Craigroyston Pitches, Edinburgh:

Evaluation Data Structure Report

AOC Project 21809

Planning Ref: 10/01273/PPP

18th March 2011

AOC Archaeology Group

ARCHAEOLOGY | HERITAGE | CONSERVATION

Craigroyston Pitches, Edinburgh:
Evaluation Data Structure Report

On Behalf of:	**City of Edinburgh Council C3 Waverley Court, 4 East Market St, Edinburgh EH8 8BG**
National Grid Reference (NGR):	**NT 2167 7559**
AOC Project No:	**21809**
Prepared by:	**Lindsay Dunbar**
Illustration by:	**Stefan Sagrott**
Date of Fieldwork:	**3rd – 4th March 2011**
Date of Report:	**18th March 2011**

This document has been prepared in accordance with AOC standard operating procedures.

Author: Lindsay Dunbar	**Date: 18/03/2011**
Approved by: John Gooder	**Date: 18/03/2011**
Draft/Final Report Stage: Draft	**Date: 18/03/2011**

Enquiries to: AOC Archaeology Group
Edgefield Industrial Estate
Edgefield Road
Loanhead
EH20 9SY

Tel. 0131 440 3593
Fax. 0131 440 3422
e-mail. admin@aocarchaeology.com

AOC Archaeology Group

www.**aocarchaeology**.com

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Abstract

This report presents the results of an archaeological geophysical survey and intrusive field evaluation undertaken by AOC Archaeology Group on the site of a proposed redevelopment at Craigroyston Pitches, Edinburgh.

The archaeological evaluation was designed to consist of the machine trenching of 1000 m^2 equating to a 5% sample of the 2 ha development area.

The geophysical survey identified a number of anomalies however these were all interpreted as modern services such as electrical and/or drainage or relating to landscaping of the site. The evaluation confirmed these interpretations and no significant archaeological features or artefacts were encountered. After consultation with CECAS during the evaluation the trenching sample was reduced to 600 m^2.

1 INTRODUCTION

1.1 Background

1.1 AOC Archaeology Group was commissioned by City of Edinburgh Council to undertake an archaeological evaluation and geophysical survey within a proposed redevelopment site at Craigroyston Pitches, Edinburgh. The archaeological evaluation was undertaken in response to planning condition (10/01273/PPP).

1.2 Edinburgh City Council is advised on archaeological matters by the City of Edinburgh Council Archaeology Service (CECAS). The archaeological works were conducted in accordance with the principles set out in *Scottish Planning Policy* (Scottish Government February 2010) and *PAN 42* (SOEnD 1994) and in accord with planning requirements as advised by CECAS.

1.3 The objective of the archaeological works was to determine the existence of any buried archaeological remains within the development area by means of a geophysical survey followed by a programme of trial trenching. A *Written Scheme of Investigation* (AOC 2011) outlining the entire programme of archaeological works was agreed with CECAS in advance of the works being undertaken.

1.2 Location

1.2.1 The proposed development area lies immediately north of Ferry Road within a fully urban setting (Figure 1). The site is centred on NGR NT 2167 7559. To the west lies Muirhouse Green, to east Craigroyston Community Centre, while a large embankment bounds the site to the north..

1.3 Archaeological background

1.3.1 The site had no known history of development, surviving as a pocket of greenfield throughout the urbanisation and development of Edinburgh. The Royal Commission on Ancient and Historical Monuments did not note any archaeological sites within the development boundaries or within the immediate vicinity. There are a small number of buildings listed in the wider area and a single archaeological intervention, *NMRS* NT27NW.567 a watching brief, which did not uncover anything of archaeological significance.

2 OBJECTIVES

2.1 The objectives of the archaeological works were:

i) to determine and assess the character, extent, condition, quality, date and significance of any buried archaeological remains within the proposed development area;

ii) to advise and implement an appropriate form of mitigation, such as excavation, post-excavation analyses and publication given the infeasibility of preserving the archaeological material *in situ*, should significant archaeological remains be encountered.

3 METHODOLOGY

3.1 Geophisical Survey

4.3.1 The geophysical survey was carried out on behalf of AOC by Archaeological Services, Durham University in February 2011. Given the anticipated nature and depth of targets complementary techniques were used: geomagnetic survey (fluxgate gradiometry) and earth electrical resistance survey. Geomagnetic survey was undertaken over 100% of the development area with resistivity survey carried out over approximately 50% of the development area where the geomagnetic survey indicated the greatest potential for further definition of sub-surface anomalies.

3.1.2 Fluxgate gradiometry involves the use of hand-held magnetometers to detect and record anomalies in the vertical component of the Earth's magnetic field which are caused by variations in soil magnetic susceptibility or permanent magnetisation; such anomalies can reflect, for example, ferrous, stone, brick and soil-filled features. Electrical resistance survey is ideal for detecting stone features such as walls, paths and culverts, but can also detect soil-filled features, depending on ground conditions at the time of survey. When a small electrical current is injected through the earth it encounters resistance which can be measured. Since resistance is linked to moisture content and porosity, stone and brick features will give relatively high resistance values while soil-filled features, which retain more moisture, will provide relatively low resistance values.

3.1.3 A 20 m survey grid was established at each survey location and recorded using a Trimble Pathfinder Pro XRS global positioning system (GPS) or a total station survey instrument. The survey area was related to the Ordnance Survey National Grid and known mapped features.

3.1.4 Measurements of vertical geomagnetic field gradient were determined using a Geoscan FM256 or Bartington Grad601-2 fluxgate gradiometer. A zigzag traverse scheme was employed and data logged in 20m grid units. The sample interval was set to 0.25 m and the traverse interval to 1 m, thus providing 1600 measurements per 20 m grid unit.

