an area. Retention of these properties or structures is considered to be important to the historic environment.

#### 3. Methodology

#### 3.1 Introduction

The assessment has been carried out in accordance with the Standard and Guidance for Desk-Based Assessment issued by the Institute for Archaeologists (IfA 2009).

The archaeological assessment was undertaken by Adrian Hadley in December 2014 and January 2015.

#### 3.2 Aims

The assessment is intended to identify the extent and character of the known and potential archaeological resource and provide an assessment of the impact of the proposed development on potential archaeological remains within the development site.

#### 3.3 Study Area

The archaeological and historic records have been considered within a Study Area defined by a 1km buffer zone around the application area (Arclid North Quarry).

#### 3.4 Resources

English Heritage: The National Heritage List for England:

- Buildings of Special Architectural or Historic Interest
- Scheduled Ancient Monuments
- Register of Parks and Gardens of Historic Interest
- Register of Battlefields
- World Heritage Sites

English Heritage: National Monuments Record Excavation Index

English Heritage: National Record of the Historic Environment

Cheshire Historic Environment Record:

- Historic Environment Records of Archaeological Sites, Monuments and Finds
- Published & Unpublished Reports
- Historic Landscape Characterisation Maps
- Aerial Photographs

Cheshire Archives: Chester Record Office:

- Historic Maps & Documents
- County Histories and other Secondary Sources

#### Online Databases:

- Heritage Gateway
- Portable Antiquities Scheme
- Archaeology Data Service
- The National Archives

#### 3.5 Walkover Survey

This involves walking systematically over the proposed development area. A site survey is undertaken in order to:

- Determine the present condition of the known heritage assets identified through the assessment.
- Identify heritage assets not included on the HER.
- Assess the proposed development area for its potential to contain buried archaeological remains.

#### 4. Results of the Assessment

#### 4.1 Introduction

There are eighteen sites recorded on the Cheshire Historic Environment Record (CHER) within 1km of the proposed development (Figs.3&4). The HER records include ten listed buildings (Fig.3) that are also recorded on the National Heritage List for England, referenced by their list entry number. The undesignated heritage assets have each been referenced by a Primary Record Number (PRN) allocated by Cheshire Council (Fig.4). Other heritage sites have been identified from previous archaeological investigations (associated with Arclid Quarry and the M6 Widening Scheme) as well as cartographic and documentary research. The latter are also shown on Figure 4.

Additional archaeological sites and monuments have been considered beyond the intensive study area in order to compare sites and finds located at a similar topographic location as the proposed development as well as to more fully assess the potential for archaeological remains within the application area.

#### 4.2 The Historic Landscape

The proposed scheme is situated within the Cheshire Plain. This landscape is comparatively low-lying and characterised by a very gently rolling topography. The agriculture is largely pastoral farming. The field pattern is derived from a combination of small-scale and irregular medieval fields as well as larger post-medieval enclosures and reorganised fields. There has additionally been a loss of field boundaries in the twentieth century. A particular feature of the plain is the presence of many field ponds formed by the extraction of marl to improve soils (for the cultivation of crops). An important feature of this landscape is hawthorn hedgerows with a relatively high density of trees (mostly mature oak). There are also small blocks of woodland, mainly broadleaf deciduous.

The historic field pattern surrounding the proposed development is shown on the tithe maps (Fig.8) for Arclid (1840) and Sandbach (1841) as well as the Ordnance Survey first edition of 1882 (Fig.10). These maps illustrate that the small to medium scale fields to the north of and

south-west of Arclid Quarry are seemingly medieval in origin. The more rectilinear field pattern to the east and south-east appears to be post-medieval; the latter most probably represents the eighteenth and nineteenth century enclosure of Sandbach and Arclid heaths.

Within the study area, the settlement is relatively dispersed, with numerous isolated houses, farmhouses and several small hamlets. The traditional building methods for the halls, farmhouses and cottages in the locality comprise timber frame (with later use of brick noggin) and orange/red brick. Thatch and stone flags were the traditional roofing material, with later use of clay tile and Welsh slate. The transport system comprises a relatively dense road network of winding country lanes, which are occasionally cut through by wider single carriage roads. The major roads include the M6 Motorway, which runs approximately north-south within the western part of the study area.

#### 4.3 Scheduled Ancient Monuments

There are no scheduled monuments recorded within the study area on the National Heritage List for England. There are, however, a number of scheduled sites recorded within the wider landscape. These significantly include a Roman military camp (List No: 1014116) located to the west of Congleton. There are also nationally important remains of Anglo-Saxon carved crosses at Sandbach (List Nos: 1011144, 1016852 & 1016853). The later have been dated on the basis of their animal and foliate ornament to the first half of the ninth century.

#### 4.4 Listed Buildings

There are ten Grade II listed buildings or structures recorded within the intensive study area. There are no Grade I or II\* buildings reported within 1km of the scheme site.

#### Old Hall Farmhouse

Old Hall Farmhouse is situated within Sandbach, on the southern side of Congleton Road. The property is set back from the roadside. This building dates from the seventeenth century. The construction is of timber frame with painted brick and cement noggin. The farmhouse has two storeys plus an attic. The building has gable ends and one gable to front. There are wood mullion and transom windows with leaded lights. The tiled roof has been restored. To the rear there is a large modern wing.

Old Hall Farmhouse is recorded as a Grade II listed building on the National Heritage List for England (List No: 1130383). This building was listed on the 11<sup>th</sup> August 1950 and the listing subsequently amended on 27<sup>th</sup> April 1978. The farmhouse is located some 40m to the south of Arclid Quarry and is within 150m of the proposed solar farm.

#### Holly Cottage

Holly Cottage is situated within Brereton Parish, between Arclid and Brownedge hamlets. This building is positioned along the eastern side of Newcastle Road. The property most probably dates from the early seventeenth century but has been subsequently altered. The construction is of timber frame with brick infill (now pebbledashed). The property is of one storey plus attic. The cottage has small casements mostly of nineteenth century vernacular type. The clay tile roof has a steep pitch which suggests this was once thatched. The oak frame is exposed on the left gable with a flush gable chimney evident (formerly a central ridge chimney). The internal timber work suggests this building originated as an open-hall dwelling that previously incorporated the adjoining cottage (demolished *circa* 1965).

Holly Cottage is recorded as a Grade II listed building on the National Heritage List for England (List No: 1138831). This building was listed on the 14<sup>th</sup> February 1967. The former hall-house is located roughly 500m to the north and north-east of quarry, over 1km from the proposed solar farm.

#### The Cottage (Tudor Cottage)

The Cottage is situated to the north of Holly Cottage (see above), in Brereton Parish, on the eastern side of Newcastle Road. This building probably dates from the late seventeenth century, but has been subsequently altered. The construction is of timber frame with diagonal braces (partly replaced in brick) and brick nogging. The property has one storey plus attic bedrooms. The small pane wood casements of are nineteenth century vernacular type. The ridge chimney is of brick. The clay tile roof has a steep pitch which suggests this was once thatched.

The Cottage is recorded as a Grade II listed building on the National Heritage List for England (List No: 1279102). This building was listed on the 21<sup>st</sup> June 1985. This seventeenth century cottage is located over 1km from the proposed solar farm.

