



Lindisfarne: The Holy Island Archaeology Project

Interim Assessment Report 2020

Chris Casswell, David Petts, Brendon Wilkins, Nat
Jackson, Indie Jago, Raphael Kahlenberg, Ben Swain,
Johanna Ungemach and David Wallace

Lindisfarne: The Holy Island Archaeology Project

Interim Assessment Report 2018-2019

Compiled by:

Chris Casswell, David Petts, Brendon Wilkins, Nat Jackson, Indie Jago, Raphael Kahlenberg,
Ben Swain, Johanna Ungemach and David Wallace

With contributions by:

Anwen Caffell, Gerry McDonnell, John Naylor, Ellen Simmons, Phil Mills, Hannah Russ,
Andrew Sage

DigVentures

The Workshop
24a Newgate
Barnard Castle
County Durham
DL12 8PL

hello@digventures.com

0333 011 3990

@thedigventurers

Purpose of document

This document has been prepared as an Interim Assessment Report. The purpose of the document is to provide an account of the archaeological excavation undertaken in 2020, including primarily results of all fieldwork, specialist reporting and links to the full archaeological record. It is supported by an easily accessible online database of all written, drawn, photographic and digital data. DigVentures accepts no responsibility or liability for any use that is made of this document other than by the Client for the purposes for which it was originally commissioned and prepared.

Carbon Footprint

A printed copy of the main text in this document will result in a carbon footprint of 99g if 100% post-consumer recycled paper is used and 126g if primary-source paper is used. These figures assume the report is printed in black and white on A4 paper and in duplex.

DigVentures is aiming to reduce its per capita carbon emissions.

Copyright

© DigVentures Limited 2020

Project summary

DV project code	LDF20
National Grid Reference	NU 12670 41760
County	Northumberland
Title:	Lindisfarne: The Holy Island Archaeology Project Interim Assessment Report 2020
Author(s):	Chris Casswell MCIfA David Petts PhD MCIfA Brendon Wilkins MCIfA Nat Jackson Indie Jago Raphael Kahlenberg Ben Swain PCIfA Johanna Ungemach David Williams
Origination date:	16 April 2021
Circulation:	Stakeholders and DV specialist team
Reviewed by:	Manda Forster PhD MCIfA
Approval:	Brendon Wilkins MCIfA

Acknowledgements

Thanks are due to our project partners at Durham University, particularly to David Petts who has not only helped us throughout but was instrumental in our involvement in the project. Thanks are also extended to the landowners, Crossman Estate, to the Diocese of Newcastle for giving us permission to excavate, and to Natural England. Mr J Patterson provided kind support and practical help, by facilitating access to the trenches and a place to store our tools.

Further contributions, helpful advice and direction throughout this project could not have been achieved without the following groups. Prof Richard Hobbs and Prof Stefan Nielsen from the Department of Earth Sciences at Durham University who kindly provided geoarchaeological equipment, and to Dr Karen Milek for providing expert supervision throughout the survey. The Institute of Medieval and Early Modern Studies, Durham University for support in bringing the project together in its early stages. David O'Conner and the Trustees of the Crossman Hall for providing an HQ, and Lindisfarne Pilgrims Coffee House for supporting the caffeine needs of the team. A big thank you is also due to the people of Holy Island for welcoming the team to the island and for taking such an active interest in the project.

The project is managed for DigVentures by Brendon Wilkins with Lisa Westcott Wilkins in the role of Project Executive. The project is supported by Dr David Petts from Durham University, who jointly directs the fieldwork with Chris Casswell, DigVentures. The project was funded exclusively by voluntary contributions from the public, so final thanks must go to our community of Venturers, without whom this work would never have taken place:

Julia Albro, Molly Anderson, Helen Avery, Bill Balding, Clive Barbour, Ed Bates, Dana Bentley, Tobias Busemann, Sonya Carnell, Heather Casswell, Nick Casswell, John Cauchi, Laurie Coleman, James Combe, Jennifer Compton, Jennifer Compton, Imogen Cornish, Susie Daniels, Ulf Dombrowsky, Sally Dye, Anita Elkes, Christopher Eve, Claire Gamble, Paul and Sarah Gammidge-Jefferson, Tom Gooden, Patricia Gregg, Dorothy Halfhide, Jim Heffer, Caroline Heffer, Jess Hollerston, Martin Holt, Doug Hopper, Lesley Jacobs, Kendra Johnson, Carol Kipling, Neil Kipling, Edwin Lambert, Jennifer Leiby, Katrina Lidbetter, Timothy Lidbetter, Simon Lloyd, Antonio Marino, Gareth Marklew, Paul Mason, Wendy Mason, Peter Memmott, Calum Mercer, Valerie Metcalfe, Yolande Monks, Christine Morland, Caroline Moseley, Judy Murray, Elizabeth Nelson, Janine Nicol, Peter Palmer, Ceri Pennington, Ali Redmore, Simon Redmore, Helen Riley, David Riley, David Robinson, Lizzie Robinson, Val Rowe, Iain Russell, Nikita Salt, Julie Scholfield, Jennifer Scott, Bill Seddon, AR Shores, Sebastian Sjöberg, Anna Rita Skahan, Patrick Skahan, Rober Slavey, Jill Sluman, Holly Smith, Christina Smith, Frances Stenlake, Melanie Stevens, Brian Stokes, Chris Swindells, Joshua Swirsky, Flora Szpirglas, Sarah Tilley, Timi Townsend, Elizabeth Tutty, Brian Tyler, Louis van Dompelaar, Hilbert Vinkenoog, Home Vogt, Mac Whatley, Jill Whiteford, Megan Whiteley and Anna Wood.

Executive summary

DigVentures, in partnership with Durham University, were invited to undertake a crowdfunded community-based archaeological research project at Lindisfarne. The project is a multi-staged and multi-disciplinary field research project, incorporating geophysical survey, archaeological evaluation and excavation, and geoarchaeological landscape analysis. The community-focused project was initiated in 2016 and is expected to run to at least 2025.

This report provides an interim assessment of results from archaeological excavation undertaken in Year 5. Field investigations took place between 3rd – 21st September 2020, with the overarching aim of fieldwork to provide baseline information to contribute to the future management, research, and presentation of the site, creating multiple educational and participatory learning experiences for community participants.

This report presents assessment results from excavations, incorporating preliminary specialist assessments. The impact of the results and how the results contribute to achieving the aims and objectives of the project are discussed, and recommendations for further work given. This report is one of a number of archive and dissemination products generated by the project, including a digital archive. All products and dig records are available on the project microsite: <https://digventures.com/lindisfarne/>.

Result summary

Excavations took place between 3rd – 21st September 2020 and entailed the reopening of Trench 2 to further investigate the early Christian burial ground and establish a better understanding of the early medieval features and structural remains. A geoarchaeological survey was also conducted using Electrical Resistivity Tomography (ERT), from which core locations were selected and retrieved.

In the northwest of Trench 2 (West) a number of stratigraphically early features were found to contain significant quantities of metalworking debris. These were found adjacent to a large circular feature identified in the 2019 field season, which was excavated in 2020 to reveal a burnt clay lining and internal structural elements. The distribution of hammerscale and smithing slags across this area suggests high temperature industry on or near this location. All industrial activity in this area was earlier than the phase of cemetery and the working hypothesis is that this represents some form of high temperature industry in the early medieval period.

Eight graves were identified and excavated, including six adults, one child, and a neo-natal skeleton. In addition, numerous other unexcavated grave cuts, stone-capped and lined graves, and skulls presumed to belong to articulated remains, were identified across the excavation area. Other finds of note include six early medieval coins, all dating to the early-mid 9th century AD under the reigns of either Æthelred II or Eanred.

Contents

1	INTRODUCTION	1
1.1	Project summary	1
2	BACKGROUND	1
2.1	Research context	1
2.2	Summary of previous work	2
2.3	2016 fieldwork	3
2.4	2017 fieldwork	4
2.5	2018 and 2019 fieldwork	4
3	PROJECT AIMS AND OBJECTIVES	5
3.1	Background	5
3.2	Aims	5
4	METHODOLOGY	6
4.1	Project model	6
4.2	Excavation	6
4.3	Geoarchaeology	7
4.4	Human remains	7
4.5	Animal bone	8
4.6	CBM	8
4.7	Archaeometallurgy	8
4.8	Environmental	9
4.9	Health and safety	9
5	EXCAVATION RESULTS	9
5.1	Introduction	9
5.2	Trench 2 West	10
5.3	Trench 2 East	12
6	GEOARCHAEOLOGY RESULTS	12
6.1	Introduction	12
6.2	Electrical Resistivity Tomography	13
6.3	Coring	13
7	ARTEFACTS AND ECOFACTS	13
7.1	Human remains	13
7.2	Animal bone	15
7.3	CBM	16
7.4	Pottery	17
7.5	Metalworking debris	17
7.6	Special finds and metal objects	18
7.7	Environmental	19
8	DISCUSSION AND CONCLUSIONS	20
8.1	Introduction	20
8.2	Industry	20
8.3	Cemetery	20
8.4	Artefact assemblage	21
8.5	Environmental remains	22
9	RECOMMENDATIONS	23
9.2	Excavation	23

9.3	Geoarchaeology	23
9.4	Human remains	24
9.5	Animal bone	25
9.6	Animal remains	26
9.7	Metalworking debris	26
9.8	Special finds	26
9.9	Environmental remains	26
9.10	Scientific dating	27
10	BIBLIOGRAPHY	28

Tables

Table 1: Trench 2 context descriptions	1
Table 2: Trench 2 (East) articulated skeletons	2
Table 3: Trench 2 (West) articulated skeletons	4
Table 4: Trench 2 (East) disarticulated skeletons/skulls	4
Table 5: Trench 2 (West) disarticulated skeletons/skulls	5
Table 6: Summary of mammal remains	7
Table 7: Summary of bird and fish remains	7
Table 8: Summary of marine mollusc remains	8
Table 9: Evidence for carcass processing	8
Table 14: Pottery catalogue	9
Table 11: CBM catalogue	9
Table 12: Catalogue of industrial residues from Trench 2 (West)	11
Table 13: Catalogue of industrial residues from Trench 2 (East)	11
Table 14: Catalogue of industrial residues by Feature number	13
Table 15: Catalogue of the magnetic fractions (weight in grams). HS? -Hammerscale present?; Flake - Flake Hammerscale present?; Spheroidal - Spheroidal Hammerscale present?	13
Table 16: Coin catalogue	15
Table 17: Palaeoenvironmental sample assessment	17
Table 18: Hand-collected palaeoenvironmental material assessment	17
Table 19: Social impact methodology	21

Figures

Figure 1: Site location	32
Figure 2: Trench 2 (West) plan	33
Figure 3: Trench 2 (East) plan	34
Figure 4: Excavation photos	35
Figure 5: Trench 2 (West) east-facing baulk section	36
Figure 6: Trench 2 (East) east-facing baulk section	37
Figure 7: Trench 2 selected sections	38
Figure 8: Electrical Resistivity Tomography (ERT) results	39

Appendices

Appendix A: Trench and context descriptions	1
Appendix B: Human remains catalogue	2
Appendix C: Animal bone catalogue	6
Appendix D: Ceramics catalogue	9
Appendix E: Metalworking debris catalogue	10
Appendix F: Coin catalogue	14
Appendix G: Environmental catalogue	16
Appendix H: Radiocarbon dating catalogue	18
Appendix I: Social impact methodology	20

1 INTRODUCTION

1.1 Project summary

- 1.1.1 DigVentures, in partnership with Durham University, were invited to undertake a crowdfunded community-based archaeological research project at Lindisfarne (hereafter 'the Site' – Figure 1). The project has been designed in collaboration with Dr David Petts, Durham University, using a MoRPHE framework (Management of Research Projects in the Historic Environment - 2006). The project is a multi-staged and multi-disciplinary field research project, incorporating geophysical survey, archaeological evaluation and excavation, and geoarchaeological landscape analysis. The community-focused project was initiated in 2016 and is expected to run to at least 2025.
- 1.1.2 This report provides an interim assessment of results from archaeological evaluations undertaken in Year 5, undertaken during 2020. The aims, objectives and methods of the season can be found in the original project design (Wilkins and Petts 2016) and updated project designs (Casswell et al. 2017, 2018 and 2020). Field investigations took place between 3rd – 21st September.
- 1.1.3 The overarching aim of fieldwork in both seasons was to provide baseline information to contribute to the future management, research, and presentation of the site, creating multiple educational and participatory learning experiences for community participants. The community-based archaeological research project was designed to:
- Identify the physical extent and character of the archaeological remains on the site with a programme of remote sensing.
 - Characterise the results of non-invasive survey, refining the chronology and phasing of the site with a programme of trenching.
 - Understand the site's archaeological and palaeoenvironmental conditions.
 - Make recommendations, analysis and publication.
- 1.1.4 The interim assessment results presented in this report have been circulated to the wider project team. This report is one of several archive and dissemination products generated by the project, including a digital archive and metadata, paper archive and artefact archives. All records are available on the Digital Dig Team project site: <https://digventures.com/lindisfarne/ddt/browser.php>.

2 BACKGROUND

2.1 Research context

- 2.1.1 Holy Island (Lindisfarne) is a small tidal island (technically a tombolo) lying just off the northeast coast of Northumberland. It is best known, archaeologically, as the site of a major Anglo-Saxon monastery founded in AD635 by Oswald, King of Northumbria and Aidan, a monk from Iona. Whilst a significant quantity of early medieval sculpture has been recovered from the area of the later medieval priory, the site of the early monastic complex has yet to be identified through archaeological investigations. This project aims to locate elements of Anglo-Saxon Lindisfarne building on previous work on the island by David Petts (Durham University).
- 2.1.2 In addition to Holy Island's important early religious heritage, the island has seen long-term settlement from the Mesolithic to the 21st century. The current Holy Island village and the adjacent priory ruins have been the focus of occupation since the Middle Ages. Following the dissolution of the monasteries in the 16th century, there was substantial investment in constructing defensive installations to protect

against possible incursions from Scotland as well as raids from the Dutch. The fishing industry grew increasingly important in the 18th century. During the 19th century the island also became an important centre for quarrying and processing limestone, with lime kilns constructed and in operation on the island at this time. The importance of the limeworks had declined by the early-20th century. Since then, whilst farming and fishing remain important to the local economy, tourism has become increasingly central to life on the island.

2.2 Summary of previous work

- 2.2.1 Compared with other major early monastic sites, such as Iona, Whithorn, Monkwearmouth and Jarrow, there has been relatively little direct archaeological work in the probable area of the monastic enclosure. The most significant programmes of work, in the immediate locality, have taken the ruins of the medieval priory as their focus. Extensive clearance of the rubble-choked complex of standing structures was undertaken by William Crossman, the landowner in the 1890s, whose work was centred on the cloistral range. His work was supplemented by further clearance by the Ministry of Works (MoW) under the supervision of Charles Peers in the early 20th century. Both sets of work have seen only limited publication (Crossman 1890b; Peers 1923-4) although most of the finds are held by Historic England in their stores in Helmsley. Notes relating to Crossman's work are held in the Northumberland Archives and the paperwork relating to MoW work is at Helmsley. Crossman also carried out some limited exploration on the site of nearby St Cuthbert's Island, the location of a probably Anglo-Saxon hermitage and certainly used as such in the medieval period.
- 2.2.2 There was no further archaeological work on the island until 1962, when the noted field archaeologist, and excavator of the major Anglo-Saxon palace site at Yeavering, Brian Hope-Taylor, turned his attention to Holy Island. Over the course of a month he carried out a series of excavations in and around the village. He placed three trenches in Rectory Field, due west of the parish church. This revealed evidence for later medieval occupation, although there were hints of earlier features. It was not easy to understand this early activity though due to the limited size of his intervention. He also excavated three trenches on or against the Heugh. Two revealed further evidence for medieval occupation, whilst one, exploring a rectangular feature on top of the Heugh revealed a small building. The lack of any identifiable ceramics from this structure suggests a possible early date, although this has not been confirmed by scientific dating. Hope-Taylor's excavations were never published. Some of his plans, sections and site notes were recovered after his death and are now in the RCAHM in Edinburgh. The project team have digitised them, and their publication is part of the wider aims of this project.
- 2.2.3 Following on from a small excavation on the site of the current English Heritage visitor centre by Deirdre O'Sullivan in 1977, a major campaign of archaeological work was initiated by O'Sullivan and Rob Young under the auspices of the Department of Archaeology, University of Leicester. This ran from the mid-1980s to the mid-1990s. A wide range of activities took place including geophysical survey (particularly of the Heugh and the area to the east of the Priory), survey of Mesolithic sites on the north side of the island, earthwork survey of the Kennedy limekilns and other sites, excavations at the major midden of Jenny Bell's Well, fieldwalking, and, most significantly as far as early medieval material is concerned, the site of Green Shiel, an important rural settlement on the north side of the island, which comprised a series of long houses and produced a substantial faunal assemblage. Several interim reports on this material have been published, although no final report has yet been produced (O'Sullivan 1985; O'Sullivan 1989; O'Sullivan and Young 1991, 1992, 1993, 1995, 1996).
- 2.2.4 Since the cessation of the Leicester campaign of research, archaeological research on the island has largely been limited to Development Control excavation. The most significant intervention of this kind took place on the site of the Lindisfarne Winery, when its shop was extended. This revealed a sequence

of post-medieval and medieval activity, including a significant build-up of midden deposits. However, beneath this were a number of earlier ditch and pit features, one of which contained an early medieval comb (NAA 2001). Possible early medieval activity was also identified in excavations carried out in advance of the construction of community housing on Castle View Gardens, which revealed a substantial post-medieval and/or recent soil accumulation overlying at least one, if not two, medieval structures fronting Green Lane, as well as remains of a possible early medieval sunken floored building – frustratingly the archives, finds and environmental samples from this site appear to have been lost. A number of smaller interventions have been made across the village, whilst several of these have produced evidence for late medieval or early post-medieval midden deposits and some structural features; none have produced clear indications of early medieval activity.

- 2.2.5 In 2012, a major new geophysical magnetometry survey of the island was carried out by Archaeological Services Durham University on behalf of David Petts (Durham University) with the financial support of National Geographic. This resurveyed some areas covered by the Leicester project, as well as taking in large areas to the north and west of the village. This produced evidence for a second cloister at the Priory, probably an infirmary cloister. It also produced a series of features of uncertain date to the east of the Priory church. To the north of the village, little was found, beyond evidence for medieval agriculture and a small, ditched enclosure of unknown date. To the west of the village, western extensions of both Marygate and Priors Lane were identified as well as a network of small paddocks or enclosures and an area of potential industrial activity of uncertain type or date (Petts 2013).

2.3 2016 fieldwork

- 2.3.1 Three evaluation trenches were excavated by DigVentures over the course of the 2016 field season, each located to investigate possible features identified from the geophysical survey. In addition to this a programme of remote sensing was undertaken, including a low-level aerial survey of the site. A full report on the results of this work was made by Wilkins *et al.* in 2016.
- 2.3.2 Trenches 1 and 2 were located to explore the possible remains of the Anglo-Saxon monastic complex to the east and southeast of the medieval priory church in Sanctuary Close. Results suggested that the area may have originally formed part of an early Christian burial ground which was later abandoned, disturbed and cleared to make way for a later phase of construction. Disarticulated human remains, stone demolition rubble and broken funerary objects, as well as sporadic quartz pebble fragments and the extremely rare find of a broken 'name-stone' burial marker, were recovered within deposits sealing in-situ burials. The burials had been disturbed and cleared to make way for later structures, although fragments of human bone were large and seem not to have been displaced too far from their original burial placement. Radiocarbon dates from three samples of human bone indicate that the cemetery was in use between the late-8th to late-10th century AD. Structural remains were recorded in both trenches and found to be medieval in date, indicated by the recovery of an 8th century AD Anglo Saxon coin during excavation of a floor surface.
- 2.3.3 Excavation in Trench 3 revealed extensive evidence for medieval occupation of 13th century AD date and later, which appears to confirm that Prior's Lane had not only existed at this time, but continued into this area and that on the south side it had been flanked by medieval domestic activity. An important aspect of the artefactual and faunal assemblage recovered was the presence of a range of material relating to the maritime economy of the village. The recovered assemblage contained significant quantities of fishbone, iron fish-hooks and clench nails. Whilst Trench 3 did produce a potentially earlier object (bone comb), the bulk of artefactual evidence suggests that the features were 12th century or later.

2.4 2017 fieldwork

- 2.4.1 The 2017 excavations on Holy Island focused entirely on Sanctuary Close, following on from fieldwork undertaken the previous year. Trench 2 was reopened and extended to the west to further investigate the early medieval cemetery and identify structural remains relating to monastic buildings. Trench 2 was divided into a western half and eastern half with a 2m wide baulk retained between the excavation areas due the presence of an electric cable. Trench 4 was opened to evaluate the results of geophysical survey and characterise buried archaeological remains believed to be related to an infirmary cloister. An assessment report on the results of this fieldwork has previously been published (Casswell et al. 2018).
- 2.4.2 In Trench 2 (West) structural remains were identified that were thought likely to be related to the early Medieval monastic complex. In the northwest corner of the trench features that were uncovered that were provisionally likened to posthole and plank-in-gully construction techniques observed at excavations in Hartlepool dating from the 7th and 8th century AD.
- 2.4.3 In Trench 2 (East) large upstanding sections of wall were identified that were much more substantial than the structural remains identified in the eastern half of the trench. The upstanding section of wall were provisionally thought to be from a later phase of construction, possibly contemporary with a series of burials recovered in the vicinity. The burials in the eastern half of the trench indicate the use of the area as a cemetery from the early-8th century AD. Two inhumation graves were uncovered, with many more disarticulated remains recorded from overlying layers. The graves were typical of traditional Christian burials – with their heads at the west end of the grave and lying in an extended supine position – and their alignment and position respecting that of the stone wall next to them.
- 2.4.4 In Trench 4 excavation confirmed the presence of substantial stone walls first identified from the geophysical survey as a low resistance anomaly. The remains likely belonged to an infirmary cloister associated with the Benedictine Priory, many parts of which are still standing to the west of the trench, and thus post-date the early Medieval complex.

2.5 2018 and 2019 fieldwork

- 2.5.1 In the 2018 and 2019 fieldwork seasons Trench 2 (West/East) was reopened to further investigate the early Christian burial ground and establish a better understanding of the early medieval features and structural remains. Trench 4 was reopened to further investigate the eastern wall of the suspected infirmary cloister and any interior features.
- 2.5.2 In the northwest of the Trench 2 (West) the earliest archaeological remains observed were a series of well-stratified layers truncated by, and exposed in, the partially excavated southern edge of large circular feature. The layers were ashy and charcoal-rich, possibly reflecting high temperature burning events from industrial activity. The large circular feature was partially excavated and projected to have a diameter of up to 8m. It was initially interpreted as having been deliberately backfilled and possibly the remains of a robbed kiln or furnace. There were two later burials cut into the large circular feature. A refuse pit containing numerous marine mollusc shells and infilled with large stones was found in the northeast of the trench. Five inhumation graves were partially exposed along the eastern baulk of the trench.
- 2.5.3 Eight graves were identified and excavated, comprising seven adults, one child, and a foetal, per- or neo-natal skeleton in Trench 2 (East). Large flat capstones, probably associated with an additional burial, were left in situ, for excavation in the following years. Graveyard soils either side of the remains of a robust wall, first identified and partially exposed in 2017, were excavated exposing the base of the wall, which seemingly overlaid an earlier graveyard soil. The potential remains of a further wall

were exposed in the southeast corner of the trench. Of particular significance was the discovery of a rare, glass 'tafl' gaming piece, likely dating from AD700-900.

- 2.5.4 The latest features excavated in 2019 were recorded in Trench 4, which investigated a possible second cloister at the Priory, probably an infirmary cloister. A large wall as recorded extending across the length of the Trench 4. Excavations on the either side of the wall uncovered layers of pebbles and cobbles, clay and rubble, overlaid by topsoil.

3 PROJECT AIMS AND OBJECTIVES

3.1 Background

- 3.1.1 The principle purpose of the research was first defined in the Project Design (Wilkins and Petts 2016) and was articulated as five overarching aims. These were to define and characterise the physical extent of the site through a programme of non-intrusive (Aim 1) and intrusive excavation (Aim 2), obtaining baseline data that would facilitate the future management of the site (Aims 3 and 4), and expand community engagement and participation (Aim 5) (Casswell et al. 2018).

3.2 Aims

- 3.2.1 The following aims and questions are based on those outlined in the initial Project Design (Wilkins and Petts 2016) and refined following excavation in successive Updated Project Designs (Casswell et al. 2017-2020).

- 3.2.2 Aim 1 – Define and establish the precise physical extent and condition of the Site with a programme of remote sensing and metric survey

- Q1: Can the layout of the site and associated sub-surface archaeology be established by remote survey?

- 3.2.3 Aim 2 – Characterise the results of non-invasive survey, refining the chronology and phasing of the site with a programme of trenching

- Q2: What can we say about the scale and nature of any structural remains?
- Q3: Can we corroborate chronological phasing for the site, including the presence of earlier and later features and structures, as defined in Aim 1?

- 3.2.4 Aim 3 – Understand the site's archaeological and palaeoenvironmental conditions

- Q4: What is the current state of the archaeological and palaeoenvironmental material across the site?
- Q5: Can the palaeoenvironmental data recovered from sampling in the trenches inform us about farming, food processing, industrial or medical activities?
- Q6: Can we increase our understanding of the local environment in the medieval period?
- Q7: How well do the deposits survive, and how deeply are they buried?

- 3.2.5 Aim 4 – Making recommendations, analysis and publication

- Q8: In light of the evidence recovered from this and previous work, can we articulate a link between the multi-phased use of the site and its different areas?

- Q9: Formulate recommendations for further archaeological and palaeoenvironmental analysis at Lindisfarne based on Aims 1-3 and implement a programme to publish and disseminate the results.

3.2.6 Aim 5 – Creating opportunities for people and communities

3.2.7 Public engagement is central to the Holy Island Archaeology Project, from the initial project set up through to dissemination and beyond. The project offers a range of opportunities for local community members, school children and visitors to the area to get involved and learn more about the archaeology of Lindisfarne. Working closely with the wider project team and the Durham University, participation opportunities will include excavation, finds processing, photogrammetry and social media.

