Little France Path Network

Edinburgh

Watching Brief Data Structure Report: April-May 2016

for

The Edinburgh & Lothians Greenspace Trust

July 2016



Initial Trench looking south east (003)

Little France, Path Network *Edinburgh*

Watching Brief April -May 2016

Job number 2215

July 2016

by Kenneth Macfadyen

Contents

Executive Summary

<i>1</i> .	Intro	duction	\imath	1
	i.		neral	
	ii.	Site	location	2
	iii.		thodology	1 2 2
2.	Watching Brief			
	i.	_	ial trenching	4 4
	ii.	Tren	nch extension	47
		a.	Metal detecting survey	7
		b.	Trench monitoring general	
		<i>c</i> .	Part 1: main extension across field	7
		d.	Part 2: junction with Greendykes road	8
<i>3</i> .	Conc	lusion		11
App	endix A:	Finds .	Assessment	12
App	endix B:	Finds	Register	12
App	endix C:	Contex	xt register	12
App	endix D.	: Drawi	ing Register	13
App	endix E:	Photo .	Register	14
App	endix F:	Photog	graphic contact sheets	16
App	endix G.	: WSI, A	March 2016	20
App	endix H	: Amend	ded WSI, April 2016	25

Illustrations

List of Figures

Figure 1 site location	3
Figure 2 Plan and section across 004	6
Figure 3 plans of exposed walls of shelter belt and section across eastern wall	9
Figure 4 WSI – Appendix G - Site location plan (red outline).	21
Figure 5 WSI – Appendix G - Area to be monitored in deep red, other paths in light red	
overlain onto OS map of 1895 25 inch to a mile	22
Figure 6 WSI - Appendix H- Altered Site location plan (trenching already monitored in rec	d,
new trenching in green).	26
Figure 7 WSI – Appendix H- Area monitored in deep red, areas to be monitored in green	
overlain onto OS map of 1895 25 inch to a mile	27
List of Plates	
District the second in the big a second will in	4
Plate 1 pre excavation looking west uphill	4
Plate 2 post excavation of eastern part looking down hill	4
Plate 3 composite section over rubble feature 004 looking south (0.5 M scale)	5
Plate 4 composite plan showing rubble feature 004 (0.5 M scale)	5
Plate 5 eastern extension to network, excavated	7
Plate 6 shelter belt pre excavation	7
Plate 7 shelter belt cleared ready for excavation	8
Plate 8 western collapsed shelter belt wall 008	10
Plate 9 Eastern collapsed shelter belt wall 005	10

Little France Path Network

Edinburgh

Path Network: Watching Brief: Summary Report

April 2016

Executive Summary

Addyman Archaeology undertook a watching brief during the construction of a network of paths, through open land to the north and east of the Royal Infirmary Edinburgh, Little France, Edinburgh. The construction involved the stripping of topsoil along the line of the path as well as deeper trenching for service ducting running alongside some of the paths.

Most of the monitored areas revealed a homogenous and continuous plough soil across almost the whole areas of trenching, overlying subsoil and natural boulder clays below. Only one feature was present, a deeply buried area of un-bonded rubble stone hardstanding; this was interpreted as bedding for a road. Although no dating evidence was recovered, as it is not depicted on the OS mapping of the late 19th century or later, it is most probably pre-19th century.

To the east of the site a forested shelter belt was broken through to join with Greendykes road. Two un-bonded rubble stone boundary walls defining either side of the wooded area were located, although they were heavily collapsed and robbed. Again these do not show on mapping of the later 19th century so must predate this.

Numerous finds were recovered, mostly pottery ranging in date from as early as the 12th-15th centuries, up to the 19th/20th century, showing the plough soil to have been fertilised with domestic rubbish over a long period of time.

1. Introduction

i. General

Addyman Archaeology was commissioned by The Edinburgh & Lothians Greenspace Trust to undertake an archaeological watching brief during the construction of a network of paths to the north and east of Royal Infirmary Edinburgh, Little France, Edinburgh.

Following submission of the initial plans part of the area to be disturbed was identified to have archaeological potential for buried historic deposits and remains. This area of potential archaeology was identified as the higher ground to the west primarily between section *CH1b 00 & CH03+50* on the proposed plan of paths supplied by client (*see appendix G:* WSI march 2016 for a location plan) and a watching brief was required between these points by John Lawson of the City of Edinburgh Archaeology Service (CECAS). A Written Scheme of Investigation (WSI) was submitted to and approved by John Lawson in March 2016 (*appendix G*).

Latterly during the works the western part of the proposed route was changed to move the path line north to run through a wooded area to meet with Craigmillar Castle Road instead of the open area originally intended. These new proposals also included the construction of a further 300m length of path to the east to join the network with Greendykes Road.

A full watching brief of this new trenching to the east was specified by John Lawson of CECAS. This was to include a metal detector survey prior to the excavation as well as metal detecting of the spoil during the excavation. Historically some metal artefacts had been discovered in this area notably metal cap badges from military training in the field (John Lawson, pers comm).

These additional works required an amended Written Scheme of Investigation (WSI) to be submitted for approval by CECAS (*appendix H*).

ii. Site location

The proposed development site is located within the South East extent of Edinburgh (trenching area approximately centred NT329006 670970) to the north there is existing forestry (Hawkhill Wood) on the site of a former quarry, to the south west is some further modern forestry and to the east open farmland.

The underlying geology is of Sandstone.

iii. Methodology

The monitoring work was undertaken for deep interventions only. The construction of the paths themselves was generally contained within the topsoil and no monitoring was specified for the initial path network. The monitoring was only undertaken on the excavation of a narrow 1m deep channel cut along the path edge for the insertion of a service duct. These excavations were archaeologically monitored.

Access to the western part of the proposed path line to join with Craigmillar Castle Road was initially delayed while access for construction was agreed with the landowner.

Standard record drawings were undertaken at 1:20 scale with details and sections drawn at an appropriate scale. A general site plan indicating the position of archaeological features was prepared and features were tied in to the National Grid, based on drawings supplied by the contactor. All drawings were complemented by digital photography (*appendix F*).