#### Brickhouse Farm No.1

Brickhouse Farm No.1 is situated within Sandbach Parish, on the east side of Holmes Chapel Road. The farmhouse dates from seventeenth century. The construction is of timber frame with gable ends. The frame has been cased in red brick at some point in the eighteenth or nineteenth centuries. The property is of two to three storeys. The front has casement windows with sliding sashes and a doorway with a plain lintel and an early nineteenth century four-panelled door. The roof has replacement tiles.

Brickhouse Farm No.1 is recorded as a Grade II listed building on the National Heritage List for England (List No: 1130362). This building was listed on the 27<sup>th</sup> April 1978. The farmhouse is located less than 50m to the west Arclid Quarry and is within 150m of the proposed solar farm.

#### Brickhouse Farm No.2 & Outbuildings

Brickhouse Farm No.2 is situated within Sandbach Parish, on the southern side of Congleton Road. The farmhouse dates from seventeenth century, but has been subsequently altered. The construction is of red brick. The property is of three storeys. The front has renewed casement windows and renewed Georgian-style doorcase with pediment and a modern door. The roof is of slate.

The outbuildings date from the early nineteenth century. These are arranged around three sides of a yard. The construction is of red brick with various segmental head openings and doorways. The outbuilding have two storeys. The roofs are tiled.

Brickhouse Farm No.2 is recorded as a Grade II listed building on the National Heritage List for England (List No: 1330385). The outbuildings are also listed Grade II on the National Heritage List for England (List No: 1130384). The outbuildings were listed on the 27<sup>th</sup> April 1978. Brickhouse Farm No.2 and associated outbuildings are located directly to the south of Arclid Quarry. These buildings are situated within 150m of the proposed solar farm.

#### Arclid Hall Farmhouse

Arclid Hall Farmhouse is situated with Arclid Parish within the hamlet of Arclid Green. The building is positioned to the south of Congleton Road (on the western side of Hemingshaw

Lane). The farmhouse dates from the early eighteenth century. The construction is of red brick in Flemish bond. The property has three storeys. Between each floor level there is a band of two bricks depth. The front of the building has near symmetrical window layout. There is a projecting plinth with a chamfered ashar band at the top. The window openings have camber heads and ashlar cills. There are gable chimney stacks either side of the building. The roof is of modern slates but originally had stone slates. To the left of the house is a nineteenth century addition which has a twentieth century lean-to.

Arclid Hall Farmhouse is recorded as a Grade II listed building on the National Heritage List for England (List No: 1330045). This eighteenth century building was listed on the 14<sup>th</sup> February 1967. The farmhouse is located approximately 300m to the south-west of Arclid Quarry, some 1.2km from the proposed solar farm.

#### Brindley Green Farmhouse

Brindley Green Farmhouse is situated within Brereton Parish, on the west side of Holmes Chapel Road. The farmhouse probably dates from the late eighteenth century. The construction is of brown brick in Flemish bond. The property is of three storeys. The front has an open-pediment gable (almost the full width of house) with a full-height round-arched recess containing a six-panel door with radial bar fanlight in a recessed moulded wood surround. The window openings have flat-gauged brick arches. Marks on the left gable indicate the removal of a former two-storey wing. The roof is of slate. There is a twentieth century extension to the rear.

Brindley Green Farmhouse is recorded as a Grade II listed building on the National Heritage List for England (List No: 1229404). This eighteenth century building was listed on the 5<sup>th</sup> December 1986. The farmhouse is located approximately 550m north-west of Arclid Quarry, some 600m from the proposed solar farm.

#### Parish Church of St John

The Church of St John is located some 850m to the east Arclid Green hamlet. The church, which dates from 1861, is of the Early Gothic style. It comprises a nave, north and south transepts, chancel and a central tower with a spire. There are plate tracery windows. The architect for this Victorian parish church was Sir George Gilbert Scott. The construction is in yellow stone with red sandstone dressings. The interior is faced in ashlar with richly carved capitals.

St John's Church is recorded as a Grade II listed building on the National Heritage List for England (List No: 1330384). This building was listed on the 3<sup>rd</sup> June 1976 and the listing subsequently amended on the 27<sup>th</sup> April 1978. The parish church is located approximately 325m to the south of Arclid Quarry, some 525m from the proposed solar farm.

#### Milepost - Newcastle Road

A cast iron milepost is recorded on the former turnpike road between Arclid and Brownedge hamlets. This is located within Brereton Parish, and positioned on the eastern side of Newcastle Road. The milepost is probably early nineteenth century. This comprises a cyclindrical post that carries a curved plate inscribed in raised sans serif capitals.

The milepost is recorded as Grade II listed on the National Heritage List for England (List No: 1279110). This structure was listed on the 5<sup>th</sup> December 1986. The milepost is located approximately 700m to the north and north-east of Arclid Quarry, over 1km from the proposed solar farm.

#### 4.5 Conservation Areas

There are no Conservation Areas recorded within the study area. The proposed development is located over 1.6km to the north-east of the Sandbach Conservation Area, which encompasses the Market Place, High Town & Chapel Street. The Sandbach Conservation Area (Congleton Borough Council Ref: 018) was designated in March 1970 and subsequently extended in December 1976 and again in January 1995.

#### 4.6 Historic Hedgerows

The hedgerows depicted on the old maps within the scheme area have subsequently been removed during sand extraction at Arclid Quarry. Hence, there are no historic hedgerows that extend across the application area. The hedgerow that defines the north-west boundary of the quarry (Plate 5) is however shown on the 1831 county map by Bryant (Fig.7) and in greater detail on the Sandbach tithe map of 1841 (Fig.8) as well as the Ordnance Survey First Series drawing of 1856 (Fig.9). This boundary is not depicted on the earlier county maps; notably the 1777 Burdett map (Fig.5) and the 1819 Greenwood map (Fig.6). It should be noted that this hedgerow extends along the boundary of the proposed solar farm. The location of the array is however set back over 10m from the site perimeter.

#### 4.7 Registered Parks and Gardens

There are no registered parks and gardens recorded within the study area. There is however a potential for historic gardens within the wider landscape. These notably include the formal gardens (PRN 1101/4) associated with Brereton Hall (PRN 1101/2). This sixteenth century mansion is located approximately 2.3km to the north of Arclid Quarry.

#### 4.8 Registered Battlefields

There are no registered battlefields recorded within the study area. A Civil War battle is nonetheless recorded at Sandbach in 1651 (PRN 1109/3). This is documented as a skirmish between the town population and Scottish troop returning from the Battle of Worcester, where the Royalist troops were defeated by Cromwell on 3<sup>rd</sup> December 1651. It appears that the troops were in such an exhausted state that the townsfolk of Sandbach had an easy victory killing or taking prisoner all of the party. The battle site is reputedly located to the north of the town.

#### 4.9 Locally Listed Buildings & Local Heritage Assets

There is one locally listed building recorded within the study area. Brookside Hall (PRN 5325) is located on the southern side of Congleton Road (which demarcates the southern boundary of Arclid North Quarry). The hall was originally built as a residence in the last quarter of the nineteenth century, but later served as a boy's grammar school. The ground floor construction is in high quality Flemish bond brickwork with shallow arched lintels. The upper two stories are built in timber frame. The windows are original (which have very fine glazing bars). The roof is of slate with decorative clay ridge tiles. There are modern extensions to the rear. This property was assigned locally listed status on 14<sup>th</sup> October 2010. Brookside Hall is set back some 80m from Congleton Road, and is located some 560m from the proposed solar farm.

