

AGENDA SUPPLEMENT (1)

Meeting: Western Area Planning Committee
Place: Ridgeway Space - County Hall, Trowbridge BA14 8JN
Date: Wednesday 6 November 2013
Time: 6.00pm

The Agenda for the above meeting was published on Monday 28 October 2013. Additional documents are now available and are attached to this Agenda Supplement.

Please direct any enquiries on this Agenda to Kieran Elliott of Democratic Services, County Hall, Bythesea Road, Trowbridge, direct line 01225 718504 or email kieran.elliott@wiltshire.gov.uk

Press enquiries to Communications on direct lines (01225)713114/713115.

This Agenda and all the documents referred to within it are available on the Council's website at www.wiltshire.gov.uk

- 6) **The Definitive Map and Statement for the Bradford and Melksha, Rural District Council Area Dated 1952 as Modified Under the Provisions of the Wildlife and Countryside Act 1981** (*Pages 1 - 96*)

The Wiltshire Council Parish of Holt (Holt Path No. 71) Rights of Way Modification Order 2013

Aerial Photographs and Consultant Report.

The Wiltshire Council Parish of Holt (Holt Path No. 72) Rights of Way Modification Order 2013

Aerial Photographs and Consultant Report.



Holt Manor, Wiltshire

HOLT 71

Statement of Expert Witness Opinion from Aerial Photographs

Regarding the use of an alleged path, HOLT 71, between 1991 and 2011

Document 1 of 3: Expert Witness Opinion Report HOLT 71

Presented separately:

Document 2: **Expert Witness Opinion Report HOLT 72**

Document 3: **Annexe**, containing all aerial photographs used to provide evidence regarding HOLT 71 and HOLT 72

Christine D Cox BA (Hons) MA MIfA

On behalf of Mr Phil Harris of Holt Manor, Wiltshire

October 2013

Air Photo Services Ltd.

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www.airphotoservices.co.uk Director Christine D Cox, Associate David W Lang. Company No. 5248188 Registered Office Brinkworth House SN15 5DF

Holt Manor, Wiltshire

HOLT 71

Statement of Expert Witness Opinion from Aerial Photographs

Regarding the use of an alleged path, HOLT 71, between 1991 and 2011

Client Name: Mr Phil Harris of Holt Manor, Wiltshire

Document Reference: CC213-0901 Doc 1 2 FINAL

Project Number: CC213-0901

Quality Assurance

Issue	Date
FINAL Two	29th October 2013

Prepared by	Signed
Chris Cox BA MA MlfA <i>Director</i>	CC

Checked by	
Tracy Michaels BSc AlfA <i>Consultant</i>	TM

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We disclaim any responsibility to the client and others in respect of any matters outside the scope of the above.

This report is confidential to the client and we accept no responsibility to third parties to whom this report, or any part thereof, is made known. Any such party relies on the report at its own risk.

CONTENTS

1. INTRODUCTION
2. REMIT OF THE INSTRUCTION
3. AERIAL PHOTOGRAPHIC INTERPRETATION AND PROPERTIES OF AERIAL PHOTOGRAPHS
4. SOURCES OF EVIDENCE
5. RESULTS
6. SUMMARY
7. CONCLUSION
8. DECLARATION
9. STATEMENT OF TRUTH

TABLES

Table 1: Aerial photographs which provide evidence within the Statutory Period

Table 2: Summary of the evidence

FIGURES

- | | |
|------------------|---|
| Figure 1 | Location of The Site and the alleged features |
| Figure 2 | HOLT 71 on 19 th August 1991 |
| Figure 3 | HOLT 71 on 9 th March 1995 |
| Figure 4 | HOLT 71 on 4 th August 1996 |
| Figure 5 | HOLT 71 on 17 th September 1998 |
| Figure 6 | HOLT 71 on 4 th September 1999 |
| Figure 7 | HOLT 71 on 20 th June 2001 |
| Figure 8 | HOLT 71 on 1 st June 2002 |
| Figure 9 | HOLT 71 on 8 th June 2006 |
| Figure 10 | HOLT 71 on 26 th April 2008 |

APPENDIX *Curriculum Vitae*, Christine Cox

ANNEXE *Provided separately* Original aerial photographs which provide the evidence discussed in this report

1 INTRODUCTION

- 1.1 I am Christine Diane Cox, a professional aerial photographic interpreter and Director of Air Photo Services Ltd (APS). I provide specialist interpretation of aerial photographs for legal, environmental, planning and archaeological purposes.
- 1.2 My qualifications comprise a BA (Honours) degree in archaeology from the University of Liverpool (1983), an MA in Aerial Photographic Interpretation from the University of Sheffield (1984) and membership of the Institute for Archaeologists (IfA, membership number 947, elected 1990, original area of competence Air Photo Interpretation).
- 1.3 In addition to my main occupation, I have previously taught aerial photographic interpretation for landscape applications to undergraduate, postgraduate and professional development levels at the Universities of Sheffield, Bristol and Oxford on an annual basis. I also provide professional development training both internally at Air Photo Services and externally on a commercial basis to colleagues, students and clients and am a member of the Aerial Archaeology Research Group and Society of Expert Witnesses.
- 1.4 My professional experience in aerial photographic interpretation extends over 28 years (1985 – 2013) and includes assessment of land use, legal, boundary, adverse possession, environmental and archaeological issues in a planning and development context. My Curriculum Vitae is appended.
- 1.5 I have full stereoscopic vision which enables me to use a magnifying mirror stereoscope to fully interpret vertical aerial photograph in stereo pairs. I am also experienced in making deductions from stereo pairs of vertical aerial photographs and single vertical or oblique aerial photographs and remotely sensed aerial imagery. This includes ortho rectification of photographs to map bases and digital comparison of land on separate images.
- 1.6 I am instructed by Mr Phil Harris of Holt Manor, to provide an expert witness report on my deductions derived from aerial imagery regarding an alleged path or track at Holt Manor, Wiltshire (**Figure 1**), herein referred to as '**HOLT 71**'.
- 1.7 This is in respect of an issue regarding alleged use of a path, **HOLT 71** between 1991 and 2011. This alleged route has been the subject of an application for a modification order under s.53 of the Countryside and Wildlife Act 1981 to add a Public Right of Way (PRoW) to the Definitive map and Statement, under application number **2012/08**.
- 1.8 I am instructed to examine aerial photographs and to comment on the alleged continuous presence and use of **HOLT 71** as shown on Figure 1, between 1991 and 2011.
- 1.9 In order to do this I have used nine core years of aerial photography which provide evidence during the application dates at 1991, 1995, 1996, 1998, 1999, 2001, 2002, 2006 and 2008.
- 1.10 I undertook my interpretation of the aerial photographs in an impartial manner without consultation of external opinion or any witness statements, on instruction from a legal professional. This is my usual practise, to ensure impartiality in my evidence.

- 1.11 In order to ascertain the facts of the case I have read the application for the order (Form 1, submitted by Holt Parish Council) and Ms Madgwick's Decision report to this application, number 2012/08 which was issued in May 2013.
- 1.12 To interpret aerial photographs in this case I have used 'Old Delft' and 'Topcon' brand scanning and magnifying mirror stereoscopes which allow me to view the aerial photographs at 1.5 and 4 x magnification and in three dimensions where stereoscopic pairs of vertical aerial photographs are available. I have also used a hand held magnifying stereoscope to examine the photographs at 1.5 and 4x magnification, and viewed digital files in high magnification on a high resolution computer screen as appropriate to the requirements of the observations and the resolution and type of available aerial images.

2 REMIT OF THE INSTRUCTION

- 2.1 I examined aerial photographs taken in **1991, 1995, 1996, 1998, 1999, 2001, 2002, 2006** and **2008**. These photographs provide a sequence of observations which comprised the core of this evidence.
- 2.2 The photographs were all examined to determine the presence or absence of a path or track at Location **HOLT 71 A – B**, which is indicated on **Figure 1**. I looked for indicators of use over the route of this alleged track, in all years of observation, as an indented or worn feature or as a mark in the grass where passage over a path on foot would have left persistent traces in the ground.
- 2.3 This was done in order to establish facts regarding the alleged presence and use of this feature without interruption between 1991 and 2011, which is The Statutory Period for this application.

3 AERIAL PHOTOGRAPHIC INTERPRETATION AND PROPERTIES OF AERIAL PHOTOGRAPHS

- 3.1 Interpretation of Aerial Photographs provides a comprehensive overview of the land-use, vegetation and configuration of visible boundaries, objects, structures and path or track ways at specific and independently authenticated points in time.
- 3.2 It provides accurately dated information on the appearance and condition of land or property at a given point in time and of the relationship of individual features.
- 3.3 In addition to point in time evidence, interpretation of aerial photographs allows deduction of the nature of past and ongoing land-use such as the presence and appearance of used paths or tracks over time which leave persistent traces in the ground surface and subsurface which show on aerial photographs both during and subsequent to any habitual use.
- 3.4 Evidence based on aerial photographs may be admitted as evidence to a court, inquiry or appeal in support of land use issues, boundary disputes, adverse possession or other legal issues.
- 3.5 Vertical aerial photographs, which were used to deduce evidence for this case, are taken for general-purpose survey using an automatic camera mounted inside a modified aircraft which takes photographs at pre-set intervals. The camera points straight down to the ground. The aircraft is flown on a pre-planned set of flight-lines which cover the survey area completely. The vertical viewpoint provides aerial photographic coverage from a fixed scale straight to the ground surface at the centre of each frame. The overlap between the areas covered by each consecutive frame is usually 60%.
- 3.6 This overlap between frames enables the photo interpreter to study each pair of vertical photos under a magnifying **stereoscope** – a mechanical instrument which allows the interpreter to see a single three-dimensional image of the ground surface on the aerial photographs. This allows consideration of height differences in topography and greatly enhances the level of information which may be derived from a single unmagnified two dimensional image.
- 3.7 All photographs were viewed for this assessment either as high resolution contact prints or as digital files using a magnifying stereoscope or high resolution computer screen where appropriate.
- 3.8 The photographs are certified to the date of their exposure by the imprinted recording strips on the contact prints and/or by the listings and certification of the library or archive where they were consulted and are held and available for purchase or consultation.
- 3.9 I have thus considered the assertion that HOLT 71 was used as a Right of Way by impartial professional examination of the evidence provided by all available authenticated dated aerial imagery, which was taken within the Statutory Period.