3.1.5 Measurements of earth electrical resistance were determined using a Geoscan RM15D resistance meter with a twin probe array. A zigzag traverse scheme was employed and data logged in 20 m grid units. The instrument sensitivity was set to 0.1 ohms, the sample interval to 1 m and the traverse interval to 1m thus providing 400 sample measurements per 20 m grid unit.

3.1.6 Data was downloaded on-site into a laptop computer for verification, initial processing and storage and subsequently transferred to a desktop computer for further processing, interpretation and archiving. Geoplot software was used to process and interpolate the geomagnetic and resistance

data to form arrays of regularly-spaced values at 0.25m intervals and to produce continuous-tone greyscale images and trace plots of the raw (unfiltered) data. Plots of filtered data will be provided if appropriate.

3.2 Evaluation

3.1 The trenching was designed to establish the extent, condition, character, quality, significance and date of any archaeological features identified by the geophysical survey and/or cropmarks and any others that where as yet be unknown within the development area. The evaluation comprised machine trenching of a 5% sample of the 2 ha development thus trenching consisted of 1000 m^2 (total basal trench dimensions). The trenches (2 m wide) were set on varying orientations and distributed across the development site with trenching weighted to the east away from the all weather pitch which had obviously involved some degree of landscaping during its construction (Figure 2).

3.2 Stripping of the overburden was by means of a JCB excavator equipped with a 2 m wide toothless ditching bucket. Excavation was undertaken in shallow units/spits until the first significant archaeological horizon or natural subsoil was reached. All machine excavation was supervised by an experienced field archaeologist.

3.3 All trial trenching was undertaken according to AOC Archaeology Group's standard operating procedures. The trenches were carefully backfilled on completion of the evaluation.

4 RESULTS

4.1 Geophisical Survey

4.1.1 The full geophysical report can be found in Appendix 4 (a copy will also be deposited with the project archive). The interpretations are based on Figures 3 and 4 therein.

4.1.2 Two hectares of geomagnetic survey and one hectare of earth electrical resistance survey were undertaken at the former Craigroyston High School playing fields. No features of likely archaeological significance were detected, possibly due to earlier landscaping at the site. Numerous anomalies associated with landscaping activities were almost certainly detected.

4.1.3 Several linear and rectilinear anomalies were identified in both the geomagnetic and resistance data across the eastern portion of the site. These are almost certainly related to land drains.

4.1.4 Around the all weather playing pitch lay positive anomalies relating to electrical services surrounding the pitch. The presence of floodlights can be seen to have caused these anomalies.

4.2 Evaluation

4.2.1 The evaluation was undertaken between 3rd and 4th March 2011. Overall weather conditions were generally fair, and good archaeological visibility was present throughout the evaluation.

PLATE 1 View of Trench 1 from north-east showing drains

4.2.2 In total four trenches were opened (Figure 1). After discussion with CECAS it was decided that the initial findings of the evaluation from these four trenches coupled with the earlier geophysical survey had adequately evaluated the site and that the evaluation could be halted. At this stage 600 m^2 of trenching had been opened equating to a 3% sample.

4.2.3 Topsoil comprised a dark brown/black silty clay containing frequent small to medium sized rounded stones and varied in depth from 0.18 m to 0.34 m. The natural subsoil across the site consisted of light brown/yellow orange clay. The topsoil contained modern 20th century artefacts such as glass and white ceramic.

4.2.4 In Trench 1 nineteen land drains were encountered, whilst Trench 2 uncovered fifteen, with the smaller trenches Trench 3 and Trench 4 revealing seven and six respectively. Most were gravel filled drains but there were smaller numbers of other drains including typical ceramic field drains, stone/rubble drains, drains with cinders and ash and a single plastic drainage pipe. The majority of the drains were aligned north to south with lesser numbers orientated north-west to south-east and north-east to south-west. The findings from the evaluation trenches correlate with the geophysical findings.

5 CONCLUSION

5.1 The geophysical results identified a large number of anomalies however these were all provisionally identified as modern services, drainage and/or the result of modern landscaping of the site. The evaluation trenching clearly demonstrated that these interpretations were entirely correct with the majority of the anomalies correlating with drains unearthed during the evaluation.

6 RECOMMENDATIONS

6.1 The significant balance of probability is that the development area is archaeologically sterile. No further archaeological works are considered necessary. This recommendation will require confirmation by CECAS on behalf of the City of Edinburgh Council.

7 BIBLIOGRAPHY

AOC 2011 *Craigroyston Pitches, Written Scheme of Investigati*on Unpublished AOC Method Statement.

Scottish Government 2010 *Scottish Planning Policy* (February 2010).

SOEnD 1994 *Planning advice Note 42, Archaeology and Planning*. Scottish Office Environment Department.

