



















M80 Stepps to Haggs Improvements Phase 1 Archaeological Works Historic Scotland ref: HS/C/3469 Volume 1

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PROJECT SUMMARY SHEET (SHG06)

Client Historic Scotland for Transport Scotland

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Schedule

Fieldwork March 19th to June 15th 2007 Report June 18th to July 20th 2007

Summary

This report presents the findings of an archaeological programme of works in advance of the M80 motorway improvement scheme. The route for the new section of the M80 motorway development runs from Stepps in North Lanarkshire to Haggs in the Falkirk area and incorporates the route of the existing A80, which currently links the two stretches of the existing M80. The fieldwork was undertaken between March and June 2007 and comprised (i) a trial trench evaluation of the road corridor, (ii) a watching brief on geotechnical test holes, (iii) building recording, (iv) surveys and (v) a palaeoenvironmental assessment of five sites.

The evaluation was originally designed as 10% of the 1, 584, 200m² development area. A large proportion of this area could not be trenched because of constraints such as services, tree cover and peat basins. A total of 842 trenches (91, 186m²) were excavated along the route in differing landscape settings from rolling hillsides to parkland and landscaped motorway verges.

A number of features were recorded within the trenches that are representative of cultivation and field improvement. These took the form of rig and furrow and frequent rubble and ceramic field drains. A number of other features indicative of small, localised burning events were also recovered.

The evaluation along with the palaeoenvironmental assessment has revealed a landscape where peat deposits have accumulated within glacially scoured hollows suggesting that in these low-lying areas the landscape was very wet and boggy and unsuitable for settlement. Cultivation of drier, less low-lying pockets of land has taken place from the medieval period onwards. The only evidence of prehistoric or Roman activity anywhere along the line evaluated consisted of the find of a stone quern in the trench adjacent to Mollins Roman fort.

M80 Stepps to Haggs Improvements RESULTS OF PHASE 1 ARCHAEOLOGICAL WORKS

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1.INTRODUCTION

Headland Archaeology Ltd was commissioned by Historic Scotland on behalf of the Scottish Executive to undertake a programme of archaeological work prior to the construction of the M80 Stepps to Haggs Motorway. Jacobs monitored the project. This report presents the results of a phase of these works, which comprised (i) a trial trench evaluation of the road corridor, (ii) a watching brief on geotechnical test holes, (iii) building recording, (iv) surveys and (v) a palaeoenvironmental assessment of five sites. The fieldwork was undertaken between the March and June 2007.

The route falls within the two local authorities of North Lanarkshire Council and Falkirk Council. The landscape along the route varies greatly from rolling hillside to landscaped motorway verge.

2. ARCHAEOLOGICAL BACKGROUND

The most significant of the ancient monuments within the study area is the Antonine Wall, located 3km north of the proposed M80 Stepps to Haggs Motorway and running for approximately 58km in an east-west direction. Where it remains unaffected by modern development or is not totally destroyed, the Antonine Wall is scheduled as a monument of national importance under the Ancient Monuments and Archaeological Areas Act 1979, and is currently a nominee for World Heritage Status. Built in 142-143 AD under Emperor Antoninus Pius, the Wall formed the most northerly frontier of the Roman Empire for some two decades. The linear barrier takes the form of a substantial rampart and ditch behind which runs a military road, connecting a series of forts and fortlets. Signalling platforms and camps utilised during its construction are to be found at regular intervals along its rear.

The Scheduled site of Castlecary Roman Fort adjoins the Antonine Wall on an elevated location overlooking the Bonny Water and Red Burn. The rectangular enclosure is approximately 3.5ha and composed of a headquarters, Commandant's house, granary, bathhouse and latrines. Within the CPO boundary itself is situated a small area of Mollins Roman Fort identified from aerial photography. Limited excavations in 1977 and 1978 suggested this may represent a rare surviving example of an earlier line of Roman defences constructed in the first century AD. Prior to any construction works, an area of 100m^2 of this site required excavation by hand.

In addition to the potential for Roman remains in the area of the proposed scheme, other sites include medieval and post-medieval cultivation activity, as well as industrial buildings. Evidence for Prehistoric occupation is poor, however the nature of the landscape indicates that archaeological potential is good.

3.OBJECTIVES

The objectives of the evaluation were to update the previous desk based assessment and walkover survey carried out by AOC Archaeology Group in 1994. The primary objectives of the trial trench evaluation were to determine the presence or absence, quality, nature, extent and character of any buried archaeological remains in the area of the road corridor and produce a mitigation strategy report for further archaeological work.

4.METHODS

The road corridor was divided into 38 parcels of land. Before any work was carried out a condition survey was completed on each plot of land detailing the ground conditions and topography and state of cultivation prior to excavation. This was updated during the course of the works recording any incidents that caused damage to the ground or field boundaries and the condition of the ground after the backfilling of the trenches. The condition surveys were supported with dated digital photographs, which can be found in the site archive. Copies of these were also provided to Jacobs.

4.1 Phase 1 Trial Trench Evaluation

A trenching plan was agreed with Historic Scotland, Jacobs and individual landowners and farmers. The trenches were sited to ensure that all areas specified in the brief were evaluated ensuring good, even coverage across the CPO; that no work was undertaken outwith the CPO; that all known services both underground and overhead were avoided and that no trenches were within 5m of any water courses. Other environmental constraints such as the presence of otter holts near Mollins fort also had to be taken into account.

The trenches were laid out using a GPS system and tied into the National Grid. The trenches were excavated under direct archaeological supervision using three 360° mechanical excavators for the larger parcels and a JCB for the smaller parcels. These were fitted with a 2m wide toothless ditching bucket. Just over half of the planned trenches were excavated due the presence of services and wooded or boggy areas. The full reasons why individual trenches or parcels were not excavated are detailed in the descriptions of each parcel below.

During fieldwork a scaled drawing was made of each trench on pro forma record sheets with additional comments on orientation, features, drains and depth of topsoil/lower ploughsoil marked on. A complete matrix for each trench was drawn at an appropriate scale. Features of potential archaeological significance within the trenches were hand cleaned and investigated. Sections were drawn at 1:10 or 1:20 as appropriate. Individual trench plans were drawn at 1:20 or 1:50 as appropriate. Colour transparencies and black and white and digital photographs were taken.

4.2 Watching Brief on Geotechnical Trial Pits

Mechanical excavation undertaken by the geotechnical contractor across Parcel 11 was carried out using a 360° mechanical excavator equipped with a 2m wide ditching bucket. The trial pits were excavated under direct archaeological supervision to the depth of the natural subsoil. A record was made of the location, layout, depth and stratigraphy of each trial pit.

4.3 Building Recording

Three buildings likely to be affected by the construction of the motorway were to be recorded.

A cartographic study of Knockmilly Quarry and site of building (Site 19) was undertaken along with a photographic record and an evaluation trench on the site of the building. The results are detailed within the description of Parcel 7. A cartographic study of (Site 51) Mollins Farm, site of buildings, was undertaken. No trace of the earlier structures was found at the site, now occupied by a late 19th century farmhouse. The details of the cartographic study and sites description are found in Appendix 4. A photographic record of (Site 60) Westfield standing buildings was undertaken. A description of the buildings is found in Appendix 4, the photographs can be found in the site archive.

5. RESULTS

As stated above the results of the buildings assessment are found in the description of Parcel 7 and in Appendix 4.

5.1 Phase 1 Trial Trench Evaluation

842 trenches were excavated during the evaluation in 38 parcels. Due to very different topography, ground conditions and use by different landowners some of the larger parcels are divided into fields. A full description of deposits is provided in Appendix 1. Summary descriptions of each parcel are provided below.

The location of the parcels is shown in Figure 1. The location of the trenches excavated within the parcels is shown in Figures 2-30. Larger scale (1:2000) plans showing furrow alignments and the location of all field drains broken and repaired can be found in the site archive. Figures 30-31 show plans of the archaeological features found in parcels 3 and 7.

Parcel 1

This, the most westerly parcel is located directly north of the A80 on fairly flat ground. Nine trenches were excavated in Parcel 1 comprising 700m linear (Figure 2).

The light brown clayey silt topsoil measured 0.2-0.3m and overlay a grey-brown clayey silt subsoil 0-0.1m in depth. This in turn overlay natural brown-grey silty clay across the parcel.

The remains of furrows were identified in all trenches. The furrows were 1.5-3m wide, up to 0.2m deep and approximately 5-7m apart. All furrows followed a northwest to southeast alignment. In Trench 446 specifically, furrow [028] was 1.56m wide and 0.1m deep, while furrow [031] was 2.4m wide and 0.12m deep. No archaeological finds were recovered. Ceramic field drains were also identified throughout the trenches, following the same alignment as the furrows and located at a depth of approximately 0.3m.

Parcel 2

The parcel is situated on gently sloping ground south of the M80 and is divided into two fields by a large hawthorn hedgerow. Four trenches were excavated in Parcel 2 comprising 165m linear (Figure 3).

Field 1 (Trenches 450-452)

The dark orange-brown clayey silt topsoil measured 0.30-0.40m deep and directly overlay natural orange-brown sands and gravels and mid grey-brown silty clays across the field. The remains of furrows were identified in all trenches. The furrows ranged from 1.50 to 3m in width and were approximately 7 to 10m apart. The furrows ran north-west to south-east and were aligned with the present field boundary. A number of the furrows were excavated and found to be up to 0.20m deep. No finds were recovered.

Field 2 (Trench 453)

In Trench 453 the mid orange-brown clayey silt topsoil measured 0.20-0.25m and lay directly over natural grey-brown silty clay.

The remains of furrows were identified within the trench. The furrows were of the same size and alignment as those in Field 1. Trench 453 contained a further linear feature. Ditch [59] was 1.30m wide and 0.20m deep and ran north-west to south-east on the same alignment as the furrows. No finds were recovered.

Parcel 3

Parcel 3 is located south of the A80 and is divided by the Arronhill Plantation into three fields (Figure 3). In addition to the excavations, an archaeological survey of this area was carried out to record the earthworks present in the form of a contour plan (see Hatherley 2007a). Thirty-seven trenches were excavated comprising 2000m linear.

Field 1 (Trenches 454-477)

Field 1 comprised the western portion of Parcel 3, bordered by the Arronhill Plantation to the east. The topsoil consisted of dark brown clayey silt 0.25-0.4m deep, overlying a natural subsoil of light orange clayey silt with light brown sandy silt lenses.

The remains of furrows were identified in all trenches. The furrows were 1.5-2m wide and up to 0.15m in depth. They were spaced approximately 7m apart and aligned north-northwest to south-southeast, in accordance with the present field boundary. One example, furrow [034] in Trench 473, was 1.5m in width and 0.18m in depth. Frequent rubble and ceramic field drains were also present, spaced approximately 5m apart. The majority were aligned with the furrows but some, e.g. those in Trenches 474 and 476, ran perpendicular to them.

Field 2 Arronhill Plantation

Field 2 consisted of the Arronhill Plantation, an area of beech woodland located over the brow of a hill between Fields 1 and 3. The plantation is contained within the bounds of an old field system that includes earthen banks and rig and furrow (Figure 30). The earthwork survey can be found in Appendix 5.1. Three slot trenches were excavated through separate linear field banks within the plantation as part of the Phase 1 trial trenching programme..

Slot 1: Excavated through a 3.5m wide earthen bank running northeast-southwest for approximately 500m, the section revealed a 0.15m deep topsoil of dark brown clayey silt overlying a 0.5m thick bank of up cast mottled orange-grey sandy clay, [035]. This in turn overlay a humic clayey silt, 0.35m deep, considered to be a buried old ground surface, [036]. Beneath this was natural dark grey- brown silty clay. No archaeological finds were recovered.

Slot 2: Located in the earthen bank aligned northwest- southeast and defining the northeastern boundary of the field system. The bank was 2.8m wide and consisted of dark brown clayey silt topsoil, 0.1m deep, overlying the main bank deposit [115] of light grey brown silty sand mixed with yellow-brown sandy clay natural subsoil (0.64m thick). On either side of the bank and running parallel to it were shallow ditches [38] and [116], 0.5m and 0.4m wide respectively and both 0.1m deep. They contained deposit [037], a dark brown humic silt which had an abrupt interface with [115]. No archaeological finds were recovered.

Slot 3: The final trench was located through a 1.2m wide bank running east- west. A layer of turf and humic material [033], 0.1m deep, overlay a 0.16m deep band of mid grey-brown silty sand [034]. This in turn overlay a mid yellow-brown silty sand [035] up to 0.5m deep.

Field 3 (Trenches 478-480, 482-484, 486-487, 490, 492-495).

Field 3 comprised the easternmost area of Parcel 3, bounded by the Arronhill plantation to the west and Parcel 5 to the east. In the southern half of the field the soil profile in Trenches 480, 490, 492-495 was composed of a topsoil of brown clayey silt 0.3-0.5m deep, over light brown sandy clay natural subsoil. To the north of Field 3 the existence of a peat basin became apparent as the soil profile changed. In trenches 478-479, 482-484, 486-487 the topsoil of midbrown clayey silt measured 0.2m and overlay a subsoil of light brown clayey silt 0.2m deep. Below this was a band of dark peat, rich in organics, up to 1.6m in depth. This overlay the natural light brown sandy clay. Ceramic field drains were prevalent throughout Field 3, consistent with the nature of the subsoil.

The parcel is situated on gently sloping ground to the south. It is bounded to the west by the M80 and by tree-lined field boundaries to the north, east and south. Seven trenches were excavated in Parcel 4 comprising 350m linear (Figure 4).

The mid brown-grey clayey silt topsoil measured 0.3-0.4m and directly overlay natural orange-brown and blue-grey silty clays across the field. The remains of furrows were identified in Trenches 496-498 and 500-502. The furrows ranged from 1.50 to 3m in width and were approximately 7 to 10m apart. The furrows ran north-east to south-west. A number of the furrows were excavated and found to be up to 0.10m deep. No finds were recovered.

Parcel 5

The parcel is situated on undulating ground sloping towards a deep peat basin in the centre of the parcel. A number of planned trenches were not excavated due to the wet, boggy ground of the peat basin. The parcel is divided by field boundaries into five fields and described by field number from SW to NE (Figure 5). Twenty-five trenches were excavated comprising 1550m linear.

Field 1 (Trenches 503-511)

Field 1 is situated on gently sloping ground from a private road at the south and west to a deep peat basin at the base of the slope to the north and east. A dark brown-grey clayey silt topsoil measured 0.30-0.40m and lay directly over a grey-brown silty clay in Trenches 503 and 504 on the upper slope. Below this point the slope of the hill becomes slightly steeper and the topsoil becomes more shallow and peaty. In Trenches 506-508, the topsoil lies directly on a band of peaty clay measuring 0.08-0.12m, which in turn overlies peat deposits between 0.60 and 0.70m. In Trenches 505, 509-511, the thin turf and topsoil measured 0.10m and lay directly over between 0.55 and 0.80m of peat. In the basal peat deposits there are frequent tree roots. One trench was not excavated due to the soft wet ground underfoot. No archaeological finds or features were recovered.

Field 2

The proposed thirteen trenches were not excavated due to the soft wet, boggy ground underfoot at the upper limits of the peat basin.

Field 3

The proposed seven trenches were not excavated due to the soft wet, boggy ground underfoot and open pools of water in the peat basin.

Field 4 (Trenches 534-536)

The trenches were situated in a south-east corner of the field on sloping ground towards a drainage ditch at the southern field boundary. The mid brown-grey clayey silt topsoil measured 0.20-0.35m and lay directly overlay natural orange-brown sands and gravels in Trenches 534 and 535. In Trench 536 the topsoil towards the southern edge of the trench overlay an orange-brown sandy silt hillwash deposit measuring 0.08-0.10m. This in turn overlay orange-brown sands and gravels. No archaeological finds or features were recovered.

Field 5 (Trenches 537-548)

The trenches were located on undulating ground with a very large depression in the north centre of the parcel. The dark brown-grey clayey silt topsoil measured 0.20-0.30m across the field, although the depth of the trenches became greater towards the northern end of the parcel. In a number of trenches along the northern boundary at the base of the slope the topsoil overlay an orange-brown sandy silt hillwash deposit measuring 0.10-0.20m. The

natural subsoil varies across the field between orange-brown sands and gravels and blue-grey silty clays. No archaeological finds or features were recovered.

Parcel 6

Twenty-six trenches were excavated comprising 1590m linear (Figure 6). The parcel is situated across a gently sloping hill slope sown with winter barley.

The grey-brown clayey silt topsoil measured a shallow 0.20-0.25m across the majority of the field. Towards the south-west corner and north-eastern margins of the field the trenches became much deeper.

At the southern edges of Trenches 642 and 643, in the SW corner, the topsoil overlay a browngrey silty clay subsoil which measured 0.20-0.25m. This overlay a dark grey-brown peaty clay 0.25-0.30m deep, which in turn lay over 0.15m of peat with frequent small tree roots in the basal layer. Towards the north-east margins, at the base of the slope, in Trenches 664, 665 and 666, the topsoil measured 0.25-0.35m and in Trench 666 overlay a orange-brown sandy silt measuring 0.20-0.25m. This appears to be a ground levelling deposit as a number of large drainage pipes were found 0.40m above the subsoil.

The natural subsoil varied between grey-brown sands and orange-brown silty clay with frequent fractured bedrock protruding in the shallower ground across the field.

The remains of furrows were identified in Trenches 644-655, 657-658 and 661-663. The furrows ranged from 1.50 to 5m in width and were approximately 7 to 10m apart. The furrows ran north to south. A number of the furrows were excavated and found to be up to 0.10m deep. 19th century pottery fragments were recovered from a number of the furrows.

Parcel 7

The parcel is found on undulating ground either side of the Garnkirk Burn and is divided into six fields. Sixty-six trenches were excavated comprising 4025m linear (Figure 7).

Field 1 (Trenches 667-671)

Trenches 667-669 were located within a narrow strip along the southern limit of a barley field, sloping gently to the east. Trenches 670-671 were sited in an area of rough pasture, sloping quite steeply to the southeast towards the Garnkirk Burn. The topsoil consisted of a light grey-brown clayey silt, 0.2-0.25m deep, over a subsoil of light orange-brown silty clay subsoil. This in turn overlay natural orange-brown sandy clay. No features of archaeological significance were recorded in any trenches. Ceramic field drains were noted, generally running on a north-west, south-east alignment.

Field 2 (Trenches 491, 672-690)

Field 2 comprised grass pasture sloping from the north-east corner of the field down towards the burn. A mid brown sandy silt topsoil approximately 0.2m deep overlay a light brown sandy silt subsoil up to 0.2m in depth. Beneath this was natural subsoil consisting of yellow-brown mixed sands and gravels.

Trenches 675, 681, 683, 684 and 687 contained the remains of furrows all approximately 3m wide. Trench 683 contained five furrows, 2.5-3m wide and oriented north-south. A number of furrows were excavated and found to be up to 0.15m deep.

Trench 679 contained a burnt feature [119] of which a length of 5m was exposed within the trench, but which extended further. Sub-round and irregular in plan, [119] was 0.2m deep and composed of a red burnt sandy clay with occasional burnt small angular stones. Modern

pottery and glass was found within [119], suggesting the feature to be evidence of a relatively modern, discrete burning event.

Trench 491- 'Knockmillie' (Figures 7 and 31)

Background

As part of the Phase 1 archaeological evaluation of Site 19, Trench 491 was located at NS 6774 7077: a site identified as 'Knockmilly.' The area lies on the south side of a hedge-lined trackway, just east of Garnkirk Burn. A level piece of ground with low, turf-clad banks (Width 0.4m; Height 0.3m) stands adjacent to an overgrown rock-cut quarry currently used for dumping agricultural materials. The banks may be identified as the remains of a structure. The 1858 first edition of the Ordnance Survey shows a large rectangular building in the vicinity, oriented east-west with an adjoining enclosure on its south side. Ordnance Survey maps from 1895 to 1938 show a similar structure but the enclosure is not documented. By 1958, a structure is no longer recorded at this location. The excavated trench was 22m linear and positioned to the east of the low banks, aligned east to west.

Results

A topsoil of mid brown sandy silt, 0.2-0.3m deep, was removed, revealing remnants of the foundations and floor make-up of a structure. From the eastern edge of the trench, wall foundation [121] extended 6m to the west. Measuring 1m wide and 0.4m deep, it was composed of moderately sorted, large sandstones in a silty clay deposit. From the western terminus of [121], foundation [123] ran perpendicular to it under the northern baulk, forming a corner. Smaller in its dimensions, measuring 0.48m wide and 0.12m in depth, [123] may have supported a lesser wall. At the western end of Trench 491 further foundations were identified. Foundation wall [131] was 0.7m wide and 0.38m deep and ran west to east from under the baulk, exposed to a length of 6m before terminating. 2-3 courses of wall survive, composed of sandstone 0.3m x0.3m x0.2m. Modern pottery and glass was recovered from wall matrix [130]. Wall [132] runs north-south from foundation wall [131]. Only a single course of sandstone remains; possibly faced on the east side. The stones appeared to be without bonding material or a foundation cut, sitting on natural. North of foundation [131], a 0.09m deep spread of silty clay with abundant charcoal was noted [127]. It extended for 11m and partially overlay [126] to the east and [128] to the south. [126] was a spread of compacted sandstone and charcoal (0.14m in depth) with occasional modern pottery inclusions. [128] was a layer of hard, compacted stone and mortar of which 0.75m x1.3m was exposed. [126] and [128] may represent floor make-up or levelling, while [127] is possibly a dumped deposit. Beneath these deposits was a natural subsoil consisting of orange-brown silty clay with frequent stony inclusions.

Discussion

The evaluation trench showed the disturbed remains of foundations which are likely to be associated with the structure at the site of 'Knockmilly.' Inside a possible northern outer wall, areas interpreted as floor and floor make up were noted, with charcoal rich deposits above these possibly relating to destruction of the building. The Ordnance Survey evidence shows the building reaching the end of its life in the period 1938- 1958. The artefacts recovered from the site date to the 19th/20th Century (see Appendix 2); correlating with the lifespan of 'Knockmilly' as derived from the OS map evidence.

Documentary Sources

Maps (National Library of Scotland)

1858 Ordnance Survey 1:2500 scale Lanarkshire II.10

1895 Ordnance Survey 1:2500 scale Airdrie Sheet 31

1925 Ordnance Survey 1:2500 scale Glasgow Sheet 72

1938 Ordnance Survey 1:2500 scale NS6770

1958 Ordnance Survey 1:2500 scale NS6770

Field 3 (Trenches 691-695)

Field 3 comprised a field of pasture sloping quite steeply from the southeast corner west and northwestwards towards the burn, bordered by a track to the south. The topsoil consisted of grey-brown silty clay, 0.2-0.4m deep, overlying a subsoil of dark brown silty clay with occasional small stony inclusions, 0.1-0.4m deep. Beneath this was a natural subsoil of orange brown clay with lenses of white-grey clay. The trenches contained a combination of ceramic and rubble field drains. No features of archaeological significance were recorded in any trenches.

Field 4 (*Trenches 696-712*)

Field 4 was grass pasture, sloping from the southeast corner northwest towards the burn. The topsoil consisted of a grey-brown silty clay, 0.2-0.3m deep, overlying a subsoil of dark brown silty clay, 0.1-0.15m deep. This in turn overlay a natural subsoil of orange-brown clay.

The remains of furrows were identified in Trenches 701, 704 and 712, all aligned northwest to southeast, following the natural slope of the land. They were 1.6-2.5m in width and up to 0.25m in depth. Ceramic and rubble field drains were noted in all trenches. No features of archaeological significance were recorded in any trenches.

Field 5 (Trenches 488-489, 713-728)

Field 5 was northeast of Field 4, separated from it by a boundary fence. The land consisted of pasture sloping downwards to the burn. The soil profile in the southern part of the field, encompassing Trenches 713-725, was a dark brown sandy silt topsoil, 0.2-0.3m deep, overlying a light brown sandy silt subsoil, 0.05-0.15m deep. Beneath this was an orange-grey silty clay natural with frequent sandstone inclusions. Trenches 488-489 and 726-728 revealed an area of peat deposition. Here, a topsoil of dark brown clayey silt approximately 0.25m deep overlay a subsoil of light brown clayey loam 0.3m deep. Beneath this was a band of light grey clay 0.2m deep overlying peat deposits up to 0.4m deep. This in turn overlay natural orange-grey silty clays.

Trenches 715 and 718-725 contained the remains of furrows. All lay on an alignment of NNW-SSE, running parallel with the field boundaries. The furrows were up to 3m wide and spaced approximately 5m apart. A number of the furrows were excavated and found to be up to 0.15m deep. No features of archaeological significance were recorded in any trenches. Ceramic field drains were noted in all trenches spaced as little as 5m apart.

Field 6 (Trench 729)

Field 6 was located in the north-eastern corner of Parcel 7 and comprises an area of deciduous plantation. By necessity, Trench 729 was positioned along a fire-break. A dark grey-brown silty clay topsoil measured 0.25m and overlay a light yellow-brown silty clay subsoil 0.4m deep. Beneath this was natural subsoil of light brown clay. No features of archaeological significance were recorded. A number of ceramic field drains were identified running northwest southeast.

Parcel 8

The parcel is found on steep north and south facing slopes either side of the Bothlin Burn and is divided by the watercourse into two fields. Forty-one trenches were excavated comprising 2400m linear (Figure 8).

Field 1 (Trenches 367-374)

Field 1 is situated on steep sloping ground from the north towards the burn at south. The ground is fairly flat above the watercourse. The dark orange-brown sandy silt topsoil measured 0.20-0.35m across the field and lay directly over a light orange-brown sandy silt subsoil measuring 0.10-0.25m. This in turn overlay natural orange-brown silty clay. No archaeological features or finds were recovered.

Field 2 (Trenches 375-407; 512)

Field 2 is situated on steep sloping ground from south towards fairly flat ground directly above the burn at the north. The north-western part of the field had been recently ploughed.

The dark brown-grey sandy silt topsoil measured 0.20-0.25m and lay directly over natural grey-brown sandy clay across the majority of the field. Towards the northern margins, and the burn at the base of the slope, the topsoil overlay a light orange-brown sandy silt hillwash deposit. This measured 0.20-0.30m and overlay natural blue-grey silty clay.

The remains of furrows were identified in Trenches 375-394 and 397-407. The furrows ranged from 3 to 5m in width and were approximately 7 to 10m apart. The furrows ran north-east to south-west along the contours of the hill slope. A number of the furrows were excavated and found to be up to 0.15m deep.

Parcel 9

Seventy-one trenches were excavated comprising 3450m linear (Figure 9). The parcel is found on steep north and south facing slopes either side of the Bothlin Burn and is divided into four fields.

Field 1 (Trenches 296-306)

Field 1 is situated on steep sloping ground from north towards the burn at the south. The grey-brown clayey silt topsoil measured 0.35-0.40m across the field and lay directly over natural blue-grey silty clay in the majority of the trenches.

At the base of the slope a large rectangular area approximately 50m by 30m was fenced off with iron railings [2126]. Within this area one trench was excavated, Trench 301. Here the topsoil lay directly above 11 linear and curvilinear red brick walls [2115-2125]. Of varying length, the remains of the walls vary between one and three brick high and one and two brick width. The bricks are bonded with cement and represent the beds of a former garden. A tarmac road surface was also identified running in an east-west direction from the garden to an iron gate, in Trenches 300 and 301. These features possibly relate to the remains of the Stonyetts Institution, the main buildings of which would have been on the opposite bank of the burn.

Field 2 (Trenches 307-339)

Field 2 is situated on steep sloping ground north of the burn. The dark orange-brown sandy silt topsoil measured 0.20-0.35m across the field. On the upper slopes, the topsoil lay directly over a light orange-brown sandy silt subsoil measuring 0.10-0.25m. This overlay natural orange-brown and blue-grey sandy clays with bedrock protruding on the shallower ground. In Trenches 307-308; 316-319; 327; 331-339 the subsoil overlay 0.20-0.50m of peat becoming slightly deeper the further down the slope to the south. The basal layers of peat contained frequent wood fragments and tree roots. The peat overlay natural blue-grey gravely clays. No archaeological features or finds were recovered.

Field 3 (Trenches 340-348)

Field 3 is situated on steep sloping ground from the south towards the burn at the north. The ground is fairly flat directly above the watercourse. The field is sown with barley. The dark

brown-grey sandy silt topsoil measured 0.20-0.25m and lay directly over natural grey-brown sandy clay in all the trenches.

The remains of furrows were identified in Trenches 340-343 and 345-346. The furrows ranged from 1.10 to 3m in width and were between 7 and 10m apart. The furrows ran north-west to south-east and were aligned with the present field boundary. A number of the furrows were excavated and found to be up to 0.08m deep.

Field 4 (Trenches 349-360)

Field 4 is situated on steep sloping ground from the road at the northern margin to the burn at the south. The ground is fairly flat above the watercourse and at the access point at the gate. The dark orange-brown sandy silt topsoil measured 0.20-0.35m across the field and lay directly over a light orange-brown sandy silt subsoil measuring 0.10-0.25m. This in turn overlay natural subsoil varying between orange-brown and blue-grey sandy and silty clays. No archaeological features or finds were recovered.

Parcel 10

The parcel is found on low-lying ground either side of a farm track and is divided by a field boundary fence into two fields (Figures 10-11). Due to the depth of the peat deposits in the boggy area to the north east of the dirt track road a number of trenches in Parcel 10 were not excavated. Sixty-three trenches and two test pits were excavated comprising 3220m linear.

Field 1 (Trenches 268, 271, 274-283 & 285-293)

Field 1 is located on a low-lying area of land in the western part of the parcel. The field is bounded to the north by a wire boundary fence and to the south by black iron railings of the former Stoneyetts Hospital. To the south of the farm track the ground slopes fairly steeply to the southern boundary, while the area to the north of the farm track extending to the eastern boundary is flat and boggy rising to a rocky outcrop in the south west margins.

North of the farm track the topsoil consists of a mid grey-brown clayey silt with an average depth of 0.20m. Directly north of track the topsoil overlies a light yellow-brown silty clay subsoil 0.15m deep, which in turn lies over the natural mid brown-grey silty clay. Further to the north and east the topsoil lay directly over peat deposits 0.35m to over 1.20m deep. On the higher ground towards the northwestern margins of the field, at the break of the steep south facing slope, the topsoil lay over a subsoil up to 0.45m deep.

South of the farm track the topsoil was a mid grey-brown clayey silt with an average depth of 0.20m. In the majority of the trenches the topsoil lay over a light yellow-brown silty clay subsoil 0.10-0.15m deep, beneath which lay the natural subsoil of mid brown-grey silty clay. In the northeast end of Trench 289 a peat deposit lay between the subsoil and natural subsoil and averaged 0.32min depth. No archaeological finds or features were recovered.

Field 2 (Trenches 186-223, 225-227, 236 & Test Pits 233 & 244)

Field 2 is located in the eastern part of Parcel 10. The ground to the north of the dirt track road is fairly flat, boggy pasture with no physical boundary demarcating the limits of the parcel. To the east the limits of the parcel are marked with a boundary fence of wire and hedgerow with two access points. The southern boundary of the parcel has no physical marker separating the parcel from the rest of the field in which it sits. The ground south of the dirt track road rises steeply to the south and is one large area of pasture.

South of the farm track the topsoil was a mid grey-brown sandy silt 0.20-0.30m deep. This overlay a grey-brown silty clay subsoil 0.10-0.15m deep, beneath which lay the natural subsoil of grey-brown clay. Toward the south-western end of the field the mid grey-brown

clayey silt topsoil measured 0.15-0.20m and overlay a mixed grey-yellow-brown silty clay subsoil being 0.10-0.15m deep. Beneath the subsoil dark grey-brown peat deposits measured 0.20-0.60m. It appears that the peat deposits start to accumulate as the ground levels out just south of the farm track and continue to get deeper north of the track.

The flat ground north of the farm track was extensively covered in reeds and rushes. Trench 236 was excavated in the northwest area of the parcel in one of the few areas where reed coverage was not present. Here a mid grey brown clayey silt topsoil measured 0.20-0.30m and overlay a mid yellow-brown silty clay subsoil 0.15-0.20m deep. On the flatter boggier ground to the south and east two test pits were excavated. The turf and topsoil were removed and revealed peat deposits over 1.50m deep. On the basis of the results from Trench 236 and Test Pits 233 and 244 no further trenching was carried out in the area north of the farm track. No archaeological finds or features were recovered.

Parcel 11

This, the largest of the parcels varied greatly in topography and ground conditions from north to south and from east to west. The parcel is divided into 14 fields (Figures 12-14). One hundred and ninety-one trenches were excavated comprising 14 400m linear.

The parcel was crossed by a high pressure gas pipeline, which is to be diverted in advance of the construction works. A watching brief was carried out separately on the pipeline diversion under a separate contract.

Field 1 (Trenches 1-5)

This, the most northerly part of the parcel is bounded to the north and west by the Luggie Water, to the east by a drainage ditch and to the south by an old quarry or rocky outcrop. Trench 5 was shortened to avoid the overhead lines running NW-SE across the field.

The dark grey-brown sandy silt topsoil measured 0.20-0.35m across the field and overlay a light grey-brown sandy silt subsoil measuring 0.15-0.20m. This, in turn, overlay natural subsoil of blue-grey silty clay. No archaeological finds or features were recovered.

Field 2 (Trenches 6-40 and 228-230)

This field is bounded to the north by overhead lines, to the west by a hawthorn hedgerow, to the east by a fence before meeting the Luggie Water, and to the south by a drainage ditch. The ground is fairly flat, rising slightly to the south.

The dark grey-brown clayey silt topsoil measured 0.25-0.35m across the field and overlay an orange-brown sandy silt subsoil measuring 0.15-0.25m in the majority of the trenches. Towards the north-western margins the trenches became much deeper. In Trenches 7-12 and 14-15, roughly along the same line as the raised mire to the west, the topsoil overlay a peat deposit between 0.20 and 0.40m in depth. The basal deposits of peat contained frequent wood fragments and tree roots. In Trench 37, located along the drainage ditch at the southern boundary, the topsoil overlay a peat deposit of up to 0.75m deep. The natural subsoil varied between orange-brown silty and blue-grey silty clays.

The remains of furrows were identified in Trenches 6, 13, 16, 23-24, 28 and 38-40. The furrows ranged in size from 1.70-5m and were between 5 and 10m apart. The furrows ran north-east to south-west along the contours of the hill slope. A number of the furrows were excavated in Trenches 13, 16 and 23 and found to be up to 0.20m deep.

Trench 31 contained a shallow pit [102] 0.32m deep. This was filled with a white-grey ashy silt [103] above a red-brown silty clay [105]. The deposits and surrounding ground appeared to have been heat affected. No finds were recovered.

Field 3 (Trenches 41-45)

Field 3 is situated on undulating ground in a narrow strip between the gas pipeline and a hawthorn hedge field boundary. From the southern hedgerow the ground slopes steeply down to the south-east and rises sharply to a flat plateau before falling steeply again to the north where it flattens out towards the river. There are a number of small oval and rounded mounds in the centre of the field.

