Westfield Way Norton North Yorkshire SE 8049 7169

Archaeological Evaluation Report

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Archaeological Evaluation Report

Non-technical Summary

Nine evaluation trenches were excavated in December 2006 at land to the east of Westfield Way, Norton, North Yorkshire, in order to evaluate the archaeological potential of the site in advance of development for warehousing and light industry.

Five of the evaluation trenches (1, 2, 4, 5 and 7) were intended to examine anomalies of potential archaeological origin that were revealed by geophysical survey. Three of the remaining trenches (3, 8 and 9) examined geophysically 'blank' areas, whist the remaining trench (6) spanned the entire width of the site in order to intercept the possible course of the Norton Three Dikes, a prehistoric land boundary that is thought to pass through the site, but which was not identified by the geophysical survey. Of the potential archaeological anomalies, only a recent limestone-filled field drain in Trench 7 proved to be of man-made origin. Trench 3 revealed a shallow ditch or furrow. There were no traces of the Norton Three Dikes.

1. Introduction

1.1 This report sets out the results of an Archaeological Evaluation that was carried out by MAP Archaeological Consultancy Ltd. at land to the east of Westfield Way, Norton, Malton, North Yorkshire (Figs. 1 & 2: SE 8049 7169) during the week commencing December 18th 2006.

- 1.2 The Evaluation was carried out on behalf of Mo Mo Architecture, and was funded by Minster Industrial Properties Ltd, in response to a major planning application for industrial development at the site (Ref. 06/00963/MOUT). The Heritage Section of North Yorkshire County Council advised Ryedale District Council that a scheme of archaeological evaluation by geophysical survey and/or trial trenching should be undertaken in order to enable an assessment to be made of the likely impact of the development proposals upon the archaeological resource.
- 1.3 The Evaluation was designed to establish the nature, location, extent and state of preservation of archaeological remains within the proposed development area, in accordance with an agreed Written Scheme of Archaeological Investigation (MAP 2006). The information provided from the Evaluation should enable an assessment of the impact of the development on archaeological deposits at the site, so that a reasonable and informed planning decision can be made in terms of identifying options for minimising, avoiding damage to, and/or recording any archaeological remains. This strategy follows the archaeology policy issued by the Secretary of State for the Environment contained in *Planning Policy Guidance 16 'Archaeology and Planning' (PPG 16)*, and in accordance with the Policy C13 of the Ryedale Local District Plan.
- 1.4 Geophysical Survey took the form of a Fluxgate Gradiometer survey that was carried out by the Landscape Research Centre in November 2006 (LRC 2006). Geophysical anomalies of potential archaeological origin were examined in five of the trenches (Trenches 1, 2, 4, 5 and 7), and three of the trenches (3, 8 and 9) examined geophysically 'blank' areas. The remaining trench (Trench 6) was intended to intercept the projected line of a prehistoric triple boundary system. The trench locations were agreed by the Archaeology Section of the Heritage Unit, NYCC (Fig, 2), and represented an area of c. 450m².
- 1.5 The MAP site code for the project was 03-12-06.

1.6 All maps within this report have been produced from the Ordnance Survey with the permission of the Controller of Her Majesty's Stationery Office, Crown Copyright, licence No. AL 50453A.

2. Site Description (Figs. 1 & 2)

- 2.1 The site is situated at the eastern fringe of the town of Norton, to the east of Hugden Way and to the south-east of Westfield Way. At the time of the evaluation it formed a level area of rough vegetation 3 ha in extent that had most recently been cultivated for potatoes.
- 2.2 The southern, eastern and north-eastern boundaries of the proposed development area are hedged, with those at the west and north-west being open. This location is at an elevation of around 23.50m AOD.

3. Geology and Soils

3.1 The geology at the site is recorded as glaciofluvial sand and gravel (Mackney *et al.* 1984), with coarse loamy soils of the Landbeach Association (*ibid.*).

4. Archaeological and Historical Background

4.1 The proposed development site lies within a known archaeological landscape. Aerial photography has identified a number of prehistoric linear boundaries or 'dykes' in the area. Within Langton parish, the Norton 'Three Dikes' exists as an earthwork with four banks and three ditches that runs northwards into Norton parish, where it survives as the cropmarks of three ditches that are visible to within (but not beyond) c. 400m south of the site (Robinson 1978, no. 219). The projected alignment of the Three Dikes passes north-south through the western half of the planning application area, and is believed to continue as the hedge boundary flanking the western side of Westfield Way. Beyond Scarborough Road cropmarks continue the Three Dikes' course.

- 4.2 The application site lies at the eastern edge of the known area of Romano-British settlement in Norton. There are finds of Romano-British date recorded in the mid 19th century from the area of Priorpot Bridge (Robinson no. 364) including a number of beads and a small amber bracelet. In addition to this the course of the Roman road heading east from Malton to Filey passes immediately south of the proposed development area.
- 4.3 Before the enclosure of Norton (1769-1772) the site lay within 'East Field', one of the three open fields of Norton (Hudleston 1962, fig. facing p.156). The present Parliament Street and its eastward continuation, formed the 'Outgang' that allowed the passage of stock through the open field to the rough pasture beyond. The Outgang also formed the major route from Norton to Scarborough prior to the formation of the relevant turnpike trust in 1752 (Robinson no. 389). The name 'Outgang' was corrupted to 'Hugden' and was subsequently attached to the farm that was built immediately to the south of the site after the enclosure of Norton.

5. **Objectives**

- 5.1 The objectives of the evaluation were to establish by trial trenching:
 - (a) The nature, depth, extent and state of preservation of any archaeological deposits to be affected by the development proposals.