4 SOURCES OF EVIDENCE

Table 1 Aerial Photographs used for this evidence

4.1 Aerial photographs were available within the Statutory period for 1991, 1995, 1996, 1998, 1999, 2001, 2002, 2006 and 2008. These are detailed in **Table 1** below.

4.2 All these photographs are presented in the **Annexe** to this report.

4.3 The photographs are also presented as **Figures 2- 10** to this report for information only.

Table 1: Aerial photographs which provide evidence within the Statutory Period

Date of aerial photography	Film ID	Frame number(s)	Archive	Type	Figure
19 th August 1991	121_91	043 & 044	Wiltshire Council	Stereo pair consulted in archive and digital files presented	2
9 th March 1995	14_95	146	Bluesky	Print and digital file	3
4 th August 1996	47_96	109 & 110	Bluesky	Stereo pair of prints and two digital files	4
17 th September 1998	OS/98437	5256 & 5257	English Heritage	Stereo pair of prints	5
4 th September 1999	MMC 084	40 & 41	Bluesky and Getmapping	Stereo pair as high resolution digital files	6
20 th June 2001	341-8	362 & 363	Wiltshire Council	Stereo pair and digital files	7
1 st June 2002	AF_02C_321	1924-1926	Bluesky	Stereo run as high resolution digital files	8
8 th June 2006			Wiltshire Council & Bluesky	Digital image	9
26 th April 2008	UCX-SX-1-90213242-Rev4	118 & 119	Bluesky	Stereo pair and digital files	10

Archive details and access to the original aerial photographs

- 4.4 The aerial photographs have been included in this report as Figures for information only. The original material is available for detailed interpretation as stereo pairs, prints and digital files in the **Annexe** which accompanies this report. These photos are authenticated regarding their dates of capture and are also held in the **archives** which are detailed below and referred to in **Table 1** above.
- 4.5 **English Heritage (EH) Archive:** The Engine House, Fire Fly Avenue, Swindon SN2 2EH. nmrinfo@english-heritage.org.uk. 01793 414600. Coversearch enquiry number AP 81448.
A public archive of aerial photographs which cover all of England. Aerial photographs can be seen by appointment in the public search room in the Archive, with reference to the coversearch number above.
- 4.6 **Bluesky:** Bluesky International Ltd., The Old Toy Factory, Jackson Street, Coalville Leicestershire LE67 3NR. 01530 518518. www.blueskyworld.com. This archive holds a comprehensive range of photographs and also holds material supplied by **GetMapping PLC** and **InfoTerra Ltd.**
- 4.7 Bluesky is a commercial archive of aerial photographs which sells date authenticated scans and prints of aerial images. They, alongside Infoterra and GetMapping, which are cross-searched by Bluesky archivists, supply much of the UK coverage which is displayed at Google Earth (GE) on the internet. These images at GE are displayed at 'timelines' which may not reflect the exact date of capture and are a mosaic of aerial and remotely sensed images which may have been captured at different dates. It is therefore essential to consult the archives for provision of high resolution date authenticated original single or stereoscopic images to support legal evidence, as has been done in this case.
- 4.8 **Wiltshire Council:** Wiltshire & Swindon History Centre, Cocklebury Road, Chippenham. SN15 3QN. 01249 705526. www.wiltshire.gov.uk. Stereo pairs of original aerial photographs taken in 1991 and 2001 were examined in this archive, and copies were scanned and provided to me as high resolution jpg files by the archive. The archive also supplied access to digital photographs held in the HBSMR Geographical Information System (GIS) which were viewed on screen and supplied as digital files by email to me.
- 4.9 Archives at the **University of Cambridge** and **The GeoInformation Group** (Cities Revealed) were examined, but held no material which lay within the required date range.
- 4.10 I consider that the evidence provided by the archives listed below is a more than sufficient basis upon which to examine and determine any alleged continuity of use for a Public Right of Way (PRoW) over the timescale of the claim.

5 RESULTS

1991

Figure 2

5.1 Vertical aerial photographs 121_91, frame numbers 043 and 044 and 110 and 111 which were taken on 19th August 1991, are a stereo pairs of vertical aerial photographs from adjacent runs taken on the same sortie. They were consulted as original prints at Wiltshire and Swindon History Centre. Frames 043 and 044 are presented in the annexe as copies and were used to derive interpretations. 110 and 111 were examined, have been taken on the same day and comprise part of an adjacent run of vertical aerial photographs. The originals are available for viewing at the Wiltshire History Centre Archive.

The condition and use of land within the Site, in regard to the alleged path or track between Locations A and B

- 5.1.1 In 1991 The Site is laid to cultivated grass.
- 5.1.2 There is a wide light toned access track into the site, which is highly visible, to the west of the alleged route of HOLT 71. This does not connect A and B and is marked on Figure 2.
- 5.1.3 The area between A and B shows very little sign of any regular or worn access track between the two points.
- 5.1.4 I conclude that a used path or track was not present in 1991 between A and B.

1995

Figure 3

5.2 Vertical aerial photograph 14_95 frame 146, taken on 9th March 1995. It is presented as a digital file and a print in the annexe to this report. There is no available stereo pair and the quality is not as high as some of the photographs I have seen for this assessment. However, it is of acceptable quality for interpretation of the presence or absence of larger landscape features and paths and tracks.

The condition and use of land within the site, in regard to the alleged path or track between Locations A and B

5.2.1 In 1995 The Site is laid to grass. The quality of this photograph is not good, but it does show a light toned feature where access has been gained to The Site from a point North east of B over the boundary. This is marked on Figure 3. This access way was much more extensive and visible in 1991 than it was in 1995. This light toned feature does not connect with A and does not continue far to the south west. It is not associated with HOLT 71.

5.2.2 There is no visible trace of a line between A and B.

5.2.3 I conclude that a path or track was not likely to have been present in 1995 between A and B.

1996

Figure 4

5.3 Vertical aerial photographs 47_96 frames 109 and 110 were taken on 4th August 1996. This stereo pair of vertical aerial photographs is presented as enlarged prints which show The Site and digital files. The quality is higher than the photograph available for 1995, and whilst the light is not strong, the photograph is adequate for interpretation purposes.

The condition and use of land within the site, in regard to the alleged path or track between Locations A and B

5.3.4 In 1996 The Site is laid to closely cultivated grass.

5.3.5 There is a very visible and well defined track across The Site, which is marked on Figure 4. This does not run between A and B at all and is likely to be associated with an agricultural process.

5.3.6 The area between A and B shows no trace at all of any path or track, which would show if one were present.

5.3.7 I conclude that a path or track was not present in 1996 between A and B.

1998

Figure 5

5.4 Vertical aerial photographs OS/98437 frames 5256 & 5257 is a stereo pair of very clear high quality vertical aerial photographs which were taken by the Ordnance Survey on 17th September 1998. They were examined in the EH archive, where they are available for consultation and are presented in the annexe as high quality photographic copies from the contact print negatives which exactly replicate the prints held in the archive. They are well lit and show minute undulations in the land surface, which include very slight residual former agricultural features and boundaries which are likely to date to the Medieval and Post Medieval periods and are no longer extant features. These features are not all marked on the early editions of the OS maps. Using a stereoscope it is possible to discern slight height differences and differences in tone on the ground surface which are used as indicators to identify small indented features and worn areas.

The condition and use of land within the Site, in regard to the alleged path or track between Locations A and B

- 5.4.4 In 1998, the site is laid to grass. The quality of these photographs is very high indeed.
- 5.4.5 There are several very slightly upstanding features in the field which show the position of former boundaries and agricultural processes, which most likely date back to the Medieval or Post Medieval periods and continue into modern times.
- 5.4.6 There is no trace at all of any continuous indented or worn feature between A and B. this would most definitely have been visible on these photographs if it were present, which it is not.
- 5.4.7 I conclude that a path or track was not likely to be present in 1998 between A and B.

1999

Figure 6

5.5 Vertical aerial photographs MMC 084 frames 40 & 41 comprise a stereo pair which was taken on 4th September 1999. They are presented as digital files in the annexe to this report and as enlarged prints. They are of good quality and show variations in the tone of the grassed surface over The Site.

The condition and use of land within The Site, in regard to the alleged path or track between Locations A and B

5.5.4 In 1999, The Site is laid to grass. The quality of these photographs allows me to see The Site clearly. There are several linear features on the site which reflect former agricultural processes as described above.

5.5.5 There is no trace of a defined track, path or line between A and B. I conclude that there was no path between these points in 1999.

2001

Figure 7

5.6 Vertical aerial photographs 341_8, frame numbers 362 & 363, which were taken on 20th June 2001, are a stereo pair of vertical aerial photographs which were consulted as original prints at the Wiltshire and Swindon History Centre. They are presented in the annexe as high quality copies and digital scans. The originals are available for consultation in the archive.

The condition and use of land within The Site, in regard to the alleged path or track between Locations A and B

- 5.6.4 In 2001, it is appreciated that access to the countryside was statutorily limited due to the need to contain an outbreak of Foot and Mouth Disease (FMD) among farm animals.
- 5.6.5 The Site is laid to cultivated grass. Stereoscopic viewing shows there is not a line or a path between A and B or any part of that alleged route.
- 5.6.6 The ground surface does not show any line or indentation and this would be visible if it were present on these photos, even if there had not been use for some months.
- 5.6.7 I conclude that no path or track was present in 2001 between A and B.