The light brown-grey clayey silt topsoil measured 0.25-0.30m and overlay an orange-brown sandy silt natural subsoil across the field. Towards the western margins the trenches become slightly deeper and in Trench 42, at the base of a small mound, the topsoil overlies a peat deposit of 0.35m. The natural subsoil varies across the field between bands of orange brown sands and gravels and light blue-grey silty clays.

Trench 41 contained the rounded terminal of a linear gully [040]. It had a width 0.40m and reached a shallow depth of 0.04m. No archaeological finds were recovered.

Field 4 (Trenches 46-58)

Sloping from south to north, Field 4 was bounded by water services to the north and a drainage ditch to the south, with fenced boundaries to the east and west. Topsoil consisted of dark brown silty sand, 0.2-0.3m deep. This overlay natural yellow brown sandy clay subsoil with frequent degraded stone.

Trenches 51-55, 57-58 and 234 contained the remains of furrows. All were aligned northwest, southeast following the western field boundary. The furrows were 1.4-1.65m wide and spaced 5-7m apart. Upon excavation, a number were found to be 0.05-0.1m in depth. Ceramic field drains were identified in all trenches located at depths of between 0.35 and 0.45m. No features of archaeological significance were recorded.

Field 5 (Trenches 59-62 & 73-77)

This, the most southeasterly part of the parcel is bounded by a road to the south and east, and hedgerow field boundaries to the west and north. The ground undulates greatly, sloping fairly steeply from the SW and W corners to the NE corner. The gas pipeline runs across the parcel in a SE-NW direction.

The mid orange-brown sandy silt topsoil measured 0.30-0.40m and overlay a natural of yellow-brown silty clay in the majority of the trenches. Towards the base of the slope in the northeast corner of the field the trenches are much deeper. Here the topsoil overlay a light orange-brown sandy silt hillwash deposit between 0.25-0.30m. No archaeological finds or features were recovered.

Field 6 (Trenches 64-72)

Field 6 was made up of rough grazing ground with frequent tufted rushes. A dark brown clayey silt topsoil, 0.2-0.38m deep, directly overlay a natural subsoil of light brown sandy clay.

The remains of furrows were identified in Trenches 65-69 and 71. They ranged from 1.2- 2m in width and 0.04- 0.11m in depth. Frequent field drains were noted, generally 5m apart, reflective of the poorly draining soils as also implied by the tufted rushes.

Field 7 (Trenches 78-94)

Situated towards the north-eastern part of the parcel the ground in this field undulates greatly, though generally slopes down to the Luggie Water at the northern boundary. There are two small rounded mounds along the south-west and western margins of the field.

The mid grey-brown sandy silt topsoil measured 0.20-0.40m across the field. On the higher ground towards the southern margins of the field the topsoil lay directly over the natural subsoil of orange-brown silty clay. From the centre of the field to the northern margins the topsoil overlay a subsoil or hillwash deposit of orange-brown sandy silt 0.10-0.45m deep. In some trenches, the upper 0.20m of this subsoil appears to have been ploughed. In Trenches 82, 86, 88 and 89, the topsoil overlay 0.20m of light blue-grey clayey silt, interpreted as a waterlogged deposit, beneath which lay peat deposits between 0.20 and 0.30m. Within the basal peat deposits there are frequent wood fragments and tree roots. The absence of peat in the intervening trenches suggests that the peat has accumulated in hollows at the base of small mounds or hillocks.

A few remaining posts can be seen either side of the farm track alignment extending from the farmhouse along the eastern field boundary and turning westwards along the riverside. Between the posts, at the north-eastern end of Trench 88, an old farm track was found below the surface. The track was made up of stone fragments, broken brick, wood and on either side a dump of 19-20th century domestic refuse.

Trench 94 contained a single small sub-rounded posthole [042] 0.20cm deep. This was filled with a dark orange-brown sandy silt [41], which contained occasional flecks of charcoal. The posthole is on the same alignment as the posts that line the old farm track.

Field 8 (Trenches 95-107)

The north side of the field is fairly dry and level with the Luggie Water forming the northern boundary. From here the ground rises slightly to the south, before sloping down again to the drainage ditch along the eastern boundary. Trench 105 and 107 were moved 5m to the south to ensure that they were 5m from the drainage ditch. Trench 96 was moved 4m to the west to ensure it was 5m from the drainage ditch.

The mid brown-grey sandy silt topsoil measured 0.15-0.30m and lay over a light grey-brown clayey silt subsoil 0.10-0.25m, which in turn overlay natural orange brown silty clay across the majority of the field. The trenches become deeper towards the south-eastern and north-eastern corners of the field. Towards the southern edge of Trench 99, the subsoil overlay a light brown-grey clayey silt, which in turn overlay a clayey peat deposit of up to 0.30m. The trenches in the north-east corner, towards the river, all have a greater depth of subsoil overlying a natural subsoil of yellow-brown sand.

Field 9 (Trenches 108-112 and Hand-Excavated Trenches A & B)

The southern part of the field is level from the eastern field boundary. From here the ground falls away, sloping down to a drainage ditch along its western boundary. Trench 108 is located in the north-western corner of the field, bounded by the Luggie Water to the north and the drainage ditch to the west. The Scheduled Ancient Monument of Mollins Roman Fort lies along the north-eastern margin of the field. Within the scheduled area, two trenches comprising 12m linear were excavated by hand.

Trenches 108-112

The mid orange-brown clayey silt topsoil measured 0.25-0.30m and overlay a brown-grey clayey silt subsoil. This ranged in depth between 0.10m in the higher south-eastern part of

the field to 0.30-0.40m in lower parts of the field towards the drainage ditch and the Luggie Water. This in turn overlay the natural subsoil, which varied between orange brown sands and gravels on the higher ground to dark blue-grey clay on the lower ground next to the river. No archaeological finds and features were recovered.

Hand dug Trench A

Situated adjacent to the drainage ditch along the western boundary the trench measured 6m by 2m and was excavated to natural subsoil at a depth of 0.90m. The mid grey-brown clayey silt topsoil [49] measured 0.40m deep and overlay an orange-brown clayey silt subsoil [48] 0.20 deep. This in turn overlay a light brown-grey silty clay [46] 0.20m deep, found to be a leached waterlogged deposit. The waterlogged horizon overlay a dark grey-brown peaty clay 0.10m deep, which lay over the natural grey-blue silty clay subsoil. Within the peaty clay, the fragments of a decayed rotary quernstone [45] were recovered.

Hand dug Trench B

Situated in the north-western margins of the scheduled area next to the Luggie Water, the trench measured 6m by 2m and was excavated to natural subsoil at a depth of 0.65m. The dark grey brown clayey silt topsoil measured 0.30m and overlay an orange-brown clayey silt subsoil 0.35m deep. This in turn overlay a natural subsoil of orange and grey clays. No archaeological finds or features were recovered.

Field 10 (Trenches 113-122)

Field 10 is located north of the Luggie Water and forms the most north-easterly part of the parcel. It is situated on fairly flat, gently sloping ground from a road in the NE corner to the river, which runs east to west and forms the southern field boundary.

The dark grey-brown sandy silt topsoil measured 0.30-0.35m and overlay a mottled browngrey silty clay subsoil 0.15-0.30m deep. This in turn overlay a natural subsoil of orange-brown sands and gravels and blue-grey clays across the majority of the field. Towards the southern margins, and the river, the subsoil was much deeper measuring 0.30-0.40m and overlay a dark grey-brown clayey peat deposit between 0.10 and 0.15m deep.

Trench 114 contained a shallow sub-rounded pit [044] 0.16m deep. This was filled with redorange silty sand [43] and appeared to be heat affected.

Field 11 (Trenches 123-148)

Field 11 is situated across a very steep hill slope. From a flat plateau in the centre of the field the ground slopes steeply to drainage ditches, which form the northern and southern boundaries. Hawthorn hedgerows form the eastern and western boundaries. Over the northern drainage ditch is a large area of raised mire. The ground along this northern edge is very flat.

On the flatter higher ground in the centre of the field the dark grey-brown clayey silt topsoil measured 0.20-0.25m and lay directly over natural orange-brown and blue-grey clay. On the hill slope to the north and south the topsoil measured 0.25-0.40m and overlay a mid orange-brown clayey silt subsoil, which in turn overlay the natural clay subsoil. At the base of the slope along the northern boundary, in Trenches 123 and 126, the topsoil measured 0.40-0.50m and lay directly over peat deposits up to 0.70m deep. The basal layers of the peat contained frequent wood fragments and large tree roots. The peat lay directly over a natural subsoil of grey-blue clay. At the drainage ditch along the southern boundary in Trench 148 the topsoil measured 0.40-0.45m and lay over a light orange-brown clayey silt subsoil up to 0.50m deep.

This in turn overlay a clayey peat deposit up to 0.35m deep. No archaeological finds or features were recovered.

Field 12 (Trenches 149-162)

Field 12 is situated on fairly steep sloping ground from the road at the southern boundary to the drainage ditch at the base of slope, which forms the northern boundary. Generally the ground is fairly flat, if somewhat bumpy underfoot.

Across the field, the mid grey brown sandy silt topsoil measured 0.25-0.30m and lay over a light yellow-brown sandy silt subsoil 0.15-0.20m deep. This in turn lay directly over natural light yellow-grey clay subsoil.

Ceramic and rubble field drains ran north-west to south-east across the field. A number of the rubble drains were excavated and found to be up to 0.35m deep.

Trench 154 contained an oval pit [85] 0.11m in depth. This was filled with a dark grey-black silt with red-brown silty clay patches [84] which contained occasional flecks and lumps of charcoal. The underlying subsoil [83] showed signs of being heat affected. The amount of charcoal present and the patches of burnt clay suggest that the shallow pit may be the base of a kiln or fire pit. No archaeological finds were recovered from the pit.

Field 13 (Trenches 163-175)

Field 13 was situated on a gentle north facing slope characterised by short gasses and tufted rushes. Overhead lines ran northwest to southeast across the field. The topsoil measured 0.20-0.30m and consisted of a mid orange-brown clayey silt. This lay directly over natural light grey-brown silty clay subsoil.

Trenches 163 and 165-175 contained the remains of furrows aligned NNW-SSE corresponding with the field boundaries. The furrows were 0.9-1.3m wide and 5-8m apart. A number were excavated and found to be up to 0.15m deep. A combination of rubble and ceramic field drains were identified, on the same alignment. No archaeological finds were recovered.

Field 14 (Trenches 176-185)

Field 14 was located in the south-west corner of Parcel 11. Ground conditions were very wet and waterlogged, the land used for rough grazing. A dark brown-grey silty clay topsoil, 0.1-0.2m deep, overlay a mid brown-grey silty clay subsoil, 0.06-0.18m deep. Beneath this the natural subsoil consisted of mottled yellow-brown silty clay with occasional small subangular stone inclusions. Trenches 176-181 contained the remains of two furrow systems. One system of furrows ran NW-SE were 1.3-1.8m wide and approximately 6m apart. These were found to be up to 0.12m deep and were truncated by narrower furrows following a NNW-SSE alignment. The more recent system of furrows were up to 1m wide and spaced approximately 8m apart. Upon excavation, a number were found to be 0.07-0.12m in depth. No archaeological finds were recovered.

Parcel 12 (*Trenches 424, 429; Test Pits 425-428, 430, 433, 437, 439-440*)

A gas pipeline bisects parcel 12, with the land on its eastern side used for rough grazing. To the west the area is wooded with abundant reeds. Two trenches and nine test pits were dug, a total of 170m linear.

Trenches 424, 429 and Test Pits 425-428 comprised a dark brown clayey silt topsoil 0.2m deep overlying made ground up to 1.5m deep. The made ground consisted of an upper layer of mixed gravels 0.5m deep and a lower layer of grey silty clays with frequent small stones and modern debris including brick and pottery fragments. Beneath this was the natural mottled

yellow clay subsoil. Test Pits 430, 433, 437 and 439-440 revealed a dark brown clayey silt topsoil 0.2m deep overlying made ground less than 1.6m deep. This comprised grey and brown silty clays with frequent small stones and rubble, as well as modern detritus including white ceramic fragments. No archaeological features or finds were recovered.

Parcel 13 (*Trenches* 235, 237-252, 262, 265-266; *Test Pits* 253-261, 842)

The parcel encompasses a level tract of uncultivated land, between the A80 to the west and the M73 to the east. The southern boundary of the parcel follows the line of fenced field boundaries. In the southern margins of the parcel a drainage ditch is found running from east to west. This represents the limit of excavation, as ground south of the drainage ditch is very boggy and access is limited. A thick scrub woodland is found in the north-east margins of the parcel and the ground is quite soft in and boggy in areas. An old tree-lined farm track runs through the centre of parcel from the east to the access gate along the western boundary (Figure 16). Nineteen trenches and 12 test pits were excavated in Parcel 13 comprising 933m linear.

In the south-eastern margins of the parcel, the topsoil measured 0.20-0.40m and consisted of a dark grey-brown clayey silt, with the deeper topsoil depths reached along the eastern boundary. In the majority of the trenches the topsoil overlay a mid grey-brown clayey silt subsoil 0.20-0.40m deep, which in turn overlay a natural subsoil of yellow-grey clay. The remains of furrows were identified in Trenches 249-250 & 266. The furrows were aligned north-west to south-east, ranged from 1.10 to 2m in width and were 5m apart.

Towards the south-western margins of the parcel, the mid grey-brown clayey silt topsoil measured 0.20-0.30m and lay directly over a natural light brown grey clay subsoil. Further west and stretching in a wide band alongside the A80 to the northern margins of the parcel the topsoil lay directly over made ground between 0.40-1m deep. In the majority of the testpits the made ground consists of a dark yellow-brown silty clay containing frequent modern detritus, including brick, fencing and pottery overlying a dark blue-grey clay with occasional modern detritus including broken ceramic field drain fragments. No archaeological features or finds were recovered from these parts of the parcel.

Parcel 14

The parcel is situated on undulating ground directly east of the M73 and is divided into three fields. Sixty trenches were excavated in total comprising 5995m linear (Figures 17-18).

Field 1 (Trenches 566-581)

This, the most northerly field is situated on a gentle hill slope down to the A90 at the northern boundary of the parcel. It is bounded to the west by the M73, to the east by a line of woodland and to the south by a hedgerow field boundary.

From the brow of the hill, roughly in the centre of the field, the ground slopes steeply to the north and flattens out to the south. The trenches on the higher, flatter ground are very shallow. The topsoil across this part of the field consisted a dark brown-grey clayey silt between 0.20 and 0.25m deep. This lay directly over a natural subsoil of orange-brown and blue-grey silty clays. On the sloping ground to the north the topsoil measured 0.25-0.30m and overlay a mid orange-brown clayey silt subsoil 0.20-0.30m deep. The subsoil or hillwash deposit became deeper as the slope became steeper, and reached a depth of 0.35m at the base of the hill.

The remains of furrows were identified in Trenches 566, 567, 569, 572, 574, and 576-578. The furrows ranged in size from 3-5m and were between 7 and 10m apart. The furrows ran northwest to south-east and were aligned with the present eastern field boundary.

Field 2 (Trenches 582-596)

The middle field is generally fairly flat, sloping slightly to the south. It is bounded to the north and south by hawthorn hedgerows, to the east by a line of woodland and to the west by the M73.

Across the field, the light brown-grey clayey silt topsoil measured 0.20-0.30m and lay directly over a natural subsoil of orange-brown and blue-grey silty clays with frequent stone fragments.

The remains of furrows were identified in Trenches 585, 589, 594 and 596. The furrows ranged in size from 3-7m and were between 7 and 10m apart. The furrows ran north-west to southeast and were aligned with the present eastern field boundary. A number of the furrows were excavated and were found to be up to 0.10m deep.

Field 3 (Trenches 597-626)

This, the most southerly field in the parcel, is situated on a fairly flat ground, sloping quite steeply at the southern margins. The field is bounded to the north, east and south by hawthorn hedgerows and to the west by the M73. A large area of woodland is found in the south-west corner of the field.

On the higher ground to the north of the field, the mid brown-grey clayey silt topsoil measured 0.20-0.25m and lay directly over orange brown sandy clay with occasional decayed stone and sandstone outcrops in places. Towards the south-eastern corner and along the southern boundary in trenches 601, 603-613 the topsoil lay directly over dark grey-brown peat up to 0.70m deep. There were frequent wood fragments and tree roots in the basal deposits of the peat. The peat overlay a natural subsoil of dark blue-grey silty clay.

The remains of furrows were found in Trenches 602-603 and 611-626. The furrows ranged in size from 3-5m and were between 7 and 10m apart. The furrows ran north-west to south-east and were aligned with the present field boundary.

Trench 622 contained a shallow sub-oval pit [2132] 0.08m deep. This was filled with a dark red-brown sandy silt [2133], which contained occasional flecks and lumps of charcoal. No archaeological finds were recovered.

Parcel 15

Parcel 15 is situated at the base of a steep north-facing slope and is bounded on north, east and west sides by motorway. A drainage ditch runs along the north-western boundary of the parcel. The high-pressure gas pipeline divides the parcel into two fields (Figure 18). Fifteen trenches were excavated comprising 835m linear.

Under a separate contract a watching brief was carried out on the diversion of the gas pipeline.

Field 1 (Trenches 549-562)

The southern boundary of the parcel is situated along fairly flat ground at the break of a steep north-facing slope breaks. From here the ground flattens and is very wet and boggy in places, with occasional open pools of water having formed in old track marks.

In Trenches 560, 561 and 562 along the break of slope, the dark grey-brown clayey silt topsoil measured 0.30m, and lay over mid brown-grey clayey silt 0.20m deep. Below this an orange-grey silty clay, hillwash deposit measured 0.30-0.35m deep. This in turn overlay peat

deposits between 0.30 and 0.80m, and a band of dark brown grey clayey peat above the natural dark blue-grey silty clay subsoil. In the trenches on the flatter ground below, the dark black-brown clayey silt topsoil measured 0.20-0.25m and lay directly over peat deposits between 0.20 and 1m deep. The peat overlay and filled in depressions in the natural blue grey clay subsoil beneath.

The only area within this part of the parcel where peat has not accumulated is in the southeast margins. In this area (Trench 549), the topsoil measured 0.25-0.30m and lay directly over a natural subsoil of orange grey silty clay. The evidence from Trenches 560, 561 & 562 suggests that the peat developed in a large hollow at the base of the slope and provided a flat surface upon which material washing down the hill collected on the surface of the bog. No archaeological finds or features were recovered within the field.

Field 2 (Trench 565)

Due to the presence of the gas pipeline and other services two proposed trenches were not excavated. In Trench 565 the dark black-brown clayey silt topsoil measured 0.20-0.25m and lay directly over peat deposits between 0.20 and 1m deep. The peat overlay a natural subsoil of blue grey clay. No archaeological finds or features were recovered within the field.

Parcel 16

Parcel 16 is located on a flat landscaped verge bounded on all sides by motorway or slip road. South of the parcel boundary in the higher ground of the verge is an area of woodland. The trees and shrubs are very overgrown and encroach on the area of the parcel. Two trenches and two test pits were excavated comprising 70m linear (Figure 19).

Across the parcel the topsoil comprised a dark black-brown silty clay with frequent modern detritus and measured between 0.20-0.25m deep. In Trench 515 and Test Pits 516-517, the topsoil lay directly over 1-1.10m of made ground. The made ground varied between grey brown and blue grey silty clays with frequent modern detritus including plastic cups, ceramic and brick fragments and overlay a natural blue grey clay subsoil. In Trench 514, the 0.20m of topsoil overlay an old road surface, with white road markings. The road surface is on the same alignment as the present Cumbernauld Road into Mollinsburn. No archaeological features or finds were recovered.

Parcel 17

Parcel 17 is enclosed by the M80 and a slip road. The land itself hosts abundant rushes and small copses of fir and hawthorn trees. Seven trenches and six test pits were excavated comprising 320m linear (Figure 19).

Test Pits 409- 410, 413- 414 and 416 comprised dark brown clay silt topsoil 0.2m deep overlying modern makeup between 1.2 and 1.9m deep consisting of mid brown silty clay with brick, concrete and other modern debris. Beneath this was natural light brown silty clay subsoil. Test Pit 415 had a thin surface layer of turf 0.05m deep overlying a concrete layer 0.1m deep. Beneath this, the modern construction debris was too compact to be fully excavated. Trenches 408, 411, 412, 417,418 and 419 consisted of dark brown clayey silt topsoil 0.2m deep over natural brown silty clay subsoil. Ten metres from the north-eastern end of Trench 411 modern make-up was revealed beneath the topsoil. Similarly, modern debris appeared beneath the topsoil at the eastern end of Trench 417. This also occurred in Trench 412 where modern make-up excavated to a depth of 1.2m was present in the south-western half of the trench. Trench 420 was lacking in topsoil and instead a layer of rubble overlay a kerbed tarmac road. No features of archaeological significance were recorded.

Parcel 18 was not excavated due to the presence of dense woodland and services.

Parcel 19

Parcel 19 is located on flat ground bounded to the north by the A80, to the south and east by the Cumbernauld Road from Mollinsburn to Condorrat and to the west by a drainage ditch. Four test pits were excavated comprising 20m linear (Figure 20).

The topsoil measured 0.30-0.40m and comprised a mid yellow-brown silty clay across the parcel. This lay directly over made ground between 1 and 2m deep. The made ground varied between grey-brown and blue-grey silty clays with frequent modern detritus including hosepipe, plastic and brick fragments and overlay natural yellow-grey clay subsoil. No archaeological features or finds were recovered.

Parcel 20

Parcel 20 is located in an area of open fields that border the north side of the A80 dual carriageway. No physical boundaries demarcate the area of the parcel as it sits in the middle of a fallow field. Two trenches were excavated comprising 100m linear (Figure 20).

The average depth of the trenches was 0.32m and the soil profile comprised of a mid grey-brown silty clay topsoil measuring 0.20m in depth over a mid yellow-brown clay subsoil measuring on average 0.12m. This in turn overlay a natural subsoil of light blue-grey clay. No archaeological finds or features were recovered.

Parcel 21

Parcel 21 is located in the north-eastern end of a large fallow field east of the A80. Five trenches were excavated comprising 250m linear (Figure 20).

The topsoil consisted of a grey-brown clayey silt 0.20-0.25m deep and lay directly over a natural subsoil of orange-brown, blue-grey silty clays. No archaeological finds or features were recovered.

Parcel 22

Parcel 22 is located within a public park and comprises a blaes football pitch in the southwest margins of the parcel and a level grassy area and shrubby woodland in the northern margins. Two test pits were excavated in the grassy area comprising 30m linear (Figure 21).

The topsoil measured 0.25-0.30m and comprised a mid grey brown silty clay across the parcel. This lay directly over made ground between 1 and 1.10m deep. The made ground varied between orange-brown and blue-grey silty clays with frequent modern detritus and overlay a natural subsoil of yellow-grey clay. No archaeological features or finds were recovered.

Parcel 23

Parcel 23 is situated on flat wet and boggy ground south-east of the A80 in Condorrat. After close inspection it was decided best not to excavate the proposed trenches due to the risk of the machine getting bogged down (Figure 21).

Parcel 24

Parcel 24 is located within an area of landscaped parkland, sloping gently southeast to northwest. Ten trenches were excavated comprising 480m linear. (Figure 22)

Trenches 740-743 contained a topsoil of dark grey silty clay 0.2-0.4m deep overlying natural mottled grey clays with frequent large stones. Trenches 734-738 reveal evidence of the ground prior to landscaping was being used as a dump for debris when the nearby quarry was in use. The surface layer of turf lies directly over a spread of cinders 0.05- 0.15m thick, which has partially mixed with a buried topsoil of dark grey clayey silt 0.12- 0.18m thick. Beneath this was a natural subsoil of mottled grey clay. No features of archaeological significance were recorded.

Parcel 25

Parcel number was not used.

Parcel 26

Parcel 26 was not excavated due to services.

Parcel 27

Parcel 27 is located on disused ground directly north of the A80. The parcel is bounded by A80 to SE, a road to SW and a tarmac path along the north-eastern boundary. The ground is mostly very flat though a large rocky outcrop is found in the centre of the parcel. Two trenches and five test pits were excavated comprising 115m (Figure 24).

On the flatter ground the topsoil measured 0.20-0.30m and consisted of a very mixed mid brown gritty silt containing frequent modern detritus including plastic and aluminium cans. The topsoil lay directly over made ground across the majority of the parcel. The made ground measured between 2 and 3.50m and consisted of a mid brown grey silty clay with frequent modern detritus including wood, plastic, tarmac and other building materials. The made ground overlay a dark brown peat deposit of 1-2.5m deep. In the basal layers of the peat there are frequent wood fragments and tree roots. Ceramic field drains were found running east to west at a depth of 3m in a number of the test pits.

On the higher ground over the rocky outcrop the topsoil measured 0.10-0.15m and consisted of a light grey-brown clayey silt. This lay directly over a natural subsoil of orange-brown sands and gravel with frequent fractured bedrock. No archaeological finds or features were recovered.

The presence of ceramic field drains, at a depth of 3m, suggests that prior to the construction of the existing A80 the ground surface was at least 2.50m lower and the rocky outcrop in the centre of the field would have been a prominent feature in the landscape.

Parcel 28

Parcel 28 is situated on landscaped ground north of the A80. The parcel is bounded by the A80 to the south and east and security fences belonging to the garden centre to the west and north. Three trenches were excavated comprising 105m linear (Figure 24).

The topsoil measured 0.15-0.20m and consisted of a mid grey-brown clayey silt across the parcel. The topsoil lay over a grey brown clayey silt subsoil 0.20-0.30m deep. This, in turn overlay a natural subsoil of grey-brown and orange-brown silty clays.

Trench 518 contained the remains of a furrow. The furrow measured 2.50m in width, had a shallow depth of 0.10m and ran north to south direction.

Trench 519 contained a small rounded pit [057] 0.08m deep. This was filled with a dark brown-black silty clay with frequent shale and charcoal. No archaeological finds were recovered.

Parcel 29 is situated south of the A80 on the flat landscaped grass of Wardpark Industrial Estate. Two test pits were excavated comprising 10m linear (Figure 25).

The topsoil measured 0.25m and consisted of a dark brown-grey silty clay. This lay directly over made ground up to 2.60m deep. The made ground consisted of an orange-brown silty clay in the upper 0.80m and a lower black-grey oily clay in the lower 1.80m. The made ground contained frequent modern detritus throughout and overlay a natural blue-grey silty clay subsoil. No archaeological features or finds were recovered.

Parcel 30

Parcel 30 is located directly south of the A80 dual carriageway and south west of Castle Glen Limekiln Site. The parcel lies on fairly flat ground comprising fallow field with overgrown shrubbery and some trees. The parcel occupies the north-eastern area of the field and there is no physical boundary between the limits of the parcel to the south and the rest of the field. To the north the A80 marks the boundary of the parcel. Nine trenches were excavated comprising 415m linear (Figure 26).

The topsoil consisted of a mid grey-brown clayey silt with an average depth of 0.25m. This overlay a light orange-brown sandy clay subsoil was with an average depth of 0.07m. The natural subsoil in the area was mid orange-brown clay with medium to large sub rounded sandstone inclusions. No archaeological finds or features were recovered.

Parcel 31

Parcel 31 is located on the east side of Red Burn, to the northeast of the Castle Glen lime kiln site. The land is uncultivated, dominated by long grasses and thistles. The parcel is bounded by a road to the east and slopes quite steeply westwards before levelling out as it reaches the burn. Eight trenches were excavated comprising 355m linear. (Figure 26)

A dark brown clayey silt topsoil (0.2- 0.25m deep) overlay mid brown clayey silt subsoil (0.05- 0.15m deep). Beneath this was a natural subsoil of mottled yellow brown silty clay with frequent degraded stone. Rubble and ceramic field drains were identified in all trenches, however no features of archaeological significance were recorded.

Parcel 32

Parcel 32 is located directly west of the A80 on the eastern edges of a field sown with barley. One trench and four test pits were excavated comprising 70m linear (Figure 27).

Trench 805 was excavated within the field boundary. Here the topsoil measured 0.20-0.25m and consisted of a dark orange brown sandy silt. This lay directly over a natural subsoil of orange brown sands and gravels and light grey brown silty clay. The trench contained two linear features running north-east to south-west across the trench. Gully [60] was 0.40m wide and 0.15m deep. No finds were recovered from the fill. Ditch [63] was 0.90m wide and 0.35m deep. This was filled with dark grey brown sandy silt [64], which contained frequent medium to large stone fragments. No finds were recovered. The position and alignment of the gully and ditch suggest that they relate to old field boundaries.

The test pits were excavated in the landscaped ground between the field and the motorway. The topsoil measured 0.25m and consisted of a dark brown-grey silty clay and lay directly over made ground 1.40-2m deep. The made ground consisted of a mid brown grey silty clay. The made ground contained frequent modern detritus and overlay natural blue-grey silty clay subsoil. No archaeological features or finds were recovered.

Parcel 33 is located on flat disused ground bounded by woodland to the south, a cottage garden to the north, the A80 to the west and a track to the east. Two trenches were excavated comprising 60m linear (Figure 27).

The topsoil measured 0.25-0.30m and consisted of a dark brown grey sandy silt. Across the parcel, the topsoil lay directly over a natural subsoil of orange brown sands and gravels. No archaeological finds or features were recovered.

Parcel 34

Parcel 34 is located on undulating ground east of the A80. The parcel is bounded to the north by a fenced field boundary, to the south and east by roads, and to the west by a drainage ditch below the steep bank of the A80. Ten trenches were excavated comprising 500m linear (Figure 28).

A man-made bank runs across the parcel from the north-east corner to the western boundary. The bank is 110m in length, varies in width between 5 and 10m, and reaches a height of 2m. The bank is made up of rubble mixed with frequent modern detritus.

The lower ground at the base of the bank is very wet with open bog pools. Trench 810 was excavated over the bank and on the sloping ground to the wet meadow. At the base of slope there was no topsoil only dark wet peat deposits of up to 1m deep. The peat overlay a natural blue-grey silty clay subsoil. Due to the very wet conditions, it was decided to move Trenches 808 and 809 to the higher, drier ground.

The higher ground south and south-east of the bank is fairly flat. Here the topsoil measured 0.20-0.25m and consisted of a dark orange brown sandy silt. In the majority of the trenches the topsoil lay directly over a natural subsoil of orange brown sands and gravels with frequent fractured bedrock protruding. On the sloping ground towards the bank the topsoil lay over a mid orange brown sandy silt subsoil or hillwash deposit 0.10-0.20m deep which in turn overlay the natural subsoil. No archaeological finds or features were recovered.

Parcel 35

Parcel 35 is a narrow corridor of land running north- south down the east side of the M80. The parcel cuts over the brow of a hill, following a steep slope into a vale to the south. The land is currently used for grazing by horses as well as the dumping of construction materials. Four trenches were excavated, totalling 190m linear (Figure 28).

A mid brown clayey silt topsoil (0.2-0.4m deep) overlay a natural subsoil of orange-brown sands and gravels. Ceramic field drains were noted in Trenches 819 and 820 running northwest, south-east in alignment with the fenced field boundary to the north-east. No features of archaeological significance were recorded.

Parcel 36

Parcel 36 is located on the brow of a hill with very steep sloping ground to the eastern boundary and the A80. The parcel is bounded by housing to the west and a wooded area to the south and east. Three trenches were excavated comprising 95m linear (Figure 28).

Across the parcel, the topsoil measured 0.25-0.30m and consisted of a dark grey brown sandy silt and lay directly over a natural subsoil of dark orange brown sands and gravels. No archaeological finds or features were recovered.

Parcel 37 is located on the steep sloping grassed ground of a public park. It is bounded to the east by a wooded verge of the A80, to the south and west by Hillhead Avenue and to the north by play park and basketball court. Two test pits were excavated comprising 10m (Figure 28).

The turf and dark grey brown clayey silt topsoil measured 0.20m and lay directly over made ground. The made ground was excavated to a depth of 2.50m and comprised dark browngrey silty clay with frequent modern detritus. No archaeological finds or features were recovered.

Parcel 38

Parcel 30 is located south and east of the A80 in the town of Haggs. The parcel is divided into two fields (Figure 29). Fourteen trenches were excavated comprising 675m linear.

Field 1 (Trenches 828-831)

Field 1 was located in the south west of the Parcel on very steep, almost 70 degree, sloping ground. The land to the north east of this parcel is a fairly flat plateau through which water services run, this drops sharply to the southwest before flattening out again at the south east of the parcel. The northwest boundary of the field is a substantial wood and barbed wire fence beyond which is an embankment with a steep drop to the M876. This fence also runs to the southern tip of the parcel and beyond. There is no physical boundary separating the area of trenching from the rest of the field in the south-eastern area of Parcel 38.

The a mid greyish brown silty sand topsoil measured 0.21m and lay over dark yellow brown silty clay subsoil 0.22m deep. This in turn overlay natural light brown-grey clay subsoil. No archaeological finds or features were recovered.

Field 2 (Trenches 832-841)

Field 2 is located in the northeastern area of the parcel and is bounded to the north and north-west by a continuation of the substantial wood and barbed wire fence present in Field 1. A dry stone dyke marks the northeastern limit of the parcel and there is no physical boundary marking the southeastern edge of the parcel and the remainder of the field. The field was under crop at the time of excavation and is fairly flat though the ground rises gently towards the northeastern limit of the parcel.

The topsoil is a mid grey-brown clayey silt averaging in depth at 0.25m, its maximum depth being 0.40m and its minimum 0.07m. In Trenches 838-841 the topsoil lay directly on the natural grey clay subsoil with occasional orange brown gravel inclusions. Trenches 833-837 had a subsoil deposit and a mixed deposit of peat and clay. The peaty clay was also present in Trenches 832 and 838 though no subsoil was recorded. Where present, the subsoil was a mid brown-grey silty clay 0.20-0.30m deep. Trenches 833-835, 837 and 838 contained substantial deposits of a dark black-brown peat mixed with a mid blue-grey clay averaging 0.68m. The peaty clay deposit was deepest in Trench 834 where it measured 1.38m in depth. Within the deposit there were rare inclusions of modern material and evidence of old turf layers. The deposit in general was very slightly stony but on occasions included large boulders measuring 1m by 1.5m. This deposit has been interpreted as overburden most likely linked to the building up of the motorway embankment to the north and north east of the area. No archaeological finds or features were recovered.

Castlecary Cropmark Site NMRS (AP NO. ST/3658 – 1975)

The cropmark site lies on the landscaped verge at the junction of the A80 and the Castlecary roads. Rectified photography (produced by Environmental Science Dept. of Stirling

University for AOC Ltd) appears to show three sides of a rectilinear ditched enclosure with a diameter in excess of 50m. Within this lies a further sub-circular ditched enclosure, 15m-20m in diameter. A possible third feature is noted, abutting the others. Two test pits were excavated, in areas devoid of trees, comprising 10m linear (Figure 39).

The topsoil consisted of a black brown silty clay and measured 0.20-0.25m deep. This overlay 1-1.20m of made ground. The made ground consisted of a dark black brown peaty clay with frequent modern detritus. This in turn overlay the natural yellow grey clay subsoil.

No archaeological finds or features were recovered. The absence of any features in the area of the cropmark, suggests that any archaeological remains must been destroyed in the construction of the road.