(b) To prepare a report summarising the results of the work and assessing the archaeological implications of the proposed development.

(c) To prepare and submit a suitable archive to the appropriate museum.

6. Methodology

6.1 Evaluation

6.1.1 Nine areas were excavated for the evaluation (Trenches 1 to 9). Eight of the trenches (Trenches 1-5, 7 and 8) were a nominal 3m x 10m in size, the other trench (Trench 6) measured 107m x 1.7m. The trenches were intended to evaluate the five geophysical anomalies of possible archaeological origin as

well as evaluating geophysically 'blank' areas. The trenches were positioned in consultation with the Heritage Section of NYCC (Fig. 2) and excavated in accordance with an agreed Written Scheme of Investigation (Appendix 6).

- 6.1.2 Weather conditions at the time of the evaluation were dry, with fog and frost. The field itself had areas of standing water, and the watercourse on the eastern boundary was full. These conditions did not inhibit the evaluation, but necessitated sponging and baling on occasion to remove excess water from Trenches 6 and 7.
- 6.1.3 The evaluation areas were stripped of topsoil by a rear-acting excavator using a toothless blade under close archaeological supervision. Machining ceased at the surface of the natural sands, into which the archaeological features cut. The trenches were roughly cleaned by shovel scraping during the machining process, and subsequently fine-cleaned by hoe.
- 6.1.4 A segment were excavated at a suitable points into the sole linear feature of archaeological origin.
- 6.1.5 All work was carried out in line with the Institute of Field Archaeologists Code of Conduct (IFA 1998).

6.2 On-site Recording

6.2.1 All archaeological deposits were recorded according to correct principles of stratigraphic excavation on MAP's *pro forma* context sheets, which are compatible with the MoLAS recording system.

6.3 Plans and Sections

6.3.1 The full extent of archaeological deposits were recorded in plan at a scale of 1:20 on drawing film. Sections of features and individual layers were drawn at 1:20, and included an OD height.

6.4 **Photographic Record**

6.4.1 The photographic record comprised monochrome and polychrome print, and colour transparencies, in 35mm format, recording all cleaned surfaces and archaeological features encountered.

6.5 Finds

6.5.1 No finds were recovered during the Evaluation.

7. Results

7.1 Trench 1 (Figs. 2 and 5, Pl. 1)

- 7.1.1 Trench 1 measured 10m x 3.40m in size and was situated at the northern limit of the site in order to intercept a southwest to northeast linear anomaly of possible archaeological origin. Natural deposits consisting of yellowish brown sandy clay (1002) were encountered at the base of the trench at a height of 22.15m AOD.
- 7.1.2 No archaeological features were present, either cutting, or above, the natural, which was overlain by a 0.20m deep yellowish brown sandy silt subsoil deposit (1001). The remainder of the trench was covered by a 0.26m deep modern ploughsoil (1000). There were no finds.

7.2 Trench 2 (Figs. 2 and 5, Pl. 2)

- 7.2.1 Trench 2 was 10m x 3.30m in size and was situated 40m to the south of Trench 1 at the location of a southeast to northwest aligned geophysical anomaly of possible archaeological origin. Sandy clay natural deposits (2001) lay at an elevation of c. 22.25m AOD. The natural was cut by a series of north to south-aligned modern plough scars.
- 7.2.2 The natural clay was sealed by a 0.28m deep layer of modern ploughsoil (2000). There were no finds.

7.3 Trench 3 (Figs. 6 and 8, Pls. 3 and 4)

- 7.3.1 Trench 3 was excavated in the north-western area, c. 75m to the southwest of Trench 2, being 10m x 3m in size and intended to evaluate a geophysically 'blank' area. The natural sandy clay (3003) lay at an elevation of c. 22.30m, and was cut by a northwest to southeast aligned linear feature (3002).
- 7.3.2 Linear Feature 3002 was present across the entire width of the trench and was 2.16m wide and 0.18m deep. It had gradually-sloping sides and a flat base. The pale yellowish brown silty sandy clay fill (3001) contained no finds, and was cut by a recent ceramic field drain, which was on the same alignment as the linear feature.
- 7.3.3 The remainder of the trench was occupied by a 0.30m deep layer of modern ploughsoil (3000).

7.4 Trench 4 (Figs. 7 and 8, Pl. 4)

- 7.4.1 Trench 4 was located c. 80m east of Trench 3, was also 10m x 3m in size and positioned to examine a possibly archaeological located by the geophysical survey. Natural yellowish sandy clay deposits (4001) lay at a height of c. 22.3.0m AOD. The natural was cut by deep modern plough scars that ran approximately north to south.
- 7.4.2 No archaeological features or finds were present, the natural being covered by a 0.30m deep layer of modern ploughsoil (4000). There were no finds.

7.5 Trench 5 (Figs. 2 and 5, Pl. 6)

7.5.1 Trench 5 was situated in the north-western part of the site c. 20m southeast of Trench 3. Measuring 3.30m x 10m, this trench evaluated a geophysical anomaly of possible archaeological origin. Natural sandy clay (5003) occurred at an elevation of 22.30m AOD. 7.5.2 The only features present in the trench consisted of a ceramic land drain (5001) and a deep modern plough scar (5002) that ran on a parallel north-south alignment along the length of the trench. A 0.28m deep layer of modern ploughsoil (5000) overlay the natural. There were no finds.