#### 4.10 Non-Designated Heritage Assets

**Undated Monuments** 

Three small pits and two gullies were found in 2009 during a watching brief on the eastern side of Arclid South Quarry, near Hemmingshaw Lane (CPAT Report 1015). These (undated) features could potentially be prehistoric. Two additional sites were subsequently identified within Arclid South Quarry. These consisted of a prehistoric burnt mound and an associated water storage pit (CPAT Report 1275) in addition to finds of two worked flints (CPAT Report 1309).

Other prehistoric artefacts appear to have been found to the north-east of Sandbach. These significantly include a number of worked flints (PRN 1106) that were reputedly discovered during the construction of the M6 motorway (but subsequently lost).

Palaeolithic (circa 700,000 BP – circa 10,000 BP)

There are no open-landscape findspots reported in the locality. However, in 1990 a broken tooth from a mammoth (*Mammuthus primigenius*) was found in Arclid North Quarry from a horizon at least 27m below ground surface (PRN 2891). Pollen has been recovered from organic-rich sediments infilling two of the tooth cavities. This suggests that the mammoth lived during a post-temperate substage of an interglacial. This has been tentatively correlated with the Ipswichian interglacial, a period from 135,000 to 73,000 years ago when the country was free of ice sheets and glaciers. The tooth was discovered at the site of the present Western Lagoon, approximately 75m south-east of the proposed solar panels.

*Mesolithic (circa 8,000 BC [10,000 BP] – circa 4000 BC)* 

There is potentially a significant archaeology for semi-permanent sites in the region. However, there are no finds of this period reported in the locality.

*Neolithic (circa 4000 – circa 2300 BC)* 

There are no Neolithic monuments or finds recorded within the intensive study area. A number of stone implements dating to this era have nonetheless been discovered within the surrounding landscape. These include an arrowhead (PRN: 1181) found at Smethwick Green, north-east of Arclid hamlet. There is also a polished flint axehead recorded in the locality on the Portable Antiquities Scheme Database (LVPL-OE5426).

In 2006 a programme of palaeoenvironmental sampling was undertaken within Arclid South Quarry. The study indicated a peat depth of up to 4.8m within a narrow hollow some 100m wide and 750m long (extending north-west to south-east). Radiocarbon dating suggested that the peat formation began around  $4480 \pm 50$  BP, during the mid to late Neolithic period, at which time the flora was dominated by tree species, particularly alder and oak (Grant, 2006).

Bronze Age (circa 2300 – circa 700 BC)

In 2010 a Bronze Age Socketed Axe (PRN 5009) was found to the north of Sandbach, near Fields Farm. The find spot is about 1km to the west of Arclid Quarry. Other artefacts reported in the locality include a barbed-and-tanged arrowhead (PRN 1180/0/2) discovered to the north-east of Arclid. There is additional evidence for Bronze Age activity within the locality. In particular, cropmarks of isolated round barrows have been identified on Sandbach Heath (PRN 2444 & 4554) and near Mossend, to the east of Arclid (PRN 1180/0/1).

Iron Age (circa 700 BC – AD 43)

In 1995 a bronze mount (PRN 2502) in the form of a bull's head was recovered from ploughsoil to the south-west of Brindley Green Farm. This was found approximately 850m north-west of the proposed solar farm. There is a close artistic parallel in a sheet bronze mount in the form of a horse mask from Stanwick, Yorkshire. The artefact probably dates to the first century AD.

Roman (AD 43 – circa AD 410)

The Roman road 'King Street' (PRN 436/1/0) represents the most significant archaeological monument in the landscape surrounding the development site. This road was probably designed to reach the Roman settlement at Chesterton, near Newcastle-under-Lyme (Margary, 1973, 302-3). To the south-east of Sandbach the course of this road is probably marked by the A533, which follows high ground and runs directly to Rode Heath. The road appears to extend through or to the south of Sanbach before continuing north-west to Middlewich.

The only evidence for Roman occupation at Sandbach consists of a stray find of a late second to early third century grooved jar and a sherd from a shallow dish (PRN 1107). Additional artefacts found in Sandbach reported on the Portable Antiquities Database include a number of Roman coins (LVPL-2AC474 & LVPL-948) and a copper brooch (LVPL-98C248).

To the north of Arclid Quarry, a hoard of one thousand Roman coins have been discovered at Brereton Green (PRN 1100). A gold finger ring, dating from the third to fourth century, has also been found in Brereton Parish (PRN 7268): the find-spot is recorded near Brindley Green Farm, about 700m north-west of the proposed scheme.

Early Medieval (circa AD 410 – AD 1086) & Medieval (1086 – 1536)

There are a number of medieval sites in the landscape surrounding the development site; these significantly include the moated hall Bradwall, located some 2km north of Sandbach (PRN 1097). Within the study area, Arclid Hall Farmhouse appears to represent the mostly likely site of a medieval manor. The present seventeenth century farmstead was formerly the manorial seat of the substantial landowners in Arclid, the Arclyds and Mainwarings (Earwaker,1972; Ormerod 1882).

Field-name evidence from the Sandbach tithe map (1841) suggests there was potentially a medieval deer park within the western scheme area. This may have been focused upon the later dwelling 'Park House', located to the north of Sandbach. It should be noted however that there are no curving field boundaries shown on the eighteenth century and later county maps to indicate a medieval park boundary. It is more likely the field-names refer to seventeenth century or later gardens. This landscaped area may have originally extended to within 300m of Arclid Quarry, but this area has now been built over by the M6 Motorway.

*Post-Medieval (1536 – 1899)* 

Most of the heritage assets recorded within the study area date from this period. These predominantly comprise the seventeenth century farmsteads along Congleton Road; Old Hall Farmhouse, Brickhouse Farms Nos. 1 & 2. The contemporary timber-frame buildings, The Cottage (Tudor Cottage) and Holly Cottage, are situated within the northern scheme area; positioned along the road from Arclid to Brownedge. The latter appears to have originated as a hall-house. Arclid Hall Farmhouse, at Arclid Green, appears to have been built at the end of the seventeenth century (but is probably built on the site of an earlier manor house). Brindley Green Farmhouse, located to the north of Arclid Quarry post-dates these farmsteads by more than a century.

The remaining farmsteads recorded within the study area appear to date from the eighteenth and early to mid nineteenth century. Within the northern scheme area these include Holmleas, Brownedge and Brownedge House farms, Dumber Bank Farm and Taxmere Farm. The latter is positioned some 350m to the north and north-east of Arclid Quarry. To the south of the application site the historic farmsteads (at Sandbach Heath) include Heath Farm, Reynold's Farm and Arclid Cottage Farm. Arclid Green Farm is also shown on old maps to the south of Arclid North Quarry, on the western side of the hamlet of the same name.

Whilst the settlement pattern within the study area is dispersed, a number of historic buildings are concentrated at Brownedge, Arclid and Arclid Green and in the vicinity of these hamlets. A number of dwellings are also noted along the two main turnpike routes; the Sandbach to Congleton Road and the Newcastle Road (Newcastle-Under-Lyme to Warrington Turnpike). There are additional historic properties (dwellings) positioned along the minor road to Brookhouse Green and Illidge Green, running to the south-east and north-east of Arclid, respectively.