5.2 WATCHING BRIEF

Across Parcel 11, twenty-three test pits excavated by Norwest Holst were monitored. No archaeological finds or features were recovered.

6.DISCUSSION

Along the length of the road corridor the evaluation revealed a number of differing features that would have affected the feasibility for settlement, the survival of any archaeological remains and the archaeological potential of the area.

For the most part the evaluation revealed a landscape comprised low-lying areas where peat deposits had accumulated within glacially scoured hollows suggestive of a very wet and boggy situation unsuitable for settlement. In the higher areas and hill slopes, more suitable for settlement, the likelihood for the survival of prehistoric archaeological remains has been greatly diminished by a long history of post-medieval field improvement in the form of frequent field drains and the remains of rig and furrow. A number of the evaluation areas were located adjacent to the existing A80 and were so altered by the construction of the road that any archaeological remains are likely to have been destroyed. The worst affected parcels were nos 13, 16, 17, 19, 27, 29, 32, 37 and 38.

Prehistoric features

No features dating to the Iron Age were recorded during the Phase 1 archaeological works, however a quernstone of possible Roman origin was recovered at the edge of the Mollins Roman Fort scheduled site (see Franklin, below). The large rotary quern had been deposited into dark grey-brown peaty clay and was in a fragmentary state. Although it is not uncommon for querns to be recovered in fragments, this may represent structured deposition, with the burial of the quern fragments for votive rather than practical purposes. It should be noted, though, that at this stage it is not possible to show that this was a deliberate, votive process. The precise duration and extent of occupation at Mollins fort is unknown; Hanson & Maxwell (1980) identify it as one of the garrisons built along the Forth-Clyde line by Agricola in the late first century AD, a chain of defence which preceded the later Antonine Wall. It is not beyond the bounds of possibility that there was some extra-mural settlement at Mollins, which might account for the deposition of the quernstone, but no structural remains were noted in the limited trenches opened. It is also possible that the quernstone was deliberately cast aside into a boggy hollow at the very edge of the site by the military occupants of the fort, possibly when the fort ceased operations, as was standard Roman practice in such circumstances.

Medieval/ Post Medieval features

The predominant archaeological features recorded during the evaluation phase were the remains of rig and furrow. The furrows were spaced 5-10m apart, consistent with the broad rig field system. The origins of broad rig lie in the medieval period following the introduction of the heavy mould-board plough, which although mainly utilised in the east of Scotland, was also to be found in Lanarkshire (Dixon 1994, 38). Roy's map of 1747-55 shows the land relating to the evaluation area as under rig cultivation, with furrows clearly marked. Broad rig cultivation fell out of use around 1800 during the Improvement period when narrow, straight rig was adopted. The earliest ceramic finds recovered during the course of excavations date to the 15th/16th Century, while the remainder span a period from that date through to the present, illustrating the relatively short history of arable agriculture in this area compared to Scotland as a whole.

Burnt features

Several discrete features relating to burning events were exposed in the course of works. Generally shallow and irregular in shape, they comprised burnt subsoil with or without charcoal flecks. The majority of the burnt features contained no dating evidence, however [119] in Parcel 7, Trench 679 contained modern pottery and glass.

7. ACKNOWLEDGEMENTS

Thanks to all the landowners and farmers along the route of the M80 Stepps to Haggs Motorway for their assistance during the evaluation; Arbuckle Plant Hire and drivers Paul Connelly, Ewan McRobert, Taylor Burnett and Alastair Rees of Jacobs who monitored the work on behalf of Historic Scotland and Dr Noel Fojut and Roderick McCullagh of Historic Scotland

8.BIBLIOGRAPHY

Birks H.J.B. (1989) Holocene isochrone maps and patterns of tree-spreading in the British Isles. *Journal of Biogeography* **16** 503-540.

Boyd W.E. (1986) Vegetation history at Linwood Moss, Renfrewshire, Central Scotland. *Journal of Biogeography* **13** 207-223.

Cameron, I. B. 1998 Geology of the Falkirk district. Her Majesty's Stationary Office, London.

Cameron, I B and Stephenson, D. 1985 The Midland Valley of Scotland. British Regional Geology. Her Majesty's Stationary Office. London.

Cappers R.T.J., Bekker R.M. and Jans J.E.A. (2006) *Digital seed atlas of the Netherlands* (Barkhuis Publishing and Groningen University Library, Groningen).

Carmicheal, J 1837 'Account of the Principal Limestone Quarries of Scotland' in Transactions of the Highland and Agricultural Society.

Charman D.J. (2001) Biostratigraphic and palaeoenvironmental applications of testate amoebae. *Quaternary Science Reviews* **20** 1753-1764.

Davies A.L. and Tipping R. (2004) Sensing small-scale human activity in the palaeoecological record: fine spatial resolution pollen analyses from Glen Affric, northern Scotland. *The Holocene* **14**, **2** 233-245.

Davies G. and Turner J. (1979) Pollen diagrams from Northumberland. *New Phytologist* 82 783-804.

Dickson J.H (1981) A pollen diagram from the Auld Wives' Lifts, Craigmaddie Muir, Strathclyde. *Glasgow Archaeological Journal* **8** 13-18.

Dickson J.H. (1988) Post-glacial pine stumps in central Scotland. Scottish Forestry 42 192-199

Dixon P 1994 'Field systems, Rig and Other Cultivation Remains in Scotland: The Field Evidence' in Foster S & Smout T C (eds) *The History of Soils and Field Systems*, Scottish Cultural Press

Douglas, G and Oglethorpe, M. 1993 Brick, Tile and Fireclay Industries in Scotland, RCAHMS, Edinburgh.

Dumayne L. (1993) Iron Age and Roman vegetation clearance in northern Britain: further evidence. *Botanical Journal of Scotland* **46** 385-392.

Greenhead Moss Community Park (2005) Palaeoecological study, http://www.greenheadmoss.org.uk/palaeoecology.php

Hanson W S & Maxwell G S 1980 'An Agricolan Praesidium on the Forth-Clyde Isthmus (Mollins, Strathclyde)', *Britannia* 11 (1980), 43-49

Kenward, H. K., Hall, A. R. and Jones, A. K. G. (1980). A tested set of techniques for the extraction of plant and animal macrofossils from waterlogged archaeological deposits. *Science and Archaeology* **22**, 3-15.

Lindsay R.A. Immirzi C.P. (1996) An inventory of lowland raised bogs in Great Britain. Scottish Natural Heritage Research, Survey and Monitoring Report. 78

Roberston, T, Simpson, J. B, and Anderson, M. A. 1948 The Limestones of Scotland. Her Majesty's Stationary Office. Edinburgh.

Ramsay S. (1995) Woodland clearance in west-central Scotland during the past 3000 years. Unpublished PhD thesis, University of Glasgow.

Ramsay S. and Dickson J.H. (1997) Vegetational history of central Scotland. *Botanical Journal of Scotland* **49** 141-150.

Rodwell J.S. (ed.)(1991) British Plant Communities Volume 2: Mires and heaths (Cambridge University Press, Cambridge)

Timpany S. (2006) *Investigation of the archaeological and palaeoecological potential of a raised mire at Kilgarth, North Lanarkshire*. Unpublished client report, Headland Archaeology Ltd.

The Statistical Accounts of Scotland, Cumbernauld, County of Dumbarton, Account of 1791 – 99 Volume 6.

The New Statistical Accounts of Scotland, Cumbernauld, County of Dumbarton, Account of 1834-45 Volume 8.

APPENDIX 1: Site Registers

1.1 Context Register

Context	Parcel No.	Description
No.		
001	All	Topsoil
002	All	Subsoil
003	All	Natural
004	11	Peat deposit, Trench 8
005	11	Furrow, Trench 180
006	11	Cut of linear ditch filled by (007), Trench 180.
007	11	Fill of linear ditch [006], Trench 180.
008	11	Cut of shallow linear feature filled by (009), Trench 180.
009	11	Fill of shallow linear feature [008], Trench 180.
010	11	Cut of shallow linear feature Filled by (011), Trench 180.
011	11	Fill of shallow linear feature [010], Trench 180.
012	11	Cut of linear feature filled by (013), Trench 180.
013	11	Fill of linear feature [012], Trench 180.
014	11	Furrow, NE-SW aligned, Trench 178.
015	11	Furrow NW-SE aligned, Trench 178.
016	11	Cut of linear ditch filled by (017), Trench 178.
017	11	Fill of linear ditch [016], Trench 178.
018	11	Cut of linear ditch filled by (019), Trench 177.
019	11	Fill of linear ditch [018], Trench 177.
020	11	Cut of linear ditch/furrow filled by (021), Trench 175.
021	11	Fill of linear ditch/furrow [020], Trench 175.
022	11	Cut of drain filled by (023), Trench 69.
023	11	Fill of drain, [022], Trench 69.
024	8	Furrow, Trench 377.
025	8	Furrow, Trench 379.
026	8	Furrow, Trench 381.
027	8	Furrow, Trench 383.
028	1	Furrow, Trench 446.
029	1	Cut of field drain filled by (030), Trench 446.
030	1	Fill of field drain [029], Trench 446.
031	1	Furrow, Trench 446.
032	1	Cut of field drain filled by (033), Trench 446.
033	1	Fill of field drain [032], Trench 446.
034	3	Furrow, Trench 473.
035	3	Earthen bank, layer of redeposited natural.
036	3	Earthen bank, layer of old ground surface.
037	3	Fill of ditch [038] associated with bank (035) & (036).
038	3	Cut of ditch filled by (037) associated with bank (035) & (036).
039	11	Fill of gully [040], Trench 41.
040	11	Cut of shallow gully filled by (039), Trench 41.
041	11	Fill of posthole [042], Trench 94.
042	11	Cut of posthole filled by (041), Trench 94.
043	11	Fill of burnt feature [044], Trench 114.
044	11	Cut of burnt feature filled by (043), Trench 114.
045	11	Quern stone, Trench A, Mollins Fort.
046	11	Grey waterlogged deposit, Trench A, Mollins Fort.
047	11	Peat deposit, Trench A, Mollins Fort.
048	11	Light orange brown loamy sand deposit, Trench A, Mollins Fort.
049	11	Mid brown loamy sand/topsoil deposit, Trench A, Mollins Fort.
050	11	Dark brownish black clayey silt/topsoil. Trench B, Mollins Fort.

11	051	11	Fill of Gold design (OFO). The stable D. Molling Food
11	051	11	Fill of field drain [052], Trench B, Mollins Fort.
155			
Description Color Color			
056 VOID VOID 057 28 Circular burnt feature, Trench 519 058 2 Fill of gully [059], Trench 433. 059 2 Cut of gully filled by (058), Trench 453. 060 32 Cut of gully filled by (064), Trench 805. 061 32 Lower fill of gully [060], Trench 805. 062 32 Upper fill of gully [060], Trench 805. 063 32 Cut of gully filled by (064), Trench 805. 077 11 Cut of gully filled by (064), Trench 805. 078 11 Fill of ditch [077], Trench 12. 079 11 Cut of ditch filled by (080), Trench 12. 079 11 Cut of ditch filled by (080), Trench 3. 081 11 Fill of ditch [077], Trench 12. 082 11 Stone fill of drain [081], Trench 153. 083 11 Light brown fill of kiln [085], Trench 154. 084 11 Burnt clay fill of [088], Trench 154. 085 11 Cut of firm of filled by (080), Trench 154. 086 11 Orange burnt clay deposit, Trench 154.		+	
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096 11 Cut of furrow filled by (095), Trench 6. 097 11 Fill of furrow [096], Trench 6. 098 11 Cut of furrow filled by ((099), Trench 40. 099 11 Fill of furrow [098], Trench 40. 100 11 Cut of posthole filled by (101), Trench 22. 101 11 Fill of posthole [100], Trench 22. 102 11 Cut of pit filled by (103), (104) & (105), Trench 31. 103 11 Ash fill of pit [102], Trench 31. 104 11 Brown fill of pit [102], Trench 31. 105 11 Charcoal fill of pit [102], Trench 31. 106 11 Cut of field drain filled by (107), Trench 31. 107 11 Fill of field drain [106], Trench 31. 108 11 Cut of furrow filled by (109), Trench 230. 109 11 Fill of furrow [108], Trench 230. 110 11 Furrow, Trench 62. 111 10 Peat deposit, Trench 278. 112 9 Cut of furrow filled by (113), Trench 366. 113 9 Fill of furrow [112], Trench 301.<			
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110 11 Furrow, Trench 62. 111 10 Peat deposit, Trench 278. 112 9 Cut of furrow filled by (113), Trench 366. 113 9 Fill of furrow [112], Trench 366. 114 9 Gravel deposit, Trench 301. 115 3 Single mixed deposit of earthen bank makeup associated with ditch [038]. 116 VOID VOID. 117 7 Cut of furrow filled by (118), Trench 712.	108	11	Cut of furrow filled by (109), Trench 230.
111 10 Peat deposit, Trench 278. 112 9 Cut of furrow filled by (113), Trench 366. 113 9 Fill of furrow [112], Trench 366. 114 9 Gravel deposit, Trench 301. 115 3 Single mixed deposit of earthen bank makeup associated with ditch [038]. 116 VOID VOID. 117 7 Cut of furrow filled by (118), Trench 712.	109	11	Fill of furrow [108], Trench 230.
1129Cut of furrow filled by (113), Trench 366.1139Fill of furrow [112], Trench 366.1149Gravel deposit, Trench 301.1153Single mixed deposit of earthen bank makeup associated with ditch [038].116VOIDVOID.1177Cut of furrow filled by (118), Trench 712.	110	11	Furrow, Trench 62.
113 9 Fill of furrow [112], Trench 366. 114 9 Gravel deposit, Trench 301. 115 3 Single mixed deposit of earthen bank makeup associated with ditch [038]. 116 VOID VOID. 117 7 Cut of furrow filled by (118), Trench 712.	111	10	Peat deposit, Trench 278.
114 9 Gravel deposit, Trench 301. 115 3 Single mixed deposit of earthen bank makeup associated with ditch [038]. 116 VOID VOID. 117 7 Cut of furrow filled by (118), Trench 712.	112	9	Cut of furrow filled by (113), Trench 366.
115 3 Single mixed deposit of earthen bank makeup associated with ditch [038]. 116 VOID VOID. 117 7 Cut of furrow filled by (118), Trench 712.	113	9	Fill of furrow [112], Trench 366.
116 VOID VOID. 117 7 Cut of furrow filled by (118), Trench 712.	114	9	Gravel deposit, Trench 301.
116 VOID VOID. 117 7 Cut of furrow filled by (118), Trench 712.	115	3	Single mixed deposit of earthen bank makeup associated with ditch [038].
117 7 Cut of furrow filled by (118), Trench 712.	116	VOID	v i
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119	7	Burnt spread, Trench 679.
120	7	
		Cut of foundation trench of boundary wall filled by (130) & (131), Trench 419
121	7	Cut of foundation trench/dyke filled by (122), Trench 491.
122	7	Fill of foundation trench/dyke [121], Trench 491.
123	7	Cut of foundation trench/dyke return of [121] filled by (124), Trench 491.
124	7	Fill of foundation trench/dyke [123], Trench 491.
125	7	Mid brown spread, Trench 491.
126	7	Sandstone and charcoal spread, Trench 491.
127	7	Charcoal spread, Trench 491.
128	7	Possible floor level, Trench 3010491.
129	7	Mid brown spread, Trench 491.
130	7	Fill of foundation trench [120], Trench 491.
131	7	Wall in foundation trench [120], Trench 491.
132	7	Possible wall running North from wall [131], Trench 491.
133	3	Turf/organic-rich leaf mulch over earthen bank [136].
134	3	Light greyish brown silty sand deposit of earthen bank [136].
135	3	Mid yellowish brown sandy clay deposit of earthen bank [136].
136	3	Earthen bank.
2115	9	Brick wall, Trench 301.
2116	9	Brick wall, Trench 301.
2117	9	Brick wall, Trench 301.
2118	9	Brick wall, Trench 301.
2119	9	Brick wall, Trench 301.
2120	9	Brick wall, Trench 301.
2121	9	Brick wall, Trench 301.
2122	9	Brick wall, Trench 301.
2123	9	Brick wall, Trench 301.
2124	9	Brick wall, Trench 301.
2125	9	Brick wall, Trench 301.
2126	9	Iron fence, Trench 301.
2127	9	Road surface, Trench 300.
2128	9	Road surface, Trench 301.
2129	10	Field drain, Trench 193.
2130	10	Furrow, Trench 211.
2131	10	Stone culvert, Trench 189.
2132	14	Cut of burnt feature filled by (2133), Trench 622.
2133	14	Fill of burnt feature [2132], Trench 622.
2134	7	Cut of furrow filled by (2135), Trench 723.
2135	7	Fill of furrow [2134], Trench 723.
2136	7	Silty clay deposit, Trench 726.
2137	7	Silty clay loam deposit, Trench 726.
2137	7	Light grey silty clay deposit, Trench 726.
2139	7	Peat deposit, Trench 726.
	7	
2140		Grey brown peat deposit, Trench 726.
2141	7	Silty clay loam deposit, Trench 726.
2142	7	Silty clay loam deposit, Trench 726.
2143	38	Cut of circular pit filled by (2144), Trench 837.
2144	38	Fill of circular pit [2143], Trench 837.

1.2 Drawing Register

Drawing No.	Scale	Parcel No.	Description
1	1:10	11	West facing section, linear ditch [006], Trench 180

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2	1:20	11	Plan of linear ditch [006], Trench 180
3	1:10	11	South-East facing section, furrow [005], Trench 180
4	1:20	11	Plan of furrow [005], Trench 180
5	1:10	11	South-West facing section, linear features [008], [010]
6	1:20	11	Plan of linear features [008] and [010], Trench 180
7	1:10	11	South-East facing section, linear feature [012], Trench 180
8	1:20	11	Plan of linear feature [012], Trench 180
9	1:10	11	Section, furrows [014] and [015], Trench 178
10	1:20	11	Plan of furrows [014] and [015], Trench 178
11	1:20	11	Plan of linear ditch [016], Trench 178
12	1:10	11	South-East facing section, linear ditch [016], Trench 178
13	1:10	11	Plan of linear ditch [018], Trench 177
14	1:20	11	West facing section, linear ditch [018], Trench 177
15	1:10	11	South facing section, linear ditch [020], Trench 175
16	1:20	11	Plan of linear ditch [020], Trench 175
17	1:10	11	Section of furrow [021], Trench 175
18	1:20	11	Plan of furrow [021], Trench 175
19	1:10	11	South-West facing section of field drain [022], Trench 69
20	1:20	11	Plan of field drain [022], Trench 69
21	1:10	8	North facing section of furrow [024], Trench 377
22	1:20	8	
			Plan of furrow [024], Trench 377
23	1:20	8	Plan of furrow [025], Trench 379
24	1:10	8	East facing section of furrow [025], Trench 379
25	1:20	8	Plan of furrow [026], Trench 381
26	1:10	8	North facing section of furrow [026], Trench 381
27	1:20	8	Plan of furrow [027], Trench 383
28	1:10	8	North facing section of furrow [027], Trench 383
29	1:20	1	Sample section of trench wall, Trench 440
30	1:10	1	West facing section of field drain [029], Trench 446
31	1:20	1	Plan of field drain [029], Trench 440
32	1:10	1	North facing section of furrow [031] + field drain [032], Trench 446
33	1:20	1	Plan of furrow [031] + field drain [032], Trench 446
34	1:10	3	South-East facing section of furrow [034], Trench 473
35	1:20	3	East facing section of earthen bank
36	1:20	3	North-West facing section of earthen bank [115]
37	1:20	3	Plan of earthen bank [115] & ditch [038]
38	1:20	7	Section of furrow [117] Trench 712
39	1:20	7	Plan of furrow [117], Trench 712
40	1:10	7	Plan of burnt feature (119), Trench 679
41	1:10	7	Section of burnt feature (119), Trench 679
42	1:50	7	Plan of trench, Trench 419
43	1:20	7	Plan of dyke [121], Trench 419
44	1:20	7	Section of dyke [121], Trench 419
45	1:20	7	Section of ditch [123] (124), Trench 419
46	1:20	7	Plan of ditch [123], Trench 419
47	1:10	7	Section of wall [131], Trench 419
48	1:10	7	Section of wait [151], Helicit 419 Section against south bulk of Trench 419 to show deposits (125) & (126)
49	1:20	3	Plan of furrow & field drain, Trench 462
50	1:10	7	Section against south bulk of Trench 419 showing deposits (127), (124)
	1.10		and [131],
51	1:10	3	West facing section of bank [136]
52	1:20	3	Plan of furrow, Trench 462
53	1:20	32	Plan of gully [60] Trench 805
54	1:10	32	East facing section of gully [63] (64), Trench 805
55	1:10	32	West facing section of gully [63] (64), Trench 805
56	1:20	32	Plan of gully [63] Trench 805
50	1,40	32	Trait of guily [00] Treffelt 000

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57	1:5	11	South facing section of [042], Trench 94
58	1:10	11	Plan of posthole [042], Trench 94
59	1:50	11	Section of peat profile, Trench 88
60	1:20	11	Plan of burnt feature (043), Trench 114
61	1:10	11	West facing section of (043), Trench 114
62	1:20	11	Plan of stone feature [45], Trench A, Mollins Fort
63	1:20	11	North east facing section of Trench B, Mollins Fort
64	1:10	11	South west facing section through (056), Trench 589
65	1:20	11	Plan of (056), Trench 589
66	1:10	11	Section of gully [60], Trench 805
67	1:20	11	East facing section of Trench A, Mollins Fort
68	1:20	11	Plan of Trench A, Mollins Fort
77	1:10	11	Section of drainage ditch [077], Trench 12
78	1:10	11	Section of field drain [079], Trench 3
79	1:10	11	Section of stone drain [081], Trench 153
80	1:10	11	Section of deposit (083), Trench 154
81	1:10	11	Section of deposit (084), Trench 154
82	1:20	11	Plan of kiln [085], Trench 154
83	1:10	11	Section of burnt clay deposit (086), Trench 154
84	1:20	11	Plan of furrow [087], Trench 23
85	1:10	11	West facing section of furrow [087] Trench 23
86	1:10	11	East facing section of furrow [087], Trench 23
87	1:10	11	South-East facing section of furrow [097], Trench 16
88	1:10	11	North-West facing section of gully [093], Trench 16
89	VOID	VOID	VOID
90	VOID	VOID	VOID
91	1:10	11	East facing section of charcoal spread [095], Trench 40
92	1:20	11	Plan of charcoal spread [095], Trench 40
93	1:10	11	Section of furrow [096], Trench 6
94	1:20	11	Plan of furrow [096], Trench 6
95	1:10	11	Section of posthole [100], Trench 22
96	1:20	11	Plan of posthole [100], Trench 22
97	1:10	11	Section of furrow [098], Trench 40
98	1:20	11	Plan of furrow [098], Trench 40
99	1:10	11	Section of pit [102], Trench 31
100	1:20	11	Plan of pit [102], Trench 31
101	1:10	11	Section of field drain [106], Trench 31
102	1:20	11	Plan of field drain [106], Trench 31
103	1:10	11	Section of furrow [108], Trench 230
104	1:20	11	Plan of furrow [108], Trench 230
105	VOID	VOID	VOID.
106	VOID	VOID	VOID.
107	1:10	9	East facing section of furrow [112], Trench 366
108	1:20	9	East facing sample section of trench wall, Trench 301
109	1:100	11	Plan of Trench 100
110	1:50	11	Plan of road surface [127], Trench 300
111	1:10	7	South facing section of field drain [129], Trench 419
112	1:20	7	South facing section of furrow [130], Trench 419
113	1:10	7	South facing section of culvert [131], Trench 419
114	1:20	14	Plan of burnt feature [2132], Trench 622
2000	1:10	14	South facing section of burnt feature [2132], Trench 622
2001	1:20	7	West facing sample section of trench wall Trench 726
2002	1:20	7	Plan of furrow [2134], Trench 723
2002	1:10	7	North facing section of furrow [2134], Trench 723
2003	1:20	38	Section of pit [2143], Trench 837
2004	1:20	38	Plan of pit [2143], Trench 837
2003	1.20	30	1 I all 01 pit [2140], 11elicii 007

1.3 Sample Register

Sample	Context	Parcel	Description
No.	No.	No.	_
1	004	11	Peat deposit (004), Trench 7.
2	004	11	Section of wood from peat deposit (004), Trench 7.
3	005	11	Fill of furrow [005], Trench 180.
4	007	11	Fill of furrow [006], Trench 180.
5	009	11	Fill of furrow [008], Trench 180.
6	011	11	Fill of furrow [010], Trench 180.
7	035	3	Earthen bank material, upper deposit (035).
8	036	3	Ground surface (036) under bank material (035).
9	037	3	Fill of ditch [038] associated with bank (115).
10	115	3	Earthen bank (115).
11	119	7	Burnt spread (119), Trench 679.
39	041	11	Fill of posthole [042], Trench 94.
40	043	11	Fill of fire pit [044], Trench 114.
41	VOID	VOID	VOID.
42	056	14	Carbon rich spread (056), Trench 589.
43	058	2	Fill of gully [059], Trench 453.
44	064	32	Fill of gully [063], Trench 805.
77	083	11	Light brown fill of [085] overlying (084), Trench 154.
78	084	11	Burnt fill of [085], Trench 154.
79	088	11	Fill of furrow [087], Trench 23.
80	092	11	Fill of furrow [091], Trench 16.
81	094	11	Fill of gully/stone drain [093], Trench 16.
82	095	11	Charcoal spread, Trench 40.
83	105	11	Charcoal/burnt clay fill of pit [102], Trench 31.
84	104	11	Brown deposit fill of pit [102], Trench 31.
85	103	11	Grey deposit fill of pit [102], Trench 31.
86	2133	14	Fill of burnt feature [2132], Trench 622.

1.4 Finds Register

Find No.	Context No.	Parcel	Description
4	127	7	Fe object, Trench 491.
5	127	7	Fe object, Trench 491.
6	127	7	Fe Knife, Trench 491.
7	127	7	Cu alloy ring, Trench 491.
39	Unstratified	11	Brick, Trench 80
40	045	11	Quern stone fragments, Trench A, Mollins Fort, Parcel 11.

1.5 Photographic Registers

Digital Photographic Register

Shot No.	Direction facing	Parcel No.	Description	Date
1	NW	11	Pre-ex view of field showing machine tracks and wet ground (Trenches 1-5)	19/3/07
2	NE	11	Pre-ex view of eastern part of field towards the river (Trenches 1-5)	19/3/07

3	SE	11	Class view of possible guarry in porthern part of field	10/2/07
3	SE	11	Close view of possible quarry in northern part of field (Trenches 1-5)	19/3/07
4	NE	11	View of possible quarry in northern part of field (Trenches 1-5)	19/3/07
5	SE	11	Pre-ex view of centre of field showing machine tracks (Trenches 7-40)	19/3/07
6	S	11	Close view of machine tracks at access point (Trenches 7-40)	19/3/07
7	N	11	Close view of machine tracks (Trenches 7-40)	19/3/07
8	N	11	View of very wet dip in centre of field (Trenches 7-40)	19/3/07
9	NE	11	Pre-ex view of upper slope in eastern part of field (Trenches 7-40)	19/3/07
10	Е	11	Pre-ex view of eastern part of field towards river (Trenches 7-40)	19/3/07
11	SE	11	Pre-ex view of south part of field showing old bore hole (Trenches 7-40)	19/3/07
12	SE	11	Pre-ex view of south-eastern part of field (Trenches 123-148)	19/3/07
13	E	11	Pre-ex view along northern boundary of field showing the raised bog to the north (Trenches 123-148)	19/3/07
14	Е	11	View of machine tracks downslope with raised bog in background (Trenches 123-148)	19/3/07
15	SW	11	View of machine tracks and access point into field (Trenches 123-148)	19/3/07
16	N	11	Close view of machine tracks and SW corner access point (Trenches 123-148)	19/3/07
17	W	11	Pre-ex view along the eastern boundary, showing wet ground (Trenches 176-185)	19/3/07
18	SW	11	Pre-ex view of south and western parts of field (Trenches 176-185)	19/3/07
19	N	11	Pre-ex view along northern boundary showing trampled ground (Trenches 176-185)	19/3/07
20	NE	11	Pre-ex view of south and west margins of field showing machine tracks (Trenches 163-175)	19/3/07
21	NW	11	Pre-ex view of north and east margins of field (Trenches 163-175)	19/3/07
22	NE	11	Pre-ex view down western margins of field (Trenches 149-162)	19/3/07
23	NW	11	Pre-ex view to NW corner, showing tufted rushes (Trenches 149-162)	19/3/07
24	N	11	Pre-ex, view down eastern boundary (Trenches 64-72)	19/3/07
25	NE	11	Pre-ex view of centre of field showing tufted rushes (Trenches 64-72)	19/3/07
26	SW	11	Pre-ex view of undulating ground within field (Trenches 59-63 & 73-77)	19/3/07
27	W	11	View of large ceramic broken field drain (Trench 8)	20/03/07
28	W	11	View of broken plastic field drain (Trench 8)	20/03/07
29	SE	11	View of broken ceramic field drain, Trench 185	20/03/07
30	SE	11	View of broken ceramic field drain, Trench 185	20/03/07
31	N	11	View of broken ceramic field drain, Trench 134	21/03/07
32	N	11	View of broken ceramic field drain, Trench 134	21/03/07
33	W	11	View of broken ceramic field drain, Trench 134	21/03/07
34	W	11	View of broken ceramic field drain, Trench 134	21/03/07
35	N	11	View of broken ceramic field drain, Trench 134	21/03/07
36	W	11	View of repaired ceramic field drain, Trench 134	21/03/07
37	W	11	View of repaired ceramic field drain, Trench 134	21/03/07
38	NW	11	View of repaired ceramic field drain, Trench 134	21/03/07
39	W	11	View of repaired ceramic field drain, Trench 134	21/03/07
40	SW	11	View of repaired ceramic field drain, Trench 134	21/03/07

44	747	11	W (1 1	24 /02 /07
41	W	11	View of broken ceramic field drain, Trench 125	21/03/07
42	N	11	View of broken ceramic field drain, Trench 125	21/03/07
43	W	11	View of repaired ceramic field drain, Trench 125	21/03/07
44	NW	11	View of repaired ceramic field drain, Trench 125	21/03/07
45	W	11	View of east facing sample section, Trench 9	21/03/07
46	W	11	View of east facing sample section, Trench 9	21/03/07
47	N	11	View of repaired ceramic field drain, Trench 9	21/03/07
48	N	11	View of repaired ceramic field drain, Trench 9	21/03/07
49	NNE	11	View of repaired ceramic field drain, Trench 7	21/03/07
50	NNE	11	View of repaired ceramic field drain, Trench 7	21/03/07
51	SE	11	View of broken ceramic field drain, Trench 7	21/03/07
52	SE	11	View of repaired ceramic field drain, Trench 7	21/03/07
53	NW	11	View of repaired ceramic field drain, Trench 6	21/03/07
54	NW	11	View of repaired ceramic field drain, Trench 6	21/03/07
55	E	11	View of broken ceramic field drain, Trench 126	21/03/07
56	E	11	View of repaired ceramic field drain, Trench 126	21/03/07
57	E	11	View of repaired ceramic field drain, Trench 185	21/03/07
58	E	11	View of repaired ceramic field drain, Trench 185	21/03/07
59	NNE	11	SSW facing section of ditch [77], (78), Trench 12	22/03/07
60	NNE	11	SSW facing section of ditch [77], (78), Trench 12	22/03/07
61	NNE	11	View of repaired ceramic field drain, Trench 12	22/03/07
62	NNE	11	View of repaired ceramic field drain, Trench 12	22/03/07
63	SSW	11	View of repaired ceramic field drain, Trench 12	22/03/07
64	SSW	11	View of repaired ceramic field drain, Trench 12	22/03/07
65	SW	11	View of repaired ceramic field drain, Trench 14	22/03/07
66	SW	11	View of repaired ceramic field drain, Trench 14	22/03/07
67	SW	11	View of repaired ceramic field drain, Trench 14	22/03/07
68	SW	11	View of repaired ceramic field drain, Trench 14	22/03/07
69	NE	11	View of repaired ceramic field drain, Trench 17	22/03/07
70	NE	11	View of repaired ceramic field drain, Trench 17	22/03/07
71	S	11	View of repaired ceramic field drain, Trench 17	22/03/07
72	S	11	View of repaired ceramic field drain, Trench 17	22/03/07
73	SW	11	View of repaired ceramic field drain, Trench 17	22/03/07
74	SW	11	View of repaired ceramic field drain, Trench 17	22/03/07
75	S	11	North facing section through drainage ditch, Trench 3	23/03/07
76	W	11	View of repaired large field drain, Trench 8	23/03/07
77	NE	11	View of repaired ceramic field drain, Trench 141	23/03/07
78	W	11	View of repaired ceramic field drain, Trench 141	23/03/07
79	W	11	View of open trenches 176-185	26/03/07
80	N	11	View of broken ceramic field drain, Trench 146	26/03/07
81	N	11	View of broken ceramic field drain, Trench 146	26/03/07
82	N	11	View of repaired ceramic field drain, Trench 146	26/03/07
83	N	11	View of repaired ceramic field drain, Trench 146	26/03/07
84	N	11	View of broken ceramic field drain, Trench 148	26/03/07
85	N	11	View of repaired ceramic field drain, Trench 148	26/03/07
86	N	11	View of broken ceramic field drain, Trench 148	
87	N	11	View of repaired ceramic field drain, Trench 148	26/03/07
88	S	11	View of broken ceramic field drain, Trench 148	26/03/07 26/03/07
89	S	11	View of repaired ceramic field drain, Trench 148	
90	N	11	•	26/03/07
			View of broken ceramic field drain, Trench 148	26/03/07
91 92	N N	11	View of preken caramic field drain, Trench 148	26/03/07
93	N		View of broken ceramic field drain, Trench 148	26/03/07
		11	View of repaired ceramic field drain, Trench 148	26/03/07
94	N	11	View of broken ceramic field drain, Trench 148	26/03/07
95	N	11	View of repaired ceramic field drain, Trench 148	26/03/07
96	ENE	11	Intermediate view of burnt area [84], Trench 154	26/03/07

