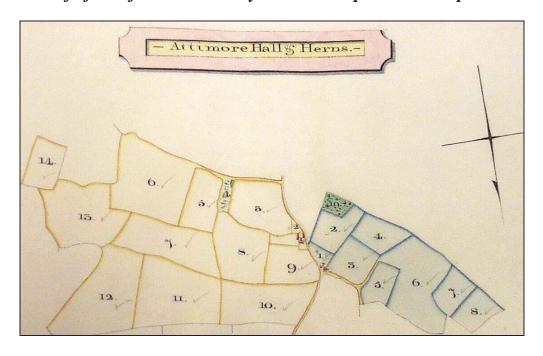


Archaeological Services & Consultancy Ltd

ARCHAEOLOGICAL DESK-BASED ASSESSMENT: SIR FREDERIC OSBORN SCHOOL, WELWYN GARDEN CITY, HERTFORDSHIRE

on behalf of Hertfordshire County Council Corporate Development Unit



Sallianne Wilcox MA BA AIFA

November 2003

ASC: 533/FWS/01

Letchworth House Chesney Wold, Bleak Hall, Milton Keynes MK6 1NE Tel: 01908 608989 Fax: 01908 605700

Email: office@archaeological-services.co.uk Website: www.archaeological-services.co.uk



Site Data

ASC project code:	FWS		Project N	o:	533
County:		Hertfordshire			
Village/Town:	Village/Town:		Welwyn Garden City		
Parish:	Parish:		Welwyn Garden City		
NGR:		TL 25620 13005			
Present use:		Open land adjacent to the school			
Planning proposal:		Possible development			
Planning application ref/date:		Pre-determination			
Local Planning Authority:		N/A			
Date of fieldwork:		19 th November 2003			
Client:		Corporate Development Unit,			
		Hertfordshire County Council,			
		County Hall,			
		Hertford			
		SG13 8DQ			
Contact name:	Contact name:		Rob Grinter (Senior Planning Officer)		
Telephone	Fax:				

Internal Quality Check

Primary Author:	Sallianne Wilcox	Date:	21.11.03
Edited/Checked By:		Date:	
Revisions:		Date:	
Edited/Checked By:		Date:	

© Archaeological Services & Consultancy Ltd

No part of this document is to be copied in any way without prior written consent.

Every effort is made to provide detailed and accurate information. However, Archaeological Services & Consultancy Ltd cannot be held responsible for errors or inaccuracies within this report.

© Ordnance Survey maps reproduced with the sanction of the Controller of Her Majesty's Stationery Office.

ASC Licence No. AL 100015154

CONTENTS

Sur	mmary	5
1.	Introduction	5
2.	Setting	6
3.	Aims & Methods	7
4.	Archaeological & Historical Evidence	9
5.	Conclusions	20
6.	Acknowledgements.	21
7.	Sites & Monuments Data	22
8.	References	23
9.	Cartographic Sources	25
10.	Photographic Sources	25
Fig	gures: General location	3
2.	Site location	
3.	Map showing location of SMR related finds	
4.	Extract from Dury and Andrews' 1776 map	
5.	Extract from Bryant's 1822 map	
6.	1920 map of Welwyn Garden City by Soissons	
7.	1809 Cowper estate map	
8.	1810 Cowper estate map	
9.	1835 Tithe Map of Tewin	
10.	1862 Cowper estate map	15
11.	1878 Ordnance Survey map	15
12.	1898 Ordnance Survey map	15
	1939 Ordnance Survey map	
14.	The 1947 Master Plan	16
15.	Photograph of the High School, Herns Lane, c.1964	17
16.	Map dating to the late 1960's	17
	Map dating to 1970 – 1	
	1981 Ordnance Survey Map	
19.	Attimore Hall, Ridgeway c.1953	18

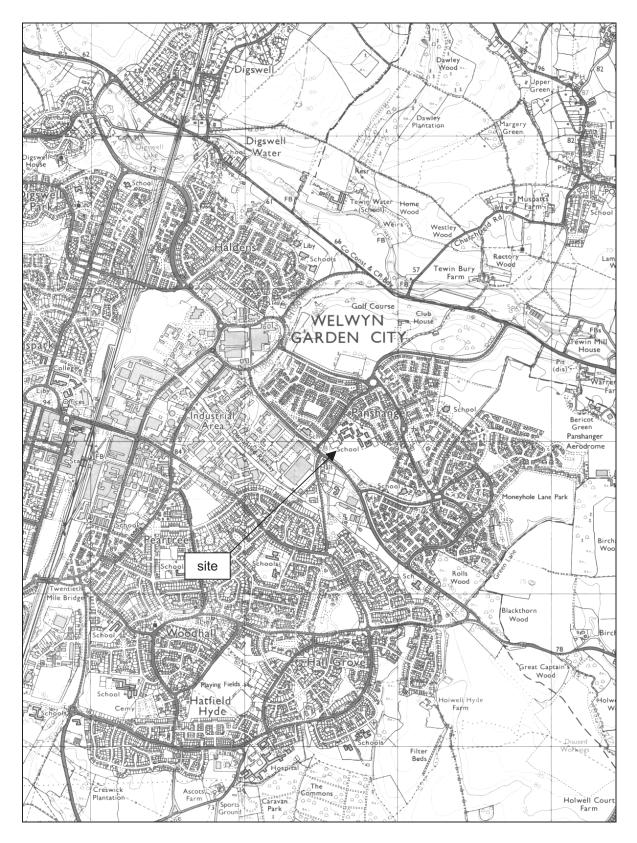


Figure 1: General location (scale 1:25,000)

