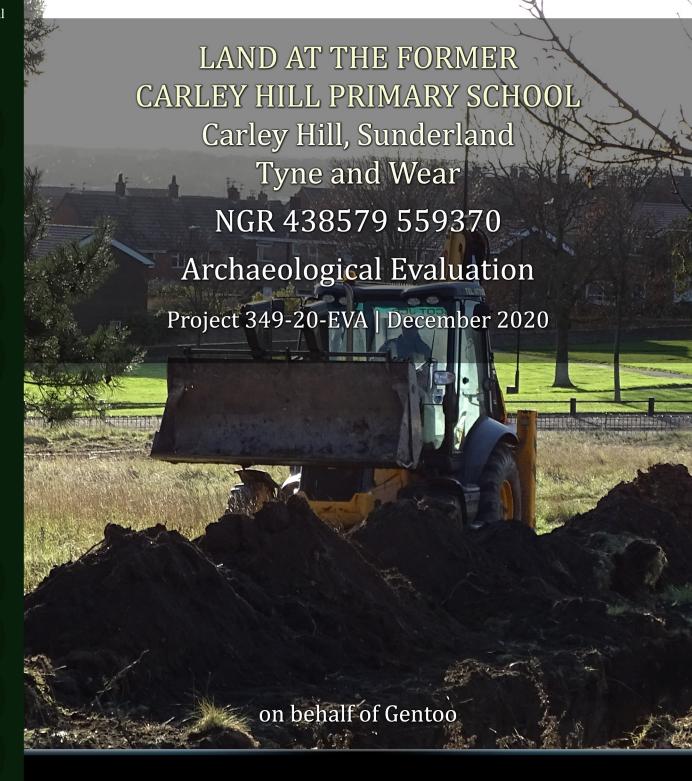
2020

Tyne and Wear

Archaeological Evaluation



VINDOMORA SOLUTIONS LTD

Archaeological Practice

PROSPECT HOUSE, PROSPECT BUSINESS PARK
CROOKHALL LANE, LEADGATE
CONSETT, COUNTY DURHAM DH8 7PW

™ contact@vindomora.info

3 01207 390010

VINDOMORASOLUTIONS.CO.UK

Archaeological Evaluation

Land at the former Carley Hill Primary School

Carley Hill, Sunderland Tyne and Wear

December 2020



VINDOMORA SOLUTIONS LTD

Archaeological Practice

Registered in England & Wales | Company Registration No. 9505415 Registered office: Prospect House, Prospect Business Park, Valley View, Leadgate, Consett, County Durham DH8 7PW



CONTENTS

Contents	1
Summary	3
Concise summary of report	3
1. Scope of project	5
1.1 Project location	5
1.2 Circumstances of the project	5
1.3 Project Specification	6
1.4 Timetable	6
1.5 Project Personnel	6
1.6 Professional standards	6
1.7 Health and safety	6
1.8 Archive	8
2. Historical/archaeological background	9
2.1 Introduction	9
2.2 Designations within the proposed development area	9
2.3 Portable Antiquities Scheme (PAS)	9
2.4 Known archaeology	9
2.5 Archaeological Potential	10
3. The evaluation	11
3.1 Introduction	11
3.2 Trench 1	12
3.3 Trench 2	13
3.4 Trench 3	14
3.5 Trench 4	14
3.6 Trench 5	15
3.7 Trench 6	16
3.8 Trench 7	16
3.9 Trench 8	18
3.10 Trench 9	20
3.11 Trench 10	20
4. Discussion	21
4.1 Overview	21
4.2 Archaeological remains	21
4.3 Recommendations	22
5. Repositories and sources	23
5.1 Repositories	23
5-2 Sources	-
Appendix 1: Context list	25
Appendix 2: Extract from specification	
·	

1

Figures

Figure 1. Location of the site, regionally	, 4
Figure 2. Location of the site, locally	.7
Figure 3. Extract from the 1862 Ordnance Survey map with the proposed development area outlined in recommendation	
Figure 4. Trench location plan	-
Figure 5. Trenches 1-3 location plan, overlaid on the 1942 Ordnance Survey map	12
Figure 6. Trenches 1-3 location plan, overlaid on the 1862 Ordnance Survey map	13
Figure 7. Trenches 5, 6 and 8 location plan, overlaid on the 1897 Ordnance Survey map	15
Figure 8. Trenches 7 and 8 location plan, overlaid on the 1862 Ordnance Survey map	16
Figure 9. Trench 7, plan and section of southwestern extent	17
Figure 10. Trench location plan showing the line of the waggonway remains in Trench 7	21
Plates	
Plate 1. Aerial view of the proposed development area (dataset © 2020 Google)	.5
Plate 2. Trench 1 looking northwest showing the grading of the dolomite layer over the quarry backfill	12
Plate 3. Trench 1 looking west.	13
Plate 4. Trench 2 looking north.	13
Plate 5. Trench 3 looking southwest.	14
Plate 6. Trench 4 looking east.	14
Plate 7. Trench 5 looking southeast.	15
Plate 8. Trench 6 looking east	15
Plate 9. Section across linear [11] looking north	16
Plate 10. Section across the remains of the waggonway trackbed, looking northeast	18
Plate 11. Trench 8 looking southwest	19
Plate 12. Trench 9 looking southwest.	19
Plate 13. Trench 10 looking northwest.	19
Tables	
Table 1. Evaluation context list.	25

SUMMARY

Name of location: Land at the former Carley Hill Primary School, Carley Hill,

Sunderland, Tyne and Wear SR5 2QA

National Grid Reference: NGR 438579 559370 (NZ 38577 59377)

Client: Gentoo

Project Type: Archaeological evaluation

Local Authority Conservation Team: Tyne and Wear Archaeology Service

Local Authority Reference: MON17199
Planning application reference: PRE-APP
Vindomora Solutions Reference: 349-20-EVA
Report Author: Tony Liddell

Report Version/Date: V1/ Monday, December 14, 2020

Document Imprint: Monday, December 14, 2020

Ordnance Survey Licence Reference: 100053142

OASIS Reference: vindomor1-410092
Google Earth Pro: Licensed 2015-20

CONCISE SUMMARY OF REPORT

In November 2020 Vindomora Solutions Ltd were commissioned by Gentoo to undertake an archaeological evaluation on land surrounding the former Carley Hill Primary School, Sunderland, to inform archaeological consultation on potential development of the site. The field evaluation of ten trenches followed the recommendations of an archaeological desk-based assessment produced by Vindomora Solutions Ltd earlier in the year noting that while the majority of the overall development area had been disturbed either by quarrying, the construction of the former school and/or tree cover, there were still areas that contained archaeological potential, including the possible remains of a late Georgian waggonway running northwest-southeast through the site.