2002

Figure 8

5.7 Vertical aerial photographs AF_02C_321 frames 1925 -1926 are a stereo pair which was taken on 1st June 2002. They are presented as a digital file in the annexe to this report.

The condition and use of land within The Site, in regard to the alleged path or track between Locations A and B

5.7.4 In 2002, The Site is again laid to cultivated grass.

5.7.5 Again, there is no worn track or any line at all visible between A and B.

5.7.6 I conclude that a path or track is not present in 2002.

2006

Figure 9

5.8 Vertical aerial photographs were taken on 8th June 2006. They are noted in the Bluesky archive, at this date and uploaded to Google Earth at a 2006 timeline. The same photographs were supplied to Wiltshire Council and are also uploaded as a digital layer to the GIS in the Wiltshire History Centre and labeled 2005/2006. One image is presented in documentation regarding the application for this alleged route. The original photographs were taken in colour and I have seen them printed in colour and monochrome. I examined the image as a digital file in the Wiltshire History Centre GIS, at Google Earth on the internet and as a printed copy supplied by the client with the application for the route. The Wiltshire History Centre supplied me with a pdf file showing the 2006 photograph and Bluesky have confirmed its date via their coversearch listing.

The condition and use of land within The Site, in regard to the alleged path or track between Locations A and B

5.8.4 In 2006, linear and vestigial features on The Site show clearly, indicating areas of access and former land use. There is a curvilinear feature to the north of A – B, but no feature on the actual alleged line of A – B.

5.8.5 The alleged path or track A – B HOLT 71 is not visible at all and I conclude that this route was not in use as a footpath in 2006 between A and B.

2008

Figure 10

5.9 Vertical aerial photographs UCX-SX-1-90213242-Rev4 frames 118 & 119 are a stereo pair which was taken on 24th April 2008. They are presented as a digital file in the annexe to this report.

The condition and use of land within The Site, in regard to the alleged path or track between Locations A and B

5.9.4 In 2008, linear and vestigial features on The Site show once again, indicating areas of access and former land use as previously described. There is a curvilinear feature well to the north of A – B, which connects B to the western boundary to the north of A.

5.9.5 However, there is no feature at all visible between A and B.

6 SUMMARY

6.1 Table 2 summarises the above results

Table 2: Summary of the evidence

Date of aerial photography	Path or track between A and B?
19 th August 1991	No
9 th March 1995	No
4 th August 1996	No
17 th September 1998	No
4 th September 1999	No
20 th June 2001	No (FMD limited access)
1 st June 2002	No
8 th June 2006	No
26 th April 2008	No

6.2 These observations indicate that the alleged route HOLT 71 A-B was not present on any of the aerial photographs which I examined.

6.3 Out of 9 observed years, in an area which does retain traces of past land use in the ground, all occasions recorded no route. Between A and B.

6.4 There is a curvilinear feature visible to the north of the route but this does not follow the route as defined in the application 2012/08.

7 CONCLUSION

- 7.1 I conclude that the alleged route HOLT 71 was not visible or in use during the **entirety of the 20 year Statutory Period between 1991 and 2011.**
- 7.2 This is proven by my observations at Section 5 above and my summary of evidence at Section 6.

8 DECLARATION

- 8.1 I understand that my overriding impartial duty as an expert witness is to a Court, adjudication or inquiry and I have complied with that duty.
- 8.2 I confirm that insofar as the facts stated in my report are within my own knowledge, I have made clear which they are and I believe them to be true and that the opinions I have expressed represent my true and complete professional opinion.
- 8.3 My report includes or reflects all relevant facts of which I am aware from the material which I have stated that I have examined. If there are material matters of which I am unaware or if the assumptions are incorrect or inappropriate for any reason of which I am currently unaware, it could have a material effect on my stated opinion.

8 STATEMENT OF TRUTH

I believe that the facts stated in this report are true and the opinions I have expressed are correct.

Signed



Christine D Cox BA (Hons) MA MifA

29th^t October 2013

FIGURES

Figure 1	Location of The Site and the alleged features
Figure 2	HOLT 71 on 19 th August 1991
Figure 3	HOLT 71 on 9 th March 1995
Figure 4	HOLT 71 on 4 th August 1996
Figure 5	HOLT 71 on 17 th September 1998
Figure 6	HOLT 71 on 4 th September 1999
Figure 7	HOLT 71 on 20 th June 2001
Figure 8	HOLT 71 on 1 st June 2002
Figure 9	HOLT 71 on 8 th June 2006
Figure 10	HOLT 71 on 26 th April 2008

APPENDIX Curriculum Vitae, Christine Cox



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PROFILE

Chris Cox is a professional archaeologist, specialist interpreter of aerial imagery and expert witness

Chris established Air Photo Services in Cambridge, UK in 1990 with Rog Palmer and has since worked on major infrastructure, legal expert witness and commercial development projects throughout the UK and Europe. She has over 28 years of experience as an interpreter of aerial imagery in the planning, heritage and engineering sectors, and experience in the provision of professional development training, recruitment and mentoring of graduate level staff.

Chris is a Council member and National Vocational Qualification (NVQ level 3) assessor for the Institute for Archaeologists (IfA), a member of the Society of Expert Witnesses (SEW) and the Aerial Archaeology Research Group (AARG).

SKILLS

- Legal expert witness opinion
- Representation in Court and at Inquiry
- Air Photo, satellite image and LiDAR Interpretation
- Teaching and training at undergraduate, graduate and professional development levels
- Integration of API data with GIS
- Ortho-rectification and accurate mapping from aerial images
- Heritage consultancy, project design and management

QUALIFICATIONS

BA (Hons.) University of Liverpool 1983. Archaeology of the Eastern Mediterranean

MA University of Sheffield 1984.

Air Photo Interpretation. Taught individually by Dr D N Riley. Awarded the Robert Kiln Bursary for aerial reconnaissance.

Chris Cox: EXAMPLE PROJECTS

[Hicks Leaze, Cricklade Wiltshire.](#)

Wiltshire Council. Assessment of aerial photographs, and representation at Public Inquiry on behalf of Wiltshire Council with St Johns Chambers for a Planning Enforcement Appeal which is awaiting the Planning Inspector's decision.

[Prestbury Lane, Cheltenham.](#)

Gloucestershire Council. Assessment of aerial photographs, and representation at Public Inquiry on behalf of Gloucestershire Council with Vivian Chapman QC to defend a TVG application on Council owned land which is awaiting the Planning Inspector's decision.

[Ash Lodge Drive, Ash and Tongham, Surrey, Expert Witness Services and representation at Public Inquiry regarding a Village Green issue.](#)

Bewley Homes PLC Stereoscopic interpretation of authenticated aerial photographs to establish historic land use on the site and successfully defend a TVG application. Expert Witness report, liaison with Counsel and presentation of evidence in chief.

[Heritage Environment Record update 2010 – 2012 from Digital Aerial Imagery.](#)

Hertfordshire Council. Interpretation of digital False Colour Infra Red (FCIR) aerial imagery and input of results to HBSMR online database. For Hertfordshire County Council Environment Department, Heritage Environment Record, UK.

[Mill Lane, Walton-on-the-Naze, Essex. Expert witness services and written representation at Public Inquiry.](#)

Silverbrook Estates Ltd. Expert witness report to document the level of access over the site to successfully defend a Village Green application.

[Vixen Tor, Devon. Expert witness services and representation at Public Inquiry regarding a Rights Of Way Issue on behalf of the landowner.](#)

Private landowner Mrs Mary Alford. Stereoscopic interpretation of authenticated aerial photographs to successfully refute a Right of Way claim over the site by The Ramblers using a 60 year time span of dated aerial photographs.

[Ashton Vale, Bristol. Expert witness services for refutation of Town Green application.](#)