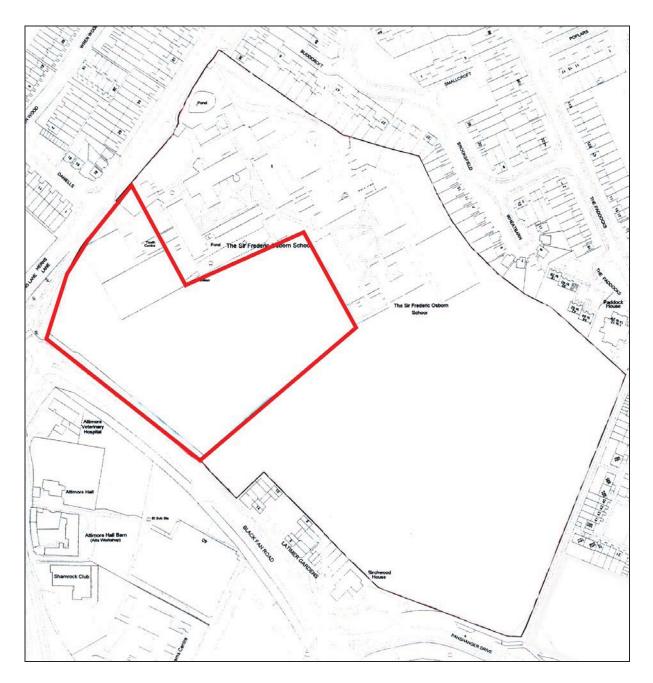


Figure 2: Site location with boundary of proposed development area outlined in red *(scale 1:2,500)*

Summary

In November 2003 Archaeological Services and Consultancy Ltd (ASC) carried out an archaeological desk-based assessment of a site at Sir Frederic Osborn School, Herns Lane, Welwyn Garden City, Hertfordshire. The project was carried out during the pre-planning stage of the proposed development of the site.

The site is situated south of the school and comprises flat, turfed, playing fields with two hard courts to the east of the development area adjacent to the school buildings. It forms part of the 1947 master plan for the extension of Welwyn Garden City to the north east of the town, based upon the ideas of Ebenezer Howard, the Garden City Association, the New Towns Trust and the plans of Louis de Soissons.

The site lies within an area of archaeological significance. A small number of archaeological finds have been found within an approximate 500m radius dating from the Bronze Age to the Roman period. This included important Iron Age cremation burial which was recorded at the former Grubbs Farm on Herns Lane near to the school. Although no archaeological remains have been recorded on the site itself, the survival of any archaeological remains is completely dependent on the degree of intrusion caused by development of the site in the early 20^{th} century.

There are no listed buildings on the site. However, to the south beyond Black Fan Road stands Attimore Hall to which the land formerly belonged as part of the Panshanger estate.

1 Introduction

- 1.1 In November 2003 Archaeological Services and Consultancy Ltd (ASC) carried out an archaeological desk-based assessment of a site at Sir Frederic Osborn School, Welwyn Garden City, Hertfordshire (NGR TL 25620 13005: Fig. 1). The project was commissioned by Hertfordshire County Council Corporate Development Unit, and was conducted following written recommendations for pre-determination investigations by the County Archaeologist (letter dated 04/07/03).
- 1.2 This desk-based assessment has been requested as the site lies within a designated area of archaeological significance, number 15 (AAS 15 no. 15). This notes evidence of a late Iron Age cremation cemetery and extensive late Iron Age and Romano-British occupation activity. The cemetery is of particular significance as it includes a chieftain's burial.
- 1.3 Archaeological Services and Consultancy Ltd conducted an archaeological evaluation adjacent to the proposed development area in 1999 prior to the extension of the laboratories at Sir Frederic Osborn School. No finds or features were discovered following the stripping of the topsoil and subsoil surface (Zeepvat 1999). However some of the historical background provided in that evaluation report has been utilised in this desk-based assessment.

2 Setting

- 2.1 The site is situated to the north east of Welwyn Garden City in the district of Welwyn Hatfield, Hertfordshire. It lies to the south west of the main buildings of Sir Frederic Osborn School, on the north side of Black Fan Road.
- 2.2 The site lies on flat terrain below 80m OD, some 500m from the Mimram valley to the north east. The local geology is classified as Glaciofluvial drift, which is the parent material for soils belonging to the Ludford Association (Soil Survey 1983). The soils are well-drained, non calcareous, argillic brown earths which were developed in fine and coarse loamy Head (Hodge *et al* 1984, 237).
- 2.3 The proposed development area comprises flat ground, formerly part of the playing fields of Sir Frederic Osborn School, and is accessed from Herns Lane to the north through the premises and a series of school buildings (Fig. 2). The perimeter is bounded by a metal chain-link fence with a hedge along its south and west side. To the west of the site are playing fields and to the north are school buildings. The proposed development area consists of turfed level ground and there are two hard court areas to the east.