97	ENE	11	Intermediate view of burnt area [84], Trench 154	26/03/07
98	N	11	View of repaired field drain, Trench 162	26/03/07
99	N	11	View of repaired field drain, Trench 162	26/03/07
100	N	11	View of broken ceramic field drain, Trench 147	26/03/07
101	N	11	View of broken ceramic field drain, Trench 147	26/03/07
102	N	11	View of repaired ceramic field drain, Trench 147	26/03/07
103	N	11	View of repaired ceramic field drain, Trench 147	26/03/07
104	N	11	Pre-ex view along western boundary of field, showing	27/03/07
			tracks and Norwest Holst test pitting, Trenches 41-45	, , -
105	SE	11	Pre-ex view along southern boundary, showing heavily trampled area, Trenches 41-45	27/03/07
106	Е	11	Close view of main access tracks across field and gas mains, Trenches 41-45	27/03/07
107	NE	11	Post-ex view of north-eastern margins of the field, Trenches 123-148	27/03/07
108	N	11	Post-ex view of the north-western margins of the field, showing the machine tracks drying out, Trenches 123-148	27/03/07
109	S	11	Post-ex view down to the SW corner, showing open trenches in the background, Trenches 123-148	27/03/07
110	NW	11	Post-ex view of the western boundary of the field, Trenches 123-148	27/03/07
111	NW	11	View of broken ceramic field drain, Trenches 41	27/03/07
112	NW	11	View of repaired ceramic field drain, Trenches 41	27/03/07
113	VOID		,,	
114	VOID			
115	NW	11	View of repaired ceramic field drain, Trench 149	27/03/07
116	NW	11	View of repaired ceramic field drain, Trench 149	27/03/07
117	NW	11	View of repaired ceramic field drain, Trench 149	27/03/07
118	N	11	Post-ex view of north and western margins of the field, Trenches 41-45	28/03/07
119	Е	11	Post-ex view showing tracks across gas mains, Trenches 41-45	28/03/07
120	NW	11	Post-ex view of western margins, showing backfilled trench flush with the surrounding ground surface, Trenches 41-45	28/03/07
121	SW	11	Pre-ex view of western boundary formed by the gas mains, Trenches 78-94	28/03/07
122	N	11	Pre-ex view along the western boundary showing machine tracks, Trenches 78-94	28/03/07
123	Е	11	Close view of main access tracks over the gas mains, Trenches 78-94	28/03/07
124	NE	11	Pre-ex view of access tracks from compound and Norwest Holst Test Pit area, Trenches 78-94	28/03/07
125	S	11	Pre-ex view of southern margins showing tracks and Norwest Holst Test Pit area, Trenches 78-94	28/03/07
126	W	11	Pre-ex view of access tracks from the compound, Trenches 78-94	28/03/07
127	N	11	Close view of broken kerbstones opposite Devro's	28/03/07
128	N	11	Close view of broken kerbstones opposite Devro's	28/03/07
129	N	11	Close view of broken kerbstones opposite Devro's	28/03/07
130	N	11	Close view of broken kerbstones opposite Devro's	28/03/07
131	S	11	Close view of broken kerbstones opposite Devro's	28/03/07
132	S	11	Close view of broken kerbstones opposite Devro's	28/03/07
133	Е	11	Close view of broken kerbstones opposite Devro's	28/03/07
134	W	11	View of broken field drain, Trench 92	28/03/07
135	W	11	View of broken field drain, Trench 92	28/03/07
136	W	11	View of broken field drain, Trench 92	28/03/07
137	W	11	View of repaired field drain, Trench 92	28/03/07

138	W	11	View of repaired field drain, Trench 92	28/03/07
139	W	11	View of repaired field drain, Trench 92	28/03/07
140	W	11	View of broken field drain, Trench 92	28/03/07
141	NW	11	Close view of machine tracks, Trenches 149-162	29/03/07
142	E	11	View of open and backfilled trenches, Trenches 149-162	29/03/07
143	SE	11	View of open and backfilled trenches, Trenches 149-162	29/03/07
144	SW	11	View of open and backfilled trenches, Trenches 149-162	29/03/07
145	SW	11	View of open and backfilled trenches, Trenches 149-162	29/03/07
146	SW	11	View of broken field drain, Trench 91	29/03/07
147	SW	11	View of broken field drain, Trench 91	
				29/03/07
148	SW	11	View of repaired field drain, Trench 91	29/03/07
149	SE	11	View of broken field drain, Trench 91	29/03/07
150	SW	11	View of repaired field drain, Trench 91	29/03/07
151	SW	11	View of broken field drain, Trench 91	29/03/07
152	S	11	View of repaired field drain, Trench 91	29/03/07
153	NW	11	View of repaired field drain, Trench 91	29/03/07
154	NW	11	View of repaired field drain, Trench 91	29/03/07
155	N	11	Plan view of slot through furrow [87], Trench 23	29/03/07
156	W	11	East facing section of furrow [87], Trench 23	29/03/07
157	E	11	West facing section of furrow [87], Trench 23	29/03/07
158	NW	11	View of repaired field drain, Trench 90	29/03/07
159	NW	11	View of repaired field drain, Trench 90	29/03/07
160	NW	11	View of repaired field drain, Trench 90	29/03/07
161	SW	11	View of repaired field drain, Trench 90	29/03/07
162	SW	11	View of repaired field drain, Trench 90	29/03/07
163	SW	11	View of repaired field drain, Trench 80	30/03/07
164	SW	11	View of repaired field drain, Trench 80	30/03/07
165	SW	11	View of open and backfilled trenches, Trenches 46-58	30/03/07
166	SW	11	View of open and backfilled trenches, Trenches 163-175	30/03/07
167	W	11	View of repaired field drain, Trench 81	02/04/07
168	S	11	Pre-ex view along the western boundary of the field	02/04/07
			showing wheel ruts, Trenches 95-107	0_,0_,0
169	Е	11	Pre-ex view along the northern boundary and river,	02/04/07
			Trenches 95-107	0_,0_,0
170	SW	11	Pre-ex view towards the southern margins, Trenches 95-107	02/03/07
171	S	11	Pre-ex view along the eastern boundary and drainage ditch,	02/03/07
1,1		11	Trenches 95-107	02/00/07
172	Е	11	Pre-ex view towards the southern margins, showing the	02/03/07
172		111	furrows left over from maize cultivation	02/00/07
173	SE	11	View of repaired field drain, Trench 15	02/03/07
174	E	11	View of repaired field drain, Trench 20	02/03/07
175	NE	11	View of repaired field drain, Trench 24	02/03/07
176	NE	11	•	1
	-		View of repaired field drain, Trench 24	02/03/07
177	NE	11	View of repaired field drain, Trench 24	02/03/07
178	NE	11	View of repaired field drain, Trench 24	02/03/07
179	NE	11	View of repaired field drain, Trench 24	02/03/07
180	S	11	Post-ex view of backfilled trenches, Trenches 78-94	03/04/07
181	NW	11	Post-ex view of backfilled trenches, Trenches 78-94	03/04/07
182	N	11	Post-ex view of backfilled trenches, Trenches 78-94	03/04/07
183	S	11	Post-ex view of backfilled trenches, Trenches 78-94	03/04/07
184	E	11	Post-ex view of backfilled trenches, Trenches 176-185	03/04/07
185	W	11	Post-ex view of backfilled trenches, Trenches 176-185	03/04/07
186	E	11	Post-ex view of backfilled trenches, Trenches 163-175	03/04/07
187	W	11	Post-ex view of backfilled trenches, Trenches 163-175	03/04/07
188	Е	11	Post-ex view of backfilled trenches, Trenches 149-162	03/04/07
189	W	11	Post-ex view of backfilled trenches, Trenches 149-162	03/04/07

100	NIE	11	Doct our sieur of healtfilled tuen shee Tronghes (172	02/04/07
190 191	NE NW	11	Post-ex view of backfilled trenches, Trenches 61-72	03/04/07
191	NW		Post-ex view of backfilled trenches, Trenches 61-72	03/04/07
192	SE	11	Post-ex view of backfilled trenches, Trenches 46-58	03/04/07
193	N SE	11	Post-ex view of backfilled trenches, Trenches 46-58 Post-ex view of backfilled trenches, Trenches 123-148	03/04/07
195	S	11	Post-ex view of backfilled trenches showing the main access	03/04/07
193	3	11	tracks to the west of the parcel, Trenches 123-148	03/04/07
196	NW	12	Pre-ex view of the access point into the parcel from the	05/04/07
170	1444	12	roadside	03/04/07
197	SE	12	Pre-ex view of already used access tracks into the parcel	05/04/07
198	W	12	Pre-ex view of the western margins of the parcel	05/04/07
199	E	12	Pre-ex view of the eastern margins of the parcel	05/04/07
200	NW	12	Pre-ex view of the eastern part of the parcel	05/04/07
201	E	12	Pre-ex view of the eastern part of the parcel up to gas mains	05/04/07
202	E	12	Pre-ex view of the eastern part of the parcel from gas mains	05/04/07
203	SE	12	NW facing view of section of Test Pit 433	05/04/07
204	NW	12	SE facing view of section of Test Pit 433	05/04/07
205	E	12	Working view of the excavation of Test Pit 430	09/04/07
206	NE	12	SW facing view of section of Test Pit 430	09/04/07
207	Е	12	View of natural reached in Test Pit 430	09/04/07
208	SW	8	Pre-ex view of the north-western margins showing visible	09/04/07
			tracks	
209	SW	8	Pre-ex view of western part of the field showing ploughed	09/04/07
			area	
210	NE	8	Pre-ex view of the north western margins showing the	09/04/07
			ploughed part of the parcel	
211	NE	8	Pre-ex view of the upper slope along the southern boundary	09/04/07
			of the parcel	
212	N	10 (E)	Pre-ex view showing the track which divides Parcel 10 into	09/04/07
			eastern and western parts	
213	NE	10 (E)	Pre-ex view of eastern margins of parcel, showing	09/04/07
			woodland and tufted rushes	
214	NW	10 (E)	Pre-ex view of western margins of parcel, showing gorse	09/04/07
			tufted rushes	
215	W	10	Pre-ex view of farm track which runs E-W across parcel	09/04/07
216	E	12	Post-ex view of Test Pit 433	10/04/07
217	S	12	Post-ex view of Test Pit 437	10/04/07
218	E	12	Post-ex view of Test Pit 440	10/04/07
219	E	12	Post-ex view of backfilled Trench and Test Pit east of gas	10/04/07
220	W-: 1	37-:1	pipe	X7-: J
220 221	Void W	Void 8	Void View of concrete pipe in Trench 375	Void
222	S	8	Close view of concrete pipe Trench 375	10/04/07 10/04/07
223	S	8	Close view of concrete pipe Hench 373 Close view of pipe running into Bothlin Burn	10/04/07
	S	8		
224 225	S	8	View of pipe running in to Bothlin Burn	10/04/07
	W		View of pipe running in to Bothlin Burn	
226 227	W	8	View of repaired field drain, Trench 386 View of repaired field drain, Trench 386	11/04/07
228	W	8	View of repaired field drain, Trench 377	11/04/07 12/04/07
229	E	8	View of repaired field drain, Trench 377 View of repaired field drain, Trench 377	12/04/07
230	E	8	View of repaired field drain, Trench 377 View of repaired field drain, Trench 377	12/04/07
231	W	8	View of repaired field drain, Trench 377 View of repaired field drain, Trench 377	12/04/07
232	E	8	View of repaired field drain, Trench 377 View of repaired field drain, Trench 377	12/04/07
233	E	8	View of repaired field drain, Trench 377 View of repaired field drain, Trench 377	12/04/07
234	NE	8	View of repaired field drain, Trench 377 View of repaired field drain, Trench 377	12/04/07
235	NE	8	View of repaired field drain, Trench 377 View of repaired field drain, Trench 377	12/04/07
233	NE	ð	view of repaired field drain, French 377	12/04/07

236	NE	8	View of repaired field drain, Trench 377	12/04/07
237	NE	8	View of repaired field drain, Trench 377 View of repaired field drain, Trench 377	12/04/07
238	NE	8	View of repaired field drain, Trench 377	12/04/07
239	NE	8	View of repaired field drain, Trench 377	12/04/07
240	NE	8	View of repaired field drain, Trench 377	12/04/07
241	SW	8	View of slot through furrow [28], Trench 377	12/04/07
242	S	8	North facing section of furrow [28], Trench 377	12/04/07
243	S	8	View of concrete pipe in Trench 377, which runs into river	12/04/07
244	S	8	View of tracks through field visible on our arrival	12/04/07
245	SW	8	View of rubble drain, Trench 378	12/04/07
246	SW	8	View of repaired field drain, Trench 387	12/04/07
247	N	8	View of repaired field drain, Trench 387	12/04/07
248	N	8	View of repaired field drain, Trench 388	12/04/07
249	SW	8	View of slot through furrow [23], Trench 379	13/04/07
250	W	8	East facing section of furrow [23]	13/04/07
251	W	8	View of furrow [26], Trench 381	13/04/07
252	S	8	North facing section of furrow [26]	13/04/07
253	SW	8	View of slot through furrow [27], Trench 383	13/04/07
254	S	8	North facing section of furrow [26]	13/04/07
255	W	8	General shot of modern drainage feature, Trench 380	16/04/07
256	Void	Void	Void	Void
257	SE	9	Pre-ex view of south and western margins, showing the long, tufted grasses, Trenches 296-306	16/04/07
258	N	9	Pre-ex view of north and eastern margins, Trenches 296-306	16/04/07
259	NW	9	Pre-ex view along the western boundary, showing rubbish	16/04/07
			dumped at the back of the houses, Trenches 296-306	
260	N	9	Pre-ex view towards the northern boundary, showing iron- fenced enclosure at the base of the slope, Trenches 296-306	16/04/07
261	NW	9	Pre-ex view towards NW corner showing bumpy disused ground, Trenches 296-306	16/04/07
262	NW	9	Pre-ex view towards NE corner showing reeds and disused ground, Trenches 296-306	16/04/07
263	NE	9	Pre-ex view of eastern margins showing small bushes,	16/04/07
		_	Trenches 296-306	
264	SW	9	Pre-ex view of western margins showing large capped drainage features, Trenches 296-306	16/04/07
265	E	10	Working shot of backfilling of trenches, Trenches 255-287	16/04/07
266	E	10	Working shot of backfilling of trenches, Trenches 255-287	16/04/07
267	W	9	Pre-ex view showing the flatter base of slope, Trenches 307-339	16/04/07
268	SW	9	Pre-ex view of the flat base of slope along the southern boundary and river, Trenches 307-339	16/04/07
269	NW	9	Pre-ex view of sloping ground at the northern boundary, Trenches 307-339	16/04/07
270	S	9	Pre-ex view of ground sloping to the river at the base, Trenches 307-339	16/04/07
271	Е	9	Pre-ex view of the lower slope along the eastern margins,	16/04/07
272	S	9	Trenches 307-339 Pre-ex view western boundary fence of this part of the	16/04/07
273	SE	9	parcel, showing trampled ground, Trenches 307-339 Pre-ex view of sloping ground to the damp SE corner, Tranches 307-339	16/04/07
274	SW	9	Trenches 307-339 Pre-ex view of sloping ground to SW corner, showing Parcel	16/04/07
275	W	9	8 trenches open in the background, Trenches 349-366 Pre-ex view of western margins of this part of the parcel,	16/04/07
			Trenches 349-366	
276	SE	9	Pre-ex view of sloping ground to the SE corner, showing the	16/04/07

			flat ground above the river, Trenches 349-366	
277	Е	9	Pre-ex view of sloping ground to the northern and eastern	16/04/07
			margins, Trenches 349-366	
278	NE	9	Pre-ex view of sloping ground to the northern and eastern	16/04/07
			margins, Trenches 349-366	
279	N	9	Pre-ex view of sloping ground to the northern and western	16/04/07
			margins, Trenches 349-366	
280	Е	9	Pre-ex view towards the eastern margins of the parcel,	16/04/07
			showing the newly sown barley crop, Trenches 340-348	
281	N	9	Pre-ex view showing the road corridor marked out by canes	16/04/07
			and trench stobs erected in the newly sown barley crop,	
			Trenches 340-348	
282	E	9	Pre-ex view of the river at the southern boundary, and the	16/04/07
202	27747		edge of the sown barley crop, Trenches 340-348	4 4 10 4 10 =
283	NW	9	Pre-ex view of the river at the southern boundary, showing	16/04/07
204	TAT	0	parts of Parcel 9 north of the river, Trenches 340-348	1 (/0 / /07
284	W	9	Pre-ex view along the northern boundary showing grassy	16/04/07
205	TA7	0	area at edge of the sown field, Trenches 340-348	17/04/07
285	W	8	View of repaired field drain, Trench 394	17/04/07
286	E	8	View of repaired field drain, Trench 385	17/04/07
287	N SW	8	View of repaired field drain, Trench 385	17/04/07
288 289	N	8	View of repaired field drain, Trench 383	17/04/07
290	N	8	View of repaired field drain, Trench 403 View of repaired field drain, Trench 403	17/04/07 17/04/07
290	SW	8		
292	SW	8	View of repaired field drain, Trench 382	17/04/07 17/04/07
293	Void	Void	View of repaired field drain, Trench 380 Void	Void
294	SW	8		17/04/07
295	SW	8	View of repaired field drain, Trench 383 View of repaired field drain, Trench 383	17/04/07
296	SW	8	View of repaired field drain, Trench 383	17/04/07
297	SW	8	View of repaired field drain, Trench 378	17/04/07
298	S	8	View of repaired field drain, Trench 405	17/04/07
299	N	8	View of repaired field drain, Trench 2005	18/04/07
300	N	8	View of repaired field drain, Trench 300	18/04/07
301	N	1	Pre-ex view of broken gate and repaired fences	19/04/07
302	S	1	Pre-ex view of old machine tracks at the access point into	19/04/07
302		1	the parcel	17/01/07
303	W	1		19/04/07
000	''	1	forming the northern boundary of the parcel	15/01/07
304	W	1	Pre-ex view of the northwest end of parcel, showing broken	19/04/07
			fence	, ,
305	W	5	Pre-ex view along the southern boundary of the far SW part	19/04/07
			of the parcel, from the road down to the peat basin	
306	W	3	Pre-ex view of gently sloping ground to the north-east from	19/04/07
			the beech plantation in the eastern part of the parcel	
307	N	3	Close view of N-S showing earthen bank on the lower	19/04/07
			slopes of the beech plantation	
308	NW	3	View of the NW-SE earthen bank at the base of the slope of	19/04/07
			the beech plantation	
309	W	3	Pre-ex view of old machine tracks along the access in the	19/04/07
			western part of the parcel	
310	S	3	View of a line of fence posts, with no wire, along the	19/04/07
			northern boundary of the parcel	
311	Е	3	View of furrows within the beech plantation	19/04/07
312	S	2	Pre-ex view of parcel, showing the A80 along the southern	19/04/07
			boundary	
313	S	2	Pre-ex view of an already repaired fence at the access point	19/04/07

			into the field	
314	SW	8	Post-ex view of the backfilled trenches	19/04/07
315	S	9	Post-ex view of the backfilled trenches on the lower	23/04/07
			southern margins, Trenches 307-339	
316	Е	9	Post-ex view of the backfilled trenches in the eastern	23/04/07
			margins, Trenches 307-339	
317	S	9	Post-ex view of the backfilled trenches in the lower	23/04/07
			southern margins, Trenches 307-339	
318	NW	9	Post-ex view of the backfilled trenches in the western	23/04/07
			margins, Trenches 307-339	
319	S	8	Post-ex view of the backfilled trenches, showing those in the	23/04/07
			grassed and ploughed area south of the Bothlin Burn	
320	W	8	Working shot showing the excavation of trenches in the part	23/04/07
221	D 7747	-	of the parcel north of the river	22/04/05
321	NW	8	Working shot showing the excavation of trenches in the part	23/04/07
322	NI	0	of the parcel north of the river	22/04/07
322	N	8	Working shot showing the excavation of trenches in the part of the parcel north of the river	23/04/07
323	Е	8	Working shot showing the excavation of trenches in the part	23/04/07
323	E	0	of the parcel north of the river	23/04/07
324	SE	8	Working shot showing the movement of plant from Parcel 9	23/04/07
325	SE	5	Pre-ex view of the machine tracking up the very wet farm	24/04/07
0 2 0	J.E.		access track in the NE part of the parcel	21/01/07
326	SE	5	Pre-ex view of the machine tracking up the very wet farm	24/04/07
			access track in the NE part of the parcel	,,
327	W	5	Pre-ex view of the very wet and boggy NE corner of the	24/04/07
			parcel	, , , ,
328	W	5	Pre-ex, view of the south-western margins of the NE field	24/04/07
			showing the large dip in the centre of the field, which is	
			very wet at the base	
329	S	5	Pre-ex view of the northern margins, showing the machine	24/04/07
			in the dip of the NE field	
330	E	5	Pre-ex view towards the western field boundary, NE field	24/04/07
331	E	1	Post-ex view of backfilled trenches	24/04/07
332	W	1	Post-ex view of backfilled trenches	24/04/07
333	S	1	Post-ex of the access tracks after days of wet weather	24/04/07
334	SW	3	View of broken field drain, Trench 461	25/04/07
335	SW	3	View of broken field drain, Trench 461	25/04/07
336	SW	3	View of repaired field drain, Trench 465	25/04/07
337	S	3	North-facing section through furrow [034], Trench 437	25/04/07
338	W	3	View of slot through furrow [034], Trench 437	25/04/07
339	W	3	View of broken field drain, Trench 458	25/04/07
354	E	3	View of broken field drain, Trench 458	25/04/07
341	NE	3	View of repaired field drain, Trench 461	26/04/07
342	NE	3	View of repaired field drain, Trench 461	26/04/07
343	W	3	View of repaired field drain, Trench 458	26/04/07
344	W	3	View of repaired field drain, Trench 458	26/04/07
345	NE	3	View of repaired field drain, Trench 470	26/04/07
346	NE	3	View of repaired field drain, Trench 470	26/04/07
347	NW	3	View of slot through furrow, Trench 457	26/04/07
348	N	3	Pre-ex view of field boundary bank [036]	26/04/07
349	W	3	East facing section through field boundary [036]	26/04/07
350	SW	5	Post-ex view of the access along the existing farm track after	26/04/07
351	CE	-	the ground has dried out	26/04/07
33 I	SE	5	Post-ex view of the access along the existing track way after	26/04/07
001			the ground had dried out slightly, NE field in the parcel	

			is still very wet, NE field of the parcel	
353	SE	5	Post-ex view of backfilled trenches NW field of the parcel	26/04/07
354	NW	5	Post-ex view of the access along the existing track way after	26/04/07
			the ground had dried out slightly, NE field in the parcel	
355	E	3	Post-ex view of the reinstated field boundary bank	27/04/07
356	S	3	View of repaired field drain, Trench 477	27/04/07
357	S	3	View of repaired field drain, Trench 477	27/04/07
358	Е	3	View of repaired fence, in the western part parcel	27/04/07
359	W	5	View of repaired field drain, Trench 504	27/04/07
360	W	5	View of repaired field drain, Trench 504	27/04/07
361	W	5	View of repaired field drain, Trench 504	27/04/07
362	W	5	View of repaired field drain, Trench 504	27/04/07
363	N	5	View of south facing section of Trench 505, showing wood	27/04/07
			contained within the peat	
364	NE	5	View of repaired field drain, Trench 505	27/04/07
365	NE	5	View of repaired field drain, Trench 505	27/04/07
366	NE	5	View of repaired field drain, Trench 505	27/04/07
367	SW	5	View of repaired field drain, Trench 505	27/04/07
368	E	3	Post-ex view of backfilled trenches in the west part of parcel	30/04/07
369	N	3	Post-ex view of backfilled trenches in the west part of parcel	30/04/07
370	E	3	Post-ex view of backfilled trenches in the west part of parcel	30/04/07
371	N	3	Post-ex view of backfilled trenches in the east part of parcel	30/04/07
372	S	3	North facing section of Trench 478, showing peat deposits	30/04/07
373	S	3	North facing section of Trench 478, showing peat deposits	30/04/07
374	S	3	North facing section of Trench 478, showing peat deposits	30/04/07
375	N	3	View of repaired field drain, Trench 478	30/04/07
376	N	3	South facing view of Test pit section at the east end of	30/04/07
			Trench 478, showing deep peat deposits	
377	N	3	View of repaired field drain, Trench 478	30/04/07
378	N	5	View of repaired field drain, Trench 507	30/04/07
379	N	5	View of repaired field drain, Trench 507	30/04/07
380	NW	5	View of repaired field drain, Trench 508	30/04/07
381	NW	5	View of repaired field drain, Trench 508	30/04/07
382	NW	5	View of repaired field drain, Trench 508	30/04/07
383	SE	5	View of repaired field drain, Trench 509	30/04/07
384	S	5	View of repaired field drain, Trench 509	30/04/07
385	NW	3	View of repaired field drain, Trench 482	30/04/07
386	NW	3	View of repaired field drain, Trench 482	30/04/07
387	NW	3	View of repaired field drain, Trench 482	30/04/07
388	S	3	View of repaired field drain, Trench 482	30/04/07
389	N	3	View of repaired field drain, Trench 482	30/04/07
390	E	3	View of repaired field drain, Trench 510	01/05/07
391	W	5	View of repaired field drain, Trench 486	01/05/07
392	W	3	View of repaired field drain, Trench 486	01/05/07
393	S	3	View of repaired field drain, Trench 492	01/05/07
394	NW	3	View of repaired field drain, Trench 487	01/05/07
395	NW	3	View of repaired field drain, Trench 487	01/05/07
396	NW	3	View of repaired field drain, Trench 487	01/05/07
397	NW	3	View of repaired field drain, Trench 487	01/05/07
398	NW	3	View of repaired field drain, Trench 487	01/05/07
399	NW	3	View of repaired field drain, Trench 487	01/05/07
400	NW	3	View of repaired field drain, Trench 487	01/05/07
401	NW	3	Post-ex view of backfilled trenches in the SW part of the parcel	01/05/07
402	N	5	Post-ex view of backfilled trenches in the SW part of the	01/05/07
			parcel, showing those backfilled in the peaty area	1

403	NE	5	Post-ex view of backfilled trenches in the SW part of the parcel	01/05/07
404	NE	5	Post-ex view of backfilled trenches in the SW part of the parcel	01/05/07
405	Е	5	Post-ex view of backfilled trenches in the SW part of the parcel	01/05/07
406	N	3	View of repaired field drain, Trench 493	01/05/07
407	N	3	View of repaired field drain, Trench 493	01/05/07
408	Е	3	View of repaired field drain, Trench 494	01/05/07
409	N	3	View of repaired field drain, Trench 490	01/05/07
410	N	3	View of repaired field drain, Trench 490	01/05/07
411	N	3	View of repaired field drain, Trench 490	01/05/07
412	NE	3	View of repaired field drain, Trench 495	01/05/07
413	NE	3	View of repaired field drain, Trench 495	01/05/07
414	NE	3	View of repaired field drain, Trench 495	01/05/07
415	S	4	Pre-ex view towards the burn at the southern boundary of the parcel	02/05/07
416	N	4	Pre-ex view towards the northern boundary of the parcel	02/05/07
417	NW	4	Pre-ex view towards the A80 at the western boundary of the	02/05/07
			parcel	
418	NW	3	Post-ex view of backfilled trenches east of the beech plantation	02/05/07
419	NE	5	Post-ex view of backfilled trenches at the south-western part of the parcel	02/05/07
420	S	4	Post-ex view of backfilled trenches	02/05/07
421	NE	9	Post-ex view of backfilled trenches north of the Bothlin Burn	02/05/07
422	N	8 & 9	Post-ex view of backfilled trenches north of the Bothlin Burn	02/05/07
423	NE	9	Post-ex view of backfilled trenches north of the Bothlin Burn	02/05/07
424	S	10(E)	View of repaired water pipe, Trench 215	03/05/07
425	S	10(E)	Post-ex view of backfilled trenches, Trenches 186-239	03/05/07
426	S	10(E)	Post-ex view of backfilled trenches, Trenches 186-239	03/05/07
427	S	10(E)	Post-ex view of backfilled trenches, Trenches 186-239	03/05/07
428	SE	10(E)	Post-ex view of farm access track and backfilled trenches,	03/05/07
			Trenches 186-239	
429	SE	10(E)	Post-ex view of backfilled trenches, Trenches 186-239	03/05/07
430	VOID			
431	VOID			
432	VOID			
433	W	10(W)	Pre-ex view of the eastern boundary, Trenches 288-295	03/05/07
434	W	10(W)	View of repaired field drain, Trench 278	03/05/07
435	W	10(E)	Plan view of slot through furrow, Trench 211	03/05/07
436	NW	10(W)	View of repaired field drain, Trench 278	03/05/07
437	Е	10(W)	Post-ex, view of backfilled trenches at the eastern boundary, Trenches 288-295	03/05/07
438	SE	7	Pre-ex view showing the access route into the parcel fenced off from the ploughed field	04/05/07
439	N	8+9	Post-ex view of backfilled trenches north of the Bothlin Burn	04/05/07
440	NE	9	Post-ex view of backfilled trenches north of the Bothlin Burn	04/05/07
441	N	8+9	Post-ex view of backfilled trenches north of the Bothlin Burn	04/05/07
442	NE	9	Pre-ex view of access point into the field to the trenches south of the Bothlin Burn	04/05/07
443	NE	4	Post-ex view of backfilled trenches towards the northern and western margins of the parcel	04/05/07
444	SE	4	Post-ex view of backfilled trenches towards the southern and western margins of the parcel	04/05/07
			i ana westem marems of the datter	i

446	N	4	Post-ex view of the access tracks at the access point from the farm track into the field	04/05/07
447	S	4	Post-ex view along the farm track used for access	04/05/07
448	S	4	Post-ex view along the farm track used for access	04/05/07
449	NW	4	Post-ex view of tracks at the eastern end of the tunnel used for access	04/05/07
450	W	4	View of the tunnel under the motorway used for access into the parcel	04/05/07
451	W	4	Post-ex view of tracks at the western end of the tunnel used for access	04/05/07
452	S	4	Post-ex view along the farm track used for access	04/05/07
453	S	4	Post-ex view along the farm track used for access	04/05/07
454	S	4	Post-ex view along the farm track used for access	04/05/07
455	SW	4	Post-ex view of the farm track at the corner of the field	04/05/07
456	W	4	Post-ex view along the farm track used for access	04/05/07
457	E	4	Post-ex view of the farm track at the corner of the field	04/05/07
458	W	7	Pre-ex view showing the SW area of the parcel fenced off	08/05/07
459	N	7	from the rest of the sown field, Trenches 667-670 Pre-ex view showing the SW area of the parcel fenced off	08/05/07
439	IN .	/		06/03/07
460	SE	7	from the rest of the sown field, Trenches 667-670	08/05/07
400) SE	/	Pre-ex view showing the SW area of the parcel fenced off from the rest of the sown field, Trenches 667-670	06/05/07
461	SW	7	Pre-ex view showing the W area of the parcel fenced off	08/05/07
401	300	/	from the rest of the sown field, Trenches 667-670	06/03/07
462	W	7	Pre-ex view showing the E area of the parcel fenced off from the rest of the sown field, Trenches 667-670	08/05/07
463	Е	7	Pre-ex view showing the access tracks made going over the bridge, Trenches 696-712	08/05/07
464	S	7	Pre-ex view showing tracks adjacent to the Garnkirk Burn,	08/05/07
465	SW	7	Trenches 696-712 Pre-ex view showing wet ground in the NW corner of the	08/05/07
463	344	/	field, Trenches 696-712	08/05/07
466	N	7	Pre-ex view showing the hedgerow field boundaries and old bore hole, Trenches 696-712	08/05/07
467	NW	7	Repaired field drain, Trench 703	08/05/07
468	NW	7	Repaired field drain, Trench 703	08/05/07
469	NW	7	Plan view of slot through furrow, Trench 709	08/05/07
470	NE	7	Repaired field drain, Trench 710	09/05/07
471	N	7	Repaired field drain, Trench 710	10/05/07
472	N	7	Repaired field drain, Trench 710	10/05/07
473	NE	7	Repaired field drain, Trench 710	10/05/07
474	SW	7	Repaired field drain, Trench 693	10/05/07
475	SW	7	Repaired field drain, Trench 693	10/05/07
476	N	7	Repaired field drain, Trench 711	14/05/07
477	NE	7	Repaired field drain, Trench 711	15/05/07
478	NE	7	Repaired field drain, Trench 711	15/05/07
479	S	7	Post-ex view of backfilled trenches, Trenches 667-670	16/05/07
480	Е	7	Post-ex view of backfilled trenches, Trenches 667-670	16/05/07
481	SE	7	Post-ex view of backfilled trenches, Trenches 713-728	17/05/07
482	SW	7	Post-ex view of backfilled trenches, Trenches 667-670	17/05/07
483	SE	7	Post-ex view of backfilled trenches, Trenches 673-695	17/05/07
484	SE	7	Post-ex view of backfilled trenches, Trenches 673-695	17/05/07
485	SE	7	Post-ex view of backfilled trenches, Trenches 696-712	17/05/07
486	SE	24	Pre-ex view access route along tarmac path	21/05/07
487	E	24	Pre-ex view access route along tarmate path Pre-ex view of grass cutting within the parcel	21/05/07
488	NE	24	Pre-ex view of grass cutting within the parcel	21/05/07
489	NE	24	Pre-ex view of access route along tarmac path	21/05/07

490	N	24	Pre-ex view of grass cutting within the parcel	21/05/07
491	SE	24	Pre-ex view of the freshly cut grass within the parcel	21/05/07
492	SW	24	Pre-ex view of the freshly cut grass within the parcel	21/05/07
493	NE	24	Pre-ex view of the freshly cut grass within the parcel	21/05/07
494	SW	24	Pre-ex view of grass cutting within the parcel	21/05/07
495	S	24	Pre-ex view of the freshly cut grass within the parcel	21/05/07
496	Void	Void	Void	Void
497	W	6 & 7	Post-ex view of backfilled trenches, Trenches 672-690, with	22/05/07
			Parcel 6 trenches in the background	
498	SW	7	Post-ex view of backfilled trenches, Trenches 672-690	22/05/07
499	NW	7	Post-ex view of backfilled trenches, Trenches 672-690	22/05/07
500	S	24	Post-ex view of backfilled trenches showing the wet areas	22/05/07
			within the parcel	
501	SE	24	Post-ex view of the backfilled trenches showing the wheel	22/05/07
			marks left by the tractor cutting the grass	
502	NE	24	Post-ex view of the backfilled trenches showing the wheel	22/05/07
			marks left by the tractor cutting the grass	
503	NW	24	Post-ex view of track marks after the backfilling of the	22/05/07
			trenches	
504	SW	24	Post-ex view of track marks after the backfilling of the	22/05/07
			trenches	
505	W	24	Post-ex view of the tarmac road used as access	22/05/07
506	W	31	Pre-ex view showing access through a broken fence	22/05/07
507	S	31	Pre-ex view of the eastern part of parcel	22/05/07
508	S	31	Pre-ex view of the western part of parcel	22/05/07
509	N	31	Pre-ex view of the western part of parcel towards the	22/05/07
F10	NI	21	woodland	22/05/07
510	N	31	Pre-ex view of the sloping ground towards the eastern part	22/05/07
511	S	7	of parcel	23/05/07
311	3	/	Post-ex view of a repaired fence at the access point over the burn	23/03/07
512	E	7	Post ex view of a repaired fence at the main access into the	23/05/07
312	-	,	parcel	25/05/07
513	Е	7	Post ex view of a repaired fence at the main access into the	23/05/07
			parcel	
514	W	31	Post-ex view of backfilled trenches downslope towards the	23/05/07
			woodland	
515	SW	31	Post-ex view of backfilled trenches over the sloping ground	23/05/07
			of the parcel	
516	S	31	Post-ex view of backfilled trenches over the sloping ground	23/05/07
			of the parcel	
517	W	31	Post-ex view of the access point through the broken gate	23/05/07
518	Е	30	Pre-ex view showing the fairly flat ground of the parcel	24/05/07
519	W	30	Pre-ex view towards the A90 at the SW boundary	24/05/07
520	W	30	Post-ex view of backfilled trenches	24/05/07
521	Е	30	Post-ex view of backfilled trenches	24/05/07
522	W	30	Post-ex view of backfilled trenches	24/05/07
523	SW	30	Repaired field drain, Trench 783	24/05/07
524	E	38	Pre-ex view of the barley in the eastern field	25/05/07
525	NW	38	Pre-ex view of the short grass of the western field	25/05/07
526	SE	38	Pre-ex view of access point at the gate and tracks made by	25/05/07
			the machine turning	
527	NW	38	Pre-ex view along the farm track used for access	25/05/07
528	NW	38	Pre-ex view along the farm track used for access	25/05/07
529	N	38	Pre-ex view of the gate into the eastern barley field	25/05/07
530	S	20	Pre-ex view of the fairly flat ground of the parcel	29/05/07
531	SW	20	Pre-ex view of the fairly flat ground of the parcel	29/05/07