A record of this project will be deposited with the Online Access to the Index of Archaeological Investigations (OASIS) website hosted by the Archaeological Data Service and with *Discovery and Excavation in Scotland* (DES), the annual publication of fieldwork by Archaeology Scotland.

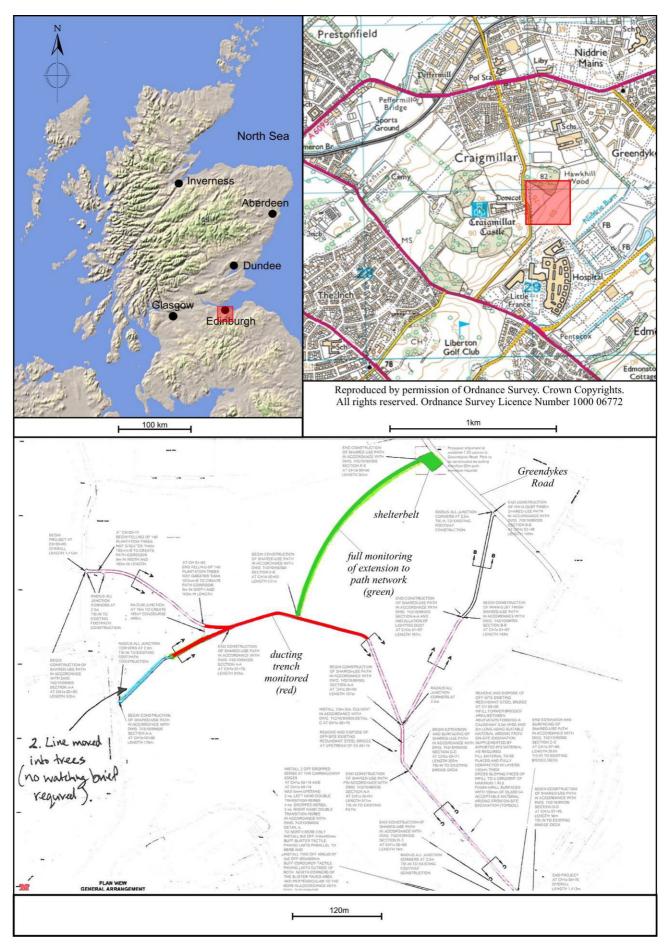


Figure 1 site location

2. Watching Brief

i. Initial trenching

The trenching was undertaken by a 6 tonne Takuechi TB260 compact excavator, fitted with a narrow toothless 0.30m wide bucket. The excavation of the service duct trenching was monitored at all times by an Archaeologist. Trenching extended to a depth of 1m.

The removed topsoil was kept separate from subsoil deposits for reinstatement.

The trenching was undertaken in two phases due to access issues to the western part being initially unresolved. This phase of monitoring was undertaken by K. Macfadyen.







Plate 2 post excavation of eastern part looking down hill

Across most of the length of the trench solid natural deposits 003 were exposed. A number of bedrock outcrops or perhaps very large boulders were identified within the boulder clay; these required breaking out in order to install the ducting. The rock outcrops were mostly noted near the break of slope of the site.

These outcrops of bedrock or large boulders were a mixture of stone types; in places these were a very pink sandstone that broke out fairly easily but in others a much harder greyish sedimentary rock.

Overlying the bedrock across much of the trench was a layer of ground up bedrock and clay interpreted as a glacial deposit. It was generally 0.1-0.3m deep where present. This was overlain by a deposit 0.3-0.4m deep of a solid and undisturbed looking light orange/brown subsoil 002 capped with a homogenous and consistent 0.3m deep deposit of a dark topsoil 001.

The only deposit with any datable artefacts was the topsoil. A part of a clay tobacco pipe bowl was recovered from this, as well as a small number of 19^{th} - 20^{th} century white ware pottery fragments (not retained), nothing identifiably earlier was noted.

Apart from a few clay field drains the only feature of interest noted was a series of large stones forming a feature to the west of the phase 1 trench. Due to the narrow confined trench the alignment or purpose of this was not fully understood, but it can be identified as likely to be of human origin.

This is composed of large rounded and unworked sandstone boulders 004 forming a relatively level surface approximately 2.5m wide. This was interesting as the otherwise solid and undisturbed subsoil 002 appeared to overlay this with no obvious cut through the subsoil or overlying topsoil 001.

The trench was very narrow and machine excavated but cleaning up of the sections could not identify any associated cut through the 002 subsoil. This perhaps indicates it is of some antiquity, although elsewhere or in a larger open area excavation a cut may be more visible

The stone feature also appeared to be clean with no evidence of deposits related to its use on the surface, as far as could be seen in the limited area exposed.



Plate 3 composite section over rubble feature 004 looking south (0.5 M scale)



Plate 4 composite plan showing rubble feature 004 (0.5 M scale)

With this limited exposure it is inconclusive what this represents, but hardstanding for a road seems most likely; although the surface would seem rough and without any associated in use deposits. The feature's relationship with the overlying "subsoil" is problematic: if the feature was excavated down to the underlying boulder clay and constructed and then latterly backfilled then this was a very neat process leaving none of the usual indicators. The subsoils and topsoil looked as homogenous and continuous as elsewhere in the trench as where it overlies the stones. The alignment of the feature is also not easy to define with the narrow trench cutting across at an angle but it seemed as if it could have been possibly headed towards Craigmillar Castle or at least on that approximate alignment.

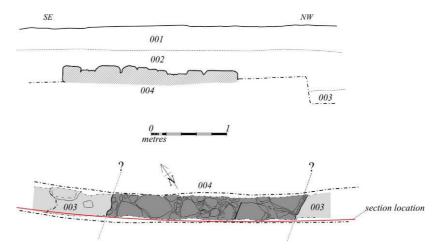


Figure 2 Plan and section across 004

The continuation of this trench to the west was moved to the north to run within an existing modern tree plantation and so the monitoring stopped at the plantation edge. The deposits within this final length of trench were similar to those elsewhere but the underlying natural deposits were generally of very pink clay with some substantial outcrops of bedrock.

ii. Trench extension

A secondary extension was latterly added to the network during construction. This consisted of 300m of path and ran to the east to connect the path network with Greendykes Road. This was fully monitored as specified by CECAS. The path line did not require a deep trench for electric ducting and most of the excavation was largely contained within the plough soil.

a. Metal detecting survey

Prior to the excavation of this area of trenching a metal detector survey was conducted along the line of the path. This this was confined to within the 2.5m wide corridor of the path. No metal finds of note were recovered, with the exception of a few beer and soft drink cans (not retained) and these were mostly clustered to the east end of the path near the road.