3.2.8 Volunteers will be invited to join the excavations and will be trained in archaeological skills, co-producing the archaeological archive using DigVentures unique Digital Dig Team software. Results will be recorded directly onto the project microsite, providing live updates of both technical data and social media.

4 METHODOLOGY

4.1 Project model

4.1.1 The archaeological fieldwork was carried out in accordance with the methodology defined in the initial Project Design (Wilkins and Petts 2016) and refined in the latest Updated Project Design (Casswell et al. 2020). All work was undertaken in conjunction with best practice, national guidelines, and published standards, including ClfA Standards and guidance (ClfA 2014). A summary of methodologies is presented below, following detailed descriptions in the Project Design linking specific techniques to aims and objectives.

4.2 Excavation

4.2.1 Excavations took place between 3rd – 21st September 2020, designed to address the research questions associated with Aims 1 and 2 (see above Section 3.2).

4.2.2 Trench 2 from the 2019 excavations was reopened in 2020. At the beginning of each field season a spoil and terram membrane placed to protect the archaeological deposits between field seasons was removed. A 2m wide baulk was retained across the excavated area due to the presence of an electric cable identified on the geophysical survey. The cable divided the trench into western and eastern halves. For clarity, this report will indicate trench location in parentheses, e.g. Trench 2 (West) and Trench 2 (East). The purpose of reopening the trench was to further investigate the early Christian burial ground and establish a better understanding of the early medieval features and structural remains.

4.2.3 All trenches were located using a GPS prior to the commencement of work, and each area scanned for finds with a metal detector prior to, and during, excavation. All trenches were de-turfed by hand and machine excavation was carried out in Trench 2 using a JCB 3CX fitted with a toothless ditching bucket, removing the overburden to the top of the first recognisable archaeological horizon, under the constant supervision of an experienced archaeologist.

4.2.4 Trenches were subsequently hand-cleaned, planned, and photographed prior to hand- excavation. Any archaeological features and deposits exposed in the trenches were hand-cleaned and excavated to determine their nature, character, and date. Carefully chosen cross-sections were then excavated

through features to enable sufficient information about form, development, date, and stratigraphic relationships to be recorded. Excavated features were dry sieved for artefacts using a 10mm gauge.

- 4.2.5 A complete drawn record of the trenches comprises plans and sections drawn to appropriate scales and annotated with coordinates and AOD heights. A single context recording system was used to record the deposits and a full list of all records is presented in Appendix A. Layers and fills are recorded '(2001)'. The cut of the feature is shown '[2001]'. Each number has been attributed to a specific trench with the primary number(s) relating to specific trenches (i.e. Trench 2, 2001+, Trench 4, 4001+). Features were also specified in a similar manner, pre-fixed with the letter 'F' (i.e. Trench 2, F201+, Trench 4, F401+).
- 4.2.6 All interventions were surveyed using a GPS tied into the Ordnance Survey grid. All recording was undertaken using the DigVentures Digital Dig Team recording system. Digital Dig Team is DigVentures' bespoke, cloud-based, open data recording platform, designed to enable researchers and community participants to publish data directly from the field using any web-enabled device (such as a smartphone or tablet) into a live relational database.
- 4.2.7 Once recorded, the born-digital archive is instantly accessible via open-access on a dedicated website and published to social profiles of all project participants (community, professional and specialist). Links to all individual trench, feature and context records are provided in Appendix A, from where all associated finds, samples, plans, sections, photographic records and 3D models can also be explored.

4.3 Geoarchaeology

- 4.3.1 A geoarchaeological survey was conducted on pasture at the centre of Holy Island (Figure 1) using a combination of electrical resistivity tomography (ERT) and coring to develop a deposit model and identify medieval soils. A 144m long transect was drawn based on topographic variability and the British Geological Survey's model of superficial deposits.
- 4.3.2 The coring strategy was developed based on the ERT results. A soil/sediment core from a location without any anomalies (Core 1, at electrode position 28) was retrieved and compared to a sequence from the area with the lowest resistivity values (Cores 2 and 3, near electrode position 100). Two additional cores (4 and 5, also near electrode 100) were extracted in opaque black liners to allow for OSL dating. In the former lagoon east of the priory, a sediment core of 2m length was taken to obtain material for dating and characterising the transition from an intertidal to a terrestrial environment.

4.4 Human remains

- 4.4.1 The articulated and disarticulated remains were assessed following Historic England guidelines (Historic England 2018). The condition and preservation of the articulated skeletons was noted. The condition of the bone surfaces were assessed following McKinley (2004): scores of 0 or 1 indicated excellent to very good condition with preservation of fine surface detail, scores of 2 or 3 indicated good to moderate condition with some loss of surface detail, while scores of 4, 5 or 5+ indicated poor through to extremely poor preservation with considerable loss of surface detail and modification of the bone profile. A subjective assessment of the amount of fragmentation was made, from minimal (most bones intact) to extreme (most bones in small fragments), and the completeness of the skeletons was expressed as broad percentage groups.
- 4.4.2 The general age category of each skeleton was recorded – i.e. adult (over 18 years) or non-adult (under 18 years) – and the potential to obtain information during further analysis on more specific age, sex and stature was assessed. The potential to estimate age and sex was based on the presence and condition of relevant parts of the skeleton (e.g. pelvis and skull in adults), and the potential to estimate

stature was based on the presence of intact long bones combined with the likelihood of a possible sex estimation. The presence of obvious pathological conditions that would require more detailed analysis was noted, but it is highly likely that more subtle pathological conditions were present that would not be detected during initial assessment.

- 4.4.3 For the disarticulated remains, a rough count was made of the number of fragments present, and an assessment was made of their general surface preservation and amount of fragmentation.

4.5 Animal bone

- 4.5.1 All animal remains were identified to element, side and to as low a taxonomic level as possible using the specialist's reference collection and published and online identification guides (BoneID; Hillson 2003; 2005). Quantification for mammal bones used the diagnostic zone method as presented by Dobney and Rielly (1988). Sheep (*Ovis* sp.) and goat (*Capra* sp.) or equid (*Equus* sp. horse/donkey/mule) distinctions were not considered. Bird remains were identified and quantified using the diagnostic zone method as presented by Cohen and Serjeantson (1996). Identification of fish remains was made using widely available identification guides (Archaeological Fish Resource; Camphuysen and Henderson 2017; Nabone Fish; Osteobase; Wheeler and Jones 1989), and quantification used the diagnostic zone method as presented by Barrett (2001) and Harland et al. (2003). Remains of cod family fish were allocated to size categories as described by Cerón-Carrasco (2004). The molluscs remains were identified using online identification guides (Hayward and Ryland 1995), with quantification made using a diagnostic zone method.

- 4.5.2 A taphonomic assessment of each fragment was undertaken, recording the presence and absence of cut and chop marks, burning and calcination, any evidence for animal activity (canid or rodent gnawing), pathology, and surface preservation; any other surface modifications of note were also recorded. Fragments of bones that could be identified to element but not any specific species were grouped as far as possible using size and class or order categories. At this stage, no attempt was made to sex any of the remains, or to measure any elements.

4.6 CBM

- 4.6.1 Material was recorded by context with fabrics recorded by a type series, and forms recorded where possible. Metrics recorded were number of fragments (No.), weight in grams (Wt.) and number of corners (Cnr.). Complete dimensions of length, width and thickness were also recorded in mm.

4.7 Archaeometallurgy

- 4.7.1 The slags were visually examined with classification based solely on morphology, supported by some qualitative Hand-Held X-Ray Fluorescence Analysis. The assemblage was divided into the following three groups with subdivisions (after McDonnell 2001):

- Diagnostic ferrous slags and residues
 - Smithing Slag - randomly shaped pieces of iron silicate slag generated by the smithing process. In general slag is described as smithing slag unless there is good evidence to indicate that it derived from the smelting process.
 - Iron Ore – iron ore, it may not be associated with iron production but could be used e.g. as a pigment.
 - Iron metal – fragments of iron metal, lacking diagnostic form.
- Diagnostic non-ferrous residues
 - Non-Ferrous Metal – fragments of non-ferrous alloys, e.g. spill and droplets.
- Non-diagnostic slags and residues

- Yellow/Grey 'Slag' - a heat affected yellow/grey slag like material. Some surfaces are smooth, others display vesicles, the material appears quite dense.
- Green Glazed Slag - similar to the yellow/grey slag but with smooth green tinged surfaces.
- Clinker - high silica content smithing slag probably generated in a post-medieval coal fired hearths, including e.g. a fire-box.
- Black Vitrified Stone / Glazed Pebble – stone with a black vitrified surface or pebble with a glaze.

4.8 Environmental

- 4.8.1 Subsamples were processed using standard water flotation methods, leaving the flot and heavy residue to be assessed. The flot (the sum of the material from each sample that floats) was sieved to 0.5mm and air dried and the heavy residue (the material which does not float) was not examined. The results presented are based entirely on the material from the flot, which was examined under a low-power binocular microscope at magnifications between x12 and x40.
- 4.8.2 A four point semi quantitative scale was used, from '1' – one or a few specimens (less than an estimated six per kg of raw sediment) to '4' – abundant remains (many specimens per kg or a major component of the matrix). Identification was carried out using published keys (Jacomet 2006, Biejerinkc 1976, Jones – unpublished and Zohary & Hopf 2000), online resources (<http://www.plantatlas.eu/za.php>), and the specialists own reference collection. Taxonomy and nomenclature follow Stace (1997).
- 4.8.3 The flot was then sieved into convenient fractions (4, 2, 1 and 0.3mm) for sorting and identification of charcoal fragments, with identifiable material was only present within the 4 and 2mm fractions. A random selection of ideally 100 fragments of charcoal of varying sizes was made, which were then identified; where samples did not contain 100 identifiable fragments, all fragments were studied and recorded. Identification was made using the wood identification guides of Schweingruber (1978) and Hather (2000). Taxa identified only to genus could not be identified more closely due to a lack of defining characteristics in charcoal material.

4.9 Health and safety

- 4.9.1 All work was carried out in accordance with its company Health and Safety Policy, to standards defined in The Health and Safety at Work etc. Act 1974, and The Management of Health and Safety Regulations 1999, and in accordance with the SCAUM (Standing Conference of Archaeological Unit Managers) health and safety manual Health and Safety in Field Archaeology (1996), and DigVentures Health and Safety Policy.

5 EXCAVATION RESULTS

Chris Casswell and Nat Jackson

All digital context and feature records have been archived on the Digital Dig Team system and can be reviewed at <https://digventures.com/lindisfarne/ddt/browser.php> and by clicking on the links in green in the text.

5.1 Introduction

- 5.1.1 During the 2020 field season, Trench 2 was re-investigated in Sanctuary Close. The principle purpose of this excavation was to help define and establish the precise physical extent and condition of archaeological remains (Aim 1), characterise the results of non-invasive survey, refining the chronology

and phasing (Aim 2), and to understand the palaeoenvironmental conditions of the site (Aim 3), as part of the multi-phased Lindisfarne research project on Holy Island.

5.1.2 These results reflect the continued excavation of Trench 2 and represents a continuous programme of investigation. The trench is described in text with the relevant half of the trench is indicated in parentheses, e.g. Trench 2 (West) and Trench 2 (East).

5.1.3 Figure 1 shows the overall location of each targeted area, Figure 2 the illustrated excavation results from Trench 2 (West) and Figure 3 the illustrated excavations results from Trench 2 (East). Detailed descriptions of every context are included in Appendix A, organised by trench number.

5.2 Trench 2 West

5.2.1 In 2020, Trench 2 (West) was re-opened in its entirety from where the excavations in 2019 left off. The trench was reopened to define the limits of the cemetery across the entire area, and further investigate the potential metalworking area identified in the northwest corner.

5.2.2 The earliest feature encountered was in the northwest extension and comprised a row of stones running north to south initially recorded in 2017 and interpreted as a wall F213. A possible construction slot F239 for a wattle/timber wall was located at the southern end of the stone wall, measuring 1.32m long, 0.50m wide and 0.12m deep. The feature was uneven, shallow and while it is conceivable that this may be a small, elongated pit or very short shallow gully, a series of three postholes F240, F241 and F242 were seen also in the base. The three post holes were all similar in nature but of differing depth. They appeared to either be cut into the base of feature F239 or cut by the feature, indicating that the overlying feature was either contemporary with the postholes, or later. The slot terminated to the west at a large flat stone which may be a threshold to the building. Hammerscale was recovered from one of the postholes and the overlying feature – indicating that there had been blacksmithing in the close vicinity – and rich (predominantly oak) charcoal assemblages were found in all sampled contexts. These features and the post holes seen in the base were perpendicular to the wall F213 and they appear to be related; however, further investigation will enable greater clarity in interpretation.

5.2.3 To the north was a pit F206 initially found in 2017, the edges of which became clear through repeated cleaning in 2020. Its function is unknown but, considering the nature of evidence in this area, is currently being interpreted as an anvil pit associated with metalworking or blacksmithing activity at this site. The upper fill comprised heat-affected lime, while the lower fill contained evidence of burning. To the west was a smaller, circular pit F238. A quarter-section was excavated to recover samples to characterise its function and significance, enabling a suitable excavation strategy to be developed and implemented in the 2021 fieldwork season. The fills were identified as containing the remains of industrial fuel, predominantly charcoal from oak trees, and both hammerscale and silica-rich smithing slag were recovered. This feature may possibly have been a smithy pit and warrants closer investigation in the future. Within this fill there was a concentrated patch of burnt material or wood 100% sampled and given a separate context number (2229). This material has been dated to between the 8th and 10th centuries AD. It is possible that F206 is of a similar date, and all may be associated with the wall F213, beam slot F239 and post holes F240, F241 and F242.

5.2.4 All the previously discussed remains were investigated following the removal of the overlying layer (2134) that extended across the south east of the north west corner. A relatively large quantity of redeposited, mixed slags and charcoals were recorded, along with a large collection of marine molluscs and animal remains. Several small finds were found through metal-detecting prior to excavation, including a copper alloy finger ring SF186 and an early medieval styca SF183 depicting

Æthelred II and dating to 844-8 AD. The nature of the finds and their depositional context indicates the ground had been heavily disturbed in this location following earlier, industrial activity.

- 5.2.5 To the north of these remains, a large circular feature F217 – identified and briefly investigated at the end of the 2019 fieldwork season, and defined by a burnt clay lining – was further investigated to define its full extent and the nature of the deposits within. Owing to its large size, a quadrant was excavated on the southern side aligned down the centre of a C-shaped arrangement of large stones F294 on its western edge. This masonry was provisionally interpreted as a flue of stokehole for a large kiln or oven however radiocarbon dates from associated samples (see below) indicate the feature is likely to be a much later feature and perhaps more likely to be linked to the construction of the Norman priory.
- 5.2.6 Following removal of the upper deposit filling the feature, a stone wall F248 was observed from east to west with a slight turn north at its western end. This wall had been constructed on the base of the feature and curve and was aligned with the stone structure found on the western side. Additionally, a stone rubble deposit was found at its base indicating that at the western end the wall had suffered collapse prior to the backfilling of the feature. There were two deposits backfilling the feature: an upper deposit (2165) comprising degraded pink sandstone fragments in silty clay matrix, overlying a clayey silt (2167) that had built up around towards the base of the feature surrounding a collection of scattered large stones (2297). The edges of the cut of the large circular feature had been extensively burnt and a series of samples were taken for archaeomagnetic dating.
- 5.2.7 Smithing slag, slagged lining and other metalworking residues were recovered from the excavated section, along with disarticulated animal and human bone and fragments of burnt clay. The mixed rubble fills together with the composition of the finds assemblage indicates they represent a rapid backfilling event. Following the backfill of this feature, three later graves F219, F220 and F249 had been cut into it. Burial F220 has been dated to between the 11th and 13th centuries (cal AD 1048 – 1273 at 95% confidence, see Appendix H), so it can be presumed that feature F217 was out of use by this time. Material from the base of the feature (2268) has been dated to between the 11th and 12th centuries (calAD 1035 – 1174 at 95% confidence, Appendix H), reinforcing the idea of rapid backfilling of a potentially short-lived feature. Two of these burials were excavated in the 2018 and 2019 fieldwork seasons and found towards the southern edge of the feature, while another east to west aligned fully articulated grave was investigated in 2020 further to the north.
- 5.2.8 To the south, Trench 2 (West) was characterised extensively by early Christian burial. Evidence for 15 grave cuts was found in this area, the majority of which identified by their grave cut or the presence of a skull. Of these, four fully articulated skeletons F233, F237, F236 and F237 were excavated and recovered for assessment. They comprised two adult inhumations, one juvenile and one neonatal burial, and were all east to west aligned and in a supine position. Burial F236 has been dated to the 11th to 13th centuries (calAD 1045 – 1265 at 95% confidence, Appendix H). Given the similarity in all these burials, it seems reasonable to assume that they are of a similar Norman/Angevin date. Identification of these graves was only possible because of the continued cleaning of the area and reduction in the level of the deposits found below the previously identified furrow. The earliest layer identified (2168) was below the furrow and was a clean compact orange clay layer with up to six possible grave cuts were visible cut into it. Overlying this layer was another interpreted as a later graveyard deposit (2164) with multiple burials cut into it. From earliest layer a small assemblage of finds was recovered, including an early medieval coin SF202 of Eanred dating to 810-40/1AD, a number of disarticulated a human bone, animal bone and fragments of lead. The later deposit produced a similar finds assemblage, including four coins SF181, SF185, SF194 and SF195. Two of these coins date to the rule of Æthelred II (844-8AD) and two to that of Eanred (810-40/1AD). Although

the layers from which these finds were made represents graveyard activity, their discovery does strongly suggest this was likely the period when a significant number of burials were made in this area.

5.3 Trench 2 East

- 5.3.1 Excavation in Trench 2 (East) continued where the 2019 excavation had concluded and focussed on removal of all deposits and features post-dating the area's use as a graveyard. In total, three articulated skeletons F225, F228 and F229 were selected and recovered for assessment, leaving approximately a potential further 30 unexcavated graves in the area. The number of unexcavated burials remains an approximation at this stage and is based on the identification of number of skulls observed in the base of the trench at the end of the 2020 fieldwork.
- 5.3.2 The three excavated human remains were less complete than those recovered from the west side of the trench and represent adult skeletons. Two displayed evidence for dental disease, all three had common pathological conditions of the spine, and at least one displayed joint disease. Whilst these burials have not been radiocarbon dated, dates of between the 10th and 13th centuries have been obtained from skeletal material recovered in previous seasons which relate to this group (see Caswell et al 2020).
- 5.3.3 Prior to the excavation of the burials, the area had been extensively cleaned of all overlying deposits (2166), which produced a large disarticulated human bone assemblage (749 fragments, representing over 85% of the overall assemblage). This mixed graveyard soil is believed to be broadly comparable and stratigraphically similar to some of the earlier deposits found on the western side of the trench, notably contexts (2164) and (2168).
- 5.3.4 The largest and earliest feature excavated in Trench 2 (East) was the substantial wall F211, first recorded in 2017. No construction cut was found, likely lost because of bioturbation caused by the active graveyard soil deposits surrounding it. No finds have been recovered with can be associated with the wall itself, although an area of burning immediately the west F235 postdates its construction. Hand collected charcoal samples were taken to enable scientific dating, which has returned a date of calAD 436 – 596 (at 95% confidence, see Appendix H). This makes wall F211 a pre-monastic feature, likely to relate to a much earlier and previously unrecorded phase of occupation at the site.
- 5.3.5 In the southwest corner of the area a rectangular arrangement of roughly worked stones F293 were found; they may represent the disturbed corner of a building or, perhaps more likely, the stone lining of at least one grave.

6 GEOARCHAEOLOGY RESULTS

Raphael Kahlenberg

6.1 Introduction

- 6.1.1 In addition to the excavation of the trenches near the priory, a geoarchaeological survey was conducted at two locations on Holy Island (Figure 1). The aim was to study landscape evolution, assess the preservation of medieval soils and make recommendations towards an efficient methodology for further environmental research (Aims 6, 7 and 9).

6.2 Electrical Resistivity Tomography

- 6.2.1 In the centre of the Island, Electrical Resistivity Tomography (ERT) results showed high variability in resistivity values within the uppermost 2 m of the sequence. Although the plot's resolution was not sufficient to characterise individual deposits, it was possible to identify an area with relatively low average values (70-80 Ωm) near the lowermost stretch of the transect (surface at 4 m a.s.l.). Near-surface average resistivity values increased towards the field boundaries. However, the highest values (>160 Ωm) have been measured in two well-defined features on the slope in the middle of the transect.

6.3 Coring

- 6.3.1 In Core 1, glacial till was reached at 0.45m below the current ground level, covered by sandy ploughsoil. The same soil appeared in the combined sequence from Cores 2 and 3, however 0.4m of wind-blown sand, a buried A-horizon, dark peaty soil and sand of alluvial or marine origin were also found. Below that, glacial till was encountered at a depth of approximately 1.50m. Cores 4 and 5 are expected to contain the same complex sequence. Data of the core from the former lagoon is not available at the time of writing this, as the analysis is disrupted by the impacts of the Covid-19 pandemic.

7 ARTEFACTS AND ECOFACTS

Andrew Sage (daub and pottery), Anwen Caffell (human remains), Hannah Russ (animal bone), Phil Mills (CBM), Gerry McDonnell (archaeometallurgy), David Petts (small finds), John Naylor (coins) and Ellen Simmons (environmental).

All digital finds records have been archived on the Digital Dig Team system and can be reviewed at <https://digventures.com/lindisfarne/ddt/browser.php> and by clicking on the links in green in the text.

7.1 Human remains

Anwen Caffell

- 7.1.1 The total number of articulated skeletons excavated and lifted from Trench 2 East was three (Appendix B). An additional 29 grave cuts and/or articulated remains were uncovered during excavation but were not lifted, and these do not form part of the current assessment.
- 7.1.2 Skeleton 2105 was least complete (25-50%), consisting of a partial torso, partial arms and upper legs. Skeleton 2112 was 50-75% complete, with the lower legs and possibly the whole right leg truncated. A reasonable quantity of disarticulated bone was recovered with this individual, and whether any of this belongs to Skeleton 2112 should be examined during full analysis. Although Skeleton 2107 was over 75% complete, part of the feet had been truncated. Two of the skeletons had only slight fragmentation of the bones (Skeletons 2107 and 2112) while Skeleton 2105 had suffered moderate fragmentation. Surface preservation was rather variable, ranging from 1 (very good) to 4 (poor), but the majority of bones from all three skeletons were well to moderately well preserved.
- 7.1.3 All three skeletons were adults, and more refined age estimates and sex estimates would be possible as relevant parts of all three skeletons were preserved. Stature estimates ought to be possible for two individuals (Skeletons 2107 and 2112), but the lack of intact long bones for Skeleton 2105 would prevent calculation of stature for that individual. Both the individuals with dentitions present (Skeleton 2107 and 2112) had evidence for dental disease, and all three had joints preserved which would allow examination of the prevalence of joint disease. Indeed, some joint disease was apparent in Skeleton

2105, and all three individuals had common pathological conditions of the spine. Note that the assessment will not have identified any more subtle lesions that are likely to be present.

- 7.1.4 Two disarticulated adult crania (labelled Skull 1 and Skull 2) were recovered from context 2166, interpreted as graveyard soil. Skull 1 appeared to be reasonably complete but was severely fragmented, while Skull 2 was fairly intact. Both represented less than 25% of a complete skeleton, and both had good/moderate to poor preservation of the bone surfaces meaning some loss of surface detail had occurred. It may be possible to provide more refined age estimates, but this would be based on dental wear alone, which can be influenced by diet. Sex estimates are likely to be possible for both, as relevant parts of the cranium were preserved. The presence/absence of non-metric traits could be observed for both crania, while some metrical analysis may be possible for the more intact Skull 2. As dentition was present with both crania it would be possible to record evidence for dental disease. During assessment it was unclear whether some lesions on Skull 2 were pathological or due to post-mortem damage and these would warrant more detailed examination during full analysis.
- 7.1.5 Around 877 fragments of disarticulated human bone were recovered from three contexts: the topsoil/backfill (2001), one of the articulated skeletons (Skeleton 2112), and the general graveyard soil (2166). By far the majority of the disarticulated bone (749 fragments, 85.4%) came from the graveyard soil (2166), with most of the rest present in the topsoil (126 fragments, 14.4%). Surface condition did vary, from very good to excellent (Grades 0-1) through to poor or very poor preservation of surface detail (Grades 4-5), but most bone was somewhere in the middle of the range at Grades 2-3 (good to moderate). The amount of fragmentation also varied, from minimal to extreme. It was the smaller elements that tended to be largely intact, while larger bones were more likely to be broken. Generally, bone from all parts of the skeleton were observed, and there was evidence for the presence of adults and non-adults (including neonates/infants). One set of bone from context 2166 likely contained the remains of one foot. A couple of possible pathological lesions were observed on some of the neonate bones in context 2166.
- 7.1.6 The total number of articulated skeletons excavated and lifted from Trench 2 West was five (Appendix B). An additional 15 grave cuts and articulated remains were uncovered during excavation but were not lifted, and these do not form part of the current assessment.
- 7.1.7 Five articulated skeletons were recovered from Trench 2 West: Skeletons 2130, 2182, 2187, 2228 and 2285. Four of these individuals appeared to have been recovered from largely undisturbed graves and were over 75% complete, while Skeleton 2228 was only 25-50% complete. The latter consisted of a partial skull, partial torso and parts of the left leg and arm, comingled with animal bone. Four of the skeletons were moderately fragmented, while skeleton 2285 was only slightly fragmented. Surface preservation was generally good to very good, but in Skeleton 2228 it was good to moderate meaning surface detail in this individual tended to be less well preserved.
- 7.1.8 Three of the five skeletons were adults (Skeletons 2130, 2182, and 2285), while Skeleton 2187 was a younger juvenile and Skeleton 2228 was probably a neonate. More refined age estimates would be possible for all five individuals. The three adults had necessary parts of the pelvis, ribs and dentition preserved, while the age estimate for Skeleton 2187 could be based on dental development and eruption, long bone lengths and skeletal development. In Skeleton 2228, the age estimate would be based on dental and skeletal development, as the lack of intact long bones would preclude measurement and the individual was too young for dental eruption to be relevant. Sex estimates would be possible for the three adults as all had skull and pelvis preserved, but the two non-adults were too young for macroscopic sex estimation. All three adults had intact long bones, indicating stature estimates should also be possible.