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532	SW	20	Post-ex view of backfilled test pit	29/05/07
533	NE	20	Post-ex view of access point off the road	29/05/07
534	NE	21	Pre-ex view of slightly sloping ground of the parcel	29/05/07
			showing the Norwest Holst Test Pit	
535	N	21	Pre-ex view of slightly sloping ground of the parcel	29/05/07
536	W	21	Pre-ex view of the overhead lines across the parcel	29/05/07
537	Е	21	Pre-ex view of track marks already present in the parcel	29/05/07
538	SW	17	Pre-ex view of boggy ground in the centre of the parcel	29/05/07
539	SE	17	Pre-ex view of tufted rushes in the centre of the parcel	29/05/07
540	N	17	Pre-ex view of track marks in the wet ground of the parcel	29/05/07
541	NE	17	South-west facing section of Test Pit 409	29/05/07
542	S	17	North facing section of Test Pit 414	29/05/07
543	S	17	Post-ex view of backfilled trenches and test pits	29/05/07
544	Е	17	Post-ex view of backfilled trenches and test pits	29/05/07
545	W	17	Post-ex view of backfilled trenches and test pits	29/05/07
546	W	33	Pre-ex view of the flat ground of the parcel with the A90	30/05/07
			raised above	
547	SE	33	Pre-ex view of the long grasses towards the woodland	30/05/07
548	NE	33	Pre-ex view of the long grasses and old fence post in the	30/05/07
			rough ground of the parcel	
549	W	33	Pre-ex view of access point off the road	30/05/07
550	W	35	Pre-ex view of access point through the gate of the builders	30/05/07
			yard	
551	W	35	Pre-ex view of the fence running E-W across the flat top of	30/05/07
			the hill	
552	S	35	Pre-ex view of the long grasses on the flat top of the hill	30/05/07
553	S	35	Pre-ex view of the long grasses on the flat top of the hill	30/05/07
554	S	35	Pre-ex view of a collapsed old field wall	30/05/07
555	S	35	Pre-ex view of the very steep slope down to the base of hill	30/05/07
556	N	35	Pre-ex view up the very steep slope of the hill	30/05/07
557	S	35	Pre-ex view of view of the area fenced off for horses	30/05/07
558	N	35	Pre-ex view of fences on brow of hill	30/05/07
559	S	35	Pre-ex view of area of used as a refuse tip	30/05/07
560	S	35	Pre-ex view of area of used as a refuse tip	30/05/07
561	N	35	Post-ex view of backfilled trench on the upper slope of the	30/05/07
			hill	
562	S	35	Post-ex view of backfilled trench on sloping ground to the	30/05/07
			base of the hill	
563	N	35	Post-ex view of backfilled trench on sloping ground to the	30/05/07
			base of the hill	22/2//2=
1000	N	11	Post-ex view of backfilled trenches, Trenches 73-77	03/04/07
1001	NE	11	Post-ex view of backfilled trenches, Trenches 73-77	03/04/07
1002	NW	11	View of repaired field drain, Trench 98	04/04/07
1003	S	11	View of repaired field drain, Trench 98	04/04/07
1004	NE	11	View of repaired field drain, Trench 98	04/04/07
1005	NE	11	View of repaired field drain, Trench 97	04/04/07
1006	NE	11	View of repaired field drain, Trench 97	04/04/07
1007	W	11	View of repaired field drain, Trench 94	04/04/07
1008	W	11	Post-ex view of backfilled trenches, Trenches 73-77	05/04/07
1009	NW	11	Post-ex view of backfilled trenches, Trenches 73-77	05/04/07
1010	SW	11	Pre-ex view of slightly sloping ground towards the river,	05/04/07
1011	TA7	4.4	Trenches 113-122	05/04/05
1011	W	11	Pre-ex working of road corridor marked out by canes and	05/04/07
1010	E	11	bunting, Trenches 113-122	05/04/05
1012	E	11	Pre-ex view towards eastern boundary and access point through gate, Trenches 113-122	05/04/07
	1	1	unough gail, menero monto	1

1014	N	11	View of repaired ceramic field drain, Trench 115	09/04/07
1015	N	11	View of repaired ceramic field drain, Trench 115	09/04/07
1016	N	11	View of repaired ceramic field drain, Trench 115 View of repaired ceramic field drain, Trench 115	09/04/07
1017	N	11	View of repaired ceramic field drain, Trench 121	09/04/07
1017	N	11	View of repaired ceramic field drain, Trench 117	10/04/07
1019	S	11	Overview of backfilled trenches in Parcel 11(east to west)	10/04/07
1020	W	11	Overview of backfilled trenches in Parcel 11(east to west)	10/04/07
1020	NW	11	Overview of backfilled trenches in Parcel 11(east to west)	
1021	E	11	,	10/04/07
1022	S	11	Overview of backfilled trenches in Parcel 11(east to west)	10/04/07
1023	S	11	Overview of backfilled trenches in Parcel 11(east to west) Overview of backfilled trenches in Parcel 11(east to west)	10/04/07
		+	\ /	
1025 1026	N S	11	Overview of backfilled trenches in Parcel 11(east to west)	10/04/07
		+	Overview of backfilled trenches in Parcel 11(east to west)	10/04/07
1027	SW	11	Overview of backfilled trenches in Parcel 11(east to west)	10/04/07
1028	N	11	Overview of backfilled trenches in Parcel 11(east to west)	10/04/07
1029	NW	11	Overview of backfilled trenches in Parcel 11(east to west)	10/04/07
1030	NE	11	Overview of backfilled trenches in Parcel 11(east to west)	10/04/07
1031	NE	11	Overview of backfilled trenches in Parcel 11(east to west)	10/04/07
1032	N	11	View of repaired ceramic field drain, Trench 119	10/04/07
1033	N	11	View of repaired ceramic field drain,, Trench 122	10/04/07
1034	W	11	Pre-ex view towards drainage ditch at western boundary, Trenches 108-112	10/04/07
1035	Е	11	Pre-ex view up slope towards road, Trenches 108-112	10/04/07
1036	N	11	Pre-ex view towards Mollins Fort Scheduled Area, Trenches	10/04/07
			108-112	
1037	S	11	Pre-ex view towards the southern margins, Trenches 108- 112	10/04/07
1038	SW	6	Pre-ex view of the lower slope of the hill showing the	10/04/07
			winter barley and old borehole location at top of hill	
1039	SW	6	Pre-ex view of the tall winter barley within the parcel	04/05/07
1040	Е	6	Pre-ex view of dried out wet areas at the base of the slope	04/05/07
1041	N	6	Pre-ex view of furrows at the edge of the barley field	04/05/07
1042	W	6	Pre-ex view of the in-use drainage ditches within the field	04/05/07
1043	SW	15	View of repaired field drain, Trench 560	
1044	NE	15	View of repaired field drain, Trench 560	
1045	NE	15	View of repaired field drain, Trench 560	04/05/07
1046	W	15	View of very wet, boggy area and old wheel ruts	04/05/07
1047	W	15	View of test pit area in very wet boggy ground	04/05/07
1048	SW	15	View of access point over small bridge	11/05/07
1049	SE	11	View of gas mains protective fencing and iron plates	11/05/07
1050	Е	11	View of access point between the two fields showing both	11/05/07
			old and new machine tracks in the very wet ground	
1051	Е	15	View of repaired field drain, Trench 560	11/05/07
1052	W	15	View of repaired field drain, Trench 560	11/05/07
1053	Е	15	View of repaired field drain, Trench 561	12/05/07
1054	Е	15	View of repaired field drain,, Trench 561	12/05/07
1055	N	15	View of repaired field drain, Trench 558	12/05/07
1056	N	15	View of repaired field drain, Trench 558	12/05/07
1057	S	14	Pre-ex view towards eastern boundary and M73, Trenches 566-581	13/05/07
		1		13/05/07
1058	S	14	Pre-ex towards western boundary and wooded windbreak, Trenches 566-581	13/03/07
1058	S N	14	Pre-ex towards western boundary and wooded windbreak, Trenches 566-581 Pre-ex view towards the northern margins of the field, Trenches 566-581	13/05/07

1061	N	14	Pre-ex view of machine tracks along the access through the wooded area at the base of the hill	13/05/07
1062	S	14	Pre-ex view of the short grasses in the central field, Trenches 582-596	14/05/07
1063	NNE	14	Pre-ex view of the area of rushes in the NE corner, Trenches 582-596	14/05/07
1064	N	14	Pre-ex view of burnt patch, Trench 589	18/05/07
1065	W	14	Mid-ex view of burnt patch, Trench 589	18/05/07
1066	N	34	Pre-ex view of trampled ground in wet part of field	25/05/07
1067	W	34	Pre-ex along the bank, with low boggy ground at the base	25/05/07
1068	S	34	Pre-ex view of rough grazing ground of the parcel	25/05/07
1069	W	2	Post-ex view of backfilled trenches	25/05/07
1070	W	2	Post-ex view of backfilled trenches	25/05/07
1071	Е	2	Post-ex view of backfilled trenches	25/05/07
1072	NW	34	Post-ex view of backfilled trench in the wet meadow area	25/05/07
1073	W	29	Pre-ex view towards the A90 at the northern boundary of	01/06/07
			the parcel	
1074	N	29	South facing section of Test Pit 759	01/06/07
1075	E	29	Working shot, backfilling of Test Pit 759	01/06/07
1076	W	16	Pre-ex view of old machine tracks at access point off the road	01/06/07
1077	S	16	Pre-ex view of concrete area	01/06/07
1078	SW	16	View of Norwest Holst Test Pit	01/06/07
1079	W	16	Pre-ex view of wooded area to the south of the parcel	01/06/07
1080	W	23	View of wet boggy area of the parcel	01/06/07
1081	N	23	View of wet boggy area of the parcel	01/06/07
1082	S	20	Post-ex view of backfilled trenches either side of the overhead lines	01/06/07
1083	SW	20	Post-ex view of backfilled trenches	01/06/07
1084	N	21	Post-ex of backfilled trenches	01/06/07
1085	NW	21	Post-ex view of backfilled trenches	01/06/07
1086	E	22	Pre-ex view showing tarmac pathway	01/06/07
1087	W	22	Pre-ex view showing the access across the football pitch	01/06/07
1088	E	22	Pre-ex view showing disturbed ground at access point	01/06/07
1089	N	16	South facing section of Test Pit 516	01/06/07
1090	E	16	West facing section of Test Pit 517	01/06/07
1091	W	16	Post-ex view of backfilled trench	01/06/07
1092	N	16	Post-ex view of backfilled test pits	01/06/07
1093	NE	36	Pre-ex view of brambles in the NE corner of the parcel	04/06/07
1094	SE	36	Pre-ex view of long grasses in damp ground of the parcel	04/06/07
1095	N	36	Pre-ex view of long grasses in damp ground of the parcel	04/06/07
1096	SW	36	Pre-ex view of the gate at the parcel access	04/06/07
1097	N	34	Post-ex view of the gate at the parcel access Post-ex view of backfilled trenches in the wet peaty area	04/06/07
1098	SW	34	Post-ex view of backfilled trenches in the wet peaty area	04/06/07
1099	N	34	Post-ex view of backfilled trenches in the wet peaty area	04/06/07
1100	S	34	Post-ex view of backfilled trenches in the wet peaty area	04/06/07
1101	SW	32	Pre-ex view along the eastern boundary of the parcel,	04/06/07
			showing the barley sown within the parcel	
1102	NE	32	Pre-ex view showing the edge of the sown barley and the woodland at North-East end of parcel	04/06/07
1103	NE	32	Pre-ex view along the eastern margins showing the barley	04/06/07
1101	l NT		sown in the parcel corridor and the woodland edge	04/07/05
1104	N	22	Post-ex view of backfilled test pit, showing track marks in the wet grass	04/06/07
1105	N	22	Post-ex view of backfilled trench, showing track marks in	04/06/07
		i	the wet grass	1

			the wet grass	
1107	Е	22	Post-ex view of backfilled test pit, showing track marks in	04/06/07
			the wet grass	
1108	W	13	Pre-ex view of overgrown vegetation and areas of	04/06/07
			woodland in the centre, east and north-east of the parcel	
1109	S	13	Pre-ex view towards the A90 at north and west boundaries	04/06/07
			of the parcel	
1110	N	13	Pre-ex view of the boggy ground south of the old farm track	04/06/07
1111	Е	13	Pre-ex towards the M73 at the eastern boundary of the	04/06/07
			parcel	
1112	N	32	Post-ex view of backfilled trench along the edge of the	04/06/07
			woodland at the eastern boundary of the parcel	
1113	Е	32	Post-ex view of backfilled test pit and tracks made by the	04/06/07
			JCVB	
1114	S	32	Post-ex view of the backfilled trench along the eastern	04/06/07
			boundary and the tracks through the barley	
1115	S	32	Post-ex view showing access into the parcel and the tracks	05/06/07
			made by the JCB in the wet ground	
1116	W	33	Post-ex view of the backfilled trenches	05/06/07
1117	N	33	Post-ex view of the backfilled trenches	05/06/07
1118	W	33	Post-ex view showing access into the parcel	05/06/07
1119	W	36	Post-ex view of the backfilled trenches	05/06/07
1120	N	36	Post-ex view of the backfilled trenches on the sloping	05/06/07
			ground of the parcel	
1121	N	36	Post-ex view of the gate at the access point, and tracks made	05/06/07
			by the JCB in the long wet grasses	, ,
1122	S	36	Post-ex view of the tracks made during access over the cut	05/06/07
			grass at the road side	
1123	Е	38	Post-ex view of the backfilled trenches in the barley field	05/06/07
1124	S	38	Post-ex view of the backfilled trenches in the barley field	05/06/07
1125	W	38	Post-ex view of the farm track and gate used ass access into	05/06/07
			the barley field	
1126	W	16	Post-ex view of backfilled trench along the southern	05/06/07
			margins of the parcel	
1127	Е	16	Post-ex view of backfilled trench along the southern	05/06/07
			margins of the parcel	
1128	Е	9	Post-ex view of the backfilled trenches in the long barley	05/06/07
			field south of the Garnkirk Burn, Trenches 340-348	
1129	Е	9	Post-ex view of the backfilled trenches in the long barley	05/06/07
			field south of the Garnkirk Burn, Trenches 340-348	
1130	N	9	Post-ex view of the backfilled trench along the western	06/06/07
			boundary, Trenches 340-348	
1131	N	37	Pre-ex view of the cut grass in the parkland of the parcel	06/06/07
1132	E	37	Pre-ex view along the tarmac path of the park, used as	06/06/07
			access to the parcel	
1133	W	37	Pre-ex view of the cut grass in the parkland of the parcel	06/06/07
1134	N	34	Post-ex view of the backfilled trenches in the eastern part of	06/06/07
			the parcel	
1135	S	34	Post-ex view of the backfilled trenches in the eastern part of	06/06/07
	<u></u>		the parcel	<u> </u>
1136	Е	35	Post-ex view of the backfilled trenches on the steep sloping	06/06/07
			ground of the parcel	
1137	S	37	Pre-ex view of the pavement at the access point from the	06/06/07
			road	
1138	W	37	Pre-ex view of the access over the pavement and path	06/06/07
1139	S	28	Post-ex view of the backfilled trenches	06/06/07
1140	SE	28	Post-ex view of the backfilled trenches	06/06/07

1141	W	15	HPD07. Area of ground reduced for levelling	06/06/07
1142	S	15	HPD07. Area of ground reduced for levelling	06/06/07
1143	Е	19	Pre-ex view of the area of freshly cut silage and tracks to a Norwest Holst Test Pit	06/06/07
1144	SE	19	Pre-ex view of the area of freshly cut silage and tracks to a Norwest Holst Test Pit	06/06/07
1145	Е	19	Pre-ex view of the gate at the access point of the road	06/06/07
1146	S	7	Pre-ex, view of the plantation area north of the burn, Trench 729	06/06/07
1147	S	7	Pre-ex view of the backfilled trenches south of the burn, Trenches 713-728	06/06/07
1148	NW	11	Post-ex of the almost grassed over backfilled trenches, Trenches 176-185	12/06/07
1149	NE	11	Post-ex of the almost grassed over backfilled trenches, Trenches 176-185	12/06/07
1150	Е	11	Post-ex of the almost grassed over backfilled trenches, Trenches 63-75	12/06/07
1151	N	11	Post-ex of the almost grassed over backfilled trenches, Trenches 123-148	12/06/07
1152	S	11	Post-ex of the almost grassed over backfilled trenches, Trenches 59-62, 73-77	12/06/07
1153	S	11	Post-ex of the almost grassed over backfilled trenches, Trenches 59-62	12/06/07
1154	SW	11	Post-ex of the almost grassed over backfilled trenches, Trenches 78-94	12/06/07
1155	W	11	Post-ex of the almost grassed over backfilled trenches, Trenches 78-94	12/06/07
1156	N	11	Post-ex of the almost grassed over backfilled trenches, Trenches 41-45	12/06/07
1157	NW	11	Post-ex of the almost grassed over backfilled trenches, Trenches 41-45,showing access track over the gas pipe	12/06/07
1158	SW	11	Post-ex of the almost grassed over backfilled trenches, Trenches 46-58	12/06/07
1159	W	11	Post-ex of the almost grassed over backfilled trenches, Trenches 46-58	12/06/07
1160	S	11	Post-ex of the almost grassed over backfilled trenches, Trenches 96-107	12/06/07
1161	Е	11	Post-ex of the almost grassed over backfilled trenches, Trenches 96-107	12/06/07
1162	SW	11	Post-ex of the almost grassed over backfilled trenches, Trenches 114-122	12/06/07
1163	W	11	Post-ex of the almost grassed over backfilled trenches, Trenches 114-122	12/06/07
1164	NE	9	Post-ex of the almost grassed over backfilled trenches, Trenches 349-366	12/06/07
1165	NE	9	Post-ex of the almost grassed over backfilled trenches, Trenches 340-348	12/06/07
1166	Е	9	Post-ex of the almost grassed over backfilled trenches, Trenches 340-438	12/06/07
1167	NE	9	Post-ex of the almost grassed over backfilled trenches, Trenches 350-365	12/06/07
1168	SW	8	Post-ex of the almost grassed over backfilled trenches, Trenches 375-407	12/06/07
1169	NW	8	Post-ex of the almost grassed over backfilled trenches, Trenches 350-365	12/06/07
1170	S	9	Post-ex of the almost grassed over backfilled trenches, Trenches 340-348	12/06/07

1171	SW	8	Post-ex of the almost grassed over backfilled trenches, Trenches 375-407	12/06/07
1172	S	9	Post-ex of the almost grassed over backfilled trenches,	12/06/07
		10	Trenches 307-339	
1173	E	19	West facing section of Test Pit 634	14/06/07
1174	E	19	West facing section of Test Pit 637	14/06/07
1175	N	37	South facing section of Test Pit 827	14/06/07
1176	E	37	Post-ex view of backfilled test pits with turf replaced	14/06/07
1177	E	37	Post-ex view of backfilled Test Pit 827	14/06/07
1178	E	37	Post-ex view of backfilled Test Pit 825	14/06/07
1179	W	16	Post-ex view of backfilled trench along the southern margins of the parcel	14/06/07
1180	NE	16	Post-ex view of backfilled trench along the southern margins of the parcel	14/06/07
1181	W	19	Post-ex view of the backfilled test pits	14/06/07
1182	NE	19	Post-ex view of the backfilled test pits	14/06/07
1183	S	13	Post-ex view of the backfilled trenches	14/06/07
1184	W	13	Post-ex view of the backfilled trenches	14/06/07
1185	Е	13	Post-ex view of the backfilled trenches	14/06/07
				, , , , ,
2000	SW	11	View of repaired field drain, Trench 34	03/04/07
2001	W	11	View of repaired field drain, Trench 34	03/04/07
2002	N	11	View of repaired field drain, Trench 35	03/04/07
2003	N	11	View of repaired field drain, Trench 35	03/04/07
2004	S	11	View of repaired field drain, Trench 36	03/04/07
2005	N	11	View of repaired field drain, Trench 36	03/04/07
2006	N	11	View of repaired field drain, Trench 36	03/04/07
2007	SE	11	View of repaired field drain, Trench 36	03/04/07
2007	E	11	•	03/04/07
2009	NE	11	View of repaired field drain, Trench 37	
		11	View of repaired field drain, Trench 28	03/04/07
2010	NE		View of repaired field drain, Trench 28	03/04/07
2011	NE	11	View of repaired field drain, Trench 28	03/04/07
2012	NE	11	View of repaired field drain, Trench 28	03/04/07
2013	NE	11	View of repaired field drain, Trench 28	03/04/07
2014	SW	11	View of repaired field drain, Trench 23	03/04/07
2015	SW	11	View of repaired field drain, Trench 23	03/04/07
2016	SW	11	View of repaired field drain, Trench 24	03/04/07
2017	NE	11	Pre-ex view towards the north-east margins showing	04/04/07
****			Norwest Holst test pits, Trenches 59-63	2.12.12
2018	S	11	Pre-ex view towards the margins showing Norwest Holst	04/04/07
2010			test pits, Trenches 59-63	0.4.10.4.10=
2019	Е	11	Pre-ex view towards the east margin and the fenced off gas mains, Trenches 59-63	04/04/07
2020	E	11	Pre-ex view of existing tracks in the field, Trenches 59-63	04/04/07
2021	S	11	Mid-ex view of open trenches, Trenches 59-63	04/04/07
2022	S	11	View of repaired field drain, Trench 31	05/04/07
2023	NW	11	View of repaired field drain, Trench 32	05/04/07
2024	NW	11	View of repaired field drain, Trench 32	05/04/07
2025	S	11	View of repaired field drain, Trench 228	05/04/07
2026	S	11	View of repaired field drain, Trench 228	05/04/07
2027	S	11	View of repaired field drain, Trench 228	05/04/07
2028	S	11	View of repaired field drain, Trench 26	05/04/07
2029	S	11	View of repaired field drain, Trench 26	05/04/07
2030	S	11	View of repaired field drain, Trench 26	05/04/07
2031	Е	11	View of repaired field drain, Trench 22	05/04/07
2032	NE	11	View of repaired field drain, Trench 22	05/04/07

2033	N	11	View of renaised field drain Trench 22	05/04/07
2033	N	11	View of repaired field drain, Trench 23 View of repaired field drain, Trench 23	05/04/07
2035	N	11	View of repaired field drain, Trench 23	05/04/07
2036	N	11	•	05/04/07
2037	N	11	View of repaired field drain, Trench 23 View of repaired field drain, Trench 23	05/04/07
2037	N	11	View of repaired field drain, Trench 23	05/04/07
	W		1	+
2039	-	11	View of repaired field drain, Trench 20	05/04/07
2040	NE S	11	View of repaired field drain, Trench 20	05/04/07
2041		11	View of repaired field drain, Trench 18	05/04/07
2042	S	11	View of repaired field drain, Trench 18	05/04/07
2043	S	11	View of repaired field drain, Trench 18	05/04/07
2044	S S	11	View of repaired field drain, Trench 18	05/04/07
2045		11	View of repaired field drain, Trench 18	05/04/07
2046	S	11	View of repaired field drain, Trench 27	05/04/07
2047	S	11	View of repaired field drain, Trench 27	05/04/07
2048	S	11	View of repaired field drain, Trench 27	05/04/07
2049	S	11	View of repaired field drain, Trench 27	05/04/07
2050	S	11	View of repaired field drain, Trench 30	05/04/07
2051	S	11	View of repaired field drain, Trench 30	05/04/07
2052	S	11	View of repaired field drain, Trench 30	05/04/07
2053	S	11	View of repaired field drain, Trench 30	05/04/07
2054	S	11	View of repaired field drain, Trench 30	05/04/07
2055	S	11	View of repaired field drain, Trench 30	05/04/07
2056	N	11	View of repaired field drain, Trench 26	05/04/07
2057	N	11	View of repaired field drain, Trench 26	05/04/07
2058	N	11	View of repaired field drain, Trench 26	05/04/07
2059	N	11	View of repaired field drain, Trench 26	05/04/07
2060	N	11	View of repaired field drain, Trench 26	05/04/07
2061	NW	11	Post-ex view of backfilled trenches towards the river at the	09/04/07
			northern boundary, Trenches 1-5	
2062	N	11	Post-ex view of backfilled trenches towards the river at the	09/04/07
			northern boundary, Trenches 1-5	
2063	SW	11	Post-ex view of backfilled trenches towards the raised bog	09/04/07
			at the western boundary, Trenches 1-5	
2064	S	11	Post-ex view of the backfilled trenches upslope towards the	09/04/07
			old quarry, Trenches 1-5	
2065	SE	11	Post-ex view of backfilled trenches showing machine tracks	09/04/07
			left in the wet ground, Trenches 1-5	
2066	SE	11	Post-ex view of backfilled trenches showing machine tracks	09/04/07
			left in the wet ground, Trenches 7-37	
2067	SE	11	Post-ex view of backfilled trenches showing main access	09/04/07
			tracks across the parcel, Trenches 7-37	
2068	NE	11	Post-ex view of backfilled trenches showing main access	09/04/07
			tracks across the parcel, Trenches 7-37	
2069	SE	11	Post-ex view of backfilled trenches towards the river at the	09/04/07
			north-eastern boundary, Trenches 7-37	
2070	E	11	Post-ex view of backfilled trenches towards the drainage	09/04/07
			ditch at the southern boundary, Trenches 7-37	
2071	W	11	Post-ex view of backfilled trenches towards the hedgerow	09/04/07
			the western boundary, Trenches 7-37	
2072	SW	11	Post-ex view of backfilled trenches towards the drainage	09/04/07
			ditch at the southern boundary, Trenches 7-37	
2073	W	11	Post-ex view of backfilled trenches towards the hedgerow	09/04/07
			the western boundary, Trenches 7-37	
2074	NW	11	Post-ex view of backfilled trenches towards the hedgerow	09/04/07
			the western boundary, Trenches 7-37	
2075	SE	10(W)	Pre-ex view of trampled and eroded ground at the western	10/04/07

			margins of the parcel Trenches 274-287	
2076	S	10(W)	Pre-ex view of trampled and eroded ground at the western	10/04/07
			margins of the parcel Trenches 274-287	
2077	E	10(W)	Pre-ex view of the road corridor marked out with canes,	10/04/07
			Trenches 274-287	
2078	S	10(W)	Pre-ex view of the edge of the road corridor, marked with	10/04/07
			canes, and rough ground of the parcel, Trenches 274-287	
2079	SE	10(W)	Pre-ex view of the flat boggy ground covered with tufted	10/04/07
•		10.717	rushes in this part of the parcel. Trenches 274-287	10/01/05
2080	NE	10(W)	Pre-ex view of barbed wire fence which crosses the parcel,	10/04/07
2001	E	10(147)	Trenches 274-287	10/04/07
2081	E	10(W)	Pre-ex view of the flat boggy ground covered with tufted	10/04/07
2002	NE	10(147)	rushes in this part of the parcel, Trenches 274-287	10/04/07
2082	INE	10(W)	Pre-ex view of barbed wire fence and drainage ditch along	10/04/07
2002	-	10(147)	the NE boundary of the parcel, Trenches 274-287	10/04/07
2083	S	10(W)	Pre-ex view of the raised ground towards the south covered	10/04/07
2004	SW	10(147)	in gorse bushes, Trenches 274-287	10/04/07
2084	300	10(W)	Pre-ex view of the road corridor, marked with canes in the	10/04/07
2005	147	10(147)	boggy ground of the parcel, Trenches 274-287	10/04/07
2085	W	10(W)	Pre-ex view of the flat boggy ground covered with tufted rushes in this part of the parcel. Trenches 274-287	10/04/07
2086	Е	10(W)		10/04/07
2000	l E	10(77)	Pre-ex view of the flat rough grazing ground in this part of the parcel, Trenches 274-287	10/04/07
2087	NW	10(W)	Pre-ex view of trampled and eroded ground at the western	10/04/07
2007	INVV	10(77)	margins of the parcel Trenches 274-287	10/04/07
2088	N	10(W)	Pre-ex view of the flat rough grazing ground in this part of	10/04/07
2000	1	10(**)	the parcel, Trenches 274-287	10/04/07
2089	Е	10(W)	Pre-ex view of the flat rough grazing ground in this part of	10/04/07
2007	l E	10(**)	the parcel, Trenches 274-287	10/04/07
2090	SE	10(W)	Pre-ex view of the flat rough grazing ground in this part of	10/04/07
2070	J.L	10(**)	the parcel, Trenches 274-287	10/04/07
2091	SE	10(W)	Pre-ex view of the flat rough grazing ground in this part of	10/04/07
2071		10(11)	the parcel, Trenches 274-287	10/01/07
2092	Е	10(W)	Pre-ex view of the flat boggy ground covered with tufted	10/04/07
		()	rushes in this part of the parcel. Trenches 274-287	
2093	W	10(W)	Pre-ex view of the flat boggy ground covered with tufted	10/04/07
		, ,	rushes in this part of the parcel. Trenches 274-287	, ,
2094	Е	10(W)	Pre-ex view of the road corridor, marked with canes in the	10/04/07
			boggy ground of the parcel, Trenches 274-287	.,.,.
2095	SW	10(W)	Pre-ex view of the boggy ground to the north of the farm	10/04/07
		,	track, used as access, Trenches 255-273	, ,
2096	S	10(W)	Pre-ex view of the boggy ground to the north of the farm	10/04/07
		, ,	track, used as access, Trenches 255-273	
2097	NW	10(W)	Pre-ex view of the boggy ground to the north of the farm	10/04/07
		, ,	track, used as access, Trenches 255-273	
2098	NE	10(W)	Pre-ex view of the boggy ground to the north of the farm	10/04/07
			track, used as access, Trenches 255-273	
2099	NW	10(W)	View of repaired field drain, Trench 276	11/04/07
2100	NW	10(W)	View of repaired field drain, Trench 276	11/04/07
2101	NE	10(W)	View of repaired field drain, Trench 279	11/04/07
2102	NE	10(W)	View of repaired field drain, Trench 279	11/04/07
2103	NE	10(W)	View of repaired field drain, Trench 279	11/04/07
2104	NE	10(W)	View of repaired field drain, Trench 279	11/04/07
2105	Е	10(W)	View of repaired field drain, Trench 278	11/04/07
2106	Е	10(W)	View of repaired field drain, Trench 278	11/04/07
2107	Е	10(W)	View of repaired field drain, Trench 278	11/04/07
2108	Е	10(W)	View of repaired field drain, Trench 278	11/04/07

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2109	E	10(W)	View of repaired field drain, Trench 278	11/04/07
2110	E	10(W)	View of repaired field drain, Trench 278	11/04/07
2111	E	10(W)	View of repaired field drain, Trench 278	11/04/07
2112	W	10(W)	View of repaired field drain, Trench 285	12/04/07
2113	W	10(W)	View of repaired field drain, Trench 285	12/04/07
2114	W	10(W)	View of repaired field drain, Trench 285	12/04/07
2115	W	10(W)	View of repaired field drain, Trench 285	12/04/07
2116	S	10(W)	View of repaired field drain, Trench 282	12/04/07
2117	S	10(W)	View of repaired field drain, Trench 282	12/04/07
2118	S	10(W)	View of repaired field drain, Trench 282	12/04/07
2119	S	10(W)	View of repaired field drain, Trench 282	12/04/07
2120	S	10(W)	View of repaired field drain, Trench 282	12/04/07
2121	S	10(W)	View of repaired field drain, Trench 282	12/04/07
2122	S	10(W)	View of repaired field drain, Trench 282	12/04/07
2123	S	10(W)	View of repaired field drain, Trench 282	12/04/07
2124	W	10(W)	View of repaired field drain, Trench 281	12/04/07
2125	W	10(W)	View of repaired field drain, Trench 281	12/04/07
2126	W	10(W)	View of repaired field drain, Trench 281	12/04/07
2127	W	10(W)	View of repaired field drain, Trench 281	12/04/07
2128	Е	10(W)	View of repaired field drain, Trench 281	12/04/07
2129	Е	10(W)	View of repaired field drain, Trench 281	12/04/07
2130	Е	10(W)	View of repaired field drain, Trench 281	12/04/07
2131	Е	10(W)	View of repaired field drain, Trench 281	12/04/07
2132	S	10(W)	View of repaired field drain, Trench 282	12/04/07
2133	S	10(W)	View of repaired field drain, Trench 282	12/04/07
2134	N	10(W)	View of repaired field drain, Trench 283	12/04/07
2135	N	10(W)	View of repaired field drain, Trench 283	12/04/07
2136	N	10(W)	View of repaired field drain, Trench 283	12/04/07
2137	N	10(W)	View of repaired field drain, Trench 283	12/04/07
2138	N	10(W)	View of repaired field drain, Trench 283	12/04/07
2139	N	10(W)	View of repaired field drain, Trench 283	12/04/07
2140	NW	10(W)	View of repaired field drain, Trench 283	12/04/07
2141	NW	10(W)	View of repaired field drain, Trench 283	12/04/07
2142	SE	10(W)	View of repaired field drain, Trench 278	12/04/07
2143	SE	10(W)	View of repaired field drain, Trench 278	12/04/07
2144	SE	10(W)	View of repaired field drain, Trench 278	12/04/07
2145	SE	10(W)	View of repaired field drain, Trench 278	12/04/07
2146	SE	10(W)	View of repaired field drain, Trench 278	12/04/07
2147	SE	10(W)	View of repaired field drain, Trench 278	12/04/07
2148	SE	10(W)	View of repaired field drain, Trench 278	12/04/07
2149	SE	10(W)	View of repaired field drain, Trench 278	12/04/07
2150	SE	` ′	1	
2150	SE	10(W) 10(W)	View of repaired field drain, Trench 278 View of repaired field drain, Trench 278	13/04/07 13/04/07
2151	SE	· /	View of repaired field drain, Trench 278 View of repaired field drain, Trench 278	
	-	10(W)	1	13/04/07
2153	SE	10(W)	View of repaired field drain, Trench 278	13/04/07
2154	NE NE	10(W)	View of repaired field drain, Trench 278	13/04/07
2155	NE	10(W)	View of repaired field drain, Trench 278	13/04/07
2156	VOID	10/147	View of remained field dusing Trans. It 274	13/04/07
2157	SE	10(W)	View of repaired field drain, Trench 274	13/04/07
2158	SE	10(W)	View of repaired field drain, Trench 274	13/04/07
2159	SE	10(W)	View of repaired field drain, Trench 274	13/04/07
2160	NW	10(W)	View of repaired field drain, Trench 282	13/04/07
2161	SE	10(W)	View of repaired field drain, Trench 278	13/04/07
2162	SE	10(W)	View of repaired field drain, Trench 274	13/04/07
2163	SE	10(W)	View of repaired field drain, Trench 274	13/04/07
2164	SE	10(W)	View of repaired field drain, Trench 274	13/04/07