Metal detecting over the spoil heaps during and after the excavation also recovered little, with just a few pieces of wood containing modern round nails and some metal wire. The only find of note was a small, unidentified cast lead alloy fragment (SF004), rectangular in shape with cut ends, and three cut protrusions and casting mark along one long edge. Further analysis of this object will be required for proper identification (see *appendix A*).

b. Trench monitoring general

This was undertaken in two parts with the main 300m length excavated first and the junction with Greendykes road formed later; this later part involved the removal of numerous trees and vegetation.

Part 1: main extension across field c.

The first 300m length of this path extension was monitored during stripping; the trench was excavated to slightly over 2.50m wide to allow for the construction of kerbs. The trench was almost entirely contained within the topsoil or just exposing the underlying subsoil/natural.



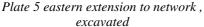




Plate 6 shelter belt pre excavation

The removed topsoil was as elsewhere on the site, a homogenous and even 0.30m deep dark humic plough soil 001 which continued across the whole trench. Occasionally where the natural deposits below were exposed the faint scarring of plough marks could be seen in the underlying stony clay/sand

subsoil 002. The plough marks showed mainly two directions of ploughing: one running east to west across the site and the other at approximately 90` running north to south.

This demonstrated that the topsoil across the site was a plough soil overlying a subsoil/natural. Numerous finds were recovered from this plough soil including a wide variety of pottery, glass and clay tobacco pipe stems/bowls (see appendix A & B). The earliest finds dated from the 12th-15th centuries, with other finds from the 13th/14th century up to the 19th/20th century. These were mostly small fragments and well-worn, indicating they related to field manuring over the centuries

Part 2: junction with Greendykes road d.

The formation of the junction with Greendykes road was more involved as it cut through an historic shelter belt visible on late 19th century Ordnance Survey mapping. The existing trees were cut down on the line of the path and stumps grubbed out prior to the excavation.

The road to the east was at a lower level to the open fields to the west. The path therefore had to chicane through the shelter belt to attain the gradient to join the levels, meaning a large area was disturbed.



Plate 7 shelter belt cleared ready for excavation

No finds were recovered and the only features noted related to stone walls delineating either side of the shelter belt. These walls were apparently of dry stone construction and largely collapsed down to foundation levels, however some fragments of these were visible above ground on either side in places.

The eastern wall 005 appears to have been retaining the soils of the shelter belt at a higher level than the road to the east; its collapse or perhaps robbing has allowed these to slump towards the road.

The loss of the wall could have been potentially caused by tree root action if not deliberately robbed.

topsoil Greendykes 006 007 collapsed wall 005 section across collapsed eastern wall collapsed wall 008 section location truncated collapsed wall 005 grass verge cut 006

The wall sits within a cut 006 cutting down into natural clays.

western wall

of shelter belt

Figure 3 plans of exposed walls of shelter belt and section across eastern wall

eastern wall of shelter belt

The western collapsed wall 008 as exposed was also largely collapsed down to the foundation but no cut was observed for its construction within the excavations. The wall could be seen to continue beyond the trench mostly as a low mound.



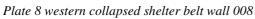




Plate 9 Eastern collapsed shelter belt wall 005

3. Conclusion

Across the extent of the monitored trenching the underlying natural boulder clays or subsoil with perhaps some bedrock outcrops was exposed. However these bedrock outcrops could just be some very large boulders as some large ones were removed from the trenching which at first was thought to be in-situ bedrock, either way this represents natural glacial deposits overlain with solid undisturbed subsoil.

Overlying this across the extent of the monitored trenching was a homogenous plough soil which was consistently about 0.30m deep; ceramic finds recovered from this show it to have been fertilised with domestic refuse from at least the 15th century up to recent times. The mapping of the Ordnance Survey shows this as open fields up to the present time.

Apart from drystone walling delineating the eastern shelter belt only one feature was noted, an enigmatic hardstanding composed of large boulders. This is likely to be a road but its depth in the stratigraphy may suggest it is of some antiquity.

Appendix A: Finds Assessment

A small assemblage of 81 artefacts was recovered during the archaeological monitoring of works for the Little France path network, Edinburgh, in May of 2016; a summary is given in Appendix B. The majority of the artefacts recovered are dateable to the 17th- 19th/20th centuries, though a number of ceramic sherds can be attributed to between the 12th and 15th centuries. All finds were retrieved from the plough soil deposits, indicative of the site's long history of agriculture and domestic fertilisation.

The ceramic assemblage is made up of 64 small to medium sized sherds, mostly dating from the 17th to the 19th/20th centuries, with a number of blue and white printed, slipware, pearlware, porcelain, and salt-glazed types represented amongst others. Earlier ceramics recovered include green glaze sherds, and a number of white gritty ware dating from the 12th to 15th centuries. Further analysis will be required in order to properly identify ceramic types and potteries, which has the potential to provide additional dating evidence for activity on site.

The clay pipe assemblage consists of 11 fragments, most of which are likely late 17th to late 18th century in date. The finds include three bowl fragments, one with spur, and one with a castle stamp on the base, and possible 'W' 'Y' on the sides of the heel, potentially attributable to the pipemakers William or Walter Young.

Other finds include five glass fragments: a green glass bottle base and rim shard (post 1821), clear glass bottle stopper, clear glass stem fragment from vessel, shard of light blue opaque glass, likely all 19th century of later, and a small, unidentified cast lead alloy fragment (*SF004*), rectangular in shape with cut ends, and three cut protrusions and casting mark along one long edge. Further analysis of this object will be required for proper identification.