Aside from farmsteads and dwellings noted above, Arclid was notably the location of a workhouse (English Heritage Archive: 1441144), formerly located at the intersection of the Congleton Road with Newcastle Road. This was built in 1844-5, intended to accommodate 370 inmates. At the end of the nineteenth century a new infirmary was constructed and Arclid Infectious Diseases Hospital (English Heritage Archive: 1069824) built to the north-east of the workhouse. During the First World War 40 beds in the infirmary was used for military casualties and the workhouse accommodated ten German prisoners of war. In the 1920s the use of the infirmary as a general hospital gradually increased. The isolation hospital was demolished in the late 1960s. Arclid Hospital closed in 1993 and the buildings subsequently demolished. The workhouse and infirmary were formerly located some 430m to the east of Arclid Quarry.

Other post-medieval features recorded within the study area include the bridges 'Far Arclid' and 'Near Arclid', positioned along the southern boundary of Arclid North Quarry, where the Congleton Road crosses the Arclid Brook. The bridges are documented in 1619 (Dodgson, 1970, 265). A rifle range is also shown on early Ordnance Survey editions on Sandbach Heath. There are in addition field-names on the Sandbach (1841) and Arclid (1840) tithe maps that indicate numerous brick kilns within the study area. It should be noted that there is a particular concentration of kilns to the north-east of Sandbach. These include a 'brickfield' located adjacent to Brickhouse Farms Nos. 1&2. Brick kilns are also shown on old Ordnance Survey maps further to the west along Congleton Road (PRN 43830).

Modern (1899 - Present)

A Royal Observer Corps Monitoring Post (PRN 4134) is recorded to the north of Sandbach, along the track leading to Fields Farm. This structure was built in 1938. It was Post 1 in Cluster C of Group 27. During the Cold War an Orlit Post was installed and in 1963 the post was moved underground in order to detect and monitor fallout in the event of a nuclear war. In October 1968 it was closed down (and may have been demolished). The monitoring post is, or was, located some 700m to the west of the proposed scheme.

#### 4.11 Aerial Photographs

Aerial photographs of the development site have previously been examined in 1993 during archaeological assessments related to widening of the M6 Motorway. Further examination of the aerial photographs identified no additional earthwork features or cropmarks within the intensive study area. The oblique aerial photographs held by Bathgate Silica Sand Ltd also show no potential soilmarks or parchmarks within the fields surrounding the proposed scheme (Fig.10).

#### 4.12 Results of the Site Survey

The weather and ground conditions were generally good during the survey (Plates 1-9). The development area was assessed for earthwork remains of archaeological monuments and former field systems as well as historic structures (in particular those associated with post-medieval brick-making). In addition, the quarry manager (Dave Robinson) provided archive material to determine the extent of former extraction activity and ground disturbance within the site of the solar farm.

During the survey it was noted that the site of the proposed solar array has been previously excavated and the landscape subsequently restored (prior to 2000). The scheme site presently comprises a comparatively steep man-made bank (over 5m high) sloping down to the Western Lagoon. There is an unexcavated strip of land at the top of the bank, along the north-west site boundary; there is, however, a high probability that this area has been previously disturbed during the restoration work.

#### 5. Conclusions

The results of the walkover survey show that the proposed site of the solar array has been previously quarried. In addition, the original ground surfaces at the proposed locations of the site compound, access roads and grid connection points have been removed, either as a result of quarrying or by disturbance to the upper soil horizons in the recent past. The scheme will consequently have no physical impact upon the potential archaeological resource.

The results of the assessment indicate there is evidence for occupation at Arclid from the Neolithic period onwards. However, there are no scheduled monuments or significant archaeological monuments recorded within 1 km of the development site.

A provisional assessment of the visual impact of the solar array indicates that there are three historic properties (comprising four Grade II listed building in total) positioned within 150m of the solar farm. These consist of three seventeenth century farmhouses (Old Hall Farmhouse and Brickhouse Farms Nos. 1&2). An informal visual assessment undertaken during the site visit determined that of these, only Brickhouse Farm No. 2 and its associated outbuildings has any views of the site (Plate 4). The potential impact on the setting of this asset is likely to be negligible, particularly if proposed tree planting by the quarry goes ahead in this area.

Four other listed buildings and structures recorded within the study area will be located over 1 km from the development site and are unlikely to be visible from the proposed development. The two remaining listed buildings comprise Brindley Green Farmhouse and the Church of St John, which are about half a kilometre or more from the solar farm, respectively. The locally listed Brookside Hall is positioned along Congleton Road at a similar distance from the proposed scheme. There are additional historic building recorded within the study area, but these are predominantly clustered around Arclid and Arclid Green hamlets, or represent isolated farmsteads and dwellings dispersed throughout the study area. Provisional analysis suggests that the scheme will not impact upon these assets.

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Archaeology Data Service: Grey Literature Reports http://archaeologydataservice.ac.uk/

British Library http://www.bl.uk/

Cheshire Archives & Local Studies http://archives.cheshire.gov.uk/

Cheshire Image Bank: Historic Photographs http://cheshireimagebank.org.uk/

Archaeological Assessment Arclid North Quarry, Sandbach, Cheshire

Cheshire Historic Environment Record: Revealing Cheshire's Past http://rcp.cheshire.gov.uk/
Cheshire Local History Association
http://www.cheshirehistory.org.uk/

English Heritage: Heritage Gateway http://heritagegateway.org.uk/

English Heritage: National Historic Records (PastScape)

http://www.pastscape.org.uk/

English Heritage: National Heritage List for England

http://list.english-heritage.org.uk/

English Heritage: Historic Photographs (ViewFinder)

http://viewfinder.english-heritage.org.uk/

Geology of Britain Viewer (British Geological Survey)

http://mapapps.bgs.ac.uk/geologyofbritain/

Promap / Landmark Information Group: Historic OS Maps http://www.promap.co.uk/

National Archives http://www.nationalarchives.gov.uk/

Portable Antiquities Database http://finds.org.uk/

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Tithe Map of Sandbach. 1841. Plan of the Township of Sandbach in the County of Chester. Cheshire Record Office EDT 351/2.

#### **Ordnance Survey Maps**

Ordnance Survey	1856	Sheet 80. Scale: 1 inch to 1 mile (1:63,360)
Ordnance Survey	1875	Scale: 1:2,500 (25 inches to 1 mile)
•	10/3	
Ordnance Survey	1882	Scale: 1:10,560 (6 inches to 1 mile)
Ordnance Survey	1898	Scale: 1:2,500 (25 inches to 1 mile)
Ordnance Survey	1899	Scale: 1:10,560 (6 inches to 1 mile)
Ordnance Survey	1909	Scale: 1:2,500 (25 inches to 1 mile)
Ordnance Survey	1911	Scale: 1:10,560 (6 inches to 1 mile)
Ordnance Survey	1938	Scale: 1:10,560 (6 inches to 1 mile)
Ordnance Survey	1954	Scale: 1:10,560
Ordnance Survey	1964-69	Scale: 1:2,500
Ordnance Survey	1969	Scale: 1:10,560
Ordnance Survey	1970	Scale: 1:10,560
Ordnance Survey	1974	Scale: 1:2,500
Ordnance Survey	1979	Scale: 1:10,000
Ordnance Survey	1992	Scale: 1:10,000

