





North Connel Quarry, Oban Archaeological Watching Brief Data Structure Report Project 4625

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## North Connel Quarry, Oban Archaeological Watching Brief Data Structure Report

On behalf of: Breedon Northern Limited

**NGR:** NM 90774 36491

Project Number: 4625

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This document has been prepared in accordance with GUARD Archaeology Limited standard operating procedures.

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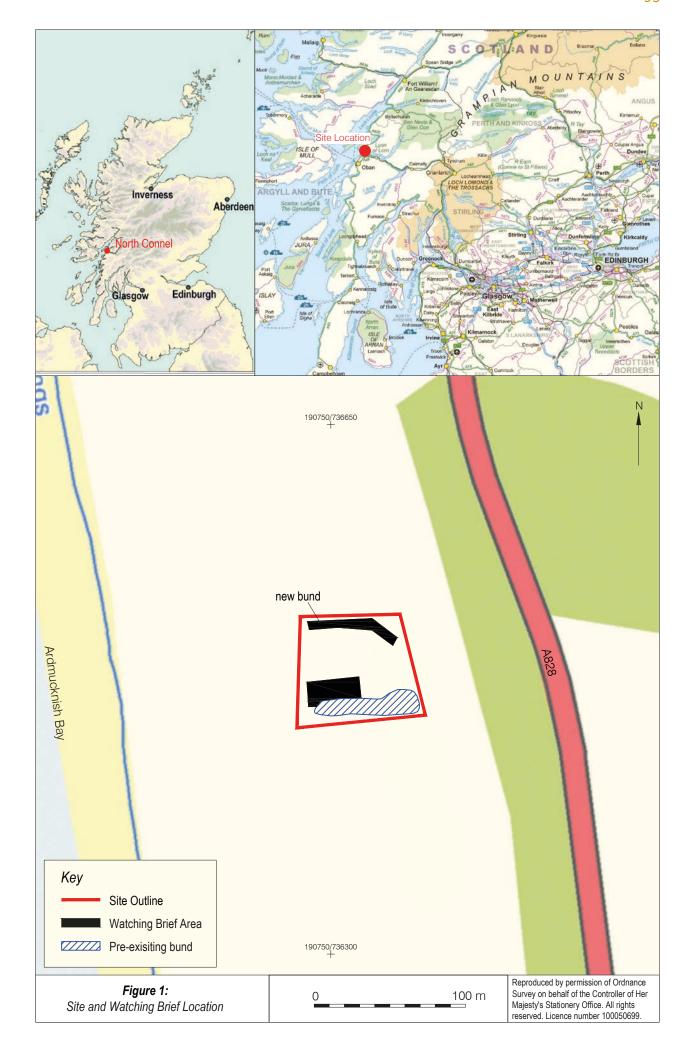
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## **Executive Summary**

1.1 GUARD Archaeology Ltd were commissioned by Breedon Northern Limited to undertake a monitored topsoil strip associated with an extension to the existing quarry at North Connel, Oban (Planning Reference: 16/01163/MIN). The work will be undertaken in stages, with the initial phase carried out on 27<sup>th</sup> February 2017. No features or deposits of archaeological interest were uncovered.

#### Introduction

2.1 This report sets out the results of an archaeological watching brief undertaken by GUARD Archaeology Ltd, on behalf of Breedon Northern Limited on a monitored topsoil strip associated with an extension to the existing quarry at North Connel, Oban (Figure 1). The Method Statement (Connolly 2016) which sets out the methodology employed during the archaeological works was prepared by CgMs Consulting in conjunction with West of Scotland Archaeology Service (WoSAS). The archaeological fieldwork was undertaken in line with the relevant policies and guidelines of the Chartered Institute for Archaeologists (CIfA) of which GUARD Archaeology Ltd is a Registered Organisation.

## Site Location, Topography and Geology

- 3.1 The site is located to the immediate north of North Connel Village and Oban Airport on the edge of land flanking the eastern side of Ardmucknish Bay, Argyll and Bute. It is positioned at NGR NM 90774 36491 and currently lies at between 12 m and 8 m AOD.
- 3.2 The site is situated in a roughly square area of ground located to the immediate north of the present quarry face. It is surrounded by a caravan holiday park to the north, enclosed fields to the south and west and the A828 road to the east. It slopes gently downwards towards the west and comprises former agricultural ground.
- 3.3 The underlying drift geology consists of Raised marine deposits comprising clay, silt and sand, while the solid geology consists of Lorn Plateau Volcanic formation Andesite and Basalt Igneous bedrock (British Geological Survey 1:50,000, http://maps.bgs.ac.uk/geologyviewer/).