3 Aims & Methods

- An archaeological desk-based assessment is an assessment of the known or potential archaeological resource within a given area, consisting of a collation of existing archaeological, historical and topographical information in order to identify the likely extent, character and quality of the known or potential archaeological resource, in order that appropriate measures might be considered.
- 3.2 The desk-based assessment was carried out according to the Brief, and the Institute of Field Archaeologists' *Standard and Guidance for Archaeological Desk-Based Assessments* (IFA 2001).
- 3.3 The following readily available sources of information were consulted for the desk-based assessment:

3.3.1 Archaeological Databases

Archaeological databases represent the standard references to the known archaeology of an area. The principal source consulted was the Hertfordshire Sites & Monuments Record (SMR), Hertford. The study area employed in the SMR search includes the site itself, and a surrounding area of approximately 500m radius.

3.3.2 Historic Documents

Documentary research provides an overview of the history of a site and its environs, suggesting the effects of settlement and land-use patterns. The principal source consulted was the Hertfordshire Archive and Local Studies Library (HALS), Hertford.

3.3.3 *Cartographic & Pictorial Documents*

Old maps and illustrations are normally a very productive area of research. The principal sources consulted were Hertfordshire Archive and Local Studies Library (HALS), Hertford.

3.3.4 Air Photographs

Given favourable light and crop conditions, air photographs can reveal buried features in the form of crop and soil marks. They can also provide an overview of and more specific information about land use at a given time. The principal source consulted was Hertfordshire Archive and Local Studies Library (HALS), Hertford.

3.3.5 Geotechnical Information

A description of the topography and solid and surface geology of the site and its environs was compiled, so as to appreciate the potential condition of any archaeological remains, to assess the hydrological conditions, and to appraise the potential for the survival of buried waterlogged archaeological and palaeoenvironmental deposits.

3.3.6 *Secondary & Statutory Sources*

The principal source consulted was Hertfordshire Archive and Local Studies Library (HALS), Hertford.

3.4 Preliminary Walk-Over Survey

As part of the desk-based assessment a preliminary walk-over survey of the site was undertaken on 19th November 2003, with the following aims:

- 3.4.1 To examine any areas of archaeological potential identified during research for the assessment, in particular with a view to gauging the possible survival or condition of any remains present.
- 3.4.2 To consider the significance of any above-ground structures, historic buildings or historic landscape features present.
- 3.4.3 To assess the present site use and ground conditions, with a view to the appropriate deployment of fieldwork techniques, if required by the CAO.

4 Archaeological & Historical Evidence

4.1 Archaeological & Historical Background to the Study Area (Fig. 3)

The site lies in an area of considerable archaeological and historical interest. A variety of archaeological and historical sources have been consulted, principally the Hertfordshire County Sites and Monuments record (SMR), maps and documents in the Hertfordshire Archive and Local Studies Library (HALS) and readily available published sources.

Prehistoric (before 600BC)

Little is known of prehistoric sites in the Welwyn Garden City area. No sites or finds of pre Iron Age date are recorded in the garden city except a late Bronze Age axe found at Woodhall Lane just outside the 500m search radius of the site (SMR 0642). However recent studies (Holgate 1995) indicate evidence of prehistoric activity in the upper Mimram valley, north west of Welwyn.

Iron Age (600BC-AD43)

In contrast, sites of Iron Age date are well represented in the Welwyn area generally. From a recent regional study (Niblett 1995, 61) it is clear that, during the late pre-Roman Iron Age (LPRIA), the area now encompassing Welwyn and Welwyn Garden City was quite densely settled, and that this thriving community included a particularly rich and influential group of people. Possibly the most significant discovery of this period made in the immediate environs of the site is the Iron Age cemetery and 'Chieftain Burial' located on the Panshanger estate in 1965 (Stead 1967: SMR 2815). The area surrounding this site is designated as *Area of Archaeological Significance* 15 by the CAO. Subsequent observations during house construction in this area (Rook 1970) have revealed much evidence of settlement and related activities of LPRIA and Roman date (SMR 2818, 2819, 2820, 6416).

Roman (AD43-c.450)

During the Roman period, the Welwyn area fell within the tribal territory (civitas) of the Catuvellauni, with its capital at Verulamium (St Albans). A number of Roman sites have been located in the area, primarily around Welwyn itself, showing that this part of the Mimram valley remained a centre of occupation. As in the late Iron Age, a significant part of the area's occupants appear to have had wealth and influence. Villas have been excavated at Lockleys (Ward Perkins 1938) and Dicket Mead (Rook 1987), and traces of other substantial Roman masonry buildings have been found elsewhere in and around Welwyn (Rook, op. cit.). Recently, the remains of a substantial Roman mausoleum and associated inhumation cemetery were excavated at Welwyn Hall (Macdonald, forthcoming). Moving closer to the site, Roman occupation debris and coins have been recovered from Panshanger (SMR 2818, 6416), and a Roman coin was found at a site in Heronswood Road just outside the 500m search area (SMR 2821). The LPRIA/Roman native settlement at Grubs Barn, discovered by the Lockleys Archaeological Society in the late 1960s (Rook 1970, 31-36), is adjacent to the school grounds. Its full extent and nature have never been fully determined.