#### Vertical Aerial Photographs (Film)

RAF/CPE/UK/1935/1130	17-MAY-1947
RAF/CPE/UK/1935/3130	17-MAY-1947
RAF/CPE/UK/1935/3135	17-MAY-1947

#### **Vertical Aerial Photographs (Digital Imagery)**

Bing Maps (© Nokia, Microsoft Corporation, 2015) http://www.bing.com/maps/

Google Maps (© Bluesky, Infoterra Ltd, Digital Globe, Getmapping Plc, 2015) https://maps.google.co.uk/maps/

**Appendix A: Figures** 

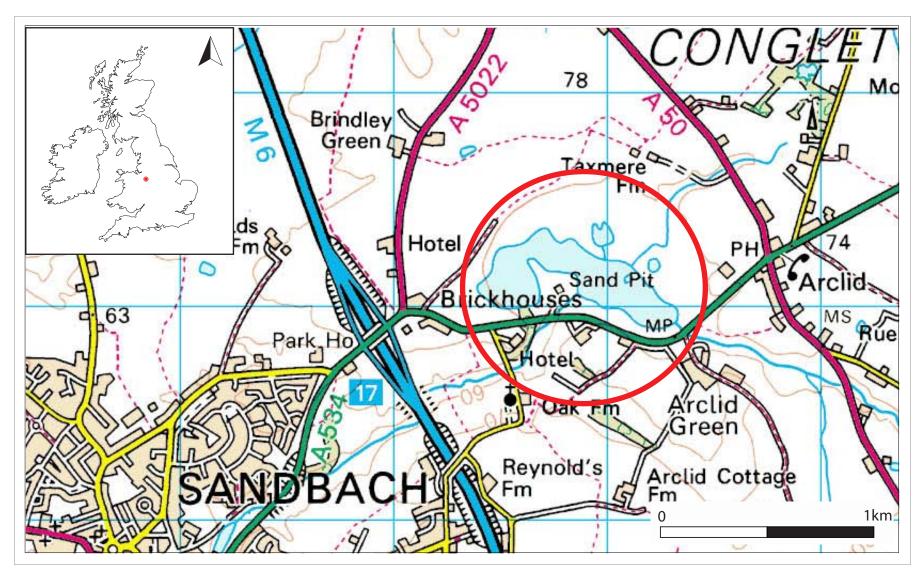
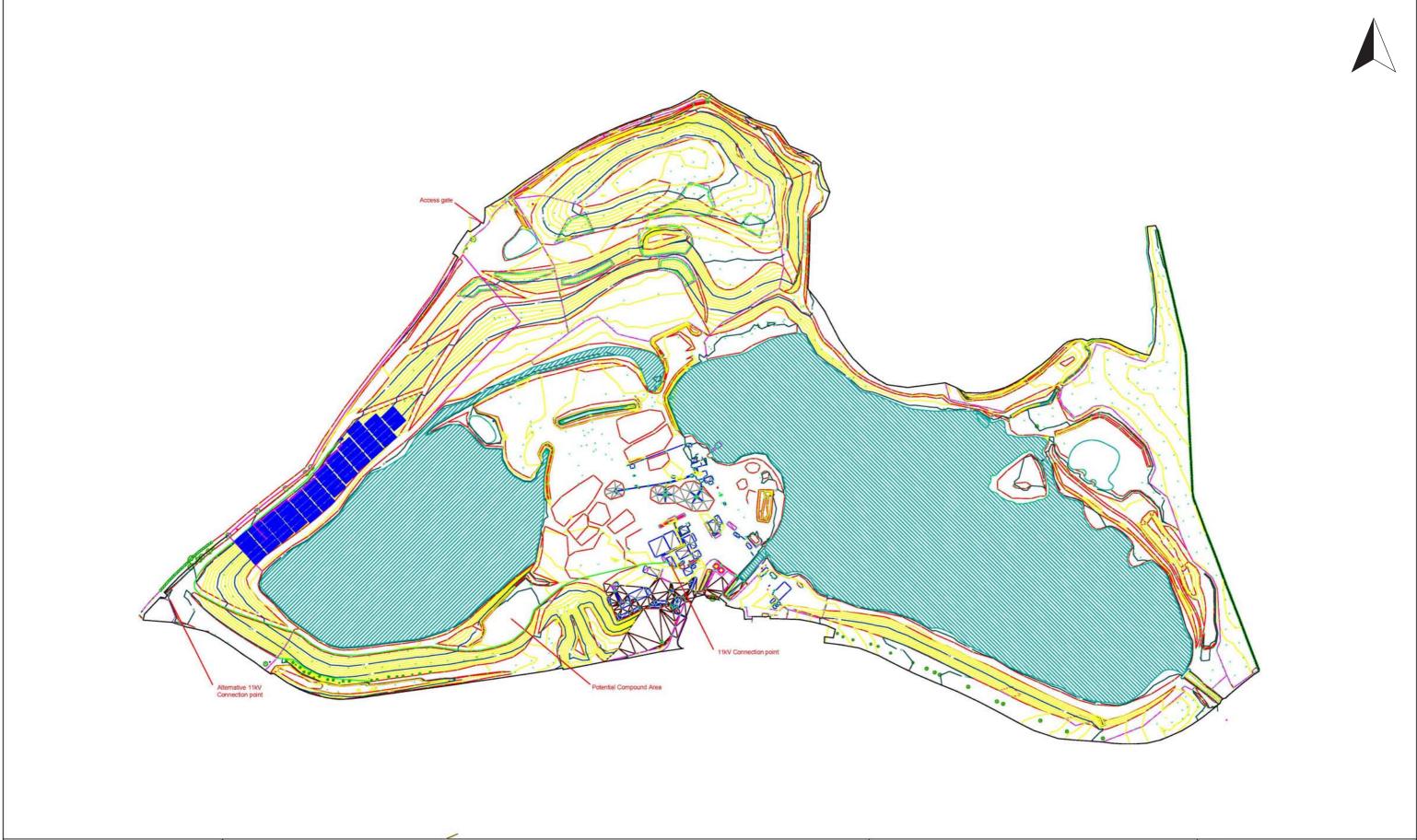