7.6 Trench 6 (Figs. 2 and 6, Pls. 7 and 8)

- 7.6.1 Trench 6 ran perpendicularly across central part of the field for a distance of 107m; a c. 5m margin was left at both ends end, because of services at the west and a flooded watercourse and pathway to the east. The purpose of this trench was to indicate either the presence or absence of the triple dyke system. Trench 6 was a nominal bucket's width wide (1.70m) with the provision to expand to 3m width should the triple dykes be present.
- 7.6.2 Natural deposits consisted of yellowish brown silty clay (6001) with lenses of chalk gravel, were located at an elevation of c. 22.30m AOD. No archaeological features were present, the surface of the natural being broken only by two ceramic field drains and occasional modern plough scars. The entire trench was covered by a 0.30m deep layer of modern ploughsoil (6000).

7.7 Trench 7 (Figs. 4 and 5, Pl. 9)

- 7.7.1 Trench 7 was located in the south-eastern part of the site, adjacent to the eastern boundar, y to examine a distinct linear anomaly identified by the geophysical survey. This trench was prone to flooding from the swollen stream situated immediately to the east. After initial cleaning had allowed examination of the trench it rapidly became water-logged. The trench measured 3.50m x 10m in size.
- 7.7.2 Natural deposits consisted of pale yellow silty clay (7002), which was cut at the northern part of the trench by a modern limestone-filled field drain (7001). The drain was 0.40m wide and cut perpendicularly across the trench on a south-west to north-east alignment. Modern ploughsoil (7000) covered the surface of the natural to a depth of 0.40m.

7.8 Trench 8 (Figs. 2 and 5, Pl. 10)

- 7.8.1 Trench 8 was positioned in the south-western part of the site immediately north of the modern warehouse recently built in this part of the field. (It was not possible to excavate this trench in the originally intended position to the south of the warehouse because of the need to avoid a landscaped area.) Trench 8 was a speculative trench excavated to evaluate an area that lacked any geophysical responses. It measured 3.30m x 10m in size.
- 7.8.2 The natural deposits (8001) consisted of yellowish brown clay that was firmer and more plastic than that in the other trenches, occurring at an elevation of c. 22.20m AOD. The only features present consisted of northwest-southeast aligned modern plough marks. The natural deposits were masked by a 0.28m deep layer of modern ploughsoil (8000).

7.9 Trench 9 (Figs. 2 and 5, Pl. 11)

- 7.9.1 Situated in the far southeast corner of the site, Trench 9 was a 3.30m x 10m area that evaluated a geophysically void area. Natural deposits, consisting of yellowish brown silty clay (9001), were present at an elevation of 22.10m AOD.
- 7.9.2 No archaeological features or finds were present. Modern plough marks scarred the surface of the natural, and ran parallel to the adjacent hedge. The entirety of the trench was covered by a 0.30m deep layer of modern ploughsoil (9000).

8. Discussion

8.1 The evaluation was designed to examine geophysical anomalies of possible archaeological origin, as well as to investigate the site as a whole by shedding light on areas that were free of anomalies and actively seeking evidence of the Norton Three Dikes. Paradoxically, the anomalies that were seen as being

possibly man-made were largely absent, but one of the geophysically blank areas (Trench 3) yielded the only archaeological feature identified by the evaluation. The Norton Three Dikes, unseen by the geophysical survey, remained elusive on the ground.

- 8.2 Anomalies 9 (Trench 5) and 10 (Trench 1) were similarly aligned and relatively narrow features that were interpreted as having a relatively recent origin. Not traceable within the evaluation trenches, it is possible that these were responses to deep furrows within the plough soil. Anomaly 11 (Trench 4) ran parallel to natural anomalies 1, 3 and 4, and as no archaeological element could be discerned for it, it too was probably of natural origin. Anomaly 13 (Trench 7) proved to be a recent field drain rather than a ditch of archaeological significance.
- 8.3 Of the 'speculative' areas only Trench 3, at the northwest of the site, showed traces of archaeological activity in the form of a linear feature. The shallow, broad form of this feature is suggestive of a furrow, and as we have seen, this area was part of Norton's pre-enclosure arable field system. However, as no other features of this sort were found the only such feature found it is possible that a boundary ditch is represented, albeit in truncated form. Although there were no associated finds, the fact that the linear feature pre-dated a c. 19th century ceramic field drain gives a post-medieval date *at the latest* for it.
- 8.4 Trench 6, which spanned as much of the site from west to east as was feasible to examine failed to reveal the Norton Three Dikes, and in that respect backed up the findings of the geophysical survey. The Dikes were sectioned in 1993 at a location c. 800m south of the present site, and were found to be relatively shallow features, each about 3m wide (CBA 1993, 35) certainly no features of this sort were present in the evaluated area of the site. At the risk of overspeculating, a number of factors could account for the absence of the Dikes: they may have been removed by ploughing, they could pass further to the west or there is a gap in the Dike system at this point. Definitive answers can only be supplied by further research outside the scope of this evaluation.

9. Bibliography

CBA	1993	CBA Forum. The Annual Newsletter
		of CBA Group 4.
English Heritage	1991	Management of Archaeological Projects.
Institute of Field	2001	Standard and Cuidance for Anthonalagias
Institute of Field	2001	Standard and Guidance for Archaeological
Archaeologists	Excava	ation
LRC		2006 Fluxgate Gradiometer Report – Norton,
		Hugden Way, Site 238.

Robinson, J F 1978 The Archaeology of Malton and Norton.



