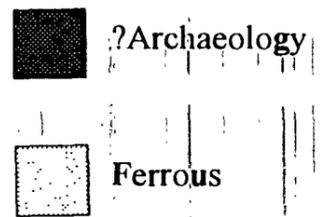
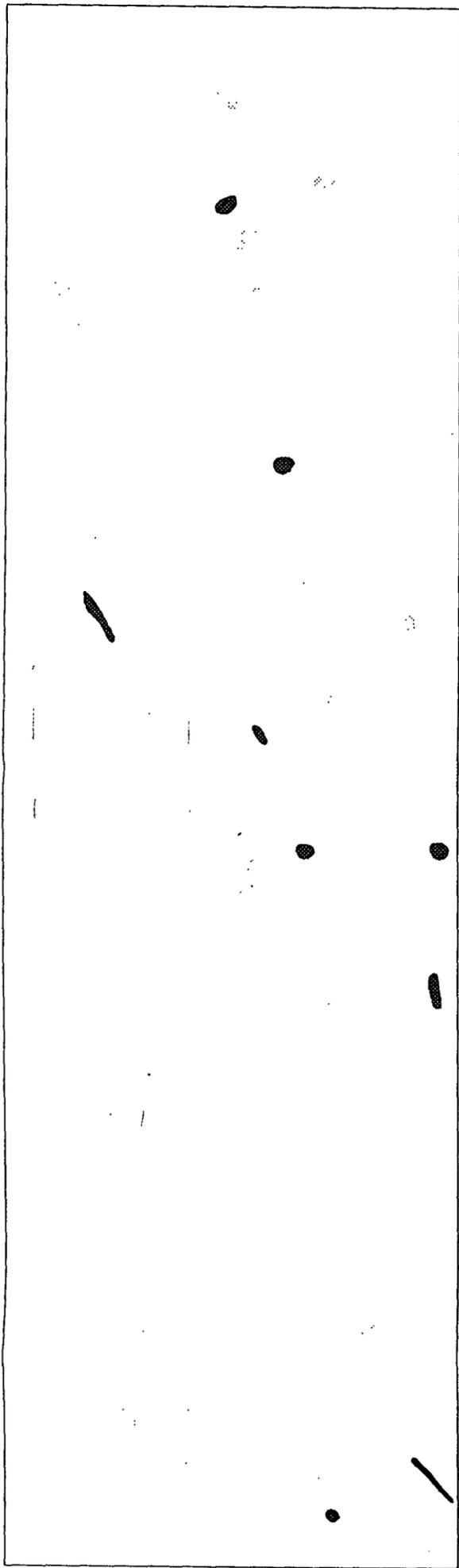
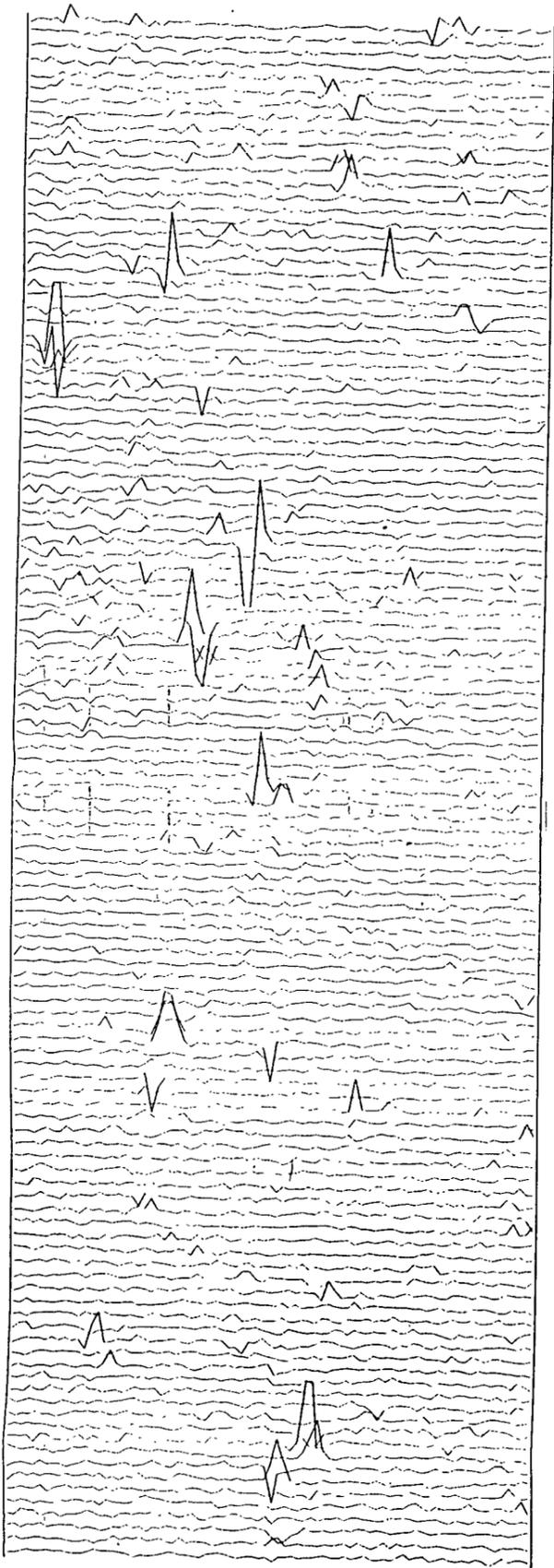