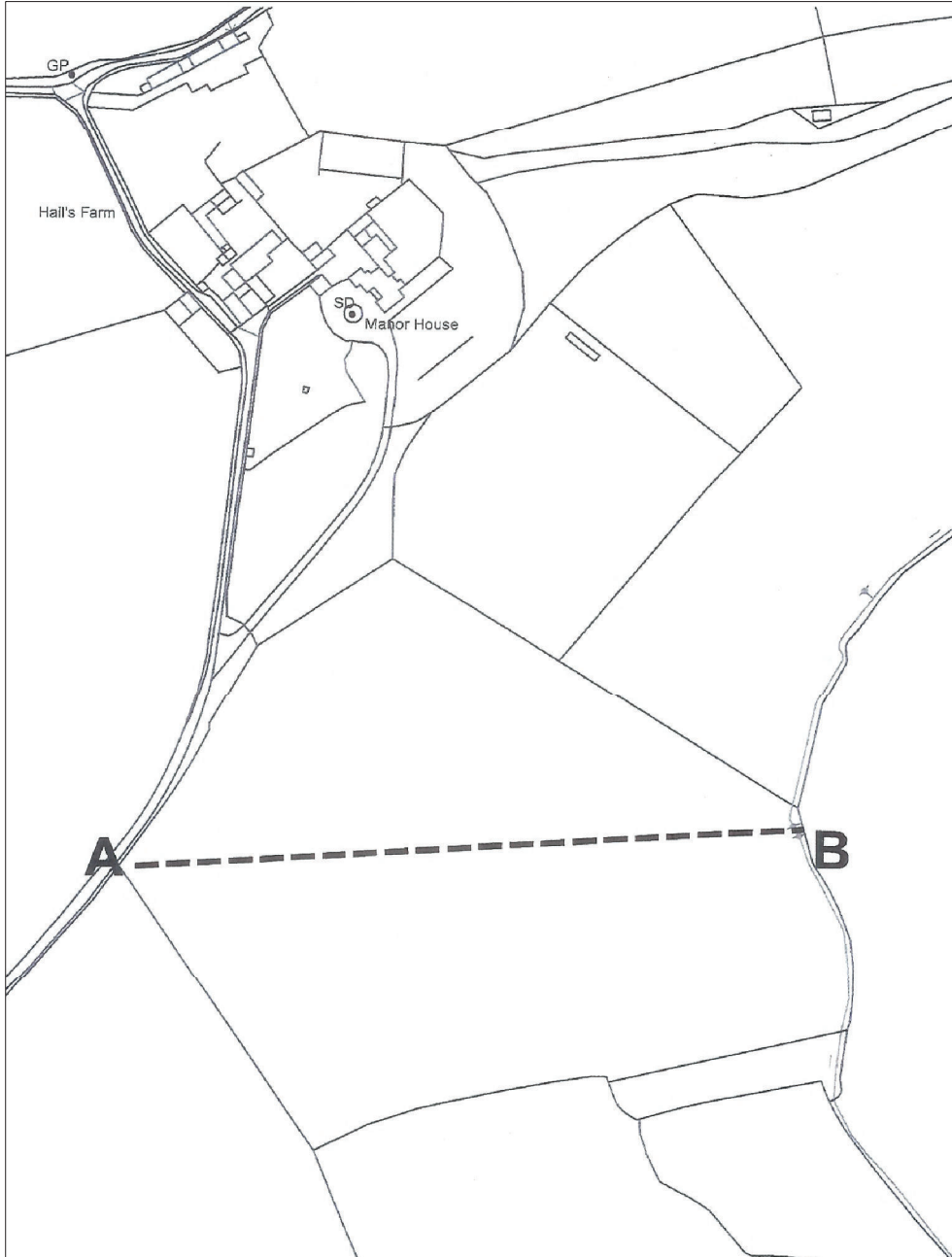
Bristol City Football Club (BCFC) Ltd. Stereoscopic interpretation of authenticated aerial photographs to determine the land use to support a planning application for a new football stadium and defend a TVG application.

ANNEXE 1 presented separately

Aerial photographs which provide the evidence discussed in this report and are detailed in **Table 1**. These are presented as authenticated electronic copies, and stereoscopic paper copies of the same, and authenticated paper copies where electronic copies are not available. The original material may be seen in the archives listed in **Section 4** above.

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FIGURE 1 Location



Drawing Title | FIGURE 1
Location of the site
and the alleged path HOLT 71

Client | Mr P Harris of Holt Manor

Project | Holt Manor, HOLT 71

Scale |

Drawing No | APS 213 09 01 HOLT 71

Drawing status | FINAL 29 10 2013

Date | 29th October 2013

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FIGURE 2 1991



Drawing Title FIGURE 2
HOLT 71 on 19th August 1991

Client Mr P Harris of Holt Manor

Project Holt Manor, HOLT 71

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Drawing No APS 213 09 01 HOLT 71

Drawing status FINAL 29 10 2013

Notes:

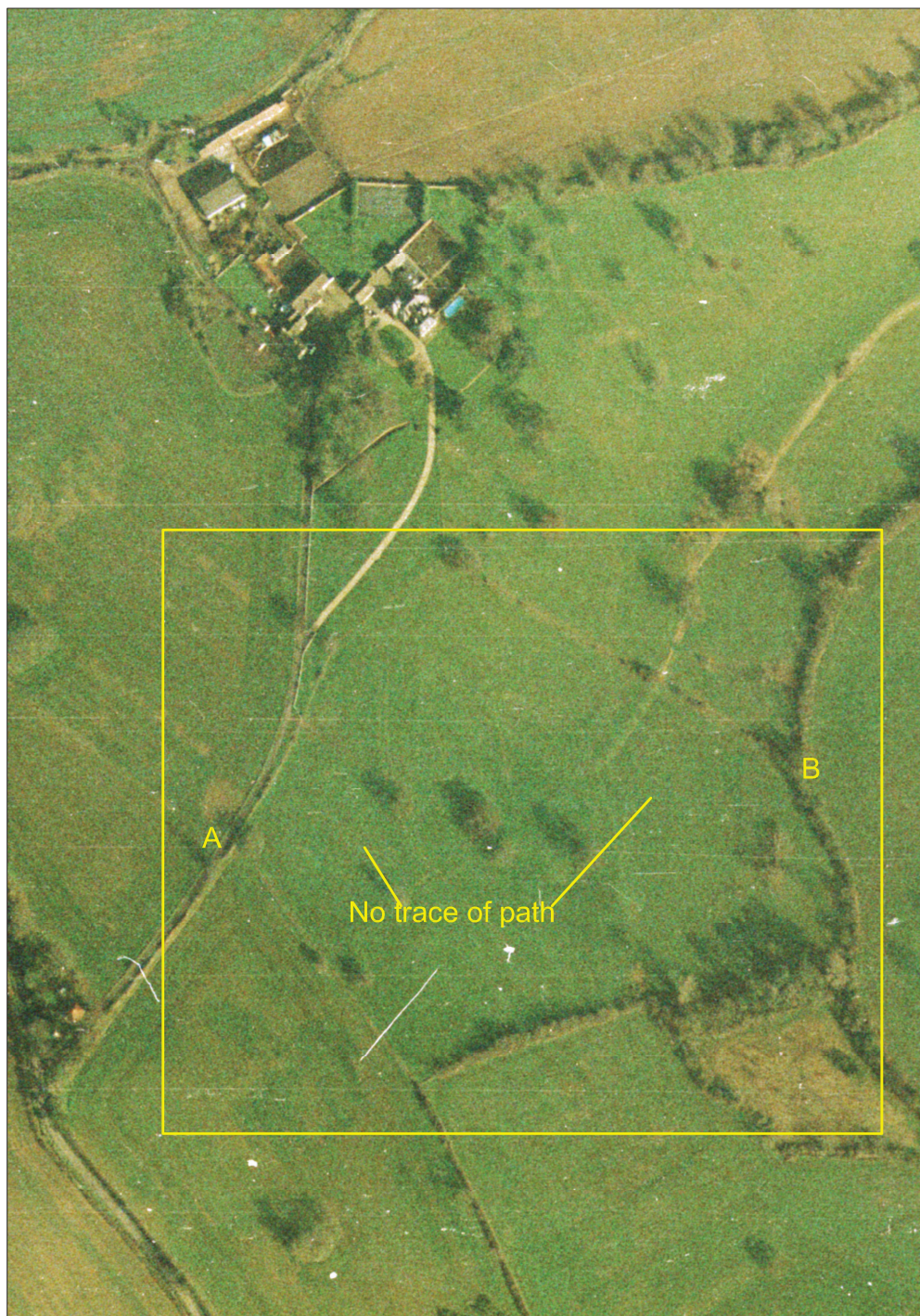
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Date 29th October 2013

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FIGURE 3 1995



Drawing Title | FIGURE 3
HOLT 71 on 9th March 1995
No trace of any path is visible between A and B
White marks and lines are dirt or scratches on the photo negative.

Client | Mr P Harris of Holt Manor
Project | Holt Manor, HOLT 71
Drawing No | APS 213 09 01 HOLT 71
Drawing status | FINAL 29 10 2013
Date | 29th October 2013
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FIGURE 4 1996



Drawing Title | FIGURE 4
HOLT 71 on 4th August 1996
No trace of any path is visible between A and B

Client | Mr P Harris of Holt Manor
Project | Holt Manor, HOLT 71
Drawing No | APS 213 09 01 HOLT 71
Drawing status | FINAL 29 10 2013
Date | 29th October 2013
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FIGURE 5 1998



Drawing Title FIGURE 5
HOLT 71 on 17th September 1998
No trace of any path is visible between A and B

Client Mr P Harris of Holt Manor
Project Holt Manor, HOLT 71
Drawing No APS 213 09 01 HOLT 71
Drawing status FINAL 29 10 2013
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FIGURE 6 1999



Drawing Title | FIGURE 6
HOLT 71 on 4th September 1999

Client | Mr P Harris of Holt Manor

Project | Holt Manor, HOLT 71

Drawing No | APS 213 09 01 HOLT 71

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FIGURE 7 2001



Drawing Title | FIGURE 7
HOLT 71 on 20th June 2001
No trace of path between A and B

Client | Mr P Harris of Holt Manor
Project | Holt Manor, HOLT 71
Drawing No | APS 213 09 01 HOLT 71
Drawing status | FINAL 28 10 2013
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FIGURE 8 2002