Figure 1. Site Location



Figure 2. Location of Evaluation Trenches over Geophysical Data



Figure 3. Plan and Section of Trench 3 Features



Figure 4. Plan of Trench 7 Features





MAP 03-12-2006



Plate 1. Trench 1. Facing North West



Plate 2. Trench 2. Facing North East



Plate 3. Trench 3 Pre-Excavation. Facing North East



Plate 4. Trench 3. Linear Feature 3002 and Field Drain. Facing South East



Plate 5. Trench 4. Facing South West



Plate 6. Trench 5. Facing North West



Plate 7. Trench 6. Facing North East



Plate 8. Trench 6. Facing South West



Plate 9. Trench 7. Facing South East



Plate 10. Trench 8. Facing North East



Plate 11. Trench 9. Facing North East

APPENDIX 1

Context Listing

Westfield Way, Norton 03-12-06

Evaluation Trench 1

Context Description

1000	Deposit	10YR 6/1, silt, Topsoil
1001	Deposit	10YR 5/3; sandy silt, Subsoil
1002	Deposit	10YR 6/6; clay, Natural

Evaluation Trench 2

Context	Description	
2000	Deposit	10YR 6/1, silt, Topsoil
2001	Deposit	10YR 6/6; silty clay, Natural

Evaluation Trench 3

Context	Description	
3000	Deposit	10YR 6/1, silt, Topsoil
3001	Deposit	10YR 6/1, silt, fill of 3002
3002	Cut	Furrow, filled by 3001
3003	Deposit	10YR 6/6; silty clay, Natural

Evaluation Trench 4

Context	Description	
4000	Deposit	10YR 6/1, silt, Topsoil
4001	Deposit	10YR 6/6; silty clay, Natural

Evaluation Trench 5

Context Description

5000	Deposit	10YR 6/1, silt, Topsoil
5001	Structure	Broken land drain
5002	Deposit	10YR 6/1, silt, fill of unexcavated land drain
5003	Deposit	10YR 6/6; silty clay, Natural

Evaluation Trench 6

Context	Description	
6000	Deposit	10YR 6/1, silt, Topsoil
6001	Deposit	10YR 6/6; silty clay, Natural

Evaluation Trench 7

Context	Description	
7000	Deposit	10YR 6/1, silt, Topsoil
7001	Structure	Modern land drain infilled with small stones
7002	Deposit	10YR 6/6; silty clay, Natural

Evaluation Trench 8

Context	Description	
8000	Deposit	10YR 6/1, silt, Topsoil
8001	Deposit	10YR 6/6; clay, Natural

Evaluation Trench 9

Context	Description	
9000	Deposit	10YR 6/1, silt, Topsoil
9001	Deposit	10YR 6/6; silty clay, Natural

APPENDIX 2

Drawing Archive Listing

Westfield Way, Norton 03-12-06

Drawing No.	Scale	Туре	Description
1	1:20	Section	East facing section of Trench 2
2	1:20	Section	North west facing section of Trench 3
3	1:20	Section	South facing section of Trench 1
4	1:20	Section	West facing section of Trench 4
5	1:20	Section	South facing section of Trench 5
6	1:20	Section	North east facing section of Trench 8
7	1:20	Plan	Overall plan of Trench 3, post excavation
8	1:20	Plan	Overall plan of Trench 3, post excavation
9	1:20	Section	North east facing section of Trench 9
10	1:20	Section	North east facing section of Trench 7
11	1:20	Section	South east facing section of Trench 6

APPENDIX 3

Photographic Archive Listing

Westfield Way, Norton 03-12-06

Film 976: Monochrome

Frame	Description	Scale	Facing
1	I.D shot	N/A	N/A
2	Pre excavation photograph of Trench 3	2x2m	North-east
3	Pre excavation photograph of Trench 3	2x2m	North-east
4	Pre excavation photograph of Trench 1	2x2m	North-west
5	Pre excavation photograph of Trench 1	2x2m	North-west
6	Pre excavation photograph of Trench 4	2x2m	South-west
7	Pre excavation photograph of Trench 4	2x2m	South-west
8	Pre excavation photograph of Trench 2	2x2m	North-east
9	Pre excavation photograph of Trench 2	2x2m	North-east
10	Pre excavation photograph of Trench 5	2x2m	North-west
11	Pre excavation photograph of Trench 5	2x2m	North-west
12	Pre excavation photograph of Trench 9	2x2m	North-east
13	Pre excavation photograph of Trench 9	2x2m	North-east
14	Pre excavation photograph of Trench 7	2x2m	South-east
15	Pre excavation photograph of Trench 7	2x2m	South-east
16	Pre excavation photograph of Trench 8	2x2m	North-east
17	Pre excavation photograph of Trench 8	2x2m	North-east
18	Cut 3002	1x2m	South-east
19	Cut 3002	1x2m	South-east
20	Pre excavation photograph of Trench 6, Western edge	1x2m	North-east
21	Pre excavation photograph of Trench 6, Western edge	1x2m	North-east
22	Pre excavation photograph of Trench 6, at 15 metres	1x2m	North-west
23	Pre excavation photograph of Trench 6, at 15 metres	1x2m	North-west
24	Pre excavation photograph of Trench 6, at 30 metres	1x2m	North-west
25	Pre excavation photograph of Trench 6, at 30 metres	1x2m	North-west
26	Pre excavation photograph of Trench 6, at 45 metres	1x2m	North-west
27	Pre excavation photograph of Trench 6, at 45 metres	1x2m	North-west
28	Pre excavation photograph of Trench 6, at 60 metres	1x2m	North-west
29	Pre excavation photograph of Trench 6, at 60 metres	1x2m	North-west
30	Pre excavation photograph of Trench 6, at 75 metres	1x2m	North-west
31	Pre excavation photograph of Trench 6, at 75 metres	1x2m	North-west
32	Pre excavation photograph of Trench 6, at 90 metres	1x2m	North-west
33	Pre excavation photograph of Trench 6, at 90 metres	1x2m	North-west
34	Pre excavation photograph of Trench 6, Eastern edge	1x2m	South-west
35	Pre excavation photograph of Trench 6, Eastern edge	1x2m	South-west