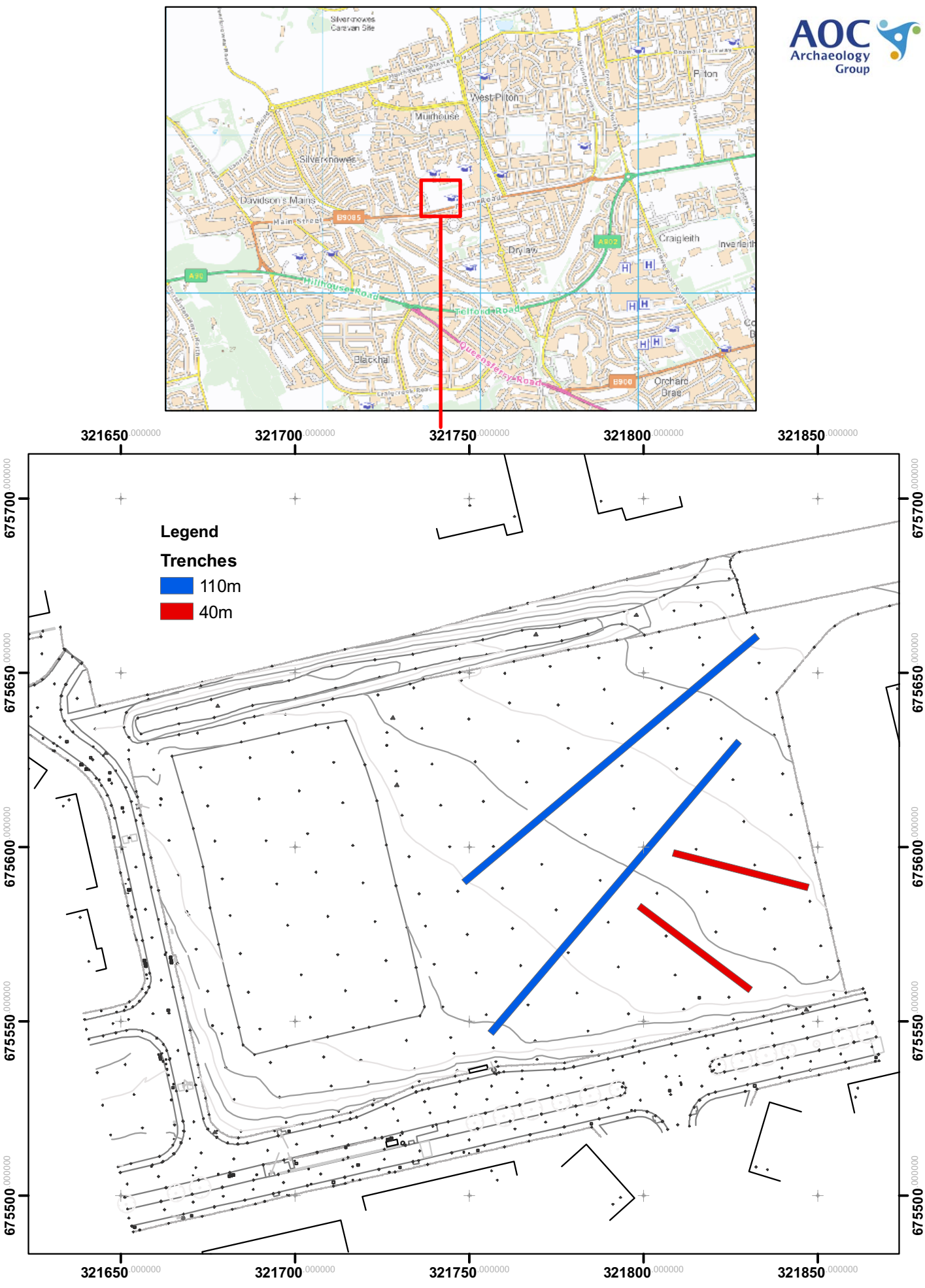

Figure 1: Trench layout

Craigroyston Pitches, Edinburgh:

Evaluation Data Structure Report

Section 2: Appendices

AOC Archaeology Group

APPENDIX 1: Trench Descriptions

Trench 1

Dimensions	109 m by 2 m
Total Area	218 m²
Orientation	NE-SW
Depth of Topsoil	0.20 to 0.31 m
Depth of Excavation	0.35 m
Significant Features	None
Other Features	Nineteen drains, mostly gravel filled but with smaller numbers of other drains including typical ceramic field drains, stone/rubble drains, drains with cinders and ash and a single plastic drainage pipe.
Subsoil	Light brown/yellow orange clay
Finds	19/20th C pottery in topsoil (not retained)

Trench 2

Dimensions	110 m by 2 m
Total Area	220 m²
Orientation	NW-SE
Depth of Topsoil	0.18 m to 0.35 m
Depth of Excavation	0.40 m
Significant Features	None
Other Features	Fifteen drains, mostly gravel filled but with smaller numbers of other types including typical ceramic field drains, stone/rubble drains, drains with cinders and ash and a single plastic drainage pipe.
Subsoil	Light brown/yellow orange clay
Finds	19/20th C pottery in topsoil (not retained)

Trench 3

Dimensions	40 m by 2 m
Total Area	80 m²
Orientation	NW-SE
Depth of Topsoil	0.15 m to 0.25 m
Depth of Excavation	0.30 m
Significant Features	None
Other Features	Seven drains, mostly gravel filled but with smaller numbers of other drains including typical ceramic field drains, stone/rubble drains and drains with cinders and ash.
Subsoil	Light brown/yellow orange clay
Finds	19/20th C pottery in topsoil (not retained)

Trench 4

Dimensions	41 m by 2 m
Total Area	82 m²
Orientation	E-W
Depth of Topsoil	0.25 m to 0.30 m
Depth of Excavation	0.35 m
Significant Features	None
Other Features	Six drains, mostly gravel filled but with smaller numbers of other types including typical ceramic field drains, stone/rubble drains and drains with cinders and ash.
Subsoil	Light brown/yellow orange clay
Finds	19/20th C pottery in topsoil (not retained)

APPENDIX 2: Photographic Register

Digital Film 1

Frame	Trench	Description	From
1	-	Registration shot	-
2	Tr.1	View of Trench 1 post-excavation	NE
3	Tr.2	View of Trench 2 post-excavation	NE
4	Tr.3	View of Trench 3 post-excavation	E
5	Tr.4	View of Trench 4 post-excavation	SE

