

JDG04

Date: August 2004

Client: Berwick-upon Tweed Preservation Trust

**John Dewar's Granary, Dewars Lane, Berwick-upon-Tweed,
Northumberland
Results of an Archaeological Evaluation**

Planning Reference: B38; 34; 1327

NGR: NT 9980 5273

Candy Hatherley

PROJECT SUMMARY SHEET (JDG 04)

Client	Berwick-upon-Tweed Preservation Trust
National Grid Reference	NT 9980 5273
Project Manager	Russel Coleman
Fieldwork	Candy Hatherley and Richard Conolly
Text	Candy Hatherley
Illustrations	Lisa Wilson
Schedule	
Fieldwork	August 2004
Report	August 2004

SUMMARY

Headland Archaeology Ltd carried out an archaeological evaluation on a parcel of land surrounding John Dewar's Granary, Dewar's Lane, Berwick-upon-Tweed. Five trenches were excavated within the footprint of the proposed development of the site. Midden deposits were encountered within two of the trenches, Trenches 1 and 5. Pottery recovered from these deposits was dated from the 12th to the 15th century. A cobbled surface (Trench 1) and a flagstone surface (Trench 5) were discovered sealed beneath the midden deposits.

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1. INTRODUCTION

- 1.1 An archaeological evaluation, commissioned by Berwick-upon-Tweed Preservation Trust, was undertaken on the parcel of land surrounding John Dewar's Granary, Dewars Lane, Berwick-upon-Tweed from the 10th – 13th August 2004.
- 1.2 The evaluation was undertaken following recommendations by Northumberland County Council Conservation Team to determine the nature, extent and importance of any archaeological deposits within the proposed development area prior to the restoration and reuse of the granary building and surrounding land. A desk based assessment was carried out prior to the evaluation by Headland Archaeology Ltd. These works were carried out in line with the guidance provided by NPPG 5 and PAN 42 and the archaeological brief prepared by Northumberland County Council Conservation Team.

2. BACKGROUND

- 2.1 Dewar's Lane Granary is located at NT 9980 5273, on the north shore of the estuary of the River Tweed within the core of the medieval town (Figure 1). The granary was built in 1769 and rebuilt in 1829 following a fire and was in continual use as a grain and fertilizer warehouse until 1982. It is one of only three surviving examples of the twenty granaries that were once situated in this part of the town.
- 2.2 The proposed development area is bounded to the south by the town walls, the east by Dewar's Lane, the west by the Sally Port and the north by buildings fronting onto Bridge Street. Bridge Street, (as Briggate) is one of the earliest streets in Berwick (Lamont-Brown 1988,16) and the former burgage plots extended southwards from Bridge Street to the river frontage are still respected. Dewar's Lane Granary occupies one of these ancient burgage plots which probably predate the enclosure of Berwick by walls in the 13th century. The wall around the medieval town was heavily modified in the 18th century and runs between the granary and the Quayside. The granary has its own access to the quayside through an opening in the wall dating probably from the 18th century (Ryder 2004).
- 2.3 The land immediately surrounding the granary to the west and south forms the proposed development area (Figure 2). Ancillary buildings constructed of steel frame and brick with asbestos sheet roofing stood here until the 1960's (pers. comm. Thomas Stewart) and are clearly evident in the granary, town and building walls which bound the site. The site is now empty and partially covered in concrete. A tramway running from the west wall of the granary through the town wall access to the quayside is still in situ and forms evidence of the granary's former use.
- 2.4 Prior to the commissioning of an archaeological evaluation, a watching brief on geotechnical investigations was carried out. Three boreholes were located within the proposed development site and each recorded c 3m of made ground with 1.4m of rich black organic deposits sealed beneath modern rubble overlying riverine sediments (Northern Archaeological Associates 2004).

3. OBJECTIVES

- 3.1 The objective of the archaeological evaluation was to determine the nature, extent and importance of any archaeological deposits following the discovery of anthropogenic deposits during the borehole survey. The evaluation was limited to areas of the site which will potentially be affected by the proposed piling required for this development. All trenches were initially excavated to the foundation level, 1.2m below present ground surface. Deeper excavation was then carried out on three of the trenches following consultation with the client and Karen Derham from Northumberland County Council Conservation Team.