## **Archaeological Background**

- 4.1 No archaeological features are recorded within the site boundary, nor are there any features adjacent. However, satellite imagery has revealed several features situated along the coastline to the west and south-west of the site, including a possible enclosure and several roughly curvilinear/rectangular structures which appear as crop marks. These have not been investigated and are not recorded within the local historic environment record.
- 4.2 Numerous prehistoric features have been recorded within the wider area and include an empty cist found next to the road south of Ledaig Village in 1870 (WoSAS pin. 1404; NMRS No. NM93NW 24). To the east lies the Moss of Achnacree where numerous Neolithic funerary cairns and Bronze Age banks have been recorded under the peat (Conolly 2016).

## Aims, Objectives and Scope

- 5.1 The aim of the archaeological watching brief was to identify:
  - the presence or absence of previously unknown archaeological deposits or artefacts within the development area;
  - to ensure that any surviving archaeological remains encountered during the watching brief are recorded in accordance with CIfA (Chartered Institute for Archaeologists) Standards.



- 5.2 The objectives were therefore to:
  - Conduct a watching brief on ground stripping works within the development area, to establish the presence or absence of any archaeological remains, and their character, date and extent if surviving;
  - Allow preservation by record or in situ as appropriate of any archaeological features encountered;
  - Undertake appropriate post-excavation analyses (if required) and dissemination of results;
  - Submit a report to data structure level for agreement of WoSAS, on completion of the
    archaeological fieldwork, which includes an outline of the scope of any further excavation
    works required to satisfy the planning authority should any significant archaeology be
    encountered.

## **Watching Brief Methodology**

- 6.1 The watching brief comprised the monitoring of topsoil stripping within the development area.
- 6.2 A mechanical excavator equipped with a toothless ditching bucket was used to remove overburden. All excavation proceeded under direct archaeological supervision in controlled spits. Machine excavation ceased upon reaching geological deposits and/or archaeologically significant deposits or features, whichever was encountered first. Exposed surfaces were sufficiently cleaned to allow for the identification of archaeological features.
- 6.3 No significant archaeological features were encountered during the watching brief.
- 6.4 A representative section was recorded denoting depth of topsoil/overburden, any stratigraphy present and the nature of the soil. This information was logged in the day book together with a sketch drawn to scale and a photographic record of deposits.
- 6.5 All elements of the fieldwork were undertaken in line with the policies and guidelines of the Chartered Institute for Archaeologists (CIfA) of which GUARD Archaeology Ltd is a *Registered Organisation*.

#### **Results**

- 7.1 During the present phase of work two areas were stripped of topsoil within the porposed quarry extension (Figure 1). This included the site of a new bund located along the length of the northern site boundary. It measured 59 m in length with a width of 6 m. The other area was in south-west corner of the site to the immediate rear of a pre-existing bund. This small area was rectangular on plan and measured 31.3 m in length and 8.2 m in width.
- 7.2 The topsoil/overburden was removed from both areas to reveal an underlying subsoil 003 comprising burnt orange/brown/grey sand with pebble and cobble inclusions. Spreads of iron panning were also noted on its surface (Plates 1 and 2). Above was located an intermediate putative topsoil 002 deposit comprising grey/light brown course sand with a thickness between 0.1 m and 0.2 m. The overlying topsoil 001 comprised mid-grey/brown silty sand with plant root and pebble inclusions. Its thickness ranged between 0.3 m and 0.4 m (Plate 3). It was overlain by long grass turf horizon.
- 7.3 A small test pit was excavated into the subsoil to investigate its depth and the characteristics of any underlying deposits. This revealed that the initial subsoil 003 measured 0.4 m in thickness and lay above a beige/light brown sand.





Plate 1: SW area of the site post-excavation.



Plate 2: Working shot during topsoil strip of the new bund site.



Plate 3: Depth of overlying deposits 001 and 003.

## **Discussion**

8.1 No features of archaeological sensitivity were identified during the present phase of watching brief. There does remain a potential for sub-surface archaeological deposits to survive within the development area, especially give the note of crop marks in the immediate proximity to the west and south-west of the development.