Archaeological remains were only found in one trench out of the ten excavated. Trench 7 was located west of the school and south of the main entrance track, and had been located to see if any remains of the Georgian waggonway were still in place. According to historic mapping, the waggonway (transporting limestone) was still in use in 1862, but had been demolished by 1897 and its line re-used as a field boundary. Trench 3 in the southeastern end of the development area was also targeted over the waggonway, but nothing was found in that trench. In Trench 7 however, the badly truncated remains of the trackbed were observed. No trace of the rail itself was present suggesting that the waggonway had been dismantled rather than just covered over at the time of decommissioning.

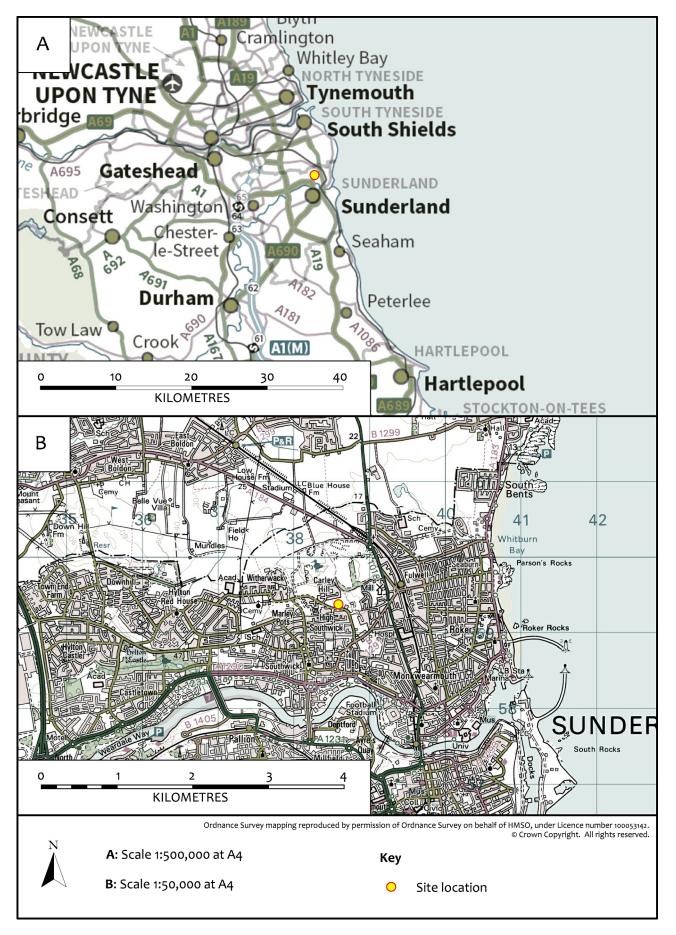


Figure 1. Location of the site, regionally.

1. SCOPE OF PROJECT



Plate 1. Aerial view of the proposed development area (dataset © 2020 Google)

1.1 Project location

- 1.1.1 The Proposed Development Area (PDA) lies at the site of the former Carley Hill Primary School, Carley Hill, Sunderland (centred at NGR 438579 559370). Emsworth Road lies to the south, with Eyemouth Lane to the west and Eversley Crescent to the north. Figure 1 shows the location of the site regionally and Figure 2 shows the location locally. The site covers approximately 42,015m².
- 1.1.2 The site area is located over the Roker Formation comprising dolostones and limestones. The superficial upper geological horizon consists of Devensian Till, comprising clays, sand, gravels and silts (British Geological Survey 2020).
- 1.1.3 The site lies at an average of 61m OD (Ordnance Datum, above sea level) at its northern extent, dropping sharply towards the southern extent to 52m OD.

1.2 Circumstances of the project

- 1.2.1 On the 11th November 2020 Vindomora Solutions Ltd were commissioned by Gentoo to undertake an archaeological evaluation on land surrounding the former Carley Hill Primary School, Sunderland, to inform archaeological consultation on potential development of the site.
- 1.2.2 In October 2020 Sophie Laidler, Archaeology Officer for the Tyne and Wear Archaeology Service had confirmed the need for evaluation (based upon the findings of the archaeological desk-based assessment produced by Vindomora Solutions Ltd), in line with paragraph 189 of the *National*

- Planning Policy Framework, Core Strategy Policies BH8 and BH9, and saved Unitary Development Plan Policies B11, B13 and B14.
- 1.2.3 Archaeological and historical research objectives are now built into developer funded archaeological schemes of work. This is the result of a number of English Heritage national policy frameworks: Exploring our Past (1991), Frameworks for our Past (1996), Research Agenda (1997) and Policy Statement on Implementation (1999). The research priorities proposed initially to have potential direct relevance to this project are set out in Shared Visions: North East Regional Research Framework for the Historic Environment (2006), in particular:
 - Neolithic and Early Bronze Age NBi. Early settlement;
 - Neolithic and Early Bronze Age NBv. Material culture: general;
 - Late Bronze Age and Iron Age lii. Settlement;
 - Late Bronze Age and Iron Age lv. Material culture: general;
 - Late Bronze Age and Iron Age lix. Burials;
 - Post-Medieval PM2. Early railways;
 - Post-Medieval PMii. Industrialisation.

1.3 Project Specification

1.3.1 The specification (MON17199) for this project, dated 27th October 2020 was produced by Sophie Laidler, Tyne and Wear Archaeology Officer for Newcastle City Council. An extract from the specification can be found in *Appendix* 2.

1.4 Timetable

- 1.4.1 The fieldwork was undertaken between the 16th and 20th November 2020.
- 1.4.2 This report was finalised on Monday, December 14, 2020.

1.5 Project Personnel

- 1.5.1 The fieldwork was undertaken by Mick Coates and Jack Coates. The fieldwork was supervised by Mick Coates.
- 1.5.2 The plant was supplied and operated by Kevin Moran Construction Ltd.
- 1.5.3 This report and its associated illustrations were undertaken and produced by Tony Liddell.