4. METHOD

- 4.1 The trenches were excavated using a small tracked excavator with a combination of a concrete breaker, toothed and toothless ditching bucket and carried out under direct archaeological supervision and control. The concrete, which covered 90% of the proposed development area, was initially broken and excavation of the hardcore was carried out with a toothed bucket. A toothless ditching bucket was employed to continue excavation below this level.
- 4.2 Headland Archaeology Ltd uses the Museum of London Recording Manual. The surfaces of all trenches were hand cleaned, recorded on plan and photographed using black and white print and colour transparencies. An overall site plan was compiled and tied into the National Grid and located on a 1:2500 map of the area. Individual features were planned at 1:20; sections/elevations were drawn at 1:10 and related to the Ordnance Datum. Archaeological deposits were sampled in accordance with Headland Archaeology Ltd standard environmental sampling practice. A minimum 10 litre bulk samples of all archaeological deposits taken for wet sieving and flotation.

5. RESULTS

5.1 Evaluation trenches (Figure 2)

- 5.1.1 Five trenches were excavated within the proposed development area (Figure 2) amounting to 35.5m² investigated. These were located and approved by Northumberland County Council Conservation Team prior to the commencing of archaeological works. Adjustments were made to the trench location during the machining due to restricted space within the yard for the tracked excavator.
- 5.1.2 A detailed description of the deposits encountered within each trench follow. Full context descriptions can be found in Appendix 1.

5.2 Trench 1

- 5.2.1 Trench 1 was located to the south of the granary at the location of a proposed footbridge giving access to the granary from the town walls. From the SE a 3.50m length of trench was excavated to a 1.45m depth. The remaining 1.50m was only excavated to a 0.30m depth due to the discovery of a rubble filled iron container set into the ground.

Orientation	NW-SE
Length	5.00m
Width	2.00m
Depth (Average)	1.45m
Contexts	0.00 – 0.10m Concrete. 0.10 – 1.00m (002) Dark brown clayish silt with modern brick 1.00 – 1.45m (003) Midden material 1.45m (011) Cobbled surface

5.2.2 The cobbled surface (011) was sealed by a composite midden layer (003) made up of a series of thin dumps and deposits of black, grey and pink clayish silt. These deposits appeared to have been dumped in quick succession and therefore were numbered collectively. Environmental analysis of context (003) produced a variety of palaeoenvironmental remains expected within a midden deposit including uncharred plant remains suggestive of a waterlogged deposit (Appendix 6).

5.2.3 The pottery recovered from (003) appears to be mainly locally made gritty fabrics and can be placed between the 12th to 15th century (Appendix 5).

5.2.4 The cobbled surface below the midden was formed from a number of large stones laid to form a slightly uneven surface. Stones appeared to have been worn, with much of the exposed surface pitted, and were set into a matrix of mid greyish brown sandy silt. One sherd of green glaze pottery was recovered from this context dating from between the 12th and 14th centuries.

5.3 Trench 2

5.3.1 Trench 2 was located immediately to the west of the granary building at the location of a proposed extension. Large foundation stones were discovered at the SW end of the trench which corresponded to stones discovered in the NE end of Trench 3. Mortar sampled from this wall has been dated to the 19th century (pers. comm. Northumberland County Council Conservation Team). It was decided not to excavate through these foundations due to the proximity of the granary walls.

Orientation	NE-SW
Length	4.25m
Width	2.00m
Depth (Average)	1.25m
Contexts	0.00 – 0.11m (001) Concrete. 0.11 – 0.24m Hardcore 0.24 – 0.59m (004) Dark grey sandy silt. Modern brick 0.59 – 1.25m (005) Dark grey silty clay. Occ. brick and tile.

5.3.2 All deposits identified within Trench 2 appear to represent 18th to 20th century levelling activity. A brick recovered from (005) has been putatively dated to the late 18th century (pers. comm. Northumberland County Council Conservation Team)

5.4 Trench 3

5.4.1 Trench 3 was located immediately to the west of the granary building approximately 1 metre from the SW end of Trench 2. It was not possible to excavate within the footprint of the proposed extension due to the potential implications of excavating too close to the foundations of the surrounding buildings.

5.4.2 At the NE end of the trench large foundation stones corresponding with those located in Trench 2 were identified. Again no further excavation was carried out on these foundations.

Orientation	NE-SW
Length	2.75m
Width	2.00m
Depth (Average)	1.25m
Contexts	0.00 – 0.10m Concrete. 0.10 – 0.35m Hardcore 0.35 – 0.70m (006) Brown clayish silt with modern brick. 0.70 – 1.20m (007) Dark brown clayish silt.

5.4.3 The deposits recovered within Trench 3 appear very similar to Trench 2 with (006) and (007) representing levelling episodes.