Saxon (c.450-1066)

Very little is known of the Welwyn area during the centuries following the end of the Roman period, and no sites or finds of Saxon date are recorded within the environs of the site. By the later part of the Saxon period, the area fell within the parish of Tewin, known as *Tiwingum* in the 10th century (Gover *et al* 1938).

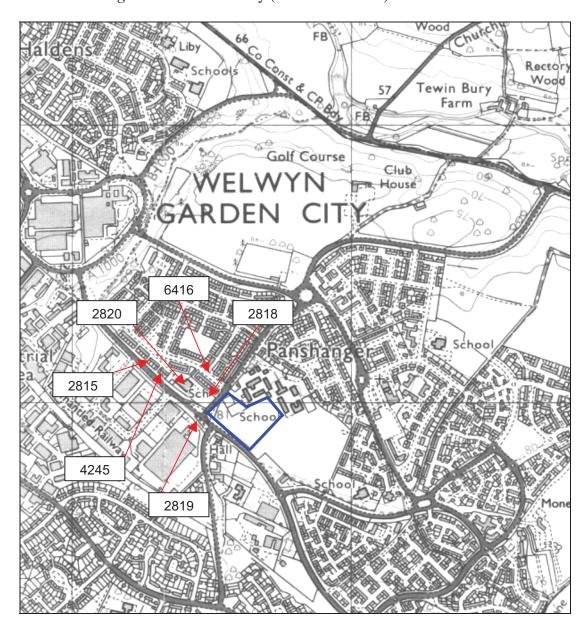


Figure 3: Map showing location of SMR related finds and the site, in blue (*not to scale*)

Medieval to Post-Medieval (1066-1900)

From the available cartographic evidence dating to the 18th century and early 19th century, the site and its environs appear to have remained as largely open agricultural land until the development of the Panshanger estate of Welwyn Garden City between 1919 and the 1960's (Figs. 4 & 5). During this period the parish of Tewin in the hundred of Hertford was recorded as *Tewinge* (11th century), *Thewinge* (13th century) and *Tuyng* (16th century) (Page 1914).

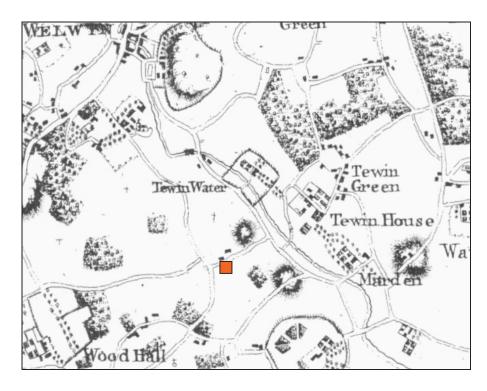


Figure 4: Extract from Dury and Andrews' 1776 map with the site marked in red

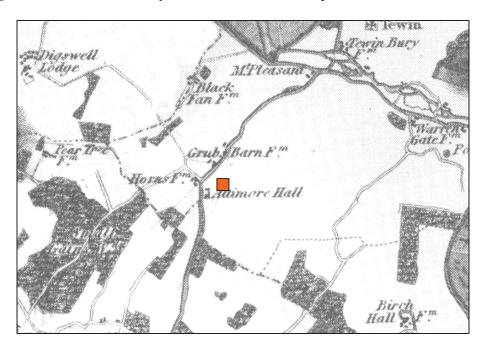


Figure 5: Extract from Bryant's 1822 map with the site marked in red

Modern (1900-present)

Ebenezer Howard formed the Garden City Association in 1899 following the publication of his book, *Tomorrow: A Peaceful Path to Real Reform* in 1898 (Pevsner and Cherry 2002; NHDC & LGCC 1990's; Osborn undated). Howard's concept of a 'mixed community developed from a controlled social and architectural structure' was further explored in his later book *Garden Cities of the Future* in 1902 (*ibid*; Pevsner and Cherry 2002). The world's first Garden City, Letchworth, was planned in 1903 by Unwin and Parker (*ibid*; Johnson 1976; NDC & LGCC 1990's). The association

intended to construct a second garden city and chose land to the southeast of Welwyn as the location. In 1919 Lord Desborough decided to sell part of his Panshanger estate in the parish of Tewin (Osborn undated; Rook 2001). Ebenezer Howard created the Welwyn Garden City Ltd and bought 1,458 acres of the estate which included twelve local farms (Osborn undated; Rook 2001). In 1920 plans for the new town were drawn by Louis de Soissons, who served as Town Planner until 1962 (Fig. 6; Soissons 1988).