#### Recommendations

- 9.1 No significant archaeological features were encountered during this phase of ground stripping works. However, there will be a need for further ground stripping work as quarry work progresses across the development site. The final decisions on the requirement and scope of any future archaeological work rests with the planning authority.
- 9.2 A summary of the results of the watching brief will be submitted to Discovery and Excavation in Scotland. A copy of the summary is included in Appendix C. The archive for the project, including a copy of the report, will be submitted to the National Monuments Record for Scotland within six months.



9.3 The online OASIS form at http://ads.ahds.ac.uk/project/oasis/ (OASIS Reference: guardarc1-278072 will be completed within three months. Once the Data Structure Report has become a public document by submission or incorporation into the local Historic Environment Record, the Council Archaeologist will validate the OASIS form thus placing the information into the public domain in the OASIS website.

## **Acknowledgements**

10.1 GUARD Archaeology would like to thank Breedon Northern Limited for commissioning us to do the work and to Mr Mark MacPherson and Hamish Buchanan for their on-site assistance. Technical support was from Clark Innes. The illustrations were produced by Jennifer Simonson. The report was desk top published by Gillian Sneddon. The project was managed for GUARD Archaeology Limited by Warren Bailie.



# North Connel Quarry, Oban Archaeological Watching Brief Data Structure Report

**Section 2: Appendices** 



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## **Appendices**

#### **Appendix A: Bibliography**

British Geological Survey Geology Maps http://maps.bgs.ac.uk/geologyviewer/ [accessed 2nd March 2017].

Conolly, R 2016 Archaeological Written Scheme of Investigation, North Connel Quarry, Oban, CgMs Consulting Unpublished document.

National Monuments Record of Scotland http://pastmap.org.uk/ [accessed 2<sup>nd</sup> March 2017].

West of Scotland Archaeology Services (WoSAS) Sites and Monuments record. http://www.wosas.net/wosas\_site.php?id=41179 [accessed 2nd March 2017].

#### **Other Sources Consulted**

Google Earth Version: 7.1.8.3036 (32-bit) Accessed week ending 10th March 2017 – Imagery date 01/01/2010

## **Appendix B: List of Contexts**

Context No	Area	Description	Interpretation
001	-	Mid grey/brown silty sand with plant root and pebble inclusions (depth 0.3 m - 0.4 m)	Topsoil
002	-	Grey/light brown course sand (depth 0.1 m - 0.2 m)	Intermediate deposit
003	-	Burnt orange/brown/grey sand with pebble and cobble inclusions	Subsoil

## **Appendix C: List of Digital Photograpy**

Frame	Area	Context No.	Subject	Taken from
1	-	-	ID Shot	-
2	-	-	Pre-exc of area	SE
3	-	-	Pre-exc of area	SE
4	-	-	Pre-exc of area	SE
5	-	001-003	N-facing section of bund area	N
6	-	003	Stripping bund area	E
7	-	003	Stripping bund area	E
8	-	003	Stripping bund area	E
9	-	001-003	N-facing section of bund area	N
10	-	-	Pre-exc of area to be stripped	N
11	-	-	Pre-exc of area to be stripped	NW
12	-	-	Pre-exc of area to be stripped	NW
13	-	001-003	S-facing section (SW end of site)	S
14	-	001-003	S-facing section (SW end of site)	S
15	-	003	Post-exc of SW corner	NW
16	-	003	Post-exc of SW corner	W
17	-	001-003	S-facing section (SW end of site)	S
18	-	003	Excavating bund sit in NE area	NW
19	-	-	Post-exc of bund strip	W
20	-	-	Post-exc shot of site	S
21	-	-	Post-exc shot of site	SE
22	-	-	Post-exc shot of site	SE
23	-	-	Post-exc shot of site	E
24	-	-	Post-exc shot of site	NE
25	-	-	Post-exc shot of site	NE
26	-	-	Post-exc shot of site	N
27	-	-	Pre-existing bund	NE
28	-	-	Pre-existing bund	NE