2165	CE	10(147)	View of remained field duain. Themsh 274	13/04/07
2165 2166	SE S	10(W) 10(W)	View of repaired field drain, Trench 274 View of repaired field drain, Trench 274	13/04/07
2167	S	10(W)	View of repaired field drain, Trench 278	13/04/07
2167	SE	` '	View of repaired field drain, Trench 278	13/04/07
2169	NE NE	10(W)	View of repaired field drain, Trench 278	
2170		10(W)	1	13/04/07
	NW	10(W)	View of repaired field drain, Trench 278	13/04/07
2171	NW	10(W)	View of repaired field drain, Trench 268	16/04/07
2172	NW	10(W)	View of repaired field drain, Trench 268	16/04/07
2173	N	10(W)	View of repaired field drain, Trench 271	16/04/07
2174	E	9	View of repaired field drain, Trench 312	17/04/07
2175	NE -	9	View of repaired field drain, Trench 312	17/04/07
2176	E	9	View of repaired field drain, Trench 312	17/04/07
2177	W	8	View of open trenches, south of the river	17/04/07
2178	S	9	View of repaired field drain, Trench 307	17/04/07
2179	S	9	View of repaired field drain, Trench 307	17/04/07
2180	S	9	View of repaired field drain, Trench 307	17/04/07
2181	S	9	View of repaired field drain, Trench 307	17/04/07
2182	N	9	View of repaired field drain, Trench 316	18/04/07
2183	N	9	View of repaired field drain, Trench 316	18/04/07
2184	N	9	View of repaired field drain, Trench 316	18/04/07
2185	N	9	View of repaired field drain, Trench 316	18/04/07
2186	N	9	View of repaired field drain, Trench 316	18/04/07
2187	N	9	View of repaired field drain, Trench 316	18/04/07
2188	N	9	View of repaired field drain, Trench 316	18/04/07
2189	SW	9	View of repaired field drain, Trench 308	18/04/07
2190	SW	9	View of repaired field drain, Trench 308	18/04/07
2191	SW	9	View of repaired field drain, Trench 308	18/04/07
2192	N	9	View of repaired field drain, Trench 307	18/04/07
2193	N	9	View of repaired field drain, Trench 310	18/04/07
2194	NW	9	View of repaired field drain, Trench 310	18/04/07
2195	NW	9	View of repaired field drain, Trench 311	18/04/07
2196	NW	9	View of repaired field drain, Trench 311	18/04/07
2197	NW	9	View of repaired field drain, Trench 311	18/04/07
2198	NW	9	View of repaired field drain, Trench 311	18/04/07
2199	NW	9	View of repaired field drain, Trench 311	18/04/07
2200	Е	9	View of repaired field drain, Trench 307	18/04/07
2201	S	9	View of repaired field drain, Trench 307	18/04/07
2202	NE	9	View of repaired field drain, Trench 318	18/04/07
2203	NE	9	View of repaired field drain, Trench 318	18/04/07
2204	NE	9	View of repaired field drain, Trench 318	18/04/07
2205	SE	9	View of repaired field drain, Trench 319	18/04/07
2206	W	9	View of repaired field drain, Trench 319	18/04/07
2207	W	9	View of repaired field drain, Trench 319	18/04/07
2208	W	9	View of repaired field drain, Trench 319	18/04/07
2209	SW	9	View of repaired field drain, Trench 338	18/04/07
2210	SE	9	View of repaired field drain, Trench 338	18/04/07
2210	SE	9	View of repaired field drain, Trench 318	18/04/07
2211	W	9	View of repaired field drain, Trench 313	18/04/07
2212	W	9	View of repaired field drain, Trench 313	18/04/07
2214	W	9	View of repaired field drain, Trench 314	18/04/07
2214	N	9	View of repaired field drain, Trench 314 View of repaired field drain, Trench 314	18/04/07
2216	SW	11	Post-ex view of backfilled trenches towards the gas mains at	18/04/07
2210	300	111	the western boundary, Trenches 73-77	10/04/0/
2217	W	11		18/04/07
ZZ1/	l vv	11	Post-ex view of backfilled trenches towards the gas mains at	10/04/0/
2210	NIVA7	11	the western boundary, Trenches 73-77	10/04/07
2218	NW	11	Post-ex view of backfilled trenches towards the gas mains at	18/04/07

			the western boundary, Trenches 73-77	
2219	N	11	Post-ex view of backfilled trenches, Trenches 73-77	18/04/07
2220	N	11	Post-ex view of backfilled trenches, Trenches 59-63	18/04/07
2221	NW	11	Post-ex view of backfilled trenches towards the hedgerows	18/04/07
			of the northern and western boundaries, Trenches 59-63	20,02,01
2222	NW	11	Post-ex view of the backfilled trenches between the western	18/04/07
			boundary and the gas mains, Trenches 41-45	10,01,01
2223	N	11	Post-ex view of the backfilled trenches between the western	18/04/07
2220		111	boundary and the gas mains, Trenches 41-45	10/04/07
2224	NW	11	Post-ex view of the backfilled trenches between the western	18/04/07
2221	1477	111	boundary and the gas mains, Trenches 41-45	10/04/07
2225	N	11	Post-ex view of the backfilled trenches between the eastern	18/04/07
2223	1	111	boundary and the gas mains, Trenches 78-94	10/04/07
2226	NE	11	Post-ex view of the backfilled trenches between the eastern	18/04/07
2220	INE	11	boundary and the gas mains, Trenches 78-94	10/04/07
2227	E	11	Post-ex view of the backfilled trenches between the eastern	18/04/07
2221	E	111		10/04/07
2220	N	11	boundary and the gas mains, Trenches 78-94	10/04/07
2228	1	111	Post-ex view of backfilled trenches towards the river, Trenches 96-107	18/04/07
2229	NW	11		10/04/07
2229	INVV	11	Post-ex view of tracks in area used for parking, Trenches 96-	18/04/07
2220	CIAI	11	107	10/04/07
2230	SW	11	Post-ex view of tracks in area used for parking, Trenches 96-	18/04/07
2224	OF.	44	107	10/04/05
2231	SE	11	Post-ex view of backfilled trenches, Trenches 96-107	18/04/07
2232	S	11	Post-ex view of tracks in area used for parking, Trenches 96-	18/04/07
2222	2.75	44	107	10/01/05
2233	NE	11	Post-ex view of the backfilled trenches along the boundary	18/04/07
			of the scheduled area, Trenches 108-112	
2234	SE	11	Post-ex view of the backfilled trenches between the	18/04/07
			southern boundary of the parcel and the scheduled area,	
2225	***	44	Trenches 108-112	10/01/05
2235	W	11	Post-ex view of the backfilled trenches between the	18/04/07
			southern boundary of the parcel and the scheduled area,	
			Trenches 108-112	
2236	S	11	Post-ex view of backfilled Trench 108, between the drainage	18/04/07
			ditch at the northern boundary of the field and the	
	0.0717		scheduled area	
2237	SSW	11	Post-ex view of the backfilled trenches north of the Luggie	18/04/07
	07.17		Water, Trenches 113-122	
2238	SW	11	Post-ex view of the backfilled trenches north of the Luggie	18/04/07
	07.17		Water, Trenches 113-122	
2239	SW	11	Post-ex view of the backfilled trenches north of the Luggie	18/04/07
			Water, Trenches 113-122	
2240	S	9	View of repaired field drain, Trench 361	19/04/07
2241	S	9	View of repaired field drain, Trench 361	19/04/07
2242	SW	9	View of repaired field drain, Trench 337	19/04/07
2243	SW	9	View of repaired field drain, Trench 337	19/04/07
2244	SW	9	View of repaired field drain, Trench 337	19/04/07
2245	SW	9	View of repaired field drain, Trench 337	19/04/07
2246	SW	9	View of repaired field drain, Trench 337	19/04/07
2247	S	9	View of repaired field drain, Trench 339	19/04/07
2248	N	9	View of repaired field drain, Trench 339	19/04/07
2249	S	9	View of repaired field drain, Trench 336	19/04/07
	1		V. (: 10 11 1 : T 1 224	10/04/07
2250	N	9	View of repaired field drain, Trench 336	19/04/07
2250 2251	N S	9	View of repaired field drain, Trench 336 View of repaired field drain, Trench 334	19/04/07
		-	-	

2254	W	9	View of repaired field drain, Trench 333	19/04/07
2255	NE	10(E)	Post-ex view of the backfilled trenches, Trenches 186-219	20/04/07
2256	NW	10(E)	Post-ex view of the backfilled trenches, Trenches 186-219	20/04/07
2257	W	10(E)	Post-ex view of the backfilled trenches, Trenches 186-219	20/04/07
2258	N	10(E)	Post-ex view of the backfilled trenches, Trenches 186-219	20/04/07
2259	Е	4	Pre-ex view of farm gate and farm track used for access into	23/04/07
			the parcel	, ,
2260	NE	4	Pre-ex view of wet ground at the gate area	23/04/07
2261	N	4	Pre-ex view along the access track	23/04/07
2262	N	4	Pre-ex view along the access track showing a wooden gate	23/04/07
2263	S	4	Pre-ex view down the western boundary of the parcel,	23/04/07
			showing bumpy, rough grasses	
2264	W	9 & 10	Pre-ex view of tracked ground and the broken fence at the	24/04/07
	, ,		access point from the road into Parcels 8 & 9	,,
2265	W	9 & 10	Pre-ex view of the broken fence at the access point from the	24/04/07
	, ,		road into Parcels 8 & 9	,,
2266	W	9 & 10	Pre-ex view of the broken fence at the access point from the	24/04/07
			road into Parcels 8 & 9	, - , -
2267	Е	9 & 10	Pre-ex view of tracked ground and the broken fence at the	24/04/07
			access point from the road into Parcels 8 & 9	, , , ,
2268	S	9 & 10	Pre-ex view a fence at the access point into the fields of	24/04/07
			Parcels 8 & 9	, ,
2269	N	9	Pre-ex view of E-W bank across the lower slope, Trenches	26/04/07
			296-306	, , , ,
2270	NW	9	Pre-ex view of E-W bank across the lower slope, Trenches	26/04/07
			296-306	, ,
2271	Е	9	Pre-ex view of E-W bank across the lower slope, Trenches	26/04/07
			296-306	
2272	Е	9	Working shot of open trenches, Trenches 296-306	26/04/07
2273	SE	9	Working shot of open trenches, Trenches 296-306	26/04/07
2274	NW	9	Working shot of open trenches, Trenches 296-306	26/04/07
2275	NW	9	View of repaired field drain, Trench 297	26/04/07
2276	SW	9	View of road surface [2127] in Trench 300	26/04/07
2277	NW	9	View of repaired field drain, Trench 296	26/04/07
2278	N	9	View of repaired field drain, Trench 298	26/04/07
2279	NE	9	View of short brick wall [2115], Trench 301	26/04/07
2280	NE	9	View of short brick wall [2116], Trench 301	26/04/07
2281	NE	9	View of short brick wall [2117], Trench 301	26/04/07
2282	NE	9	View of short brick wall [2118], Trench 301	26/04/07
2283	Е	9	View of concrete surface [2119], Trench 301	26/04/07
2284	W	9	View of short brick wall [2120], Trench 301	26/04/07
2285	N	9	View of short brick wall [2121] Trench 301	26/04/07
2286	N	9	View of short brick wall [2122] Trench 301	26/04/07
2287	W	9	View of short brick wall [2123] Trench 301	26/04/07
2288	N	9	View of short brick wall [2124] Trench 301	26/04/07
2289	SW	9	View of short brick wall [2125] Trench 301	26/04/07
2290	NE	9	View of iron railings [2126] Trench 301	26/04/07
2291	N	9	Post-ex view of backfilled trenches south of the houses,	26/04/07
	- '		Trenches 296-306	
2292	S	10(E)	Pre-ex view of the sloping ground of the parcel, showing	26/04/07
-		-5(2)	old track marks	,,
2293	W	10(E)	Pre-ex, east field	26/04/07
2294	E	10(E)	Pre-ex, East field	26/04/07
2295	W	10(E)	Repaired field drain, Trench 219	26/04/07
2296	W	10(E)	Repaired field drain, Trench 219	26/04/07
2297	W	10(E)	Repaired field drain, Trench 219	26/04/07
	7 7	1 10(1)	repaired neid drain, fiction 417	40/0 1 /0/

2299	W	10(E)	Repaired field drain, Trench 219	26/04/07
2300	NE	10(E)	Section 113, Feature [2131], Trench 189	26/04/07
2301	N	10(E)	Repaired field drain, Trench 187	26/04/07
2302	N	10(E)	Repaired field drain, Trench 219	26/04/07
2303	N	10(E)	Repaired field drain, Trench 219	26/04/07
2304	W	10(E)	Repaired field drain, Trench 219	27/04/07
2305	W	10(E)	Repaired field drain, Trench 219	27/04/07
2306	W	10(E)	Repaired field drain, Trench 219	27/04/07
2307	S	10(E)	Repaired field drain, Trench 193	27/04/07
2308	W	10(E)	Repaired field drain, Trench 219	27/04/07
2309	NE	7	Pre-ex view of trampled ground in SW corner of field,	04/05/07
			Trenches 713-728	0 =, 00, 01
2310	NW	7	Pre-ex view of Norwest Holst Test Pit, Trenches 696-712	04/05/07
2311	Е	7	Pre-ex view towards the woodland at the eastern boundary	04/05/07
			of the field, Trenches 713-728	, ,
2312	SE	7	Pre-ex of the sloping ground towards the south-eastern	04/05/07
			margins of the field, Trenches 713-728	
2313	SW	7	Pre-ex along the northern boundary, showing ground rising	04/05/07
			steeply to south, Trenches 696-712	
2314	W	7	Pre-ex view of old tracks, Trenches 672-695	04/05/07
2315	S	7	Pre-ex view of sloping ground, Trenches 672-695	04/05/07
2316	SE	7	Pre-ex view of trampled ground, Trenches 672-695	04/05/07
2317	W	7	Pre-ex view of sown crop and fencing marking the access	04/05/07
			route	
2318	NW	7	View of repaired field drain, Trench 488	04/05/07
2319	NW	7	View of repaired field drain, Trench 488	04/05/07
2320	NW	7	View of repaired field drain, Trench 488	04/05/07
2321	SE	7	View of repaired field drain, Trench 727	04/05/07
2322	N	7	View of repaired field drain, Trench 727	04/05/07
2323	NE	7	View of repaired field drain, Trench 727	04/05/07
2324	S	7	View of repaired field drain, Trench 728	04/05/07
2325	N	7	View of repaired field drain, Trench 728	04/05/07
2326	S	7	View of repaired field drain, Trench 728	04/05/07
2327	E	7	View of repaired field drain, Trench 724	07/05/07
2328	NE	7	View of repaired field drain, Trench 725	08/05/07
2329	NE	7	View of repaired field drain, Trench 726	08/05/07
2330	NE	7	View of repaired field drain, Trench 726	08/05/07
2331	SW	7	View of repaired field drain, Trench 489	08/05/07
2332	NE	7	View of repaired field drain, Trench 489	08/05/07
2333	NE	7	View of repaired field drain, Trench 489	08/05/07
2334	NE	7	South East facing section of Trench 726 showing band of	08/05/07
			peat	
2335	NE	7	South East facing section of Trench 726 showing band of	08/05/07
2021	0.5		peat	00/2=:
2336	SE	7	View of repaired field drain, Trench 713	08/05/07
2337	W	7	View of repaired field drain, Trench 713	08/05/07
2338	S	7	View of repaired field drain, Trench 713	08/05/07
2339	N	7	View of repaired field drain, Trench 713	08/05/07
2340	N	7	View of repaired field drain, Trench 713	08/05/07
2341	NW	7	Pre-ex view of gently sloping ground, Trenches 672-690	10/05/07
2342	N	7	Pre-ex view of gently sloping ground, Trenches 672-690	10/05/07
2343	NW	7	Pre-ex view of Norwest Holst Test pitting, Trenches 672-690	10/05/07
2344	S	7	Pre-ex view towards road at south-west boundary, Trenches 672-690	10/05/07
2345	SW	7	Pre-ex, view towards burn along the western boundary,	10/05/07
			Trenches 672-690	

2346	W	7	Pre-ex view towards road, with the open trenches of Parcel	10/05/07
2340	l vv	/	6 in the background, Trenches 672-690	10/03/07
2347	NW	7	Post-ex view of backfilled trenches, Trenches 713-728	10/05/07
2348	NE	7	Post-ex view of backfilled trenches, Trenches 713-728	10/05/07
2349	N	7	Post-ex view of backfilled trenches, Trenches 713-728	10/05/07
2350	W	7	Possible burnt feature, Trench 679	10/05/07
2351	Е	15	View of repaired field drain, Trench 522	11/05/07
2352	SE	15	View of deep peat, Trench 555	11/05/07
2353	NE	15	View of deep peat, Trench 555	11/05/07
2354	SE	15	View of repaired field drain, Trench 554	11/05/07
2355	SE	15	View of repaired field drain, Trench 554	11/05/07
2356	SE	15	View of repaired field drain, Trench 554	11/05/07
2357	SE	15	View of repaired field drain, Trench 554	11/05/07
2358	SE	15	View of repaired field drain, Trench 554	11/05/07
2359	SE	15	View of repaired field drain, Trench 554	11/05/07
2360	VOID			11/05/07
2361	VOID			11/05/07
2362	SE	15	View of repaired field drain, Trench 554	11/05/07
2363	SE	15	View of repaired field drain, Trench 554	11/05/07
2364	SE	15	View of repaired field drain, Trench 554	11/05/07
2365	NE	15	View of repaired field drain, Trench 555	11/05/07
2366	SE	15	View of repaired field drain, Trench 555	11/05/07
2367	SE	15	View of repaired field drain, Trench 555	11/05/07
2368	SE	15	View of repaired field drain, Trench 555	11/05/07
2369	SE	15	View of repaired field drain, Trench 555	11/05/07
2370	NW	15	View of repaired field drain, Trench 556	11/05/07
2371	NW	15	View of repaired field drain, Trench 556	11/05/07
2372	NW	15	View of repaired field drain, Trench 556	11/05/07
2373	VOID			11/05/07
2374	NW	15	View of repaired field drain, Trench 556	11/05/07
2375	NW	15	View of repaired field drain, Trench 556	11/05/07
2376	W	15	View of repaired field drain, Trench 557	11/05/07
2377	NW	15	View of repaired field drain, Trench 559	11/05/07
2378	S	6	Post-ex view of backfilled trenches in the barley towards the road	11/05/07
2379	N	6	Post-ex view of backfilled trenches on the flatter ground at the base of slope	11/05/07
2380	W	6	Post-ex view of the trenches extended towards the eastern	11/05/07
			boundary	
2381	E	6	Post-ex view of backfilled trenches crossing the in-use	11/05/07
			drainage ditch	
2382	S	6	Post-ex view of backfilled trenches along the flat middle part of the field	11/05/07
2383	SW	6	Post-ex view of backfilled trenches along the sloping ground towards the SW corner of the field	11/05/07
2384	Е	6	Post-ex view of backfilled trenches down the northern	11/05/07
			boundary of the parcel, with the open trenches of Parcel 7 in the background	
2385	Е	15	View of repaired field drain, Trench 565	15/05/07
2386	E	15	View of repaired field drain, Trench 565	15/05/07
2387	E	15	View of repaired field drain, Trench 565	15/05/07
2388	E	15	View of repaired field drain, Trench 565	15/05/07
2389	E	15	View of repaired field drain, Trench 565	15/05/07
2390	E	15	View of repaired field drain, Trench 565	15/05/07
2391	S	14	View of repaired field drain, Trench 601	15/05/07
2392	S	14	View of repaired field drain, Trench 601	15/05/07

2393	S	14	View of repaired large field drain, Trench 601	17/05/07
2394	S	14	View of repaired farge field drain, Trench 618	18/05/07
2395	S	14	View of repaired field drain, Trench 618	18/05/07
2396	S	14	•	
2396	S		View of repaired field drain, Trench 618	18/05/07
	S	14	View of repaired field drain, Trench 618	18/05/07
2398		14	View of repaired field drain, Trench 618	18/05/07
2399	S	14	View of repaired field drain, Trench 618	18/05/07
2400	SW	14	View of repaired field drain, Trench 613	24/05/07
2401	W	14	View of repaired field drain, Trench 613	24/05/07
2402	N	14	View of repaired field drain, Trench 613	24/05/07
2403	SW	14	View of repaired field drain, Trench 613	24/05/07
2404	NE	14	View of repaired field drain, Trench 603	24/05/07
2405	SW	14	View of repaired field drain, Trench 603	24/05/07
2406	N	14	View of repaired field drain, Trench 603	24/05/07
2407	S	14	View of repaired field drain, Trench 603	24/05/07
2408	N	14	View of repaired field drain, Trench 603	24/05/07
2409	N	14	View of repaired field drain, Trench 603	24/05/07
2410	E	14	View of repaired field drain, Trench 604	24/05/07
2411	E	14	View of repaired field drain, Trench 604	24/05/07
2412	E	14	View of repaired field drain, Trench 604	24/05/07
2413	E	14	View of repaired field drain, Trench 604	24/05/07
2414	E	14	View of repaired field drain, Trench 604	24/05/07
2415	E	14	View of repaired field drain, Trench 604	24/05/07
2416	Е	14	View of repaired field drain, Trench 604	24/05/07
2417	Е	14	View of repaired field drain, Trench 604	24/05/07
2418	Е	14	View of repaired field drain, Trench 607	24/05/07
2419	Е	14	View of repaired field drain, Trench 608	24/05/07
2420	S	14	Post-ex view of backfilled trenches towards the north-	24/05/07
			western margins of the parcel	
2421	W	14	Post-ex view of backfilled trenches towards the south-	24/05/07
			western margins of the parcel	
2422	N	14	Post-ex view of backfilled trenches towards the north-	24/05/07
			eastern margins of the parcel	
2423	Е	38	View of repaired field drain, Trench 833	29/05/07
2424	Е	38	View of repaired field drain, Trench 833	29/05/07
2425	SE	38	View of repaired field drain, Trench 834	29/05/07
2426	SE	38	View of repaired field drain, Trench 834	29/05/07
2427	SE	38	NE facing section of sondage at north end of Trench 834	29/05/07
2428	SE	38	NE facing section of sondage at north end of Trench 837	29/05/07
2429	N	38	View of repaired field drain, Trench 838	29/05/07
2430	W	38	View of repaired manhole cover	30/05/07
2431	N	38	View of repaired manhole cover	30/05/07
2432	Е	38	View of repaired manhole cover	30/05/07
2433	Е	38	Plan view of posthole [2143], Trench 837	30/05/07
2434	E	38	Plan view of posthole [2143], Trench 837	30/05/07
2435	SE	38	View of repaired field drain, Trench 832	30/05/07
2436	SE	38	View of repaired field drain, Trench 832	30/05/07
2437	S	38	View of repaired field drain, Trench 832	30/05/07
2438	E	38	Plan view of posthole [2143], Trench 837	30/05/07
2439	S	38	Plan view of posthole [2143], Trench 837	30/05/07
2440	S	38	Plan view of posthole [2143], Trench 837	30/05/07
2440	W	38	Post-ex view of backfilled trenches, Trenches 828-831	30/05/07
2441	S	38		
	+		Post-ex view of backfilled trenches, Trenches 828-831	30/05/07
2443	NE	38	Post-ex view of fence around location of repaired manhole, Trench 837	30/05/07
2444	N	38	Post-ex view of backfilled trenches and access tracks in the	30/05/07

			barley field, Trenches 832-841	
2445	NE	38	Post-ex view of backfilled trenches and access tracks in the	30/05/07
			barley field, Trenches 832-841	
2446	E	38	Post-ex view of the area east of access track	30/05/07
2447	S	38	Post-ex view of the area east of access track	30/05/07
2448	N	27	South facing section of Test Pit 745	31/05/07
2449	NE	28	Pre-ex view showing access over a tarmac footpath	31/05/07
2450	NE	28	Pre-ex view showing access over a tarmac footpath	31/05/07
2451	W	28	Pre-ex view of the flat landscaped ground of the parcel	31/05/07
2452	NE	28	Pre-ex view of the flat landscaped ground of the parcel	31/05/07
2453	W	28	Pre-ex view of the flat landscaped ground of the parcel	31/05/07
			either side of the tarmac foot path	
2454	Е	28	Pre-ex view of the flat landscaped ground of the parcel	31/05/07
2455	S	27	Pre-ex view of the flat landscaped ground of the parcel	31/05/07
2456	SE	27	Post-ex view of the backfilled trenches and test pits	31/05/07
2457	SE	28	NW facing section of the burnt deposit, Trench 520	31/05/07

Colour Slide and Black & White

Shot	Direction	Parcel	Description
No.	facing	No.	
1	/	/	ID Shot
2	NW	11	SE facing section through furrow [05], Trench 180
3	W	11	E facing section through furrow [06], Trench 180
4	SE	11	NW facing section through furrows [008] and [010], Trench 180
5	SW	11	NE facing section through furrow [012], Trench 180
6	SW	11	NE facing section through furrow [014], Trench 178
7	NW	11	SE facing section through furrow [016], Trench 178
8	Е	11	W facing section through furrow [018], Trench 177
9	N	11	S facing section through furrow [020], Trench 175
10	NW	11	SE facing section through furrow [021], Trench 168
11	NE	11	SW facing section of field drain [022], Trench 69
12	W	11	View of stone drain [081], Trench 153
13	N	11	View of stone drain [081], Trench 153
14	Е	11	View of natural rocky outcrop, Trench 153
15	SW	11	View of burnt deposit [084], Trench 154
16	SW	11	NE facing section of burnt deposit [084], Trench 154
17	NE	11	SW facing section of burnt deposit [084], Trench 154
18	NE	11	SW facing section of burnt deposit [084], Trench 154
19	SE	11	NW facing section of burnt deposit [084], Trench 154
20	SE	11	NW facing section of burnt deposit [084], Trench 154
21	N	11	S facing half section of posthole [042], Trench 94
22	N	11	S facing half section of posthole [042], Trench 94
23	SE	11	NW facing section of burnt clay deposit [086], Trench 154
24	SE	11	NW facing section of burnt clay deposit [086], Trench 154
25	N	11	General view of furrow [087], Trench 23
26	W	11	E facing section of furrow [087], Trench 23
27	Е	11	W facing section of furrow [087], Trench 23
28	W	11	E facing section through furrow, Trench 40
29	Е	11	W facing section of stone drain [093], Trench 16.
30	Е	11	W facing section of stone drain [093], Trench 16.
31	NE	11	SW facing section of stone drain [093], Trench 16.
32	NE	11	SW facing section of stone drain [093], Trench 16.
33	W	11	E Facing section of furrow [098], Trench 40
34	/	/	ID Shot

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	T ==	1	
35	SE	11	NW facing half section of posthole [100], Trench 22
36	SE	11	NW facing half section of posthole [100], Trench 22
37	Е	11	W facing half section of fire pit [102], Trench 31
38	E	11	W facing half section of fire pit [102], Trench 31
39	W	11	Plan view of posthole [100], Trench 22
40	W	11	Plan view of posthole [100], Trench 22
41	W	11	E facing section of field drain [106], Trench 31
42	E	11	W facing half section of fire pit [102], Trench 31
43	E	11	W facing half section of fire pit [102], Trench 31
44	W	11	Plan view of posthole [100], Trench 22
45	W	11	Plan view of posthole [100], Trench 22
46	S	11	General view of furrow, Trench 230
47	S	11	Pre-ex view of fire pit [043], Trench 114
48	S	11	Pre-ex view of fire pit [043], Trench 114
49	W	11	Pre-ex view of fire pit [043], Trench 114
50	S	11	Pre-ex view of fire pit [043], Trench 114
51	S	11	Mid-ex view of fire pit [043], Trench 114
52	S	11	Post-ex view of fire pit [043], Trench 114
53	E	11	Post-ex view of fire pit [043], Trench 114
54	W	12	General view of Trench 427
55	SW	12	NE facing section, Trench 427
56	N	8	Close view of pipe, Trench 375
57	S	8	General view of water pipe running into burn, Trench 375
58	N	11	Working shot showing hand excavation of Trench A
59	S	11	Pre-ex view of quernstone, hand dug Trench A
60	W	11	•
61	E	11	Pre-ex view of quernstone, hand dug Trench A
		-	Pre-ex view of quernstone, hand dug Trench A
62	N	11	Working shot showing hand excavation of Trench B
63	N	11	Working shot showing hand excavation of Trench A
64	N	11	Working shot showing hand excavation of Trench A
65	S	11	Working shot showing hand excavation of Trench A
66	S	11	Working shot showing hand excavation of Trench A
67	SE	11	Post-ex view of hand dug Trench B
68	SE	11	Post-ex view of hand dug Trench B
69	/	/	ID Shot
70	N	9	Working shot showing the excavation of Parcel 9
71	NE	9	Working shot showing the excavation of Parcel 9
72	S	8	Working shot showing the excavation of Parcel 8
73	S	8	Working shot showing the excavation of Parcel 8
74	E	1	W facing section of furrow [28] and field drain [29], Trench 446
75	S	1	N facing section of furrow [31] and field drain [32], Trench 446
76	S	11	Working shot showing the removal of quernstone, hand dug Trench A
77	S	11	N facing section of hand dug Trench A
78	S	11	N facing section of hand dug Trench A
79	S	11	N facing section of hand dug Trench A
80	S	3	Working shot showing the survey in the Arronhill Plantation
81	S	3	Working shot showing excavation of bank, Section 2
82	SE	3	Working shot showing excavation of bank, Section 2
83	SE	3	Working shot showing excavation of bank, Section 2
84	SE	3	View of slot through bank, Section 2
85	E	3	View of slot through bank, Section 3
86	SE	3	General view of the banks at the southern end of the wood
87	S	3	Close view of looking up external eastern bank
88	S	3	Close view of looking up external eastern bank Close view of looking up external eastern bank
89	W	7	Pre ex view of Trench 491, Knockmilly
90	W	7	·
90	VV	/	Pre ex view of Trench 491, Knockmilly

91	E	7	Pre ex view of Trench 491, Knockmilly showing L-shaped foundations
92	E	7	Pre ex view of Trench 491, Knockmilly showing L-shaped foundations
93	S	7	Pre ex view of Trench 491, Knockmilly showing stone floor
94	S	7	Pre ex view of Trench 491, Knockmilly showing stone floor
95	NW	7	SE facing section of fire pit, Trench 679
96	N	7	S facing section of fire pit, Trench 679
97	Е	7	Mid-ex view of Trench 491, Knockmilly showing boundary wall [120]
98	S	7	Mid-ex view of Trench 491, Knockmilly showing boundary wall [120]
99	W	7	E facing section of fire pit, Trench 679
100	W	7	E facing section of wall [121], Trench 491, Knockmilly
101	W	7	E facing section of wall [121], Trench 491, Knockmilly
102	Е	7	W facing section of wall [131], Trench 491, Knockmilly
103	S	7	N facing section of ditch [123], Trench 491, Knockmilly
104	N	7	S facing section of trench showing deposits (125) & (126) Trench 491
105	S	7	N facing section of trench showing (127), (124) [131], Trench 491
106	Е	7	W facing section of trench showing (127), (124) [131], Trench 491
107	S	14	Pre-ex view of burnt feature, Trench 622
108	N	14	Pre-ex view of burnt feature, Trench 622
109	NE	2	SW facing section of gully, Trench 453
110	SW	2	SW facing section of gully, Trench 453
111	Е	38	W Facing half section of pit, Trench 837
112	S	22	N facing section of Test Pit 732, showing made ground
113	NW	22	SE facing section of Test Pit 732, showing made ground
114	W	32	E facing section of gully [60], Trench 805
115	Е	32	Mid-ex view of ditch [63], Trench 805
116	N	32	S facing section of ditch [63], Trench 805
117	S	32	N facing section of ditch [63], Trench 805
118	Е	32	W facing section of Test Pit 804

Buildings Recording Photographic Register

Shot No.	Direction	Site	Description
	facing	No.	
1	N	60	East cottage, view from S
2	SW	60	East cottage, NE gable
3	SW	60	View from NE
4	W	60	West cottage, view from E
5	NE	60	West cottage, view from SW
6	E	60	West cottage, view from W
7	W	60	View from E
8	SW	60	View from NE
9	W	60	East cottage, view from E
10	NW	60	West cottage, view from SE
11	SE	60	West cottage, view of rear
12	S	60	East cottage, view of rear
13	/		ID Shot
14	E	19	Main quarry from west
15	E	19	General shots from west
16	E	19	General shots from west
17	SE	19	Main quarry from NW
18	S	19	Main quarry (S edge) from N
19	W	19	Main quarry, feature
20	W	19	View along S of track
21	W	19	View of lower platform from upper
22	NW	19	Section of walling on platform 1

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23	Е	19	Platform 1 looking to platform 2 (access to N)	
24	NW	19	View from hill at SE	
25	W	19	Trackside and hedgerows	
26	SE	19	Smaller quarries at S of track	
27	S	19	Main quarry- W face	
28	S	19	Main quarry- W face	
29	N	19	Main quarry- W face	
30	E	19	Walling on platform 1	
31	E	19	Platform 1 and possible 'edge'	
32	S	19	General Shot	
33	SW	19	General Shot	
34	S	19	Adjacent farm	

APPENDIX 2: Finds Assessment by Julie Franklin

The assemblage numbered 57 sherds of pottery, with a few pieces of metalwork, clay pipe, glass, stone and miscellaneous finds. In general they ranged in date from as early as the 16th century up to the 20th century, with the majority being towards the later end of that range, particularly the later 19th and earlier 20th centuries. Some pottery fragments were also recovered during sample processing and recorded with the retent sample results, but these were all less than 1cm in size, and are not described individually in the list below. None of these fragments (where identifiable) were earlier than 19th/20th century. The one notable exception to the general assemblage is a fragmented rotary quernstone of possible Romano-British date.

Summary of finds by Parcel and Trench

Parcel 1 - Tr.442

Eight items (marble, clay pipe & ceramics), dating to around the second half of the 19^{th} century.

Parcel 3

One pot sherd, from the 18th or 19th century.

Parcel 7 - Tr.491

This trench produced more finds than any other, particularly Context (127). All appear to be of 19th and 20th century date. The nature of these finds, domestic pottery and glassware, metal tools and dress accessories, imply nearby occupation during this period, though there is a possibility that it represents organised waste disposal from the city of Glasgow. Highlights include a complete folding knife (SF6) with decorative bone handle and a possible brass finger ring (SF7).