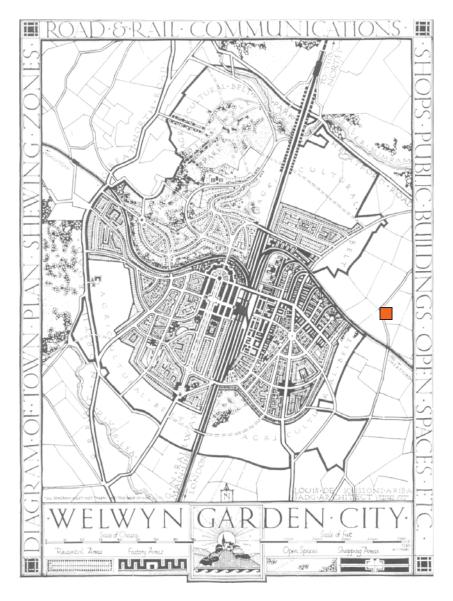


Figure 6: 1920 map of Welwyn Garden City by Soissons. Site location in red

The philosophy of the second garden city Ltd differed from that of the first as it incorporated the New Towns Trust, a body started by the Quakers, who concentrated upon the spiritual welfare and education of people rather than their physical well being (Rook 2001).

Welwyn Garden City Corporation began the second wave of building in the town during the 1950's following the New Towns Act of 1946 (CNT 1970). The city was to spread over to the north, which culminated in the Master Plan dating to 1947 (Rook 2001). Further land was purchased from the Panshanger estate in order to expand the

town, and by 1960 10 new schools, 4,400 new dwellings, 42 new shops and factory space had been created (Rook 2001).

Sir Frederic J. Osborn

In 1903 Frederic Osborn came from London to work as a housing manager at Letchworth Garden City. In 1912 he joined Ebenzer Howard at the Letchworth Garden City Ltd, and in



1885 – 1978

1920 Howard appointed him to form a new company, Welwyn Garden City Ltd (Soissons 1988; Osborn undated). Osborn became highly involved in the early design of Welwyn Garden City, and although later knighted, he left the company in 1936 (Soissons 1988).

Osborn wrote several books and toured the country giving lectures on garden cities and new towns. His books include New Towns After the War in 1918, Green Belt Cities in 1969, The New Towns. The Answer to Megalopolis in 1969 with Whittaker, and Genesis of Welwyn Garden City. Some jubilee memories, undated (Osborn undated). In 1969 – 70 the school adjacent to the site was re-named the Sir Frederic Osborn School as a tribute to his connection to the town and the centenary of the establishment of Welwyn Garden City. Sir Frederic J. Osborn

4.2 The Known Archaeology & History of the Site

Prehistoric to Saxon (before 600BC- 1066)

Little is known about the site prior to the medieval period as no archaeological finds have been recorded. However it was probably covered with forest during the early stone age as part of the wooded river valley, and would probably have been cleared and used as arable land at sometime during the Neolithic period.

Medieval (1066-1500)

In the 11th century the manor of Panshanger, to which the site belonged, was given to Geoffery de Manville by William I (Soissons 1988). The manor passed to William de Melkesope in 1277 and to the Marchioness of Exeter by the 16th century (Soissons 1988). Her estate was forfeited by Henry VII in 1541 following the execution of her husband and the manor was given to Nicholas Throckmorton (Soissons 1988). The Panshanger estate later belonged to the Hitchcocks who sold the manor to William Cowper in 1710 (Soissons 1988).

Post-Medieval (1500-1900)

In 1710 the Panshanger estate was bought by William Cowper, the Lord Chancellor (Soissons 1988; Rook 2001). The 3rd and 5th Earls Cowper purchased more land within the valley of Mimram, including part of the manor of Tewin, which was incorporated into the family seat of Panshanger (Rook 2001; Page 1914). Land at Tewin remained within the Panshanger estate and in the ownership of the Cowper family throughout the 19th century. Detailed estate maps and historical maps show that the site was used as arable land during the 19th century (Figs. 7, 8, 9, 10, 11 & 12).

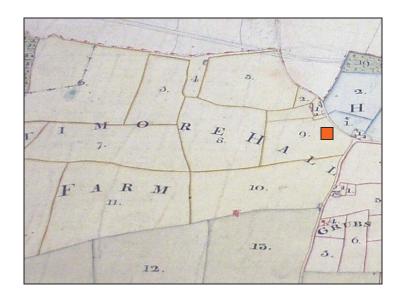


Figure 7: 1809 Cowper estate map. Site location in red (D/EP P33)

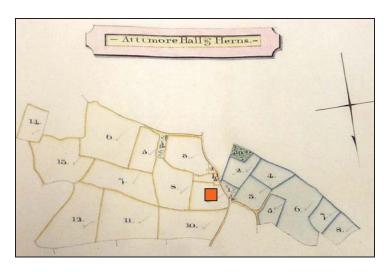


Figure 8: 1810 Cowper estate map. Site location in red (D/EP P38)



Figure 9: 1835 Tithe Map of Tewin. Site location in red (D/EP P60)