# Appendix D: Discovery & Excavation Scotland Report

LOCAL AUTHORITY:	Argyll and Bute
PROJECT TITLE/SITE NAME:	North Connel Quarry, Oban
PROJECT CODE:	4625
PARISH:	Ardchattan and Muckairn
NAME OF CONTRIBUTOR(S):	Maureen C. Kilpatrick
NAME OF ORGANISATION:	GUARD Archaeology Ltd
TYPE(S) OF PROJECT:	Archaeological Watching Brief
NMRS NO(S):	n/a
SITE/MONUMENT TYPE(S):	n/a
SIGNIFICANT FINDS:	None
NGR (2 letters, 6 figures)	NM 90774 36491
START DATE (this season)	27 <sup>th</sup> March 2017
END DATE (this season)	27 <sup>th</sup> March 2017
PREVIOUS WORK (incl. DES ref.)	None
MAIN (NARRATIVE) DESCRIPTION: (May include information from other fields)	GUARD Archaeology Ltd were commissioned to undertake a monitored topsoil strip associated with an extension to the existing quarry at North Connel, Oban (Planning Reference: 16/01163/MIN). The work will be undertaken in stages, with the initial phase carried out on 27 <sup>th</sup> February 2017. No features or deposits of archaeological interest were uncovered.
PROPOSED FUTURE WORK:	Yes
SPONSOR OR FUNDING BODY:	Breedon Northern Limited
CAPTION(S) FOR ILLUSTRS:	
ADDRESS OF MAIN CONTRIBUTOR:	GUARD Archaeology Limited, 52 Elderpark Workspace, 100 Elderpark Street, Glasgow, G51 3TR
EMAIL ADDRESS:	bob.will@guard-archaeology.co.uk
ARCHIVE LOCATION (intended/deposited)	Archive to be deposited in WoSAS and NMRS.



## **Appendix E: Written Scheme of Investigation**



**ARCHAEOLOGICAL WRITTEN SCHEME OF INVESTIGATION** 

**NORTH CONNELL QUARRY NORTH CONNEL OBAN ARGYLL & BUTE** 

**Planning Ref:** 16/01163/MIN

Planning • Heritage

Specialist & Independent Advisors to the Property Industry

September 2016



# Local Planning Authority: **Argyll & Bute Council**

Site centred at: NGR NM 9078 3645

Author: Richard Conolly MA(Hons), MIfA, FSA Scot

Report Status: Final

Issue Date: September 2016

CgMs Ref: **RJC/22699/1** 

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**APPENDIX: EXTRACTION AREA** 



#### 1.0 INTRODUCTION

#### 1.1 Planning Background

- 1.1.1 This Written Scheme of Investigation (WSI) has been prepared on behalf of Breedon Northern Limited (the 'Client'). The Client has received planning consent for an extension to their existing quarry at North Connel, Oban (the 'Site'). A plan is appended (Appendix 1).
- 1.1.2 Attached to the consent was the following condition relating to archaeology:
  - 19. No development or ground breaking works shall commence until a method statement for an archaeological watching brief has been submitted to and approved in writing by the Planning Authority in consultation with the West of Scotland Archaeology Service [WoSAS].

The method statement shall be prepared by a suitably qualified person and shall provide for the recording, recovery and reporting of interest or finds within the application site.

Thereafter the development shall be implemented in accordance with the duly approved details with the suitably qualified person being afforded access at all reasonable times during ground disturbance works.

Reason: In order to protect archaeological resources.

1.1.3 This document constitutes the method statement required by the above condition. It will be submitted to for initial comment before being submitted to the Planning Authority for approval.

#### 1.2 Archaeological Background

1.2.1 As indicated in WoSAS' consultation response, no archaeological features are recorded within the Site. Nor are there any such features adjacent to the Site. However, the Site lies in an area in which numerous Prehistoric features have been recorded. An empty cist was discovered next to the road south from Ledaig village in 1870 (Canmore 23239). The exact location is unknown but it is recorded as being to the west of the road, south of the junction with the road from Achnacree, potentially within 200m of the Site. To the east of the Site lies the Moss of Achnacree. Here there are Neolithic funerary cairns and Bronze Age banks have been recorded running under the peat. It is reasonable to assume that Moss contains further as yet unrecorded archaeological remains. Related unrecorded features may extend into the Site.



#### 2.0 OBJECTIVES

- 2.1.1 The objectives of the watching brief are:
  - To allow preservation by record or in situ as appropriate of any features of archaeological encountered; and
  - to undertake appropriate post-excavation analyses (if required) and dissemination of results.



#### 3.0 SCHEDULE

- 3.1.1 A start date is yet to be confirmed. WoSAS will be given a minimum of two weeks' notice of the commencement of site works.
- 3.1.2 A draft report on the works will be presented (a data structure report; DSR) within four weeks of the completion of relevant site works.
- 3.1.3 If further post-excavation work is required a post-excavation research design (PERD) will be submitted within three months of WoSAS agreement of the DSR. If publication of the results is required a draft article will be submitted within a year of agreement of the PERD. Material archives will be deposited within six months of the completion of all works.