Film 974: Colour Print

Frame	Description	Scale	Facing
1	I.D shot	N/A	N/A
2	Pre excavation photograph of Trench 3	2x2m	North-east
3	Pre excavation photograph of Trench 3	2x2m	North-east
4	Pre excavation photograph of Trench 1	2x2m	North-west
5	Pre excavation photograph of Trench 1	2x2m	North-west
6	Pre excavation photograph of Trench 4	2x2m	South-west
7	Pre excavation photograph of Trench 4	2x2m	South-west

8	Pre excavation photograph of Trench 4	2x2m	South-west
9	Pre excavation photograph of Trench 2	2x2m	North-east
10	Pre excavation photograph of Trench 2	2x2m	North-east
11	Pre excavation photograph of Trench 5	2x2m	North-west
12	Pre excavation photograph of Trench 5	2x2m	North-west
13	Pre excavation photograph of Trench 9	2x2m	North-east
14	Pre excavation photograph of Trench 9	2x2m	North-east
15	Pre excavation photograph of Trench 7	2x2m	South-east
16	Pre excavation photograph of Trench 7	2x2m	South-east
17	Pre excavation photograph of Trench 8	2x2m	North-east
18	Pre excavation photograph of Trench 8	2x2m	North-east
19	Cut 3002	1x2m	South-east
20	Cut 3002	1x2m	South-east
21	Pre excavation photograph of Trench 6, Western edge	1x2m	North-east
22	Pre excavation photograph of Trench 6, Western edge	1x2m	North-east
23	Pre excavation photograph of Trench 6, at 15 metres	1x2m	North-west
24	Pre excavation photograph of Trench 6, at 15 metres	1x2m	North-west
25	Pre excavation photograph of Trench 6, at 30 metres	1x2m	North-west
26	Pre excavation photograph of Trench 6, at 30 metres	1x2m	North-west
27	Pre excavation photograph of Trench 6, at 45 metres	1x2m	North-west
28	Pre excavation photograph of Trench 6, at 45 metres	1x2m	North-west
29	Pre excavation photograph of Trench 6, at 60 metres	1x2m	North-west
30	Pre excavation photograph of Trench 6, at 60 metres	1x2m	North-west
31	Pre excavation photograph of Trench 6, at 75 metres	1x2m	North-west
32	Pre excavation photograph of Trench 6, at 75 metres	1x2m	North-west
33	Pre excavation photograph of Trench 6, at 90 metres	1x2m	North-west
34	Pre excavation photograph of Trench 6, at 90 metres	1x2m	North-west
35	Pre excavation photograph of Trench 6, Eastern edge	1x2m	South-west
36	Pre excavation photograph of Trench 6, Eastern edge	1x2m	South-west

Film 975: Colour Slide

Frame	Description	Scale	Facing
1	I.D shot	N/A	N/A
2	Pre excavation photograph of Trench 3	2x2m	North-east
3	Pre excavation photograph of Trench 3	2x2m	North-east
4	Pre excavation photograph of Trench 1	2x2m	North-west
5	Pre excavation photograph of Trench 1	2x2m	North-west
6	Pre excavation photograph of Trench 4	2x2m	South-west
7	Pre excavation photograph of Trench 4	2x2m	South-west
8	Pre excavation photograph of Trench 2	2x2m	North-east
9	Pre excavation photograph of Trench 2	2x2m	North-east
10	Pre excavation photograph of Trench 5	2x2m	North-west
11	Pre excavation photograph of Trench 5	2x2m	North-west
12	Pre excavation photograph of Trench 9	2x2m	North-east
13	Pre excavation photograph of Trench 9	2x2m	North-east
14	Pre excavation photograph of Trench 7	2x2m	South-east
15	Pre excavation photograph of Trench 7	2x2m	South-east
16	Pre excavation photograph of Trench 8	2x2m	North-east
17	Pre excavation photograph of Trench 8	2x2m	North-east
18	Cut 3002	1x2m	South-east
19	Cut 3002	1x2m	South-east
20	Pre excavation photograph of Trench 6, Western edge	1x2m	North-east
21	Pre excavation photograph of Trench 6, Western edge	1x2m	North-east
22	Pre excavation photograph of Trench 6, at 15 metres	1x2m	North-west
23	Pre excavation photograph of Trench 6, at 15 metres	1x2m	North-west

24	Pre excavation photograph of Trench 6, at 30 metres	1x2m	North-west
25	Pre excavation photograph of Trench 6, at 30 metres	1x2m	North-west
26	Pre excavation photograph of Trench 6, at 45 metres	1x2m	North-west
27	Pre excavation photograph of Trench 6, at 45 metres	1x2m	North-west
28	Pre excavation photograph of Trench 6, at 60 metres	1x2m	North-west
29	Pre excavation photograph of Trench 6, at 60 metres	1x2m	North-west
30	Pre excavation photograph of Trench 6, at 75 metres	1x2m	North-west
31	Pre excavation photograph of Trench 6, at 75 metres	1x2m	North-west
32	Pre excavation photograph of Trench 6, at 90 metres	1x2m	North-west
33	Pre excavation photograph of Trench 6, at 90 metres	1x2m	North-west
34	Pre excavation photograph of Trench 6, Eastern edge	1x2m	South-west
35	Pre excavation photograph of Trench 6, Eastern edge	1x2m	South-west