APPENDIX 3: '*Discovery and Excavation in Scotland*' Report

LOCAL AUTHORITY:	City of Edinburgh Council
PROJECT TITLE/SITE NAME	Craigroyston Pitches, Edinburgh Evaluation
PROJECT CODE:	AOC 21809
PARISH:	City of Edinburgh
NAME OF CONTRIBUTOR:	Lindsay Dunbar
NAME OF ORGANISATION:	AOC Archaeology Group
TYPE(S) OF PROJECT:	Archaeological Evaluation and Geophysical survey
NMRS NO(S)	
SITE/MONUMENT TYPE(S):	
SIGNIFICANT FINDS:	None
NGR (2 letters, 6 figures)	NT 2167 7559
START DATE (this season)	3rd March 2011
END DATE (this season)	4th March 2011
PREVIOUS WORK (incl. DES ref.)	N/a
MAIN (NARRATIVE) DESCRIPTION: (May include information from other fields)	A geophysical survey (Archaeological Services Durham University, Report 2612) and evaluation trenching were undertaken prior to a proposed redevelopment at Craigroyston Pitches, Edinburgh. The geophysical survey identified a number of anomalies, however these were all interpreted as modern services such as electrical and drainage or related to the landscaping of the site. The evaluation confirmed these interpretations and no significant archaeological features or artefacts were encountered.
PROPOSED FUTURE WORK:	None
CAPTION(S) FOR ILLUSTRS:	---
SPONSOR OR FUNDING BODY:	City of Edinburgh Council
ADDRESS OF MAIN CONTRIBUTOR:	Edgefield Road Industrial Estate, Loanhead, Midlothian, EH20 9SY
EMAIL ADDRESS:	admin@aocarchaeology.com
ARCHIVE LOCATION (intended/deposited)	Archive to be deposited in NMRS

APPENDIX 4: Geophysics Report

ARCHAEOLOGICAL SERVICES
DURHAM UNIVERSITY

on behalf of
AOC Archaeology Group

Former Craigroyston High School
Craigroyston
Edinburgh

geophysical surveys

report 2612
March 2011

Durham University

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South Road · Durham · DH1 3LE · tel 0191 334 1121 · fax 0191 334 1126
archaeological.services@durham.ac.uk · www.dur.ac.uk/archaeological.services

1. Summary

The project

1.1 This report presents the results of geophysical surveys conducted in advance of proposed development at the former Craigroyston High School playing fields, Craigroyston, Edinburgh. The works comprised 2ha of geomagnetic survey and 1ha of earth electrical resistance survey.

1.2 The works were commissioned by AOC Archaeology Group and conducted by Archaeological Services Durham University.

Results

1.3 No features of likely archaeological significance have been detected, possibly due to earlier landscaping at the site.

1.4 Land drains were detected in both the geomagnetic and resistance data.

1.5 Anomalies relating to landscaping works were almost certainly detected.

1.6 Services were detected.

1.7 The former all-weather playing surface, still extant in the west of the area, is evident in the geomagnetic data.

1.8 A concrete path, visible on the ground in places, was detected in the north of the area.

2. Project background

Location (Figure 1)

2.1 The study area was located at the former Craigroyston High School playing fields, Craigroyston, Edinburgh (NGR centre: NT 21765 75599). The geophysical works comprised approximately 2ha of geomagnetic survey across the whole area and 1ha of electrical resistance survey across the eastern half of the area. A steep bank rose in the south to the B9085, Ferry Road; to the east was a school; to the north was another school and a BT training centre; to the west the area was bounded by Muirhouse Green.

Development proposal

2.2 The development proposal is for housing (planning reference 10/01273/PPP).

Objective

2.3 The principal aim of the surveys was to assess the nature and extent of any sub-surface features of potential archaeological significance within the proposed development, so that an informed decision may be made regarding the nature and scope of any further scheme of archaeological works that may be required in relation to the development.

Methods statement

2.4 The surveys have been undertaken in accordance with a Written Scheme of Investigation (Appendix) provided by the client, and with national standards and guidance (see para 5.1).

Dates

2.5 Fieldwork was undertaken between 21st and 22nd February 2011. This report was prepared for 15th March 2011.

Personnel

2.6 Fieldwork was conducted by Tom Fitton and Richie Villis (Supervisor). The geophysical data were processed by Richie Villis. This report was prepared by Richie Villis, with illustrations by David Graham, and edited by Duncan Hale, the Project Manager.

Archive/OASIS

2.7 The site code is **ECS11**, for **E**dinburgh **C**raigroyston High **S**chool 20**11**. The survey archive will be supplied on CD to the client for deposition with the project archive in due course. Archaeological Services Durham University is registered with the **O**nline **A**cces**S** to the **I**ndex of archaeological investigation**S** project (**OASIS**). The OASIS ID number for this project is **archaeol3-94766**.

3. Historical and archaeological background

3.1 Historical Ordnance Survey maps of the area show little changed open agricultural land from the 1st Edition dated 1855 until 1948. Sometime between 1948 and 1953 a TA Centre was constructed to the north of the site. The school appears first on the maps in 1966. The Royal Commission on the Ancient and Historical Monuments of Scotland (RCAHMS) holds plans and drawings of the school, by Edinburgh based architects AH Mottram & Son, dated 1959.

3.2 It is understood that little or no development has occurred on the site since the development of the playing fields in this period. No significant archaeological or historical events or features at the site are noted on the RCAHMS website.

4. Landuse, topography and geology

4.1 At the time of survey the proposed development area comprised an open field formerly used as a playing field by Craigroyston High School. The western half of the area was covered by a hardcore surface, formerly used as an all-weather playing surface. Six floodlights surrounded this playing surface.

4.2 The area was predominantly level with a mean elevation of approximately 50m OD.

4.3 The underlying solid geology of the area comprises Carboniferous sedimentary strata of the Gullane Formation.

4.4 During the preparation of this report an examination of British Geological Survey maps indicated that the southern half of the site is Worked Ground and that the northern half of the site is Made Ground, reflecting the landscaping works used to create the playing fields about fifty years ago.