Parcel 8

There was only one pot sherd, but that relatively early. It is of local manufacture, and of probable 16^{th} century date.

Parcel 11 - TP39, Tr.A, 3, 13, 66, 69, 80, 113 & 114

This Parcel produced the widest variety and the widest scattering of objects, with finds from 9 different trenches and test pits, dating from possibly as early as the Roman period to the early 20th century.

The earliest was a rotary quern (SF40, Tr.A), found near to Mollins Roman Fort, just outside the scheduled area, and possibly contemporary with it.

The next finds are post-medieval, 5 sherds of pottery, dating to around the 17th century, found in Tr.13, 69, 113 and 114. Lastly there were a small number of modern finds scattered through Tr.3, 66, 69 and Test Pit 39, including clay pipes and pottery. They dated from the late 18th to at least the later 19th century. None of these later finds were found in dense enough concentrations to suggest activity any more intense than sporadic periods of agriculture in the area during the post-medieval period.

Conservation assessment & requirements

No finds require conservation.

Artefact Storage

The finds will be declared as Treasure Trove following standard procedure and will be stored on the premises of Headland Archaeology Ltd until such time as the finds are allocated to a museum or other instructions for disposal are received from the Treasure Trove Unit and/or Historic Scotland.

Finds list

Parcel	Tr.	Ctxt	SF	Material	Qty	Description	Spot Date
1	442	U/S		Ceramic	1	Marble	$L.19^{th}/$
							e.20 th
1	442	U/S		Clay Pipe	4	Bowl & stem, joining sherds,	c.1860-
						stamped design on back of bowl '-	c.1880
						ORK' (Cork), stamped stem	
						'CHRISTIE / GALLOWGATE',	
						Glasgow	
1	442	U/S		Pottery	3	2 Modern whiteware, one purple	19 th /e.20 th
						printed	
				_		1 Mod redware, slip lined	
3		115		Pottery	1	Mod redware, slip lined	18 th /19 th
7	491	122		Glass	2	Window & bottle, thick window	L.19th/20th
						sherd, bottle fragment	
7	491	122		Plastic	1	Flat, red	L.20 th /
							e.21 st
7	491	122		Pottery	15	12 Mod whiteware, blue & black	L.18 th -20 th
						printed, sponged, pink glazed	
						saucer, bowls	
				_		3 Mod stoneware	
7	491	124		Pottery	1	Mod whiteware, printed	19 th /20 th
7	491	126		CBM	1	Drain pipe, stoneware	19 th /20 th
7	491	126		CBM	1	Brick, large corner sherd, buff with	m.19 th /
						black core, coarse fabric, firebrick?	$m.20^{th}$
					-	T.79mm	
7	491	126		Fe	1	Object, small rectangular sectioned	
						bar	
7	491	126		Glass	2	Vessel & window, thick window	$19^{th}/20^{th}$
_					<u> </u>	sherd, stemmed glass base	
7	491	126		Pottery	4	1 Mod whiteware	$19^{th}/20^{th}$
						1 Mod Porcelain tea cup base	
						1 Mod redware ?casserole	
_	104	407		CI D'	2	1 Mod stoneware	4004 000
7	491	127		Clay Pipe	2	Stems, one mouthpiece, one bowl	19 th /e.20 th
						end with no heel, unglazed, narrow	
7	101	107	_	- C	- 1	bore	
7	491	127	7	Си	1	Ring (finger ring?). Small ring,	
	1					25mm diam, in three pieces, with	
						small section missing. Sub-	
7	101	107	1	Γ.	1	triangular section with flat interior.	19 th /20 th
7	491	127	4	Fe	1	Nail, small round head, machine made?	19"'/20"
7	101	107	-	Γ.	1		
7	491	127	5	Fe	1	Object, linear, wider at one end.	
				l		Possibly a key or nail.	

Material Parcel Tr. Ctxt SF Qty Description Spot Date 491 127 Fe & Bone Knife. Complete folding knife with Probbone handle. Bone scale handle, P.Med fixed by two rivets, with spotted cut decoration and scoop out of one side for finger hold on blade. Two blades, one folded, one extended. Extended blade, short, pointed, scoop out of blade edge possibly original. Blade length 86, handle length 92mm. 7 127 Glass 3 19th/20th 491 Bottle/vessel sherds, one moulded, one cut/moulded, one plain bottle 10 Mod whiteware, trans printed, 7 491 127 Pottery 21 19th/e.20th sponged, blue banded, bowls, dishes, cups 5 Mod caneware, rockingham glazed teapot sherds 3 Mod Porcelain, one printed, dish sherds 2 Mod redware, brown glazed, slip lined, teapot & casserole? 1 Mod stoneware bottle base? 19th/e.20th 7 491 127 Slate pencil stub Stone1 491 130 Си 2 Wire/pins. Three lengths of wire, representing one or two objects. Two pieces bent, (one S-bend) some pointed ends. Poor condition 8 U/S Pottery 1 Greyware, sandy, olive glazed, $15^{th}/16^{th}$ abraded jug sherd TP3 004 1 Mod stoneware, large brown & 19th/e.20th 11 Pottery white jar with moulded loop lug handles 11 StoneΑ 045 40 1 Quernstone. Large rotary quern Roman? with domed top. Stone in very poor condition, fragmented in ground into 9 sherds and few fragments. Found at edge of scheduled area for Mollins Roman fort. Photographed in situ. Each sherd numbered, planned and bagged separately. 11 3 080 Pottery Modern whiteware, small abraded L.18th/ $e.19^{th}$ sherds, 1 creamware, 2 pearlware, some hand painting 11 13 090 2 Redware, smooth micaceous, soft $16^{th}/17^{th}$ Pottery fired, rim & handle junction, possibly same vessel, internal olive glaze U/S 11 66 Clay Pipe Bowls, one plain & unspurred, one c.1850e.20th with moulded tongue shaped heel and stamped on back of bowl 'GLADSTONE PIPE' within oval ribbon (William Gladstone, Lib PM, public figure c.1867-death in 1898, crusader for Irish home rule) 11 69 U/S Pottery 1 Mod redware, brown glazed strap $18^{th}/19^{th}$ handle

Parcel	Tr.	Ctxt	SF	Material	Qty	Description	Spot Date
11	69	U/S		Pottery	1	Greyware, smooth, soft fired, micaceous, olive glazed large jug sherd	17 th /e.18 th
11	80	U/S	39	СВМ	2	Brick, large sherds, badly wedged red and grey fabric, hand made?	19 th ?
11	113	U/S		Pottery	1	Greyware, olive glazed rim/handle sherd	16 th /17 th
11	114	U/S		Pottery	1	Greyware, olive glazed both sides	17th/e.18th

APPENDIX 3: Environmental Assessment

Dr S. Timpany with contribution by D. Masson (19/07/07)

Palaeoenvironmental samples report

Introduction

Sixteen samples were collected for palaeoenvironmental assessment (see Sample Register 1.3) as part of the evaluation work undertaken by Headland Archaeology Ltd in readiness of the construction of the new stretch of the M80, which will link Stepps in North Lanarkshire to Haggs in the Falkirk area. Bulk samples were taken from features including pits, furrows, gullies and a posthole.

Method

Samples were processed in laboratory conditions using a standard floatation method (cf. Kenward *et al*, 1980). All plant macrofossil samples were analysed using a stereomicroscope at magnifications of x10 and up to x100 where necessary to aid identification. Identifications were confirmed using modern reference material and seed atlases including Cappers *et al* (2006).

Results

The results are presented in Tables 1 (retent samples) and 2 (floatation samples) below.

Plant remains

Charcoal fragments are present in 12 samples of which six samples contained fragments of a size suitable for identification and/or Accelerated Mass Spectrometry (AMS) dating (see Tables 1 and 2). Charred cereal grain is present in only three samples (44, 83 and 84) with barley (Hordeum vulgare) club/bread wheat (Triticum aestivo-compatum) and spelt wheat (Triticum spelta) together with unidentifiable grain (Cereal indet.). Two samples (83 and 84) were found to contain evidence of cereal processing with the presence of weed seeds, sedges (Carex sp.) and sun spurge (Euphobia helioscopia) together with stalk and spikelet fragments. Charred hazel (Corylus avellana) nutshell fragments were recovered from one sample (82).

Other finds (Davie Masson)

Coal fragments were present in eight samples (see Tables 1 and 2). Pottery sherds were recovered from Sample 44. Brick fragments were found in two samples (11 and 79) as were pieces of glass (04 and 44). A single piece of chert was present in Sample 40 but does not appear to be worked. A Fe nail was found in Sample 44. Metallic waste in the form of slag, hammerscale and prill was present in four samples (10, 44, 84 and 83). Bone was recovered in Sample 42 and oyster (*Ostrea edulis*) shell fragments were found within Sample 83.

For further information on pottery fragments and other finds please refer to the finds report section.

Discussion

The majority of the samples processed contained no archaeobotanical material other than small quantities of charcoal fragments largely less than 1cm in size, however samples from three features (44, 82, 83 and 84) did produce some material and are discussed below.

Fill of gully [063], Trench 805

Sample 44 from the fill of the gully was found to contain large quantities of charcoal fragments and charred grain of barley, club-bread wheat and spelt wheat, together with

unidentifiable cereal grain (see Table 2). Much of the grain was observed to be in poor state of preservation with broken and abraded grain present within the sample. No other archaeological features were present in relation to the gully and it is thought it may relate to old field boundaries (see Haston *et al*, main text).

The fill [063] was also found to contain a variety of material including pieces of glass, pottery sherds, metallic waste and an iron nail (see Table 1). This mixture of debris and charred grain suggests the sample may relate to disposal of domestic rubbish (e.g. from hearths and fires), the charred grain originating from domestic activities such as baking and the charcoal the result of wood being used as a fuel source. This debris may have been scattered across the field for use as a fertilizer, with the debris originally containing ash or may have been deliberately dumped into the gully. The poor preservation of the grain, being largely broken and abraded indicates that it had been exposed and moving around on the surface before being incorporated into the gully fill. This may also suggest that it had been scattered onto a field where it was exposed for a period before being blown and/or washed into the gully, rather than being disposed of straight into the gully.

Charcoal spread, Trench 40

Sample 82 was from an observed spread of charcoal located with Trench 40, which also contained the remains of a furrow. A large quantity of charcoal was recovered from the floatation sample (see Table 2) and a fragment of charred hazelnut shell was found in the retent sample (see Table 1). The quantity of charcoal and the size of the fragments recovered (up to 3cm in the floatation sample) suggest this represents *in-situ* burning. The charred hazel nutshell recovered also indicates the gathering of wild foodstuffs. However, no other archaeological features or artefacts were recovered in association with this sample so no date for this burning is known.

Fill of pit [102], Trench 31

Samples 83 and 84 were taken from the fills of an isolated pit [102] within Trench 31. No artefacts or other archaeological features were found in association with the pit, although the ground surrounding the pit was noted as being heat affected (Haston *et al*, main text). Both samples were found to contain evidence of charred cereal processing waste, with weed seeds (sedge and sun spurge), straw fragments, cereal grain (barley) of which some were still contained in their hulls and spikelet fragments. Small quantities of charcoal fragments were also recovered from these samples along with metallic waste (hammerscale and prill).

It is likely that the pit was used to discard the waste material from cereal processing following the sorting of the grain (barley) from the chaff, through burning. The metallic waste recovered form the sample appears to be anomalous but may relate to something used to ignite the fuel. It seems likely that this activity may relate to one of the sporadic periods of agriculture during the post-medieval period (17th to 19th century) as identified through the finds recovered from this area (see Franklin, finds report).

Table 1: Retent Sample Results

Context Number	Sample Number	Retent Vol (I)	Pottery	Brick fragments	Glass	Lithic	Fe object	Metallic	Charred <i>Corylus</i> Nutshell	Charred cereal	Bone	Marine shell	Coal	Charcoal Quantity	Charcoal max size (cm)	Charcoal	Comments
5	3	4											+				Coal not kept
7	4	4			+								++				Coal not kept
35	7	4											+				Coal not kept
36	8	2												+	<1		
41	39	2												+	<1		
43	40	30				+							++	+	<1		Coal not kept, Chert
56	42	10									+		++++				Coal not kept
58	43	10												++	1	*	
64	44	20	+		+		+	+						++++	1>	*	Fe nail
88	79	4		+									++				Coal not kept
95	82	4							+					+	<1		
104	84	7						++		+				++	1	*	Prill, Hammerscale
105	83	30						+				+	+				Coal not kept
115	10	4						+		+				+	<1		
119	11	10		+													

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

^{* =} sufficient sized charcoal for identification and AMS dating

Table 2 SHG-06 Flotation Sample Results

Context	Sample	Total flot	Cereal	Hordeum	Triticum	Triticum	Cereal	Other	Charcoal		Comments
Number	Number	Vol (ml)	grain:	vulgare	aestivo-compactum	spelta	indet.	plant remains	Quantity	AMS	
05	03	<10							+		
07	04	<10									Cinder +
35	07	50									Archaeologically sterile
36	80	30							+		
37	09	100									Archaeologically sterile
115	10	50									Archaeologically sterile
119	11	25							+		Coal +
41	39	<10							+++		
43	40	20						_	+		Coal +
56	42	25						_	+++	*	
58	43	<10									Archaeologically sterile
64	44	25		+++	+++	+++	+++		+++	*	
88	79	10									Coal +, Cinder +
95	82	200							++++	*	
105	83	75		+				Carex sp. +, Euphorbia helioscopia +, Spikelet fragments +, Stalk fragments +++	++	*	Coal +, Cinder ++
104	84	15		+			+				,

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

^{* =} sufficient sized charcoal for identification and AMS dating

APPENDIX 4: Building Recording

Site 19, Knockmilly Quarry, building

NGR – NS 6774 7077 Designation – None Recorded – 15/03/07 by GG of Headland Archaeology Ltd Photographic archive with NMRS

Summary

This site is accessed by substantial surfaced tracks from the N and E, both depicted on the first edition. Hedgerows and later fences mark the field boundaries and there is established woodland over the stream to the W. there is a distinct small quarry at the west of site defined by E and S faces, and obscured by rubble and modern dumping. The quarry face continues roughly along the south edge of the track running uphill to the east. South of these small areas of quarrying, there are two fairly distinctive terraces, one above the other. The lower of these is the probable site of the 19th century building and there are two possibly unrelated sections of walling here.

Knockmilly is marked on the first edition as a long rectangular building with a small yard at the back, a larger yard beyond with a well, and a possible quarry to the W. The buildings represented as Knockhill on Richardson's 1795 *Map of Glasgow and the country seven miles round* may be Knockmilly. However, Roy's more accurate map of c.1750 shows another possible settlement here, also seen on the first edition (as Clossfoot) N of Knockmilly but W of Davidston. This may be the 1795 Knockhill.

First Edition Ordnance Survey - Lanarkshire Sheet 2, 1858/64

Site 51, Mollins Farm, Site of Buildings

NGR – NS 7122 7176 Address – Mollins Farm, Cadder, North Lanarkshire Designation – None Recorded – 15/03/07 by GG of Headland Archaeology Ltd Photographic archive with NMRS

Summary

The first edition shows 2 long buildings round an irregular courtyard with a central well, a yard to the N and a pond to the S. The pond seems to have a lead into the W building which might suggest it had some water-powered machinery, possibly a simple mill. The current site has been modified extensively, particularly by extensive quarrying at the south of the site and the impact of the modern road network. The current buildings, a late 19th century farmhouse and various 20th century sheds are slightly further west and the site of the earlier buildings is now an open uneven area, but with no features that clearly relate to the footprint of earlier structures.

First Edition Ordnance Survey - Lanarkshire Sheet 2, Surveyed 1858, Published 1864

Site 60, Westfield, standing buildings

NGR - NS 7330 7337 Address – Westfield, Cumbernauld, North Lanarkshire Designation – None Recorded – 15/03/07 by GG of Headland Archaeology Ltd Photographic archive with NMRS

Summary

The NE cottage is a 4-bay T-plan single storey harled cottage with a lower single bay extension to the SW. It is built on quite a distinct slope from SW to NE. The roof is later tile though it retains its 19th century capped gable stacks and coping. The fenestration has almost certainly been altered from 3-bay and the main openings have probably been enlarged. The rear extension is a later addition, probably 20th century, and the SW extension is probably later 20th century. The interior was not seen.

The SW cottage is slightly smaller, 3-bay and single storey. As with the other, recent harling obscures details in the walling. The roof has certainly been replaced with tile and eaves over the gables; it may have had upstand gables and it is interesting that there is only a single and possibly later chimney stack. Again, the rear extension is later and similar to the other cottage. The shed shown on the first edition is retained in a truncated form against the SW wall; this has also been re-roofed and re-harled. This cottage retains the long garden shown on the first edition map.

First Edition Ordnance Survey - Dunbartonshire Sheet XXV Surveyed 1859, Published 1864

APPENDIX 5: SURVEY

Appendix 5.1 Arronhill Plantation Earthworks Survey

Method

The Arronhill earthwork survey comprised the recording of visible upstanding archaeological features within the section of beech plantation located within the CPO boundary of the M80 road corridor.

An initial walkover survey was undertaken within the plantation to locate the majority of the upstanding earthworks. Initial base stations tied into the National Grid were placed around the exterior of the woodland using a Trimble VRS GPS system. Due to heavy foliage cover the GPS system could not be used within the plantation and further stations were located within the interior using a total station theodolite.

The earthwork survey was undertaken using a PC running CAD software linked to a total station theodolite. Additional heights were taken at 1m intervals to generate an accurate contour survey. Due to the heavy tree coverage within the plantation, visibility was reduced in many areas and some areas remained inaccessible.

The inner and outer edges of all banks and the trackway were surveyed. The dotted line representing the rig on Figures 32 and 33 indicates the base of each furrow. A line of heights along the top of the banks and rig was also surveyed to produce an accurate contour plan.

In addition to the earthwork survey, trenches were dug by hand and by machine across three banks within the plantation, none of which recovered any dating evidence. These are reported on in detail above in the main body of the report under Parcel 3. The location of the excavated slot trenches is shown on Figure 32.

Results (Figures 30, 32, 33, 34)

The Arronhill plantation occupies a north-east facing slope and brow of a small hill located to the north-east of the town of Stepps. The area surveyed forms part of an extensive field system surviving within the plantation, which includes upstanding banks, rig and furrow and trackways. The plantation is located within the boundaries of the field system and respects the outer banks of the enclosure. Tree roots and other vegetation had disturbed the majority of the field system surveyed, and in places this disturbance had removed all traces of the earthworks. Despite this, a high percentage of the upstanding archaeological remains surveyed within the plantation have survived and were clearly identifiable on the ground.

The field system is enclosed by a head-dyke aligned NE/SW and NW/SE, forming a rectilinear area comprising the eastern limits of the enclosure. These enclosing dykes are formed by upstanding linear earthen banks which survive to a maximum of 1m in height. The main NE/SW enclosure is formed by two parallel banks defining an internal pathway, allowing access to entrances within the inner bank. These entrances lead to a trackway or directly into the fields beyond. Both banks continue beyond the survey boundary to the NW, and the outer bank also continues to the SW.

The head-dyke continues to the NW with banks located at the top and bottom of the hill, running at right angles to the NE/SW enclosure banks. These linear banks define the NE &

SW edges of the field systems. At the NE edge the head-dyke is formed from a single bank with an entrance located at the NE corner where the two bank systems converge.

The SW enclosure is formed by two parallel banks, again running at right angles to the NE/SW banks. At the corner where these banks converge, a small gap has been created, allowing access into the main pathway. Another entrance is located at the centre of the inner bank, allowing access into one of the fields beyond.

Within the area enclosed by the head-dyke, four rectilinear fields were identified and recorded. These field enclosures were formed by single linear banks defining separate plotsof land. Only two of the fields were completely within the survey parcel, with two further fields only partially recorded, each continuing beyond the limits of the survey area. The largest field was located in the NE corner of the head-dyke, bounded on the N and E by the head-dyke banks and on the W and SW by further linear banks. The interior of the field contained narrow, straight rig oriented NE/SW. The rig was low-backed with a maximum width of 4.5m, its furrows steeply sloping and well-defined. A trackway cuts across the SW edge of the field, leading from the head-dyke into a field to the S.

Two further fields were recorded to the S of the largest one. These fields are bounded to the SW by the head-dyke and a system of linear banks to the N. Both contained rig oriented NE/NW. The rig is low backed with shallow sloping furrows and has a maximum width of 6m. Towards the S boundary of both fields the rig begins to gently curve, following the contours of the summit of the hill, possibly to aid drainage and for ease of cultivation. The two fields may originally have been a single enclosure, which has later been subdivided by an additional bank, separating the rig into two separate fields.

One other field was survyed, located to the NW of the largest field. Only the linear banks of the SW edge of the field, and an entrance leading from the largest field were recorded. No rig and furrow was survyed within this field.

One rig was recorded in between the parallel banks of the SW head-dyke. The single rig is oriented NW/SE and is 5m in width. It was clearly overlain to the NE by the internal bank of the head-dyke.

The product of this earthwork survey is a contour and outline plan of the earthworks. It was not feasible to produce a hachure plan due to the small scale of the drawings required.

Discussion

The earthwork survey of the Arronhill Plantation has identified a well-preserved and extensive field system. The rig and furrow located within the head-dyke appears to be narrow straight rig, dating to the later 18th and 19th centuries (Dixon 194, 41). This is an improved type of rig, common throughout Scotland prior to the introduction of underground drainage.

The orientation of the rig appears to be positioned to take advantage of the natural slopes of the hill. The rig within the largest field will drain down the hill, wholst the rig on the summit of the slope will drain down both side of the brow of the hill, away from the rig located below. The field system appears to have more than one phase, with evidence of the rig being overlain by the enclosure banks in a number of places.

APPENDIX 5.2 CASTLE GLEN LIME KILNS SURVEY

INTRODUCTION

Headland Archaeology Ltd was commissioned by Historic Scotland on behalf of Transport Scotland to undertake a topographic and earthwork survey of the castle glen industrial area (Site 68 NS 78700 77000), near Castlecary. This work forms an additional element to the Phase 1 archaeological works in advance of the M80 Stepps to Haggs DBFO improvement scheme. The Castle Glen area is part of extensive industrial remains surviving throughout the Castlecary Glen which include lime workings, quarrying and mining. Other probable contemporary features include banks, trackways, revetting and terracing.

The earthwork and topographic survey comprised the recording of visible archaeological remains located in the section of the glen within the CPO boundaries of the M80 road corridor. The product of the survey is a contour and hachure plan and a series of north-south profile plans through the glen. A short history of the site, which includes cartographic and historical sources, and written description of the main archaeological features surveyed has been compiled and is complemented by a brief photographic record (Figures 35-39).

LOCATION

The site is located to the north-east of the town of Cumbernauld, on the extreme eastern edge of the former Cumbernauld Parish, Dunbartonshire. The area surveyed occupies a narrow valley located between the A80 road and the Red Burn, immediately upstream from the Castlecary Viaduct. The north-west slope and base of the wooded valley was formerly occupied by the Castlecary Lime Works. The survey area forms a triangular piece of land bounded by the A80 to the north-west, the Castlecary Viaduct to the north, the Red Burn watercourse to the east and the CPO line to the south. The Red Burn is the boundary with Stirlingshire (Falkirk Parish).

THE GEOLOGY OF THE CASTLECARY AREA

The Castlecary limestone marks the top of the upper limestone group which is characterised by thick limestones and beds of mudstone and coal (Cameron and Stephenson 1985, 72). It outcrops at various locations in the central and eastern area of the central belt and has a reputation for producing good quality lime for building, agriculture and as a flux for iron smelting. The naming of the limestone after this particular site indicates the importance of the lime industry within the glen and the early date of working on the site (Cameron 1998, 290).

The Castlecary Glen consists of three beds of limestone of differing quality which were worked from a number of mines on both sides of the glen. These beds were separated by shale, giving a total thickness of c. 2.1 m. The seams in this area are relatively flat, worked from horizontal mining tunnels (adits) throughout the western side of the glen. The castlecary limeworks were located over one of the few limestone beds in dumbartonshire and the accessible limestone has now been completely mined out (roberston et al 1948, 85).

HISTORICAL BACKGROUND

With contributions by Stuart Nisbet

Research on the Castlecary Lime Works has proved to be difficult due to the location of the works and its common name in the area.

The Castlecary name for the lime works actually refers to the traditional estate located across the Red Burn in Stirlingshire to the east. In addition to this duplicate name, two industrial sites, the Castlecary Lime and Fireclay works (NS 784 783) and the Castlecary Fireclay works (NS 797 784), are both located nearby. These works both operated between the 19th and 20th century and were completely separate enterprises to the lime works (Douglas & Oglethorpe 1993). Loose, locally made bricks stamped 'Castlecary' remain scattered around the site of the lime works, presumably from the structures formally located within the glen.

The Castlecary Lime Works does not appear on any maps prior to the 1st Edition Ordnance Survey map of 1859. This may be due to the location of the lime works, on the extreme edge of the county of Dunbartonshire and the parish of Cumbernauld and within a steep wooded glen.

18th century

Cumbernauld Parish was well known as a source of lime in the late 18th century. The quality of the lime coupled with the local availability of coal and ease of transportation on the nearby Forth and Clyde Canal to Glasgow and beyond made the area popular. The Old Statistical Account (1791-99) notes seven lime quarries working in the parish between 1791-99, none of which are named or located

Roy's military survey map of Scotland 1747-55 shows the area with the Red Burn labelled. The entire glen appears to be cultivated with rig bounded by field walls, potentially associated with Garnhall, a large house located to the north-west.

19th century

Two main lime-working sites are recorded in the Cumbernauld Parish by Carmicheal in his 'Account of the Principle Limestone Quarries of Scotland' published in 1837. One is described as the 'Cumbernauld' Lime Works, which could refer to the Castlecary Lime Works or to another large site, Vault Glen, located further up the valley. Another possible candidate is a lime kiln noted on Thomson's map of Dumbartonshire in 1823 immediately to the north of Castlecary at Netherwood. The owner of both the works and Cumbernauld House, located approximately one mile to the south, is named as Admiral Fleming, suggesting that this may refer to the Castlecary site.

The 'Cumbernauld' works are described as a quarry and extensive mine where a 2.1 m thick seam of limestone was worked in the glen. Around seventy men were employed to burn the lime, quarry and mine. These mines were drained by water power which raised the water within the mine by over 15 m using shafts working on inclined planes (Carmicheal 1837).

By 1845 the mining of limestone was common in the Cumbernauld Parish, along with the working of coal to burn it. The New Statistical Account of 1834 - 45 describes the limestone as being burnt within both draw and clamp kilns. The draw kilns are more economical, using half as much coal as the clamp kilns which were vented by air-pens, carried up the sides and the ends. The miners were paid 6 shillings per heap of five tons, with one ton of coal required to burn thirty-two bushels of lime, equating to roughly two parts lime and one of coal.

The 1st Edition Ordnance Survey map of 1859 shows a wooded glen with a central pathway leading into the glen from the north. Along the pathway are two rectangular draw kilns, one containing three circular kilns and the other containing two, each are labelled 'Kiln'. Two further kilns are located on the west side of the glen and are labelled 'Old Kiln', suggesting that by the date of the survey they were out of use. A complex of three buildings on the upper slopes of the glen are labelled 'Limestone Pit', presumably the central quarry at this time. A pathway connects the pit to the block of three draw kilns. Wall lines can be seen on the upper edge of the glen, along the banks of the burn, the slope and along the floor of the valley. Numerous other un-labelled buildings (kilns) have been located and one area to the south of the survey limits is labelled 'Mine'.

By the 1870's Castlecary Lime Works was worked by Andrew Stirling, who also owned coal works at Bankknock and Slamannan. At Castlecary he employed about 60 men (Scottish Mining Villages website 2005-2007).

The 2^{nd} Edition Ordnance Survey map of 1895 shows that the lime works appears to be still in use but is scaled down from the mid 19^{th} century. The triple draw kiln is now labelled 'Old Kiln' and a number of the small un-labelled kilns seen on the 1^{st} Edition are no longer present. The clamp kiln cut into the main bank and the limestone pit building complex to the north are still present.

A path has been added running from the main mining area heading north behind the triple draw kiln. No revetting is illustrated within the glen and no other paths are shown.

20th century

The date of the closure of Castlecary Lime Works is unknown. The works finally closed after all the limestone was exhausted in the area (Roberston et al 1948).

ARCHAEOLOGICAL SURVEY

Aims and objectives

The objectives of the earthwork and topographic survey with Castle Glen was to: -

- Provide as complete as possible record and interpretation of upstanding earthworks, quarries and limekilns visible at the surface within the section of the glen located within the CPO boundaries of the M80 road corridor.
- Survey as a minimum; the inner and outer edges and the entrance positions for each wall, building or structure, the top, bottom and breaks of slope of any earthwork features, and additional 3D points to generate an accurate contour survey.
- Tie the survey accurately into the National Grid.
- All existing features including fences, hedges, gates and trackways recorded as part of the survey. The minimum extent of the survey shall be the whole portion of the land within the Land Made Available/Compulsory Purchase Order on the northern side of the Red Burn.

Produce survey drawings including interpretative hachure plans (at 1:500 or 1:1000); a
contour plan at 2 m intervals, an interpretative hachure plan at 1:1250 accurately located
on an Ordnance Survey base and north-south profiles of the slopes, terracing,
revettements and trackways from the carriageway level to burn at 25 m intervals.

Methods

An initial walkover survey was undertaken within the glen to locate the majority of the upstanding archaeological remains. Initial base stations tied into the National Grid were placed around the exterior of the wooded glen using a Trimble VRS GPS system. Due to heavy foliage cover the GPS system could not be used within the glen and further stations were located within the interior using a total station theodolite.

The earthwork and topographic survey was undertaken using a PC running CAD software linked to a total station theodolite. Additional heights were taken at regular intervals to generate an accurate contour survey.

Results (Figures 35-39)

The preservation of the archaeological remains within the glen was generally good, with the majority of the damage to walls and earthworks caused by tree roots and other vegetation. Due to steeply sloping ground and thick vegetation cover at the time of the survey (late spring) some of the archaeological remains were inaccessible or not clearly visible. Therefore this survey represents a percentage of the archaeological remains surviving within the glen and the CPO of the M80.

Lime Kilns

The most prominent surviving feature of the Castlecary lime works is the block of three partially ruined dressed rubble draw kilns, located at the southern end of the survey area. The kilns have intact draw arches (c. 2.1 m wide) facing the burn. The furnaces are c. 3.5 m in diameter and are brick-lined and egg shaped. The inside surface is lined with a coating of dripping slag. Much of the outer walls of the block have been removed or have collapsed, leaving the inner core of the walls exposed. The southern furnace is almost completely intact, with the central and northern furnaces badly collapsed. The kilns are freestanding with no loading ramp surviving. The 1st edition map shows that a raised bank would have served as a loading ramp located on the western side. A tramway is illustrated running from the kilns to the limestone pits to the north.

A brick wall possibly associated with the other twin draw kiln block identified on the 1st edition ordnance survey map was identified. The brick wall was cut into the slope behind and was heavily scorched and stained with molten slag. This evidence and the location suggest it may well be the other kiln shown on the map.

Clamp kilns

Two clamp kilns of differing types were identified at Castlecary. The first, a long clamp kiln (c. 15 m) with stone lining was identified at the northern end of the site, close to the burn edge and possibly cut into natural subsoil.

The second clamp kiln was located cut into the main bank, located close to the three draw kilns. The kiln was narrow and stone lined, with exposed scorched boulder lining still intact. This kiln may have previously formed one of a series of similar kilns cut into the main bank, the other now no long visible.

Revetting

The whole of the glen is steep and terraced from the carriageway boundary down to the Red Burn. The northern half of the steep north-west slope of the glen running from the edge of the A80 down to the flat base of the valley was revetted with stone and brick walls. These retaining walls were presumably constructed to allow for rough terracing and trackways to be cut into the slope. This landscaping of the topography would allow for easier access into the site for the workers and access out of the site with lime.

The majority of the walls were of dry stone construction with large field boulders. These survived as low walls of two or three courses and were unlikely to have been constructed much higher. In a number of places parallel walls bounded pathways cutting diagonally across the slope from the base of the valley to the top. In other places it appeared that the walls were forming boundaries of levelled areas, perhaps for the storage of stone or coal.

The wall along the base of the slope had obviously been created by cutting into the hillside to form a wider base for the valley, which appeared to be the main access route to and from the kilns.

Quarries

A long vertical rock face is located on the A80 side of the glen. Cut into the rock face is a continuous sequence of horizontal mining tunnels (adits) in the form of stoop or room workings within the limestone. The majority of these adits have been deliberately blocked with rubble and stone. Timber props can be identified within one of the unblocked entrances.

Earthworks

Numerous linear and curvilinear banks were identified throughout the level base of the glen and running up the slope. The majority of these banks appear to separate working areas, delimit pathways and act in a similar fashion to the revetting on the slopes.

Several large heaps were also identified on the level base of the glen. These were less uniform in size and shape than the banks and, although some were linear, they did not appear to serve any purpose. These heaps are probably spoil and rubble from quarrying and waste material from the final firings of the kilns.

Several crater-like hollows are located along the base of the glen. These may represent backfilled mine shafts.

Trackways

Numerous trackways were identified within the glen. The main trackway running into the industrial complex from the northern entrance to the glen was easily visible and well defined by banks along the embankment of the Red Burn and the main bank running parallel to it along the outer edge of the level base of the glen. Another major trackway was identified at the southern limits of the survey, running south-west down the slope before turning north-east along the level floor of the glen. This trackway could not be traced up to the upper edge of the industrial complex due to truncation by a modern drainage channel associated with the construction of the a80. This may have been one of the main entrances into castlecary lime works (pers comm Alastair Rees).

Further smaller trackways or hollow-ways were identified running into the adits cut into the vertical rock face. These are probably the remains of tramway connections running from the quarry face to the kilns beyond.

Surface finds

Four sherds of late 18th to 19th century pottery were collected from the upper surface of the steep north-west slope. Numerous sherds of similar type were identified on the surface along with brick, roof tile and coal. This suggests that the glen may have been used to dump rubbish and waste materials in during its life as a lime workings.

Numerous bricks stamped with the name 'castlecary' were scattered across the slope and base of the glen. Many had mortar attached to them and may be associated with the collapse or demolition of the lime-working buildings. The castlecary brick was produced from the mid 19th century until the mid 20th century.

DISCUSSION

The earthwork and topographic survey of the Castlecary Lime Works has partially identified the substantial industrial remains which survive within the glen. The site is complex and undoubtedly represents various phases of the limeworks, possibly over a century long in duration. Modifications have certainly been carried out after the 1st and 2nd Edition maps, with the removal of the loading bank behind the triple draw kiln and the additional pathway seen on the 2nd Edition.

The central flat rectangular area to the south-west of the three draw kilns may contain unseen footings of buildings associated with the works. The mining from the adits and burning within the clamp kilns may represent an earlier phase of the lime works, with the draw kilns and the mine shafts later additions. This change may be due to the availability of the lime within the adits and the quantities of lime being burnt.