1.6 Professional standards

- 1.6.1 The work undertaken was in accordance with the following standards:
 - Chartered Institute for Archaeologists' Code of Conduct (2014);
 - Chartered Institute for Archaeologists' Standard and Guidance for an archaeological evaluation (2014);
 - British Archaeologists' and Developers' Liaison Group's Code of Practice (1988);
 - Yorkshire, the Humber & the North East: A Regional Statement of Good Practice for Archaeology in the Development Process (2019).

1.7 Health and safety

1.7.1 All work on site abided by the Health and Safety Act of 1974 and all its subsequent amendments. All fieldwork projects are undertaken in accordance with the Federation of Archaeological Managers & Employers (FAME) manual *Health and Safety in Field Archaeology*. Appropriate care and attention was taken during the works, and hi-vis clothing worn.

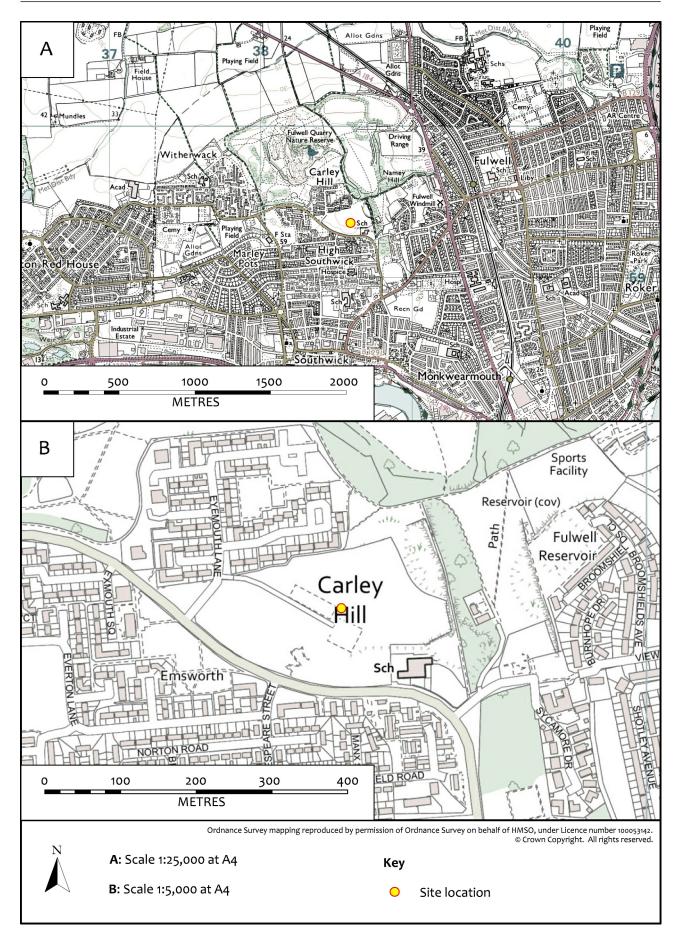


Figure 2. Location of the site, locally.

- 1.7.2 **COVID-19:** Appropriate PPE and social distancing was utilised during the fieldwork element of this scheme.
- 1.8 Archive
- 1.8.1 A full archive has been compiled in line with the specification and current UKIC and English Heritage Guidelines. The project code is **CHS-20** (Carley Hill Sunderland 2020). Vindomora Solutions support the **O**nline **A**cces**S** to the Index of Archaeological Investigation**S** project (OASIS). As a result, this report will be made available to the project under the unique identifier **vindomor1-410092**.

2. HISTORICAL/ARCHAEOLOGICAL BACKGROUND

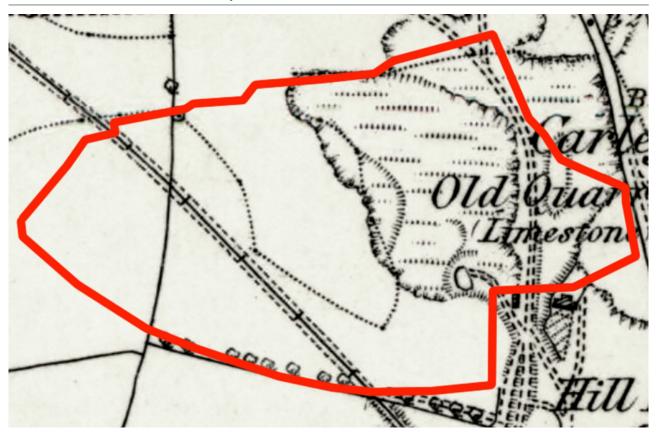


Figure 3. Extract from the 1855 Ordnance Survey map with the proposed development area outlined in red.

2.1 Introduction

- 2.1.1 This historical/archaeological background section is a summary of *Archaeological Desk-based* Assessment (Vindomora Solutions Ltd report 323-20-DBA) produced for Gentoo in September 2020.
- 2.2 Designations within the proposed development area
- 2.2.1 There are no Scheduled Ancient Monuments (SAMs) within the overall study area.
- 2.2.2 The overall study area does not contain any designated Conservation Areas.
- 2.2.3 No Registered Parks and Gardens were recorded within the overall study area.
- 2.2.4 No Registered Battlefields were recorded within the overall study area.
- 2.3 Portable Antiquities Scheme (PAS)
- 2.3.1 No finds spots are registered on the Portable Antiquities Scheme (PAS) within the study area (based upon a map and post-code search).

2.4 Known archaeology

2.4.1 The study of the known archaeological/historical sites and historic mapping of a 650m radius study area from the centre of the PDA highlights that the site lies within an area of prehistoric activity, with a Neolithic axe found 475m northeast of the development site and a potential Neolithic barrow found 445m to the northwest of the PDA. Further burials have also been identified at the PDA's eastern boundary during the quarrying works, and 320m to the west of the PDA. A ditched