Drawing Title | FIGURE 8
HOLT 71 on 1st June 2002

Client | Mr P Harris of Holt Manor

Project | Holt Manor, HOLT 71

Drawing No | APS 213 09 01 HOLT 71

Drawing status | FINAL 29 10 2013

Date | 29th October 2013

Drawn | CC

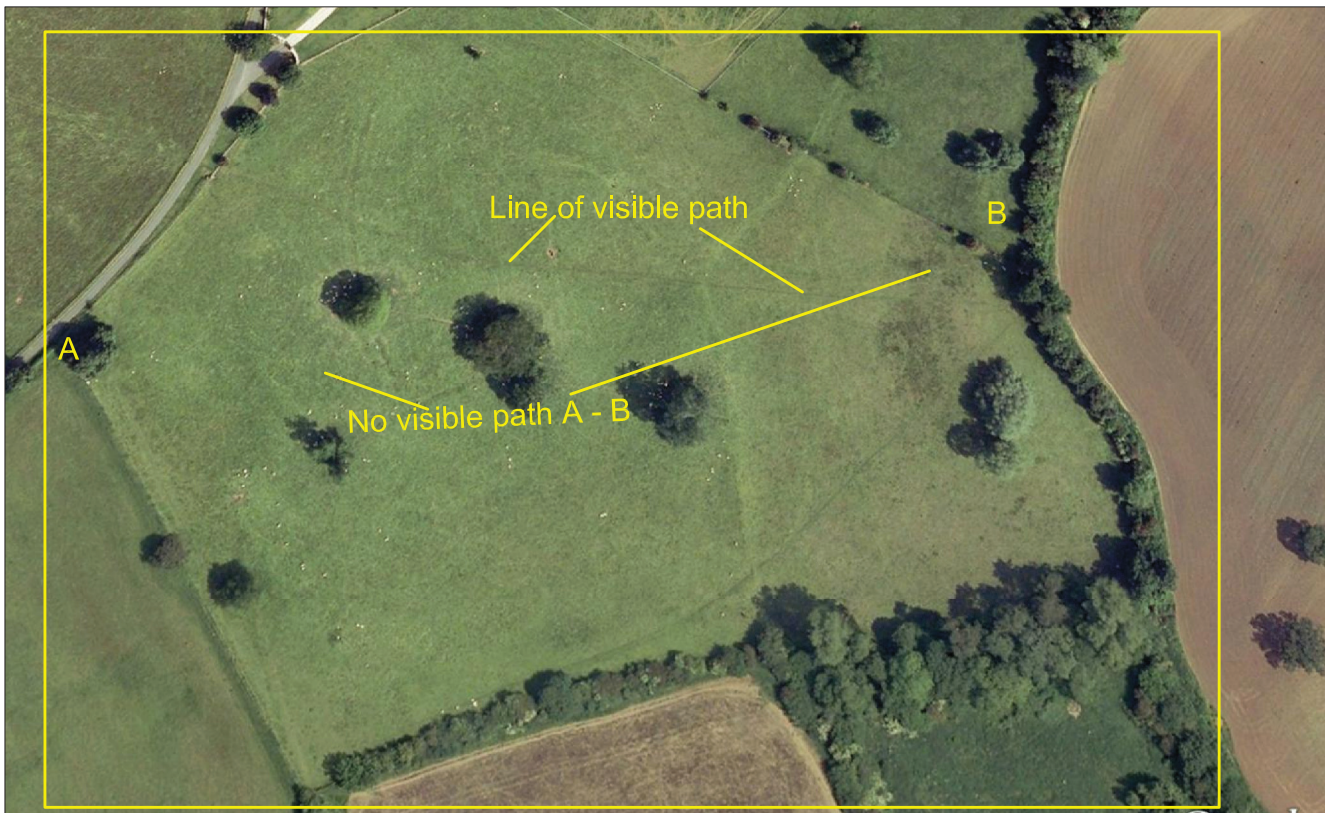
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FIGURE 9 2006



Drawing Title | FIGURE 9
HOLT 71 on 8th June 2006

Client | Mr P Harris of Holt Manor

Project | Holt Manor, HOLT 71

Drawing No | APS 213 09 01 HOLT 71

Drawing status | FINAL 29 10 2013

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FIGURE 10 2008



Drawing Title | FIGURE 10
HOLT 71 on 26th April 2008

Client | Mr P Harris of Holt Manor

Project | Holt Manor, HOLT 71

Drawing No | APS 213 09 01 HOLT 71

Drawing status | FINAL 29 10 2013

Date | 29th October 2013

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Holt Manor, Wiltshire

HOLT 72

Statement of Expert Witness Opinion from Aerial Photographs

Regarding the use of an alleged path, HOLT 72, between 1991 and 2011

Document 2 of 3: Expert Witness Opinion Report HOLT 72

Presented separately:

Document 1: **Expert Witness Opinion Report HOLT 71**

Document 3: **Annexe**, containing all aerial photographs used to provide evidence regarding Holt 71 and Holt 72

Christine D Cox BA (Hons) MA MIfA

On behalf of Mr Phil Harris of Holt Manor, Wiltshire

October 2013

Air Photo Services Ltd.

Brinkworth House Business Centre Brinkworth Wiltshire SN15 5DF +44 (0) 1666 511646 info@airphotoservices.co.uk
www.airphotoservices.co.uk Director Christine D Cox, Associate David W Lang. Company No. 5248188 Registered Office Brinkworth House SN15 5DF

Holt Manor, Wiltshire

HOLT 72

Statement of Expert Witness Opinion from Aerial Photographs

Regarding the use of an alleged path, HOLT 72, between 1991 and 2011

Client Name: Mr Phil Harris of Holt Manor, Wiltshire

Document Reference: CC213-0901 Doc 2 2 FINAL

Project Number: CC213-0901

Quality Assurance

Issue	Date
FINAL Two	29th October 2013

Prepared by	Signed
Chris Cox BA MA MlfA <i>Director</i>	CC

Checked by	
Tracy Michaels BSc AlfA <i>Consultant</i>	TM

Disclaimer

This report has been prepared by Air Photo Services Ltd. with all reasonable skill, care and diligence within the terms of the Contract with the client, incorporation of our General Terms and Condition of Business and taking account of the resources devoted to us by agreement with the client.

We disclaim any responsibility to the client and others in respect of any matters outside the scope of the above.

This report is confidential to the client and we accept no responsibility to third parties to whom this report, or any part thereof, is made known. Any such party relies on the report at its own risk.

CONTENTS

1. INTRODUCTION
2. REMIT OF THE INSTRUCTION
3. AERIAL PHOTOGRAPHIC INTERPRETATION AND PROPERTIES OF AERIAL PHOTOGRAPHS
4. SOURCES OF EVIDENCE
5. RESULTS
6. SUMMARY
7. CONCLUSION
8. DECLARATION
9. STATEMENT OF TRUTH

TABLES

Table 1: Aerial photographs which provide evidence within the Statutory Period

Table 2: Summary of the evidence

FIGURES

- | | |
|------------------|---|
| Figure 1 | Location of The Site and the alleged path HOLT 72 |
| Figure 2 | HOLT 72 on 19 th August 1991 |
| Figure 3 | HOLT 72 on 9 th March 1995 |
| Figure 4 | HOLT 72 on 4 th August 1996 |
| Figure 5 | HOLT 72 on 17 th September 1998 |
| Figure 6 | HOLT 72 on 4 th September 1999 |
| Figure 7 | HOLT 72 on 20 th June 2001 |
| Figure 8 | HOLT 72 on 1 st June 2002 |
| Figure 9 | HOLT 72 on 8 th June 2006 |
| Figure 10 | HOLT 72 on 26 th April 2008 |

APPENDIX *Curriculum Vitae*, Christine Cox

ANNEXE *Provided separately* Original aerial photographs which provide the evidence discussed in this report

1 INTRODUCTION

- 1.1 I am Christine Diane Cox, a professional aerial photographic interpreter and Director of Air Photo Services Ltd (APS). I provide specialist interpretation of aerial photographs for legal, environmental, planning and archaeological purposes.
- 1.2 My qualifications comprise a BA (Honours) degree in archaeology from the University of Liverpool (1983), a MA in Aerial Photographic Interpretation from the University of Sheffield (1984) and membership of the Institute for Archaeologists (IfA, membership number 947, elected 1990, original area of competence Air Photo Interpretation).
- 1.3 In addition to my main occupation, I have previously taught aerial photographic interpretation for landscape applications to undergraduate, postgraduate and professional development levels at the Universities of Sheffield, Bristol and Oxford on an annual basis. I also provide professional development training both internally at Air Photo Services and externally on a commercial basis to colleagues, students and clients and am a member of the Aerial Archaeology Research Group and Society of Expert Witnesses.
- 1.4 My professional experience in aerial photographic interpretation extends over 28 years (1985 – 2013) and includes assessment of land use, legal, boundary, adverse possession, environmental and archaeological issues in a planning and development context. My Curriculum Vitae is appended.
- 1.5 I have full stereoscopic vision which enables me to use a magnifying mirror stereoscope to fully interpret vertical aerial photograph in stereo pairs. I am also experienced in making deductions from stereo pairs of vertical aerial photographs and single vertical or oblique aerial photographs and remotely sensed aerial imagery. This includes ortho rectification of photographs to map bases and digital comparison of land on separate images.
- 1.6 I am instructed by Mr Phil Harris of Holt Manor, to provide an expert witness report on my deductions derived from aerial imagery regarding an alleged path or track at Holt Manor, Wiltshire (**Figure 1**), herein referred to as '**HOLT 72**'.
- 1.7 This is in respect of an issue regarding alleged use of a path, **HOLT 72** between 1991 and 2011. This alleged route has been the subject of an application for a modification order under s.53 of the Countryside and Wildlife Act 1981 to add a Public Right of Way (PRoW) to the Definitive Map and Statement, under application number 2012/07.
- 1.8 I am instructed to examine aerial photographs and to comment on the alleged continuous presence and use of **HOLT 72** as shown on Figure 1, between 1991 and 2011.
- 1.9 In order to do this I have used nine core years of aerial photography which provide evidence during the application dates at 1991, 1995, 1996, 1998, 1999, 2001, 2002, 2006 and 2008.
- 1.10 I undertook my interpretation of the aerial photographs in an impartial manner without consultation of external opinion or any witness statements, on instruction from a legal professional. This is my usual practise, to ensure impartiality in my evidence.

- 1.11 In order to ascertain the facts of the case I have read the application for the order (Form 1, submitted by Holt Parish Council) and Ms Madgwick's Decision report to this application, number 2012/07 which was issued in May 2013.
- 1.12 To interpret aerial photographs in this case I have used 'Old Delft' and 'Topcon' brand scanning and magnifying mirror stereoscopes which allow me to view the aerial photographs at 1.5 and 4 x magnification and in three dimensions where stereoscopic pairs of vertical aerial photographs are available. I have also used a hand held magnifying stereoscope to examine the photographs at 1.5 and 4x magnification, and viewed digital files in high magnification on a high resolution computer screen as appropriate to the requirements of the observations and the resolution and type of available aerial images.

