OXFORDSHIRE COUNTY COUNCIL HISTORIC AND NATURAL ENVIRONMENT TEAM

# Historic Landscape Characterisation STAGE 1 COMPLETION REPORT

Malone, Charlotte - Environment & Economy 02/27/2013

Period Covered: 15th October 2012 – 22nd February 2013

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# **1.0 Project Overview**

This completion report describes the progress made in stage one of the Historic Landscape Characterisation (HLC) for Oxfordshire, currently being undertaken by Oxfordshire County Historic and Natural Environment Team, encompassing the former Archaeological Services.

English Heritage has supported a national programme of Historic Landscape Characterisation projects over the past decade. For the most part they have been undertaken by County Council based Historic Environment Services, covering individual Counties or similar sized units. They aim to achieve an archaeologist's understanding of the historic and cultural origins and development of the present day landscape through a desk-based programme of digital mapping, description and analysis, and by the identification of the physical remains visible within the landscape that demonstrate the processes by which it has reached its present form.

Like the other members of the family of landscape characterisation studies to which it belongs, HLC provides a broad-brush overview of complex aspects of the historic environment in order to provide new and wide-ranging information for conservation, management and development decisions. The objectives of HLC are to promote better management and understanding of the historic landscape resource and of the accommodation of continued change within it, and to establish an integrated approach to its sustainable management in partnership with other organisations.

The basis of HLC is a Geographic Information System (GIS). The information within the GIS is structured by the identification and classification of archaeological historical and other environmental attributes of land parcels. Unlike other forms of landscape assessment, HLC permits the creation of a plurality of classifications of historic landscape types. The distribution of landscape types can be mapped using GIS, with each type being supported by written descriptions of these types and the particular process of landscape formation that they represent. This approach to HLC provides a permanent and renewable database, which may be used to inform a wide range of planning, conservation and management initiatives and strategies.

In the initial, data collection stage of HLC, GIS polygons will be defined, based on groups of modern land parcels exhibiting similar historic origins or processes. Each polygon will be assigned to one of a set of pre-determined high-level broad HLC types, which can then be subdivided and refined according to the recorded range of attributes. The HBSMR database HLC module will be used to record all the attributes reflecting the historic landscape features specific to each polygon (such as aspects of field pattern and boundary form, woodland cover, evidence for former land-use).

In the subsequent, analytical phase of the programme, these attributes will be interrogated to provide further Historic Landscape Types and sub-types, based on recognisable and extant historic character.

# 2:0 Stage 1 Objectives and Outcomes

# 2.1 Project Objectives during Stage 1

- To ensure the finalised methodology will meet the needs of the identified and potential endusers of the HLC, and to confirm the methodology and its monitoring are robust enough to ensure defined daily and project targets are met
- To familiarise her/himself with HLC sources to be used and how they fit with the project methodology. It will enable the PO to revise them in consultation with the stakeholders, project team and the OCC Project Assurance Officer. Potential end-users within these monitoring bodies will thus ensure their needs will be met by and throughout the project
- To create a concordance to integrate terms used by the 3 existing HLCs in line with relevant terms for the proposed Oxfordshire HLC. All of these tasks need to ensure that the remaining area of Oxfordshire's HLC will be carried out in a consistent or integrated manner
- To digitise the pilot area (16 complete parishes) this will test the methodology to be used against the foreseeable diversity of landscape types and identify any need for modification to the methodology. This will encompass an area along the northern edge of the North Wessex Downs (NWD) and Chilterns, filling in one area not covered by either Area of Outstanding Natural Beauty (AONB). The pilot area of 9975 ha includes parishes (Brightwell-cum-Sotwell, Long Wittenham, Dorchester, Chalgrove, Berinsfield, Warborough, Drayton St Leonard, Newington, Berrick Salome, Clifton Hampden, Didcot, Appleford, Cuxham with Easington, Upton, West Hagbourne, and East Hagbourne)
- To assess whether additional data sets will be required (or whether some have to be discarded) and to evaluate the technical suitability of the computer software and hardware available