#### 4.0 PERSONNEL

4.1.1 The works will be managed by Richard Conolly (MCIfA) of CgMs. CgMs is a registered organisation of the CIfA. Personnel for the project will be confirmed when a programme is in place and forwarded to WoSAS.



#### 5.0 OUTLINE STAGES OF WORK AND METHOD

#### 5.1 Strategy

- 5.1.1 The programme of works will comprise:
  - Monitoring of topsoil stripping.
  - Production of a data structure report (DSR; archive) on the above, including assessment of the significance of the results and the potential of further post-excavation analysis if required. If the results are concluded to be of sufficient significance then the scope of further post-excavation work will be set out in an accompanying post-excavation research design (PERD).
  - Post-excavation analyses as set out in the PERD (if required) will be undertaken and the results provided in the agreed format (likely to be an article suitable for publication in a relevant archaeological journal)

#### 5.2 Watching Brief

- 5.2.1 A mechanical excavator equipped with a toothless ditching bucket will be used to remove overburden. This comprises topsoil, no peat is present on the Site (vegetation, topsoil and peat). All excavation will proceed under direct archaeological supervision and in controlled spits. Machine excavation will cease upon reaching geological deposits or archaeologically significant deposits or features, whichever is encountered first. Exposed surfaces (including the surface of geological deposits if exposed) will be sufficiently clean to allow for the identification of archaeological features.
- 5.2.2 Any identified archaeological features, or possible features, will be marked and noted so as to allow their investigation. Spoil removal and plant movements (of the excavator or dumpers) will be controlled so as to avoid tracking over, disturbing or covering any such features.
- 5.2.3 All identified features or possible features will be investigated by hand and recorded (or discounted if not archaeologically significant). The hand excavated sample will typically amount to 50% of discrete features, and 10% of linear features. This sample will be increased where appropriate (for example, for structural features, possible burials, and to increase the chances of recovering dateable material) and as subject to discussion with WoSAS. Excavation will proceed so as to recover all available stratigraphic information. WOSAS will be the final judge of significance in any instance and



- may well require full excavation of any features to be destroyed by the proposals.
- 5.2.4 If homogenous archaeological deposits are encountered (for example, former ground surfaces) a sampling strategy will be agreed with WoSAS. It may be appropriate to remove homogenous deposits by machine following appropriate sample excavation and recording.
- 5.2.5 Once areas are deemed to be archaeologically sterile (i.e. they contain no identified features, or all features have been excavated and recorded to agreed levels) they will be released and quarry operations can proceed as normal.

#### 5.3 DSR (archive) reporting

5.3.1 The results of archaeological fieldwork will be set out in a DSR (archive) report subject to the standards set out below. The final report will be accompanied by assessment of the significance of the results and a PERD if appropriate.

#### 5.4 Post-excavation and publication

5.4.1 If appropriate, the analyses set out in the PERD will be undertaken and a report suitable for inclusion in an archaeological journal produced.



#### 6.0 GENERAL REQUIREMENTS

- 6.1.1 All archaeological work will satisfy the codes, standards and guidance set out by the Chartered Institute for Archaeologists (http://www.archaeologists.net/codes/ifa).
- 6.1.2 In particular, all contexts, small finds and environmental samples will be given unique numbers. Record photographs including a metric scale and general site photographs will be taken and recorded in a register that includes information on context and direction of shot. Plans and sections of excavated features will be hand drawn at an appropriate scale (generally 1:20 for plans and 1:10 for sections).
- 6.1.3 An overall site plan showing the monitored area will be produced using information supplied by the client and related to the National Grid. If archaeological remains are encountered they will be recorded and related to Ordnance Datum.

#### 6.2 Environmental Sampling

- 6.2.1 Bulk finds will be collected by context and small finds will be 3D-plotted where appropriate. The on-site advice of an appropriate specialist will be sought if particularly significant, or fragile, finds are identified (e.g. intact funerary urns). Finds will be cleaned, dried and stored as appropriate and in accordance with First Aid for Finds (Watkinson & Neal 1998). They will be catalogued and assessed by an appropriately experienced specialist and the results included in the DSR.
- 6.2.2 Bulk environmental samples (up to 40 litres) will be collected from primary archaeological contexts and a representative number processed by wet sieving and flotation. The resulting artefacts and environmental remains shall be collected and assessed by an appropriately experienced specialist and the results included in the DSR.