- 7.1.9 In terms of pathology, the three adults all had evidence for dental disease and the younger juvenile had a potential dental developmental anomaly. The three adults also all had evidence for joint disease. Evidence for other pathological conditions was also observed, including a common developmental anomaly of the spine (Skeleton 2182), metabolic disease (Skeleton 2130), and inflammation (Skeletons 2187 and 2285). Skeleton 2285 potentially had a lesion related to inflammation or trauma in their left ulna, which may require radiography during full analysis. Note that the assessment will not have identified any more subtle lesions that are likely to be present.
- 7.1.10 Three skeleton numbers had been assigned to non-articulated remains. These included Skeleton 2118 (skull), Skeleton 2172 (skull, left clavicle and scapula), and Skeleton 2189 (skull and left humerus). All three represented less than 25% of a complete skeleton, and in the case of Skeleton 2172 and Skeleton 2189 it is not certain whether the bones associated with the skulls were parts of those individuals or not. Preservation varied: Skull 2118 was moderately fragmented, but surface preservation was good to very good; Skull 2172 had slight to moderate fragmentation with good to moderate surface preservation; while Skull 2189 was only slightly fragmented but had moderate to poor surface preservation. All three derived from adult individuals, and sex estimates should be possible for all of them. Age estimates may also be possible, though based on dental wear alone. Standard non-metric traits could be recorded for all, and some measurements could be obtained from the more intact crania. The presence of dentitions with all three would allow recording of any dental disease. Skull 2189 was particularly interesting as it had evidence for a peri-mortem blade injury to the posterior cranium, and potentially a second peri-mortem injury to the superior cranium.
- 7.1.11 Nineteen contexts from Trench 2 West yielded 471 disarticulated human bone fragments (Table 1). The largest quantity of bone came from context 2164 (probable graveyard soil; 221 fragments, 46.9%), followed by context 2111 (a rubble layer; 65 fragments, 13.8%). Six of the contexts were associated with articulated skeletons – either the skeletons themselves or the grave fills – some of which were not fully excavated in 2020. As with the bone in Trench 2 East, the surface preservation of the bone in Trench 2 West ranged in preservation from excellent to poor, with most being in the good to moderate range, and the amount of fragmentation ranged from minimal to extreme, with most being moderately to severely fragmented. Both adult and non-adult remains were present, including neonate/infant bones, and all parts of the skeleton were represented. A small number of pathological or possibly pathological bones were observed.

7.2 Animal bone

Hannah Russ

- 7.2.1 The 2020 animal remains, including mammals, birds, fish and marine molluscs, were submitted for assessment from Trench 2. The assemblage comprised 1,678 fragments in total: 540 vertebrate and 1,138 mollusc remains (Appendix C).
- 7.2.2 The vertebrate remains recovered from Trench 2 in 2020 represent a diverse range of domestic and wild mammal, bird and fish taxa, Tables 1 and 2. Mammal remains included (in size order from large to small) whale (cetacean), equid (horse/donkey/mule – *Equus* sp.), domestic cattle (*Bos taurus*), possible red deer (recorded as cf. *Cervus elaphus*), domestic pig (*Sus domesticus*), grey and/or harbor seal (*Halichoerus grypus/Phoca vitulina*, recorded as Phocidae), sheep/goat (*Ovis aries/Capra hircus*), domestic cat (*Felis catus*) and rat (*Rattus* sp.), Table 1. Birds included domestic goose (*Anser anser domesticus*), mallard (*Anas platyrhynchos*), domestic fowl (*Gallus gallus domesticus*) and gull (Laridae), Table 2. Fish remains included salmon or trout (*Salmo* sp.) and cods (Gadiformes) including Atlantic

cod (*Gadus morhua*), Table 2. All three class groups included specimens that could only be identified to size-based clade (ungulate) or class (mammal/bird/fish) groups, specimens that could be identified at order level or lower formed 25.4% of the 2020 Trench 2 assemblage (count, n=137, Tables 1 and 2).

- 7.2.3 Marine mollusc remains (n=1138) included gastropods and bivalves; in taxonomic order, common limpet (*Patella vulgata*), common periwinkle (*Littorina littorea*), common or Mediterranean mussel (*Mytilus* sp.), European/edible oyster (*Ostrea edulis*) and common cockle (*Cerastoderma edule*), Table 3. Periwinkle and oyster remains were most common in the assemblage.
- 7.2.4 Bone surface preservation varied throughout the assemblage from 'excellent' to 'awful' (categories 1-5). Most of the specimens displayed 'good' or 'moderate' surface preservation (83.0% by count, n=448). Fragmentation was high throughout the assemblage with many partial bones and teeth recovered and some re-fitting fragments of single specimens.
- 7.2.5 Evidence for butchery in the form of fine cut marks and more substantial chop marks was recorded on ten specimens in the Trench 2 assemblage in 2020, Table 4. Trench-wide evidence for carcass processing was low.
- 7.2.6 Evidence for carnivore activity was observed on nine specimens, from four contexts: 2134, 2161, 2164 and 2179. No evidence for rodent gnawing was observed. Gnawing activity provides evidence for the presence of carnivores, likely domestic dogs and/or foxes at the site and that animal remains/carcasses were accessible to these animals at some point after their deposition.
- 7.2.7 No skeletal abnormalities possibly resulting from disease, injury or age were recorded. Only one burnt bone was recovered from Trench 2 in 2020, a precaudal vertebra from a small Gadiforme (cod order) fish. In total, 12 bones were suitably complete to allow measurement for size estimation. Measurable elements included cattle, sheep/goat and salmon/trout vertebrae.
- 7.2.8 Bone fusion data for estimation of age at death was recorded for one or both epiphyses of 79 specimens. One sheep/goat mandible and three loose teeth (all sheep/goat) were suitable for providing age at death data. No animal remains were suitable for identifying sex.
- 7.2.9 Shell surface preservation varied throughout the assemblage from 'excellent' to 'awful' (categories 1-5). Over half of the specimens had 'poor' or 'awful' surface preservation (57.3% by count, n=122). Fragmentation was high throughout the assemblage with many partial shells recovered and some re-fitting fragments of single specimens. Eight specimens of European oyster shell contained evidence for infestation by annelid worm(s) of the genus *Polydora*. These were recovered from contexts 2001, 2021 and 2039. No burnt and/or calcined shell was recovered from Trench 2. In total, 74 shells were suitably complete to allow measurement for size estimation. Measurable species included periwinkle, dog whelk, edible cockle and European flat oyster.

7.3 CBM

Phil Mills

- 7.3.1 The 2020 CBM assemblage submitted for analysis from Trench 2 comprised 74 fragments, weighing 1,347g (Appendix D). Of the material recovered, three separate fabrics were recorded:
 - D01 – a pale red fabric which is soft with a fine fracture. It has inclusion of occasional sand in a generally clean matrix. (NB coded as TZ01 in Mills 2020). This is a pale low fired fabric which may be mud brick, although it is somewhat harder than is normally the case for burnt clay.

- TZ11 – a red fabric with a pale red core, it is hard with a sandy feel and irregular fracture. It has inclusions of common, rounded quartz at c. 0.6mm and moderate black iron stone at c. 0.4mm.
- TZ21 – a red fabric which is hard with a sandy feel and irregular fracture. It has inclusions of moderate quartz at c. 0.4mm and moderate lime at c. 0.3mm.

7.3.2 Definite CBM was only recovered from topsoil deposits in Trench 2 East and West areas, comprising sandy fabric TZ11 and a tile fragment is calcareous fabric TZ21. Both these fabrics were noted in the 2019 material (Mills 2020). There was a silt stone fragment with mortar (2134); this could have been a roof tile, or part of a wall.

7.3.3 The majority of the material were fragments of burnt clay. There were a number of large lumps suggesting that these probably derived from mud bricks, as was suggested for the 2019 material (Mills 2020), although oven lining is also a possibility. All this material was from the West area, with the majority from F217 indicating that this was high temperature activity there. There was one fragment of burnt clay with mortar (2165) which may be a render on the external face of the structure.

7.4 Pottery

Andrew Sage

7.4.1 The 2020 pottery assemblages submitted for analysis from Trench 2 comprised five sherds, weighing 56g, and spanned the 13th to 17th century (Appendix D). Only small fragments of individual vessels were present with only a single identifiable form.

7.4.2 Four of the five sherds came from topsoil deposits (2001) This included two sherds of 13th to early 14th century Scottish White gritty wares (Tweed Valley types) and two sherds of post-medieval redwares. A single small sherd of 13th to early 14th century Scarborough Ware was recorded from Context 2161. The majority of sherds were very fragmentary.

7.5 Metalworking debris

Gerry McDonnell

7.5.1 The 2020 slag and production waste residues from Trench 2 submitted for assessment comprised 297 fragments, weighed 4,423g (Appendix E). The metalworking assemblage comprises a variety of slag types, which is consistent with previous years' results and shows that iron smithing and non-ferrous secondary metalworking were carried out in the vicinity of the site. There is also one example of possible iron smelting slag. The material was grouped into three broad categories: diagnostic ferrous slags and residues, diagnostic non-ferrous residues and non-diagnostic slags and residues.

7.5.2 The greatest quantity of material is slagged lining, which is dominated by a single piece of slagged red sandstone weighing 2.75kg and measuring 160mm x 140mm x 70mm recovered from a cobbled surface (2288). It is probable that this is a piece of building stone that had been subjected to very high temperatures, and has become 'naturally' vitrified/slagged due to the iron and silica content of the stone. The other fragments of slagged lining appear to be cinder (rather than slag) fused on to stone.

7.5.3 There were 77 fragments of smithing slag, weighing 620g, recovered from eight contexts; the mean weight was 8 grams, which is small suggesting that the pieces were fragmented from disturbance/re-deposition. There was only one reasonably sized deposit (2165) with 15 fragments weighing 224g. There were 199 fragments of cinder weighing 311g, recovered from ten contexts, again indicative of fragmentation/re-deposition. Thirty fragments of cinder (weighing 19g) and one fragment of smithing

slag (3g) were recovered from burials (2130 and 2182, respectively); although the smithing slag was noted as being next to the skull, indicative of disturbance of the slag rather than 'ritual' deposit.

- 7.5.4 There was a single piece of very liquated slag (2181) which was interpreted as tap smelting slag but is more likely to be overheated smithing slag. It is noted that that in the feature description charcoal flecking was noted as frequent and there was hammerscale recovered from the sieving programme (Table 3). A small amount of clinker was identified (189 g from two contexts), the largest piece weighed 102g (2270) and was very black and could have been generated in a coal fire.
- 7.5.5 There was only one substantial negative feature F239 which contains the piece of flowed/tap slag fragments of cinder, charcoal and hammerscale. Four contexts (Table 3) had a magnetic fraction from the sieving programme. All produced some hammerscale, but the fill of a pit (2181) and a posthole (2274) had significant amounts. They all contained flake hammerscale, but only the sample from Context 2274 contained a few examples of spheroidal hammerscale, indicative of fire welding.
- 7.5.6 There were two fragments of non-ferrous metal spills, one copper alloy and one possibly lead. One piece of smithing slag from Context 2165 appeared to have copper alloy staining adhering to it, and a piece of stone also the feature may have lead staining or adhering lead corrosion.

7.6 Special finds and metal objects

David Petts and John Naylor

- 7.6.1 All special finds were registered on the Digital Dig Team system, and further details including images of each object can be viewed at <http://www.digventures.com/lindisfarne/ddt/browser.php>.
- 7.6.2 In total, 37 registered special finds were recovered from Trench 2 during the 2020 excavation (SF179 – 216). This material includes seven beads, one buckle, six coins, four nails, one ring, four lead objects, three iron objects and a possible piece of worked animal bone (Appendix F). In addition to these 'special finds', a further five copper alloys objects, eight iron objects, one bead, eight fragments of lead and 52 quartz pebbles were collected.
- 7.6.3 The ferrous metal assemblage was modest, and many items although stabilised, require X-ray and conservation to assist identification. The only clearly identifiable items were nails. A group of six nails with surviving heads make it possible to allocate them to the classes identified at Monkwearmouth/Jarrow (Goodall 2006, 284-5). It is not possible to be more precise about their function beyond noting there was no obvious association with any burials and they are thus unlikely to be coffin nails. These all fit within a broad early medieval to medieval context. Both Class A (SF184) and Class B (SF1179, SF180, SF182 and two others) were identified.
- 7.6.4 The majority of the copper alloy finds assemblage was fragmentary or too small to identify. The only identifiable items includes a finger ring SF186 with a very simple design and no diagnostic decoration, but would sit comfortably in a broad, early medieval to medieval context. Similar broadly early medieval rings are known from Coppergate, York (Mainman and Rogers 2000, 2585, Fig. 1279).
- 7.6.5 Most lead fragments were small and not capable of identification, although fragments of lead sheet and clippings thereof, and lead drops are identifiable. The only items which are more identifiable comprise two strips of lead pierced with iron nails, and another pierced strip but with the nail/rivet missing. These are likely to be lead tingles for securing roof tiles; this group is unstratified but were probably associated with the late medieval priory, potentially to a post-Dissolution phase of dismantling. A larger item SF208 may be a fragment of sprue from casting a lead item.

- 7.6.6 A group of small stone balls had the appearance of being worked rather than natural SF213, SF214 and SF216. Small clay and stone balls have been found at Traprain Law, Broxmouth and other Iron Age forts in southeast Scotland (Close-Brooks 1983, 22; Cool 1982). Their function is uncertain.
- 7.6.7 There are a series of objects that may have been used as beads. A quartz pebble SF211 appeared to have a hole drilled or bored through it; with no indication that this piercing is natural, suggesting it may have been used as a bead or an amulet. Some fossil crinoids found at the site (known as St Cuthbert's Beads) have a natural hole, and could potentially have been worn as beads SF198, SF200 and SF210, although it is impossible to confirm.
- 7.6.8 A small fragment of orange material appears to be amber SF192. There is a noticeable lack of amber from Monkwearmouth, Jarrow or Portmahomack, although amber work is common in York, where it tends to be associated with Anglo-Scandinavian phases (Cramp 2006; Mainman and Rogers 2000, 2500-2519). Amber objects of a similar date are also known from Whithorn (Dumfries and Galloway) (Hill 1997). An alternative possibility is that this is a fragment of yellow/orange glass – examples of similar coloured glass beads are known from Coppergate, York (Mainman and Rogers 2000, 2521). The fragmentary 'crumbled' nature of the object does suggest amber resin over glass, but XRF analysis should confirm this identification.

7.7 Environmental

Ellen Simmons

- 7.7.1 Four bulk samples were taken during the excavation in 2020. They were processed and assessed for the recovery of charred plant remains and wood charcoal. One bulk sample from F233 was processed for the recovery of bone but also produced a small flot.
- 7.7.2 Sample 145 from fill 2181 of small pit or beam slot F239 produced a single charred barley grain (*Hordeum distichum/vulgare*) and a charred seed of dock (*Rumex* spp.)
- 7.7.3 Rich assemblages of wood charcoal were present in all the sampled contexts. Preliminary examination using low power microscopy indicates that the assemblages are composed primarily of a ring porous taxon morphologically similar to oak (cf. *Quercus* sp.), but also include some diffuse porous taxa (such as hazel/birch/alder, hawthorn/apple/pear/whitebeams, willow/poplar, cherry/blackthorn and field maple).
- 7.7.4 Sample 141 from fill 2130 of burial 233 produced one hundred >2mm³ wood charcoal fragments, consisting of probable oak (cf. *Quercus* sp.) along with diffuse porous taxa. Sample 144 from fill 2179 of possible smithy pit 238 produced a very rich assemblage of over five hundred >2mm³ wood charcoal fragments, primarily of probable oak (cf. *Quercus* sp.) but also including some diffuse porous taxa. Oak charcoal fragments with weak ring curvatures are present. Sample 143 from burnt layer 2229 within possible smithy pit 238 produced a rich assemblage of almost four hundred >2mm³ wood charcoal fragments, although only probable oak is apparently present. Charcoal fragments with weak ring curvatures are again present as well as charcoal fragments with closely spaced annual growth rings.
- 7.7.5 Sample 145 from fill 2181 of small pit or beam slot 239 produced a very rich assemblage of over five hundred >2mm³ wood charcoal fragments, once again primarily consisting of probable oak but also including some diffuse porous taxa. Oak charcoal fragments with weak ring curvatures and closely spaced annual growth rings are present.

- 7.7.6 Sample 151 from fill 2274 of post hole 242, which was found at the base of pit/beam slot 239, produced a smaller assemblage of just over seventy >2mm³ wood charcoal fragments, with a very similar composition to the charcoal assemblage in pit/beam slot 239, consisting primarily of probable oak along with some diffuse porous taxa. Oak charcoal fragments with weak ring curvature and closely spaced growth rings are present.
- 7.7.7 Preliminary examination of a series of hand collected charcoal fragments from various features, indicate that all are a ring porous taxon which is morphologically like oak (cf. *Quercus* sp.). A sample of eight >4mm³ probable oak fragments from upper fill 2165 of large circular feature 217 was found to have intermediate ring curvature and a sample of four >4mm³ probable oak charcoal fragments, also from fill 2165 of feature 217, was found to have weak ring curvature and closely spaced annual growth rings.
- 7.7.8 Very small assemblages of less than ten land snail shells (Mollusca) were found in sample 141 from fill 2130 of burial 233, sample 144 from fill 2179 of possible smithy pit 238 and sample 145 from fill 2181 of small pit or beam slot 239.

8 DISCUSSION AND CONCLUSIONS

8.1 Introduction

- 8.1.1 The 2020 season of excavation continued to explore the industrial activity previously identified, focusing on the northwest area of Trench 2 (West) where several stratigraphically early features were found to contain significant quantities of metalworking debris. In addition, eight graves were identified and excavated, increasing understanding of the extent and significance of burial deposits associated with the cemetery. Finds included a significant assemblage of metalworking residue and six early medieval coins, all dating to the early-mid 9th century AD under the reigns of either Æthelred II or Eanred.

8.2 Industry

- 8.2.1 In the northwest area of the trench, excavation focused on investigating the features tentatively interpreted the previous year as relating to metalworking owing to the presence of industrial residues. A section was excavated across the large circular feature revealing a burnt clay lining, a wall constructed on its base, and an unexcavated feature to the west provisionally interpreted as a flue or stokehole. Following its primary use, the area was rapidly backfilled and subsequently used as part of the medieval cemetery.
- 8.2.2 The presence of hammerscale in four contexts in this area is indicative of blacksmithing in the close vicinity, and the recovery of non-ferrous spills and copper-stained smithing slag indicates non-ferrous working was carried out, probably in the blacksmith's hearth. A small group of largely unidentifiable ceramic fragments recovered from this area seemed likely to have derived from an oven and is either mud brick or clay lining, a fragment of with mortar attached suggest that there may have been an external render on at least part of this structure.

8.3 Cemetery

- 8.3.1 The presence of a cemetery in Trench 2 was first noted in 2016 and has continued to be investigated in each subsequent year. Its extent is now known to cover both sides of Trench 2; however, slight variations in the nature of burial practices indicates several phases of use. Overall, the burials in Trench 2 (East) were more difficult to identify because of the extent to which graves had been intercut, whereas

in Trench 2 (West) grave-cuts were somewhat easier to identify in plan and there was less recutting of features.

- 8.3.2 The human remains excavated in 2020 add to the remains recovered in previous years, enhancing the potential information to be gained from full analysis. Notably the eight articulated skeletons bring the total number of articulated skeletons fully excavated and lifted from Lindisfarne to 18, all of which were recovered from Trench 2: 11 from Trench 2 (East) and seven from Trench 2 (West). Whilst still a relatively small sample size overall, the expanded sample is likely to be more representative of the original burial population in the area to the east of the priory church. Although the preservation of the skeletons from 2020 (in terms of surface preservation and amount of fragmentation) was perhaps not quite as good as those recovered previously, they still tended to have good to very good surface preservation and the amount of fragmentation was slight to moderate. Like those excavated previously, they were also mostly fairly complete and have the potential to yield a considerable amount of information on full analysis.
- 8.3.3 Broadly speaking, currently there appear to be a number of different phases of west to east aligned Christian burial, each defined by particular attributes. In the northwest area burial was supine, extended with hands crossing over the pelvis, suggesting a more formal burial rite that occurred after the area had ceased to function for industry. In the main part of Trench 2 (West) the majority of burials were encountered at a shallower depth and, although displaying many of the attributes to those previously mentioned, had survived in a poorer state of preservation. It may be that this is more a reflection of the deposits into which they had been cut; however, further excavation would be required to provide a greater sample size. Against the eastern baulk of Trench (West) much deeper graves were encountered in 2019, most of which had skeletons lying on their side and in a poor state of preservation. These may represent an earlier, less formal burial tradition. In Trench 2 (East) the picture was a little less clear on account of the extensive reworking, but two distinct types of grave were observed: those aligned east to west, and some oriented slightly away from cardinal point – more east-northeast to west-southwest.

8.4 Artefact assemblage

- 8.4.1 The artefact assemblage from 2020 was limited, as is typical of early medieval sites. The year on year decrease in medieval and later ceramics is testament to the fact that the project has moved through the mixed and heavily reworked upper layers and is now more firmly within early medieval layers. Much of the assemblage is made up of relatively undiagnostic material, such as ferrous objects; however, the preservation of the artefacts from earlier contexts appears better than in previous years. Most finds recovered were human or animal bones, but small, significant assemblages of metalworking residue and coins were also found.
- 8.4.2 As a total assemblage, the animal bone remains provide evidence for a diet that included the main domesticates expected for northern England from later prehistoric to present times; beef, pork, lamb/mutton/goat, goose and chicken. Cattle would have been kept for beef, traction, milk and/or leather, pigs for meat, sheep/goat for lamb/mutton, milk and/or wool, and geese and chickens for meat, feathers and/or eggs. These taxa are common features within the assemblages of animal bones recovered from sites within the region and throughout Britain, being five of the main domestic livestock animals. A single equid tooth attests to horse, donkey or mule on the island, probably for transport, traction or entertainment. Bird remains included those likely resulting from food waste (goose, duck and chicken), but also those reflecting the island's natural species diversity (gull). The fish remains provide evidence for the exploitation and consumption of salmon and/or trout and cods.

- 8.4.3 The remains of marine molluscs recovered represent a small number of species that are common to the North Sea around the island in recent and historic times (e.g. Hayward and Ryland 1995). Many of the species present are popular food items, this is especially true for mussel, edible cockle and European flat oyster. Raine (1852) attests to the establishment of oyster beds by the Monks living on Lindisfarne in 1381; the Monks bought an oyster filled boat from a Scotsman for 100 shillings, before which he suggests that the species would not have been locally available. These remain the only oyster beds on the East Coast of England until Norfolk. Other species present are sometimes collected for human consumption, but also used as fishing bait, such as limpets and periwinkles (Tupper 1970). The location of the site close to the seashore, adjacent to a public pathway and close to a popular beach provides a myriad of possible accumulation processes. The remains may result from humans or animals eating shellfish and discarding the shells, they may represent waste from fishing bait collection, or even items that were once gathered during a day out at the beach, discarded on the walk back to town. It is possible that over hundreds of years that the total remains represent all of these activities. The recovery of many of the specimens from topsoil, subsoil and/or plough soils further prevents any specific comment on the role of shellfish on the island in any given period. Collectively, the marine mollusc remains recovered between 2017 and 2020 provide some evidence that these resources played a significant economic role on the Island, an interpretation supported by historical documentary evidence (e.g. Raine 1852).
- 8.4.4 Two whale bones were identified, with presence of butchery marks on one whale vertebra demonstrating that whale may have been an important resource on the island, though whether the animal was actively hunted or scavenged as a stranding from the foreshore can never be determined. The fish remains recovered do not provide the evidence for consumption of a wide variety of fish including very large cod and ling, as has been recovered in previous years (Russ 2020a), but adds to the existing evidence that cod fish and salmon and/or trout were consumed on the island. There is some limited evidence that other marine animals, whale and seal, may have also played a role in the economy and/or diet of those living on the island.
- 8.4.5 A group of six early medieval coins were also recovered from Trench 2 (West). They include three minted during the reign of Eanred and three from the reign of Æthelred II; both of which date to the early-mid 9th century AD. None were found in securely dated features, instead they were metal detected from the layers directly beneath the furrow representing mixed graveyard soil deposits. Although their presence does not date these layers, it does indicate that the deposits encountered at the end of the 2020 field season relate to the early medieval period, with no diagnostically later material present.

8.5 Environmental remains

- 8.5.1 The rich assemblages of wood charcoal found in a number of features have good potential to provide evidence for the availability and uses of wood. Where at least fifty charcoal fragments of a suitable size for identification are present, this more likely to result in a representative sample of wood use, including rare taxa (Stuijts 2006). Preliminary examination of the wood charcoal assemblage using low power microscopy indicates the presence of both ring porous and diffuse porous taxa in most of the sampled contexts, which indicates good potential for evidence of the use of different wood species.
- 8.5.2 The rich charcoal assemblages found in association with metalworking in the northwest part of the trench, are likely to be the remains of industrial fuel. The predominance of probable oak is consistent with industrial fuel, as it is an excellent fuel wood which burns slowly but produces a high temperature fire (Krueger 1992, 390). The presence of some diffuse porous taxa elsewhere indicates a more mixed assemblage of fuel types. The probable oak charcoal with weak ring curvature, indicates the use of large diameter branch or trunk wood, but oak with closely spaced annual growth rings were also

identified. This is likely to indicate the use of slow grown oak trees from well-established dense woodland (Margueire and Hunot 2007), although growth ring width can also be affected by factors such as soil type, climate and woodland management practices such as coppicing (Dufraisse 2006).