# 2.2 Project Outcomes or Products

- OCC Induction
- Member lists for Project Team and Stakeholder Group <u>OCC HLC Group Members List.docx</u>
- Define draft terminology
   <u>OCC HLC Stg 1 Draft Terminology.xlsx</u>
- Digitised polygons and database for Pilot area
- Revised PD Gantt Chart, Final methodology <u>HLCRevised Draft 9 CM end of STg 1 Update.doc</u> <u>Updated Gantt CM end of Stge 1.xlsx</u>
- Minutes from Meetings, with commitment to revised methodology and any issues resolved <u>OCC HLC inception Meeting Mins 1-11-2012.docx</u> <u>OCC HLC Consultation Group Agenda 16-01-2013.docx</u> <u>OCC HLC Project Group Agenda 16-1-2013.docx</u> <u>Minutes of HLC consultation meeting 16 Jan 2013.pdf</u>
- Stage One Completion Report
   OCC HLC Stage 1 CompletionReport V1.doc

# 3.0 Project Status

#### 3.1 Schedule Status

The Project Design (PD) anticipated that Stage 1 would take around 4 months (approximately from 15/10/2012 – 22/02/2012). The general aims of this stage included familiarisation and training of the project officer, refinement of methodology, and carrying out the pilot project. The tasks that make up this stage have been achieved in this 4 month period; however in some cases the tasks took longer than originally anticipated in the PD, and this stage did reveal some additional tasks/objectives that were not originally included in the PD. See Appendix 1, for detailed breakdown of actual timescales against the estimated break down in the PD.

# 3.12 The Pilot Phase

Oxfordshire covers 259,800ha, of this 35480 ha (13.65%) is covered by the Chilterns AONB HLC, 8.7% or 22580ha is covered by North Wessex Downs AONB HLC and 1.75% (4547ha) is covered by Oxford City HLC. The Pilot phase was designed to test the HLC methodology and explore the relationship between the existing AONB HLC areas and that of the prospective Oxfordshire HLC project.

The Pilot Phase of the project covered 9975Ha or 3% of Oxfordshire including small amounts of the Chilterns and North Wessex Downs AONB HLC areas. As the HLC polygons did not conform exactly to the shape of the pilot area a slightly larger area – 4% of the total -- was covered in the Pilot Phase (11440Ha).

This total area is slightly larger than that outlined in the PD, and partially explains why the pilot phase ran over by 2 days. Another possible cause for the overrun was the initial difficulty in achieving the urban digitisation rate of 250 ha/day outlined in the Project Design. In order to resolve this, a more generalised approach to urban areas has been taken, and the hectareage digitised each day has been closely monitored since January 2013 and will continue into the next phase of the project to ensure the mitigation is effective.

# 3.12 Revised Estimates

On completion of the pilot phase the estimates for digitising the rest of the county were revised. The revisions are shown in full on the updated Gantt chart in Appendix 3. In order to accurately estimate the time required for the next stage of work it was necessary to estimate the proportion of urban to rural areas in each district. The estimates were based on the percentage urban to rural land in the district of Cherwell (14% urban : 86% Rural), and then extrapolated to the rest of the county (not including AONB areas and Oxford City as both urban and rural land in these areas will be digitised at a rate of 750 ha/day). The estimated number of days for each area was calculated on the premise that urban areas will continue to be digitised at 250 ha/day and the rural areas will continue to be digitised at 500 ha/day.

Stage 2 Digitisation	Rural	Urban	AONB	Rural	Urban	AONB	Site Visits	No of Days /area
Area								
Cherwell	50483.9	8216.2	0.0	100.0	32.0		3.0	135.0
West Oxford	60766.4	10473.6		120.5	42.0	0.0	3.0	165.5
Chilterns			35480.0			47.0	2.0	49.0
Vale of White								
Horse	29703.2	5416.8	0.0	59.5	21.5	0.0	2.0	83.0
North Wessex								
Downs			22580.0			22.5	1.0	23.5
South Oxfordshrie	18427.7	3581.3		37.0	14.0		2.0	53.0
Oxford City			4547.0			6.0	1.0	7.0
Total	159381.2	27687.8	62607.0	317.0	109.5	75.5	14.0	516.0

# 3.13 Table showing revised schedule for stage 2 digitisation

# 3.2 AONB Areas

A key aim of this stage of the project was to explore the relationship between the existing HLCs in Oxfordshire and develop a process for incorporating this data into the Oxfordshire HLC. From the outset, the project intended to re-characterise the area of the Cotswolds AONB, and utilise the existing information from the North Wessex Downs AONB, the Chilterns AONB and Oxford City HLCs, incorporating them into a holistic, if less fine grained, 'Oxfordshire HLC'.