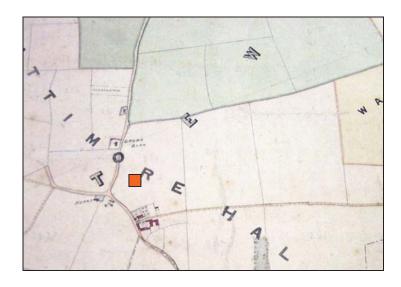


Figure 10: 1862 Cowper estate map. Site location in red (D/EP P64)

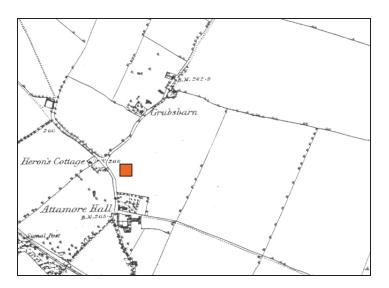


Figure 11: 1878 Ordnance Survey map. Site location in red

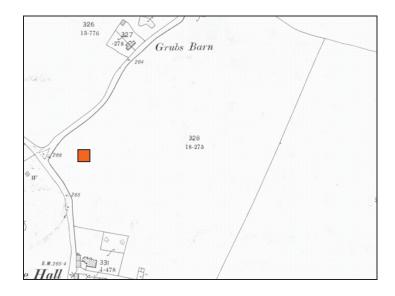


Figure 12: 1898 Ordnance Survey map. Site location in red

In 1803, 1809 and 1810 the site formerly stood on field 9, Well Field (Figs. 7 & 8). At this time the land was part of Attimore Hall and Attimore Hall Farm and was occupied by a tenant named Francis Patience and later his widow (D/EP E25; D/EP/T2604; D/EP/T2608; D/EP P33; D/EP P34, D/EP P38). Tithe records show that Attimore Hall and its farm were occupied by Calcol Stokes in the 1830's (Fig. 9; DSA4/101/1).

Modern (1900-present)

In 1913 Countess Cowper died and the estate was inherited by Lord Desborough through the Countess' niece, Lady Desborough (Rook 2001). When land was purchased from Lord Desborough by Ebenezer Howard in 1919 in order to begin construction of Welwyn Garden City, the site was not part of the original sale (Fig. 6). Following the 1944 Education Act and the forthcoming expansion of the New Town, more land was required to the north east (Rook 2001). After 1939 further land was purchased from the Panshanger estate and in 1947 the Master Plan was developed (Figs. 13 & 14).

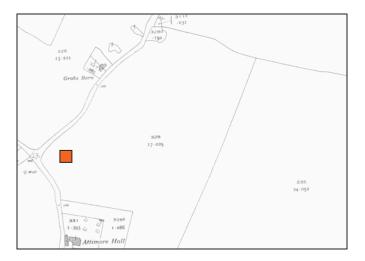


Figure 13: 1939 Ordnance Survey map. Site location in red

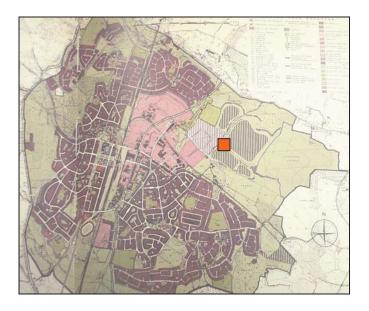


Figure 14: The 1947 Master Plan. Site location in red

As well as residential areas and a large industrial area, several new schools were planned (Rook 2001). Despite the area being originally designated for industrial use, two schools were constructed adjacent to the site; Attimore Secondary Modern School which opened in 1956 and High School, Herns Lane which opened in 1960 (Figs. 15 & 16; Rook 2001). The site was probably used as playing fields for the High School.

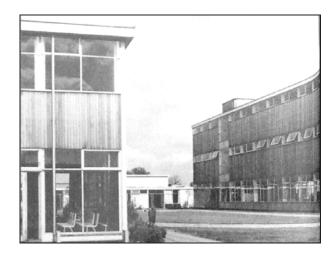


Figure 15: Photograph of the High School, Herns Lane, c.1964

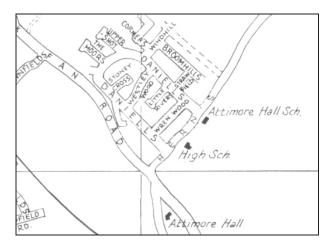


Figure 16: Map dating to the late 1960's

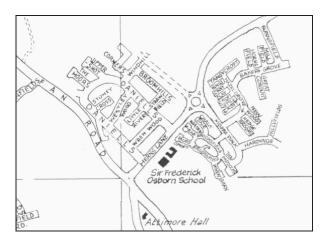


Figure 17: Map dating to 1970 - 1

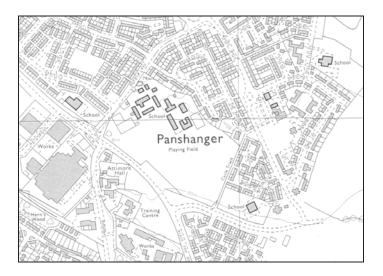


Figure 18: 1981 Ordnance Survey Map

At the end of the 1960's the two schools were amalgamated into one which was renamed the Sir Frederic Osborn School (Fig. 17). It retained the large playing fields to the south on which the site stands that formerly belonged to the High School on Herns Lane. The 1981 map of the site shows the extent of the building construction on the site including the hard courts to the west of the playing fields (Fig. 18).