Appendix B: Finds Register

Finds	Context	Material	Date	Initials	Quantity	Description	Comments
No.	No.						
001	001	Ceramic	May-16	KmacF	64	Ranging from Medieval to 19th century.	From
						White gritty, Reduced greyware, Slipware,	Ploughsoils
						Porcelain, pearl, salt, BlueandWhite	
						transfer etc.	
002	001	Clay	May-16	KmacF	11	8 stem, 3 bowl fragments (2 with heel)-	From
		Pipe				one with castle stamp and possible 'W"L or	Ploughsoils
						Y'on heel (William or Walter Young?).	
						Likely late 17th to late 18th century.	
003	001	Glass	May-16	KmacF	5	Green glass bottle base and rim shard (post	From
						1821), clear glass bottle stopper, clear glass	Ploughsoils
						stem fragment from vessel, shard of light	
						blue opaque glass, likely all 19th century of	
						later.	
004	001	Pb	May-16	KmacF	1	Unidentified PbA object, linear, cut ends,	From
						solid cast. Likely Post-med	Ploughsoils

Appendix C: Context register

Context	Description	Recorded by
no		
001	Turf and Plough soil	Kmacf
002	subsoil	Kmacf
003	Natural deposits	Kmacf
004	Rubble built masonry feature	Kmacf
005	Drystone shelter belt boundary wall (eastern) alongside Green dykes road	PDK
006	Foundation trench cut for 005	PDK
007	Fill of 006	PDK
008	Drystone shelter belt boundary (western)	PDK

Appendix D: Drawing Register

Drawing	Description	Recorded by
No		
01	Plan of rubble feature 004	Kmacf
02	Section across masonry feature 004	Kmacf
03	Plan of shelter belt wall 008	PDK
04	Plan of shelter belt wall 005	PDK
05	Sketch section across 005	PDK

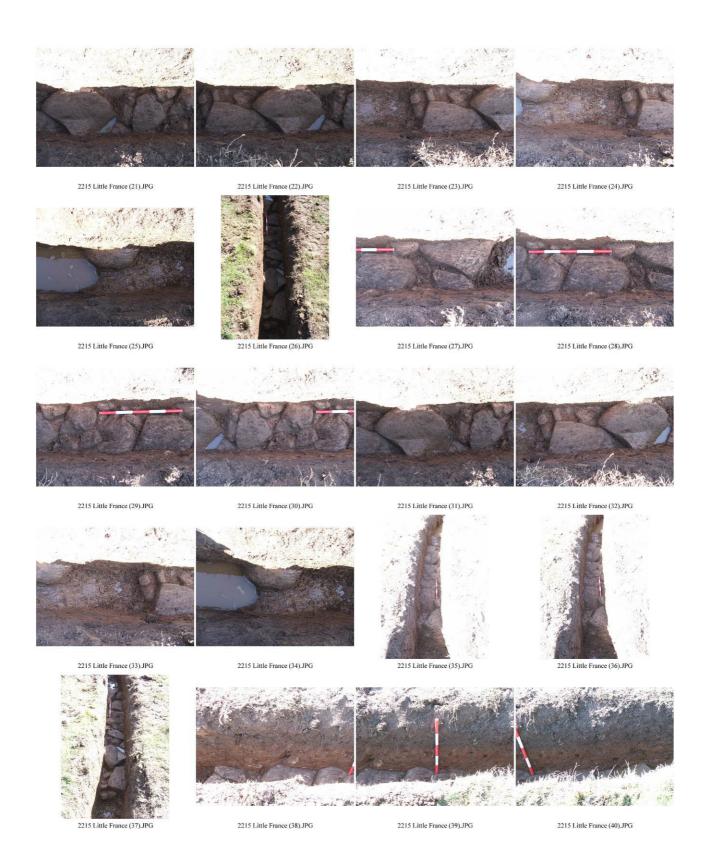
Appendix E: Photo Register

Photo No	Direction facing	Description	Taken by
01	NW NW	Initial trench, pre excavation eastern half, view upslope	Kmacf
02	SE	Initial trench, post excavation downslope	Kmacf
03	SE	Initial trench, post excavation downslope	Kmacf
04	NW	Initial trench, pre excavation western half view upslope	Kmacf
05	SE	Initial trench, post excavation western half view downslope	Kmacf
06	NW	6 tonne digger working view	Kmacf
07	NW	Initial trench, Post excavation western half view upslope	Kmacf
08	NW	Initial trench, Post excavation western half view upslope	Kmacf
09	NW	Initial trench, Post excavation eastern half view upslope	Kmacf
10	NW	Pre excavation view to west of western trench (latterly moved north)	Kmacf
11	NW	Pre excavation view to west of western trench (latterly moved north)	Kmacf
12	N	View yo north into woods showing path line (not monitored)	Kmacf
13	W	Pre excavation view to west of western trench (latterly moved north)	Kmacf
14	SE	Pre excavation view to west of western trench (latterly moved north)	Kmacf
15	N	Rubble feature 004 as exposed (poor light)	Kmacf
16	V	Rubble feature 004 as exposed (poor light) Plan Pt 1	Kmacf
17	V	Rubble feature 004 as exposed (poor light) Plan Pt 2	Kmacf
18	V	Rubble feature 004 as exposed (poor light) Plan Pt 3	Kmacf
19	V	Rubble feature 004 as exposed (poor light) Plan Pt 4	Kmacf
20	V	Rubble feature 004 as exposed (poor light) Plan Pt 5	Kmacf
21	V	Rubble feature 004 as exposed (poor light) Plan Pt 6	Kmacf
22	V	Rubble feature 004 as exposed (poor light) Plan Pt 7	Kmacf
23	V	Rubble feature 004 as exposed (poor light) Plan Pt 8	Kmacf
24	V	Rubble feature 004 as exposed (poor light) Plan Pt 9	Kmacf
25	V	Rubble feature 004 as exposed (poor light) Plan Pt 10	Kmacf
26	SE	Rubble feature 004 as exposed (poor light)	Kmacf
27	V	Rubble feature 004 as exposed, Plan Pt 1	Kmacf
28	V	Rubble feature 004 as exposed, Plan Pt 2	Kmacf
29	V	Rubble feature 004 as exposed, Plan Pt 3	Kmacf
30	V	Rubble feature 004 as exposed, Plan Pt 4	Kmacf
31	V	Rubble feature 004 as exposed, Plan Pt 5	Kmacf
32	V	Rubble feature 004 as exposed, Plan Pt 6	Kmacf
33	V	Rubble feature 004 as exposed, Plan Pt 7	Kmacf
34	V	Rubble feature 004 as exposed, Plan Pt 8	Kmacf
35	N	Rubble feature 004 as exposed,	Kmacf
36	N	Rubble feature 004 as exposed,	Kmacf
37	S	Rubble feature 004 as exposed,	Kmacf
38	SW	West section across 004	Kmacf
39	SW	West section across 004	Kmacf
40	SW	West section across 004	Kmacf
41	SW	West section across 004	Kmacf
42	SW	West section across 004	Kmacf
43	SW	West section across 004	Kmacf
44	W	Location of 004	Kmacf
45	NW	Location of 004	Kmacf
46	W	East trench extension, post excavation	Kmacf
47	W	East trench extension, post excavation	Kmacf
48	W	East trench extension, post excavation	Kmacf
49	E	East trench extension, post excavation east end at junction with shelter belt	Kmacf
50	W	East trench extension, east end	Kmacf
51	W	East trench extension, shelter belt, pre excavation . trees still in situ	Kmacf
52	W	East trench extension, shelter belt, pre excavation . trees still in situ	Kmacf
53	W	East trench extension, shelter belt, pre excavation . trees still in situ	Kmacf
54	W	East trench extension, shelter belt, pre excavation . trees still in situ	Kmacf
55	E	Western trench western end up to woods post excavation	Kmacf
56	W	Western trench into wooded area	Kmacf
57	W	Western trench western end up to woods post excavation	Kmacf
58	E	East trench extension, shelter belt, general pre excavation view	PDK
59	SE	East trench extension, shelter belt, general pre excavation view	PDK
60	W	East trench extension, shelter belt, pre excavation view from road	PDK