5.5 Trench 4

5.5.1 Trench 4 was located to the west of granary building within the footprint of the proposed portico along the western boundary of the proposed development area. Two R.S.G's were discovered at each end of Trench 4. These were set into rubble filled holes to a depth of 1.20m. A sondage was dug into the base of Trench 4 at the SE corner to a depth of 1.75m to determine what lay beneath the R.S.G foundations.

Orientation	NW-SE
Length	4.00m
Width	2.00m
Depth (Average)	1.75m
Contexts	0.00 – 0.08m Concrete. 0.08 – 0.36m Hardcore 0.36 – 0.66 (008) Dark grey silt with rubble and modern brick. 0.66 – 1.26 (009) Pink sandy silt with rubble and mortar. 1.26 – 1.75m (010) Very dark grey clayish silt. Brick and tile.

5.5.2 The deposits identified within Trench 4 appear to be fairly similar to those in Trenches 2 and 3 with (008), (009) and (010) representing 19th – 20th century episodes of levelling.

5.6 Trench 5

5.6.1 Trench 5 was located to the west of the granary building. This trench was excavated on the clients and curators request to test the ground in this area to the depth of 2.75m.

Orientation	NE-SW
Length	2.75m
Width	2.00m
Depth (Average)	2.75m
Contexts	0.00 – 0.15m (012) Topsoil 0.15 – 0.60m (013) Hardcore 0.60 – 2.00m (014) Dark brown clayish silt with mortar and rubble. 2.00 – 2.50m (015) Midden material 2.50 – 2.75m (016) Red sandstone surface

5.6.2 The deposits identified within Trench 5 appear to be fairly similar to those found within Trench 1. The midden material (015) contained oyster shell and animal bone throughout. No pottery was recovered during machining and due to the depth of the trench no hand excavation was carried out. It was very clear that (015) was very similar to (003) the midden material within Trench 1.

5.6.3 Bulk samples of (015) produced a number of green glazed sherds of white gritty wares and redwares. These can be dated between the 12th and 15th centuries (Appendix 5). Environmental analysis provided a similar assemblage of palaeoenvironmental material to (003) Trench 1 although no potential waterlogged material was recovered (Appendix 6).

5.6.4 Beneath (015) was a flagstone surface (016). Identification was only possible by the partial removal of the stones by the machine. A number of flat worn red sandstone blocks were excavated and a putative interpretation given. This surface is approximately one metre below the cobbling identified within Trench 1. Bulk samples produced two sherds of redware dating to the 13th/15th century (Appendix 5).

6. DISCUSSION

6.1 The archaeological evaluation carried out on John Dewar's Granary has confirmed the earlier bore hole results that archaeological deposits appear to survive within the development area from 1 to 2 metres below the current ground surface. However in Trenches 2, 3 and 4 modern disturbance to a depth of 1.2m has occurred.

6.2 It is clear from the pottery assemblage recovered that the archaeological activity identified on site can be dated to the later medieval period. Locally made gritty fabrics and redwares place the primary deposition for the midden material (003) and (015), overlying the cobbled and flagstone surfaces, to the 14th-15th century.

6.3 The survival of well sealed cobbled and flagstone surfaces within these trenches suggests earlier medieval deposits may survive below.

7. ACKNOWLEDGEMENTS

7.1 I would like to thank Thomas Stewart (Berwick Preservation Trust's Architect), Karen Derham (Northumberland County Council Conservation Team) and Richard Conolly (Headland Archaeology Ltd) for all their advice and assistance during the archaeological evaluation.

8. References

Bishop M C 2004: *Dewar's Lane Granary, Berwick-upon-Tweed*, Geotechnical Ground Investigation Archaeological Watching Brief. Northern Archaeological Associates

Lamont-Brown R 1988: *The Life and Times of Berwick-upon-Tweed*, Edinburgh.

McCarthy MR & Brooks CM 1988 *Medieval Pottery in Britain AD 900-1600*.