4.3 Listed Buildings

There are no listed buildings on the site or within Sir Frederic Osborn School grounds. Listed buildings of Welwyn Garden City are associated with older buildings that were present prior to the construction of the town and incorporate significant structures that were built as part of the city's 20th century development. To the south of Sir Frederic Osborn School, across Black Fan Road is Attimore Hall to which the land formerly belonged. It has a grade II listed 19th century granary and 17th century barn (Fig. 19: DOE 1980, 3/26 & 3/26A).



Figure 19: Attimore Hall, Ridgeway c.1953

4.4 Archaeological Potential of the Site

The site lies within a wider area of known archaeological sites and find spots in and around Welwyn Garden City (AAS no. 15). Although no finds have been recorded on the site, its proximity to a small number of finds within a 500m radius indicates the probability of further archaeological remains being present on the site. However, the survival of any archaeological remains on the site to be developed is completely dependent on the degree of intrusion caused by the construction of the school in the mid to late 20th century.

5 Conclusions

- 5.1 This desk-based assessment has identified a number of important archaeological finds within the local area dating from the Bronze Age to the Roman period. However, no archaeological remains are known to have been found on the site itself during the construction of the school buildings between the early 1950's and 1999.
- 5.2 The site lies within a designated area of archaeological significance (AAS no. 15). An important Iron Age cremation burial was recorded at the former Grubbs Farm on Herns Lane near to the school, and a small number of other discoveries have been made within the limits of the study area. Due to its proximity to the location of the Iron Age cremation, it possible that archaeology of this period might be encountered on the site.
- 5.3 The potential for the preservation of Iron Age and Roman archaeological remains on the site may be fairly low considering the urban development during the 20th century. However, the impact of 20th century development on the site is not known, and will only be revealed by archaeological evaluation of the site.
- 5.4 The site appears to have been open fields from at least as early as the medieval period up until the early 20th century. In 1920 plans for the second garden city were created by Louis de Soissons for Welwyn Garden City which were based upon published works and philosophy of Ebenezer Howard, the Garden City Association and the New Towns Trust.
- 5.5 The site was not incorporated in the original plan for Welwyn Garden City in 1920 that included houses, commerce, shops, parks and the establishment of the agricultural green belt around the town. Known as Well Field, it remained as arable land as part of the remaining Panshanger estate in the parish of Tewin until after the development of a Master Plan in 1947. Despite the area being originally designated for industrial use in the plan, two schools were constructed on Herns Lane, Attimore Secondary Modern School which opened in 1956 and High School which opened in 1960. At the end of the 1960's both schools were amalgamated into one, which was re-named the Sir Frederic Osborn School. The large playing fields to the south on which the proposed development area stands formerly belonged to the High School and now belong to Sir Frederic Osborn School.
- Although the site is set within a built-up area and it is bounded by a fence and hedge, it remains visually open to the south along Black Fan Road. Currently it has little impact on the privacy of other historic buildings as the nearest building, Attimore Hall, is situated to the south beyond Black Fan Road.

6 Acknowledgements

The writer is grateful to Hertfordshire County Council Corporate Development Unit who commissioned this report and to Jonathan Smith for his assistance with the project as the County Archaeology Officer (CAO).

Thank you to Alison Tinniswood (Hertfordshire SMR Officer) who provided the SMR data, and to the staff of the Hertfordshire Archive and Local Studies Library, Hertford for their help with the background historical research.

The site visit was conducted by Jonathan Hunn and the report was written by Sallianne Wilcox.

7 Sites & Monuments Data

Sites listed below are those within the study area, i.e.

CAS No	NGR	Period	Туре	Description
2815	TL 2526 1316	51 – 10BC	burial site	Panshanger Estate; Late Iron Age burial of 'chieftain' cremation with
				amphorae, silver, bronze &
				wooden vessels, glass game counters. Part of small cemetery
2818	TL 2550 1305	100BC -	finds and	with 6 other cremation pots
2010	1L 2330 1303			Grubs Barn, Panshanger Estate; 2
		AD1500	features	late Iron Age ditches, 3 hearths,
				Iron age to Roman occupation material, medieval hut
2819	TL 2547 1295	I ata mma	find	Corner of Black Fan Road and
2819	1L 234/ 1293	Late pre- Roman Iron	IIIIQ	
				Herns Lane, Panshanger Estate; sherds in pit or ditch
2820	TL 2540 1307	Age	feature	1
2820	1L 2340 1307	Late pre- Roman Iron	reature	Panshanger JMI School; ditch
4245	TL 253 131	Age AD50 - 410	find	Carrie Dome Donahon con Estato
4243	1L 233 131	AD30 - 410	IIIIu	Grubs Barn, Panshanger Estate; pottery and tile fragments, coin of
				Faustina II, a fireball, quern
(416	TI 255 121	Damana	C., 1	fragments
6416	TL 255 131	Romano-	find	Pit with native and Roman 1 st and
		British		2 nd century pottery and tile