APPENDIX 4

Project Team Details

Westfield Way, Norton 03-12-06

Fieldwork

Mark Stephens *director* Charles Rickaby Charlie Morris Geoff Wilson

Post-excavation

Mark Stephens *report* Charles Rickaby *Appendices* Nigel Cavanagh *editorial* Dave Knight *CAD* and illustrations

WRITTEN SCHEME OF INVESTIGATION FOR ARCHAEOLOGICAL EVALUATION

LAND AT NORTON GROVE WESTFIELD WAY NORTON NORTH YORKSHIRE

NGR SE 80494 71687

Prepared by MAP Archaeological Consultancy Ltd on behalf of Mo Mo Architecture

4th December 2006

LAND AT NORTON GROVE WESTFIELD WAY NORTON NORTH YORKSHIRE

NGR SE 80494 71687

WRITTEN SCHEME OF INVESTIGATION FOR ARCHAEOLOGICAL EVALUATION

1. Summary

- 1.1 Industrial development is proposed on land at Norton Grove, Westfield Way, Norton, North Yorkshire.
- 1.2 The proposed site lies within an area of high archaeological potential, on the eastern fringe of the Roman settlement. The Roman road from Malton to Filey passes along the site's southern boundary, and the projected course of Norton Three Dikes (a prehistoric triple ditch system) crosses the site.
- 1.3 Accordingly, the Heritage Unit has advised Ryedale District Council that a scheme of archaeological evaluation is undertaken at the site. The aim of this work is to establish the nature, location, extent and state of preservation of archaeological remains within the development area. The results of this work will enable the archaeological impact of the development to be fully appreciated and an appropriate design mitigation, and/or further archaeological work, to be agreed to preserve archaeological deposits either *in situ*, or by record. This scheme of investigation has been prepared to define the scope of this archaeological evaluation by trial trenching by MAP Archaeological Consultancy Ltd, acting on behalf of Mo Mo Architecture.

1.4 The first stage of the evaluation took the form of a magnetometry survey conducted by the Landscape Research Centre in November 2006. The survey identified five linear anomalies (9–13) of potentially archaeological origin. Eight anomalies of more amorphous form were interpreted as being natural in origin. There were no clear indications of the triple ditch system, possibly because the material filling them offered little magnetic difference from the surrounding subsoil.

2. Purpose

2.1 This written scheme of investigation represents a summary of the broad archaeological requirements to enable an assessment of the impact of development proposals upon the archaeological resource. This is in accordance with Policy C13 of the Ryedale Local Plan (March 2002) and the guidance of Planning Policy Guidance note 16 on *Archaeology and Planning*, 1990.

3. Location and Description (centred at NGR SE 7877 7182)

- 3.1 The extent of the application area is indicated on a site location plan supplied by Mo Mo Architecture at 1:100 scale. The total area of the proposed development is approximately 2.9 ha.
- 3.2 The proposed development site lies at the eastern edge of the modern settlement at Norton, to the east of Hugden Farm, and north and southeast of Westfield Way, at the eastern edge of an area of current industrial estate. The application area comprises three separate parcels of land, one large and two small. The two smaller parcels lie to the north of Westfield Way and exist as areas of hardstanding. The larger of the three areas, measuring approximately 3 ha, lies east of Hugden Way.

4. Historical and Archaeological Background

4.1 The proposed development site lies in a sensitive archaeological area.

The application site lies at the periphery of the known area of Romano British settlement in Norton and there are finds of Romano-British date recorded in the mid 19th century. These include a number of beads and a small amber bracelet. In addition to this the projected course of the Roman road heading east from Malton to Filey passes along the southern boundary of the proposed development area. There are a number of prehistoric linear dyke systems in this area, known from aerial photography. The projected alignment of a triple dyke system passes north-south through the western half of the larger land parcel of the planning application area. There is potential therefore for development of this site as a new industrial development to disturb, and/or destroy any archaeological remains of prehistoric, Romano-British and later date that may survive within the application area.

5. Objectives

5.1 The objectives of the archaeological evaluation work within the proposed development area are:

.1 to determine by means of trial trenching, the nature, depth, extent and state of preservation of any archaeological deposits to be affected by the development proposals. Trial trenches of sufficient size and depth to provide this information will be excavated, and archaeological deposits will be explicitly related to depths below existing surface and actual heights in relation to Ordnance Datum.

.2 to prepare a report summarising the results of the work and assessing the archaeological implications of proposed development,

.3 to prepare and submit a suitable archive to the appropriate museum.

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6. Access, Safety and Monitoring

- 6.1 Access to the site will be arranged through the commissioning body.
- 6.2 It is the archaeological contractor's responsibility to ensure that Health and Safety requirements are fulfilled.
- 6.3 The project will be monitored by the Senior Archaeologist, North Yorkshire County Council, to whom written documentation should be sent before the start of the trial trenching confirming: a) the date of commencement, b) the names of all finds and archaeological science specialists likely to be used in the evaluation, and c) notification to the proposed archive repository of the nature of the works and opportunity to monitor the works.
- 6.4 Where appropriate, the advice of the Regional Advisor for Archaeological Science (Yorkshire) at English Heritage will be called upon.
- 6.5 It is the archaeological contractor's responsibility to ensure that monitoring takes place by arranging monitoring points as follows:
 - .1 a preliminary meeting or discussion at the commencement of the contract to agree the locations of the proposed trial trenches.
 - .2 progress meeting(s) during the fieldwork phase at appropriate points in the work schedule, to be agreed.
 - .3 a meeting during the post-fieldwork phase to discuss the draft report and archive before completion.
- 6.6 It is the responsibility of the archaeological contractor to ensure that any significant results are brought to the attention of the Archaeologist,

North Yorkshire County Council and the commissioning body as soon as is practically possible.