ARKENDALE Area F1

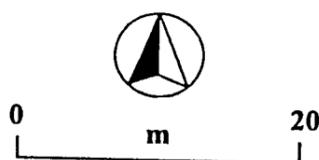
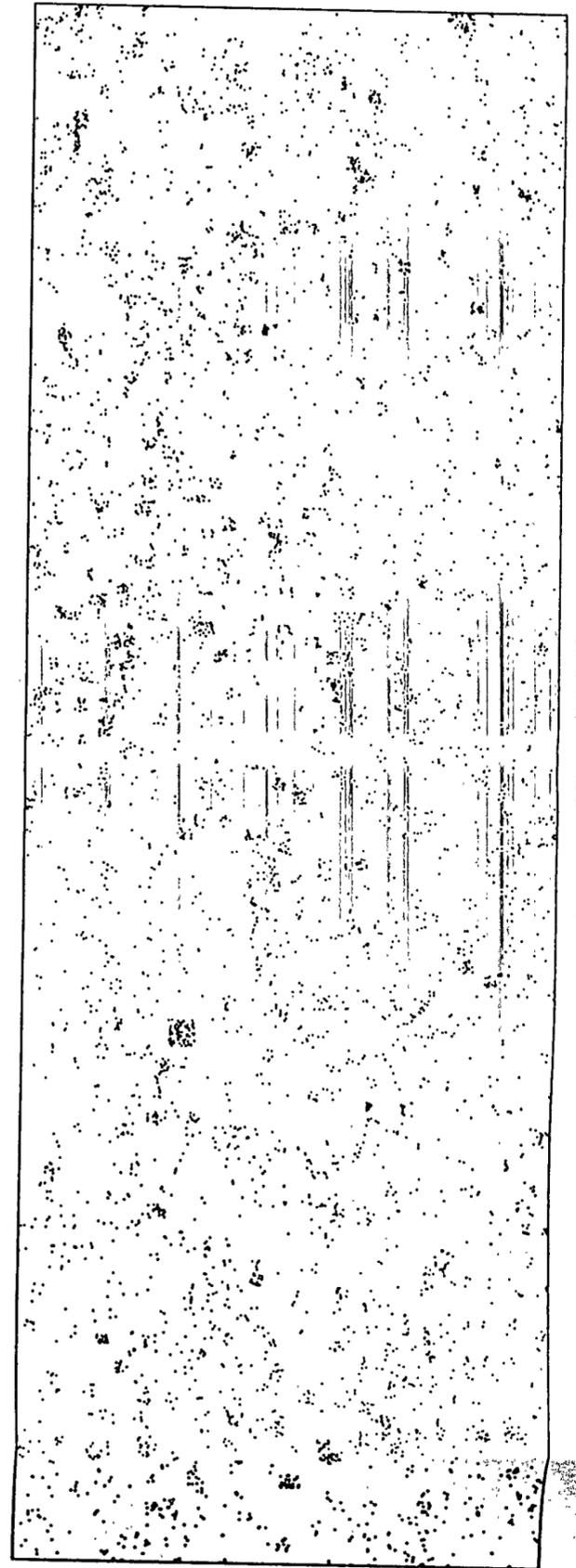
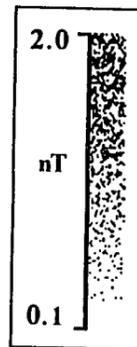