61	E	East trench extension, shelter belt, wall 005, west facing elevation	PDK
62	N	East trench extension, shelter belt, wall 005, general view	PDK
63	S	East trench extension, shelter belt, wall 005, east facing elevation	PDK
64	N	East trench extension, shelter belt, wall 005, general view	PDK
65	W	East trench extension, shelter belt, wall 008, general view	PDK
66	E	East trench extension, shelter belt, wall 008, west facing elevation	PDK
67	E	East trench extension, shelter belt, wall 008, west facing elevation, north part	PDK
68	E	East trench extension, shelter belt, wall 008, west facing elevation south part	PDK
69	W	East trench extension, shelter belt, wall 008, general view	PDK
70	W	East trench extension, shelter belt, wall, 008 east facing elevation	PDK
71	W	East trench extension, shelter belt, wall, 008 east facing elevation detail	PDK
72	W	East trench extension, shelter belt, wall, 008 east facing elevation detail	PDK

Appendix F: Photographic contact sheets









Appendix G: WSI, March 2016

Little France Path Network, Edinburgh

Written Scheme of Investigation (WSI) for The Edinburgh & Lothians Greenspace Trust

K. Macfadyen

Addyman Archaeology - March 2016

1. Introduction

i. General

Addyman Archaeology has been commissioned by The Edinburgh & Lothians Greenspace Trust to undertake an archaeological watching brief during the construction of a series of paths at Little France Park, Craigmillar. The proposed development is located in the near vicinity of the historic Craigmillar Castle. City of Edinburgh Council Archaeology officer (John Lawson) placed a condition on the works requiring an archaeological watching brief to be undertaken during the excavation of a section of the path network that was identified to be of potential archaeological interest.

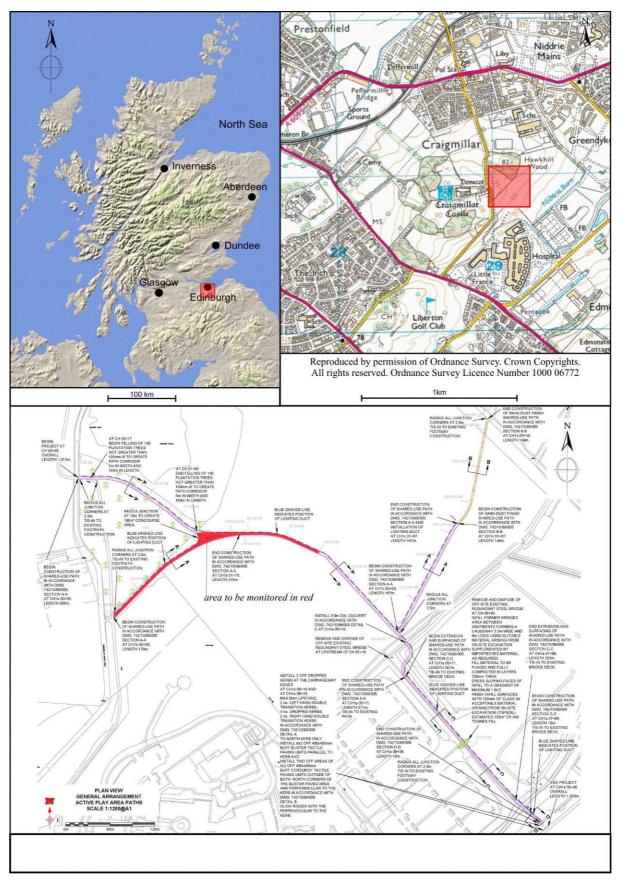
This Written Scheme of Investigation (WSI) sets out the methodology for the archaeological watching brief placed upon the development as required by the planning authority.

The proposed development comprises a series of new paths through Little France park

ii. The Site - Location, Topography and Geology

The proposed development site is located within the South East extent of Edinburgh (trenching area approximately centred NT329006 670970) to the north there is existing forestry (Hawkhill Wood) on the site of a former quarry, to the south west is some further modern forestry and to the east open farmland.