- enclosure was identified by Tyne and Wear Museums in 1990, located 100m north of the development boundary, with radio-carbon dating of the site suggesting activity with the Bronze Age, 1840 BC (+/- 80 years).
- 2.4.2 The PDA also lies within an area of background Roman activity. A Roman figure was recovered from quarrying 335m to the west of the PDA, which also noted human remains being recorded in the same area. Roman coins were recovered from quarrying 112m to the east of the PDA boundary and Late Roman pottery and quernstones were recovered from Fulwell quarry in 1927 and 1933, located 475m to the northwest of the PDA, with the Neolithic barrow noted to lie to the northwest of the site re-used for an inhumation during the Roman period.
- 2.4.3 While there are no known Early medieval sites within the vicinity of the proposed development area, there was a burial recovered 270m north of the PDA boundary, noted in the HER to be potentially Viking in date (though also possibly 17th century). There are also no known Later medieval sites within the study area, with the nearest known medieval settlement lying 250m east of the overall study area boundary.
- 2.4.4 In the Post-medieval period, just under a half of the eastern section of the PDA was effectively removed by Carley Hill Quarry in the late 18th or early 19th century, with the quarry already out of use by 1855. A waggonway, potentially built between 1790-1800 also intersected the PDA running between a limestone quarry to the northwest and the lime works to the south (the waggonway had been removed by the late 19th century). The overall study area saw major expansions of limestone quarrying through the 19th and into the 20th centuries.
- 2.4.5 Through the 20th century the quarry in the PDA was gradually backfilled and landscaped, with the remainder of the site remaining as fields, presumably servicing the expansion of Carley Hill Farm to the southeast.
- 2.4.6 In the 1960s Carley Hill Junior Mixed and Infant School was built on the site. The school closed in 2004.
- 2.5 Archaeological Potential
- 2.5.1 Based upon the data within the desk-based assessment, the potential for the presence of prehistoric features (including potential human remains) within the site boundary was classed as LOW-MODERATE.
- 2.5.2 Based upon the data within the desk-based assessment, the potential for the presence of Roman features within the site boundary was classed as **LOW-MODERATE**.
- 2.5.3 Based upon the data within the desk-based assessment, the potential for the presence of Early or Later medieval features within the site boundary was classed as **LOW**.
- 2.5.4 Based upon the data within the desk-based assessment, the potential for the presence of post-medieval and/or modern features within the site boundary was classed as **HIGH**.

3. THE EVALUATION

Figure 4. Trench location plan.

3.1 Introduction

- 3.1.1 In accordance with the brief, the evaluation involved the excavation of ten trenches, all surveyed in based on locations provided by the Tyne and Wear Archaeology Officer. The trench location plan can be seen on Figure 4.
- 3.1.2 The trenches were excavated by a JCB 3CX with a 1.6m wide ditching bucket under constant archaeological supervision. The plant was provided by Kevin Moran Construction Ltd with an archaeological evaluation experienced driver.
- 3.1.3 For health and safety reasons, each trench was opened, cleaned, recorded and backfilled before the subsequent trench was cut.
- 3.1.4 The area of each trench was scanned via CAT before excavation commenced.
- 3.1.5 For ease of interpretation a single context system was used to record the site. Contexts (each context represents a different element or event) are identified in blue, with rounded brackets for deposits and fills, eg (#) for context identifier #1, and in squared brackets for cuts, example [#]. Geological

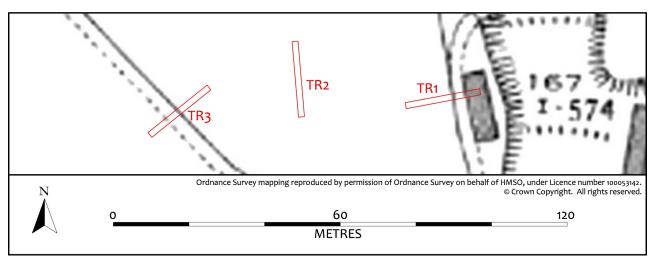


Figure 5. Trenches 1-3 location plan, overlaid on the 1942 Ordnance Survey map.

contexts are identified in green with rounded brackets, to differentiate from archaeological contexts, eg (x).

3.2 Trench 1

- 3.2.1 Trench 1 (see Plates 2 and 3) measured 20m long by 1.6m wide, and was aligned northeast-southwest in the southeastern extent of the site. The trench was located over a farm building noted on the 1942 Ordnance Survey map (see Figure 4). The trench was located 8m south of a dynamic sampler borehole excavated as part of Gentoo's ground investigation works. The borehole did not encounter the natural substrate at 5m depth.
- 3.2.2 5.5m from the northeast end of the trench the pale yellow dolomite (2) base of the 20th century building was noted. As the building had been built on reclaimed quarry ground, a heavy layer of dolomite had been packed as a base to prevent the farm building moving. However, only the base remained suggesting a simple timber building with no set foundations. The dolomite layer was packed onto dark brown redeposited clay (4), the material that had been used to backfill the quarry in this area, and was noted to have been pushed to the east to pack the area, with the dolomite grading to depth from the west end of the trench. The quarry backfill was encountered at 0.3m depth below the top of the dark grey-brown clay topsoil (1) covering the backfilled material

at the western end of the trench. The topsoil was noted to contain sherds of 20th century ceramics.

3.2.3 No other archaeological features were noted within the trench barring the dolomite base of the farm building, and the natural substrate was not observed, as expected from the results of the borehole.

Plate 2. Trench 1 looking northwest showing the grading of the dolomite layer over the quarry backfill.







Plate 3. Trench 1 looking west.

Plate 4. Trench 2 looking north.

- 3.3 Trench 2
- 3.3.1 Trench 2 (see *Plate 4*) measured 20m long by 1.6m wide, and was aligned approximately north-south in the southeastern extent of the site. The northern extent of the trench was dug into the base of the south-facing slope, with the trench within the slope measuring 1.6m deep, and 0.6m at the southern end.
- 3.3.2 Natural geology (G1) was noted at a sloping depth of 1.6m at the northern end of the trench, and o.6m at the southern end. The natural substrate (3) was a creamy-yellow compact dolomite limestone. Over this was topsoil (1).
- 3.3.3 No archaeological features, deposits or artefactual material were recovered from this trench.

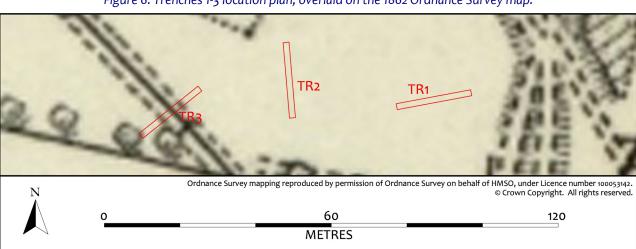


Figure 6. Trenches 1-3 location plan, overlaid on the 1862 Ordnance Survey map.





Plate 5. Trench 3 looking southwest.

Plate 6. Trench 4 looking east.