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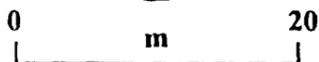
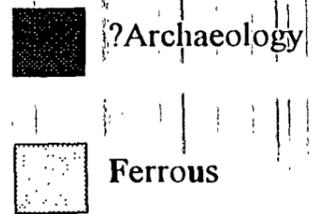
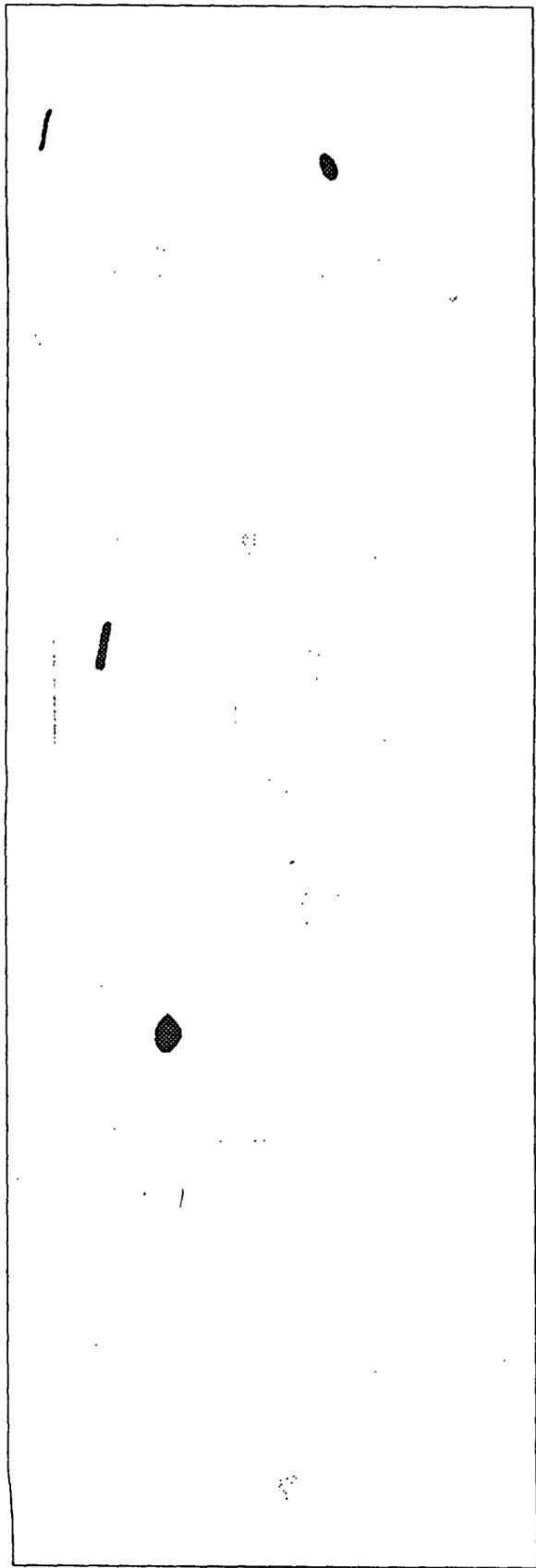
ARKENDALE Area F2



15 nT



ARKENDALE Area F2



APPENDIX 1: DESCRIPTION OF MAPS

Reference numbers shown here are those used by the County Records Office, Northallerton.

Transcribed Aerial Photograph map

Consulted at the Sites and Monuments Records Office, Northallerton, this map shows a sub-circular enclosure in the area bordering on/ just within the northern leg of the assessment area. This is the prehistoric enclosure referred to in *Section 3.3.1* above. A linear feature almost on the line of the west field boundary may be an earlier field boundary, or the line of the road referred to in *Section 3.3.4*. The map also shows shorter north - south linear features across the present south field boundary, thought to be drainage cuts.

1st edition Ordnance Survey 6" map (1855) - MIC 1830/372

See Figure 4. This map shows Hollins House, with fields to the north called 'The Hollins' and a small wood to the south-west called Barnkiln Wood. A mile post is shown on the east side of the road. A kinked footpath is seen in the south-east field corner west of the road.

2nd edition Ordnance Survey map, 6" (1898) - MIC 2546/62

Field boundaries remain entirely unchanged since 1855. The kinked footpath is now straightened out.

Ordnance Survey map, 25" (1909) - MIC 1896/487

Barnkiln Wood is somewhat extended to the west and south, and a building erected, all within the lines of a pre-existing enclosure. One new field boundary is seen, running from the south-east corner of the wood eastwards to the main road, but otherwise there is no substantial change.

6" Quarter sheet (1910) - MIC 1816/240

Shows identical information to the 25" map of the previous year (above).

APPENDIX 2: DESCRIPTION OF AERIAL PHOTOGRAPHS

Reference numbers are those used by the Sites and Monuments Record, North Yorkshire, where the photographs were examined.