The underlying geology consists of Sandstone of the Kinnesswood Formation. A Sedimentary Bedrock formed approximately 352 to 385 million years ago in the Carboniferous and Devonian Periods in a Local environment previously dominated by rivers (www.bgs.ac.uk).



 $\label{eq:figure 4WSI-Appendix G-Site location plan (red outline)} In the problem of the probl$

2. Brief map regression

i. Maps

Accessible maps of the area from the Map library of Scotland were consulted. Primarily the Ordnance Survey maps from the second edition of the late 19th C onwards. Little was noted in the maps across the area to be monitored. The maps showed primarily open farmland with a quarry noted where hawkhill wood is now

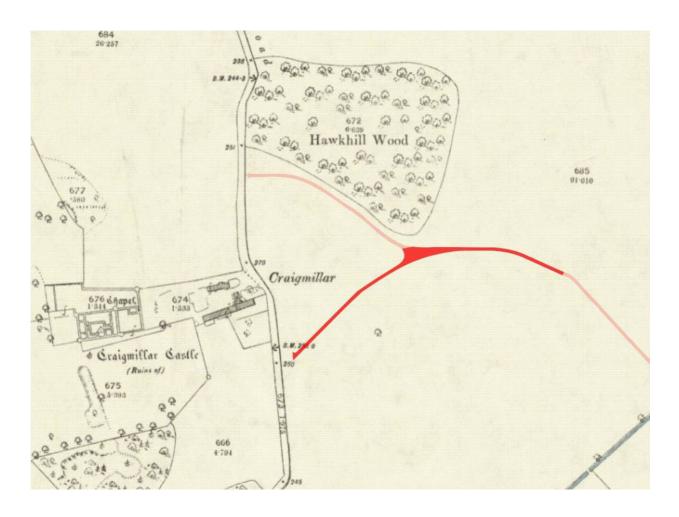


Figure 5 WSI – Appendix G - Area to be monitored in deep red, other paths in light red overlain onto OS map of 1895 25 inch to a mile

3. Scope of Proposed Works

i. Watching Brief

The proposed works comprise the construction of a new path across farmland being formed into a park. It is proposed that all topsoil stripping and excavation in this area shall be archaeologically monitored by an archaeologist and any exposed archaeological features or deposits mapped and recorded.

The topsoil removal will therefore be conducted using a mechanical excavator fitted with a flat-bladed bucket under direct archaeological supervision. Provision will be made by the contractor to allow suitable time for any identified archaeological features to be investigated during the works.

ii. Recovery of archaeologically significant remains

When archaeologically significant remains are identified during the watching brief, the supervising archaeologist will take over formal investigation of these feature(s). Any archaeological remains encountered will be recorded and investigated/sampled as per recording standards which comply with those outlined by the Chartered Institute of Field Archaeologists *CIfA* (see Section 3.iv. below).

If archaeological finds are recovered during the work, they will have to be formally recorded, cleaned/conserved where necessary, and studied appropriately. A small provision is allowed for such work as part of this phase. The qualified archaeologist on site will assess the extent and quality of the archaeological remains.

Should the remains prove to be significant and their extent substantial, a new phase of archaeological mitigation may be required, to be discussed with the Edinburgh City Council Archaeological Officer and the client at the time of discovery. This will also include a proposal for the study of artefacts and ecofacts, should the requirements exceed the provision within the watching brief phase.

iii. Standards and Recording.

Addyman Archaeology is committed to providing a high standard of research work, for historic building recording and assessment and for any below-ground archaeological investigations. We use standard *pro-forma* sheets for the recording of archaeological contexts, finds and samples and for drawings and photographs produced during the archaeological works, which become part of the archaeological record. These records are produced to *Chartered Institute for Archaeologists (CIfA)* standards and Addyman Archaeology adheres to the *CIfA*'s principal codes of conduct. The *pro-forma* sheets are filled in manually on site and generally digitised in the office in excel database or word format as required.

Standard recording drawings are undertaken at 1:20 scale (in plan) with details and sections drawn at 1:10. Plans and sections of areas that yielded archaeological remains will be produced representing and preserving the encountered stratigraphy. A general site plan indicating the position of archaeological features will be prepared at a larger scale. All drawings are complemented by digital photography. We generally complement the digital record (provided on CD) by a print-out of thumbnail-format images and a list with the photograph descriptions.

As the archaeological works are not a separate work stage, but co-ordinated with the contractor, we would in general expect that the Risk Assessment is undertaken by the contractor, although we complete our own as a matter of procedure. We are happy to provide some archaeological input for the preparation of the Risk Assessment by the contractor, should this requirement arise.

iv. Reporting, archiving and artefact/ecofact analysis

The results of the archaeological evaluation will be presented in a formal Data Structure Report (DSR) to be submitted to the City of Edinburgh Archaeology Service, typically 4-6 weeks after completion of the site works. In the event that a limited amount of significant archaeological finds are made, a small provision of contingency within this proposal will permit sample excavation, and specialist analysis of the finds, artefacts and ecofacts.

All material, drawings, reports, site records and photographs will be catalogued and deposited in a suitable archive; the paper and digital archives will be submitted to RCAHMS. A short description of the works will also need to be submitted to the journal *Discovery & Excavation Scotland* and to the Online Access to the Index of Archaeological Evaluations (OASIS) as part of the archaeological evaluation. Any finds resulting from the excavation will be declared to Treasure Trove within 6 months of the completion of the project.

If significant artefacts and/or ecofacts are recovered during the watching brief requiring detailed specialist study, a separate Post-Excavation Research Design (PERD) will have to be agreed with CECAS (see mitigation strategy below).