3.4 Trench 3

- 3.4.1 Trench 3 (see *Plate 5*) measured 20m long by 1.6m wide, and was aligned northeast-southwest in the southeastern extent of the site. The trench was located over a section of late Georgian waggonway shown on the 1862 Ordnance Survey map in *Figure 6*. The waggonway had been dismantled and its line constructed into a field boundary by 1897.
- 3.4.2 Natural geology (G2) was noted at a sloping depth of 0.4m at the northeastern end of the trench, and 0.3m at the southwestern end. The natural substrate (14) was a dark clay mixed with magnesian dolomite limestone, grading to an orange clay at the southwestern end. Over this was topsoil (1).
- 3.4.3 No archaeological features, deposits or artefactual material were recovered from this trench.

3.5 Trench 4

- 3.5.1 Trench 4 (see *Plate* 6) measured 20m long by 1.6m wide, and was aligned east-west in the southern extent of the site.
- 3.5.2 Natural geology (G3) was noted at a depth of 0.75m at the northwestern extent of the trench and 0.84m at the eastern extent. The natural substrate (13) was a compact pinkish yellow slightly silty clay containing gravel pockets and degraded sandstone chunks. Over this was a layer of subsoil (7), a 0.35m thick layer of silty sandy clay. Over this was topsoil (1).
- 3.5.3 No archaeological features, deposits or artefactual material were recovered from this trench. Two modern services (dead) were however noted, presumably that had connected to the former school buildings.
- 3.5.4 The trench was cut to a depth of 1.5m to test the nature of the natural substrate.





Plate 7. Trench 5 looking southeast.

Plate 8. Trench 6 looking east.

- 3.6 Trench 5
- 3.6.1 Trench 5 (see *Plate* 7) measured 20m long by 1.6m wide, and was aligned southeast-northwest in the southwestern extent of the site.
- 3.6.2 Natural geology (G₃) was noted at a depth of 0.46m at the northwestern extent of the trench and 0.62m at the southeastern extent. The natural substrate (1₃) was a compact pinkish yellow slightly silty clay containing gravel pockets and degraded sandstone chunks. Over this was a layer of subsoil (7), a 0.2m thick layer of silty sandy clay. Over this was topsoil (1).
- 3.6.3 Central within the trench and aligned northeast-southwest was a furrow remnant.

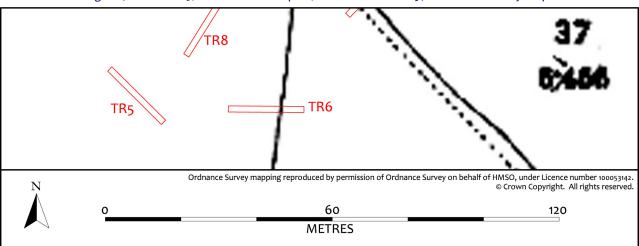


Figure 7. Trenches 5, 6 and 8 location plan, overlaid on the 1897 Ordnance Survey map.

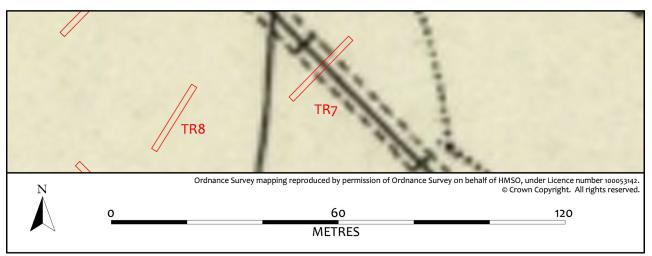


Figure 8. Trenches 7 and 8 location plan, overlaid on the 1862 Ordnance Survey map.

3.7 Trench 6

- 3.7.1 Trench 6 (see *Plate 8*) measured 20m long by 1.6m wide, and was aligned east-west in the southwestern extent of the site. The trench was targeted over a field boundary noted on the 1862 and 1897 Ordnance Survey maps (see *Figure 7*) but was gone by 1942.
- 3.7.2 Natural geology (G₃) was noted at a depth of o.6m at the western extent of the trench and o.9m at the eastern extent. The natural substrate (1₃) was a compact pinkish yellow slightly silty clay containing gravel pockets and degraded sandstone chunks. Over this was a layer of subsoil (7), a o.5m thick layer of silty sandy clay. Over this was topsoil (1).
- 3.7.3 There was no trace of the field boundary within the trench. No archaeological features, deposits or artefactual material were recovered from this trench.

3.8 Trench 7

- 3.8.1 Trench 7 (see *Plates 9-10*, Figure 9) measured 22.5m long by 1.6m wide, and was aligned northeast-southwest in the central section of the site. The trench was located over a section of late Georgian waggonway shown on the 1862 Ordnance Survey map in *Figure 8*. The waggonway had been dismantled and its line constructed into a field boundary by 1897.
- 3.8.2 Note on early railway gauges: This waggonway was likely built in the latter decade of the 18th
 - century, and as such likely retained initially the 4ft 8inches or 5ft gauge rail track. The standard gauge was not approved by the Royal Commission on Railway Gauges until 1845, and as the track was still in use in 1862 may have been converted.
- 3.8.3 Natural geology (G₃) was noted at a depth averaging 0.94m within the trench. The natural substrate (13) was a compact pinkish yellow slightly silty clay containing gravel pockets and degraded sandstone chunks.
- 3.8.4 4.7m from the southwestern extent of the trench was cut [11], a 1.02m wide linear feature aligned northwest-southeast. The feature was shallow,



Plate 9. Section across linear [11] looking north.

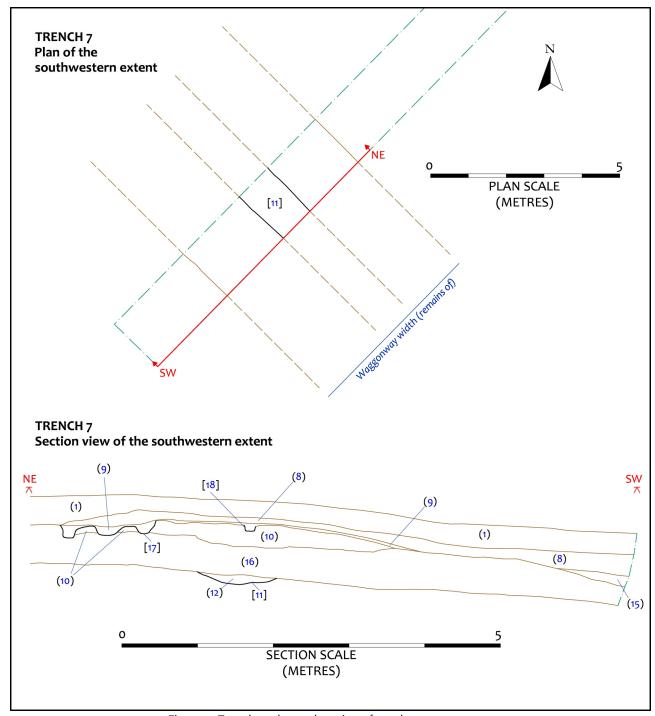


Figure 9. Trench 7, plan and section of southwestern extent.

with a maximum depth of 0.12m and was filled with dark brown sandy clay (12). This feature appears to have marked the route of the waggonway trackbed above, set centrally below the feature and on the same alignment.