Fig 1: Figure showing location of assessment area





DYFI ECO PARK — MACHYNLLETH — POWYS — SY20

BAX

WALES — UNITED KINGDOM

TEL: +44(0)1654 705000 FAX: +44(0)1654

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Notes

Fig 2 - Development Proposals

	FEASIBILITY				CLIENT PROJECT LOCATION	Bathgate Silica Sand Ltd								
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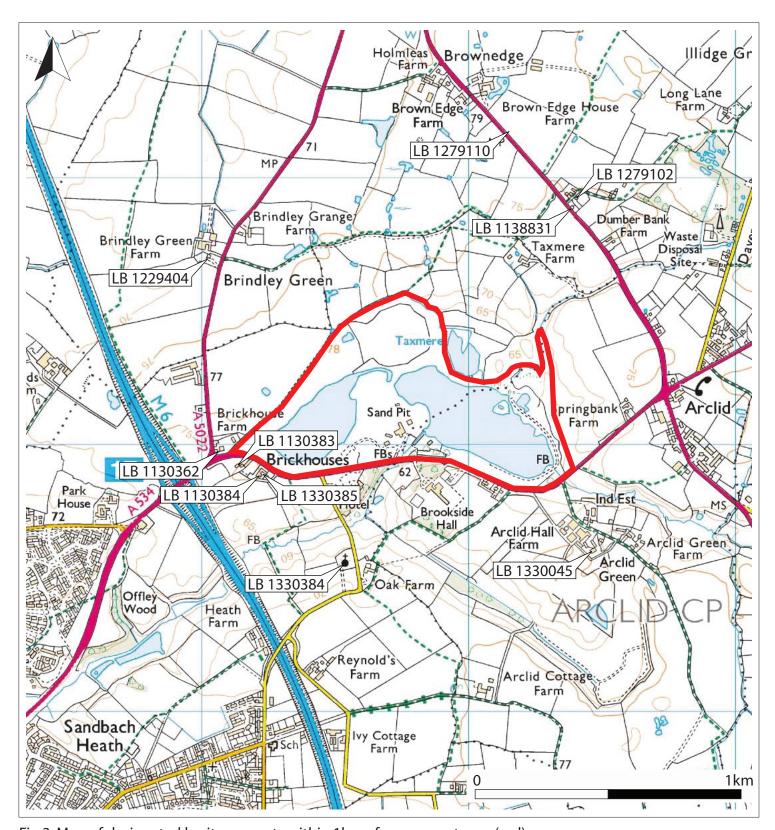


Fig 3: Map of designated heritage assets within 1km of assessment area (red)

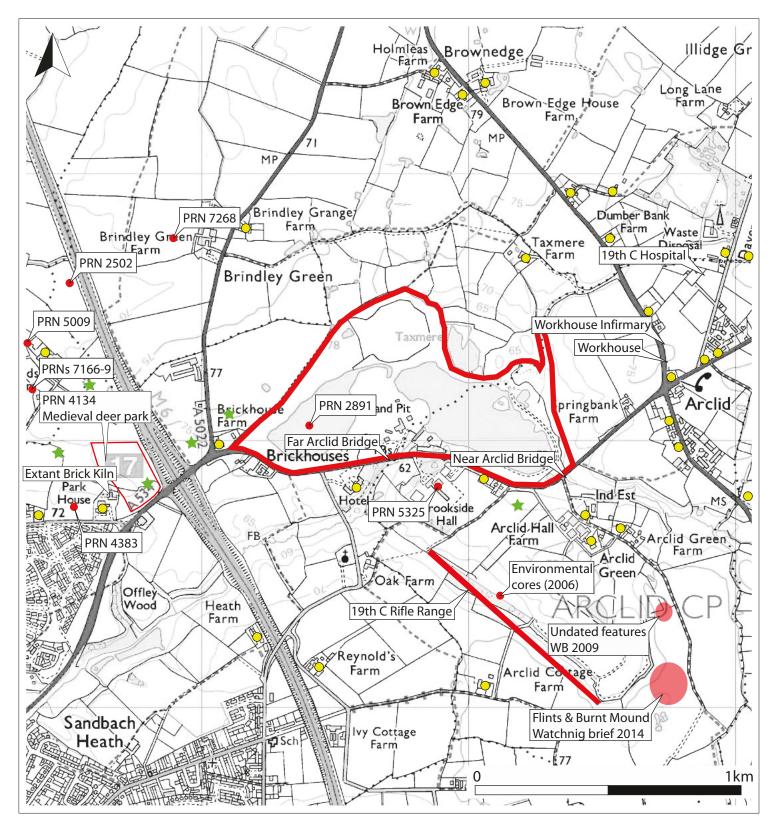


Fig 4: Non-designated heritage assets within 1km of assessment area (red)

★ Brick Kilns

Historic Buildings

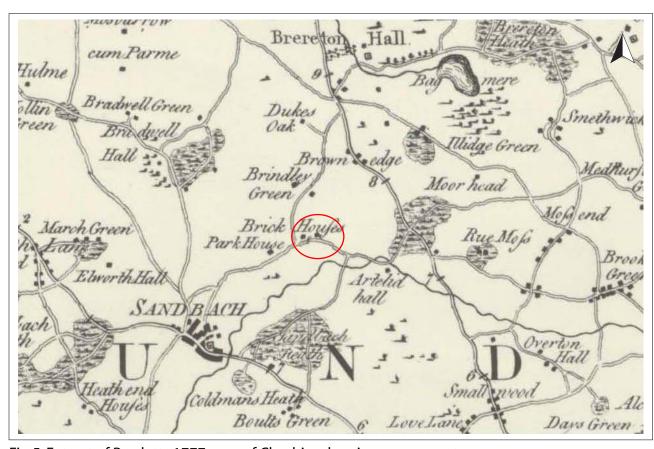


Fig 5: Extract of Burdetts 1777 map of Cheshire showing assessment area

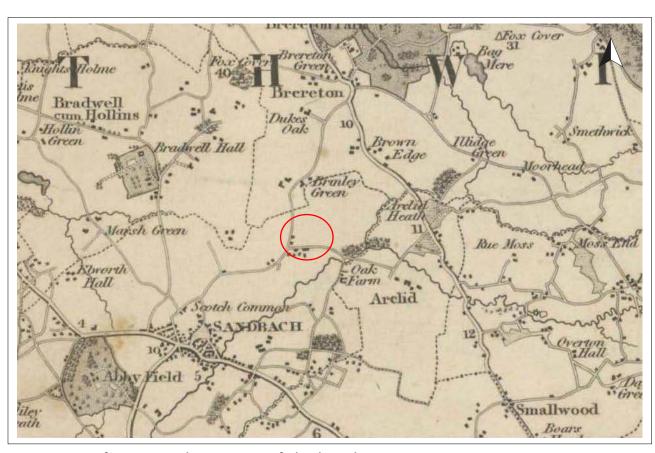


Fig 6: Extract of Greenwoods 1819 map of Cheshire showing assessment area

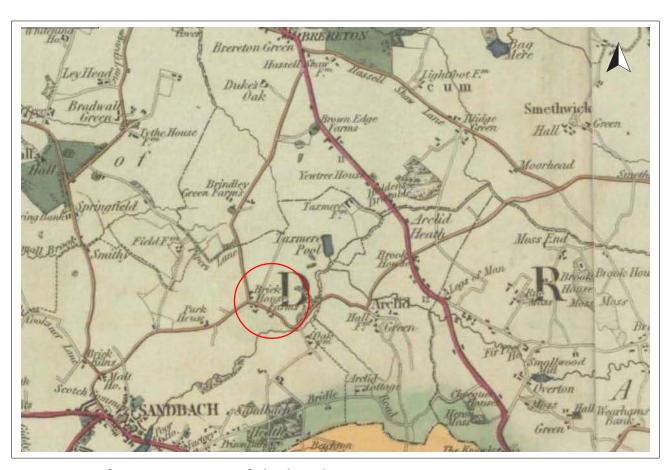


Fig 7: Extract of Bryants 1831 map of Cheshire showing assessment area



Fig 8: Parish Tithe map (1840s) showing approximate location of proposed solar farm