General colour oblique shots

These photographs of the pre-motorway Great North Road (nos 18 and 19) showed a faint darkening in the area of the 'enclosure' and possibly a large curving feature in the field at the angle of the Great North Road and the Marton road, showing as a shadow, consistent with the route of a pre-1855 footpath shown on the First Edition Ordnance Survey map.

PVA 4762016

Black and white oblique photograph taken in 1976. It clearly shows a small sub-circular 'enclosure' with central circular shadow at SE 401 623, which will have been destroyed by earlier road building works. Also seen is the light mark of a possible field boundary west of the enclosure, running north-east towards the Great North Road.

5667199 and 5767160

Black and white vertical photographs taken in 1967: the former shows a possible lighter, squarish patch in the centre of the field at the angle of roads mentioned above, but the sides are exactly parallel with the field boundaries, which suggests something to do with the movements of contemporary farm machinery. Nothing shows on the east side of the road.

4062 and 4063

Black and white vertical photographs taken in March 1946, which show nothing in any of the fields concerned, except a faint squarish shadow in the field north-east of the farm which is thought to be made up of drainage channels.

APPENDIX 3: PROJECT DESIGN

1. INTRODUCTION

- 1.1 An archaeological desk top assessment and geophysical evaluation is required as a planning requirement in advance of an inquiry into the construction of a motorway service area at Arkendale, North Yorkshire. The area has been fieldwalked, identifying earthwork features to the north of Hollins farm and a small number of flint fragments to the south. Further archaeological work to the north of the development area has suggested that even small quantities of flint in this area are indicative of plough damaged features of prehistoric date.
- 1.2 The Lancaster University Archaeological Unit has considerable experience of desk top assessment work, together with the evaluation and excavation of sites of all periods, having undertaken a great number of small and large scale projects during the past 15 years. Evaluations have taken place within the planning process, to fulfil the requirements of clients and planning authorities, to very rigorous timetables. LUAU has the professional expertise and resource to undertake the project detailed below to a high level of quality and efficiency. LUAU and all its members of staff operate subject to the Institute of Field Archaeologists (IFA) Code of Conduct.

2. OBJECTIVES

- 2.1 The following programme has been designed to provide an accurate archaeological evaluation of the designated area, within its broader context. The required stages to achieve these ends are as follows:

2.2 *Desk Top Survey*

To accrue an organised body of data to inform the field inspection.

2.3 *Geophysical Survey*

A geophysical survey is required to examine a sample of the study area. The size of the sample has yet to be confirmed but is likely to be in the region 40% of the study area.

2.4 *Evaluation Report*

A written evaluation report will assess the significance of the data generated by the desk top study and the geophysical evaluation within a local and regional context. It will advise on the mitigation measures necessary to protect and/or record (to appropriate levels) identified archaeological features and deposits, including any appropriate further evaluation, excavation, and recording strategies.

3. METHODS STATEMENT

3.1 The following work programme is submitted in line with the stages and objectives of the archaeological work summarised above.

3.2 DESK TOP SURVEY

3.2.1 The following will be undertaken as appropriate, depending on the availability of material. The level of such work will be dictated by the timescale of the project.

3.2.2 **Documentary and cartographic material:** This work will rapidly address the full range of potential sources of information. It will include an appraisal of the North Yorkshire Sites and Monuments Record, as well as appropriate sections of County histories, early maps, and such primary documentation (tithe and estate plans etc.) as may be reasonably available. Particular attention will be paid to field- and place-names recorded on early cartographic sources as these often provide important evidence of archaeological activity. Any photographic material lodged in either the County Sites and Monuments Record or the County Record Offices will also be studied. Published documentary sources will also be examined and assessed.

3.2.3 **Aerial Photography:** A survey of the extant air photographic cover will be undertaken. This may indicate the range and survival of archaeological and structural features in the designated area, and if appropriate coverage is available, allow an assessment of the rate and progress of erosion of archaeological features. It will also facilitate the rapid recognition and plotting of archaeological features including those no longer visible at ground level.

3.2.4 **Physical environment:** A rapid desk-based compilation of geological (both solid and drift), and topographical information will be undertaken. This will not only set the archaeological features in context but also serves to provide predictive data, that will increase the efficiency of the field investigation.

3.2.5 **Collation of data:** The data generated by 3.2.1-3.2.4 (above) will be collated and analysed in order to provide an assessment of the nature and significance of the known surface and subsurface remains within the designated area.

3.4 GEOPHYSICAL SURVEY

3.4.1 Subject to discussions with the County Archaeological Curator it is proposed to undertake a gradiometer survey over a sample of the study area. It is proposed that the work be undertaken by Geophysical Surveys (Bradford) Ltd who are the leading exponents of archaeological geophysics. The results will be related to any information produced by the desk top study.