7. Brief

- 7.1 The proposed development area is c. 2.9 ha in size. It is suggested that nine areas of trial trenching should be excavated within the application site, placed to evaluate the five potentially archaeological anomalies identified by the geophysical survey, as well as four other trenches that will evaluate apparently 'blank' areas. The latter category will include a trench running across the site from west to east in an attempt to intercept the projected alignment of the triple ditch system. The trenches will be 10m by 3m in size, with the exception of the latter trench, which will be the width of a standard ditching bucket (c. 1.6m), but increased to 3m in width to allow the evaluation of the triple dikes (if present). The trial trenches will determine the nature, depth, extent and state of preservation of archaeological deposits across the site. The precise location of the trenches will be agreed with the Senior Archaeologist, North Yorkshire County Council and the commissioning body prior to excavation. The project should be undertaken in a manner consistent with the guidance of MAP2 (English Heritage, 1991) and professional standards and guidance (IFA, 1999).
- 7.2 Archaeological investigation should be carried out over the full area of each trench, either by area excavation or sectioning of features in order to fulfil Objective 5.1.1 above. Sondages or slit trenches should be used only to facilitate the recording of the trench; they should not be used to provide a representative sample of the trench. Where excavation below a safe working depth constrains investigation, consideration should be given to stepping back or shoring the excavation. In case of query as to the extent of investigation, a site meeting shall be convened with the Senior Archaeologist, North Yorkshire County Council.

- 7.3 All deposits should be fully recorded on standard context sheets, photographs and conventionally-scaled plans and sections. Each trench area should be recorded to show the horizontal and vertical distribution of contexts. Normally, all four sides of a trench should be recorded in section. Fewer sections can be recorded only if there is a substantial similarity of stratification across the trench. The elevation of the underlying natural subsoil where encountered will be recorded. The limits of excavation will be shown in all plans and sections, including where these limits are coterminous with context boundaries.
- 7.4 Overburden such as turf, topsoil, made ground, rubble or other superficial fill materials will be removed by machine using a JCB or 360° excavator fitted with a toothless or ditching bucket. Mechanical excavation equipment shall be used judiciously, under archaeological supervision down to the top of archaeological deposits, or the natural subsoil (C Horizon or soil parent material), whichever appears first. Bulldozers or wheeled scraper buckets will not be used to remove overburden above archaeological deposits. Topsoil will be kept separate from subsoil or fill materials. Thereafter, hand-excavation of archaeological deposits will be carried out. The need for, and any methods of, reinstatement will be agreed with the commissioning body in advance of submission of tenders.
- 7.5 Human remains will be left *in situ* following the determination of the extent of the remains and grave cut(s).
- 7.6 Metal detecting, including the scanning of topsoil and spoil heaps, will only be permitted subject to archaeological supervision and recording so that metal finds are properly located, identified, and conserved. All metal detection should be carried out following the Treasure Act 1996 Code of Practice.
- 7.7 Due attention will be paid to artefact retrieval and conservation, ancient technology, dating of deposits and the assessment of potential for the

scientific analysis of soil, sediments, biological remains, ceramics and stone. All specialists (both those employed in-house and those subcontracted) should be named in project documentation, their prior agreement obtained before the fieldwork commences and opportunity afforded for them to visit the fieldwork in progress.

- 7.8 Finds should be appropriately packaged and stored under optimum conditions, as detailed in *First Aid for Finds* (Watkinson & Neal, 1998).
- 7.9 The character, information content and stratigraphic relationships of features and deposits should be determined and a running section along the excavation area, from highest to lowest point, should be recorded to show the vertical distribution of layers. All linear features, such as ditches, should have their shape, character, and depth determined by hand excavation of sections. A minimum sample of 20% of each linear feature of less than 5m in length and a minimum sample of 10% of each linear feature greater than 5m in length (each section will be not less than 1m wide) should be excavated. All junctions of linear features should have their stratigraphic relationships determined, if necessary using box sections. A 100% sample of all stake-holes should be excavated, and all pits, post-holes and other discrete features should be half-sectioned by hand to record a minimum of 50% of their fills, and their shape. Any other unknown or enigmatic features should be investigated similarly. Large pits, post-holes or deposits of over 1.5m diameter should be excavated sufficiently to define their extent and to achieve the objectives of the investigation, but should not be less than 25%. All intersections should be investigated to determine the relationship(s) between features.
- 7.10 Scientific investigations should be undertaken in a manner consistent with the English Heritage best-practice guidelines (2003).
- 7.11 Where there is evidence for industrial activity, macroscopic technological residues (or a sample of them) should be collected by

hand. Separate samples (*c*. 10ml) should be collected for micro-slags hammer-scale and spherical droplets). In these instances, the guidance of English Heritage (2001) and Jones (*ed* 2006) should be followed.