8 References

The following references were consulted in the course of this assessment:

CNT. 1970. *Commission for the New Towns. Welwyn Garden City*. Commission for the New Towns (London)

D/EP E25. 1803. *Valuation of Tewin Estate of William Schribeir*. Hertfordshire Archive and Local Studies Library (Hertford)

D/EP/T2604. 1803. *Particulars of Tewin House and Valuable Estate*. Hertfordshire Archive and Local Studies Library (Hertford)

D/EP/T2608. 1803. *Contract of Particulars of Tewin House and Valuable Estate*. Hertfordshire Archive and Local Studies Library (Hertford)

D/EP P33. Earl Cowper Estate records 1809. Hertfordshire Archive and Local Studies Library (Hertford)

D/EP P34. Earl Cowper Estate records 1810. Hertfordshire Archive and Local Studies Library (Hertford)

DSA4/101/1. *Tewin Tithe Apportionment 1835*. Hertfordshire Archive and Local Studies Library (Hertford)

DOE. 1980. List of Buildings of special Architectural or Historical Interest. District of Welwyn/ Hatfield; Attimore Hall, Ridgeway, 3/26 & 3/26A.

Gover, J.E.B, Mawer, A. and Stenton, F.M. 1938. *The Placenames of Hertfordshire*. Cambridge University Press (Cambridge)

Hodge C.A.H, Burton R.G.O, Corbett W.M, Evans, R. and Seale, R.S. 1984 *Soils and their use in Eastern England*. Soil Survey of England and Wales Bulletin **13** (Harpenden).

Holgate R. 1995 'Early Prehistoric Settlement of the Chilterns' in Holgate (ed.) 1995 Chiltern Archaeology, Recent Work. A Handbook for the Next Decade, 3-16.

Johnson, K. 1976. The Book of Letchworth. Barraccuda Books (Chesham)

Macdonald, T., forthcoming 'Excavations at Welwyn Hall, Welwyn, 1991-95', *Herts Archaeology*.

Niblett, R., 1995 Roman Hertfordshire. Dovecote Press (Wimborne).

NHDC & LGCC. 1990's. *Letchworth. The World's First Garden City*. North Herts District Council and Letchworth Garden City Committee.

Osborn, F.J. undated. *Genesis of Welwyn Garden City. Some jubilee memories*. Town and County Planning Association (London)

Page, W. (ed.) 1914 The Victoria History of the County of Hertfordshire, vol. iii, 91-110.

Pevsner, N and Cherry, B. 2002. *The Buildings of England. Hertfordshire*. Yale University Press (London)

Rook, A.G, 1970 'Investigation of a Belgic site at Grub's Barn, Welwyn Garden City', *Herts. Archaeol.* **2**, 31-36.

Rook, A.G, 1987 'The Roman villa site at Dicket Mead, Herts. Archaeol. 9, 79-175.

Rook, T. 2001. Welwyn Garden City Past. Phillimore (Chichester)

Soil Survey 1983 Soils of England & Wales: Sheet 4, Eastern England: 1:250,000 map and legend (Harpenden).

Soissons, M de. 1988. Welwyn Garden City. A town designed for healthy living. Publications for Companies (Cambridge)

Stead, I. M. 1967 'A La Tène III Burial at Welwyn Garden City', Archaeologia 101.

Ward-Perkins, J.B., 1938 'The Roman villa at Lockleys, Welwyn', Antiq. J. 18, 339-76.

Zeepvat, B. 1999. An Archaeological Evaluation of a site at Sir Fredric Osborn School, Welwyn Garden City, Hertfordshire. Report 126/FOS99. Archaeological Services and Consultancy.

9 Cartographic Sources

The following maps and plans were consulted in the course of this assessment:

Date	Reference	Description
1776	Dury and Andrews 1980	A Topographical Map of Hertfordshire
1809	D/EP P33	Cowper estate map
1810	D/EP P38	Cowper estate map
1822	Bryant, A. 1822.	The County of Hertford in the years 1820 and 1821. in Four County Maps of Hertfordshire
1835	D/EP P60	Tithe Map of Tewin
1862	D/EP P64	Cowper estate map
1878	Sheet no. XXVIII	Ordnance Survey map.
1898	Sheet no. XXVIII	Ordnance Survey map
1920	Soissons 1988	Plan of Welwyn Garden City
1939	Sheet no. XXVIII	Ordnance Survey map
1947	Soissons 1988	Master Plan of Welwyn Garden City
late 1960's	CNT late 1960's	Map of Welwyn Garden City
1917	TL 2513	Ordnance Survey Map
1970 - 1	Welwyn Garden City Directory	Map of Welwyn Garden City
1981	TL 21 SE	Ordnance Survey Map

10 Photographic Sources

The following photographs were consulted in the course of this assessment:

Date	Reference	Description
c.1953	Photographic library at HALS	Photograph of Attimore Hall, Ridgeway
c.1964	Photographic library at HALS	Photograph of the High School, Herns Lane
undated	Soissons 1988	Photograph of Sir Frederic Osborn