3.8.5 Over the natural geological horizon and sealing cut [11] was a 0.45m thick layer of re-deposited subsoil (16), a silty-sandy clay similar to (7). At the southwestern extent of the trench, an 0.11m thick deposit of gravel and dolomite (15) was noted extending 0.95m into the trench from the south, which may have been either a levelling deposit or a potential soakaway lying to the south side of the waggonway. This lay on top of (16).



Plate 10. Section across the remains of the waggonway trackbed, looking northeast.

- 3.8.6 2.98m from the southwestern extent of the trench, the remains of the base of the trackbed for the waggonway were noted. The base comprised a 4.32m wide deposit of crushed dolomite (10), averaging 0.26m thick. This bed lay above the re-deposited subsoil (16). A series of three cuts [17] were noted at the northern extent of the deposit, and a further cut [18] set centrally. Cuts [17] punched through the dolomite and into (16) below, whereas angular cut [18] was set centrally within the upper surface of the dolomite and measured only 0.07m deep. All four were filled with (9), a mixed compact layer of grey/brown sandy clay with limestone flecking and gravel pockets that appeared to have been laid to seal the dolomite below. The northern edge cuts [17] may represent where tracks have been removed and replaced over the years with the central cut [18] potentially marking the centre of the track.
- 3.8.7 Sealing the feature was a deposit of black ash, coal and clinker (8) which averaged 0.19m thick and was noted to continue south out of the trench edge. This deposit appears to represent the demolition layer that was spread across the feature in the late 19th century when the waggonway was demolished and the line of the feature re-utilised as a field boundary. This layer was in turn sealed by topsoil (1).
- 3.9 Trench 8
- 3.9.1 Trench 8 (see *Plate 11*) measured 20m long by 1.6m wide, and was aligned northeast-southwest in the southwestern extent of the site.
- 3.9.2 Natural geology (G₃) was noted at an average depth of 0.65m. The natural substrate (13) was a compact pinkish yellow slightly silty clay containing gravel pockets and degraded sandstone chunks. Over this was a layer of subsoil (7), a 0.2m thick layer of silty sandy clay. Over this was topsoil (1).







Plate 12. Trench 9 looking southwest.





- 3.9.3 No archaeological features, deposits or artefactual material were recovered from this trench. Two field drains were noted cut into the natural geology.
- 3.10 Trench 9
- 3.10.1 Trench 9 (see *Plate* 12) measured 20m long by 1.6m wide, and was aligned northeast-southwest in the western extent of the site.
- 3.10.2 Natural geology (G₃) was noted at an average depth of o.4m. The natural substrate (1₃) was a compact pinkish yellow slightly silty clay containing gravel pockets and degraded sandstone chunks. Over this was a layer of subsoil (7), a o.1m thick layer of silty sandy clay. Over this was topsoil (1).
- 3.10.3 No archaeological features, deposits or artefactual material were recovered from this trench. Two field drains were noted cut into the natural geology.
- 3.11 Trench 10
- 3.11.1 Trench 10 (see *Plate* 13) measured 20m long by 1.6m wide, and was aligned northwest-southeast in the northern extent of the site, west of the known quarry edge.
- 3.11.2 Natural geology (G₃) was noted at an average depth of 0.4m. The natural substrate (1₃) was a compact pinkish yellow slightly silty clay containing gravel pockets and degraded sandstone chunks. Central in the trench was also a 12m wide outcrop of (G₁), creamy-yellow compact dolomite limestone (3). Over this was a layer of subsoil (7), a 0.15m thick layer of silty sandy clay. Over this was topsoil (1).
- 3.11.3 No archaeological features, deposits or artefactual material were recovered from this trench. Two field drains were noted cut into the natural geology.

4. DISCUSSION

Figure 10. Trench location plan showing the line of the waggonway remains in Trench 7.

4.1 Overview

4.1.1 In November 2020 Vindomora Solutions Ltd were commissioned by Gentoo to undertake an archaeological evaluation on land surrounding the former Carley Hill Primary School, Sunderland, to inform archaeological consultation on potential development of the site. The field evaluation of ten trenches followed the recommendations of an archaeological desk-based assessment produced by Vindomora Solutions Ltd earlier in the year noting that while the majority of the overall development area had been disturbed either by quarrying, the construction of the former school and/or tree cover, there were still areas that contained archaeological potential, including the possible remains of a late Georgian waggonway running northwest-southeast through the site.

4.2 Archaeological remains

4.2.1 Archaeological remains were only found in one trench out of the ten excavated. Trench 7 was located west of the school and south of the main entrance track, and had been placed to see if any remains of the Georgian waggonway were still in place. According to historic mapping, the

waggonway (transporting limestone) was still in use in 1862, but had been demolished by 1897 and its line re-used as a field boundary. Trench 3 in the southeastern end of the development area was also targeted over the waggonway, but nothing was found in that trench. In Trench 7 however, the badly truncated remains of the track bed were observed. No trace of the rail itself was present suggesting that the waggonway had been dismantled rather than just covered over at the time of decommissioning.

4.3 Recommendations

4.3.1 The evaluation suggests that the construction of the school landscaped much of the potential post-medieval archaeology on the site, with likely only small patches remaining such as those seen in Trench 7. With the waggonway having been dismantled so only the track bed remained in the 19th century, further investigation is likely to reveal little or no extra information about the feature. Due to the extent of the area within the proposed development area by the quarrying, school and tree coverage, it is recommended that no further archaeological works be undertaken within the scope of the proposed planning application.