- 8.5.3 The presence of a charred barley grain (*Hordeum distichum/vulgare*) and a dock seed suggests a trace presence of domestic hearth waste, with the rich charcoal assemblages appearing to be very similar in composition. Both were dominated by probable oak with weak ring curvature and frequent closely spaced annual growth rings. Both also include some diffuse porous taxa.

9 RECOMMENDATIONS

- 9.1.1 The following recommendations have been derived from initial assessment of the excavations results and contribute towards the fulfillment of Aim 4 (Q7-9) – making recommendations, analysis and publication, as articulated in the original Project Design (Wilkins and Petts 2016, see above Section 2.5.1).

9.2 Excavation

- 9.2.1 It is recommended that the cemetery continue to be excavated to enable characterisation of the sequence of burials. This may provide additional information enabling the phasing of the cemetery to be established. Because of the large area the cemetery covers, focus should move predominantly to the burial sequence in Trench 2 (East). Of critical importance is further excavation of the large circular feature in Trench 2 (West), which has provisionally been described as a kiln or oven. Excavation of the full extent of this feature will enable a greater understanding of its function and the industrial activities and industrial processes that took place at the site before the establishment of the cemetery. This will entail an increase in the size of the area to the north of Trench 2 (West) to cover the projected extent of the feature. Excavation will also help to further expose the underlying layer sequence enabling them to be fully characterised.
- 9.2.2 Given the potentially early date of these sediments a programme of scientific dating, including samples for radiocarbon and archaeomagnetic dating, have been prepared. It is recommended that radiocarbon dating of the features that produced metalworking residues, along with the later burials found in association, would refine the phasing of this activity. In addition to this, it is recommended that a sample of the graves from across the trench be sent for dating to provide a chronological framework for the life of the cemetery.

9.3 Geoarchaeology

- 9.3.1 Preliminary results suggest that relevant sediment layers do not exceed a depth of 1.5m below surface, hence further geophysical investigations should focus on increasing the resolution of the ERT to this depth. Using a different technique such as Ground-Penetrating Radar should be considered because achieving a higher resolution using ERT would require significantly more time in the field.
- 9.3.2 A tiered sampling approach is recommended to increase efficiency: Geophysics can cover large areas and provide coarse but comprehensive data while hand augering could be used punctually to enable more detailed interpretations. Hand auguring would also be sufficient to map the extent of wind-blown sands and medieval soils. Percussion coring should be used only occasionally when the extraction of undisturbed samples and/or sampling for OSL dating is anticipated.

9.4 Human remains

- 9.4.1 The human remains excavated in 2020 add to the remains recovered in previous years, enhancing the potential information to be gained from full analysis. Notably the eight articulated skeletons bring the total number of articulated skeletons fully excavated and lifted from Lindisfarne to 18, all of which were recovered from Trench 2: 11 from Trench 2 East and seven from Trench 2 West. Whilst still a relatively small sample size overall, the expanded sample is likely to be more representative of the original burial population in the area to the east of the priory church. Although the preservation of the skeletons from 2020 (in terms of surface preservation and amount of fragmentation) was perhaps not quite as good as those recovered previously, they still tended to have good to very good surface preservation and the amount of fragmentation was slight to moderate. Like those excavated previously, they were also mostly fairly complete and have the potential to yield a considerable amount of information on full analysis.
- 9.4.2 Osteological analysis of the 18 skeletons would provide data on the demography of the sample, as age and sex estimates should be possible for most skeletons. This will inform on the use of the graveyard to the east of the priory church, including any funerary practices related to age and sex in terms of burial location, body position etc. It should be possible to record a suite of standard cranial and post-cranial measurements for most skeletons, and stature estimates should be possible for at least ten of the adults. Stature is related to both genetics and the environmental conditions experienced during childhood and adolescence. Obvious pathological lesions were noted in most of the skeletons, and it is highly likely that more subtle pathological lesions are also present but were not observed during the assessment. Full analysis of the pathology present will inform on the health of the population and contribute to an understanding of their interaction with their living environment (Roberts 2009, 154-155). The enlarged sample would make such analysis more informative than previously. Analysis of the dentitions would inform on their dental health, oral hygiene, and diet (the latter potentially linked to foods produced locally and/or obtained via trade, and food processing practices), and the prevalence of joint disease could be established through examining all surviving joints. The generally good surface condition of the bone indicates that evidence for new bone formation associated with inflammation/ infection, trauma and metabolic disease ought to be preserved. It is unlikely that direct evidence for medical treatment will be present in the skeletal remains from Lindisfarne, since such evidence is rare (Roberts 2009, 184). However, it may be possible to infer something on treatment through examining fracture healing.
- 9.4.3 Assessment of the disarticulated remains recovered during 2020 and preceding seasons (that were not previously observed) has increased the amount of disarticulated remains recovered considerably to around 6,000 fragments in total. Much of this disarticulated bone appears to relate to the graveyard soil and later levelling of the cemetery in Trench 2 East and Trench 2 West. The amount of disarticulated remains in the graveyard soil, coupled with the indistinct nature of some of the grave cuts, suggests the cemetery was intensively used, with later graves probably disturbing earlier ones, while the levelling process may well have disturbed existing burials. Smaller quantities of disarticulated bone were recovered from the presumed infirmary cloister in Trench 4.
- 9.4.4 Disarticulated remains have more limited potential for further analysis and so have lesser priority than the study of the articulated remains (Historic England 2018), but data from the disarticulated remains can enhance that from the articulated burials and there may be value in analysing them in conjunction with the latter. Data from analysis of the articulated and disarticulated remains combined would provide information on the minimum number of individuals buried in the cemetery, which is likely far higher than the number of articulated skeletons observed during excavation. The disarticulated remains may also provide additional demographic or pathological information that supplements that from the articulated burials. For example, there may be evidence for non-adults or adults of different

ages and sexes among the disarticulated remains, providing evidence for their presence that would be lost were the articulated remains analysed alone. At least one of the disarticulated crania has evidence for peri-mortem injuries, which certainly warrant detailed analysis and illustration. To date, the only remains recovered from the infirmary cloister (Trench 4) are disarticulated, and these provide the only evidence for who was buried in that location as opposed to the graveyard to the east of the church.

- 9.4.5 Evaluation of the condition of the articulated and disarticulated human skeletal remains recovered to date will develop understanding of the current preservation state of human remains at Lindisfarne, and potentially whether bone is better/worse preserved in different areas of the site in respect to localised variation in the burial environment or likelihood of disturbance. For example, the assessment already suggests that the articulated skeletons are better preserved than the disarticulated remains in terms of surface quality and fragmentation, which may relate to the type of disturbance the latter have experienced.
- 9.4.6 The osteological analysis would also inform future public presentation of the site and provide additional opportunities for public engagement. The wider public are generally extremely interested in human remains, and any findings will provide a direct connection with the experiences of the past people who lived, died, and were buried at Lindisfarne.
- 9.4.7 To the author's knowledge, these are the first human remains to have been excavated at Lindisfarne, and it is highly recommended that the articulated skeletons and disarticulated crania/skulls are analysed in full and recorded according to current osteological standards (e.g. Mitchell and Brickley 2017; Brickley and McKinley 2004). Any disarticulated remains from contexts associated with individual burials (e.g. grave fills) should be examined alongside the articulated skeleton to determine whether it belongs to that skeleton. The possibility that the neonate/infant remains from context 2015 are the remains of a single individual should also be evaluated, and if this appears to be the case it could increase the number of skeletons. Consideration should also be given to the viability of recording the remaining disarticulated remains, at least in some form, to enhance understanding of the population and cemetery use. Although the assemblage of articulated remains is relatively small, the context of their burial within a cemetery associated with the early medieval monastic foundation at Holy Island provides a valuable opportunity to learn about the population. The recovery of any additional human remains, particularly articulated skeletons, in future years of excavation will enhance the value of the sample further. To provide context and aid interpretation, the data collected should be compared with those from other early medieval populations in northern England/southern Scotland, such as the Bamburgh Bowl Hole, Northumberland (Groves 2010, 2011), Jarrow and Monkwearmouth, Tyne and Wear (Cramp 2005, 2006), and Whithorn, Dumfries and Galloway (Hill 1997).

9.5 Animal bone

- 9.5.1 A wide variety of animal bone has been recovered from the excavations at Lindisfarne. This has given us a hint at the wild environment of the island and the eating habits of the people who have lived there over the past 1500 years. To be able to further understand this the following recommendations have been put forward for future work on the animal bone:
- It is expected that the whale, seal, mustelid and some of the bird remains could be more precisely identified when skeletal reference collections reopen for access, and it is recommended that this work is undertaken during an analysis phase as an interpretation of these resources cannot be made without specific identifications.
 - No further recording work is recommended for the animal remains already assessed from Trench 4, or those from Trenches 5 and 6.

- An overview of material recovered from all seasons following the planned 2020 excavation, incorporating years 2016 – 2019, will provide a useful mid-point review of the animal bone.
- This overview assessment of the complete recovered assemblage will provide an opportunity to research the role of animals on Lindisfarne through previously published work and grey literature reports, and subsequently feed into the research aims and objectives for future years of the project.

9.6 Animal remains

- 9.6.1 It is expected that the whale, seal and some of the bird remains recovered in 2020 could be more precisely identified when skeletal reference collections reopen for access, and it is recommended that this work is undertaken during an analysis phase as an interpretation of these resources cannot be made without specific identifications.
- 9.6.2 Once all material from the excavations between 2016 and 2020 (and any future excavations) has been assessed and a phased chronology is available for all secure archaeological deposits, recommendations can be made for any required future analysis works. Based on the assessment of the 2018, 2019 and 2020 vertebrate and mollusc remains it is envisaged that analysis would entail the completion of an integrated report with minimal further recording of skeletal remains (such as measurements) but with extended research on the role of animals on Lindisfarne through previously published work and grey literature reports. No further recording work is recommended for the mollusc remains recovered during excavations in 2020.

9.7 Metalworking debris

- 9.7.1 The 2020 assemblage should be reviewed with all the other assemblages when the excavations are complete. The evidence recovered from the 2020 excavation is evidence for the presence of a forge in the close vicinity of the Trench 2 West; in particular F239 was a possible industrial feature.
- 9.7.2 The non-ferrous spills and possible lead staining/corrosion on a stone fragment should be analysed by XRF to characterise them and confirm the interpretations. The non-magnetic residue from the environmental sampling should be in for the presence of non-ferrous droplet etc, and any droplets identified to be analysed by XRF. Any residues from the contexts (2134 and 2135) containing the non-ferrous droplets should be examined for small droplets of non-ferrous alloy.

9.8 Special finds

- 9.8.1 Following this assessment of special finds and metal objects, a number of recommendations can be made for particular material groups.
- Conservation, x-ray and full analysis of selected ferrous finds, including well-stratified nails and other objects, to be undertaken to assist in identification.
 - Conservation of the copper alloy ring may bring up fine detail during analysis.
 - Further analysis of the lead, in its entirety from all field seasons, would add group value to the overall assemblage.
 - XRF analysis of the small fragment of probable amber would aid in material identification.

9.9 Environmental remains

- 9.9.1 It is recommended that one hundred >2mm³ wood charcoal fragments found in sample 144 from fill 2179 of possible smithy pit 238, sample 143 from burnt layer 2229, sample 145 from fill 2181 of small pit or beam slot 239, and all the >2mm³ charcoal fragments in sample 151 from fill 2274 of post hole 242, be fully identified using high power microscopy. Dendrological features such as ring curvature,

presence of tyloses and presence of fungal hyphae should also be recoded to provide evidence for the type of wood selected as fuel and the condition of the wood before it was burnt. The aims of this analysis would be to produce a fully quantified record of the taxa used as fuel during the medieval period at the site, to investigate the selection of fuel for industrial activity and to investigate the nature of local woodland resources (Updated Project Design, Aim 3, Q5 and Q6). The results of the wood charcoal analysis can then be compared with published charcoal and palynological data from other sites.

9.10 Scientific dating

- 9.10.1 Material suitable for scientific dating is present in sample 145 from fill 2181 of small pit or beam slot 239 in the form of a short life cereal grain, although as only a single grain is present it would not be possible to obtain multiple dates from this context. It is also possible however that further identification of the wood charcoal assemblage in sample 145, along with that in sample 144 from fill 2179 of possible smithy pit 238, or sample 151 from fill 2274 of post hole 242, would produce charcoal fragments with strong ring curvatures indicative of short life small diameter round wood. The large fragment of probable oak charcoal which was recovered by hand from upper fill 2165 of large circular feature 217 may also be suitable for scientific dating. This fragment was found to have intermediate ring curvature, indicating a shorter potential life than large diameter trunk or branch wood with weak ring curvature (Updated Project Design, Aim 2 Q3).
- 9.10.2 Assessment of the results from 2020 season of excavation at Lindisfarne has demonstrated the archaeological significance and potential of the site, as well as its importance as a project which has had, and continues to achieve, social impacts within the local community and beyond. This assessment has informed the archaeological strategy for the 2021 research design.

10 BIBLIOGRAPHY

- Alcock, L, Alcock, E A and Driscoll, S 1989, 'Reconnaissance excavations on early historic fortifications and other royal sites in Scotland, 1974–84; 3: Excavations at Dundurn, Strathearn, Perthshire, 1976–77', *Proc Soc Antiq Scot* 119, 189–226.
- Archaeological Fish Resource. <http://fishbone.nottingham.ac.uk> Accessed June 2020.
- Ballin, T.B., 2000. Classification and description of lithic artefacts: a discussion of the basic lithic terminology. *Lithics: The Journal of the Lithic Studies Society* 21, 9–15.
- Barrett, J. H. 2001. *FISH: The York Fish Bone Recording Protocol*, Version 1.1. Fish Lab: University of York.
- Biejerinck, W, 1976, *Zadenatlas der Nederlandsche Flora: Ten Behoeve van deBotanie*, Palaeontology, Bodemcultuur en Warenkennis.Backhuys and Meesters. Amsterdam.
- BoneID. <http://www.boneid.net> Accessed June 2020
- British Geological Survey (BGS), 2020. Geology of Britain Viewer. [Retrieved online 19th February 2020] <http://mapapps.bgs.ac.uk/geologyofbritain/home.html>
- Butler, C., 2005. Prehistoric flintwork. The History Press, Stroud.
- Campbell, E and Maldonado, A 2020, 'A New Jerusalem "at the ends of the earth": interpreting Charles Thomas's excavations at Iona Abbey 1956–63', *Antiq J*.
- Camphuysen, C. J and Henderson, P. A. 2017. *North Sea fish and their remains*. Royal Netherlands Institute for Sea Research and Pisces Conservation Ltd.
- Carver, M, Garner-Lahire, J and and Spall, C 2016, *Portmahomack on Tarbat Ness: Changing Ideologies in North-East Scotland, Sixth to Sixteenth Century AD*, Edinburgh: Society of Antiquaries of Scotland
- Chartered Institute for Archaeologists (CIfA), 2014, By-Laws, Standards and Policy Statements of the Institute for Archaeologists: Standards and guidance
- Cerón-Carrasco, R. 2004. The fish remains from Glassknapper's Cave, Antler Cave and Wetweather Cave, in Pollard, T. The excavation of four caves in the Geodha Smoo near Durness, Sutherland. *Scottish Archaeological Internet Report* 18. pp27-28.
- Cotton, J. 2002. Marygate, Lindisfarne, Northumberland, LMG98: plant macrofossil analysis. ASUD report 926. 8pp.
- Cramp, R. 1977. *Corpus of Anglo-Saxon Stone Sculpture: Durham and Northumberland* Clarendon Press, Oxford
- Crone, A and Hindmarch, E 2016, *Living and Dying at Auldham. The Excavation of an Anglian Monastic Settlement and Medieval Parish Church*, Edinburgh: Society of Antiquaries of Scotland.
- Curtis-Summers, Shirley; Pearson, Jessica A.; Lamb, Angela L.. 2020 From Picts to Parish: stable isotope evidence of dietary change at medieval Portmahomack, Scotland. *Journal of Archaeological Science: Reports*, 31, 102303
- Daniels, R., 2007, *Anglo-Saxon Hartlepool and the foundations of English Christianity: an archaeology of the Anglo-Saxon monastery*. Tees Archaeology (Monograph Series 3)
- Dobney, K. and Rielly, K. 1988. A method for recording archaeological animal bones: the use of diagnostic zones. *Circaea* 5:79–96.
- Donaldson, A. M. and Rackham D. J., 1985. *Biological evidence—analysis of soil samples*. 80-3. In: O'sullivan, D.M. *The excavation in Holy Island village 1977*. Archaeol. Aeliana 5th Ser. 13. 27-116.

- Edlin, H. L., 1949, *Woodland crafts in Britain: an account of the traditional uses of trees and timbers in the British countryside*, London, Batsford.
- Finlayson, R. and Hardie, C. 1995-7 (revised 2010), *Holy Island, Northumberland Extensive Urban Survey*, Northumberland County Council and English Heritage.
- Gale, R., and Cutler, D. F., 2000, *Plants in Archaeology – Identification Manual of Artefacts of plant origin from Europe and the Mediterranean*, Westbury Scientific Publishing and Royal Botanic Gardens, Kew.
- Groves, S., 2011, 'Social and biological status in the Bowl Hole early medieval burial ground, Bamburgh, Northumberland' in Petts, D. and Turner, S (eds) 2011. *Early Medieval Northumbria: Kingdoms and Communities AD450-1100*, Brepols, 241-67.
- Harland, J. F., J. H. Barrett, J. Carrott, K. Dobney and D. Jaques. 2003. *The York System: An integrated zooarchaeological database for research and teaching*. Internet Archaeology **13**.
- Hather, J G. 2000 *The identification of Northern European woods; a guide for archaeologists and conservators*, London. Archetype Press.
- Hayward, P. J. and Ryland, J. S. (eds) 1995. *Handbook of the Marine Fauna of North-West Europe*. Oxford: Oxford University Press.
- Hill, P 1997, *Whithorn and St Ninian. The Excavation of a Monastic Town, 1984–91*, Stroud: Sutton Publishing/Whithorn Trust.
- Hillson, S. 2003. *Mammal Bones and Teeth. An introductory guide to methods of identification*. London: Institute of Archaeology, University College London.
- Hillson, S. 2005. *Teeth*. Second Edition. *Cambridge Manuals in Archaeology*. Cambridge: Cambridge University Press
- Historic England, 2008, *SHAPE, Strategic Framework for the Historic Environment Activities and Programmes*.
- Historic England, 2012, *Management of Research projects in the Historic Environment*. PPN 3: Archaeological Excavation – Annual Report May 2011-March 2012.
- Historic England, 2018, *The Role of the Human Osteologist in an Archaeological Fieldwork Project*. Swindon. Historic England.
- Humphrey, J., Young, R., 1999. Flint use in later Bronze Age and Iron Age England – Still a fiction? *Lithics: Journal of the Lithic Studies Society* 20, 57–61.
- Huntley, J.P. 1994. *The Heugh, Lindisfarne. The carbonised plant remains*. Durham Environmental Archaeology Report 38/94.
- Inizan, M.-L., Reduron-Ballinger, M., Roche, H., Tixier, J., 1999. Technology and Terminology of Knapped Stone, *Préhistoire de la Pierre Taillée*. Cercle de recherches et d'études préhistoriques, Nanterre.
- James, H. and Yeoman, P. 2008. *Excavations at St Ethernan's Monastery, Isle of May, Fife, 1992-7* Tayside and Fife Archaeology Committee
- Jacomet, S, 2006, Identification of cereal remains from archaeological sites. IPAS. Base.
- Jones, G. Teaching Notes for Archaeobotany. Unpublished.
- King, H 2009, 'The economy and industry of early medieval Clonmacnoise: a preliminary view' in N Edwards (ed), *The Archaeology of the Early Medieval Celtic Churches*, Leeds: Maney, 333–49.
- Lane, A and Campbell, E 2000, *Dunadd: An Early Dalriadic Capital*, Oxford: Oxbow Books.
- Lash, R. 2018. *Enchantments of Stone: Confronting other-than-human Agency in Irish Pilgrimage. Practices*. *TJournal of Social Archaeology* 18(3): 284–305.

- Lowe, C. 2006 *Excavations at Hoddum*, Dumfriesshire Society of Antiquaries of Scotland
- Lowe, C. 2008, *Inchmarnock: An early historic island monastery and its archaeological landscape* Society of Antiquaries of Scotland
- Lucas, V and Paynter, S 2010, *Whitby Cliff, Whitby, North Yorkshire: an Assessment of the Metalworking Debris from the Whitby Cliff Excavations*, Engl Heritage Res Rep 31-2010.
- MacGregor, A. Mainman, A. and Rogers, N. 1999. *The Archaeology of York: The Small finds AY 17/2 Bone, Antler, Ivory and Horn from Anglo-Scandinavian and Medieval York*. Finds from Anglo-Scandinavian York
- Mainman, A. and Rogers, N. 2000. *The Archaeology of York The Small Finds 17/14. Craft Industry and Everyday Life* Finds from Anglo-Scandinavian York
- Maldonado, A. 2013. 'Burial in early medieval Scotland: New Questions' *Medieval Archaeology* 57, 1-34
- Mays, S. and Cox, M. 2000. 'Sex determination in skeletal remains', in M. Cox and S. Mays(eds) *Human Osteology in Archaeology and Forensic Science* (London): 117-130.
- McCormick, F 1992, 'Early Christian metalworking on Iona: excavations under the 'infirmary' in 1990', *Proc Soc Antiq Scot* 122, 207-14.
- McDonnell J.G. 2001 "Pyrotechnology" in Brothwell, D. and Pollard A.M.P. (eds) *Handbook of Archaeological Sciences*, John Wiley & Sons, London pp. 493-506.
- McKenna, R. (2017) An investigation into the palaeoenvironmental potential of samples originating from excavations at Lindisfarne: The Holy Island Archaeology Project 2016(Project Number LDF 16).
- McKenna, R. (2018) An investigation into the palaeoenvironmental potential of samples originating from excavations at Lindisfarne: The Holy Island Archaeology Project 2016(Project Number LDF 17).
- McKinley, J.I. 2004. 'Compiling a skeletal inventory: disarticulated and co-mingled remains', in M Brickley and J.I. McKinley (eds) *Guidelines to the Standards for Recording Human Remains*. IFA paper No.7. (Southampton and Reading): 14-17.
- McOmish, J.M. & Petts, D. 2008. *Fey Field, Whithorn: Excavations by David Pollock and Amanda Clarke*. York: York Archaeological Trust.
- Nabone Fish.<https://www.nabohome.org/products/manuals/fishbone/fish/fish.html> Accessed June 2020.
- Noble, G Meggen Gondek, Ewan Campbell, Nicholas Evans, Derek Hamilton & Simon Taylor 2019a A Powerful Place of Pictland: Interdisciplinary Perspectives on a Power Centre of the 4th to 6th Centuries AD, *Medieval Archaeology*, 63:1, 56-94
- Noble, G, Cruickshanks, G, Dunbar, L, Evans, N, Hall, D, Hamilton, D, MacIver, C, Masson-MacLean, E, O'Driscoll, J, Paskulin, L & Sveinbjarnarson, O 2019b, 'Kinnedar: A Major Ecclesiastical Centre of the Picts', *Proceedings of the Society of Antiquaries of Scotland*, vol. 148, pp. 113-145.
- Northern Archaeological Associates (NAA), 2001, *The Winery & Village Hall, Holy Island: Archaeological Post-Excavation Assessment* NAA report **01/4**.
- Osteobase. <http://osteobase.mnhn.fr> Accessed June 2020
- O'Sullivan, D M and Young, R (1991), 'The early-medieval settlement at Green Shiel, Northumberland', *Archaeologia Aeliana* 5th series XIX, 55-69 .
- O'Sullivan, D M. 1985, 'An excavation in the Holy Island village, 1977' *Archaeologia Aeliana* 5th series XIII, 27-116.
- Peers, C. and CAR Radford 1943 'The Saxon monastery of Whitby', *Archaeologia*, 89 (1943), 27-88

- Petts, D. 2017. 'A place more venerable than all in Britain' The Archaeology of Anglo-Saxon Lindisfarne. In *The Lindisfarne Gospels: New Perspectives*. Gameson, R. Leiden, Boston: Brill. 57: 1-18.
- Petts, D. 2013. The Search for St Cuthbert's Priory.
- Petts, D. and Gerrard, C., 2006, Shared Visions: The North-East Regional Research Framework for the Historic Environment, Durham County Council
- Plant Atlas. <http://www.plantatlas.eu/za.php>.
- Prins, F. and Shackleton, C. M., 1992, Charcoal analysis and the "Principle of Least Effort" - A conceptual Model. *Journal of Archaeological Science*, 19, 631-637.
- Rackham, D.J & Snelling, A. 2001. *The Winery, Lindisfarne-WL00. Environmental archaeology assessment*. Unpublished report, Environmental Archaeology Consultancy
- Rahtz, P. 1976. 'The buildings plan of the Anglo-Saxon monastery of Whitby Abbey' in D. Wilson (ed) *The Archaeology of Anglo-Saxon England* 459-62
- Rossen, J., and Olson, J., 1985, The controlled carbonisation and archaeological analysis of SE US wood charcoals, *Journal of Field Archaeology* **12**, 445-456
- Saville, A., 1981. Grimes Graves, Norfolk. Excavations 1971-72: Volume II, Department of the Environment Archaeological Reports. Her Majesty's Stationary Office, London.
- Scholtz, A., 1986, *Palynological and Palaeobotanical Studies in the Southern Cape*, MA Thesis of Stellenbosch, Stellenbosch, South Africa.
- Schweingruber, F H, 1978 *Microscopic wood anatomy*. Birmensdorf. Swiss Federal Institute of Forestry Research.
- Stace, C, 1997, *New flora of the British Isles*, Cambridge University Press, Cambridge.
- Standing Conference of Archaeological Unit Managers, (1991 rev. 1997) *Health and Safety in Field Archaeology Manual*.
- Stevens, P 2012, 'For whom the bell tolls: the monastic site at Clonfad 3, Co. Westmeath', in M Stanley, E Danaher and J Eogan (eds), *Creative Minds: Production, Manufacturing and Invention in Ancient Ireland*, Dublin Wordwell: National Roads Authority, 85-98.
- Thi  ry-Parisot, I., 2002, 'Gathering of firewood during the Palaeolithic' in S Thi  bault (ed), *Charcoal Analysis, Methodological Approaches, Palaeoecological Results and Wood Uses*, BAR International Series 1063.
- UKIC, 1990, Guidelines for the Preparation of Excavation Archives for long term storage.
- Van der Veen, M. 1985. *The plant remains from Lindisfarne midden 1984*. In: Beavitt, P., O'Sullivan, D. & Young, R. (eds.) *Recent work on Lindisfarne*. University of Leicester Department of Archaeology Occasional Paper 1.
- Walker, K., 1990, Guidelines for the preparation of excavation archives for long-term storage, Archaeology Section of the United Kingdom Institute for Conservation.
- Wilkins, B. and Petts, D., 2016, Lindisfarne: The Holy Island Archaeology Project, Project Design.
- Wilkins, B., Petts, D. and Dave, R. 2016, Lindisfarne, The Holy Island Archaeology Project 2016: Archaeological Assessment Report.
- Wheeler, A. and Jones, A. K. G. 1989. Fishes. *Cambridge Manuals in Archaeology*. Cambridge: Cambridge University Press.
- Zohary, D, & Hopf, M, 2000, *Domestication of Plants on the Old World*. Oxford University Press Ltd. Oxford.