The pilot phase covered part of the NWD AONB and Chilterns AONB areas; it established that in the areas covered by the pilot there had been very little change in difference in interpretation of the historic landscape character from the original assessments during the AONB projects. This allowed the data from these projects to be easily assimilated into the Oxfordshire HLC at the rate of 750 ha per day. The slight differences between the AONB areas and the Pilot area relate to the sources used and the terminology. The Oxfordshire HLC uses fewer sources and will create a less fine grained HLC, resulting in some polygons from the AONB HLCs being merged to reflect the general character of an area based on the minimum hectare outlined in the Project Design.

The terminology differs between both of the AONBs and the Oxfordshire HLC. This has been rationalised through the creation of a concordance between the three classification systems. The concordance was tested in the pilot and found to allow easy transfer of the information into the Oxfordshire HLC.

# 3.3 Budget Status

At the end of stage one of the project, the budget was underspent. Because the first instalment was allocated to cover a 9 month period, it is anticipated that after the initial 5 months (end of stage 1) the budget will be underspend. The budget will be reviewed and updated again at the end of the 9 month period.

# 4.0 Products and Tasks to be completed in stage 1

Deliverable/Milestone	Scheduled Date	Final Date	Sign Off Date	Over/under run
Induction/ Training for HLC Officer (HLCO, HERO) Outputs:				
OCC Induction		15/03/2013		
HBSMR/ Map Info Training	By 15/11/2012	15/11/2012		
Urban Training (RT HLCO)	By 01/02/2013	01/02/2013		+0.5 (not in original PD)
Attend West Midlands     HLC Conference	6/12/2012	7/12/2012		+1 (Not in original PD)
EH National HLC Conference	7/12/2012	7/03/2012		+1 (Not in original PD)
Resolve ICT Issues (Map Info HBSMR)	By 15/11/2012	Ongoing		+0.5
Set up first Project group (Inception Meeting (HLCO HERO) Out Puts:	1 <sup>st</sup> November 2012			+2
<ul><li>Agenda (HLCO)</li><li>Meeting</li></ul>		31/10/2012 1/11/2012 2/11/2012	31/10/2012 1/11/2012 2/11/2012	
Minutes(HLCO)     Familiarisation with     Existing HLC's NWD/     Chilterns/ Oxfordshire     Concordance for AONB	By 15/11/2012	19/11/2012		
<ul> <li>Areas</li> <li>Introduction to HLC resources</li> <li>Visit History Centre</li> </ul>				+2 +2
Identify a Working Classification of Broad Types and Sub Types to be used	15/12/2012	12/12/2012	15/12/2012	+3
Organize project and consultation meetings; presentation/input at both Outputs:	16/01/2013	16/01/2013	16/01/2013	
<ul> <li>Agenda(HLCO)</li> <li>Meetings (HER)</li> </ul>	11/01/2013 16/01/2013	10/01/2013 16/01/2013	10/01/2013 16/01/2013	-2
<ul> <li>Meetings (HER)</li> <li>Presentation (HLCO)</li> <li>Minutes(HLCO and HER)</li> </ul>	06/02/2013	29/02/2013	06/02/2013	-1

Get HLC customising query set up for HBSMR use	6/01/2013	06/01/2013	+1 (not scheduled in original Plan)
<ul> <li>Complete Pilot Area</li> <li>Outputs</li> <li>HLC polygons and database Records for Pilot area</li> <li>Monitor digitisation rate Jan to Feb 2013</li> </ul>	08/02/2013	12/01/2013	+2 days
<ul> <li>Update PD</li> <li>Revise time estimates for Landscape Categories</li> <li>Revise Gantt Chart</li> </ul>	22/03/2013		
Produce Stage 1 Completion report	15/02/2013		
Totals			+12 days

# 5.0 Products and Tasks to be completed in the Next Stage

#### 5.1Tasks

- Compile Attribute Data and Polygonise by District all remaining areas of Oxfordshire and create HBSMR database
  - Cherwell
  - South Oxfordshire
  - Vale of the White Horse
  - West Oxfordshire
  - Chilterns AONB
  - NWD AONB
  - Oxford City
- Under take site visits to collaborate results and photograph contemporary landscape (14 total one every 2 months)
- Produce GIS Maps for County
- Hold Project Team meeting to discuss preliminary results
- Prepare Stakeholder meeting to demonstrate direction and preliminary results
- Prepare stage 2 completion report
- Get HLC Output/ Dissemination registered on ICT Project list
- Plan for dissemination of project results

# 5.2 Products of Stage 2

- Polygons and database for 1<sup>st</sup> district followed by review by HERO
- Polygons and database for remaining areas
- Results of Photographic Recording
- GIS Maps produced showing results
- Second Project group and Stakeholder group Minutes
- Stage 2 Completion report for HERO and NHPC

# 6.0 Project Issues and Risks

This section highlights any issues that have come up in this stage, and outlines the processes put in place to resolve them. It will also identify any changes to the status or likelihood of risks in the risk log.

