THE ARCHAEOLOGY OF THE YORKSHIRE WATER DROUGHT RELIEF PIPELINE
MOOR MONKTON TO ELVINGTON
June to September 1996

ASSESSMENT REPORT,
STATEMENT OF POTENTIAL
and
PROJECT DESIGN

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FIELDWORK METHODOLOGY

1.1 Introduction (Figure 1)

This project was brought about by the recent lack of rainfall in the North of England which has led to the need for an improvement of the infrastructure for the provision of the water supply. This particular pipeline is one of several linking the regions rivers, and will allow for the fast movement of water between counties.

In this instance a pipeline was required to link the Rivers Ouse and Derwent. The chosen route measured a distance of 23 kilometres from the Moor Monkton pumping station on the river Ouse to the Water Treatment works at Elvington on the river Derwent. The route took the pipeline around the north and east side of the City of York. Since the recent alteration of the boundary of the City of York Council that part of the pipeline to the south and east of the A19 lies within the City boundary. That part of the pipeline between the A19 and the River Ouse is within the County of North Yorkshire.

A written scheme of investigation for the provision of archaeological requirements on the pipeline was provided jointly by the City of York Council and North Yorkshire County Council. That scheme of works formed the basis for the fieldwork methodology and the basis for this report.

This report is submitted to satisfy the requirements laid down by English Heritage in ‘Management of Archaeological Projects’ (MAP2), 1991. That document outlined a model for the management of archaeological projects, defining the stages by which a project would reach publication. This identified the need for a stage of assessment of potential for analysis. The intention was that those concerned with the analysis of archaeological data should outline the significance, quantify the resource and justify the programme and ultimately the costs of the post-excavation work. This procedure was expected to ensure that finite resources were not wasted on those aspects of a project which had no contribution to make to the better understanding of our heritage. The possible local, regional and national significance of the various elements of a project within overall research themes were required to be demonstrated.

This report attempts to satisfy the requirements of MAP2, although it should be stated at the outset that this project does not concern a particular site or locality but a random slice through the landscape. The range and date of archaeological deposits which were encountered are therefore perhaps more varied than would be the case with a more restricted project. The fact that the route passes close to the City of York gives it added significance.
The structure of this report will adhere to the following format. Section 1 will outline the methodology of the various stages of fieldwork. This will be followed by a quantification and description of the results of the fieldwork by location, in Section 2. An initial assessment of potential of each location will follow on from that description in the same section and recommendations will be made for further action. The report will continue with Section 3. This will consist of an overview of the implications of the archaeology from the whole pipeline. A Research design will be proposed which will address a number of potential themes for further analysis. The report will conclude with Section 4, Resources and Programming. This will lay down a timetable for the work to be completed, allocate resources both in terms of time, staff and equipment and finally an initial assessment of the budgetary implications.

1.2 Desk-top Evaluation

Archaeological work on this pipeline project commenced with a Desk-top Evaluation of the available written, cartographic and photographic evidence. This work was carried out by Kurt Hunter-Mann of the York Archaeological Trust and has been produced as a separate report. In it a number of areas of archaeological potential were identified on or close to the pipeline route. This information was primarily collected from the Sites and Monuments Record and from a study of aerial photographs of the route. That report recommended that archaeological observation of the topsoil strip would be particularly relevant close to the located sites. Where a particular location was identified in the desk-top evaluation that has been recorded in the relevant text section in Section 3 below with details of what was actually encountered in the ground.

1.3 Field Walking

A small scale programme of field walking was undertaken in advance of the topsoil strip in June 1996 concurrently with the desktop evaluation. The detailed results of that exercise are included as an appendix to this report. The timing of the fieldwalking and the agricultural regime in place on much of the pipeline route in early summer determined that most of the fields that were walked were either under pasture or various types of cereal. It was clearly impossible to view anything other than earth-works in the pasture and the maturing cereals made surface observation and collection of artefacts an impossibility. In a limited number of cases a variety of vegetable crops were in an early stage of growth and in those cases it was possible to collect surface material. In none of those cases was an archaeological site or significant surface scatter predicted on the basis of the collection.

1.4 Geophysical Survey
A geophysical survey was commissioned at the same time that surface collection was taking place. The results of that survey have been submitted as a separate three part report. The value of this work was also reduced by the timing of the project since it was only possible to undertake geophysical prospecting effectively in pasture. Elsewhere the maturing crops made it impossible to track the equipment at ground level. At a number of locations the pipe sections had already been dumped in the pipeline corridor prior to the arrival of the geophysical team. The presence of a considerable quantity of tubular steel sections rendered geophysical survey a complete impossibility!

1.5 Topsoil Removal and Excavation

Observation of the topsoil strip was considered to be the most appropriate method for undertaking an effective evaluation of the presence of archaeological deposits within the pipeline corridor. To that end a team of archaeologists was recruited to observe each machine working along the length of the route for the duration of the topsoil strip. This took just in excess of three weeks in June of 1996. Two separate sub-contractors were employed by Yorkshire Water to undertake this monumental task. At any one time as many as a dozen heavy tracked excavators were in action. The logistics of this activity both from the point of view of the engineers and of carrying out archaeological observation, were acute. Nonetheless in virtually all cases an archaeologist was present when the initial strip took place.