5. Geophysical survey

Standards

5.1 The surveys and reporting were conducted in accordance with English Heritage guidelines, *Geophysical survey in archaeological field evaluation* (David, Linford & Linford 2008); the Institute for Archaeologists (IfA) *Draft Standard and Guidance for archaeological geophysical survey* (2010); the IfA Technical Paper No.6, *The use of geophysical techniques in archaeological evaluations* (Gaffney, Gater & Ovenden 2002); and the Archaeology Data Service *Guide to Good Practice: Geophysical Data in Archaeology* (draft 2nd edition, Schmidt & Ernenwein 2010).

Technique selection

5.2 Geophysical survey enables the relatively rapid and non-invasive identification of sub-surface features of potential archaeological significance and can involve a suite of complementary techniques such as magnetometry, earth electrical resistance, ground-penetrating radar, electromagnetic survey and topsoil magnetic susceptibility survey. Some techniques are more suitable than others in particular situations, depending on site-specific factors including the nature of likely targets; depth of likely targets; ground conditions; proximity of buildings, fences or services and the local geology and drift.

5.3 In this instance, both geomagnetic and electrical resistance surveys were required.

5.4 The geomagnetic technique, fluxgate gradiometry, involves the use of hand-held magnetometers to detect and record anomalies in the vertical component of the Earth's magnetic field caused by variations in soil magnetic susceptibility or permanent magnetisation; such anomalies can reflect archaeological features.

5.5 Earth electrical resistance survey can be particularly useful for mapping stone and brick features. When a small electrical current is injected through the earth it

encounters resistance which can be measured. Since resistance is linked to moisture content and porosity, stone and brick features will give relatively high resistance values while soil-filled features, which retain more moisture, will provide relatively low resistance values

Field methods

5.6 A 20m grid was established across the survey area and tied-in to known, mapped Ordnance Survey points using a Trimble Pathfinder Pro XRS global positioning system with real-time correction.

5.7 Measurements of vertical geomagnetic field gradient were determined using Bartington Grad601-2 dual fluxgate gradiometers. A zig-zag traverse scheme was employed and data were logged in 20m grid units. The instrument sensitivity was nominally 0.03nT, the sample interval was 0.25m and the traverse interval was 1m, thus providing 1,600 sample measurements per 20m grid unit.

5.8 Measurements of electrical resistance were determined using Geoscan RM15D resistance meters and MPX15 multiplexers with a mobile twin probe separation of 0.5m. A zig-zag traverse scheme was employed and data were logged in 20m grid units. The instrument sensitivity was set to 0.1ohm, the sample interval to 1m and the traverse interval to 1m, thus providing 400 sample measurements per 20m grid unit.

5.9 Data were downloaded on site into a laptop computer for initial processing and storage and subsequently transferred to a desktop computer for processing, interpretation and archiving.

Data processing

5.10 Geoplot v.3 software was used to process the geophysical data and to produce both continuous tone greyscale images and trace plots of the raw (minimally processed) data. The greyscale images and interpretations are presented in Figures 2-6; the trace plots are provided in Figure 7. In the greyscale images, positive magnetic/high resistance anomalies are displayed as dark grey and negative magnetic/low resistance anomalies as light grey. Palette bars relate the greyscale intensities to anomaly values in nanoTesla for the geomagnetic data and ohm for the resistance data.

5.11 The following basic processing functions have been applied to the geomagnetic data:

clip	clips data to specified maximum or minimum values; to eliminate large noise spikes; also generally makes statistical calculations more realistic
zero mean traverse	sets the background mean of each traverse within a grid to zero; for removing striping effects in the traverse direction and removing grid edge discontinuities
destagger	corrects for displacement of geomagnetic anomalies caused by alternate zig-zag traverses
despike	locates and suppresses iron spikes in gradiometer data

interpolate	increases the number of data points in a survey to match sample and traverse intervals; in this instance the data have been interpolated to 0.25m x 0.25m intervals

5.12 The following basic processing functions have been applied to the resistance data:

add	adds or subtracts a positive or negative constant value to defined blocks of data; used to reduce discontinuity at grid edges
despike	locates and suppresses spikes in data due to poor contact resistance
interpolate	increases the number of data points in a survey to match sample and traverse intervals; in this instance the data have been interpolated to 0.25m x 0.25m intervals

Interpretation: anomaly types

5.13 Colour-coded geophysical interpretation plans are provided. Three types of geomagnetic anomaly have been distinguished in the data:

positive magnetic	regions of anomalously high or positive magnetic field gradient, which may be associated with high magnetic susceptibility soil-filled structures such as pits and ditches
negative magnetic	regions of anomalously low or negative magnetic field gradient, which may correspond to features of low magnetic susceptibility such as wall footings and other concentrations of sedimentary rock or voids
dipolar magnetic	paired positive-negative magnetic anomalies, which typically reflect ferrous or fired materials (including fences and service pipes) and/or fired structures such as kilns or hearths

5.14 Two types of resistance anomaly have been distinguished in the data:

high resistance	regions of anomalously high resistance, which may reflect foundations, tracks, paths and other concentrations of stone or brick rubble
low resistance	regions of anomalously low resistance, which may be associated with soil-filled features such as pits and ditches

Interpretation: features

5.15 A colour-coded archaeological interpretation plan is provided.

5.16 Regularly spaced, parallel, high resistance anomalies have been detected aligned north/south across the area. Some of these correspond to negative and dipolar magnetic anomalies, and almost certainly reflect land drains.

5.17 'Herring-bone' arrangements of low resistance anomalies corresponding with positive and dipolar magnetic anomalies have been detected. These also almost certainly reflect systems of land drainage.

5.18 The rectangular high concentration of dipolar magnetic anomalies, bordered by strong positive magnetic anomalies, detected in the west of the area reflects the location of a former all-weather playing surface.

5.19 Chains of dipolar magnetic anomalies have been detected around the former all-weather playing surface. These almost certainly reflect power cables for the floodlights, which are evident in the data as large, intense dipolar magnetic anomalies.