 DigVentures

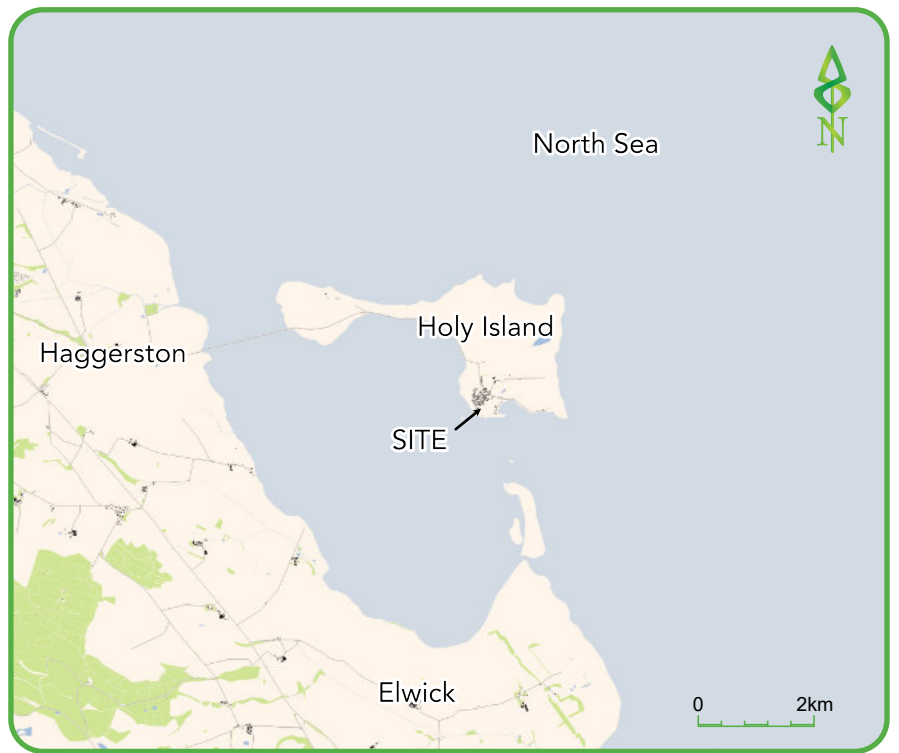


Figure 1 - Site location



Figure 2 - Trench 2 (West) plan



Figure 3 - Trench 2 (East) plan



Grave F249, looking west



Grave F236, looking west



Grave F233, looking west



Burnt deposits F235 recorded abutting the large wall F211, 1m scale



Postholes F240, F241 and F242, looing north, 1m scale



Post-excavation photo of large circular feature F217



Burnt clay lining overlying possible flue/stokehole F294, 0.4m scale



Archaeomagnetic dating of burnt lining F217



Shade in numbers



One of several early medieval Æthelred II coins found

Figure 4 - Excavation photos

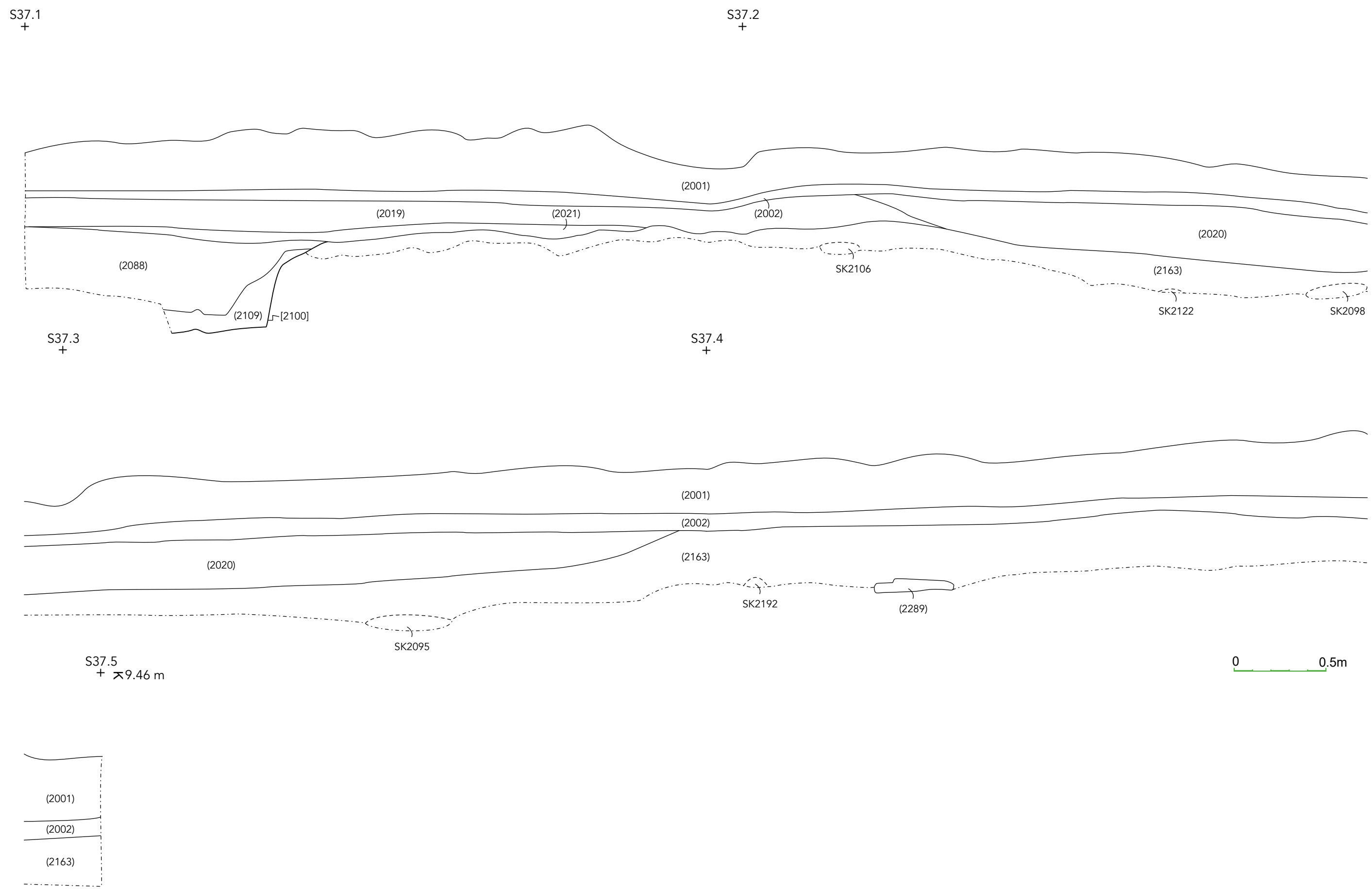


Figure 5 - Trench 2 (West) east-facing baulk section

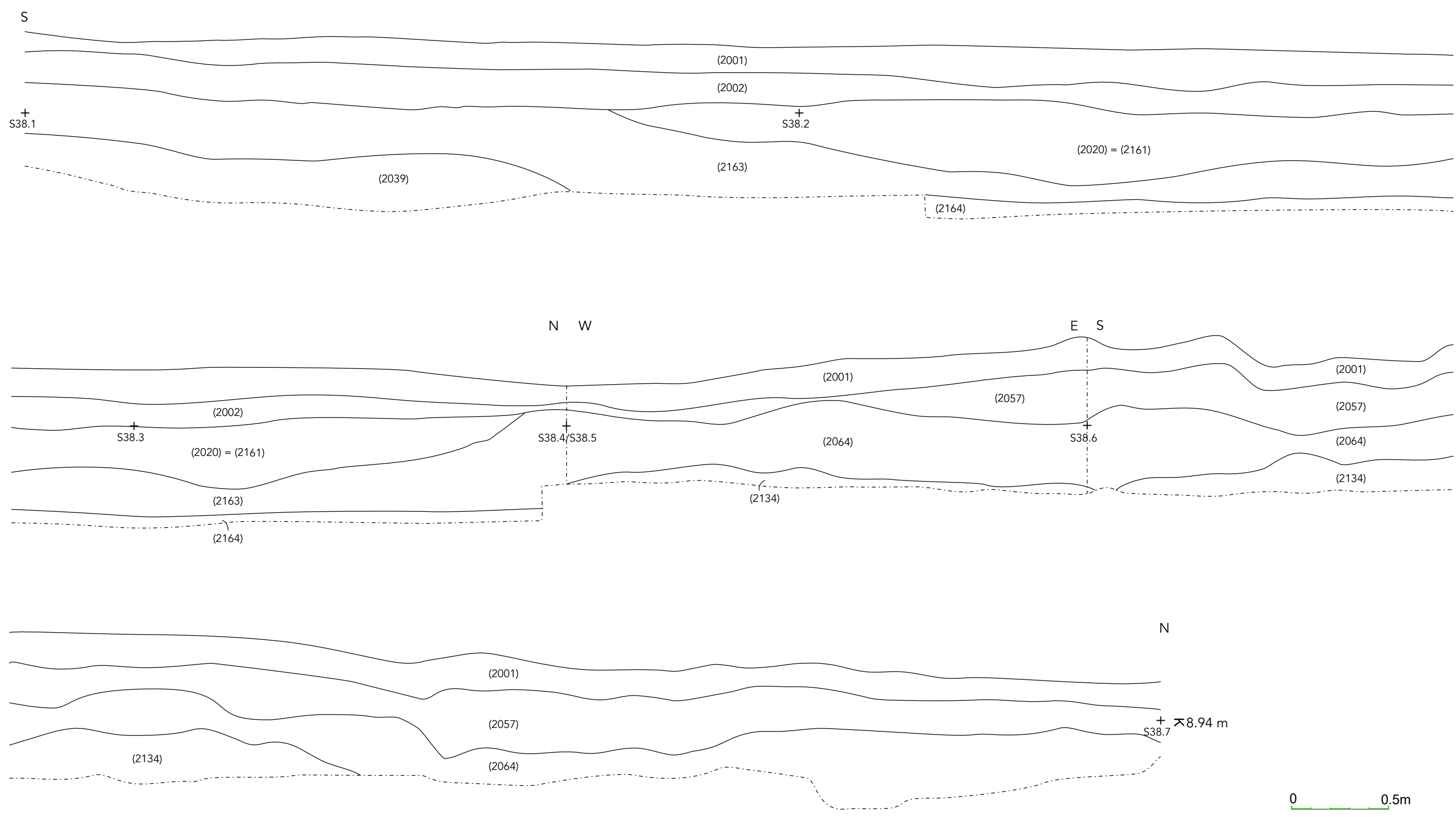
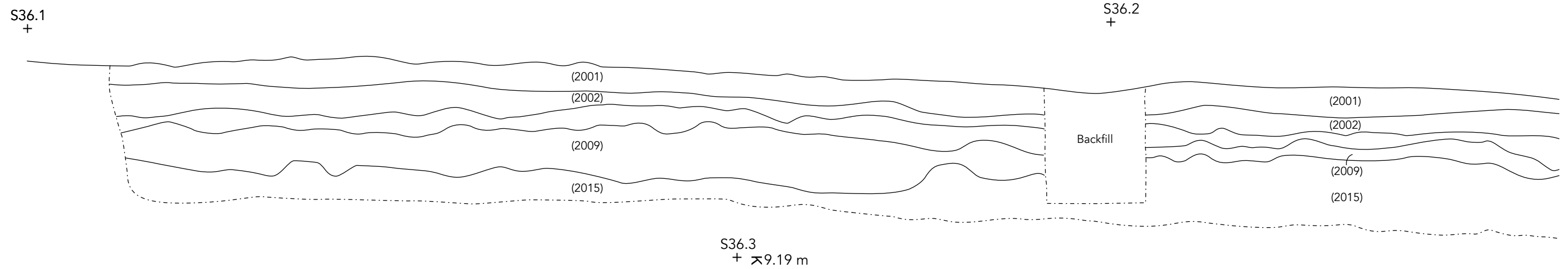
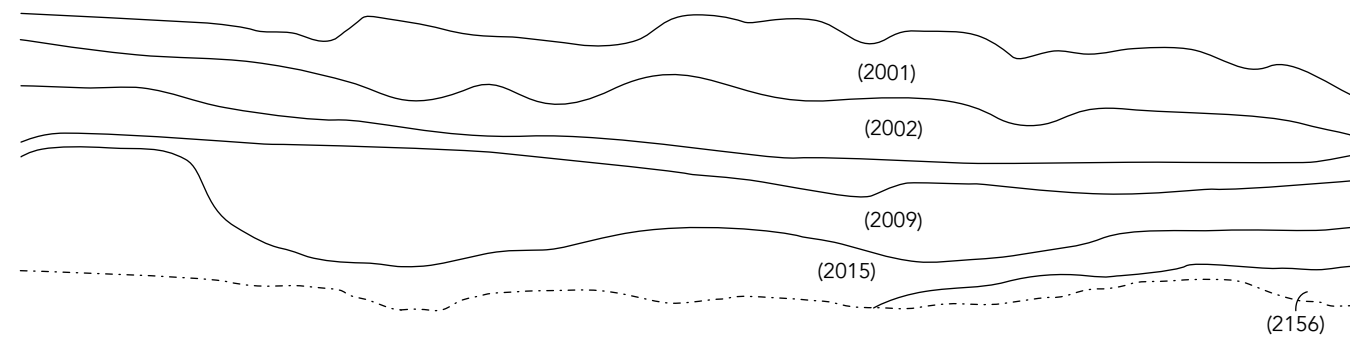


Figure 6 - Trench 2 (East) east-facing baulk section

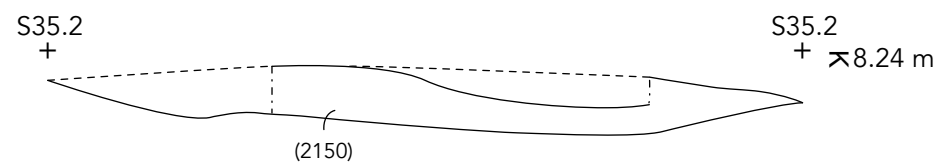
East-facing section of Trench 2 (East)



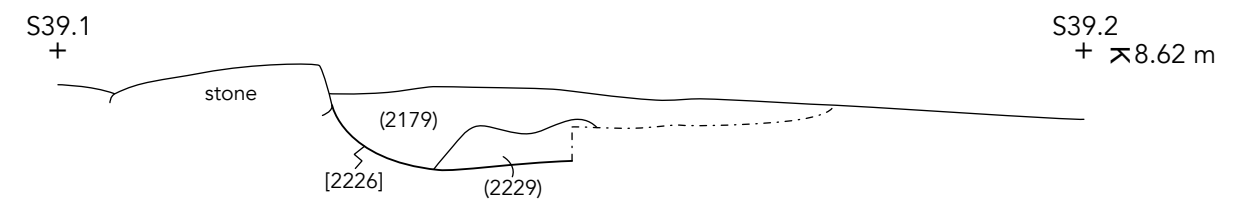
0 0.5m



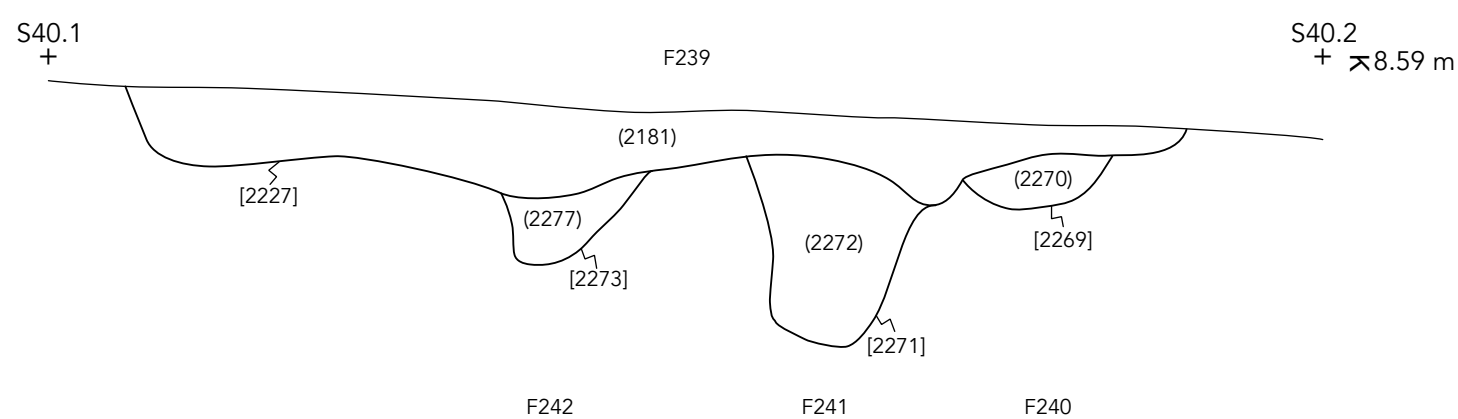
E-facing section of charcoal spread F235



S-facing section of possible smithy pit F258



S-facing section of possible beam slot F239 and post holes F240, F241 and F242



0 0.5m

Figure 7 - Trench 2 selected sections

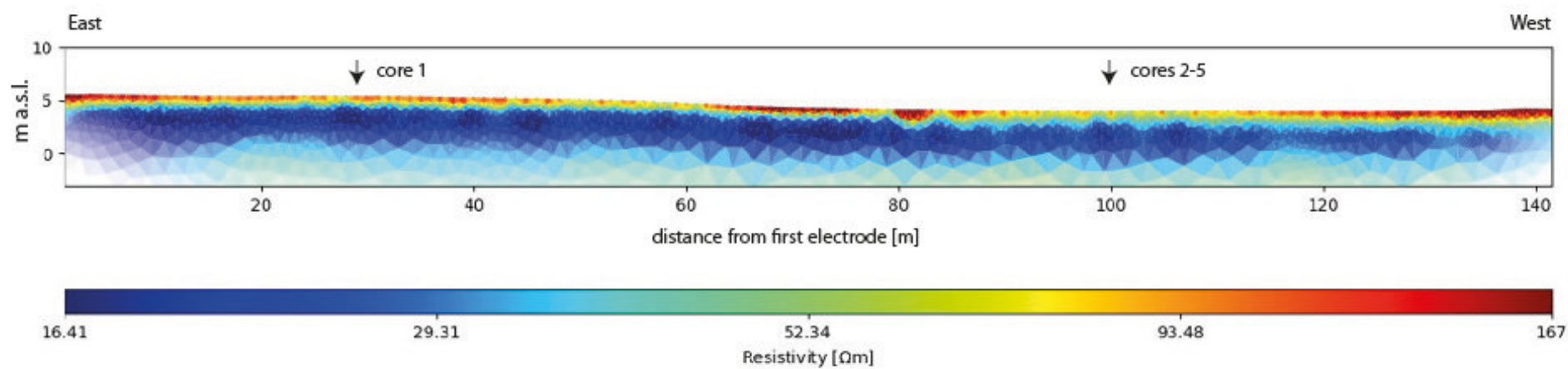


Figure 8 - Electrical Resistivity Tomography (ERT) results

Appendix A: Trench and context descriptions

Table 1: Trench 2 context descriptions

Trench 2		Dimensions: 17m x 15m			
		Orientation: N-S			
		Reason for Trench: One of two additional evaluation trenches (17m x 15m) positioned in Sanctuary Close due east of the Priory church to investigate possible structural remains predating the current monastic complex.			
Area	Context	Description	Interpretation	Dimensions (m)	Feature
East	2001	Dark brown soft silty-clay with occasional small rounded pebbles.	Deposit – topsoil/ backfill from previous seasons	Length – 17.00m Width – 15.00m Depth – 0.15m Ranges from 0 – 0.15m	
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2001			
East	2002	Mid brown orange firm sandy silt with Moderate charcoal fragments, moderate cobbles and small angular pebbles.	Deposit – subsoil	Length – 17.00m Width – 15.0m Depth – 0.15m to 0.27m	
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2002			
East	2003	Orange-brown, soft silty sand with small sub-angular stones and larger cobbles	Deposit – Subsoil cleaning level	Length – 10.00m Width – 4.00m Depth – 0.03m	
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2003			
East	2004	Dark brown firm sandy silt with medium angular to sub-rounded stones and pebbles.	Deposit – demolition and cemetery clearance rubble same as 2009	Length – 2.25m Width – 1.50m Depth – 0.20m	
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2004			
East	2005	Void	Cut - feature not real. Part of (2009)	Length – 1.10m Width – 1.03m Depth – 0.20m	
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2005			
East	2006	Light grey- brown hard sandy silt, sandstone cobbles and pebbles.	Deposit – Rubble deposit. Same as (2000)	Length – 2.20m Width – 2.80m Depth – 0.50m	
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2006			
East	2007	Light grey-brown loose sandy silt with 10% sub-angular pebbles.	Deposit – Rubble deposit. Same as (2009)	Length – 1.14m Width – 0.50m Depth – 0.10m	
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2007			
East	2008	Mid greyish brown hard sandy silt with medium to large sub-angular to rounded cobbles and pebbles.	Deposit – Rubble deposit. Same as (2009)	Length – 3.30m Width – 4.00m Depth – Unknown not fully excavated	
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2008			
East	2009	Light greyish brown sandy silt with angular to sub-angular pebbles and gravel.	Deposit – Possible levelling layer	Length – 4.00m Width – 3.50m Depth – 0.10m	
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2009			
East	2010	Mid grey brown hard sandy clay with large angular and sub-angular sandstone cobbles and stones.	Deposit – Rubble deposit. Same as (2009)	Length – 1.65m Width – 0.35m Depth – 0.20m	F212
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2010			
East	2011	Mid grey-brown loose sandy silt with inclusions of 10% sub-angular rounded gravel.	Deposit – levelling layer. Same as (2009)	Length – 0.50m Width – 0.54m Depth – 0.20m	
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2011			
East	2012	Light orange brown sandy clay with 30% inclusions of flecks charcoal, small sandstone pieces.	Deposit – levelling layer. Same as (2009)	Length – 1.00m Width – 0.40m Depth – 0.30m	
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2012			
East	2013	Sandstone block and cobbles roughly hewn with random coursing and no bonding.	Deposit – Rubble deposit. Same as (2009)	Length – 1.00m Width – 0.25m Depth – 0.20m	
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2013			

Area	Context	Description	Interpretation	Dimensions (m)	Feature
East	2014	Mid-orange brown compact silty clay with 40% inclusions of sub-angular to rounded gravel and sandstone pebbles.	Deposit – Levelling layer. Same as (2015)	Length -1.20m Width -0.80m Depth- Unknown not fully excavated	
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2014			
East	2015	Mid-orange brown compact sandy clay 50% sub-angular inclusions sandstone pieces, charcoal flecks and gravel.	Deposit – Graveyard soil	Length -4.00m Width -2.80m Depth- Unknown not fully excavated	
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2015			
West	2016	Oval shape oriented N-S with a gradual break of slope at the top, concave sides, a gradual almost non perceptible break of slope at the bottom, and an ever so slightly	Cut - chanel pit	Length – 1.40m Width – 0.80m Depth – 0.20m	F203
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2016			
West	2017	Dark brown soil fill surrounding human remains with frequent (25%) bone and sub-angular pebbles.	Fill - soil surrounding human remains in chanel pit	Length – 1.40m Width – 0.80m Depth – 0.20m	F203
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2017			
West	2018	A mixture of human remains found within a chanel pit.	Fill - Skeletal remains within chanel pit	Length – 1.40m Width – 0.80m Depth – 0.20m	F203
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2018			
West	2019	Firm light yellowish brown clayey silt with Moderately sorted stone inclusions (15%).	Deposit - Stonier subsoil localised in north part of western part of trench	Length – 9.00m Width – 6.00m Depth – 0.20m	
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2019			
West	2020	Compact greyish brown silt with sub angular rubble(20%) and human bone (<1%) inclusions.	Deposit- Plough furrow	Length – 9.00m Width – 4.40m Depth – Unknown not fully excavated	
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2020			
West	2021	Dark brown sandy silt with sub angular rubble (<10%) inclusions and large quantities of animal remains of varying species.	Deposit - Midden of animal, and human bone	Length – 3.20m Width – 2.00m Depth – Unknown not fully excavated	
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2021			
East	2022	Very compact dark yellowish brown clayey sand containing sub angular and sub-rounded rubble inclusions (70%)	Deposit – levelling layer. Same as (2009)	Length – 6.00m Width – 3.00m Depth – Unknown not fully excavated	
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2022			
East	2023	Uneven rectilinear cut oriented SW-NE with a gradual break of slope at the top, shallow sides and a non-perceptible break of slope at the bottom.	Cut - grave	Length – 1.88m Width – 0.43 Depth – 0.20m	F204
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2023			
East	2024	Supine individual facing upwards with upper arms parallel to body, and lower arms crossed over pelvis. The ankles were placed side by side.	Skeleton - Articulated human remains		F204
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2024			
East	2025	Hard brown silty sand with sub angular stone inclusions (10%).	Fill - Backfill of grave cut [2023]	Length – 1.88m Width – 0.43m Depth – 0.20m	F204
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2025			
	2026	Oval cut oriented E-W with an almost non perceptible break of slope at the top, concave sides and a gradual break of slope at the bottom.	Cut- feature not real. Part of (2009)	Length – 1.60m Width – 1.00m Depth – Unknown not fully excavated	F212
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2026			