Ryder P F 2004: *Dewar's Lane Granary, Berwick-upon-Tweed*, An Archaeological Assessment

APPENDIX 1: Context Register

Context No.	Trench	Description
001	All	Concrete
002	1	Dark brown silty clay with brick, lime, coal and gravel throughout. Very mixed. Make up/levelling layer.
003	1	Composite layer formed by at least 5 episodes of dumping. Thin (0.03-0.07) deposits of black silt, pink clayish silt, grey sandy silt, pink clay and mid grey clayish silt. Animal bone, oyster shell, coal, lime mortar and pottery sherds throughout. Midden layer.
004	2	Dark grey clayish sandy silt. Fragments of brick and tile, coal and patches of orange sand throughout. Very mixed. Make up/levelling layer.
005	2	Dark greyish brown silty clay. Coal, brick, tile and rubble throughout. Make up/levelling layer.
006	3	Brown silty loam with rubble, coal and brick throughout. Frequent mortar inclusions. Very mixed. Make up/levelling layer.
007	3	Dark brown clay loam with coal and charcoal throughout. Occ. Oyster shell and rubble. Very mixed. Make up/levelling layer.
008	4	Dark grey silt with brick and rubble throughout. Coal and mortar inclusions. Very mixed. Make up/levelling layer.
009	4	Pink sandy silt. Coal, rubble and mortar throughout. Very mixed. Make up/levelling layer.
010	4	Very dark grey clayish silt. Coal, rubble, brick and mortar throughout. Very mixed. Make up/levelling layer.
011	1	Cobbled surface comprising large (0.30 – 0.40m) stones (predominately sandstone). Laid to form slightly uneven surface sloping generally to south, more pronounced hollow in SE corner of trench. Mid greyish brown sandy silt matrix between stones.
012	5	Dark brown loamy silt. Occ. Stones and pebbles. Topsoil.
013	5	Pink sandy silt with 50 – 80% rubble (including pantiles). Hardcore.
014	5	Dark brown clayish silt. Coal, mortar, rubble and brick fragments throughout. Make up/levelling layer
015	5	Very dark grey clayish silt. Animal bone, oyster shells, coal, gravel fragments and pottery sherds throughout. Midden layer
016	5	Probable red sandstone flagged floor. Only identified during excavation of test pit at 2.75m below modern ground surface. Matrix of dark tan sandy silt between flags.

APPENDIX 2: Photographic Register

Shot No.	Subject	Direction Facing
1	Registration	
2-3	Pre-excavation shot of site	E
4	North facing section Trench 1	S
5	General view of Trench 1	SW
6	West facing section Trench 2	E
7	General view of Trench 2	S
8	West facing section Trench 3	E
9	West facing section Trench 3 (flash)	E
10	General shot of Trench 3	N
11	North facing section Trench 4	S
12	General shot of Trench 4	W
13-14	Cobbled surface (011)	W
15-16	Cobbled surface (011) (flash)	W
17	North facing section Trench 1	S
18	North facing section Trench 1 (flash)	S
19	General view of backfilled trenches	E
20-21	West facing section Trench 5	E

APPENDIX 3: Drawing Register

Drawing No.	Scale	Description
1	1:10	North facing section Trench 1
2	1:50	Trench 1 plan
3	1:10	West facing section Trench 2
4	1:50	Plan of Trenches 2 and 3
5	1:10	West facing section Trench 3
6	1:20	Cobbled surface (011) Trench 1
7	1:50	'Sketch' West facing section Trench 5

APPENDIX 4: Sample Register

Sample No.	Context	Description
1	011	Matrix of cobbled surface
2	003	Midden layer
3	015	Midden layer
4	016	Matrix of flagstone floor

APPENDIX 5: Pottery assessment

Simon Stonach

The assemblage consists of 18 sherds of pottery. All the sherds appear to be of medieval date. The medieval sherds are of predominately locally made gritty fabrics. The smaller, abraded sherds retrieved from samples are generally thin-walled and very gritty, typical of the earlier medieval period, and possibly all date to between the 12th and 14th centuries. However the larger, hand-recovered, sherds are all thick-walled with darker, reduced fabrics and many are likely to be from jugs. These are more likely to provide a primary date of deposition for context 03 and are comparable to those described as dating to the later 14th-15th century in McCarthy & Brooks (1988, 388).

List of Pottery

Ctxt	Smpl	Fabric	No	Ri	H	Ba	Bo	Description	Spot Date
03	-	WG	4				4	Thick-walled, large relatively unabraded sherds, 3 possible jugs, green glazed with horizontal decoration	13 th /15 th
03	2	WG	6				6	3 green glazed, all small and abraded	12 th /14 th
11	1	WG	1				1	Very small, green glazed	12 th /14 th
15	3	WG	4	1			3	Two very small, one larger rilled body sherd, and a green glazed rim	12 th /14 th
15	3	Redware	1				1	Very small and abraded, green glazed	13 th /15 th
16	4	Redware	2				2	Very small abraded frags, greyish sandy fabric, olive glaze	13 th /15 th

Abbreviations: WG = White Gritty

Ri = rim sherds; H = handles; Ba = base sherds; Bo = body sherds

APPENDIX 6: Assessment of samples

Mhairi Hastie

SAMPLING STRATEGY

Four bulk soil samples (ranging in size from 10-20 litres) were taken from a series of midden deposits for the recovery of small finds and palaeoenvironmental remains.