2 REMIT OF THE INSTRUCTION

- 2.1 I examined aerial photographs taken in **1991, 1995, 1996, 1998, 1999, 2001, 2002, 2006** and **2008**. These photographs provide a sequence of observations which comprised the core of this evidence.
- 2.2 The photographs were all examined to determine the presence or absence of a path or track at Location **HOLT 72 A – B**, which is indicated on **Figure 1**. I looked for indicators of use over this alleged track, in all years of observation, as an indented or worn features or as marks in the grass where passage over the path on foot would have left persistent traces in the ground. This is confirmed by the appearance of the ground in 2001, 2006 and 2008 over the alleged route of **HOLT 72**.
- 2.3 This was done in order to establish facts regarding the alleged presence and use of this feature without interruption (as stated in paragraph 6.3 , page 20, Decision Report of Ms Sally Madgwick, Application 2012/07 **HOLT 72**, Rights of Way Officer, May 2013) between 1991 and 2011, which is The Statutory Period for this application.

3 AERIAL PHOTOGRAPHIC INTERPRETATION AND PROPERTIES OF AERIAL PHOTOGRAPHS

- 3.1 Interpretation of Aerial Photographs provides a comprehensive overview of the land-use, vegetation and configuration of visible boundaries, objects, structures and path or track ways at specific and independently authenticated points in time.
- 3.2 It provides accurately dated information on the appearance and condition of land or property at a given point in time and of the relationship of individual features.
- 3.3 In addition to point in time evidence, interpretation of aerial photographs allows deduction of the nature of past and ongoing land-use such as the presence and appearance of used paths or tracks over time which leave persistent traces in the ground surface and subsurface which show on aerial photographs both during and subsequent to any habitual use.
- 3.4 Evidence based on aerial photographs may be admitted as evidence to a court, inquiry or appeal in support of land use issues, boundary disputes, adverse possession or other legal issues.
- 3.5 Vertical aerial photographs, which were used to deduce evidence for this case, are taken for general-purpose survey using an automatic camera mounted inside a modified aircraft which takes photographs at pre-set intervals. The camera points straight down to the ground. The aircraft is flown on a pre-planned set of flight-lines which cover the survey area completely. The vertical viewpoint provides aerial photographic coverage from a fixed scale straight to the ground surface at the centre of each frame. The overlap between the areas covered by each consecutive frame is usually 60%.
- 3.6 This overlap between frames enables the photo interpreter to study each pair of vertical photos under a magnifying **stereoscope** – a mechanical instrument which allows the interpreter to see a single three-dimensional image of the ground surface on the aerial photographs. This allows consideration of height differences in topography and greatly enhances the level of information which may be derived from a single unmagnified two dimensional image.
- 3.7 All photographs were viewed for this assessment either as high resolution contact prints or as digital files using a magnifying stereoscope or high resolution computer screen where appropriate.
- 3.8 The photographs are certified to the date of their exposure by the imprinted recording strips on the contact prints and/or by the listings and certification of the library or archive where they were consulted and are held and available for purchase or consultation.
- 3.9 I have thus considered the assertion that HOLT 72 was used as a Right of Way by impartial professional examination of the evidence provided by all available authenticated dated aerial imagery, which was taken within the Statutory Period.

4 SOURCES OF EVIDENCE

Table 1 Aerial Photographs used for this evidence

4.1 Aerial photographs were available within the Statutory period for 1991, 1995, 1996, 1998, 1999, 2001, 2002, 2006 and 2008. These are detailed in **Table 1** below.

4.2 All these photographs are presented in the **Annexe** to this report.

4.3 The photographs are also presented as **Figures 2- 10** to this report for information only.

Table 1: Aerial photographs which provide evidence within the Statutory Period

Date of aerial photography	Film ID	Frame number(s)	Archive	Type	Figure
19 th August 1991	121_91	043 & 044	Wiltshire Council	Stereo pair consulted in archive and digital files presented	2
9 th March 1995	14_95	146	Bluesky	Print and digital file	3
4 th August 1996	47_96	109 & 110	Bluesky	Stereo pair of prints and two digital files	4
17 th September 1998	OS/98437	5256 & 5257	English Heritage	Stereo pair of prints	5
4 th September 1999	MMC 084	40 & 41	Bluesky and Getmapping	Stereo pair as high resolution digital files	6
20 th June 2001	341-8	362 & 363	Wiltshire Council	Stereo pair and digital files	7
1 st June 2002	AF_02C_321	1924-1926	Bluesky	Stereo run as high resolution digital files	8
8 th June 2006			Wiltshire Council & Bluesky	Digital image	9
26 th April 2008	UCX-SX-1-90213242-Rev4	118 & 119	Bluesky	Stereo pair and digital files	10

Archive details and access to the original aerial photographs

- 4.4 The aerial photographs have been included in this report as Figures for information only. The original material is available for detailed interpretation as stereo pairs, prints and digital files in the **Annexe** which accompanies this report. These photos are authenticated regarding their dates of capture and are also held in the **archives** which are detailed below and referred to in **Table 1** above.
- 4.5 **English Heritage (EH) Archive:** The Engine House, Fire Fly Avenue, Swindon SN2 2EH. nmrinfo@english-heritage.org.uk. 01793 414600. Coversearch enquiry number AP 81448.
A public archive of aerial photographs which cover all of England. Aerial photographs can be seen by appointment in the public search room in the Archive, with reference to the coversearch number above.
- 4.6 **Bluesky:** Bluesky International Ltd., The Old Toy Factory, Jackson Street, Coalville Leicestershire LE67 3NR. 01530 518518. www.blueskyworld.com. This archive holds a comprehensive range of photographs and also holds material supplied by **GetMapping PLC** and **InfoTerra Ltd.**
- 4.7 Bluesky is a commercial archive of aerial photographs which sells date authenticated scans and prints of aerial images. They, alongside Infoterra and GetMapping, which are cross-searched by Bluesky archivists, supply much of the UK coverage which is displayed at Google Earth (GE) on the internet. These images at GE are displayed at 'timelines' which may not reflect the exact date of capture and are a mosaic of aerial and remotely sensed images which may have been captured at different dates. It is therefore essential to consult the archives for provision of high resolution date authenticated original single or stereoscopic images to support legal evidence, as has been done in this case.
- 4.8 **Wiltshire Council:** Wiltshire & Swindon History Centre, Cocklebury Road, Chippenham. SN15 3QN. 01249 705526. www.wiltshire.gov.uk. Stereo pairs of original aerial photographs taken in 1991 and 2001 were examined in this archive and copies were scanned and provided to me as high resolution jpg files by the archive. The archive also supplied access to digital photographs held in the HBSMR Geographical Information System (GIS) which were viewed on screen and supplied as digital files by email to me.
- 4.9 Archives at the **University of Cambridge** and **The GeoInformation Group** (Cities Revealed) were examined, but held no material which lay within the required date range.
- 4.10 I consider that the evidence provided by the archives listed below is a more than sufficient basis upon which to examine and determine any alleged continuity of use for a Public Right of Way (PRoW) over the timescale of the claim.

5 RESULTS

1991

Figure 2

5.1 Vertical aerial photographs 121_91, frame numbers 043 and 044, which were taken on 19th August 1991, are a stereo pair of vertical aerial photographs. They were consulted as original prints at Wiltshire and Swindon History Centre.

The condition and use of land within The Site, in regard to the alleged path or track between Locations A and B

5.1.1 In 1991 The Site is laid to grass which has been variably cultivated. There is a highly visible track into The Site, but no trace of a track or path between A and B. If there was a trodden path on this site between A and B it would be visible, which it is not.

5.1.2 I conclude that a path or track was not present in 1991 between A and B.

1995

Figure 3

5.2 Vertical aerial photograph 14_95 frame 146, taken on 9th March 1995. It is presented as a digital file and a print in the annexe to this report. There is no available stereo pair and the quality is not as high as some of the photographs I have seen for this assessment. However, it is of acceptable quality for interpretation of the presence or absence of larger landscape features and paths and tracks.

The condition and use of land within The Site, in regard to the alleged path or track between Locations A and B

- 5.2.1 In 1995 The Site is laid to grass. The quality of this photograph is not good, but it does show a light toned feature where access has been gained to The Site from a point north east of B over the boundary. This light toned feature does not connect with A and does not continue far to the south west.
- 5.2.2 There is a slight line along part of A – B at its north western end and this is likely to be rough vegetation rather than a worn track.
- 5.2.3 I conclude that a path or track was not likely to have been present in 1995 between A and B.

1996

Figure 4

- 5.3 Vertical aerial photographs 47_96 frames 109 and 110 were taken on 4th August 1996. This stereo pair of vertical aerial photographs is presented as enlarged prints which show The Site and as digital files.
- 5.4 The quality is higher than the photograph available for 1995 and whilst the light is not strong, the photograph is adequate for interpretation purposes.

The condition and use of land within The Site, in regard to the alleged path or track between Locations A and B

- 5.4.1 In 1996 The Site is laid to closely cultivated grass.
- 5.4.2 There is a very visible and well defined track across The Site, which is marked on Figure 4. This does not run between A and B.
- 5.4.3 The area between A and B shows no trace at all of any path or track, which would show in the same manner as that to the northwest if one were present.
- 5.4.4 I conclude that a path or track was not present in 1996 between A and B.

1998

Figure 5

5.5 Vertical aerial photographs OS/98437 frames 5256 & 5257 is a stereo pair of very clear high quality vertical aerial photographs which were taken by the Ordnance Survey on 17th September 1998. They were examined in the EH archive, where they are available for consultation and are presented in the annexe as high quality photographic copies from the contact print negatives which exactly replicate the prints held in the archive. They are well lit and show minute undulations in the land surface, which include very slight residual former agricultural features and boundaries which are likely to date to the Medieval and Post medieval periods and are no longer extant features. Using a stereoscope it is possible to discern slight height differences and differences in tone on the ground surface which are used as indicators to identify small indented features and worn areas.