Area	Context	Description	Interpretation	Dimensions (m)	Feature
	2027	Firm orange brown sandy silt with sub angular stone inclusions (80%). The top of the layer is filled with disarticulated bone there may be a further undisturbed burial below.	Deposit – Rubble deposit. Same as (2009)	Length – 1.60m Width – 1.00m Depth – Unknown not fully excavated	F212
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2027			
East	2028	Rectilinear cut oriented E-W with a sharp break of slope at the top and concave sides.	Cut - grave	Length – 1.72m Width – 0.45m Depth – 0.20m	F205
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2028			
East	2029	Orangey brown sandy silt with Poorly sorted sub angular stones (10%,). At least 7 Quartz pebbles recovered from around the skull and chest cavity. 4 pebbles found around	Fill- Backfill of grave cut [2028]	Length – 1.72m Width – 0.45m Depth – 0.20m	F205
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2029			
East	2030	Supine individual facing upwards with upper arms parallel to body, and lower arms crossed over pelvis. The ankles were placed side by side with the right foot placed on top	Skeleton - Articulated human remains	Length – 1.72m Width – 0.45m Depth – 0.20m	F205
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2030			
East	2031	Compact yellowish brown silty clay with small sub angular stone (20%) inclusions and human bone.	Deposit - Graveyard soil. Same as (2015)	Length – Unknown not fully excavated Width – Unknown not fully excavated Depth – Unknown not fully excavated	
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2031			
West	2032	Linear cut running N-S.	Cut - for a potential wall in the north west of the trench	Length – 2.21m Width – 0.38m Depth – Unknown not fully excavated	F213
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2032			
West	2033	Stones placed in a row	Masonry - Linear row of tooled stone running N-S. Some kind of foundation course, perhaps post pads.	Length – 2.11m Width – 0.57m Depth – Unknown not fully excavated	F213
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2033			
West	2034	Friable white brown plaster made of large sub-angular rubble.	Fill - Upper fill of possible anvil pit	Length – 1.58m Width – 1.52m Depth – 0.22m	F206
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2034			
West	2035	Compact reddish brown silty clay with no inclusions.	Fill - red clay fill of linear feature in north-west corner of trench	Length – 2.20m Width – 0.40m Depth – 0.10m	F210
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2035			
West	2036	Compact dark greyish brown soil and frequent well sorted sub-rounded stone inclusions (80%).	Fill - Raised cobbled surface in NW of trench 2	Length – 1.25m Width – 0.80m Depth – Unknown not fully excavated	
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2036			
West	2037	Rectilinear cut with a gradual break of slope at the top and gradual sides.	Cut - Posthole	Length – 0.10m Width – 0.10m Depth – 0.05m	F209
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2037			

Area	Context	Description	Interpretation	Dimensions (m)	Feature
West	2038	Soft grey silty clay with no inclusions.	Fill - Posthole [2037]	Length – 0.10m Width – 0.10m Depth – 0.05m	F209
	Link	https://digventures.com/lindisfarne/ddt/cxt/LDF_2038			
West	2039	Firm orange brown sandy silt with sub-angular stone inclusions (10%)	Layer - Rubble spread at south end of Western part of trench below (2002)	Length – 9.00m Width – 4.00m Depth – Unknown not fully excavated	
	Link	https://digventures.com/lindisfarne/ddt/cxt/LDF_2039			
West	2040	Cut orientated E-W with a gradual break of slope at the top and concave sides and gradual break of slope at its bottom.	Cut - Possible anvil pit	Length – Unknown not fully excavated Width – Unknown not fully excavated Depth – 0.22m	F206
	Link	https://digventures.com/lindisfarne/ddt/cxt/LDF_2040			
East	2041	Large mud stone faces that appear to line up with 2042.	Masonry - Large stone wall/platform aligned roughly north to south	Length – 2.50m Width – 1.12m Depth – Unknown not fully excavated	F211
	Link	https://digventures.com/lindisfarne/ddt/cxt/LDF_2041			
East	2042	Large mud stone faces that appear to line up with 2041.	Masonry - Two large stones north of projected line of (2041)	Length – 1.00m Width – 0.40m Depth – Unknown not fully excavated	F211
	Link	https://digventures.com/lindisfarne/ddt/cxt/LDF_2042			
East	2043	Oval shape orientated N-S.	Cut - Feature not real	Length – 0.60m Width – 0.50m Depth – Unknown not fully excavated	F207
	Link	https://digventures.com/lindisfarne/ddt/cxt/LDF_2043			
East	2044	Stone packing that might indicate the presence of a post hole, unexcavated	Fill - Feature not real	Length – 0.60m Width – 0.45m Depth – Unknown not fully excavated	F207
	Link	https://digventures.com/lindisfarne/ddt/cxt/LDF_2044			
East	2045	Dark brown sandy silt unexcavated.	Fill - Feature not real	Length – 0.65m Width – 0.45m Depth – Unknown not fully excavated	F207
	Link	https://digventures.com/lindisfarne/ddt/cxt/LDF_2045			
East	2046	A row of stone and soil that were left unexcavated, running NE-SW. Their might be a stone lining between these stones.	Fill - Feature not real	Length – 0.90m Width – 0.70m Depth – Unknown not fully excavated	
	Link	https://digventures.com/lindisfarne/ddt/cxt/LDF_2046			
East	2047	A row of irregular stone running E-W that return on their western edge slightly. This may represent the capping of a burial but was left unexcavated.	Fill- L-shaped stone lined fill in northeast corner of east side of trench	Length – 1.86m Width – 0.87m Depth – Unknown not fully excavated	
	Link	https://digventures.com/lindisfarne/ddt/cxt/LDF_2047			
East	2048	Left unexcavated.	Fill - Feature not real	Length – 0.60m Width – 0.20m Depth – Unknown not fully excavated	
	Link	https://digventures.com/lindisfarne/ddt/cxt/LDF_2048			
West	2049	Three aligned stones running E-W with a further cluster stones on its E end.	Fill - East to west aligned stone kerbing	Length – 1.30m Width – 0.10m Depth – Unknown not fully excavated	
	Link	https://digventures.com/lindisfarne/ddt/cxt/LDF_2049			

Area	Context	Description	Interpretation	Dimensions (m)	Feature
West	2050	Linear cut orientated E-W with a sharp break of slope at the top and concave sides and gradual break of slope at its bottom.	Cut - East to west aligned ditch in southeast corner of west side of trench, possible robber trench	Length – Unknown not fully excavated Width – 1.10m Depth – 0.16m	F208
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2050			
West	2051	Soft mid orange brown sandy silt with frequent small sub-angular and moderate large angular stones.	Fill - Fill of east to west aligned ditch in southeast corner of west side of trench	Length – Unknown not fully excavated Width – 1.10m Depth – 0.16m	F208
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2051			
West	2052	A roughly circular stone layer found in the SE of Trench 2 west, left unexcavated.	Deposit - Stone layer same as (2039)	Length – 1.60m Width – 1.00m Depth – Unknown not fully excavated	
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2052			
West	2053	A patch of disturbed rubble this may be a continuation of context 2049.	Deposit - Stone layer same as (2039)	Length – 1.20m Width – 1.20m Depth – Unknown not fully excavated	
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2053			
West	2054	A row of stones running E-W during 2017 these were thought to cover burials. Left unexcavated.	Stones probably aligned through ploughing. Part of furrow 2020.	Length – 1.10m Width – 0.25m Depth – Unknown not fully excavated	
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2054			
West	2055	A linear cut aligned NW-SE with a gradual break of slope at its top, shallow sides and a gradual break of slope at its bottom. It has an uneven base.	Cut - Northwest to southeast aligned small ditch cut by [2040]	Length – 2.15m Width – 0.10m Depth – 0.10m	F210
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2055			
West	2056	Compact greyish brown silt with sub angular rubble(20%) and human bone (<1%) inclusions.	Deposit- Plough furrow (same as 2020)	Length – 9.00m Width – 4.40m Depth – Unknown not fully excavated	
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2056			
West	2057	Soft, medium orangey brown, sandy clay, with charcoal inclusions and mixed stone types ranging in size from 1cm - 15cm	Deposit - Subsoil	Length-7.70m Width-7.75m Depth-0.05m	
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2057			
West	2058	Void	Void		
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2058			
West	2059	Void	Void (same as 2039)		
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2059			
West	2060	Void	Void		
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2060			
West	2061	Mid greyish brown, silty clay, with poorly sorted mixed stone sub-angular to sub-rounded stones (10%)	Deposit - below 2057, though to be above possible oven, geochemical samples were	length-7.70m Width-7.76m Depth-0.13m	
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2061			

Area	Context	Description	Interpretation	Dimensions (m)	Feature
East	2062	Aligned east to west. Lying in supine position with hands crossed over the pelvis, feet pointed.	Skeleton - Articulated human remains ☞	/	215
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2062			
East	2063	Light orangey bron, sandy clay, with poorly sorted sub-angular stones (10%)	Fill - of burial SK2062	Length- 1.76m Width- 0.69m Depth- 0.21m	215
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2063			
West	2064	Light orangey bron, silty clay, with poorly sorted sub-angular stones (40%)	Deposit - rubble layer, equal to (2064) on exterior of building	Length-2.0m Width-0.50m Depth- 0.07m	
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2064			
West	2065	Light greyish brown, silty clay, with poorly sorted pink sandstone inclusions ranging from 3-14cm (40%)	Deposit - rubble layer, equal to (2064) on interior of building	Length-0.68m Width-2.72m Depth- 0.07m	
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2065			
East	2066	East - west aligned grave cut, with edge only clearly visible next to right tibia	Cut - grave cut for SK2062	Length- 1.76m Width- 0.69m Depth- 0.21m	215
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2066			
East	2067	Head and torso turned on to its side, pelvis half turned, leg straight. Looks like it would have been originally laid supine	Skeleton - Articulated human remains	/	216
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2067			
West	2068	Yellow, blue and white, poorly sorted sub rounded burnt stones (4-11 cm) supported by a silty clay	Deposit - Probably a dump of stones	Length - 1.68 m Width - 0.46 m Depth - unexcavated	217
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2068			
West	2069	Large sub angular to sub rounded stones poorly sorted 8-24cm, supported by a silty clay	Deposit - rubble infilling kiln structure	Length - 9.68 Width - 0.59 Depth - 0.18	217
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2069			
West	2070	compact, mid pinkish brown, silty clay with small sub angular poorly sorted inclusions (15%)	Deposit - mixed stony layer in NW extension	Length - 2.60 Width - 4.16 Depth - 0.05	
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2070			
West	2071	Soft, mid brown, sandy clay, with small sub angular poorly sorted stones (10%)	Deposit - mixed stony layer in NW extension	Length - 2.26 Width - 3.03 Depth - 0.05	
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2071			
West	2072	Compact, mid orangey brown, sandy clay, with burnt clay (15%) and poorly sorted small sub angular stones 4-9cm (20%)	Deposit - mixed stony layer in NW extension	Length - 2.05 Width- 0.85 Depth - 0.05	
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2072			
East	2073	Supine, body under bulk, pelvis down has been excavated	Skeleton - Articulated human remains in southwest corner of trench 2 east.	/	218
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2073			
East	2074	Mid orangey brown, sandy clay, with poorly sorted white and pink subangular sandstone 3-7cm (10%)	Fill - of burial SK2073	Length - 1.00m Width- 0.38 Depth - 0.15	218
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2074			
West	2075	Not fully excavated and difficult to see	Cut - presumed grave cut for SK2073	Length - 1.00m Width- 0.38 Depth - 0.15	218
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2075			

Area	Context	Description	Interpretation	Dimensions (m)	Feature
East	2076	Elongated E-W aligned grave cut	Cut - grave cut for SK2067	Length - 1.83 Width- 0.48 Depth - 0.15	216
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2076			
East	2077	Mid orange brown, silty clay	Fill - of burial SK2067	Length - 1.83 Width- 0.48 Depth - 0.15	216
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2077			
West	2078	Mid orangey brown, silty clay, with poorly sorted sub-angular stones (10%)	Fill - of burial SK2079	Length - 1.95 Width- 0.50 Depth - 0.35	219
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2078			
West	2079	Supine with arms crossed over pelvis	Skeleton - Articulated human remains	/	219
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2079			
	2080	Void	Void		
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2080			
East	2081	Legs of E-W skeleton in supine position	Skeleton - articulated legs of human remains	Length - 0.90m Width - 0.35m Depth - 0.10m	218
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2081			
West	2082	E end of elongated grave cut pit	Cut - E-W grave	Length - 0.90m Width - 0.35m Depth - 0.10m	218
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2082			
West	2083	Redeposited burnt clay	Deposit - on S side of F217, probably related to industrial/ metalworking activity	Length - 1.00m Width - 0.60m Depth - not fully excavated	217
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2083			
West	2084	Line of large stones oriented E-W	Fill - Probably the backfilling of a feature	Length - 3.5m Width - 0.50m Depth - not fully excavated	
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2084			
	2085	Mid orange brown silty clay	Fill - of grave SK2081	Length - 1.00m Width- 0.38 Thickness - 0.15	218
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2085			
East	2086	Light yellow compact sand	Deposit - sand bedding layer	Length- 2.00m Width - 1.00m Thickness - 0.05m	
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2086			
West	2087	Duplicate of (2140)	Duplicate of (2140)		
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2087			
West	2088	Large stone sub angular stones supported by a sandy silt matrix	Deposit - rubble infilling pit	Length- 1.26m Width - 0.70m Thickness - 0.49m	221
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2088			

Area	Context	Description	Interpretation	Dimensions (m)	Feature
West	2089	Dark brown silty clay with charcoal inclusions	Deposit - charcoal spread	Length- 2.00m Width - 2.00m Thickness - 0.10m	
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2089			
West	2090	E-W aligned grave cut with near-vertical sides and flat base	Cut - grave cut for SK2091	Length - 1.75m Width - 0.50m Depth - 0.35m	220
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2090			
West	2091	Lying in supine position oriented E-W	Skeleton - Articulated human remains	Length - 1.75m Width - 0.50m Thickness - 0.10m	220
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2091			
West	2092	Mid brown sandy clay	Fill - of grave SK2091	Length - 1.75m Width - 0.50m Thickness - 0.35m	220
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2092			
West	2093	Void	Void		
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2093			
West	2094	Void	Void		
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2094			
West	2095	Supine, only chest up could be excavated, some ploughing damage	Skeleton - Articulated human remains in S of slot against the bulk in trench 2 W. Lower	/	222
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2095			
West	2096	Lying on its side, with right left extended with the left leg lying on top bent with the knees crossed, the feet where flexed, right hand placed next to upper femur, rest of the	Skeleton - Articulated human remains in N of SK2095 in slot against the baulk in trench 2	/	223
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2096			
West	2097	Duplicate of 2095	Duplicate of 2095		
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2097			
West	2098	Lying on its right side oriented E-W.	Skeleton - Articulated juvenile human remains in slot against the baulk in trench 2 W. Lower	/	224
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2098			
West	2099	Void	Void		
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2099			
West	2100	Stone-filled pit in NE corner of W side of trench	Cut - of pit	Length - 1.30m Width - 0.70m Depth - 0.60m	221
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2100			
East	2101	E-W cut for burial, heavily disturbed by ploughing so the shape in plan is difficult to see, not excavated	Cut - of burial SK2102	Length - 1.10m Width - 0.38m Thickness - Not fully excavated	225
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2101			
East	2102	Duplicate of 2105	Duplicate of 2105		
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2102			

Area	Context	Description	Interpretation	Dimensions (m)	Feature
East	2103	Loose, mid greyish brown, clayey silt, with occasional rounded quartz pebbles and poorly sorted stones	Fill - of burial SK2105	Length - 1.10m Width - 0.38m Thickness - Not fully excavated	225
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2103			
East	2104	The position of the body is unclear as the grave is badly disturbed due to post deposition ploughing and possible recutting of other graves - assumed supine	Skeleton - Partially articulated human remains in trench 2 E.	/	226
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2104			
East	2105	Badly disturbed burial, appears to be lying supine.	Skeleton - Partially articulated human remains in trench 2 E.	/	225
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2105			
West	2106	Lying in its right hand side, with body extended, from mid femur down under baulk	Skeleton - Articulated human remains in N of slot against the baulk in trench 2 W. Lower	/	227
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2106			
East	2107	Lower half of body appears to be supine, however the torso appears to have been twisted and is partially lying on right side facing south, possibly to make the inhumation fit	Skeleton - Articulated human remains in stone lined burial. At S end of trench 2 E.	/	228
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2107			
West	2108	Compact orange clay	Fill - of pit	Length - 0.85m Width - 0.40m Thickness - 0.35m	221
Link	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2108			
West	2109	Dark brown sandy silt with frequent shells in S part of pit	Fill - shell midden within pit	Length - 0.60m Width - 0.50m Thickness - 0.35m	221
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2109			
West	2110	Compact, mid orangey brown, sandy clay, with frequent small to medium sub-angular stones	Deposit - rubble layer	Length - 8.00m Width - 4.00m Thickness - 0.20m	
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2110			
West	2111	Mid to dark brown sandy clay with frequent angular stone inclusions	Deposit - rubble layer	Length - 8.12m Width - 4.30m Thickness - 0.20m	
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2111			
East	2112	Extended supine burial facing east, with some disturbance	Skeleton - Articulated human remains. E of SK2107 (F228).	/	229
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2112			
East	2113	Oblong cut, sharp 90 degree corners at head of grave with stone lining. Base of cut unknown as burial was not lifted	Cut - of burial SK2107	Length - 1.4m (to LOE) Width - 0.42m Depth - not fully excavated	228
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2113			
East	2114	Two large stones, one oriented N-S the other E-W that line the grave [2113]	Masonry - grave lining	Height: 0.23m (to LOE) Width: 0.06m at widest point	228
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2114			

Area	Context	Description	Interpretation	Dimensions (m)	Feature
East	2115	Moderately loose, mid greyish brown, clayey silt with occasional quartz pebbles	Fill - of burial SK2107	Length - 1.4m (to LOE) Width - 0.42m Depth - not fully excavated	228
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2115			
West	2116	Cut close to body, the E most extent of the cut is under baulk. Rounded round the head	Cut - of burial SK2098	Length - 0.81m LOE Width - 0.26m Depth - not excavated	224
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2116			
West	2117	Soft, mid greyish brown, sandy silt, with rare charcoal flecks and small stones	Fill - of burial SK2098	Length - 0.81m LOE Width - 0.26m Depth - not excavated	224
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2117			
West	2118	Linear, W end of cut is under baulk, rounded corners almost circular at E end of cut	Cut - of burial SK2096	Length- 0.84 LOE Width - 0.41 Depth - not excavated.	223
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2118			
West	2119	Soft, mid greyish brown, sandy silt, with frequent charcoal inclusions and occasional small sand stone pebbles	Fill - of burial SK2096	Length- 0.84 LOE Width - 0.41 Depth - not excavated.	223
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2119			
West	2120	Linear cut, cut close to body, rounded around the head, E end under baulk	Cut - of burial SK2095	Length - 0.42m LOE Width - 0.44m Depth- not excavated	222
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2120			
West	2121	Soft, mid greyish brown, sandy silt, with rare small stone pebbles	Fill - of burial SK2095	Length - 0.42m LOE Width - 0.44m Depth- not excavated	222
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2121			
West	2122	Most of the body is under baulk, can be seen from shoulders up. Looks as though they were lying in their right side	Skeleton - Articulated human remains S of SK2106. Body under baulk.	/	230
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2122			
West	2123	Not full extent seen, as most of the burial is under baulk. Cut close to body, rounded around the head.	Cut - of burial SK2122	Length- 0.35m LOE Width - 0.33m Depth- not excavated	230
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2123			
West	2124	Soft, mid greyish brown, sandy silt, with occasional flecks of charcoal and rare small stone pebble inclusions	Fill - of burial SK2122	Length- 0.35m LOE Width - 0.33m Depth- not excavated	230
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2124			

Area	Context	Description	Interpretation	Dimensions (m)	Feature
West	2125	Curvy-linear, Close to body, can't be seen under baulk	Cut - of burial SK2106	Length - 1.04m LOE Width - 0.36m Depth - not excavated	227
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2125			
West	2126	Soft, mid orangey brown, sandy silt, with rare small stone incursions	Fill - of burial SK2106	Length - 1.04m LOE Width - 0.36m Depth - not excavated	227
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2126			
West	2127	Sub circular cut	Cut - of sub circular feature, not excavated, appears to be truncated by SK2106	Length- 0.45m (truncated) Width - 0.35m Depth - not excavated	231
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2127			
West	2128	Soft, dark orangey brown, sandy silt, occasional small stone pebbles	Fill - of sub-circular cut [2127]	Length- 0.45m (truncated) Width - 0.35m Depth - not excavated	231
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2128			
East	2129	Extended supine facing east, with arms placed across body with hands resting over pelvis. Pointing east toes slightly scrunched possibly due to rigor mortis at time of burial.	Skeleton - Articulated human remains	/	232
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2129			
West	2130	Assumed East facing extended supine burial, only feet and lower legs excavated	Skeleton - Articulated human remains which appear to go under the building at NW of	/	233
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2130			
West	2131	Lens of pale yellow ash	Deposit - lens of ash	Length - 0.40m Width - 0.30m Thickness - not fully excavated	217
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2131			
West	2132	Very loose, degraded pink sandstone with lenses of silt with occasional rubble stones becoming more frequent towards base	Deposit - rubble infilling robber cut	Length - 9.50m Width - 6.30m Thickness - 0.30m	217
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2132			
West	2133	Circular shape in plan, sharp breaks of slope with near vertical side and a flat base	Cut - possible robber cut	Length - 9.50m Width - 6.30m Depth - 0.30m	217
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2133			
West	2134	Compact pinkish red clay in NW extension	Deposit - clay spread SW of F217	Length - 5.50m Width - 3.00m Thickness - not fully excavated	
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2134			
West	2135	Soft, mid greyish brown, clayey silt, with common large charcoal and burnt stone inclusions and occasional burnt clay	Deposit - full extent not excavated, under burnt lime and stone, probable related to F217	Length - not fully excavated Width - not fully excavated Thickness - 0.30m	206
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2135			

Area	Context	Description	Interpretation	Dimensions (m)	Feature
West	2136	Moderately loose, mid pinkish/reddish brown, silty sand, with occasional flecks of charcoal and frequent stones ranging from small pebbles to larger cobbles.	Fill - of burial SK2130	Length - not excavated Width - not excavated Thickness - not excavated	233
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2136			
West	2137	Soft, mid greyish brown, clayey silt, with occasional sandstone pebbles and rare shell inclusions	Deposit - full extent not excavated, related to F217	Length - 2.65 Width - not fully excavated Thickness- 0.30	217
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2137			
West	2138	Firm, mid reddish pink, silty clay, with rare sub angular sandstone pebbles	Deposit - full extent not excavated, related to F217	Length- 2.70m Width- not full excavated Thickness - 0.12m	217
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2138			
West	2139	Ver soft, light yellowish white, lime powder	Deposit - full extent not excavated, related to F217	Length- 0.23m Width - not fully excavated Thickness- 0.10m	217
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2139			
West	2140	compacted dark bluish black burnt silt and charcoal	Deposit - full extent not excavated, related to F217	Length- 2.43m Width - not fully excavated Thickness- 0.05m	217
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2140			
West	2141	Burnt stone and lime supported by sandy silt	Deposit - full extent not excavated, related to F217	Length- 0.40m Width - not fully excavated Thickness- 0.22m	217
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2141			
West	2142	Mid orangey red and light yellowish white burnt clay	Deposit - full extent not excavated, related to F217	Length - 0.38m Width - not fully excavated Thickness- 0.16m	217
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2142			
West	2143	Moderately firm, mid greyish brown, clayey silt with Occasional small sand stone pebbles and charcoal flecks	Deposit - full extent not excavated, related to F217	Length- 1.10m Width - not fully excavated Thickness- 0.13m	217
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2143			
East	2144	Oblong cut, with gradual breaks of slope	Cut - of burial SK2145	Length -2.09m Width - 0.48m Depth - 0.07m	234
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2144			
East	2145	Extended laying on right side orientation E-W	Skeleton - Articulated human remains ☑	/ / /	234
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2145			
East	2146	Infant burial, extended lying on back in supine position orientated east west	Skeleton - Articulated infant remains. Found in same burial as SK2145.	/ / /	234
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2146			

Area	Context	Description	Interpretation	Dimensions (m)	Feature
East	2147	Moderately loose, mid greyish brown, clayey silt, with rare small rounded pebbles	Fill - of burial SK2145 & SK2146	Length - 2.09m Width - 0.48m Thickness - 0.07m	234
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2147			
East	2148	Oblong oval cut, with gradual breaks of slope, and a irregular base	Cut - of burial SK2129	Length 1.79m Width 0.86m Depth 0.15m	232
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2148			
East	2149	Loose, mid greyish brown, clayey silt, with poorly sorted rare rounded pebbles	Fill - of burial SK2129	Length: 1.88m Width: 0.7m Thickness: 0.11m	232
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2149			
East	2150	Soft black charcoal	Deposit - circular charcoal spread	Length - 1.00m Width - 0.80m Thickness - Not excavated	235
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2150			
East	2151	Roughly E-W line of five large flat stones	Masonry - grave capstones	Length - 1.85m Width - 0.60m Thickness - Not excavated	
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2151			
East	2152	E-W line of flat stones lying on side	Masonry - stone grave lining	Length - 1.72m Width - 0.15m Thickness - Not excavated	
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2152			
East	2153	Shape in plan is unclear due to post-depositional disturbance from other graves, not excavated	Cut - of burial SK2112	Length - not excavated Width - not excavated Thickness - not excavated	229
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2153			
East	2154	Mid reddish brown, clayey silt, with occasional quartz pebbles and moderately sorted rounded and sub angular stones	Fill - of burial SK2112	Length - not excavated Width - not excavated Thickness - not excavated	229
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2154			
East	2155	E-W line of roughly hewn rectangular blocks at S end of E side of trench	Masonry - E-W wall	Length - 1.80m Width - 0.30m Thickness - Not excavated	
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2155			
East	2156	Soft, light yellowish white, silty sand, with frequent sandstone cobbles	Deposit - layer under (2015)	Length - 11.00m Width - 7.00m Thickness - Not excavated	
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2156			