METHODOLOGY

Each sample was subjected to a system of flotation in a Siraf style flotation tank. The floating debris (flot) was collected in a 250 μ m sieve and, once dry, scanned using a binocular microscope. Any material remaining in the flotation tank (flot) was wet-sieved through a 1mm mesh and air-dried. This was then sorted and any material of archaeological significance removed.

The results are summarised in Tables 1 and 2.

RESULTS

- Pottery and Daub:** Fragments of pottery were recovered from all samples. In addition, a small quantity of daub or fired clay was recovered from Context 3.
- Iron Objects:** One fragment of iron nail was recovered from both Contexts 11 and 15.
- Industrial debris:** Occasional fragments of non-ferrous slag were recovered from Contexts 3, 11 and 15.
- Building material:** Small fragments of course white mortar with gravel inclusions were recovered from both Contexts 3 and 11.
- Bone:** Well-preserved fragments of uncharred large mammal bone/teeth and fishbone were recovered from all samples.

- Marine shell:** Low concentrations of marine shell were recovered including oyster shell and limpets.
- Plant remains:** Carbonised cereal grain including bread wheat (*Triticum aestivo-compactum*), hulled barley (*Hordeum vulgare*), oat (*Avena* sp.) and possible rye (cf *Secale cereale*) were recovered from three samples, Contexts 3, 15 and 16.
- In addition, occasional carbonised grape pips (*Vitis vinifera*) were recovered from Context 15.
- Uncharred grape pips, hazel nutshell fragments and occasional seeds of hemlock (*Conium maculatum*) were also present in Context 3.
- Coal and cinders:** The samples contained fragments of unburnt coal and coal ash. This material was not retained.

DISCUSSION

Preservation of small finds and palaeoenvironmental remains was good. Both domestic and industrial material was recovered from the samples, including pottery sherds, slag, animal and fish bone, and carbonised cereal grain. The mixture of material present is consistent with the archaeological interpretation of these deposits as midden layers.

Charred cereal grains were recovered from three samples, with Context 15 and 16 (both from Trench 5) containing high concentration of grain. Bread wheat and barley were the dominant species present with lesser quantities of oat and rye, and this might suggest a late medieval or post-medieval date for the deposits.

Occasional grape pips both charred and uncharred were recovered from Contexts 3 and 16 (Trench 1). In addition, fragments of uncharred hazelnut shell and hemlock seeds were present in Context 3 (midden deposit). No small fragile plant material was preserved.

This deposit (Context 3) consisted of a number of thin laminated layers of midden material that is thought to have been dumped in quick succession (see main report). The midden material was sealed under a deep deposit of modern make-up and there was no evidence during the excavation to suggest that these deposits were waterlogged.

The recovery of uncharred grape pips and other plant material from these midden layers suggests either that these deposits had been contaminated by later material, for instance from Victorian sewage, or that the laminated midden layers were sufficiently damp to aid preservation of more robust plant debris. Their presence could therefore indicate the potential for well-preserved waterlogged deposits within the excavation area.

Both carbonised and waterlogged grape seeds have been recovered from other medieval sites. Grapes were imported as dried fruit throughout the medieval period being imported from the South, probably Southern Europe, and were considered luxury goods. It would not therefore be unusual to find such material preserved in medieval deposits from Berwick upon Tweed.

John Dewar's Granary, Dewar's Lane, Berwick-upon-Tweed: Data Structure Report

Sample no	Context no	Trench no	Context description	Pottery	Iron Nail	Daub	Slag	Mortar	Bone	Fishbone	Marine shell	Coal/cinders
1	11	1	Cobbled surface	+	+		+	+	+	+	+	+
2	3	1	Midden layer	+		+	++	+	++	+	+	+++
3	15	5	Midden layer	+	+		+		++	++	+	+
4	16	5	Sand between flags	+					++	+	+	++

Key: + = rare, ++ = occasional, +++ = common and ++++ = abundant

Table 1. Composition of retents

Sample no	Context no	Context description	Total flot vol (ml)	Cereal grain	Other plant remains	Coal/cinders	Comments
1	11	Cobbled surface	20			++	
2	3	Midden layer	100	+	+	+++	Barley + Grape pips (uncharred) + <i>Conium maculatum</i> (uncharred) + Hazelnut shell (uncharred) +
3	15	Midden layer	50	+++	+	+	Wheat ++ Barley ++ Oat + Carbonised grape pip +
4	16	Sand between flags	20	++		+	Wheat ++ Barley + Oat + Cf. Rye +