Seven kilns, both clamp and draw, were identified during the survey. Two other kilns have been illustrated on the 1st Edition map labelled 'Old Kiln' and other probable kilns are unlabelled. This evidence suggests that the Castlecary Lime Works was a substantial and important site, in operation for a considerable period of time.

Further to the south, outwith the survey limits, the industrial activity continues. Various mine shafts, a rail line and a rubble-lined lade are located within this area as well as further adits and possible kilns. The lade may be associated with the water powered drainage system for the coal pits using a water wheel operating a pump.

APPENDIX SURFACE FINDS Julie Franklin

There were 6 finds, none of which were stratified. All fit with the known dating of Castlecary Lime Works between the mid 19th and early 20th century.

The brick is from a circular shaft or support. It is marked 'Castlecary', referring to a nearby (though unrelated) fireclay company, in production from 1883.

The pottery represents one stoneware jar and two plates. The jar was possibly a container for cider or some other alcoholic beverage. The plates are both probably 19th century. The shell-edged sherd is more likely to belong to the first half of the century, while the willow pattern could well be later. They imply activity in the area a little more domestic in nature.

Ctxt	Material	Qty	Description	Spot Date
Surface	CBM	1	Brick, complete, wedge shaped, stamped 'CASTLECARY', but	$1883/L.20^{th}$
find			no frog. Reddish colour, coarse ?fireclay. From circular	
			structure. 235x123-103x68.	
Surface	CBM	1	Pan tile, large sherd	$18^{th}/20^{th}$
find				
Surface	Pottery	4	3 Mod Whiteware, joining sherds of blue trans printed willow	$L.18^{th}/e.19^{th}$ -
find			pattern plate/dish (L.18th/20th), 1 blue shell edged plate/dish	$19^{th}/20^{th}$
			rim (L.18 th /19 th - prob 1 st half 19 th)	
			1 Mod Stoneware, jar sherd with two-tone brown & white	
			glaze	

SOURCES

Maps

Accessed via http://www.nls.uk/maps

Roy 1747 – 55 Military Survey of Scotland Sheet 06/7d, Area around Denny, in Stirlingshire and Dunbartonshire

Thompson 1823 Dumbartonshire

Ordnance Survey 1859 Dunbartonshire Sheet XX/10 & 14 First Edition 1/1250

Ordnance Survey 1895 Airdrie Sheet 31 Second Edition

Internet Resources

http://www.mining-villages.co.uk/

APPENDIX 6

M80 STEPPS TO HAGGS: PHASE 1, PALAEOENVIRONMENTAL ASSESSMENT OF FIVE AREAS OF IDENTIFIED PEAT DEPOSITS

Dr Scott Timpany Headland Archaeology Ltd

Non-technical summary

A palaeoenvironmental assessment of five areas of peat deposits (four from the original brief and one additional site identified in the field) within the road corridor of the new section of M80 development was carried out prior to any construction work being started. This investigation was undertaken through instruction by Historic Scotland and with funding by Transport Scotland.

The five areas were assessed through visual inspection in the field and the use of a gouge auger at five locations per site to investigate the depth, nature and sedimentary sequence of the deposits. At two sites (Stoneyetts peat basin and Mollinsburn peat basin) inspection of sediments using the gouge auger was ineffective due to the presence of compact stony sediments. These deposits are believed to relate to hillwash (Stoneyetts) and construction rubble (Mollinsburn). Trench records were therefore used to investigate the sedimentary sequence where possible.

Three areas (South Broomknowes, Barbeth Bog and Mollinsburn Farm) were found to contain deposits (peat and clay layers) between 4m to in excess of 6.3m in depth suitable for palaeoenvironmental analyses. These deposits were observed in the field to contain well-preserved plant material including monocotyledon tissue (rushes, sedges etc) and wood fragments. The good preservation of these plant remains indicates that there would be good preservation of other fossilised material including pollen grains and seeds.

At South Broomknowes there is evidence of early peat deposits, which may date back to the Windermere interstadial, which precedes the Loch Lomond stadial. Palaeoenvironmental records from this period could provide important information on the landscape, climate and local vegetation for this area of central Scotland.

The plant remains observed within the sediments and the sediment types themselves indicate that the area across these sites (c.5km) contained a mosaic of vegetational communities during the past including raised mire, reed/sedge swamp and carr-woodland. The recognition of these community types has important repercussions on acknowledging the different scales of pollen recruitment at these sites. Further palaeoenvironmental study within each of these vegetational communities will provide data from the regional scale (wider landscape information) to the local scale (site specific information). Such information will be able to put any disturbance agencies (for example people clearing woodland) into context with wider vegetational changes taking place in the landscape (e.g. trees dying due to changes in local hydrology).

This first phase of assessment has therefore identified three areas for potential further palaeoenvironmental study (Phase 2) at: South Broomknowes (former reed/sedge swamp), Barbeth Bog (former carr-woodland) and Mollinsburn Farm (raised mire).

Introduction

Background and circumstances of the work

The route for the new section of the M80 motorway development runs from Stepps, North Lanarkshire to Haggs, Falkirk and incorporates the route of the existing A80, which currently links the two stretches of the existing M80. The new route will pass through five areas of peat deposits, which could provide valuable palaeoenvironmental records and also have the potential to contain archaeological material including structures and artefacts. Four of these areas (Sites 9, 34, 37 and A1) were identified prior to any work commencing, within the brief for this phase of work. The fifth site (Mollinsburn Farm) was identified in the field as a site of palaeoenvironmental interest and consent was given to include it within this phase of works.

According to the Environmental Statement for this road scheme, no archaeological records currently exist for any of the areas of peat deposits within this study (see Figure 40). Therefore the archaeological and palaeoenvironmental potential of these sites was unknown prior to this investigation. Four of these mires have been previously recognised as sites of potential palaeoenvironmental significance: South Broomknowes peat basin (Site 9), Barbeth Bog (Site 37) and Mollinsburn peat basin (Site A1 and new site) (Dickinson, 1988; Lindsay and Immirzi, 1996).

This work has been undertaken with instruction by Historic Scotland and funding made available from Transport Scotland.

Aims and objectives of the work

The main aim of this first stage of study is to investigate depth and the sedimentary sequence of the peat basin; to assess [primarily] the palaeoenvironmental potential of the site; and make recommendations for further studies to be undertaken.

The archaeological and palaeoecological potential of peat deposits will be primarily determined by the age and the nature of the deposits themselves. It is generally accepted that deposits dating to the glacial and late-glacial period are unlikely to contain significant archaeological features, such as structures, or contain evidence of human impact in the palaeoenvironmental record. However, deposits of this age may contain important palaeoenvironmental records of tree-spread following the glacial period and indicators of climate warming from the records of thermophilous species such as *Juniperus communis* (common juniper). Deposits, which are prehistoric or later in date, have a greater potential to contain archaeological finds ranging from flint tools to structures, such as buildings. These deposits are also important palaeoenvironmental resources as they can contain records of prehistoric peoples' exploitation of the environment from small-scale woodland clearings for hunting to large-scale woodland removal for agriculture. The nature of the sediment itself is also important in terms of investigating evidence for human activity. For example, in prehistoric contexts, evidence is more likely to be found in environments such as reedswamps, which offer a wide range of wetland resources that can be exploited (e.g. fowling) than in carr-woodlands, which are difficult to traverse and offer fewer resources.

Palaeoenvironmental background of the study area

A number of palaeoenvironmental studies have been undertaken at peat basins across central Scotland. Figure 40 shows the locations of studies that are mentioned in the text and helps to

put into context the sites being studied as part of this phase of work with previous work in the area. The general model of peat formation across central Scotland is from the infilling of often shallow, bodies of water that formed following the end of the last Glacial period (Devensian), which were contained in hollows in the land created by glacial action. Two such peat deposits occur at Kilgarth raised mire and Greenhead Moss, North Lanarkshire and have been found to contain deposits of peat up to 4.5m in depth. The basal deposits of these two sites have been radiocarbon dated, showing that peat development started shortly after the end of the last glacial period. At Kilgarth peat began to form at 9920±40 BP (GU-14280; 9460-9270 Cal. BC) and at Greenhead Moss at c. 10250 BP (c. 10130-10010 Cal. BC) (Greenhead Moss Community Park, 2005; Timpany, 2006). This development of peat during the early Holocene has been recorded across central Scotland with similar dates observed at sites to the west such as Linwood Moss, Renfrewshire. Here peat has been radiocarbon dated as forming from 9290±90 BP (SRR-2028; 8750-8300 Cal. BC) (Boyd, 1986). Ramsay and Dickinson (1997) note that in many of these areas the peat contains palaeoenvironmental records for almost the entire Holocene up to the present day. However, at some areas such as at Kilgarth the mire shows evidence of the peat having been cut either for fuel or for drainage, with peat near to the surface being dated to the medieval period 955±35 BP (GU-14275; 1010-1160 Cal. AD) (Timpany, 2006).

Contained within the palaeoenvironmental records of the mires shown in Figure 40, is evidence for anthropogenic activity. Dickinson (1981) recognises possible Mesolithic activity in the pollen diagram from the Auld Wives' Lifts, East Dunbartonshire. Here peaks in microscopic charcoal and dips in arboreal pollen suggest some form of manipulation of the woodland canopy by people during this period. Boyd (1986) also sees evidence for anthropogenic woodland clearance in his pollen diagram from Moss Cottage, Renfrewshire during the late Neolithic or early Bronze Age. This is seen through a decline in arboreal taxa, most notably that of *Betula* sp. (birch) and a rise in herbaceous taxa common within agricultural/pastoral communities including *Rumex* sp. (docks), *Plantago* sp. (plantains) and *Urtica* sp. (nettles), showing a change in land use from woodland to pasture land. Similar activity during the Bronze Age has been recorded at Walls Hill Bog, Renfrewshire (Ramsay, 1995).

This clearance of woodland increased dramatically across central Scotland during the Iron Age, and large-scale clearances are recorded in pollen diagrams from Hills Bog, Renfrewshire and Lochend Loch, North Lanarkshire (Ramsay, 1995), together with Fannyside Muir, North Lanarkshire and Letham Moss, Stirlingshire (Dumayne, 1993). Again this clearance activity appears to lead to pastoral rather than arable activity. Near the end of the Iron Age into the Roman period woodland regeneration was seen to take place in areas such as Walls Hill Bog (Ramsay, 1995). However, sites along the Antonine Wall remained cleared throughout the period of occupation. Evidence in pollen diagrams is of an open, meadow vegetation of pastureland during this period (Ramsay and Dickinson, 1997). Woodland clearances are again recorded during the medieval period with large declines in arboreal pollen indicating large-scale removal of trees (Ramsay and Dickson, 1997). Such evidence appears at Walls Hill Bog, Lochend Loch and Lenzie Moss (Ramsay, 1995).

Methods

The approach adopted by this study was to use a manual gouge auger to determine the depth and nature of the sediments within the bogs. A transect was carried out across each of the

bogs consisting of five coring locations, as specified in Section 2.12.5 of the Phase 1 works brief. Once extracted the sediments contained within each core were carefully recorded in the field. Gouge auguring locations are shown for each site in associated figures within the results section.

Results

SITE 9 SOUTH BROOMKNOWES FARM BASIN, NORTH LANARKSHIRE

Site description

Site 9, South Broomknowes peat basin (NS 670 702) today is an area of lowland bog with a predominant vegetation of *Juncus effusus* (soft rush) community growing on its surface, similar in nature to the M23 *Juncus-Galium* rush-pasture vegetational community described by Rodwell (1991). The bog is contained on the north and south sides by steep-sided ridges, which rise to *c*.10m above the bog's surface. The proposed roadline will run from northeast to southwest across the main basin (see Figure 41) and will therefore have a significant impact on this area.

Stratigraphy

An idealised stratigraphic sequence for South Broomknowes peat basin is presented in Table 1, based on the deepest peat sequence observed during the gouge auger transect, coring point 4. The locations of the coring points are shown in figure 42, with a graphic representation of the sedimentary sequence from each core. The individual sediment depths of each core are presented in Appendix 6.1.

Table 1 Idealised sedimentary sequence of South Broomknowes peat basin from Core 4

Unit	Stratigraphy description	Estimated Dates	Depth
			(cm)
VII	Top peat with wood fragments	Modern?	0-30
VI	Peat layer with monocotyledon	Mid to late Holocene	30-385
	plant fragments		
V	Peaty-clay layer with	Early Holocene	385-512
	monocotyledon plant fragments		
IV	Clay layer	Loch Lomond stadial	512-534
III	Peaty-clay layer with wood	Windermere interstadial	534-548
	fragments		
II	Clay layer with sand	Late Glacial (Late	548-560
		Devensian)	
I	Till layer	Glacial (Devensian)	560+

The stratigraphic sequence, shown in Table 1 indicates that clay (unit ii) developed on glacial till (unit i), which is likely to represent the forming of a body of water. The transect drawing in figure 41 shows that the underlying landscape of the peat basin is a series of small hollows carved into the landscape through glacial scouring. These features would have collected water following de-glaciation. A layer of peaty-clay (unit iii), which contains wood fragments lies between two layers of clay (units ii and iv). It is thought that this peaty clay layer may represent the Windermere Interstadial (13,000-11,000 bp), during which time

temperature rose allowing the colonisation of trees (such as pine and birch) and other plants, the detritus of which forming the peaty element within this layer. The second clay layer (unit iv) may represent a second period of glacial advance, the younger Dryas (11,000-10,000 bp), a short-lived period where a re-advance of glaciers occurred as climate took a down turn and global temperatures cooled. This clay layer was observed in the field to contain [freshwater] shell fragments, which gave a marl element to the clay. These shell remains are important biotic indicators of water temperature and could provide detail on the lake environment and climate at this time.

Overlying this second clay layer is another layer of peaty-clay (unit v), which is suggested to date to the early Holocene as temperatures continued to warm and plant life steadily recolonised. The peat element as before would have formed from the detritus of plants growing around the margin of the water body. This layer was observed to contain fragments of monocotyledon plant tissue, which may represent the growth of reeds or sedges. Above this layer is a layer of peat, which contained similar monocotyledon tissue (unit vi). It is thought that this peat layer began to accumulate some time during the mid holocene through to the late holocene. Overlying this peat is another peat layer, which contains wood fragments (unit vii). It is possible this peat could be modern in date and may reflect woodland, which has either only recently been removed or that this layer reflects an older period of woodland and that the peat may have been cut (e.g. For drainage) leaving this layer close to the surface.

SITE 34 STONEYETTS PEAT BASIN, NORTH LANARKSHIRE

Site Description

Site 34, Stoneyetts peat basin (ns 692 715) today forms an area of open pastureland. To the immediate southeast of the study area is a much larger area of lowland bog, with a cover of rush swamp. However, this area is not contained within the limits of, nor will be affected by, the road scheme and therefore is outside of the scope of this study. The area of peat basin, which is within the proposed road scheme, is contained on the north and south sides by two steep-sided ridges, which rise to c.10 to 12m above the basin's surface. The proposed roadline will run from east to west across this area (see Figure 43) and will therefore have a significant impact.

Stratigraphy

The gouge auger survey across this area proved unsuccessful, as it was unable to penetrate a layer of stony silt (probable hillwash) that underlies the topsoil and overlies the peat. Therefore the stratigraphic records from sections within the excavated trenches from across this area have been used to provide details on the sedimentary sequence. An idealised stratigraphic sequence for Stoneyetts peat basin is presented in Table 2, based on the deepest sequence observed within the trench sections, Trench 337. The locations of these trenches in relation to the study area are shown in Figure 44, together with a graphic representation of the sedimentary sequence from each trench. The individual sediment depths from each trench are presented in Appendix 6.1.

5, ... 55

Table 2 Idealised sedimentary sequence of Stoneyetts peat basin from Trench 337

Unit	Stratigraphy description	Estimated Dates	Depth
			(cm)
VIII	Top soil	Modern	0-30
VII	Stony silt layer (hillwash)	Modern?	30-50
VI	Sand layer	Modern?	50-60
V	Peat layer with wood fragments	Mid to late Holocene	60-80
IV	Clay layer	Loch Lomond stadial to	80-90
		Early Holocene	
III	Peat layer with wood fragments	Windermere interstadial	90-100
II	Clay layer	Late Glacial (Late	100-110
		Devensian)	
I	Till layer	Glacial (Devensian)	110+

The stratigraphic sequence, shown in Table 2 indicates that clay (unit ii) developed on glacial till (unit i), which is again likely to represent the forming of a body of water. The transect drawing in figure 44 based on the trench records suggests that Trench 337 has cut through small hollows, which would have collected water following the glacial retreat. A layer of peaty-clay (unit iii) containing wood fragments lies between two layers of clay (units ii and iv), which is suggested may once more represent the windermere interstadial. The second clay layer (unit iv) may represent the Loch Lomond Stadial.

The [second] clay layer (unit iv) is overlain by a layer of peaty-clay (unit v), which was observed to contain fragments of wood, suggesting this layer represents a period of carrwoodland development. It is thought that this peat layer may represent peat accumulation some time during the mid holocene through to the late Holocene. Overlying this layer of peat is a layer of sand (unit iii), which is likely to represent a period of active erosion from the valley sides, deposited into the basin. Above this sand layer is a stony silt layer (unit ii), which is thought represents a second period of hillwash into the basin from the steep slopes to the north and south of the site. Above this layer of hillwash a topsoil has developed (unit i) reflecting stabilisation of the valley slope to the north and possibly the construction of the drainage ditch, which has effectively stopped deposition of hillwash from the farmed agricultural land on the southern slope into the basin. These top layers (units i to iii) are thought to be modern in date.

SITE 37 BARBETH BOG RAISED MIRE, NORTH LANARKSHIRE

SITE DESCRIPTION

Site 37, lies to the south of the main area of Barbeth Bog raised mire (NS 700 721) and as such does not actually contain any areas of raised mire within the area of land impacted on by the road scheme. However, there is a small area of lowland mire present within this area (see Figure 45). This area of lowland mire is similar to that at South Broomknowes (Site 9) with a surface vegetation of *Juncus effusus* (soft rush) community comparable to the M23 *Juncus-Galium* rush-pasture vegetational community described by Rodwell (1991). This area of bog is contained on its south side by a steep-sided ridge, which has a maximum elevation of

c.20m above the bog's surface. The proposed roadline will run from east to west across this pocket of lowland mire and will therefore have a major impact on this area.

Stratigraphy

An idealised stratigraphic sequence for the lowland mire at Barbeth is given in Table 3, based on the deepest peat sequence observed during the gouge auger transect, coring point 2. The locations of the coring points are shown in Figure 46, with a graphic representation of the sedimentary sequence from each core. The individual sediment depths of each core are presented in Appendix 6.1.

Table 3 Idealised sedimentary sequence of Barbeth lowland mire from Core 2

Unit	Stratigraphy description	Estimated Dates	Depth
			(cm)
IV	Peat layer with monocotyledon	Late Holocene	0-15
	plant fragments		
III	Peat layer with wood fragments	Early to Mid Holocene	15-378
II	Clay layer with silt element	Late Glacial (Late	378-400
		Devensian) to Early	
		Holocene	
I	Till layer	Glacial (Devensian)	400+

The stratigraphic sequence in Table 3 starts off much like the previous two sites with clay (unit ii) developing on glacial till (unit i), which again represents the forming of a body of water within a depression in the land, shown in Figure 46 likely to have been formed by glacial scouring. Overlying this clay layer is a wood peat (unit iii) in excess of 3.5m the wood fragments observed in the field are likely to be of *Alnus glutinosa* and *Betula pubescens* (from preserved bark), suggesting a carr-woodland environment existed during this period. It is thought this peat layer may date to the early to mid holocene based on the presence of *Alnus* and *Betula*, which spread across Central Scotland at approximately 7500 bp and 10,000 bp respectively (Birks, 1989). The layer above is a second peat layer, which contains monocotyledon plant material probably relating to the current rush swamp on the bog's surface. It is thought that this top peat is therefore late holocene in date.

NEW SITE MOLLINSBURN FARM RAISED MIRE, NORTH LANARKSHIRE

SITE DESCRIPTION

Mollinsburn Farm raised mire (NS 70670, 72100) is an isolated pocket of mire, which lies near to the southern fringes of the raised mire at Barbeth Bog (see Figure 47). The raised mire can be seen in the field as having a rich mosaic of vegetation types growing upon its hummock and hollow surface, which consists predominantly of *Eriophorum vaginatum* (cotton grass), *Erica tetralix* (cross-leaved heath) and *Sphagnum* moss communities. Overall the vegetational community is similar to that of the M18 *Erica tetralix-Sphagnum papillosum* raised mire community described by Rodwell (1991).

This area of bog is situated in the valley bottom, which opens out to the east. The bog itself rises some 2-3m on its northern side and is contained to the south by a steep-sided ridge,

which has a maximum elevation of *c*.20m above the bog's surface. The roadline will run from east to west through this area of raised mire will thus have a major impact on this area.

Stratigraphy

An idealised stratigraphic sequence for Mollinsburn farm raised mire is presented in Table 4, based on the deepest peat sequence observed during the gouge auger transect, coring point 5. The locations of the coring points are shown in figure 48, with a graphic representation of the sedimentary sequence from each core. The individual sediment depths of each core are presented in Appendix 6.1.

Table 4 Idealised sedimentary sequence of Mollinsburn Farm raised mire from Core 5

Unit	Stratigraphy description	Estimated Dates	Depth
			(cm)
IV	Peat layer with monocotyledon	Early to Late Holocene	0-611
	and heather/heath fragments		
III	Peaty clay layer	Early Holocene	611-627
II	Silty clay layer with	Late Glacial (Late	627-636
	monocotyledon plant fragments	Devensian) to Early	
		Holocene	
I	Till layer	Glacial (Devensian)	636+

The stratigraphic sequence presented in Table 4 shows that the raised mire developed in a similar to succession to that described at the other sites with the raised mire peat (unit iv) forming above a peaty-clay layer (unit iii) signalling the infilling of a body of water shown by the boulder clay layer (unit ii), which was deposited over till (unit i). The gouge auger transect shown in Figure 48 shows the profile of the dome of the raised mire, rising from the sides (core 1) to the top of the dome (core 5), where the deepest peat depths occur. Monocotyledon plant fragments of probable reeds or sedges found within unit ii suggests the area of water was shallow with these species usually growing at the fringes of larger water bodies. Given the large depth of peat (over 6.2m) and a possibly shallow area of water to begin with at this site it is thought that the peat here may have begun to develop in the early Holocene soon after the end of the last glacial period, such has been shown at sites like Kilgarth, North Lanarkshire (Timpany 2006).

SITE A1 MOLLINSBURN PEAT BASIN, NORTH LANARKSHIRE

SITE DESCRIPTION

Site A1 Mollinsburn peat basin (ns 71561, 71847) lies within the [road] island formed by the slip road of the Mollinsburn junction off the A80, next to the Mollinsburn roundabout (see figure 49). Today this is an area of pastureland used for grazing by horses with pockets of rush swamp, with gentle slopes on each side rising some 5m in elevation. However, it is likely that this elevation is man made, constructed during the course of this part of the A80. The new M80 road scheme will encompass the entire area of this roundabout and will therefore significantly impact any areas of lowland bog it may contain.

Stratigraphy

The gouge auger survey across this area proved ineffective, as it was unable to penetrate a compact layer of rubble, which underlies a thin layer of [modern] topsoil (see figure 50). This rubble layer is likely to represent the dumping of material onto the site during the construction of this stretch of the a80, possibly to stabilise the surface for easier access of plant and other heavy machinery. It is probable that this activity would have disturbed and compacted any underlying peat deposits and therefore greatly reduced the palaeoenvironmental potential of such deposits, particularly in regard to the chronostratigraphic resolution of the upper part of the deposit. The depth of this rubble layer is currently unknown due to the inability to manually core through it, however, trenching through this area may reveal any underlying peat deposits.

DISCUSSION

With the exception of the Mollinsburn peat basin (site A1), whose origins are unknown due to this area being covered by construction rubble, all of the sites have a similar development history. The gouge auger transects across each site have demonstrated the deepest sediment accumulations have occurred within hollows, gouged into the landscape from glacial activity. These hollows have effectively provided "pockets" for the deposition and accretion of sediments. The general model across the sites within this study is for these pockets to originally fill with water, shown by the clay deposits, which gradually infill with peaty sediments from colonisation by plants. These peats are then generally seen to continue to accumulate to the top of the stratigraphic columns. It is thought that the boulder clay deposits were laid down in the late glacial with peat development ranging from the early holocene (c. 10,000 to 9,000 bp) to mid holocene (c. 7,500 to 5,000 bp) and continuing up to the present day. Three sites have been found to contain large depths of deposits: south broomknowes (up to 5.5m), Barbeth Bog (up to 4m) and Mollinsburn Farm (up to 6.2m). Field observations have also shown these deposits to have good preservation of fossilised plant material and also at Broomknowes Farm of freshwater shell material. These sites therefore have the potential to provide detailed palaeoenvironmental reconstruction data of a good resolution from the late glacial period, possibly up to the present day, dependent on truncation (e.g. From peat cutting). The raised mire record at mollinsburn farm will also have good potential for palaeoclimate reconstruction from testate amoebae records due to such areas receiving water via precipitation rather than ground water (Charman, 2001).

The palaeoenvironmental importance and potential of these areas

At two sites (South Broomknowes and Stoneyetts peat basin) there is also evidence of earlier peaty deposits, which may date back to the Windermere Interstadial (*c.* 13,000 to 11,000 bp). These deposits have been identified during the gouge auger and trenching work as bands of peaty-clay sandwiched between layers of clay, which in turn overlie till. These layers have been observed in the field to contain wood fragments, indicating good preservation of material for palaeoenvironmental reconstruction. Such records have the potential to provide important information on the climate and vegetation for this area of central Scotland during this relatively brief period following the end of the Devensian period.

An interesting aspect of the results of this work is the differences in vegetational environments signalled by the plant remains visible within the peats. Moving from west to east across this area (approximately 5km) the vegetation is seen to change from reed/sedge

swamp at South Broomknowes, to carr-woodland at Stoneyetts peat basin and Barbeth Bog and finally to raised mire vegetation at Mollinsburn Farm. It is thought that all these environments would have been in existence across the area from at least the mid Holocene onwards and highlights the different mosaics of vegetational communities that can exist over a relatively small area together with the different hydrological regimes in operation. These different vegetation covers over the peat then have repercussions on pollen recruitment aspects for these sites. In general the more open the vegetation covering the peat the larger the area the pollen will be recruited from, so for example areas of reed/sedge swamp and raised mire will have a higher regional pollen signal than areas covered by carr-woodland, which will have a strong local signal (Davies and Tipping, 2004). The three sites of deepest sediment accumulation occur in each of these environments and therefore offer a chance for good spatial palaeoenvironmental reconstruction across the area covered by this study. The more open environments of the reed/sedge swamp and raised mire will provide good records of local and more wider vegetation change and the carr-woodland environment will provide records of local changes. This then allows a vegetation model for the area to be constructed, which importantly will recognise the complexity of the different vegetation types, which will be intrinsic in interpreting possible evidence of interactions between people and the landscape.

Conclusions

Overall the Phase 1 assessment has shown that:

- There is good potential for palaeoenvironmental work across the area covered by this study with good preservation of fossilised plant material and shell observed in the recorded sediments.
- Three sites have deposits of 4m plus (South Broomknowes, Barbeth Bog and Mollinsburn Farm), which would provide good resolution studies for vegetational history and investigation of anthropogenic activity. Including at South Broomknowes possible material from the Windermere Interstadial.
- Plant remains visible within the peats have shown that a mosaic of different
 vegetational communities existed across the area of investigation. Understanding of
 these communities through reconstructive work will provide information of the
 hydrological history of the area together with landscape change at the wide and local
 scales.
- South Broomknowes, Barbeth Bog and in particular Mollinsburn Farm with their deep sedimentary sequences places them at the level of at least regional importance. The Mollinsburn Farm site with its deep raised mire sequence (6.2m plus) and absence of any evidence of peat cutting and/or drainage observed in the field may be of national importance due to it's potential for not only vegetational reconstruction but also for climate reconstruction potentially from the early Holocene onwards.

RECOMMENDATIONS FOR FURTHER PALAEOENVIRONMENTAL INVESTIGATIONS

The following recommendations are based on the data collected during this study and the understanding of the palaeoenvironmental potential of the sediments at the following sites.

South Broomknowes peat basin (Site 9)

The sediments at South Broomknowes were found to go down to depths of up to 4m. The plant remains observed in the peat suggest this area may have been sedge swamp. This environment would then have been fairly open and would have allowed pollen recruitment from a wide area suggesting these sediments will hold a good record of local and regional vegetation change. A band of peaty sediments containing wood fragments between two clay layers is suggested to date to the Windermere interstadial. The good preservation of the wood within this layer indicates that preservation of other plant macrofossils and pollen would be good and that important records of vegetation and climate could be gained from this layer. This would then enhance our understanding of the landscape for this period across central Scotland. Therefore it is recommended that this site be put forward for the Phase 2 investigative works to further assess its palaeoenvironmental potential.

Stoneyetts peat basin (Site 34)

• The main area of peat bog at Stoneyetts peat basin was observed in the field to be outside of the road limit and those sediments recorded from trench sections to be fairly shallow; the deepest sequence recorded at trench 337 was 1.1m in depth. Within this sequence the main peat layer was found to be only 0.2m in depth. The deepest peat sequence was recorded within Trench 318 was 0.4m deep. These peats would then offer poor resolution for vegetational reconstruction and its close proximity to Barbeth Bog (Site 37) a sequence of 4m suggests this latter site would make a better study area. There is a potential Windermere interstadial deposit within this area, however, a deposit of this date is also present at South Broomknowes where it is more accessible through coring and can be more easily obtained. Therefore it is recommended that no further work be done at this site.

Barbeth Bog (Site 37)

• From field observations the main area of Barbeth Bog, raised mire is to the north of this site and not within the actual road limits. However, a pocket of peat and clay was found extending to a depth of 4m in the area within the road corridor. The peat was observed to contain well-preserved wood fragments suggesting the area was once carr-woodland. These sediments have good palaeoenvironmental potential and will help to elucidate vegetational change within this area and in particular any interactions between disturbance agents, such as people and the woodland. This site would also add to the understanding of the overall vegetational changes taking place across the area of study. Therefore it is recommended that this site be put forward for the Phase 2 investigative works to further assess its palaeoenvironmental potential.

Mollinsburn Farm (New Site)

• Mollinsburn Farm was an additional site observed in the field as an isolated area of raised mire not far from the fringes of the main area of Barbeth Bog. The gouge auger transect revealed sediments up to 6.36m deep, of which 6.11m was peat.
Observations in the field showed that this peat was predominantly raised mire and that this record appears to be intact, possibly covering the entire Holocene. This site then has the potential to provide detailed palaeoenvironmental and palaeoclimatic reconstruction evidence for the entirety of this period. These records will also provide a good source for investigating human activity in the landscape throughout this time (prehistory to modern day). Therefore it is recommended that this site be put forward for the Phase 2 investigative works to further assess its palaeoenvironmental potential.

Mollinsburn Peat Basin (Site A1)

• The area of Mollinsburn peat basin is currently situated in the middle of a road island formed by the Mollinsburn Junction slip road off the A80. Gouge auger investigation of this area indicated that the area has been significantly impacted upon by previous road development of the A80. Any areas of peat, should they be surviving are currently buried below an unknown amount of construction rubble. Thus any surviving fragments of the peat are also likely to have been disturbed and compacted. Therefore it is recommended that no further work be done at this site.

APPENDIX 6.1

Gouge Auger Transect Results

Gouge auger transect results, showing depth of sediments for Site $9\,$

Sediment	Core:	1	2	3	4	5
dark brown monocotyledon peat with wood fragments		0.00-0.53m	0.00-0.50m	0.00-0.26m	0.00-0.30m	0-00-0.40m
light brown monocotyledon peat		0.53-3.60m	0.50-2.45m	0.26-3.67m	0.30-3.85m	0.40-1.70m
dark brown-black peaty clay		3.60-4.00m			3.85-5.12m	
blue-grey boulder clay		4.00-4.40m	2.45-2.50m	3.67-5.50m	5.12-5.34m	
black peaty clay					5.34-5.48m	
blue-grey boulder clay with sand				5.50-5.80m	5.48-5.60m	
dark brown sandy clay with gravels						1.70-2.85m
till layer/stone		4.40m+	2.50m+	5.80m+	5.60m+	2.85m+

Trench section results, showing depth of sediments for Site 34

Sediment	Trench:	333	337	319	318	308	307
top soil		0.00-0.20m	0.00-0.30m	0.00-0.30m	0.00-0.30m	0.00-0.30m	0.00-0.25m
stoney silt - hillwash		0.20-0.40m	0.30-0.50m	0.30-0.60m	0.30-0.50m	0.30-0.50m	0.25-0.40m
sand			0.50-0.60m				
sandy clay							0.40-0.60m
dark brown peaty clay with wood fragments					0.50-0.80m	0.50-0.70m	0.60-0.80m
brown peat with wood fragments		0.40-0.60m	0.60-0.80m	0.60-0.80m	0.80-0.90m	0.70-0.80m	0.80-1.00m
blue-grey clay			0.80-0.90m	0.80-0.90m	0.90-1.00m	0.80-0.90m	

brown peat with wood fragments		0.90-1.00m		
blue-grey clay		1.00-1.10m		
till layer/stone	0.60-0.70m	1.10-1.20m		

Gouge auger transect results, showing depth of sediments for Site 37

Sediment	Core:	1	2	3	4	5
black monocotyledon peat		0.00-0.10m	0.00-0.15m	0.00-0.50m	0.00-0.43m	0.00-0.40m
dark brown peat with wood fragments		0.10-2.22m	0.15-3.78m	0.50-3.18m	0.43-0.69m	0.40-0.89m
dark brown peaty clay with wood fragments						
dark grey silty clay				3.18-3.30m	0.69-0.84m	0.89-0.95m
light brown organic mud					0.84-0.93m	
blue-grey silty clay with occasional wood fragment		2.22-2.60m				
blue-grey boulder clay with silt and gravels		2.60-3.00m	3.78-4.00m	3.30-3.60m	0.93-1.00m	0.95-0.98m
till layer/stone		3.00m+	4.00m+	3.60m+	1.00m+	0.98-1.00m

Gouge auger transect results, showing depth of sediments for New Site

Sediment	Core:	1	2	3	4	5
orange-brown monocotyledon peat		0.00-4.20m	0.00-5.50m	0.00-4.80m	0.00-5.50m	0.00-6.11m
dark brown wood peat		4.20-4.62m				
dark brown-black peaty clay		4.62-4.98m	5.50-6.00m	4.80-4.98m	5.50-6.55m	6.11-6.36m
dark grey sandy silt with gravels		4.98-5.25m	6.00m+	4.98-5.00m	6.55-6.60m	6.36-6.38m

Gouge auger transect results, showing depth of sediments for Site A1

Sediment	Core:	1	2	3	4	5
black top soil		0.00-0.10m	0.00-0.10m	0.00-0.05m	0.00-0.05m	0.00.0.10m
orange-grey sandy clay with large stones		0.10-0.47m	0.10-0.20m	0.05-0.10m	0.05-0.20m	0.10-0.25m