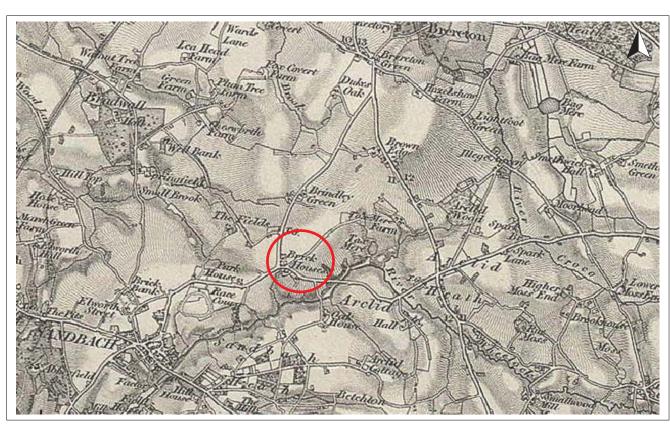


Fig 9: Extract of the 1856 OS first Series (1 inch) map showing assessment area

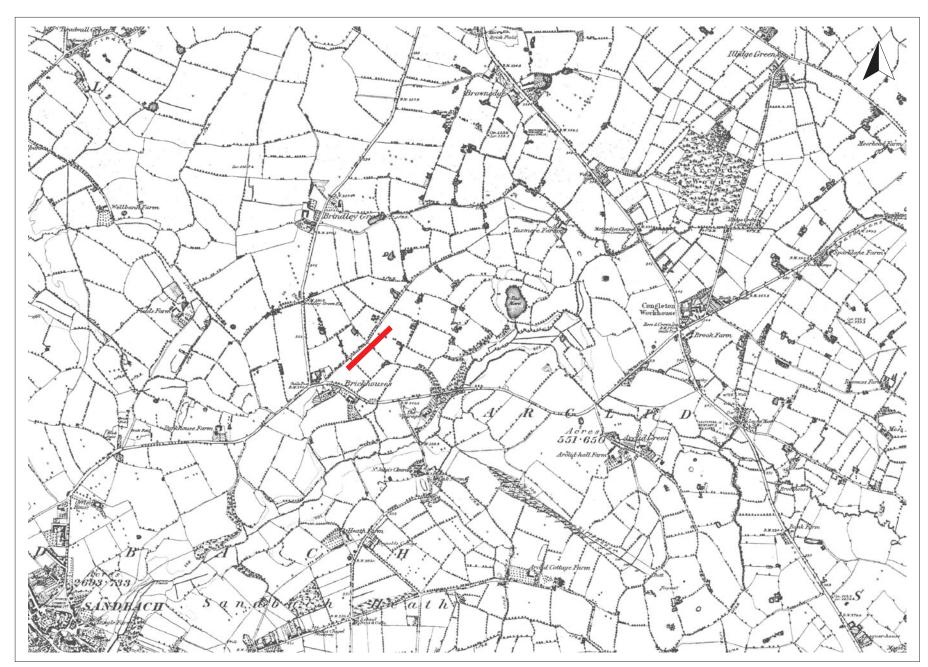


Fig 10: Extract of the 1882 6 Inch 1st Edition OS map showing approximate location of proposed solar farm

**Appendix B: Plates** 



Plate 1: General view across Arclid quarry north. Looking south west



Plate 2:The restored landscape at the western corner of the quarry Looking south west



Plate 3: View across the Western Lagoon showing the proposed site of the solar farm (located on the landscaped bank along the north-west boundary). Looking North-North-West.



Plate 4: View at the western corner of the quarry towards Brickhouse Farm No.2 (to the left) and Old Hall Farmhouse (on the far right). Looking South



Plate 5. General view on top of the bank along the north-west perimeter of the quarry. Looking South-South-East.



Plate 6. View towards the M6 Motorway to the west of the proposed scheme. Looking West-North-West.



Plate 7. The restored landscape within the northern part of Arclid Quarry. Looking North-East.



Plate 8. View of the Lovell Telescope at Jodrell Bank. Looking North.



Plate 9. General view towards the hamlets of Arclid (on the left) and Arclid Green (on the right). Springbank Farm is shown in the foreground. Looking East-South-East.

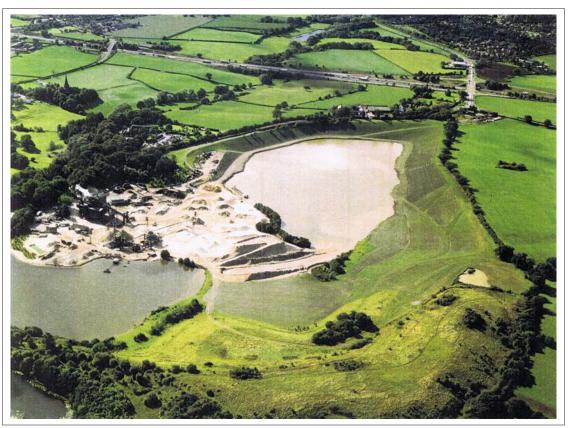


Plate 10. Aerial photograph of Arclid Quarry taken in June 2000 (Bathgate Silica Sand Ltd) showing the restored landscape at the proposed location of the solar farm. Looking South-South-West.

**Appendix C: Specification** 

### **Specification**

for an

### **Archaeological Desk-Based Assessment**

at

### Arclid Quarry, Congleton Road, Sandbach, Cheshire

Prepared for:

Dulas Ltd Unit 1 Dyfi Eco Park, Machynlleth, Powys, SY20 8AX

17<sup>th</sup> December 2014

Archaeology Wales Limited Rhos Helyg, Cwm Belan, Llanidloes, Powys, SY18 6QF Tel: +44 (0) 1686 440371 Email: admin@arch-wales.co.uk

maii: admin@arcn-waies.co.ui: Web: www.arch-wales.co.uk

#### Summary

This Specification details the proposal for an Archaeological Desk-Based Assessment prior to application for planning permission for a 2 megawatt solar farm at Arclid Quarry, Sandbach, Cheshire. The assessment has been commissioned by Dulas Ltd on behalf of Bathgate Silica Sand Ltd.

#### 1. Introduction

The proposed solar farm is located at Arclid Quarry, Congleton Road, Sandbach, Cheshire, CW11 4SN (henceforth – the site). The development area is located to the north-east of Sandbach (some 1.5km from the historic core of the settlement). Arclid village is situated some 400m to the west of the quarry whilst Arclid Green hamlet is positioned directly to the south of the development site.

The application area is calculated to be some 50 hectares. The proposed solar farm is likely to cover approximately 15 hectares to the north of lakes formed by quarrying activity within the eastern and western parts of Arclid Quarry. The development site is 60m-80m above Ordnance Datum.

The centre of the application area is approximately situated at NGR 377760 362160 (SJ 7776 6216).

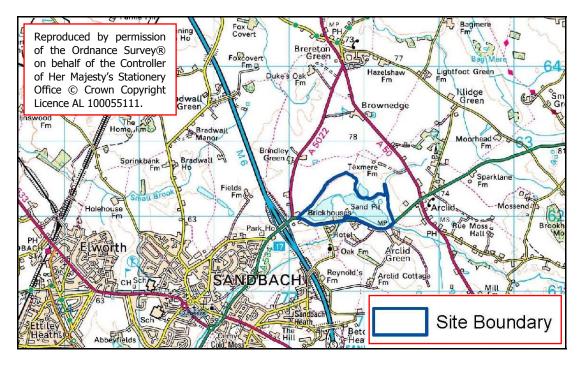


Figure 1. Location Map

The development proposal has been submitted by Dulas Ltd (Unit 1 Dyfi Eco Park, Machynlleth, Powys, SY20 8AX) on behalf of Bathgate Silica Sand Ltd (c/o Langtons, The Plaza, 100 Old Hall Street, Liverpool, L3 9QJ).