Key: + = rare, ++ = occasional, +++ = common and ++++ = abundant

Table 2. Composition of flots

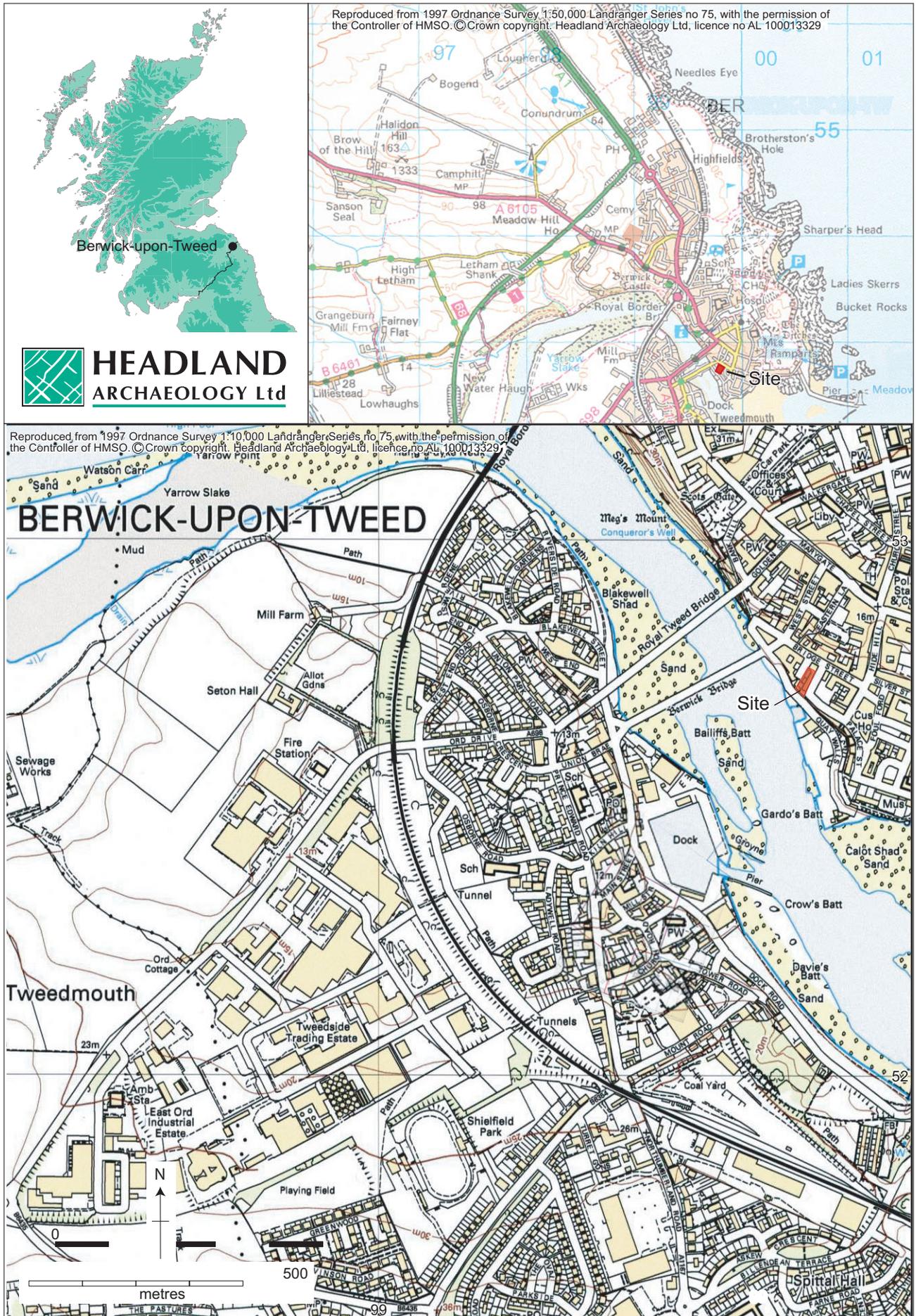