The condition and use of land within The Site, in regard to the alleged path or track between Locations A and B

- 5.5.1 In 1998 The Site is laid to grass. The quality of these photographs allows me to see the site clearly in sharp 3D.
- 5.5.2 There are several very slightly upstanding features in the field which show the position of former boundaries and agricultural processes.
- 5.5.3 There is no trace at all of any indented feature between A and B. this would most definitely have been visible on these photographs if it were present, which it is not.
- 5.5.4 I conclude that a path or track was not likely to be present in 1998 between A and B.

1999

Figure 6

5.6 Vertical aerial photographs MMC 084 frames 40 & 41 comprise a stereo pair which was taken on 4th September 1999. They are presented as digital files in the annexe to this report and as enlarged prints. They are of good quality and show variations in the tone of the grassed surface over The Site.

The condition and use of land within The Site, in regard to the alleged path or track between Locations A and B

- 5.6.1 In 1999, The Site is laid to grass. The quality of these photographs allows me to see the site clearly.
- 5.6.2 For the first time within the Statutory Period, a slight line is visible in the grass along part of the alleged route. It is not worn to substrate and does not connect A and B. It does not begin at B and its extent is marked precisely on Figure 6.
- 5.6.3 The line does not indicate pedestrian access between A and B as it does not connect the two points and there is no traces of it at or beyond the access points A and B.
- 5.6.4 A track connecting A and B is not visible in 1999, although a very slight line is visible in part of this area of the field.

2001

Figure 7

5.7 Vertical aerial photographs 341_8, frame numbers 362 & 363, which were taken on 20th June 2001, are a stereo pair of vertical aerial photographs which were consulted as original prints at the Wiltshire and Swindon History Centre. They are presented in the annexe as high quality copies and digital scans. The originals are available for consultation in the archive. I also considered a photograph presented at page 6 of Ms Madgwick's decision notice report (OS Copyright photo).

The condition and use of land within The Site, in regard to the alleged path or track between Locations A and B

- 5.7.1 In 2001, it is appreciated that access to the countryside was statutorily limited due to the need to contain an outbreak of Foot and Mouth Disease (FMD) among farm animals.
- 5.7.2 In 2001 The Site is laid to cultivated grass. Stereoscopic viewing shows that the slight features which have been previously visible are still very slightly extant. These do not include a path or line between A and B or any part of that alleged route.
- 5.7.3 The ground surface does not show any line or indentation and this would be visible if it were present on these photos between A and B. As in 1999, there is a slight line in the ground on the OS copyright photograph but this does not extend over the alleged route and neither does it connect A and B or extend from or to either of these points.
- 5.7.4 I conclude that no path or track was present in 2001 between A and B.
- 5.7.5 This is in accordance with an observation on page 8 of Ms Madgwick's report that the most worn route, visible in 2006 and 2008, was not visible in 2001. I understand that the photograph referred by Ms Madgwick (page 8 ref to a photo on page 6) is that of the kissing gate at the top of the page not the aerial photograph dated 2001 which is also displayed at page 6 of her report.

2002

Figure 8

5.8 Vertical aerial photographs AF_02C_321 frames 1924 -1926 are a stereo pair which was taken on 1st June 2002. They are presented as a digital file in the annexe to this report.

The condition and use of land within The Site, in regard to the alleged path or track between Locations A and B

5.8.1 In 2002 The Site is again laid to cultivated grass. The position of a track between A and B is clearly visible as a worn line. This is the first time this track or path has been visible as a line, which indicates pedestrian access along the route. The Site contains numerous small white dots which could be grazing sheep.

5.8.2 I conclude that a path or track is present and visible for the first time along its entire length in 2002 between A and B.

2006

Figure 9

5.9 Vertical aerial photographs were taken on 8th June 2006. They are noted in the Bluesky archive, at this date and uploaded to Google Earth at a 2006 timeline. The same photographs were supplied to Wiltshire Council and are also uploaded as a digital layer to the GIS in the Wiltshire History Centre and labelled 2005/2006. One image is presented in documentation regarding the application for this alleged route. The original photographs were taken in colour and I have seen them printed in colour and monochrome. I examined the image as a digital file in the Wiltshire History Centre GIS, at Google Earth on the internet and as a printed copy supplied by the client with the application for the route. The Wiltshire History Centre supplied me with a pdf file showing the 2006 photograph and Bluesky have confirmed its date via their coversearch listing.

The condition and use of land within The Site, in regard to the alleged path or track between Locations A and B

- 5.9.1 In 2006, linear and vestigial features on The Site show once again, indicating areas of access and former land use.
- 5.9.2 In common with 2002, the alleged path or track is again clearly visible as a worn line on the ground between A and B.
- 5.9.3 The Site contains numerous grazing sheep.
- 5.9.4 I conclude that a path or track is present in 2006 between A and B on the same line as it was first observed in 2002.

2008

Figure 10

5.10 Vertical aerial photographs UCX-SX-1-90213242-Rev4 frames 118 & 119 are a stereo pair which were taken on 26th April 2008. They are presented as a digital file in the annexe to this report.

The condition and use of land within The Site, in regard to the alleged path or track between Locations A and B

- 5.10.1 In 2008, linear and vestigial features on The Site show once again, indicating areas of access and former land use as previously described.
- 5.10.2 In common with 2002 and 2006, the alleged path or track is again visible as a darker toned line on the ground between A and B. It is not worn to substrate as previously seen, so may not be so well used at this time as in 2002 and 2006.
- 5.10.3 I conclude that a path or track is present in 2008 between A and B on the same line as it was first observed in 2002 and 2006. The track, in common with other linear and curvilinear features, is not so apparent in 2008 as in 2002 and 2006, but is nonetheless visible.

6 SUMMARY

6.1 Table 2 summarises the above results

Table 2: Summary of the evidence

Date of aerial photography	Path or track between A and B?
19 th August 1991	No
9 th March 1995	No
4 th August 1996	No
17 th September 1998	No
4 th September 1999	Partial, c30% of alleged route
20 th June 2001	No (FMD limited access)
1 st June 2002	Yes, full alleged route
8 th June 2006	Yes, full alleged route
26 th April 2008	Yes, full alleged route

6.2 These observations indicate that the alleged route was only established and visible in 2002 for the first time as a walked path or track. It was not present prior to this time in its full extent and was possibly only partially visible in 1999 and its ends at A and B were not connected or visible.

6.3 Out of 9 years of observations, in an area which does retain traces of past land use in the ground, 5 occasions recorded no route, one recorded a partial use line and 3 observations recorded the alleged route as a feature on the ground.

7 CONCLUSION

- 7.1 I conclude that the alleged route was not in use during the **entirety of the 20 year Statutory Period** between **1991 and 2011**. This is proven by my observations at Section 5 above and my summary of evidence at Section 6.
- 7.2 The route was first partially visible in 1999, not visible at all in 2001 and thereafter visible in 2002 and 2006 as a worn line. In 2008, the line appears in the grass, but is more vestigial and not worn to substrate.
- 7.3 I conclude therefore that the alleged route has not been established and used within the entirety of the Statutory Period and has only been visible since 2002 in its entirety.

8 DECLARATION

- 8.1 I understand that my overriding impartial duty as an expert witness is to a Court, adjudication or inquiry and I have complied with that duty.
- 8.2 I confirm that insofar as the facts stated in my report are within my own knowledge, I have made clear which they are and I believe them to be true and that the opinions I have expressed represent my true and complete professional opinion.
- 8.3 My report includes or reflects all relevant facts of which I am aware from the material which I have stated that I have examined. If there are material matters of which I am unaware or if the assumptions are incorrect or inappropriate for any reason of which I am currently unaware, it could have a material effect on my stated opinion.

8 STATEMENT OF TRUTH

I believe that the facts stated in this report are true and the opinions I have expressed are correct.

Signed



Christine D Cox BA (Hons) MA MifA

25th October 2013

FIGURES

Figure 1	Location of The Site and the alleged path HOLT 72
Figure 2	HOLT 72 on 19 th August 1991
Figure 3	HOLT 72 on 9 th March 1995
Figure 4	HOLT 72 on 4 th August 1996
Figure 5	HOLT 72 on 17 th September 1998
Figure 6	HOLT 72 on 4 th September 1999
Figure 7	HOLT 72 on 20 th June 2001
Figure 8	HOLT 72 on 1 st June 2002
Figure 9	HOLT 72 on 8 th June 2006
Figure 10	HOLT 72 on 26 th April 2008

APPENDIX Curriculum Vitae, Christine Cox



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PROFILE

Chris Cox is a professional archaeologist, specialist interpreter of aerial imagery and expert witness

Chris established Air Photo Services in Cambridge, UK in 1990 with Rog Palmer and has since worked on major infrastructure, legal expert witness and commercial development projects throughout the UK and Europe. She has over 28 years of experience as an interpreter of aerial imagery in the planning, heritage and engineering sectors, and experience in the provision of professional development training, recruitment and mentoring of graduate level staff.

Chris is a Council member and National Vocational Qualification (NVQ level 3) assessor for the Institute for Archaeologists (IfA), a member of the Society of Expert Witnesses (SEW) and the Aerial Archaeology Research Group (AARG).

SKILLS

- Legal expert witness opinion
- Representation in Court and at Inquiry
- Air Photo, satellite image and LiDAR Interpretation
- Teaching and training at undergraduate, graduate and professional development levels
- Integration of API data with GIS
- Ortho-rectification and accurate mapping from aerial images
- Heritage consultancy, project design and management

QUALIFICATIONS

BA (Hons.) University of Liverpool 1983. Archaeology of the Eastern Mediterranean

MA University of Sheffield 1984.