The local planning authority is Cheshire East Council. The application reference is 14/3642S.

This Specification has been prepared by Adrian Hadley of Archaeology Wales Ltd (henceforth - AW) at the request of Rachel Kennedy of Dulas Ltd. It provides information on the methodology that will be employed by AW during the assessment.

#### 2. Aims and Objectives

The archaeological assessment is intended to identify the extent and character of the known and potential archaeological resource within the scheme area. The assessment will consider the importance of heritage assets in a local, regional and national context. The report will also assess the impact of the proposed development on potential archaeological remains within the development site. This work will determine the need for an archaeological evaluation or other mitigation measures to ensure archaeological features and/or deposits are preserved *in situ* or by record, as appropriate.

The assessment will be undertaken in accordance with the *Standard and Guidance* for *Desk-Based Assessment* issued by the *Institute for Archaeologists (IfA 2009)*.

#### 3. Methodology

#### Study Area

The study area for the archaeological assessment will comprise a 1km buffer zone around the proposed development. Aerial photographs will be examined across the study area in order to identify potential archaeological sites within and beyond the footprint of the proposed scheme. Research on historic records will focus on the development site.

#### Analysis of Databases and Historic Sources

The assessment will examine all readily available sources. The study will comprise:

- An assessment of those designated assets included on the National Heritage List for England, held by English Heritage. This encompasses Buildings of Special Architectural or Historic Interest, Scheduled Ancient Monuments, Parks and Gardens of Historic Interest and Registered Battlefields.
- The collation and assessment of all relevant information held in the Cheshire Historic Environment Record (HER). These records encompass archaeological sites, monuments and finds, details of previous fieldwork and historic landscape characterisation maps.
- The collation and assessment of the Heritage Gateway data relating to the intensive study area.
- An assessment of all available excavation reports and archives (including unpublished reports) affecting the site and its setting. These notably include the grey-literature reports held by the Archaeology Data Service.
- An assessment of online records held by the Portable Antiquities Scheme. These relate to stray finds reported within the assessment area that have not been incorporated into the Cheshire HER.

- An analysis of available cartographic evidence. Old maps are held by the British Library, the National Archives and Cheshire Archives. These include tithe and enclosure maps, estate plans and the Ordnance Survey County Editions.
- An analysis of the published and unpublished studies such as county histories and local and national journals. These are held by Cheshire Archives as well as other local archives. Historic (unpublished) documents such as estate records, leases, wills, etc will be examined if appropriate.
- An analysis of pictorial evidence. Old photographs are held by Cheshire Archives as well as other local archives.
- A review of the aerial photographic evidence. An assessment of vertical and oblique aerial photographs held by Cheshire HER.
- Geotechnical Information. This will include soil logs from ground investigation (boreholes or test pits) within the development site. Borehole records for the study area may also be available from the British Geological Survey website.

#### Field Observation

A walkover survey will be undertaken in order to assess the condition of any known heritage assets and identify any additional features of cultural heritage interest. During the site visit factors such as existing and previous land use will be considered in order to assess the survival or condition of known or potential archaeological remains.

Background research will be completed prior to the survey. Photographs of the site will be taken in digital format, using a high resolution digital (10MP or greater) camera with photographs stored in Jpeg and Tiff format.

#### **General Considerations**

All sources consulted will be listed and cited in the report whether or not these have been productive. All other known sources which have not been consulted will be listed and the reason for non-consultation given.

All sources will be considered in respect of their reliability and value for the purpose of the desk-based assessment.

#### **Monitoring**

Curatorial responsibility for the archaeological work lies with the Cheshire Archaeology Planning Advisory Service. Any variations to the specification will be communicated to the Planning Advisory Service for approval before these are implemented.

#### 4. Project Codes

The Archaeology Wales site code for this project is SSF/14/DBA.

#### 5. Reporting

The results of the assessment will be submitted to Cheshire Archaeology Planning Advisory Service for review. Following approval of the assessment, a bound copy of the report in addition to an electronic copy will be presented to the Cheshire Historic Environment Record.

The assessment report will include the following:

- A non-technical summary
- The aims and objectives of the assessment
- The methodology employed during the assessment
- Analysis of topography and geology
- An assessment of the historic landscape character
- Descriptions of the known heritage assets reported within the study area
- Analysis of previous archaeological investigations within the study area
- An assessment of the local, regional and national importance of the heritage assets identified within the study area
- Assessment of the potential archaeological resource within the development site
- Assessment of the primary and secondary historic sources for the development area
- Cartographic analysis
- Analysis of aerial photographs
- The results of the site visit
- An assessment of the impact of the development on the potential archaeological resource
- General conclusions and recommendations for further work and/or mitigation strategies
- Bibliography and references
- Appendices containing location maps, a plan of the proposed development, distribution maps of designated heritage assets and archaeological sites recorded within the study area, old maps and photographs/pictures as well as photographs taken during the site visit.

#### **General Considerations**

An assessment of the potential for further investigative work will be included within the report. This will give recommendations, where appropriate, for non-intrusive survey and/or intrusive evaluation to determine the location, extent, date, character, condition, significance and quality of any surviving archaeological remains. The assessment will

formulate a methodology for further archaeological investigation and/or a mitigation strategy. The following techniques will be considered:

- A geophysical survey and/or trial trenching to evaluate the development site
- Design modifications to preserve archaeological remains in situ
- Archaeological excavation of identified remains
- An archaeological watching brief during the construction programme

#### **Archive Report**

The site archive will be prepared in accordance with the *Management of Research Projects in the Historic Environment* (English Heritage 2006). The archive will be deposited with the appropriate organisation or museum within six months of the completion of the full report.

#### Confidentiality and Copyright

It is understood that the publication report will become a public document after an appropriate period of time (generally not exceeding six months following deposition).

Archaeology Wales Ltd shall retain full copyright of any commissioned reports, tender documents or other project documents under the *Copyright, Designs and Patents Act* (1988). All legal rights shall be reserved, except that an exclusive licence shall be provided to Dulas Ltd, Cheshire East Council and the Archaeology Planning Advisory Service for the use of such documents in all matters relating to the project.

#### 6. Resources and Timetable

#### **Standards**

AW is a Registered Organisation with the Institute for Archaeologists. The assessment will be undertaken by suitably qualified AW staff using current best practice. All work will be conducted in accordance with the standards and guidelines of the Institute for Archaeologists.

#### Timetable for the Archaeological Work

The assessment and site visit are scheduled to be undertaken in January 2015.

#### Insurance

AW is an affiliated member of the CBA, and holds Insurance through the CBA insurance service.

#### **Health and Safety**

Risk assessments will be carried out in advance of all fieldwork. All members of staff will adhere to the requirements of the *Health & Safety at Work Act*, 1974, and the Health and Safety Policy Statement of AW.



Archaeology Wales Limited
Rhos Helyg, Cwm Belan, Llanidloes, Powys SY18 6QF
Tel: +44 (0) 1686 440371
Email: admin@arch-wales.co.uk

Company Directors: Mark Houliston MIFA & Jill Houliston Company Registered No. 7440770 (England & Wales). Registered off ce: Morgan Gri ths LLP, Cross Chambers, 9 High Street, Newtown, Powys, SY16 2NY