Figure 1: John Dewar's Granary, Berwick-upon-Tweed: Site Location

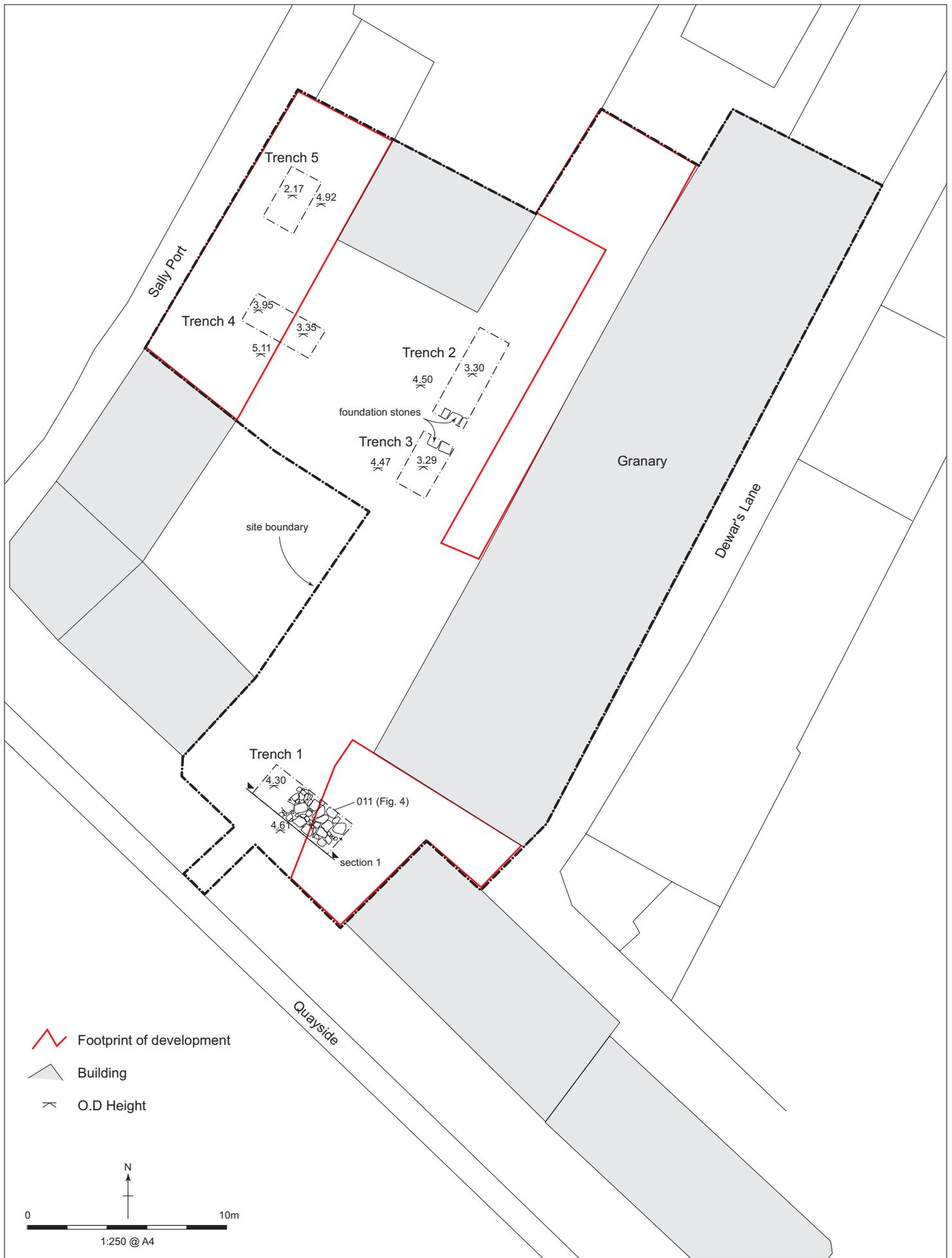


Figure 2: John Dewar's Granary, Berwick-upon-Tweed, Trench Location Plan.