- 7.12 Samples should be collected for scientific dating (radiocarbon, dendrochronology, luminescence dating, archaeomagnetism and/or other techniques as appropriate), following an outline strategy presented to the Senior Archaeologist, NYCC.
- 7.13 Where appropriate, buried soils and sediment sequences should be inspected and recorded on site by a recognised geoarchaeologist. Samples may be collected for analysis of chemistry, magnetic susceptibility, particle size, micromorphology and/or other techniques as appropriate, following an outline strategy presented to the Senior Archaeologist, NYCC, and in consultation with the geoarchaeologist. The guidance of Canti (1996) and English Heritage (2002) should be followed.
- 7.14 Deposits should be sampled for retrieval and analysis of all biological remains. The sampling strategy should include a reasoned justification for selection of deposits for sampling, and should be developed in collaboration with a recognised bioarchaeologist. Sampling methods should follow the guidance of the Association for Environmental Archaeology (1995) and English Heritage (2002). Flotation samples and samples taken for coarse-mesh sieving from dry deposits should be processed at the time of the fieldwork wherever possible, partly to permit variation of sampling strategies if necessary, but also because processing at a later stage could cause delays.
- 7.15 Samples should be collected from primary and secondary contexts, where applicable, from a range of representative features, including pit and ditch fills, postholes, floor deposits, ring gullies and other negative features. Positive features should also be sampled. Sampling should also be considered for those features where dating by other methods

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(for example pottery and artefacts) is uncertain. Bulk samples should be collected from contexts containing a high density of bones. Spot finds of other material should be recovered where applicable.

- 7.16 In accordance with the English Heritage Guidelines (2002), bulk samples should be between 30 and 40 litres in size, although this will be dependent upon the volume of the context. Entire contexts should be sampled if the volume is low, and specialist samples, such as for General Biological Analysis (GBA) should be of the order of 10 litres. Allowance should be made for a site visit from the contractor's environmental specialists/consultants.
- 7.17 The specialists that MAP Archaeological Consultancy Ltd. use are as follows:

CONSERVATION

Ian Panter YAT 01904 612529			
	lan Panter	YAT	01904 612529

Prehistoric	Terry Manby		01430 873147
Pottery			
Roman	Vivien Swan		01904 468335
Pottery			
	Jeremy Evans		0121 778 4024
	Paula Ware	MAP	01653 697752
Pre-conquest	Mark Stephens	MAP	01653 697752
Pottery			
Medieval	Mark Stephens	MAP	01653 697752
Pottery			
Post Medieval	Mark Stephens	MAP	01653 697752
Pottery			
Clay Tobacco	Mark Stephens	MAP	01653 697752
Pipe			
СВМ	Sandra		01904 621339
	Garside –		

	Neville		
Animal Bone		PRS	01388 772167
Small Finds	Hilary Cool		0116 981 9065
Leather	lan Carlisle	YAT	01904 663000
Textile	Penelope	Textile Research	01904 634585
	Walton Rogers	in Archaeology	
Slag/Hearths	Jerry	Bradford	01274 383 5131
	McDonnell	University	
Flint	Pete Makey		01377 253695
Environmental		PRS	01388 772167
Sampling			
Human	Malin Holst	York Osteology	01904 737509
Remains		Ltd	

- 7.18 Upon completion of archaeological field recording work, an appropriate programme of analysis and publication of the results of the work should be completed. Post excavation assessment of material should be undertaken in accordance with the guidance of MAP2 (English Heritage, 1991).
- 7.19 Where appropriate, the advice of the English Heritage Regional Advisor for Archaeological Science, Yorkshire Region may be called upon to monitor the archaeological science components of the project.

8. Archive

- 8.1 A field archive will be compiled consisting of all primary written documents, plans, sections and photographs should be produced and cross-referenced. Archive deposition will be undertaken with reference to the County Council's *Guidelines on the Transfer and Deposition of Archaeological Archives.*
- 8.2 The archaeological contractor will liase with an appropriate museum to establish the detailed requirements of the museum and discuss archive

transfer in advance of fieldwork commencing. The relevant museum curator should be afforded to visit the site and discuss the project results. In this instance, Malton Museum is suggested.

9. Report

- 9.1 A summary report shall be produced following the County Council's guidance on reporting: Reporting Check-List.
- 9.2 All excavated areas will be accurately mapped with respect to nearby buildings and roads.
- 9.3 At least five copies of the report should be produced and submitted to the commissioning body, North Yorkshire County Council Heritage Section HER, the Local Planning Authority, the museum accepting the archive and the English Heritage Regional Advisor for Archaeological Science.
- 9.4 Copyright in the documentation prepared by the archaeological contractor and specialist sub-contractors should be the subject of an additional licence in favour of the museum accepting the archive and North Yorkshire County Council to use such documentation for their statutory educational and museum service functions, and to provide copies to third parties as an incidental to such functions.
- 9.5 Under the Environmental Information Regulations 2005 (EIR), information submitted to the HER becomes publicly accessible, except where disclosure might lead to environmental damage, and reports cannot be embargoed as 'confidential' or 'commercially sensitive'. Requests for sensitive information are subject to a public interest test, and if this is met, then the information has to be disclosed. The archaeological contractor should inform the client of EIR requirements, and ensure that any information disclosure issues are resolved before

completion of the work. Intellectual property rights are not affected by the EIR.

- 9.6 If the archaeological fieldwork produces results of sufficient significance to merit publication in their own right, allowance would be made for the preparation and publication of a summary in a local journal, such as the *Yorkshire Archaeological Journal*. This should comprise, as a minimum, a brief note on the results and a summary of the material held within the site archive, and its location.
- 9.7 Upon completion of the work, the archaeological contractor should make their work accessible to the wider research community by submitting digital data and copies of reports online to OASIS (<u>http://ads.ahds.ac.uk/project/oasis/</u>). Submission of data to OASIS does not discharge the planning requirements for the archaeological contractor to notify the Senior Archaeologist, NYCC of the details of the work and to provide the Historic Environment Record (HER) with a report on the work.

10. References

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11. Additional Information

This brief was completed on 4 December 2006 by:

Sophie Langford and Mark Stephens MAP Archaeological Consultancy Ltd New Unit 1 Showfield Lane Malton North Yorkshire YO17 6BT

Tel: 01653 697752