5. REPOSITORIES AND SOURCES

5.1 Repositories

Beamish Museum People's Collection. Online at http://collections.beamish.org.uk/

Britain from Above Project. Online at http://www.britainfromabove.org.uk/

British Library. Online at http://www.bl.uk/

British Geological Survey. Online at

http://www.bgs.ac.uk/discoveringGeology/geologyOfBritain/viewer.html

Department for Environment Food and Rural Affairs (DEFRA): Online at

https://environment.data.gov.uk/DefraDataDownload/?Mode=survey

Durham Record Office. County Hall, Durham DH1 5UL

Google Earth Pro 2020

Historic England Archive. Online at http://archive.historicengland.org.uk

Keys to the Past. Online at http://www.keystothepast.info

Newcastle City Library. Local studies section, Princess Square, Newcastle upon Tyne, NE99 1DX

PastScape Project. Online at http://www.pastscape.org.uk/default.aspx

Portable Antiquities Scheme. Online at https://finds.org.uk/

Tyne and Wear Archaeology Service. Newcastle City Council, Planning, 9th Floor, Civic Centre, Newcastle upon Tyne, NE1 8QH

Tyne and Wear Archives. Blandford House, Blandford Square, Newcastle upon Tyne NE1 4JA

ViewFinder Project. Online at http://viewfinder.english-heritage.org.uk/

Vindomora Solutions Ltd Archive. Prospect House, Prospect Business Park, Leadgate, Consett, County Durham DH8 7PW

5.2 Sources

CIfA (2014) Code of Conduct. Chartered Institute for Archaeologists

(CIfA revised 2014) Standard and Guidance for archaeological evaluation. Chartered Institute for Archaeologists.

CIfA (2014) Standard and guidance for the creation, compilation, transfer and deposition of archaeological archives. Chartered Institute for Archaeologists

Department for Environment Food and Rural Affairs (DEFRA). LIDAR data

Department for Communities and Local Government (2019) Communities and Local Government: National Planning Policy Framework

English Heritage (2008) Conservation Principles - Policies and Guidance

English Heritage (1991) Managing Archaeological Projects. Second edition

Historic England (2015) Management of Research Projects in the Historic Environment - The MoRPHE Project Managers' Guide

Historic Environment Record Search, Dataset 2020.

Liddell, T. (2020) Archaeological Desk-based Assessment: Land at the former Carley Hill School, Sunderland. Report 323-20-DBA. Vindomora Solutions Ltd.

Ordnance Survey mapping: 1862, 1877, 1896, 1898, 1919, 1921, 1938, 1946, 1951, 1956, 1967, 1975, 1987, 1994 and 2020 editions

Petts, D. & Gerrard, C. (2006) Shared Visions: The North-East Regional Research Framework for the Historic Environment. Durham

APPENDIX 1: CONTEXT LIST

Context #	Trench	Form	Description
1	All	Deposit	Topsoil. Grey-brown clay loam
2	1	Deposit	Pale yellow crushed dolomite
3	2	Natural	Creamy yellow compact dolomite limestone
4	1	Deposit	Dark brown de-deposited clay. Quarry infill.
5	2	Deposit	Pink-brown clay forming embankment side
6	3	Deposit	Mixed made ground
7	4-6,8-10	Deposit	Silty sand clay subsoil
8	7	Deposit	Black ash, coal and clinker
9	7	Deposit	Grey sandy clay with limestone flecking and gravel
10	7	Deposit	Dolomite
11	7	Cut	Cut of linear feature beneath trackbed
12	7	Fill	Fill of cut [11]
13	4-6,8-10	Natural	Pinkish yellow silty clay
14	3	Natural	Dark brown clay mixed with magnesian dolomite limestone
15	7	Deposit	Black ash, coal and clinker. Similar to (8)
16	7	Deposit	Silty sand clay redeposited subsoil
17	7	Cut	Triple cut at northeastern edge of trackbed. Potential evidence for the tracks having been relaid.
18	7	Cut	Angular cut in centre of trackbed

Table 1. Evaluation context list.

APPENDIX 2: EXTRACT FROM SPECIFICATION

Tyne and Wear Archaeology Service

Specification for Preliminary Archaeological Evaluation at Carley Hill Primary School, Carley Hill, Sunderland SR5 2QA

Planning Application: pre-application

Author:

Sophie Laidler
Tyne and Wear Archaeology Officer
Newcastle City Council
Planning
9th Floor
Civic Centre
Barras Bridge
Newcastle upon Tyne
NE1 8QH
sophie.laidler@newcastle.gov.uk

Date: 27th October 2020

Reference Number: MON17199

The Tyne and Wear Archaeology Service is the curatorial service for archaeology and industrial archaeology throughout the Tyne and Wear districts. It helps and advises Newcastle, Gateshead, North Tyneside, South Tyneside and Sunderland Councils to carry out their statutory duties to care for the precious historic environment of Tyneside and Wearside.



Introduction

Site grid reference: NZ 38577 59377

Pre-application advice has been requested regarding the development of land at the former Carley Hill Primary School, Carley Hill, Sunderland. It was advised that a desk-based assessment should be undertaken. In 2020 Vindomora Solutions produced a desk-based assessment, the results of the assessment are outlined below. Based on the findings in the report, further archaeological evaluation is recommended in the form of archaeological trial trenching.

Archaeological Background

Previous Archaeological Work

In 2020 Vindomora Solutions undertook a desk-based assessment for land at the former Carley Hill Primary School, Sunderland. The proposed development area is located within a landscape associated with prehistoric activity. Within the surrounding area evidence of both Neolithic and Bronze Age occupation was identified, both a Neolithic axe and barrow were identified within 500m of the site's redline boundary. In addition, a Bronze Age settlement has been identified 100m north of the proposed development area. Evidence of Roman occupation has also been identified in the local landscape. No Early medieval sites were identified within the vicinity of the proposed development area but a potential burial was identified 270m north of the site. The nearest medieval settlement was identified 250m east of the site. The immediate area around the site was subject to quarrying in the late 18th and early 19th century. A waggonway (1790-1800) was identified to have run across the study area. In the report it is concluded that the site has some potential for pre-18th century archaeology in addition to the preserved remains of the 18th century waggonway. The remains of farm buildings associated with Carley Hill farm may also be present within the development area. It is unlikely that earlier archaeology remains survive within the areas of the 1960s Carley Hill School except for beneath the roads, paths and hard standing. It is estimated that c.23% of the site remains undisturbed by guarrying, modern buildings and tree coverage. Due to this in the report it is recommended that a geophysical survey will not be suitable for the site. An evaluation is however recommended.