Area	Context	Description	Interpretation	Dimensions (m)	Feature
West	2157	Large stone blocks forming at least two courses in a U shape	Possible flue or stoke hole, probably related to F217	Length - 1.36m Width - 1.18m Thickness - not excavated	
	Link	https://digventures.com/lindisfarne/ddt/cxt/LDF_2157			
West	2161	Compact, dark yellow brown, silty clay with occasional inclusions of small to medium sized sandstone chunks	Fill - Medieval furrow	Length - 9.00m Width - 4.40m Thickness - 0.42m	
	Link	https://digventures.com/lindisfarne/ddt/cxt/LDF_2161			
East	2162	Soft, mid greyish brown silty clay, with 40% chalk pebble inclusions and charcoal flecks	Fill - soft rubble infill between stone wall F211	Length - 2.01m Width - 0.54m Thickness - 0.14-0.17m	211
	Link	https://digventures.com/lindisfarne/ddt/cxt/LDF_2162			
West	2163	Compact, mid brownish grey silty clay with 40% medium sub angular stone inclusions	Deposit - a mixed stoney rubble and clay layer at the base of the furrow fill, rising	Length - Width - Thickness -	
	Link	https://digventures.com/lindisfarne/ddt/cxt/LDF_2163			
West	2164	Compact, mid orangey brown silty clay with 20% sub angular chalk/limestone inclusions	Deposit - covering the entirety of west wsde of trench, and with numerous graves cut into	Length - Width - Thickness -	
	Link	https://digventures.com/lindisfarne/ddt/cxt/LDF_2164			
West	2165	Moderately firm, friable, pinkish brown sandy silt with very frequent cobbles, occasional small stones, occasional baked clay/daub material (?)	Deposit - latest layer of infilling with F217, a fairly homogenous fill	Length - 5.70m Width - 4.32m Thickness - 0.42m	217
	Link	https://digventures.com/lindisfarne/ddt/cxt/LDF_2165			
East	2166	Hard, mid orangey brown clayey silt with frequent large sub-angular sandstone inclusions and frequent small sandstone pieces	Deposit - graveyard soil equal to 2015, issued for 2020 season cleaning layer	Length - 4.00m Width - 7.00m Thickness - between 0.22m in N and 0.38m in S	
	Link	https://digventures.com/lindisfarne/ddt/cxt/LDF_2166			
West	2167	Soft friable, dark brown clayey silt with frequent large stone, moderate medium stone, occasional small tone, charcoal fleck and shell inclusions	Deposit - layer that had built up around some large stones in SW of F217	Length - 3.19m Width - 1.33m Thickness - 0.50m	217
	Link	https://digventures.com/lindisfarne/ddt/cxt/LDF_2167			
West	2168	Compact, mid orangey brown silty clay with rare flecks of limestone inclusions	Deposit - clean, compact layer below (2164) representing the earliest layer on site as of	Length - Width - Thickness -	
	Link	https://digventures.com/lindisfarne/ddt/cxt/LDF_2168			
West	2169	Softish friable, grey brown clayey silt with occasional small stone and charcoal fleck inclusions	Deposit - layer of fill-like material around the potential stoke hole or flue of F217	Length - 3.43m Width - 1.49m Thickness - Not excavated	217
	Link	https://digventures.com/lindisfarne/ddt/cxt/LDF_2169			
West	2170	Moderately compact, friable, grey brown with white mottling silty clay. Frequent mortar-like inclusions	Deposit - layer with mortar-like material within it	Length - 2.86m Width - 0.96m Thickness - Not excavated	217
	Link	https://digventures.com/lindisfarne/ddt/cxt/LDF_2170			
West	2171	Rectangular, rounded cut with sharp break of slope at top and base. Steep/vertical sides with flat base, oriented E-W	Cut - of burial SK2130	Length - 1.60m Width - 0.47m Depth - 0.13m	233
Link	Link	https://digventures.com/lindisfarne/ddt/cxt/LDF_2171			

Area	Context	Description	Interpretation	Dimensions (m)	Feature
West	2172	Skull in two fragments, cranium discovered upside down abutting a large stone thought to be part of a flue. Mandible present but not articulated. Associated fragment	Skeleton - skull located in flue of F217, disturbed in antiquity possibly when feature was		217
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2172			
West	2173	DUPLICATE OF 2039			
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2173			
East	2174	DUPLICATE OF 2150			
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2174			
East	2175	VOID			
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2175			
East	2176	Soft sand varying from dark orange yellow to light white yellow, with 20% small sub angular sandstone pebbles	Deposit - possible sand/sandstone bedding underneath wall F211	Length - 1.80m Width - 0.50m Thickness - 0.08m	211
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2176			
West	2177	Softish, friable, reddish brown clayey silt with occasional small stone, daub-like material, and charcoal fleck inclusions	Fill - of possible stoke hole/flue of F217. Within fill was SK2172. Possibly some of the earliest fill in F217	Length - 0.75m Width - 0.47m Thickness - Not excavated	217
		https://digventures.com/lindisfame/ddt/cxt/LDF_2177			
West	2178	Moderately compact, reddish brown silty clay with occasional small stone and charcoal fleck inclusions	Deposit - seen between F217 and F238	Length - 2.10m Width - 1.69m Thickness - Not excavated	217 & 238
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2178			
West	2179	Moderately soft, friable, dark grey/brown mottled clayey silt with frequent charcoal/burnt wood, occasional small stone and cu/cu alloy blob inclusions	Fill - of a possible smithy pit, likely used for copper or bronze working. Contained	Length - 0.64m Width - 0.64m Thickness - 0.10m	238
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2179			
West	2180	Compact, friable, grey brown clayey silt with occasional small stone and charcoal fleck inclusions, and frequent shells	Deposit - a shelly layer seen after (2134) was excavated	Length - 1.51m Width - 1.01m Thickness - Not excavated	
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2180			
West	2181	Moderate, friable, dark grey brown silty clay with frequent charcoal/burnt wood, moderate shell, occasional small stone inclusions and occasional clay patches	Fill - of a potential beam slot or small lozenge shaped pit or very short, shallow gully	Length - 1.32m Width - 0.50m Thickness - 0.12m	239
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2181			
West	2182	Supine with head turned to face south, oriented E-W. Neonatal burial next to right fibula is potentially related	Skeleton - adult burial with possible associated neonatal burial		237
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2182			
West	2183	Skull exposed during cleaning of (2164). Body not exposed or excavated	Skeleton - probable burial		247

Area	Context	Description	Interpretation	Dimensions (m)	Feature
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2183			
West	2184	Skull exposed during cleaning of (2164). Body not exposed or excavated	Skeleton - probable burial		244
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2184			
West	2185	Skull exposed during cleaning of (2164). Body not exposed or excavated	Skeleton - probable burial		250
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2185			
West	2186	Supine E-W though only lower half of body exposed, with the rest running into western baulk of trench	Skeleton - adult burial with associated infant burial SK2187		236
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2186			
West	2187	Supine E-W	Skeleton - infant burial approx. 4-5 years old associated with SK2186		236
		https://digventures.com/lindisfame/ddt/cxt/LDF_2187			
West	2188	Skull exposed during cleaning of (2164). Body not exposed or excavated	Skeleton - probable burial		252
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2188			
West	2189	Skull and humerus exposed and excavated with no other remains evident	Skeleton - highly disturbed, probably not the one individual		262
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2189			
West	2190	Skull exposed during cleaning of (2164). Body not exposed or excavated	Skeleton - probable burial		
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2190			
West	2191	Skull exposed during cleaning of (2164). Body not exposed or excavated	Skeleton - probable burial		251
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2191			
West	2192	Skull exposed during cleaning of (2164). Body not exposed or excavated	Skeleton - probable burial		245
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2192			
West	2193	Skull exposed during cleaning of (2164). Body not exposed or excavated	Skeleton - burial underneath capstones		243
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2193			

Area	Context	Description	Interpretation	Dimensions (m)	Feature
West	2194	Partially articulated remains exposed during cleaning of (2164). Body not fully exposed or excavated	Skeleton - probable burial		
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2194			
West	2195	Partial lower jaw bone with unerupted teeth. Body not fully exposed or excavated	Skeleton - probable burial		246
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2195			
West	2196	Cut not visible but burials probably placed in same grave cut	Cut - possible grave cut for burials SK2182 & SK2228	Length - not excavated Width - not excavated Depth - not excavated	237
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2196			
West	2197		Fill - possible grave fill for burials SK2182 & SK2228	Length - not excavated Width - not excavated Depth - not excavated	237
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2197			
West	2198	Cut not visible and unexcavated as of 2020 season	Cut - possible grave cut for burial SK2183	Length - not excavated Width - not excavated Depth - not excavated	247
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2198			
West	2199	Fill not visible and unexcavated as of 2020 season	Fill - possible grave fill for burial SK2183, incorporating stone lining	Length - not excavated Width - not excavated Depth - not excavated	247
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2199			
West	2200	Cut not visible and unexcavated as of 2020 season	Cut - possible grave cut for burial SK2184	Length - not excavated Width - not excavated Depth - not excavated	244
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2200			
West	2201	Fill not visible and unexcavated as of 2020 season	Fill - possible grave fill for burial SK2184	Length - not excavated Width - not excavated Depth - not excavated	244
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2201			

Area	Context	Description	Interpretation	Dimensions (m)	Feature
West	2202	Cut not visible and unexcavated as of 2020 season	Cut - possible grave cut for burial SK2185	Length - not excavated Width - not excavated Depth - not excavated	250
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2202			
West	2203	VOID			
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2203			
West	2204	Fill not visible and unexcavated as of 2020 season	Fill - possible grave fill for burial SK2185	Length - not excavated Width - not excavated Depth - not excavated	250
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2204			
West	2205	Not visible on surface and full dimensions not known as grave runs into western baulk of trench	Cut - grave cut for burial SK2186, most likely the same cut as [2207]	Length - 1.16m Width - 0.55m Depth - 0.12m	236
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2205			
West	2206	Same as (2164) and only partially excavated as grave runs into western baulk of trench	Fill - grave fill for burial SK2186	Length - 1.48m Width - 1.38m Thickness - 0.12m	236
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2206			
West	2207	Not visible on surface and full dimensions not known as grave runs into western baulk of trench	Cut - grave cut for infant burial SK2187, most likely the same cut as [2205]	Length - 1.16m Width - 0.55m Depth - 0.12m	236
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2207			
West	2208	Same as (2164) and only partially excavated as grave runs into western baulk of trench	Fill - grave fill for infant burial SK2187, most likely same fill as (2206)	Length - 1.48m Width - 1.38m Thickness - 0.12m	236
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2208			
West	2209	Cut not visible and unexcavated as of 2020 season	Cut - possible grave cut for burial SK2188	Length - not excavated Width - not excavated Depth - not excavated	252
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2209			
West	2210	Fill not visible and unexcavated as of 2020 season	Fill - possible grave fill for burial SK2188	Length - not excavated Width - not excavated Depth - not excavated	252
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2210			
West	2211	Cut not visible and not fully excavated as of 2020 season	Cut - possible grave cut for burial SK2189	Length - not excavated Width - not excavated Depth - not excavated	262
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2211			

Area	Context	Description	Interpretation	Dimensions (m)	Feature
West	2212	Same as (2164) and only partially excavated when skull was lifted	Fill - possible grave fill for burial SK2189	Length - not excavated Width - not excavated Depth - not excavated	262
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2212			
West	2213	Cut not visible and unexcavated as of 2020 season	Cut - possible grave cut of burial SK2190	Length - not excavated Width - not excavated Depth - not excavated	
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2213			
West	2214	Fill not visible and unexcavated as of 2020 season	Fill - possible grave fill of burial SK2190	Length - not excavated Width - not excavated Depth - not excavated	
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2214			
West	2215	Cut not visible and unexcavated as of 2020 season	Cut - possible grave cut of burial SK2191	Length - not excavated Width - not excavated Depth - not excavated	251
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2215			
West	2216	Fill not visible and unexcavated as of 2020 season	Fill - possible grave fill of burial SK2191	Length - not excavated Width - not excavated Depth - not excavated	251
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2216			
West	2217	Cut not visible and unexcavated as of 2020 season	Cut - possible grave cut of burial SK2192	Length - not excavated Width - not excavated Depth - not excavated	245
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2217			
West	2218	Fill not visible and unexcavated as of 2020 season	Fill - possible grave fill of burial SK2192	Length - not excavated Width - not excavated Depth - not excavated	245
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2218			
West	2219	Cut not visible and unexcavated as of 2020 season	Cut - possible grave cut of burial SK2193	Length - not excavated Width - not excavated Depth - not excavated	243

Area	Context	Description	Interpretation	Dimensions (m)	Feature
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2219			
West	2220	Fill not visible and unexcavated as of 2020 season	Fill - possible grave fill of burial SK2193	Length - not excavated Width - not excavated Depth - not excavated	243
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2220			
West	2221	Cut not visible and unexcavated as of 2020 season	Cut - possible grave cut of burial SK2194	Length - not excavated Width - not excavated Depth - not excavated	
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2221			
West	2222	Fill not visible and unexcavated as of 2020 season	Fill - possible grave fill of burial SK2194	Length - not excavated Width - not excavated Depth - not excavated	
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2222			
West	2223	Duplicate of (2140)			246
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2223			
West	2224	Fill not visible and unexcavated as of 2020 season	Fill - Probable grave fill of SK195	Length - not excavated Width - not excavated Depth - not excavated	246
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2224			
West	2225	Top of a skull	Skeleton - probable burial		
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2225			
West	2226	Circular pit with moderate sides and a concave base	Cut - of possible smithy pit	Length - 0.64m Width - 0.64m Depth - 0.10m	238
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2226			
West	2227	Ovoid cut running E-W with an uneven base	Cut - of potential beam slot	Length - 1.32m Width - 0.50m Depth - 0.12m	239
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2227			
West	2228	Neonatal burial in lying in supine position	Skeleton - Neonatal burial, buried in the same cut as adult burial SK 2182		237
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2228			
West	2229	Soft friable, dark grey/ black, silty charcoal	Fill - sump or insitu burning within feature. Possibly smithing.	Length - 0.21m + Width - 0.14m Depth - 0.05m	238
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2229			

Area	Context	Description	Interpretation	Dimensions (m)	Feature
East	2230	Skull exposed during cleaning of (2166). Body not fully exposed or excavated	Skeleton - probable burial		
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2230			
East	2231	Skull exposed during cleaning of (2166). Body not fully exposed or excavated	Skeleton - probable burial		
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2231			
East	2232	Skull exposed during cleaning of (2166). Body not fully exposed or excavated	Skeleton - probable burial		
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2232			
East	2233	Skull exposed during cleaning of (2166). Body not fully exposed or excavated	Skeleton - probable burial		
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2233			
East	2234	Skull exposed during cleaning of (2166). Body not fully exposed or excavated	Skeleton - probable burial		
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2234			
East	2235	Skull exposed during cleaning of (2166). Body not fully exposed or excavated	Skeleton - probable burial		
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2235			
East	2236	Skull exposed during cleaning of (2166). Body not fully exposed or excavated	Skeleton - probable burial		
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2236			
East	2237	Skull exposed during cleaning of (2166). Body not fully exposed or excavated	Skeleton - probable burial		
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2237			
East	2238	Skull exposed during cleaning of (2166). Body not fully exposed or excavated	Skeleton - probable burial		
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2238			
East	2239	Skull exposed during cleaning of (2166). Body not fully exposed or excavated	Skeleton - probable burial		
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2239			
East	2240	Skull exposed during cleaning of (2166). Body not fully exposed or excavated	Skeleton - probable burial		
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2240			

Area	Context	Description	Interpretation	Dimensions (m)	Feature
West	2241	Rectangular, E-W aligned grave cut	Cut - possible grave cut	Length - 1.40m Width - 0.58m Depth - not excavated	261
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2241			
West	2242	Compacted, mid orangey brown, sandy clay with 15% small angular white lime/sandstone pieces	Fill - of possible grave	Length - 1.40m Width - 0.58m Depth - not excavated	261
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2242			
East	2243	Skull exposed during cleaning of (2166). Body not fully exposed or excavated	Skeleton - probable burial		
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2243			
East	2244	Skull exposed during cleaning of (2166). Body not fully exposed or excavated	Skeleton - probable burial		
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2244			
East	2245	Skull exposed during cleaning of (2166). Body not fully exposed or excavated	Skeleton - probable burial		
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2245			
East	2246	Skull exposed during cleaning of (2166). Body not fully exposed or excavated	Skeleton - probable burial		
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2246			
East	2247	Skull exposed during cleaning of (2166). Body not fully exposed or excavated	Skeleton - probable burial		
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2247			
East	2248	Skull exposed during cleaning of (2166). Body not fully exposed or excavated	Skeleton - probable burial		
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2248			
East	2249	Skull exposed during cleaning of (2166). Body not fully exposed or excavated	Skeleton - probable burial		
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2249			
East	2250	Skull exposed during cleaning of (2166). Body not fully exposed or excavated	Skeleton - probable burial		
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2250			
East	2251	Skull exposed during cleaning of (2166). Body not fully exposed or excavated	Skeleton - probable burial		
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2251			
East	2252	Infant skeleton partially exposed during cleaning of (2166). Body not fully exposed or excavated	Skeleton - probable infant burial		255
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2252			
East	2253	Infant skeleton partially exposed during cleaning of (2166). Body not fully exposed or excavated, only 3 ribs and humerus exposed.	Skeleton - probable infant burial		
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2253			
East	2254	Skull exposed during cleaning of (2166). Body not fully exposed or excavated	Skeleton - probable burial		
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2254			
East	2255	Skull exposed during cleaning of (2166). Body not fully exposed or excavated	Skeleton - probable burial		
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2255			

Area	Context	Description	Interpretation	Dimensions (m)	Feature
East	2256	Skull exposed during cleaning of (2166). Body not fully exposed or excavated	Skeleton - probable burial		
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2256			
East	2257	Skull exposed during cleaning of (2166). Body not fully exposed or excavated	Skeleton - probable burial		
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2257			
East	2258	Skull exposed during cleaning of (2166). Body not fully exposed or excavated	Skeleton - probable burial		
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2258			
East	2259	Skull exposed during cleaning of (2166). Body not fully exposed or excavated	Skeleton - probable burial		
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2259			
East	2260	Skull exposed during cleaning of (2166). Body not fully exposed or excavated	Skeleton - probable burial		
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2260			
East	2261	Skull exposed during cleaning of (2166). Body not fully exposed or excavated	Skeleton - probable burial		
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2261			
West	2262	Rectangular, E-W aligned grave cut	Cut - possible grave cut	length - 1.60m width - 0.45m Depth - not excavated	260
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2262			
West	2263	compacted, mid orangey brown, sandy clay with 5% inclusions of small white angular lime/sandstone pieces	Fill - of possible grave	length - 1.60m width - 0.45m Depth - not excavated	260
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2263			
West	2264	Skull exposed during 2020, body not fully exposed or excavated	Skeleton - probable burial		253
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2264			
West	2265	Compact friable, grey brown, silty clay with occasional small stones, occasional charcoal flecks	Layer - overburden	Length - 4.10m Width - 4.04m Thickness - 0.05m	
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2265			
West	2266	Context recorded for sampling for archaeomagnetic dating.	Hasn't been excavated so we can't interpret it yet.	Length - not excavated Width - not excavated Depth - not excavated	
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2266			
West	2267	VOID			
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2267			

Area	Context	Description	Interpretation	Dimensions (m)	Feature
West	2268	Context recorded for sampling for archaeomagnetic dating. Burnt layer under 2165 currently seen in the base of F217.	Hasn't been excavated so we can't interpret it yet.	Length - not excavated Width - not excavated Depth - not excavated	217
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2268			
West	2269	Circular cut with steep sides and concave base	Cut - of post hole, part of a row may be associated with F213	Length - 0.21m Width - 0.12m + Depth - 0.09m	240
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2269			
West	2270	Soft friable, dark grey/black, silty clay, frequent burnt wood	Fill - of post hole [2269]	Length - 0.21m Width - 0.12m + Thickness - 0.09m	240
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2270			
West	2271	Circular cut with steep sides and concave base	Cut - of post hole, part of a row may be associated with F213	Length - 0.20m Width - 0.08m + Depth - 0.30m	241
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2271			
West	2272	Soft friable, dark grey/black, silt, frequent burnt wood	Fill - of post hole [2271]	Length - 0.20m Width - 0.08m+ Thickness - 0.30m	241
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2272			
West	2273	Circular cut with moderate - steep sides and concave base	Cut - of post hole, part of a row may be associated with F213	Length - 0.18m Width - 0.17m Depth - 0.21m	242
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2273			
West	2274	Soft, dark grey/black, silty clay, with frequent burnt wood, occasional small stones	Fill - of post hole [2273]	Length - 0.18m Width - 0.17m Thickness - 0.21m	242
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2274			
West	2275	Skull exposed during 2020, body not fully exposed or excavated	Skeleton - probable burial		256
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2275			
West	2276	Skull exposed during 2020, body not fully exposed or excavated	Skeleton - probable burial		254
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2276			
West	2277	Rectangular, E-W aligned grave cut	Cut - possible grave cut	Length- 1.40m Width - 0.47m Depth - not excavated	256
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2277			
West	2278	Compacted, mid orangey brown, sandy clay, with 10% small angular pieces of white sand/limestone	Fill - of possible grave	Length- 1.40m Width - 0.47m Thickness - not excavated	256
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2278			
West	2279	Rectangular, E-W aligned grave cut	Cut - possible grave cut	Length - 1.60m Width - 0.70m Depth - not excavated	258
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2279			
West	2280	Compacted, mid orangey brown, sandy clay, 10% inclusions of small angular white sand/limestone	Fill - of possible grave	Length - 1.60m Width - 0.70m Thickness - not excavated	258
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2280			

Area	Context	Description	Interpretation	Dimensions (m)	Feature
West	2281	Rectangular, E-W aligned grave cut	Cut - possible grave cut	Length - not excavated Width - not excavated Depth - not excavated	257
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2281			
West	2282	Compact, mid orangey brown, sandy clay, with 20% inclusions of small angular white lime/sandstone pieces	Fill - of possible grave	Length - not excavated Width - not excavated Thickness - not excavated	257
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2282			
West	2283	Sub-oval, E-W aligned grave cut	Cut - possible grave cut	Length - 1.00m + Width - 0.40m Depth - not excavated	259
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2283			
West	2284	Moderately compact, mid orangey brown, sandy clay, with very frequent inclusions of small rounded white quartz pebbles, and infrequent inclusions of small angular white lime/sandstone pieces	Fill - of possible grave	Length - 1.00m + Width - 0.40m Thickness - not excavated	259
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2284			
West	2285	E-W aligned supine burial	Skeleton - Articulated human remains		249
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2285			
West	2286	Moderately compact friable, pinkish brown, silty clay, with moderate degraded sandstone cobbles, occasional small stones, occasional charcoal flecks	Fill - grave fill for burial SK2285	Length - 1.71m Width - 0.56m Thickness - 0.20m	249
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2286			
West	2287	Line of large stones, at least two courses.	Masonry - wall, purpose unclear	Length - 3.68m Width - 0.46m Depth - 0.42m	248
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2287			
West	2288	Layer of cobbles W of F217	Layer - of cobbles, purpose unclear	Length - 2.85m Width - 1.76m Thickness - not excavated	
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2288			
West	2289	Flat rectangular stones, running E-W	Masonry - stone capping of burial S2193	Length - 1.30 Width - 0.47 Height - 0.08	243
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2289			
West	2290	Cut not visible and unexcavated as of 2020 season	Cut - possible grave cut for SK2264	Length - not excavated Width - not excavated Depth - not excavated	253
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2290			

Area	Context	Description	Interpretation	Dimensions (m)	Feature
West	2291	Fill not visible and unexcavated as of 2020 season	Fill - possible grave fill for SK2264	Length - not excavated Width - not excavated Thickness - not excavated	253
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2291			
West	2292	Cut not visible and unexcavated as of 2020 season	Cut - possible grave cut for SK2276	Length - not excavated Width - not excavated Depth - not excavated	254
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2292			
West	2293	Fill not visible and unexcavated as of 2020 season	Fill - possible grave fill for SK2276	Length - not excavated Width - not excavated Thickness - not excavated	254
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2293			
West	2294	Cut not visible and unexcavated as of 2020 season	Cut - possible grave cut for SK2225	Length - not excavated Width - not excavated Thickness - not excavated	255
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2294			
West	2295	Fill not visible and unexcavated as of 2020 season	Fill - possible grave fill for SK2225	Length - not excavated Width - not excavated Thickness - not excavated	255
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2295			
West	2296	Three upright limestone blocks, forming a line running E-W. Rough finish with no coursing or bonding.	Masonry - stone lining of burial Sk2183	Length - 1.15m Width - 0.09m Height - 0.12m	247
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2296			
West	2297	Moderate - large sub-angular stones	Layer - probable collapsed wall, may have been part of F248	Length - 2.04m Width - 0.80m	248
	Link	https://digventures.com/lindisfame/ddt/cxt/LDF_2297			

Appendix B: Human remains catalogue

Sk No	Feature	Cut	Fill	Condition			Broad Age Group	Potential for:			Parts Present:									Pathology	Notes
				F	SP	%		Age	Sex	Stature	Skull	Dentition	Torso	Arms	Hands	Pelvis	Legs	Feet	Joints		
2105	F225	2101	2103	mod	2-3	25-50	A	Y	Y	N	-	-	Y	Y	Y	Y	Y	-	Y	Y	Joint disease; development/trauma
2107	F228	2113	2115	sli	1-2	75+	A	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Schmorl's nodes; dental disease; some further cleaning required (auricular surfaces, sternal ribs)
2112	F229	2153	2154	sli	1-4	50-75	A	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	-	Y	Y	Schmorl's nodes; dental disease; check if R femur & any other disarticulated bones are part of Sk 2112; some further cleaning required (spine - joint surfaces)

Table 2: Trench 2 (East) articulated skeletons

Sk No	Feature	Cut	Fill	Condition			Broad Age Group	Potential for:			Parts Present:									Pathology	Notes
				F	SP	%		Age	Sex	Stature	Skull	Dentition	Torso	Arms	Hands	Pelvis	Legs	Feet	Joints		
2130	F233	2171	2136	mod	1-2	75+	A	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Metabolic disease; dental disease; joint disease; further cleaning required (spine and hands - joint surfaces); nine fragments human bone (including fragments of vertebra, pelvis and hands) recovered from sample

Sk No	Feature	Cut	Fill	Condition			Broad Age Group	Potential for:			Parts Present:										Pathology	Notes
				F	SP	%		Age	Sex	Stature	Skull	Dentition	Torso	Arms	Hands	Pelvis	Legs	Feet	Joints			
																					141 – potentially part of Sk 2130, check during full analysis	
2182	F237	2196	2197	mod	1-2	75+	A	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Dental disease; joint disease; common developmental spinal anomaly; further cleaning required (some joint surfaces of spine and pubic symphysis)	
2187	F236	2205	2206	mod	1-3	75+	YJ	Y	-	-	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Possible dental developmental anomaly; inflammation; age estimation should be possible based on dental development and eruption, long bone lengths and skeletal development	
2228	F237	2196	2197	mod	2-3	25-50	N	Y	-	-	Y	Y	Y	Y	-	-	Y	-	-	-	Skeleton currently not cleaned - will need cleaning prior to analysis; some animal bone co-mingled; age estimation should be possible based on dental and skeletal development – long bones too incomplete to measure	
2285	F249	-	2286	sli	1-2	75+	A	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Joint disease; dental disease; inflammation, possible inflammation or trauma of ulna; some further cleaning required (spine and feet - joint surfaces)	

Table 3: Trench 2 (West) articulated skeletons

% = Completeness expressed as a percentage; SP = Surface Preservation: 0 (excellent), 1 (very good), 2 (good), 3 (moderate), 4 (poor), 5 (very poor), 5+ (extremely poor), adapted from McKinley (2004); F = Fragmentation: min (minimal), sli (slight), mod (moderate), sev (severe), ext (extreme); * should have skull & dentition based on in situ photo; ** Should have rest of body, not just skull based on in situ photo.