4. Mitigation strategy if significant archaeological remains are recovered

i. Preservation in situ

If any features of archaeological significance are identified during the archaeological watching brief, the first mitigation option to be considered should be avoidance. This would involve altering the proposed location or course of the construction aspect causing the direct impact on the archaeological feature. The alteration of the course and layout would have to be of a sufficient amount that it no longer causes a direct impact upon the archaeological feature in question.

ii. Excavation

It is anticipated that any archaeological remains which are discovered during the archaeological watching brief will be recorded *in situ*, prior to being excavated where necessary. Depending upon the nature of any archaeological sites/features identified and the nature of the construction impacting upon them, it may be the case that 'preservation by record' is regarded as the most appropriate mitigation method. This would involve the excavation, recording and study of archaeological sites to an accepted methodology agreed at the time of the discovery of significant archaeological remains.

Formal archaeological excavation usually involves the study of artefacts and anthropogenic material, so-called ecofacts recovered during the excavation process. The extent of such post-excavation analysis would have to be discussed at the time of the discovery and a separate Post-Excavation Research Design (PERD) submitted and agreed by CECAS, should this matter arise. The PERD will detail the proposed methodology for the study of artefacts and environmental remains by specialists. If significant archaeological remains are found, the post-excavation requirements may be substantial.

If the findings during excavation and / or post-excavation analysis provide a significant contribution to archaeology as a subject, it may become a condition to disseminate the results through full academic publication. Any pre-publication work such as writing, editing and illustrations will have to be assessed separately, along with the PERD. There may also be a requirement for publication of the results in a suitable journal. Any post-excavation and/or publication would be costed separately from the present stage of works.

Appendix H: Amended WSI, April 2016

Little France Path Network, Edinburgh

Written Scheme of Investigation (WSI) for The Edinburgh & Lothians Greenspace Trust

K. Macfadyen

Addyman Archaeology - April 2016

5. Introduction

i. General

Addyman Archaeology had been commissioned by The Edinburgh & Lothians Greenspace Trust to undertake an archaeological watching brief during the construction of a series of paths at Little France Park, Craigmillar. This development was located in the near vicinity of the historic Craigmillar Castle. City of Edinburgh Council Archaeology officer (John Lawson) initially placed a condition on the works requiring an archaeological watching brief to be undertaken during the excavation of a section of the path network that was identified to be of potential archaeological interest (WSI March 2016 K.Macfadyen).

Latterly during the works part of the proposed route was changed to move the western most part of the network north to run through a wooded area instead of the open area originally intended. The new proposals also included a new 300 m length of path to the east to join with Greendykes Road

These additional works required an amended Written Scheme of Investigation (WSI) to be submitted for approval by CECAS

ii. The Site - Location, Topography and Geology

The proposed development site is located within the South East extent of Edinburgh (trenching area approximately centred NT329006 670970) to the north there is existing forestry (Hawkhill Wood) on the site of a former quarry, to the south west is some further modern forestry and to the east open farmland.

The underlying geology consists of Sandstone of the Kinnesswood Formation. A Sedimentary Bedrock formed approximately 352 to 385 million years ago in the Carboniferous and Devonian Periods in a Local environment previously dominated by rivers (www.bgs.ac.uk).

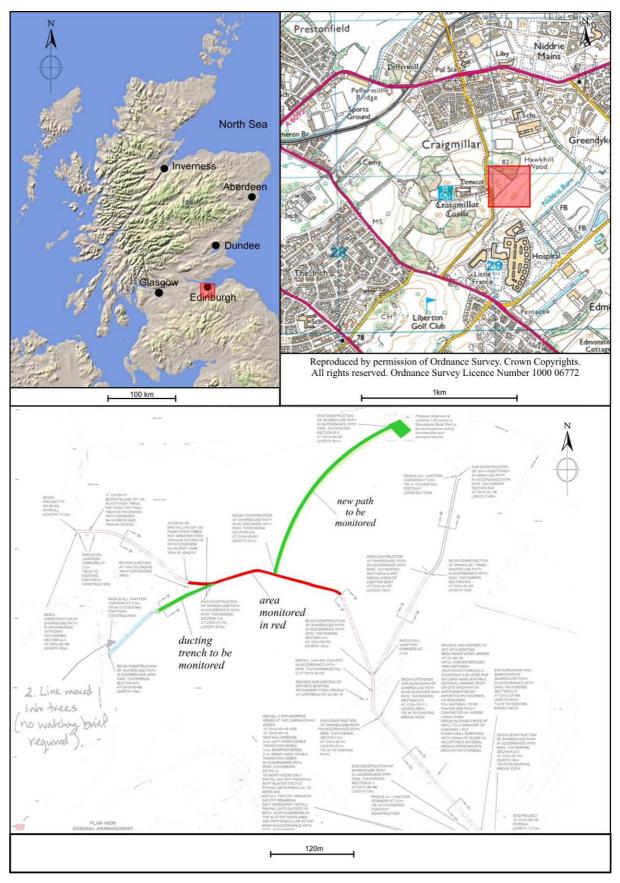


Figure 6 WSI – Appendix H- Altered Site location plan (trenching already monitored in red, new trenching in green).

6. Brief map regression

i. maps

Accessible maps of the area from the Map library of Scotland were consulted. Primarily the Ordnance Survey maps from the second edition of the late 19th C onwards. Little was noted in the maps across the area to be monitored. The maps showed primarily open farmland with a quarry noted within hawkhill wood

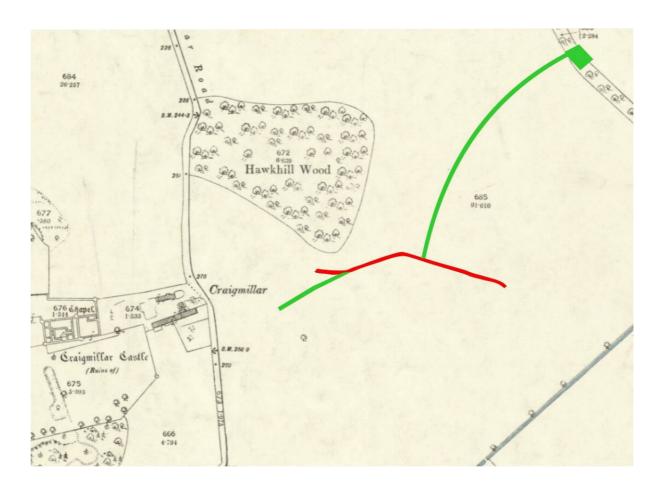


Figure 7 WSI – Appendix H- Area monitored in deep red , areas to be monitored in green overlain onto OS map of 1895 25 inch to a mile

7. Scope of Proposed Works

i. Watching Brief

The proposed alteration to works comprise the construction of a new path across farmland to the east to join with Greendykes Road and an alteration to the alignment of the western end of the path network.