#### 6.1 Stage 1 Issues 6.11 IT issues

**Issue:** Access to HBSMR and Map info, erratic, sometimes unable to access all or part of the software necessary to create the HLC Polygons and records **Action:** Contacted Exegesis and OCC helpdesk, Problem located on one of the servers. Server subsequently deleted. This has resolved access issues, although still some issues with the speed of the operating systems.

**Issue:** HBSMR HLC Module unable to perform some tasks required for filtering the HLC data **Action:** Arranged for Exegesis to build some custom queries that will perform these tasks

# 6.12 Digitisation Speed

**Issue:** Difficulty meeting daily digitisation targets within urban areas (250 Ha/day). **Action**: Meeting with RT to discuss Urban Characterisation (training) in general, and also identify an approach which would speed up digitisation by taking a more generalised approach to the urban characterisation. This approach involved identifying Urban areas to be characterised in a day, and working out based, on average polygon production per day, how many polygons could actually be produced, this gives a more realistic idea of the level of detail that can be achieved on a daily basis whilst still meeting the digitisation target of 250 Ha/day in Urban areas).

**Follow up:** Monitor, digitisation rates in urban areas closely to ensure this has resolved the problem.

# 6.2 Changes to the risk log

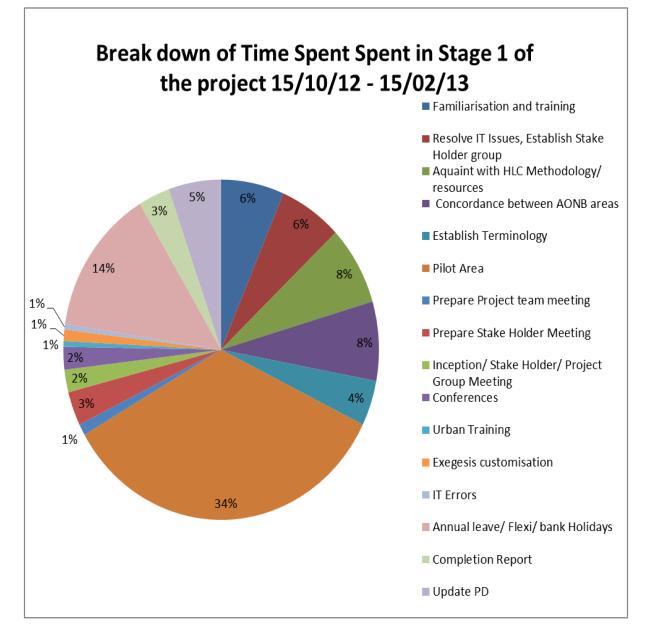
There have been no changes or additions to the risk log as a result of the pilot phase.

# 6.3 Project News

# 6.31 Information Dissemination through `Share Point'

As a result of the first consultation group meeting, it was decided that it would be useful to have a way to easily disseminate information to the consultation group and also have a forum for discussion and alongside the ability to gather end user input into the project. With this in mind we are liaising with IT colleagues about the possibility of creating a forum for the sharing and discussion of information. The forum would be used for discussion of ideas, sharing progress updates, and seeking feedback on developments that support this partnership, as well as encouraging ownership in the development of this work. The intention is that it would provide easier resolution of any issues that arise, therefore supporting and enhance the project board. The forum would also be used to share information (bulky reports, graphics files from mapping work) across the Partnership in a more consistent fashion than e-mail.

**Appendix 1: Stage 1 Timescales:** A Pie Chart and a Table showing the breakdown of time spent during phase 1 of the Oxfordshire HLC project.