Sk No/ Context	Context Description	Condition			Broad Age Group	Potential for:			Parts Present:									Pathology	Notes
		F	SP	%		Age	Sex	Stature	Skull	Dentition	Torso	Arms	Hands	Pelvis	Legs	Feet	Joints		
2166, Skull 1	Graveyard soil in E side of Trench 2	sev	2- 4	<25	A	Y?	Y	N	Y	Y	-	-	-	-	-	-	-	-	In fragments but seems reasonably complete
2166, Skull 2	Graveyard soil in E side of Trench 2	sli	3- 4	<25	A	Y?	Y	N	Y	Y	-	-	-	-	-	-	-	-	Fairly intact cranium (vault & face); NMT; dentition present; some odd lesions but unclear if pathological or post-mortem damage

Table 4: Trench 2 (East) disarticulated skeletons/skulls

Sk No/ Context	Context Description	Condition			Broad Age Group	Potential for:			Parts Present:									Pathology	Notes
		F	SP	%		Age	Sex	Stature	Skull	Dentition	Torso	Arms	Hands	Pelvis	Legs	Feet	Joints		
2118	?*	mod	1-2	<25	A	Y?	Y	N	Y	Y	-	-	-	-	-	-	-	-	Skull needs washing; online records have 2118 as the grave cut for Sk 2096
2172	Located in the flue of F217,	sli-mod	2-3	<25	A	Y?	Y	N	Y	Y	-	Y?	-	-	-	-	-	-	Fairly intact vault, but face & mandible in more fragments; NMT;

	within fill 2177																		L clavicle & scapula also present, but not clear if definitely part of same skeleton as skull
2189	South west corner of Trench 2; cut 2211, fill 2212	sli	3- 4	<25	A	Y?	Y	N	Y	Y	-	Y?	-	-	-	-	-	-	Cranium mostly fairly intact + some fragments; NMT; sharp force peri-mortem trauma to R occipital + possibly 2nd peri- mortem injury to superior cranium (margins a little eroded); L humerus also present, but not clear if part of same skeleton as skull; small non- adult/?species bone also present

Table 5: Trench 2 (West) disarticulated skeletons/skulls

Appendix C: Animal bone catalogue

Context	Terrestrial mammals							Ungulate			Marine mammals		Mammal					Total
	<i>Equus</i>	<i>Bos</i>	<i>cf. Cervus elaphus</i>	<i>Sus</i>	<i>Ovis/ Capra</i>	<i>Felis catus</i>	<i>Rattus</i>	Large	Small	Unsize	Cetacean	Phocidae	Large	Medium /large	Medium	Medium /small	Small	
2001									1				2	3	3			9
2001E		1			2													3
2001N		1							14				5		2			22
2001 W					1		1			1			1	8	2			14
2039				1	2	1				1			2		6			13
2068													2	2	3			7
2083		1																1
2111	1	12		2	2	1		3	1				22	15	19			78
2134		8		3	8			5	6	1		1	33	50	23			138
2136								1					4		4			9
2161		13		3	1			3	1		1		3		1			26
2164		20		8	8			1					26	6	13			82
2165		7			2			2	1		1		14	12	9	1		49
2166		1						2					1					4
2167												1	1	3	1			6
2168		1			1				1									3
2170													13	12				25
2177														2	1			3
2179				1				8					2	1	2		1	15

Context	Terrestrial mammals							Ungulate			Marine mammals		Mammal					Total
	Equus	Bos	cf. Cervus elaphus	Sus	Ovis/Capra	Felis catus	Rattus	Large	Small	Unsize	Cetacean	Phocidae	Large	Medium /large	Medium	Medium /small	Small	
2181			1										4					5
Total	1	65	1	18	27	2	1	25	25	3	2	2	135	114	89	1	1	512

Table 6: Summary of mammal remains

Context	Birds										Fish				Total
	Anser anser domesticus	cf. Anser anser domesticus	Anas platyrhynchos	Gallus gallus domesticus	Galliformes	Laridae	Large bird	Medium/large bird	Medium/small bird	Small bird	Salmo	Gadus morhua	Gadiformes	Fish	
2001W		1													1
2111			1					1	1		1				4
2134	1					1									2
2136												3			3
2164	2			3						2	1			1	9
2165							1	3							4
2166													1		1
2167				1											1
2177							1								1
2179					1										1
2181			1												1
Total	3	1	2	4	1	1	2	4	1	2	2	3	1	1	28

Table 7: Summary of bird and fish remains

	<i>Ostrea edulis</i>	<i>Cerastoderma edule</i>	<i>Mytilus</i> sp.	<i>Littorina littorea</i>	<i>Patella vulgata</i>	
Context	Edible oyster	Common cockle	Mussel	Periwinkle	Limpet	Total
2001	8	1		18		27
2001E				4		4
2001N	7			29		36
2001W	17	1		24	2	44
2068	2					2
2111	1			4		5
2134	61	15	1	174	1	252
2136	1			8		9
2161	36			48	2	86
2164	89	2		185	1	277
2165	42	2	1	139		184
2166	24	1		8		33
2167				24		24
2168	1			10		11
2170				1		1
SK2172				1		1
2177	1	5		28		34
2179	7	2		23		32
2180	8			2		10
2181	6			38		44
SK2184				1		1
2187		1				1
2265	10			9		19
2286				1		1
Total	321	30	2	779	6	1138

Table 8: Summary of marine mollusc remains

Context	Taxa	Element	Cut	Chop
2134	Cattle	Astragalus	0	1
	Medium mammal	Vertebra	0	1
2161	Cattle	Axis	0	1
2164	Cattle	Femur	0	1
	Large mammal	Rib	0	1
	Salmon/trout	Caudal vertebra	0	1
2165	Whale	Vertebra	0	1
	Medium mammal	Vertebra	1	0
	Large bird	Pelvis	1	0
2179	Pig	Longbone shaft	1	0

Table 9: Evidence for carcass processing

Appendix D: Ceramics catalogue

Cxt	Code	Full Name/Description	Form	NoSh	Wt	Part	TPQ	TAQ
2001 West	TWV1 type	Tweed Valley ware type 1	HV	1	3		1200	1350
2001	TWV1S type	Sandy Tweed Valley ware type 1	HV	1	2		1200	1350
2001 East	ER / ERS	English post-medieval red earthenware / slip- decorated red earthenware	Jug/ Mug	1	46	R+H	1580	1700
2001 North	ER / ERS	English post-medieval red earthenware / slip- decorated red earthenware	HV	1	1		1580	1700
2161	SCARB	Scarborough Ware	HV	1	4		1225	1350

Table 10: Pottery catalogue

Area	Context	SF No	Fabric	Function	Confidence	NoSh	Wt	Mortaring	Comments
East	2001		TZ11	B/T		5	10		
West	2001		TZ21	Tile		1	13		
West	2068		d01	Brick		6	252		
West	2134		d01	brick	3	1	2		
West	2134		ST01	b/t		1	19	1	siltstone
West	2136		d01	Brick	3	1	32		
West	2136		d01	b/t		9	3		
West	2161		d01	b/t		1	4		
West	2165		d01	Brick	3	13	184		
West	2165		d01	Brick	3	5	687		
West	2165		d01	Brick	3	11	94		
West	2165	197	d01	Brick	3	2	23	1	
West	2172		d01	B/T		1	2		
West	2177		d01	B/T		9	19		
West	2179		d01	B/T		6	2		
West	2181		d01	B/T		2	1		

Table 11: CBM catalogue

Appendix E: Metalworking debris catalogue

Context	Feature Type	Smithing Slag Count	Smithing Slag Weight	Tap Slag Count	Tap Slag Weight	Slagged Lining Count	Slagged Lining Weight	Cinder Count	Cinder Weight	Clinker Count	Clinker Weight	Fe Metal Count	Fe Metal Weight	Non_Ferrous Metal	Non_Ferrous Metal	Other Weight
2111	rubble layer											2	15			
2130	Burial							30	19							
2134	Deposit	45	182			4	64	6	19	4	87			1	3	
2135	Deposit													1	3	
2164	Deposit	6	143					1	3							
2165	Deposit	15	224			4	185	14	35							101
2167	Deposit					1	46	4	5							
2168	Deposit							3	6							
2179	Fill	1	5					30	32							
2181	Fill, pit or beam slot			1	26			51	156							
2182	Burial	1	3													
2229	Fill							10	10							
2270	Fill of posthole									1	102					

Context	Feature Type	Smithing Slag Count	Smithing Slag Weight	Tap Slag Count	Tap Slag Weight	Slagged Lining Count	Slagged Lining Weight	Cinder Count	Cinder Weight	Clinker Count	Clinker Weight	Fe Metal Count	Fe Metal Weight	Non_Ferrous Metal	Non_Ferrous Metal	Other Weight
2272	Fill of posthole	4	30													
2274	Fill of posthole							50	26							
2288	Cobble Layer					2	2860									
Totals		72	587	1	26	11	3155	199	311	5	189	2	15	2	6	101

Table 12: Catalogue of industrial residues from Trench 2 (West)

Context	Feature Type	Smithing Slag Count	Smithing Slag Weight	Tap Slag Count	Tap Slag weight	Slagged Lining Count	Slagged Lining Weight	Cinder Count	Cinder Weight	Clinker Count	Clinker Weight	Fe Metal Count	Fe Metal Weight	Non_Ferrous Metal	Non_Ferrous Metal	Other Weight
2001	Topsoil	4	20													
2166	Deposit	1	13													
Total		5	33													

Table 13: Catalogue of industrial residues from Trench 2 (East)

Area	Context	Feature Type	Feature Number	Smithing Slag Weight	Tap Slag weight	Slagged Lining Weight	Cinder Weight	Clinker Weight	Fe Metal Weight	Non-Ferrous Metal Weight	Other Weight
West	2135	Deposit	206							3	
West	2167	Deposit	217	224		231	40				101
West	2130	Burial	233				19				
West	2182	Burial	237	3							
West	2229	Fill	238	5			42				
West	2181	Fill, pit or beam slot	239		26		156				
West	2270	Fill of posthole	240					102			
West	2272	Fill of posthole	241	30							
West	2274	Fill of posthole	242				26				
West	2111	rubble layer							15		
West	2134	Deposit		182		64	19	87		3	
West	2164	Deposit		143			3				
West	2168	Deposit					6				
West	2285	Burial									
West	2288	Cobble layer				2860					
East	2001	Topsoil		20							
East	2166	Deposit		13							

Area	Context	Feature Type	Feature Number	Smithing Slag Weight	Tap Slag weight	Slagged Lining Weight	Cinder Weight	Clinker Weight	Fe Metal Weight	Non-Ferrous Metal Weight	Other Weight
Total				620	26	3155	311	189	15	6	101

Table 14: Catalogue of industrial residues by Feature number

Context	Sieve Number	Sieve Size	HS?	Flake?	Spheroidal?	Slag present?	Sample Weight	Comment
2229	143	<1mm	n			y	1	
2229	143	1-2mm	y	y			15.9	a few flakes
2179	144	<2mm	y	y			2	a few flakes
2179	144	2-4mm	n				13.9	
2181	145	<2mm	y	y			19.1	lots of flakes
2181	145	2-4mm	y	y		y	26.2	some flake
2274	151	1-4mm	y	y	y		3.1	mostly HS
2274	151	>1mm	y	y			16.1	some HS

Table 15: Catalogue of the magnetic fractions (weight in grams). HS? -Hammerscale present?; Flake - Flake Hammerscale present?; Spheroidal - Spheroidal Hammerscale present?

Appendix F: Coin catalogue

Context	SF No.	Qty	W (g)	Diameter (mm)	Ruler	Moneyer	Obverse	Reverse	Notes
2164	181	1	1	13	Æthelred II (2 nd reign; 844–8?)	Eardwulf	+EDILRED REX (cross in centre)	+EARDVVLf (cross in centre)	Eardwulf known only from Æthelred II's 2 nd reign (based on metallurgy- a copper alloy coin, no silver)
2134	183	1	1	12	Æthelred II (840/1 – 8?) probably 2 nd reign (844–8?)	Eardwulf (probably)	+EDILRED REX (cross in beaded circle in centre)	+E[]LF (retrograde) (cross in centre)	
2164	185	1	1	13	Eanred (810–40/1)	Monne	+EANRED REX (E and first R backwards) (cross in centre)	+MONNE (first N reverse barred); (cross in centre)	Probably belongs to later in Eanred's reign (cf. MEC8 plate 24 nos 718–19, 'late phase' types).
2164	194	1	1	14	Æthelred II (840/1 – 8?)	Fordred	+EDILRED REX (cross in centre)	+FORDRED (cross has pellet in each angle; F inverted); (cross in centre)	May be able to assign to first or second reign with additional work.
2164	195	1	1	13	Eanred (810–40/1)	Monne	+EAN[]REX (cross in centre)	+MONNE[]; (first N reverse barred); (cross in centre)	Probably belongs to later in Eanred's reign (cf. MEC8 plate 24 nos 718–19, 'late phase' types).

Context	SF No.	Qty	W (g)	Diameter (mm)	Ruler	Moneyer	Obverse	Reverse	Notes
2168	202	1	1	12	Eanred (810–40/1)	Monne	+E[JNRED REX (rosette of pellets in centre)	+MONNE; (first N reverse barred); (large pellet in centre)	Probably belongs to later in Eanred's reign (cf. MEC8 plate 24 nos 718–19, 'late phase' types).

Table 16: Coin catalogue

Appendix G: Environmental catalogue

Context number	2130	2179	2229	2181	2274
Sample number	141	144	143	145	151
Trench number	2	2	2	2	2
Feature number	233	238	238	239	242
Context type	Fill of burial	Fill of possible smithy pit	Burnt layer within possible smithy pit	Fill of small pit or beam slot	Fill of post hole in alignment of posts
Archaeological period	medieval	medieval	medieval	medieval	medieval
Sample volume (litres)	5	20	0.8	40	0.35
Volume of intrusive root material (ml)	10	10	0	1	0
Flot volume excluding intrusive root material (ml)	4	50	20	160	10
Charred plant remains					
<i>Hordeum distichum/vulgare</i> (barley) grain				1	
<i>Rumex</i> spp. (dock)				1	
Other paleoenvironmental material					
Molluscs (land snail shells)	-	-		-	
Wood charcoal					
>4mm ³ wood charcoal fragments	20	125	42	437	18
2-4mm ³ wood charcoal fragments	80	+++++	348	+++++	60
<2mm ³ charcoal fragments	+++++	+++++	+++++	+++++	++++
Vitrified charcoal (>1mm)	+++	+		+	
Charcoal notes	RP (inc cf. <i>Quercus</i> sp.) and DP	Primarily RP (inc cf. <i>Quercus</i> sp. with weak	RP (cf. <i>Quercus</i> sp. with weak curvature and	Primarily RP (inc cf. <i>Quercus</i> sp. with weak curvature and	Primarily RP (inc cf. <i>Quercus</i> sp. with weak curvature and

Context number	2130	2179	2229	2181	2274
Sample number	141	144	143	145	151
Trench number	2	2	2	2	2
Feature number	233	238	238	239	242
		curvature) some DP	frequent narrow rings)	frequent narrow rings) some DP	frequent narrow rings) some DP
Metallurgical debris	-				

Table 17: Palaeoenvironmental sample assessment

Abundance key, - = < 10 items, + = > 10 items, ++ = > 50 items, +++ = > 100 items, ++++ = > 250 items, +++++ = > 500 items (uc = uncharred), DP = diffuse porous, RP = ring porous

Context number	2001	2068	2134	2134	2134	2136	SK2187
Trench number	2	2	2	2	2	2	
Feature number		217				233	
Feature type	Topsoil	Deposit of stones in large circular feature	Clay layer	Clay layer	Clay layer	Grave	Skeleton
Wood charcoal							
>4mm ³ wood charcoal fragments		2	4	1	3		
2-4mm ³ charcoal fragments			2				
Charcoal notes		cf. <i>Quercus</i> sp.	cf. <i>Quercus</i> sp.		cf. <i>Quercus</i> sp.	cf. <i>Quercus</i> sp.	
Vitrified charcoal / coal	5			5			
Earthworm cocoon							1

Table 18: Hand-collected palaeoenvironmental material assessment

Appendix H: Radiocarbon dating catalogue

Site Code	Context / Feature	Lab no.	Radiocarbon age (BP)	±	$\delta^{13}\text{C}$ relative to VPDB	$\delta^{15}\text{N}$ relative to air	C/N ratio (Molar)	Calibrated radiocarbon ages (cal AD)	
								68.3% probability	95.4% probability
LDF20	2229 F238	SUERC-99199 (GU58265)	1142	24	-26.6‰			calAD 883 (15.8%) 900 calAD 917 (52.4%) 974	calAD 774 (4.6%) 786 calAD 730 (5.7%) 854 calAD 873 (85.1%) 989
LDF20	2268 F217	SUERC-99200 (GU58266)	927	22	-26.2‰			1046 (34.7%) 1084calAD 1095 (5.7%) 1103calAD 1124 (27.8%) 1161calAD	1035 (95.4%) 1174calAD
LDF20	SK2091 F220	SUERC-99201 (GU58267)	955	24	-18.7‰	13.3%	3.3	cal AD 1156 (68.3%) 1257	calAD 1048 (10.3%) 1087 calAD 1093 (1.9%) 1105 calAD 1117 (83.3%) 1273
LDF20	2150 F235	SUERC-99202 (GU58268)	1539	22	-27.2‰			calAD 481 (8.6%) 493 calAD 536 (59.7%) 577	calAD 436 (11.6%) 465 calAD 475 (13.7%) 502 calAD 507 (1.9%) 517 calAD 529 (68.2%) 596
LDF20	SK2145 F234	SUERC-99203 (GU58269)	1096	22	-20.3‰	11.0‰	3.4	calAD 898 (26.1%) 920 calAD 956 (42.2%) 992	calAD 891 (95.4%) 995
LDF20	SK2030 F205	SUERC-99204 (GU58270)	917	24	-20.1‰	11.5‰	3.4	calAD 1046 (34.8%) 1084 calAD 1095 (4.3%) 1103 calAD 1124 (29.1%) 1168	calAD 1038 (90.4%) 1180 calAD 1190 (5.0%) 1206

Site Code	Context / Feature	Lab no.	Radiocarbon age (BP)	±	$\delta^{13}\text{C}$ relative to VPDB	$\delta^{15}\text{N}$ relative to air	C/N ratio (Molar)	Calibrated radiocarbon ages (cal AD)	
								68.3% probability	95.4% probability
LDF20	SK2129 F232	SUERC-99208 (GU58271)	894	24	-20.2‰	11.0‰	3.4	calAD 1054 (16.8%) 1075 calAD 1157 (51.4%) 1211	calAD 1046 (24.8%) 1085 calAD 1094 (1.7%) 1104 calAD 1122 (68.9%) 1220
LDF20	2181 F239	SUERC-99209 (GU58272)	1303	24	-24.9‰			calAD 668 (25.3%) 689 calAD 697 (3.9%) 701 calAD 742 (39.1%) 772	calAD 660 (45.3%) 710 calAD 721 (50.2%) 775
LDF20	SK2187 F236	SUERC-99210 (GU58273)	943	22	-94.4‰	11.3‰	3.3	calAD 1054 (10.6%) 1077 calAD 1153 (57.7%)	calAD 1045 (19.2%) 1108 calAD 1115 (76.3%) 1265

All samples are measured at the Scottish Universities Environmental Research Centre AMS Laboratory.

The above ^{14}C age is quoted in conventional years BP (before 1950 AD) and requires calibration to the calendar timescale. The error, expressed at the one sigma level of confidence, includes components from the counting statistics on the sample, modern reference standard and blank and the random machine error.

The radiocarbon age given is calibrated to the calendar timescale using the Oxford Radiocarbon Accelerator Unit calibration program OxCal 4.

The above date ranges have been calibrated using a mix of the IntCal13 and Marine13 calibration curves.

Human bone collagen with a $\delta^{13}\text{C}$ value above -20, accompanied by a raised $\delta^{15}\text{N}$ value, is taken to indicate a marine component in the diet. The percentage contribution of this marine component is calculated using end-members of -21.0‰ (fully terrestrial) and -12.5‰ (fully marine) with an uncertainty of 10% applied. The $\delta^{13}\text{C}$ value of -19.8‰ gives a 14% marine contribution ($\pm 10\%$).

A regional marine offset (ΔR) of 0 ± 50 years has been used in the calibration.

Appendix I: Social impact methodology

	Activities	Outputs	Outcomes	Standards of Evidence
	<i>the processes and tasks undertaken by the organisation</i>	<i>a quantifiable unit of 'product' or 'service' measurable once completed</i>	<i>observable change for heritage, individuals or communities</i>	<i>data collection and confidence rating demonstrating the positive difference made by an intervention</i>
For archaeology and heritage	1. Stakeholder consultation with national and local heritage bodies, societies and local authorities 2. Archaeological investigation of nationally significant site 3. Accessible archaeological archive	✓ Scheduled Monument Consent ✓ Archaeological Project Design ✓ Archaeological Assessment Report with recommendations ✓ Archaeological Archive	Through our work, heritage will be: ➤ identified, interpreted, and better explained ➤ better managed and in an improved condition	Level 3 – Analytical report, synthesising specialist reports with previous regional, national and international work to determine significance, importance and potential of the site.
For people	4. Half-day family friendly DigCamp sessions 5. Finds Lab participation 6. Excavation skills training 7. Heritage skills workshops	✓ Excavation and finds room skills training for 87 participants ✓ 14 Participants learn new skills DigCamp ✓ 23 Participants in poetry and creative skills workshops	By taking part in our work: ➤ a wider range of people will be involved in archaeology and heritage ➤ people will have greater wellbeing ➤ people will have learnt about the archaeology and heritage of Pontefract Castle, leading to changes in ideas and actions ➤ people will have more skills in excavation and finds processing, giving greater confidence to get involved	Level 3 – Field school training programme quality assured and endorsed by ClfA. Level 2 – Project evaluation report including survey data for users of DigLab and project participants to determine changes for individuals as a consequence of taking part, and highlighting scalability, implementation and ability to meet national needs.

	Activities	Outputs	Outcomes	Standards of Evidence
	<i>the processes and tasks undertaken by the organisation</i>	<i>a quantifiable unit of 'product' or 'service' measurable once completed</i>	<i>observable change for heritage, individuals or communities</i>	<i>data collection and confidence rating demonstrating the positive difference made by an intervention</i>
For communities and society	8. Education programme for primary schools 9. Daily trench-side tours during archaeological investigation 10. Published web content and native social posts 11. Traditional broadcast and print media	✓ 45 school pupils benefit from tailored education content ✓ Daily trench-side tours reach new and more diverse audiences (~1500 per people week) ✓ 500,000 combined impression across Facebook & Twitter ✓ 7,000 unique microsite views ✓ Regional and National News Coverage by BBC, Daily Mail, Forbes, The Guardian, Telegraph, amongst many others	As a consequence of our work: ➡ more and a wider range of people will be involved in heritage ➡ people have learned about archaeology and heritage, leading to change in ideas and actions ➡ the local area will be a better place to live, work or visit	Level 2 – Collection of evaluation survey data for participating schools, visitors to the archaeological site to quantify audience demographics and determine any changes which took place as a consequence of the visit

Table 19: Social impact methodology