The alteration to the western end means that the path is realigned to run within a modern forestry plantation and as such the area to be monitored is reduced to stop at the plantation edge.

The eastern extension of the network has been identified as an area of potential surviving archaeology due to the topography of the land by CECAS and as such a full watching brief was instructed on all works in this extension. This will involve a metal detector survey in advance of the excavation along

the corridor of the path (2.5 m wide and 300 m long). Following this the topsoil strip of the path and any associated deep excavation for services will be archaeologically monitored and any exposed archaeological features or deposits mapped and recorded.

The topsoil removal will therefore be conducted using a mechanical excavator fitted with a flat-bladed bucket under direct archaeological supervision. Provision will be made by the contractor to allow suitable time for any identified archaeological features to be investigated during the works.

ii. Recovery of archaeologically significant remains

When archaeologically significant remains are identified during the watching brief, the supervising archaeologist will take over formal investigation of these feature(s). Any archaeological remains encountered will be recorded and investigated/sampled as per recording standards which comply with those outlined by the Chartered Institute of Field Archaeologists *CIfA* (see Section 3.iv. below).

If archaeological finds are recovered during the work, they will have to be formally recorded, cleaned/conserved where necessary, and studied appropriately. A small provision is allowed for such work as part of this phase. The qualified archaeologist on site will assess the extent and quality of the archaeological remains.

Should the remains prove to be significant and their extent substantial, a new phase of archaeological mitigation may be required, to be discussed with the Edinburgh City Council Archaeological Officer and the client at the time of discovery. This will also include a proposal for the study of artefacts and ecofacts, should the requirements exceed the provision within the watching brief phase.

iii. Standards and Recording.

Addyman Archaeology is committed to providing a high standard of research work, for historic building recording and assessment and for any below-ground archaeological investigations. We use standard *pro-forma* sheets for the recording of archaeological contexts, finds and samples and for drawings and photographs produced during the archaeological works, which become part of the archaeological record. These records are produced to *Chartered Institute for Archaeologists (CIfA)* standards and Addyman Archaeology adheres to the *CIfA*'s principal codes of conduct. The *pro-forma* sheets are filled in manually on site and generally digitised in the office in excel database or word format as required.

Standard recording drawings are undertaken at 1:20 scale (in plan) with details and sections drawn at 1:10. Plans and sections of areas that yielded archaeological remains will be produced representing and preserving the encountered stratigraphy. A general site plan indicating the position of archaeological features will be prepared at a larger scale. All drawings are complemented by digital photography. We generally complement the digital record (provided on CD) by a print-out of thumbnail-format images and a list with the photograph descriptions.

As the archaeological works are not a separate work stage, but co-ordinated with the contractor, we would in general expect that the Risk Assessment is undertaken by the contractor, although we complete our own as a matter of procedure. We are happy to provide some archaeological input for the preparation of the Risk Assessment by the contractor, should this requirement arise.

iv. Reporting, archiving and artefact/ecofact analysis

The results of the archaeological evaluation will be presented in a formal Data Structure Report (DSR) to be submitted to the City of Edinburgh Archaeology Service, typically 4-6 weeks after completion of

the site works. In the event that a limited amount of significant archaeological finds are made, a small provision of contingency within this proposal will permit sample excavation, and specialist analysis of the finds, artefacts and ecofacts.

All material, drawings, reports, site records and photographs will be catalogued and deposited in a suitable archive; the paper and digital archives will be submitted to RCAHMS. A short description of the works will also need to be submitted to the journal *Discovery & Excavation Scotland* and to the Online Access to the Index of Archaeological Evaluations (OASIS) as part of the archaeological evaluation. Any finds resulting from the excavation will be declared to Treasure Trove within 6 months of the completion of the project.

If significant artefacts and/or ecofacts are recovered during the watching brief requiring detailed specialist study, a separate Post-Excavation Research Design (PERD) will have to be agreed with CECAS (see mitigation strategy below).

8. Mitigation strategy if significant archaeological remains are recovered

i. Preservation in situ

If any features of archaeological significance are identified during the archaeological watching brief, the first mitigation option to be considered should be avoidance. This would involve altering the proposed location or course of the construction aspect causing the direct impact on the archaeological feature. The alteration of the course and layout would have to be of a sufficient amount that it no longer causes a direct impact upon the archaeological feature in question.

ii. Excavation

It is anticipated that any archaeological remains which are discovered during the archaeological watching brief will be recorded *in situ*, prior to being excavated where necessary. Depending upon the nature of any archaeological sites/features identified and the nature of the construction impacting upon them, it may be the case that 'preservation by record' is regarded as the most appropriate mitigation method. This would involve the excavation, recording and study of archaeological sites to an accepted methodology agreed at the time of the discovery of significant archaeological remains.

Formal archaeological excavation usually involves the study of artefacts and anthropogenic material, so-called ecofacts recovered during the excavation process. The extent of such post-excavation analysis would have to be discussed at the time of the discovery and a separate Post-Excavation Research Design (PERD) submitted and agreed by CECAS, should this matter arise. The PERD will detail the proposed methodology for the study of artefacts and environmental remains by specialists. If significant archaeological remains are found, the post-excavation requirements may be substantial.

If the findings during excavation and / or post-excavation analysis provide a significant contribution to archaeology as a subject, it may become a condition to disseminate the results through full academic publication. Any pre-publication work such as writing, editing and illustrations will have to be assessed separately, along with the PERD. There may also be a requirement for publication of the results in a suitable journal. Any post-excavation and/or publication would be costed separately from the present stage of works.

St. Ninian's Manse, Quayside Street, Edinburgh, EH6 6EJ admin@addyman-archaeology.co.uk 0131 555 4678