			Estimated	
	Task Description	Task	Number of Days	Actual
Stage 1	Familiarisation and training	1	5	6
	Resolve IT Issues, Establish Stake Holder group	2	5	6
	Acquaint with HLC Methodology/ resources	3	6	7
	Concordance between AONB areas	4	6	7
	Establish Terminology	5	1	4
	Pilot Area	6	30	32
	Prepare Project team meeting	7	3	1
	Prepare Stake Holder Meeting	8	4	3
	Inception/ Stake Holder/ Project Group Meeting	9	0	2
	Conferences	10	0	2
	Urban Training	11	0	0.5
	Exegesis customisation	12	0	1
	IT Errors	13	0	0.5
	Stage 1 Completion Report	14	3	3
	Updated PD	15	5	5
Stage 1 Totals			68	80

Appendix 2 Milestones for stage 2, with approximate date to be achieved by	Appendix 2 Milestones	for stage 2, with approximate dat	to be achieved by
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Deliverable/Milestone	Scheduled Date based on PD time estimates	Final Date	Sign Off Date	Over/under run
Compile Attribute Data and Polygonise by District all remaining areas of Oxfordshire and create HBSMR database*	31/06/2015			
Cherwell	10/2013			
Review by HERO	10/2013			
South Oxfordshire	12/2013			
Vale of the White     Horse	5/2014			
West Oxfordshire	01/2015			
Chilterns AONB	05/2015			
NWD AONB	06/2015			
Oxford City	06/2015			
Under take site visits to collaborate results and photograph contemporary landscape (14 total one every 2 months)	04/2013 06/2013 08/2013 10/2013 12/2013 02/2014 04/2014 06/2014 08/2014 10/2014 12/2014 12/2014 02/2015 04/2015 05/2015			
Produce GIS Maps for County*	03/07/2015			

Project Team meeting *	09/07/2015		
Prepare			
Hold			
Minutes			
Prepare Stakeholder			
meeting to demonstrate			
direction and preliminary			
results*	13/07/2015		
Prepare			
Hold			
Minutes			
Prepare Completion report	16/07/15		
HLC Output on ICT Project	20/07/2015		
list*			
Plan for dissemination of	17/07/2015		
project results*			

\*Scheduled Dates are estimates, (the period 15/10/2012 to 22/10/2015 the first 3 years of the project has 1103 days, 765 of which are working days, 24 are public holidays and 314 days are weekends. Over the 3 year period 87 working days are allocated as annual leave leaving 678 Project days this averages at 18.84 project days per month).

#### Version: 2.0

# Appendix 3 Revised Gantt chart

	Estimat	ted Days Actua	I Days MONTH No.	o. 1	2 3	4	5	6	7	8		10	11	12	13	14	15 1	5 17	18	19	20 21	22	23 24	25	26	27	28	29 30	31	32	33	34	35 36	5 37		38	39 40	<u>0</u>	. T
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	2	5	6 Resolve IT Issues, Establish Stake Holder																																				
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	5	1	4 Establish Terminology				_																					_											
	6	30	32 Pilot Area		32 days																									_									
	7	4	1 Prepare Project team meeting			18	8 days																																
			Inception/ Stake Holder/																																				
	8		2 Project Group Meeting																																				
	9	3	3 Prepare Stake Holder Meeting																																				
	10		2 Conferences																																				
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	16c	83	Vale of White Horse													4	4 Months																						
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	16e	49	Chilterms AONB adaptation	n																							2.751	Aonths											
	16f	23.5	NWD AONB adaptation	n																									1.25 Mo	nths									
	16e	7	Oxford City adaptation	n																										0.37 Mo	nths								
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	17	2	Produce mapped GIS layer for county																																				
	18	2	Prepare/hold proj team mtg to discuss	_					-																				-						_			+ + +	
	19		Prepare/submit report to HERO						-																			_	-	-									
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		1	Get HLC output on ICT proj list			_	_																							_			_						-
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	23	15	Analyze/interrogate HLC to provide			_	_																								1.05 Month	IS							.
	24	2	Merge Oxon data w/AONB data;				_																					_											.
	25	3	Review shape of HLC for end-user							1													1																, I.
	26	75	Copy/merge data; create new																												3.9	8Months							
	27	10	Use of HER data to correlate existing																																1 Mr	lonth			
	28	5	Prepare/submit report to HERO/ proj																		1																		
	29	3	Stage 3 completion report to NHPC											1							1																		. 1
age 4		50	Stage 4 Total	ıls						1		1									1		1													Sta	ge 4 2 Month	ins	1
	30	2	Make HLC GIS layer internally available						1	1											1		1													50 d			. 1
	31	20	Devise and implement dissemination						1	1								1			1		1														//		. 1
	32		Prepare/hold final stakeholder group to						1	1											1		1							1				$\rightarrow$	d#+				. 1
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ige 5	36	10	Produce HLC results online																																				, 1
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	38	10	Launch website via public event						1									1																					70 da
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