## 6.3 Reporting & Archive

6.3.1 The results of the work will be presented in a draft report within four weeks of the completion of fieldwork (unless agreed otherwise). The report will conform to any WOSAS reporting requirements and include specialist assessments of recovered artefacts or environmental material where appropriate. The results will be supplied to WoSAS in a digital format suitable for inclusion in their HER database. A summary report will be prepared for



submission to Discovery & Excavation in Scotland and the online OASIS database.

- 6.3.2 Archives will be compiled in accordance with the guidelines published by the IfA on behalf of the Archaeological Archives Forum (July 2007). The documentary and digital archive will be submitted to Historic Environment Scotland within six months of completion of all work on this project. All finds will be reported to the Scottish Archaeological Finds Allocation Panel, which will determine the ultimate destination of the material archive. Once this is determined, and within three months, arrangements will be made with the specified museum for transfer of material and title.
- 6.3.3 The results of the works may merit full post-excavation analysis and publication in a relevant journal. Any such works will be set out in a PERD following completion of assessment and production of the DSR. This will be submitted for agreement with WoSAS on behalf of the planning authority.

#### 6.4 Human Remains

6.4.1 If any human remains are identified during the work the local police, client and WoSAS will be informed. Excavation will be undertaken in line with relevant CIfA and Historic Environment Scotland guidance and in keeping with Scottish legal requirements.

#### 6.5 Health & Safety

6.5.1 All work will be undertaken in accordance with current H&S legislation. Risk assessments and method statements will be prepared prior to the commencement of work. All site staff will wear appropriate PPE.



#### 7.0 REFERENCES

Archaeological Archives Forum 2007 Archaeological Archives: a guide to best practice in creation, compilation, transfer and curation (published by the CIfA).

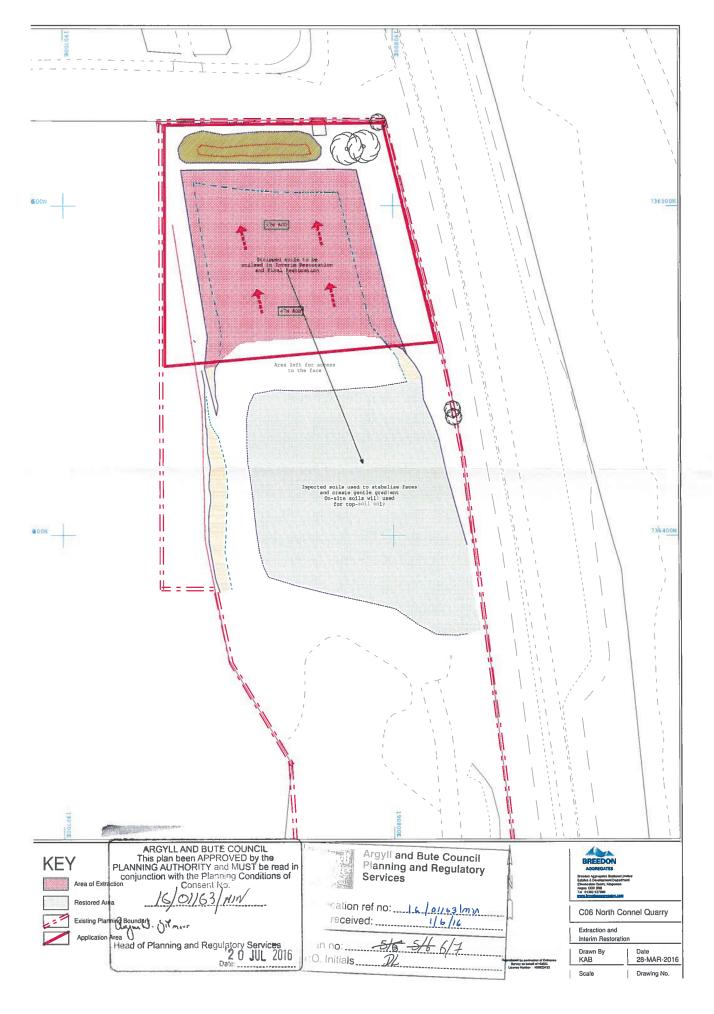
CIfA Standards & Guidance.

Watkinson D & Neal V 1998 First Aid for Finds.



**APPENDIX: EXTRACTION AREA** 





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