5.20 The linear strong dipolar magnetic anomaly detected along the northern edge of the survey area corresponds to an existing concrete footpath.

5.21 The dipolar magnetic and low resistance anomalies detected at the bottom of the slope along the southern boundary of the site almost certainly reflect a ferrous pipe and/or drain; two inspection covers were noted on the ground.

5.22 A pair of small intense dipolar magnetic anomalies in the central-southern part of the site probably reflect sockets for goal-posts.

5.23 Broad, weak, linear magnetic anomalies have been detected aligned east/west. These are almost certainly associated with the former landscaping activities.

5.24 Strong dipolar magnetic anomalies detected along the east, south and west edges of the area reflect the locations of ferrous fences enclosing the playing fields. The large and strong dipolar magnetic anomaly at the centre of the south edge of the geomagnetic survey is due to an adjacent bus shelter.

6. Conclusions

6.1 Two hectares of geomagnetic survey and one hectare of earth electrical resistance survey were undertaken at the former Craigroyston High School playing fields, Craigroyston, Edinburgh, prior to proposed development.

6.2 No features of likely archaeological significance were detected, possibly due to earlier landscaping at the site.

6.3 Land drains were detected in both the geomagnetic and resistance data.

6.4 Anomalies associated with landscaping activities were almost certainly detected.

6.5 Services were detected.

6.6 The former all-weather playing surface, still extant in the west of the area, is evident in the geomagnetic data.

6.7 A concrete path, visible on the ground in places, was detected in the north of the area.

7. Sources

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RCAHMS http://canmore.rcahms.gov.uk/

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Figure 1: Site location

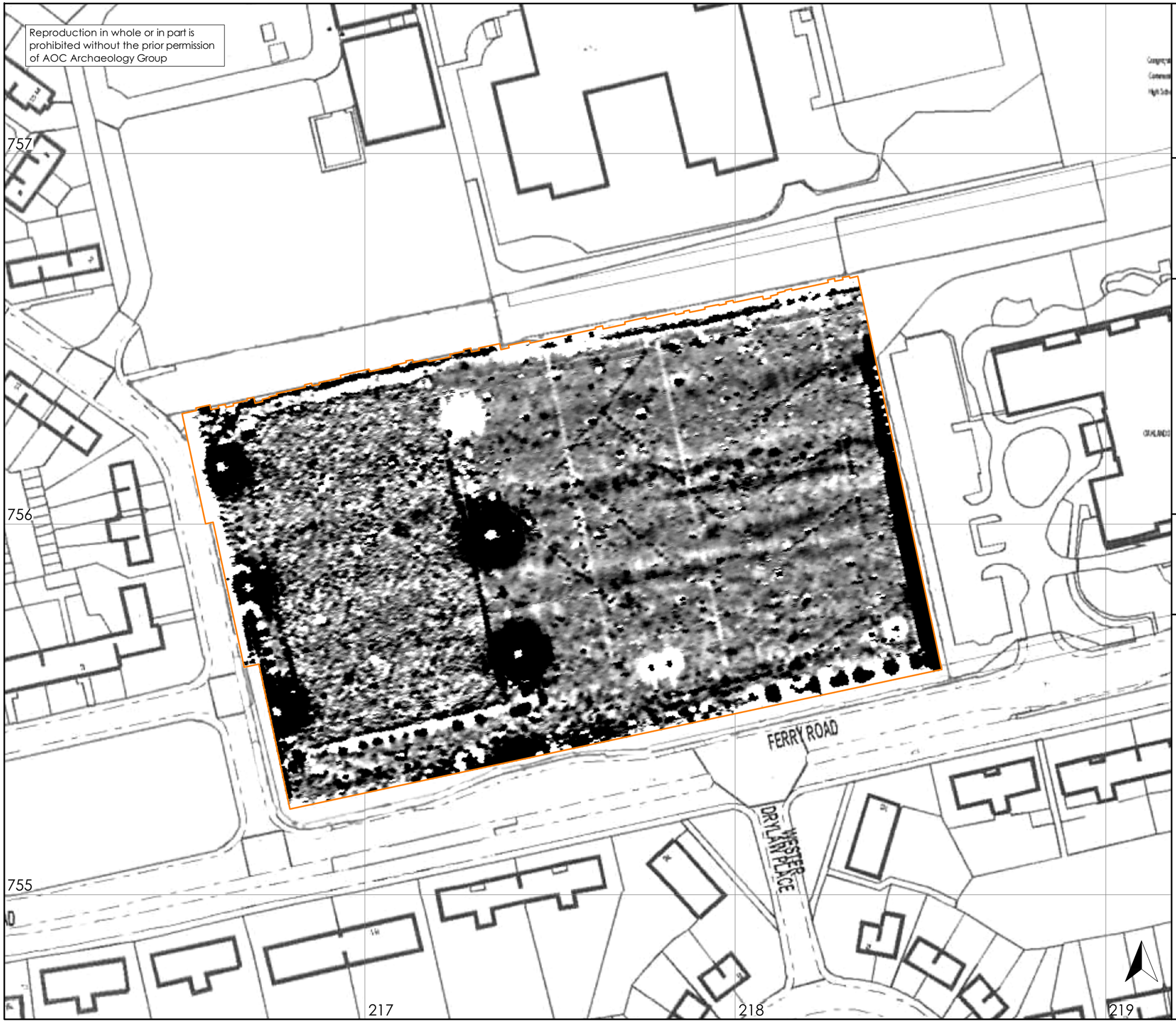

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Figure 2: Geomagnetic survey