3.5 EVALUATION REPORT

3.5.1 **Archive:** The results of Stages 3.1-3.4 will form the basis of a full archive to professional standards, in accordance with current English Heritage guidelines (*The Management of Archaeological Projects, 2nd edition, 1991*). The project archive represents the collation and indexing of all the data and material gathered

during the course of the project. It will include summary processing and analysis of any features and finds recovered during fieldwork. The deposition of a properly ordered and indexed project archive in an appropriate repository is considered an essential and integral element of all archaeological projects by the IFA in that organisation's code of conduct.

- 3.7.2 This archive can be provided in the English Heritage Central Archaeology Service format, both as a printed document and on computer disks as ASCII files, and a synthesis (in the form of the index to the archive and the report) will be deposited with the North Yorkshire Sites and Monuments Record. LUAU practice is to deposit the original record archive of projects (paper, magnetic, and plastic media) with the appropriate County Record Office, and a full copy of the record archive, should any material be recovered, with the material archive (artefacts, ecofacts, and samples, at this stage from surface collections) with an appropriate museum.
- 3.7.3 **Report:** One bound and one unbound copy of a written synthetic report will be submitted to the Client, and a further copy submitted to the North Yorkshire County Archaeologist. The report will include a copy of this project design, and indications of any agreed departure from that design. It will present, summarise, and interpret the results of the programme detailed above and will include a full index of archaeological features identified in the course of the project, together with appropriate illustrations, including a map and gazetteer of known or suspected sites identified within or immediately adjacent to the study area. It will also include a complete bibliography of sources from which the data has been derived, and a list of further sources identified during the programme of work, but not examined in detail.
- 3.7.4 This report will identify areas of defined archaeology. An assessment and statement of the actual and potential archaeological significance of the site within the broader context of regional and national archaeological priorities will be made. Illustrative material will include a location map, location of survey transects and survey plots; including both raw data plots and interpretative plots. It can be tailored to the specific requests of the client (eg particular scales etc), subject to discussion. The report will be in the same basic format as this project design; a copy of the report can be provided on 3.5" disk (IBM compatible format).
- 3.7.5 **Proposals:** The report will make a clear statement of the likely archaeological implications of the intended development, as far as can be assessed without intrusive evaluation techniques. It will also make recommendations for any further evaluation of the identified archaeological resource deemed necessary or desirable. It will seek to achieve, as a first option, the preservation *in situ* of all significant archaeological features, and possible strategies for the mitigation of the development, including design modifications, will be considered. Where conservation is neither possible, nor practical, it may be appropriate to recommend a further stage of more intensive archaeological work in order to mitigate the effects of development.
- 3.7.6 **Confidentiality:** The evaluation report is designed as a document for the specific use of the client, for the particular purpose as defined in the project brief and this project design, and should be treated as such; it is not suitable for publication as an

academic report, or otherwise, without amendment or revision. Any requirement to revise or reorder the material for submission or presentation to third parties beyond the project brief and project design, or for any other explicit purpose, can be fulfilled, but will require separate discussion and funding.

4. PROJECT MONITORING

- 4.1 **J.J. Harrison (Properties) Ltd:** LUAU will consult with J.J. Harrison (Properties) Ltd regarding access to land within the study area. This consultation will include, if required, the attendance of a representative of the client at any meetings convened with the North Yorkshire County Archaeologist, or his representative, to discuss progress or the report.
- 4.2 **North Yorkshire Sites and Monuments Record:** Any proposed changes to the project brief or the project design will be agreed with the North Yorkshire County Archaeologist in coordination with the client. LUAU will arrange a preliminary meeting, if required, and the North Yorkshire SMR will be informed of the commencement of the project in writing.

5. OUTLINE RESOURCES

The following resource base will be necessary to achieve the proposals detailed above.

5.1 **Desk Top Study**

5 man-days Archaeological Consultant

5.2 **Geophysical Survey**

5 man-days Geophysical Surveys of Bradford (3 days field work, 2 days report)

5.3 **Evaluation Report**

2 man-days Project Officer (including incorporating results of geophysical survey).

- 5.4 The project will be under the direct line management of **Alan Lupton, PhD.** (Unit Project Manager) to whom all correspondence should be addressed. LUAU reserves the right to sub-contract elements of the project to respected archaeological consultants, as required, in order to fulfil the strict timetable. It is proposed that the desk-top study be undertaken by **Jo Bell** who has considerable experience of desk-top studies for planning assessments and evaluations. The geophysical survey will be undertaken by **Geophysical Surveys of Bradford.**