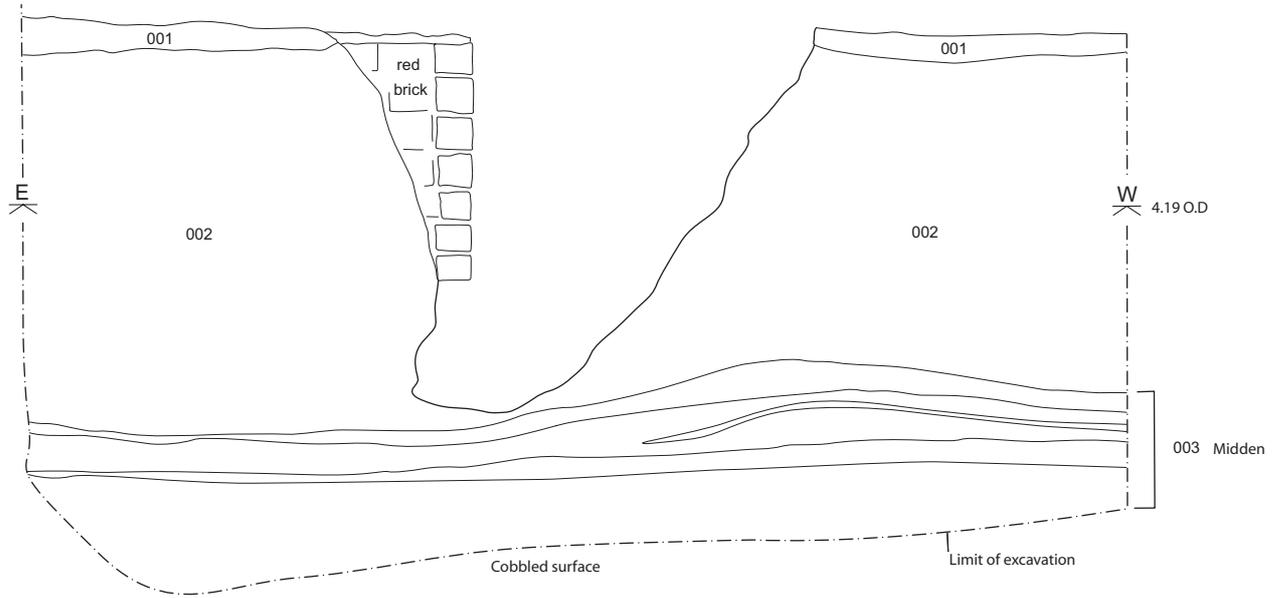


Figure 3: Section 1, North facing, through Trench 1.

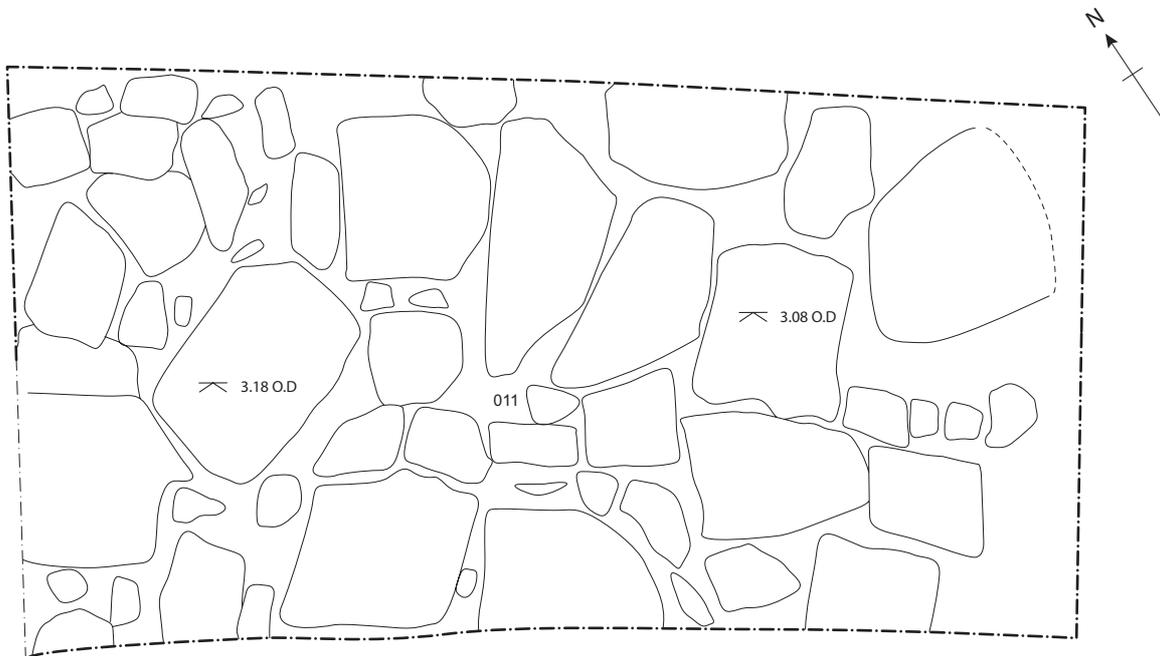


Figure 4: Plan 6, cobbled surface 011, Trench 1.



Figures 3 & 4, John Dewar's Granary, Berwick-upon-Tweed; Plan & Section through Trench 1.