The appointed archaeologist must familiarise themselves with the results of previous archaeological work on the site before starting work.

Archaeological Work Required

Archaeological evaluation trenches are required to determine future applications associated with the development of this site in accordance with paragraph 189 of the National Planning Policy Framework, Core Strategy Policies BH8 and BH9, and saved Unitary Development Plan Policies B11, B13 and B14.

Research Aims and Objectives

The evaluation report should refer to Regional and Thematic Research Frameworks.

'Shared Visions: The North-East Regional Research Framework for the Historic Environment' by David Petts with Christopher Gerrard, 2006 notes the importance of research as a vital element of development-led archaeological work. It sets out key research priorities for all periods of the past allowing commercial contractors to demonstrate how their fieldwork relates to wider regional and national priorities for the study of archaeology and the historic environment. The aim of NERRF is to ensure that all fieldwork is carried out in a secure research context and that commercial contractors ensure that their investigations ask the right questions.

http://www.durham.gov.uk/media/1551/Shared-Visions-North-East-Regional-Research-Framework-for-the-Historic-Environment/pdf/SharedVisionsNERegionalResearchFrameworkHistoricEnvironment.pdf

NERRF is being revised and is online:

http://www.nerrf.net/

'Frontiers of Knowledge' edited by Matthew FA Symonds and David JP Mason 2010 is the Research Framework for Hadrian's Wall, part of the Frontiers of the Roman Empire World Heritage Site. The aim of the publication is to assess the existing knowledge base for our understanding of the monument, to identify and prioritise key themes for future research and to set out a strategy and action plan by which the initial set of objectives might be achieved.

'Mesolithic Research and Conservation Framework 2013' by Edward Blinkhorn and Nicky Milner aims to improve the understanding of the Mesolithic of England and set out key issues and priorities for future work.

For the Historic England Research Agenda see https://historicengland.org.uk/images-books/publications/eh-research-agenda/

Where appropriate note any similar nationwide projects using ADS, internet search engines, ALSF website, HEEP website, OASIS, NMR excavation index.

All staff on site must understand the project aims and methodologies.

Methods statement

Ten evaluation trenches are needed to inform the Planning Authority of the character, nature, date, depth, degree of survival of archaeological deposits on this site. The excavation must be carried out by a suitably qualified and experienced archaeological organisation. The work will record and environmentally sample any archaeological deposits of importance found on the plot. The purpose of this brief is to obtain tenders for this work. The report must be the definitive record for deposition in the Tyne and Wear HER, and it must contain recommendations for any further archaeological work needed on this site.

The commissioning client needs to be aware that the purpose of the preliminary evaluation is merely to ascertain if archaeological remains survive on this site and if they do, to determine their broad date, nature and function. Where archaeological remains are found in the preliminary

trenches, and if these remains are at threat by the proposed development, further archaeological excavation and or a watching brief will be required before and during development work.

All staff employed by the Archaeological Contractor shall be professional field archaeologists with appropriate skills and experience to undertake work to the highest professional standards.

The work will be undertaken according to Management of Research Projects in the Historic Environment (MoRPHE) – The MoRPHE Project Managers' Guide, Project Planning Notes and Technical Guides 2015.

All work must be carried out in compliance with the codes of practice of the Chartered Institute for Archaeologists and must follow the CIFA Standard and Guidance for Archaeological Field Evaluations, Excavation or Watching Briefs as appropriate.

Notification

The Tyne and Wear Archaeology Officer (AO) needs to know when archaeological fieldwork is taking place in Tyne and Wear so that they can inform the local planning authority and can visit the site to monitor the work in progress. The Archaeological Contractor <u>must</u> therefore inform the AO of the start and end dates of the Evaluation. They <u>must</u> also keep the AO informed as to progress on the site. The AO must be informed of the degree of archaeological survival and of any significant finds. The Client will give the AO reasonable access to the development to undertake monitoring.

PROJECT INITIATION

PROJECT DESIGN

Because this is a detailed specification, the Tyne and Wear Archaeology Officer does **not** require a Project Design from the appointed archaeologist. The appointed archaeologist is expected comply with the requirements of this specification.

HEALTH AND SAFETY AND RISK ASSESSMENT

A health and safety statement and risk assessment, identifying potential risks in a risk log (see template in appendix 2 of The MoRPHE Project Manager's Guide) and specifying suitable countermeasures and contingencies, is required to be submitted to the commissioning client.

See appendix 1 for more information.

PROJECT EXECUTION

1) Archaeological evaluation

The trenches are shown on the accompanying plan. The dimensions of the trenches are 20m x 1.5m in plan **at base**.

4

Trench locations can be adjusted to avoid services or for practical or safety purposes.

The appointed archaeologist **must** be able to get into the trench to plan, photograph and sample excavate any archaeological features which are found. In order to do this safely, where archaeological features lie over 1.2m below present ground level, trenches **must** be widened (if feasible) to allow safe access, otherwise shoring will be required.

Trench positions should be accurately surveyed prior to excavation and tied into the national grid.

The trenches should be excavated to the depth of natural subsoil or quarry infill.

Trenches must avoid known services.

Trenches must stay a safe distance away from pylons and overhead power lines.

The commissioning client will advise of any ecological or biodiversity issues which need to be taken into consideration. See appendix 2 for more information.

The commissioning client will advise of any protected trees which must be avoided by the evaluation. Damage to trees covered by a Tree Protection Order carries a substantial fine.

Trenches must avoid any **Japanese Knotweed** (it is the commissioning client's responsibility to advise their archaeologist if Japanese Knotweed is present on the site).

Tasks

Hand excavation, recording and environmental sampling (as stipulated below) of deposits down to the depth specified above.

Any modern overburden or levelling material can be machined-off using a wide toothless ditching bucket under strict archaeological supervision and the remaining deposits are to be excavated by hand.

All faces of the trench that require examination or recording will be cleaned.

Excavation is to be carried out with a view to avoid damage to any archaeological features which appear to worthy of preservation in-situ.

Excavation is to be carried out by single context planning and recorded on *pro forma* context sheets. Features over 0.5 m in diameter can be half sectioned.

Environmental sampling (and where relevant scientific dating) are compulsory parts of the evaluation exercise. All tenders will give a price for the assessment, full analysis, report production and publication per environmental and scientific dating sample as a contingency.