0 50m
scale 1:1000 for A3 plot

magnetic survey

-10 nT 10

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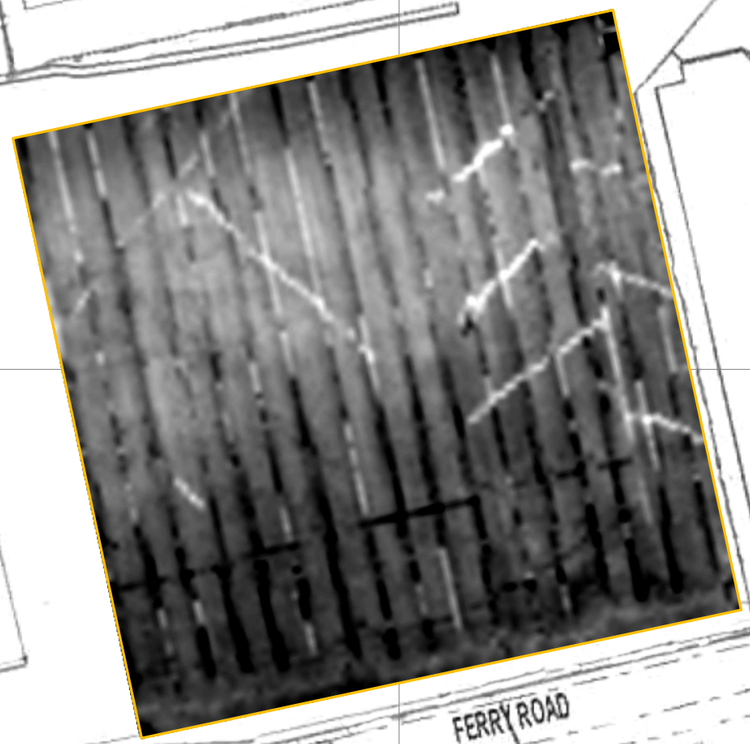
Figure 3: Geophysical interpretation of geomagnetic survey

0 50m
scale 1:1000 for A3 plot

- magnetic survey
- dipolar magnetic anomaly
- positive magnetic anomaly
- negative magnetic anomaly

757
756
755
217
218
219
FERRY ROAD
WESTER DRYLAW PLACE



757

756

755

217

218

219

FERRY ROAD

DRYLAW PLACE

WESTER

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Figure 4: Resistance survey

0 50m
scale 1:1000 for A3 plot

resistance survey

15 ohm 30

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Figure 5: Geophysical interpretation of resistance survey

0 50m
scale 1:1000 for A3 plot

resistance survey

high resistance anomaly

low resistance anomaly

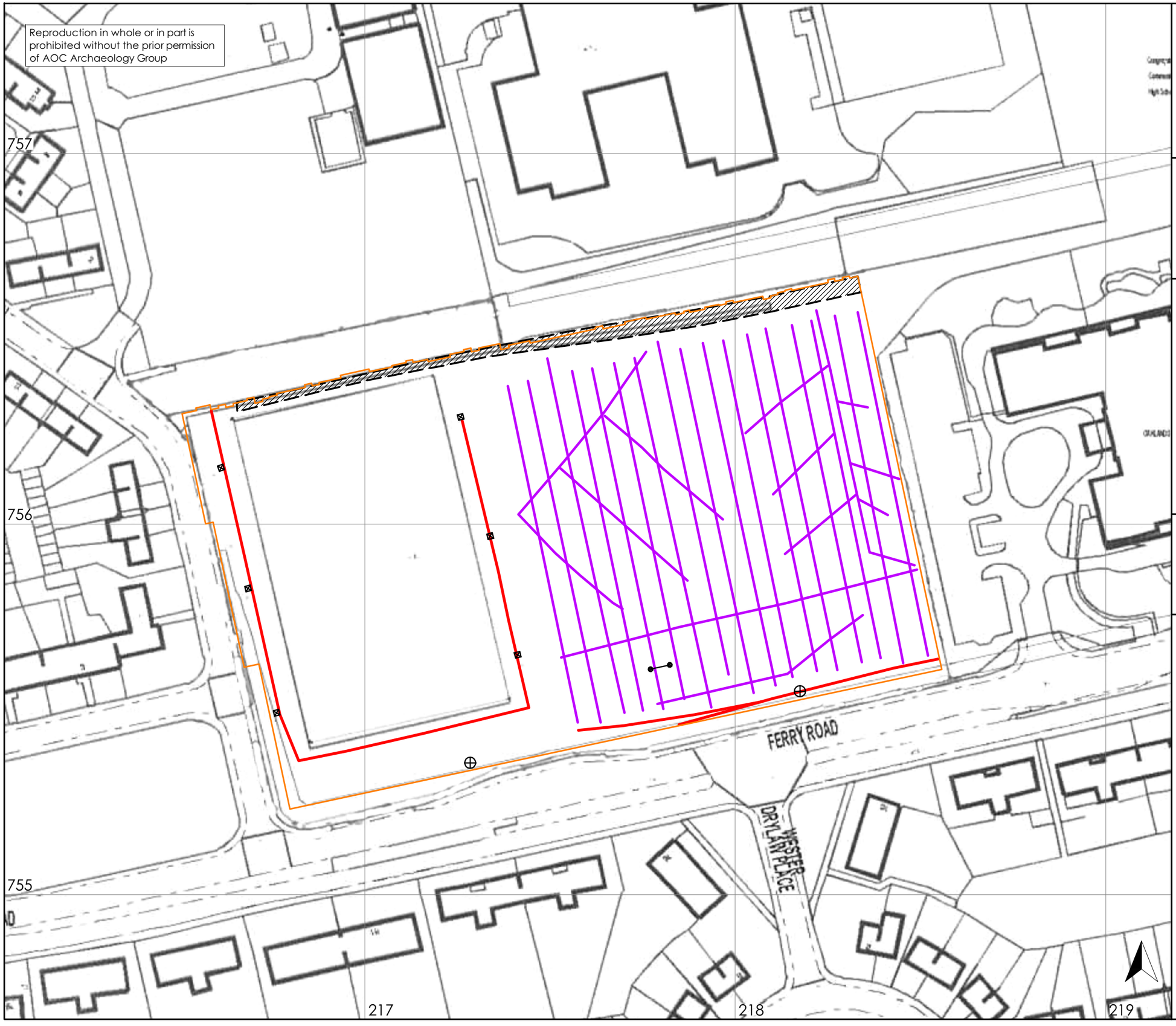

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Figure 6: Archaeological interpretation