Air Photo Interpretation. Taught individually by Dr D N Riley. Awarded the Robert Kiln Bursary for aerial reconnaissance.

Chris Cox: EXAMPLE PROJECTS

[Hicks Leaze, Cricklade Wiltshire.](#)

Wiltshire Council. Assessment of aerial photographs, and representation at Public Inquiry on behalf of Wiltshire Council with St Johns Chambers for a Planning Enforcement Appeal which is awaiting the Planning Inspector's decision.

[Prestbury Lane, Cheltenham.](#)

Gloucestershire Council. Assessment of aerial photographs, and representation at Public Inquiry on behalf of Gloucestershire Council with Vivian Chapman QC to defend a TVG application on Council owned land which is awaiting the Planning Inspector's decision.

[Ash Lodge Drive, Ash and Tongham, Surrey, Expert Witness Services and representation at Public Inquiry regarding a Village Green issue.](#)

Bewley Homes PLC Stereoscopic interpretation of authenticated aerial photographs to establish historic land use on the site and successfully defend a TVG application. Expert Witness report, liaison with Counsel and presentation of evidence in chief.

[Heritage Environment Record update 2010 – 2012 from Digital Aerial Imagery.](#)

Hertfordshire Council. Interpretation of digital False Colour Infra Red (FCIR) aerial imagery and input of results to HBSMR online database. For Hertfordshire County Council Environment Department, Heritage Environment Record, UK.

[Mill Lane, Walton-on-the-Naze, Essex. Expert witness services and written representation at Public Inquiry.](#)

Silverbrook Estates Ltd. Expert witness report to document the level of access over the site to successfully defend a Village Green application.

[Vixen Tor, Devon. Expert witness services and representation at Public Inquiry regarding a Rights Of Way Issue on behalf of the landowner.](#)

Private landowner Mrs Mary Alford. Stereoscopic interpretation of authenticated aerial photographs to successfully refute a Right of Way claim over the site by The Ramblers using a 60 year time span of dated aerial photographs.

[Ashton Vale, Bristol. Expert witness services for refutation of Town Green application.](#)

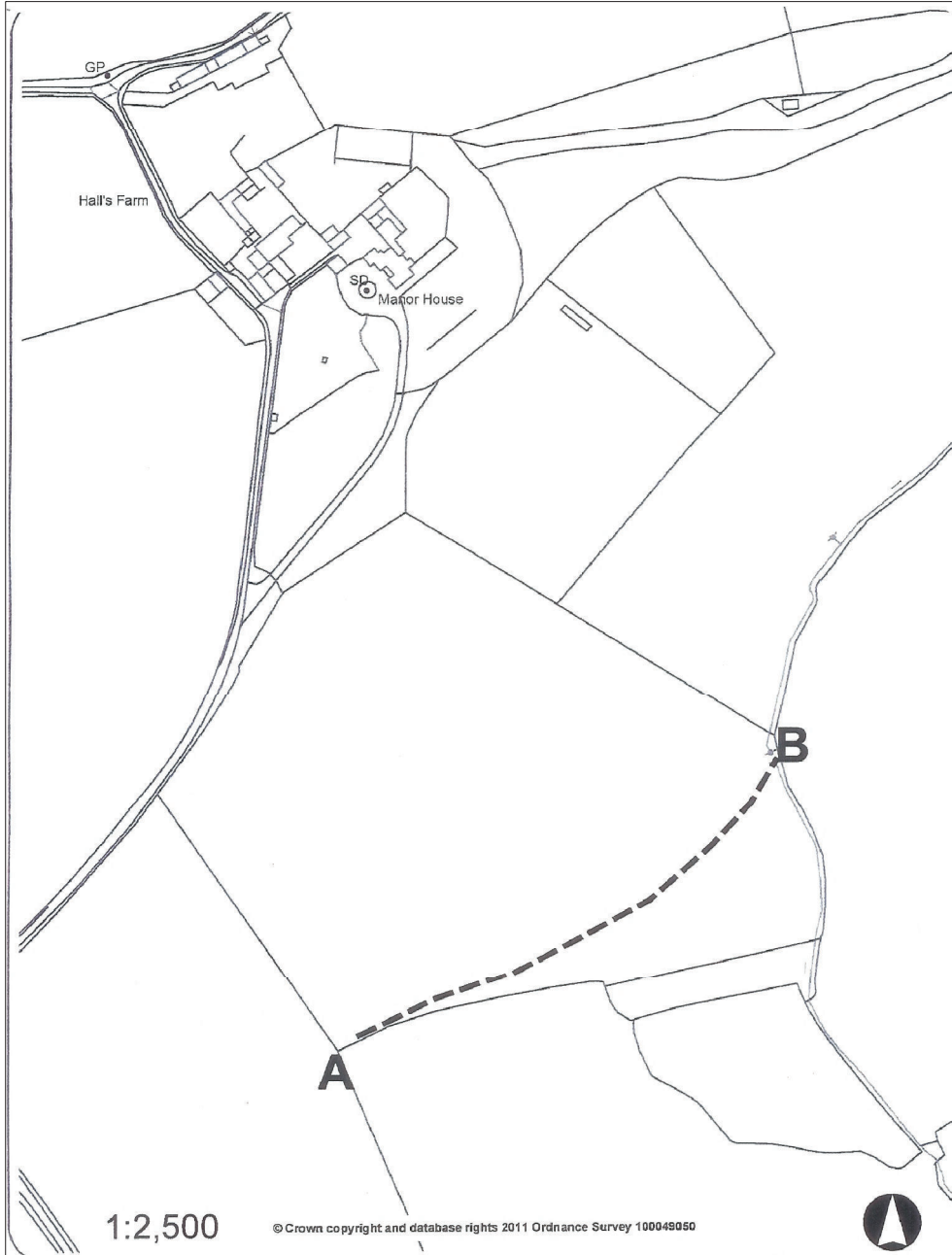
Bristol City Football Club (BCFC) Ltd. Stereoscopic interpretation of authenticated aerial photographs to determine the land use to support a planning application for a new football stadium and defend a TVG application.

ANNEXE 1 presented separately

Aerial photographs which provide the evidence discussed in this report and are detailed in **Table 1**. These are presented as authenticated electronic copies and stereoscopic paper copies of the same and authenticated paper copies where electronic copies are not available. The original material may be seen in the archives listed in **Section 4** above.

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FIGURE 1 Location



Drawing Title | FIGURE 1
Location of The Site
and the alleged path HOLT 72

Client | Mr P Harris of Holt Manor

Project | Holt Manor, HOLT 72

Scale |

Drawing No | APS 213 09 01 HOLT 72

Drawing status | final 29 10 2013

Date | 29th October 2013

Drawn | CC

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FIGURE 2 1991



Drawing Title | FIGURE 2
HOLT 72 on 19th August 1991
No trace of any path is visible between A and B

Client | Mr P Harris of Holt Manor

Project | Holt Manor, HOLT 72

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Drawing No | APS 213 09 01 HOLT 72

Drawing status | final 29 10 2013

Date | 29th October 2013

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FIGURE 3 1995



Drawing Title | FIGURE 3
HOLT 72 on 9th March 1995
No trace of any path is visible between A and B
White marks and lines are dirt or scratches on the photo
negative.
Client | Mr P Harris of Holt Manor
Project | Holt Manor, HOLT 72
Drawing No | APS 213 09 01 HOLT 72
Drawing status | FINAL 29 10 2013
Date | 29th October 2013
Drawn | CC

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FIGURE 4 1996



Drawing Title | FIGURE 4
HOLT 72 on 4th August 1996
No trace of any path is visible between A and B

Client | Mr P Harris of Holt Manor

Project | Holt Manor, HOLT 72

Drawing No | APS 213 09 01 HOLT 72

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Date | 29th October 2013

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FIGURE 5 1998



Drawing Title FIGURE 5
HOLT 72 on 17th September 1998
No trace of any path is visible between A and B

Client Mr P Harris of Holt Manor
Project Holt Manor, HOLT 72
Drawing No APS 213 09 01 HOLT 72
Drawing status FINAL 29 10 2013
Date 29th October 2013
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FIGURE 6 1999



Drawing Title | FIGURE 6
HOLT 72 on 4th September 1999
Only part of the alleged route shows a line which is not
between A and B and is not continuous

Client | Mr P Harris of Holt Manor

Project | Holt Manor, HOLT 72

Drawing No | APS 213 09 01 HOLT 72

Drawing status | FINAL 29 10 2013

Date | 29th October 2013

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FIGURE 7 2001



Drawing Title | FIGURE 7
HOLT 72 on 20th June 2001
No trace of path between A and B

Client | Mr P Harris of Holt Manor
Project | Holt Manor, HOLT 72
Drawing No | APS 213 09 01 HOLT 72
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Date | 29th October 2013
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FIGURE 8 2002



Drawing Title | FIGURE 8
HOLT 72 on 1st June 2002
Worn line of path visible for the first time fully and between
points A and B

Client | Mr P Harris of Holt Manor
Project | Holt Manor, HOLT 72
Drawing No | APS 213 09 01 HOLT 72
Drawing status | FINAL 29 10 2013
Date | 29th October 2013
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FIGURE 9 2006



Drawing Title	FIGURE 9 HOLT 72 on 8th June 2006 Worn line of path visible
Client	Mr P Harris of Holt Manor
Project	Holt Manor, HOLT 72
Drawing No	APS 213 09 01 HOLT 72
Drawing status	FINAL 29 10 2013
Date	29th October 2013
Drawn	CC

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FIGURE 10 2008



Drawing Title | FIGURE 10
HOLT 72 on 26th April 2008
Faint unworn line of path visible

Client | Mr P Harris of Holt Manor
Project | Holt Manor, HOLT 72
Drawing No | APS 213 09 01 HOLT 72
Drawing status | DRAFT 29 10 2013
Date | 29th October 2013
Drawn | CC

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