0 50m
scale 1:1000 for A3 plot

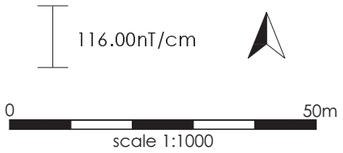
- magnetic survey
- service pipe/cable
- land drain
- concrete footpath
- floodlight
- inspection cover
- goal post

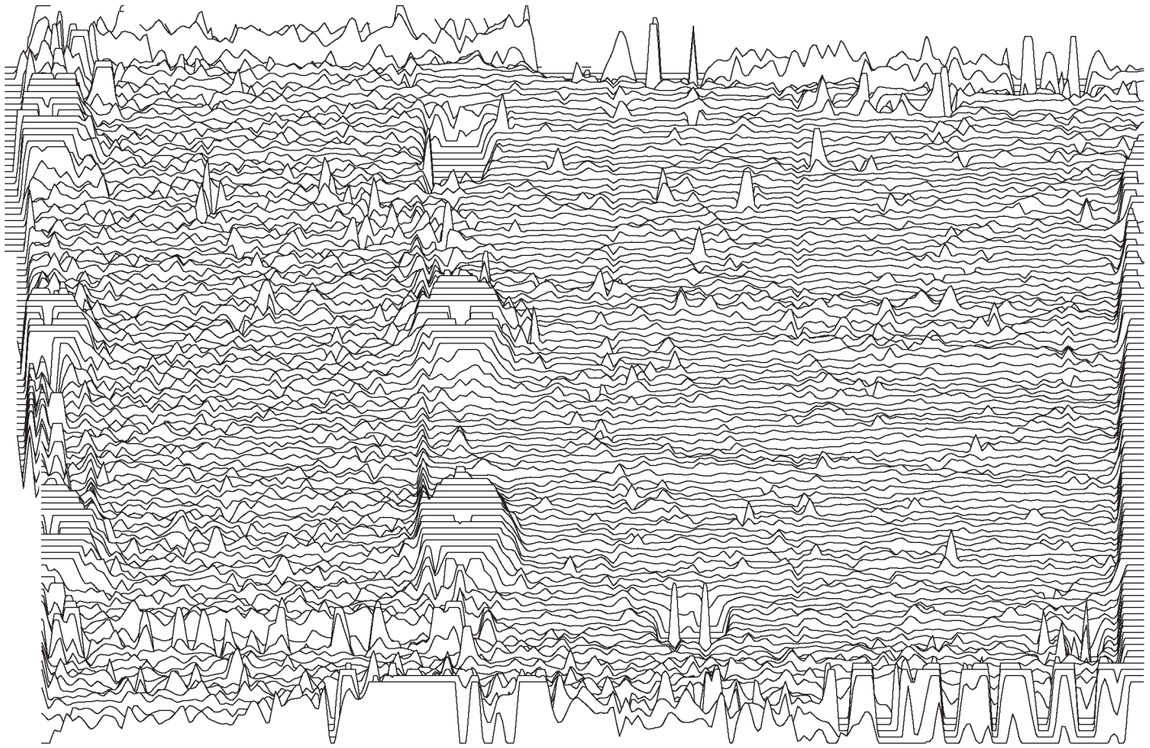
Former Craigroyston High School
Craigroyston
Edinburgh

geophysical survey
report 2612

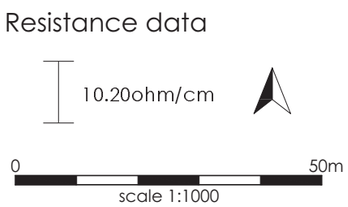
Figure 7:
Trace plots of geophysical data

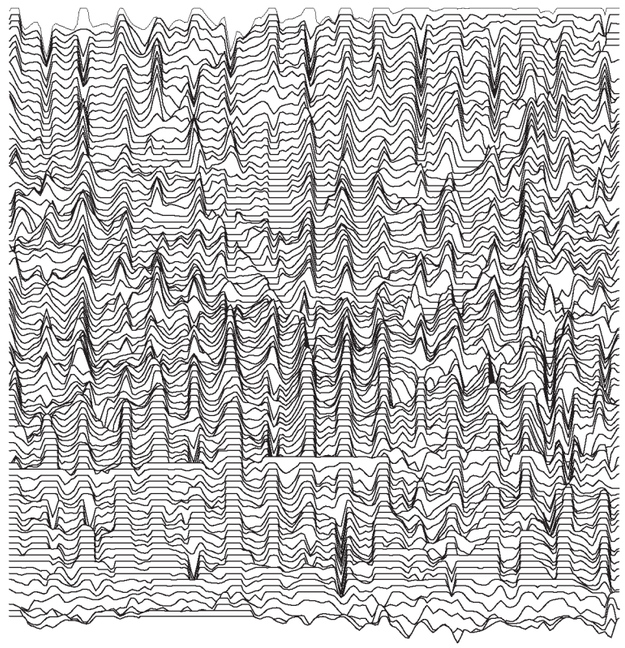
Geomagnetic data





Resistance data





AOC Archaeology Group

AOC Archaeology Group, Edgefield Industrial Estate, Edgefield Road, Loanhead EH20 9SY

tel: 0131 440 3593 | **fax:** 0131 440 3422 | **e-mail:** admin@aocarchaeology.com

www.aocarchaeology.com