The precise details of the topsoil strip are significant as it proved to be particularly effective as an archaeological method. A 30m wide corridor was fenced off for pipeline construction. This allowed sufficient space to lay the pipe, track machinery and leave linear spoil heaps which did not hinder the pipe laying. Unlike a linear strip for the construction of a road it was the intention in this case that the topsoil would be replaced after the insertion of the pipe and the land should revert to its original use. In order for this to be achieved it was essential that topsoil was removed and stored separately from the subsoil. The farmers along the route were keen that the more fertile topsoil should be kept separate from the inert sands and heavy clays that formed the subsoil.

Topsoil was therefore removed by 360 degree swivel, (Hymac), tracked excavators using large smooth bladed ditching buckets. This division between topsoil and subsoil proved the perfect modus operandi for archaeological observation. All of the important archaeological deposits, and in particular cut features, were most readily seen at the interface between the topsoil and subsoil. Each tracked excavator was therefore carefully observed whilst the strip took place and field notes were taken.

Only after that had taken place and the archaeologist was able to report that nothing of interest was present were bulldozers permitted to track over the
exposed surface of the subsoil, rendering further observation impossible. If the topsoil strip had taken place by means of bulldozers alone, the effectiveness of archaeological observation would have been significantly diminished.

In most cases where archaeological features were observed these were recorded and described in field notebooks and surveyed using a Total Station Theodolite. In several instances it was necessary to undertake more detailed fieldwork although in the majority of these cases this was undertaken whilst topsoil stripping was taking place elsewhere and prior to the arrival of the pipe laying gangs. In this way it was possible to carry out proper archaeological recording without hindrance to the main contractors.

In some cases the archaeological features observed were deemed to be sufficiently important to be fenced off and protected for later excavation, whilst the remainder of the topsoil strip took place elsewhere. Three sites were excavated in this manner between July and September 1996. Two of these sites form the main substance of this report.

The working methodology and agreement between Yorkshire Water and the archaeological team in the case of those sites that were fenced off is important to outline here, as it proved to be an extremely effective mechanism for undertaking detailed examination of potentially important archaeological sites whilst at the same time minimising disruption to the main contract.

The normal arrangement in such cases would be for the archaeologists to carry out as much recording as possible in an agreed limited amount of time, whilst keeping the delay to a minimum. This situation is not ideal for either party as it is often necessary to carry out the work too quickly and it does not prevent an expensive, if short term, delay to the contract. On this project Yorkshire Water and the archaeological team were able to come to an agreement whereby the pipe was inserted within a narrower working strip than normal over a limited distance. Fast salvage excavation was carried out within these areas without any delay to the pipe layers. The undisturbed area which was left at the side of the pipe was therefore left for controlled archaeological excavation before the reinstatement of the topsoil, several weeks later. Not only did Yorkshire Water agree to alter their normal working practices for this arrangement to take place, they also fully covered the costs of the archaeological work. This is perhaps the first time that such an initiative has taken place, in which a Utility Company has financed the costs of what has amounted to a fast track research excavation to the satisfaction of all concerned. Yorkshire Water should be applauded for this far sighted approach to the undertaking of the necessary archaeological fieldwork.
2 Results by Location

2.1 Introduction

In this section the results of the topsoil monitoring exercise are reported on in a linear manner, commencing at the south-eastern end of the pipeline at the Elvington Water Treatment Works and concluding twenty three kilometres away at the Moor Monkton Pumping Station. Each archaeological discovery is described by location and reported separately.

In each instance a site description is given and a factual account of what was observed is recorded. This is followed by a statement of potential for analysis and recommendations for future action. The section concludes with a breakdown of the Programme of Works required to complete the analysis. The programme of works includes an itemised list of all tasks that are required to be completed, by whom, together with an estimate of the time and resource implications.

In all cases the recommendations for future action includes elements from the following list:-

2.1.1 Archive Preparation:

This is an essential part of the process of analysing the data from any archaeological site. The volume of work which is required at each specific location will of course be determined by the extent, nature and complexity of what was discovered. However the following general principles apply in all cases:-

The archive comprises all data gathered during fieldwork which will be quantified, ordered, indexed, and checked for internal consistency. The archive represents the original record of the project's results and will not be amended, even when subsequent research suggests interpretations and conclusions different from those set down at the time of fieldwork. If at this, or any subsequent stage in the project, material is discarded from the archive, this fact will be recorded.

The first objective in assembling the archive is to preserve the integrity of the primary field record. This will be maintained in optimum conditions to ensure the physical survival of the records, ecofacts, artefacts and other specimens. It will contain, where relevant, the following elements:

- copies of correspondence relating to fieldwork
- survey reports (e.g. Geophysical, documentary, desktop)
• site notebooks/diaries
• original photographic records
• site drawings (plans, sections, elevations)
• original context records
• full site matrix: all stratigraphic relationships will be cross-checked and the stratigraphic sequence of the site firmly established.
• artefacts, ecofacts and any other sample residues
• original finds records (e.g. registered finds, bulk finds, artefact dating catalogues)
• records of conservation and x-rays undertaken during fieldwork
• original sample records
• computer discs and printout

Catalogues and other records

The archive will also include material derived from work done during the analysis phase and will comprise: stratigraphical/structural, artefact, environmental, and other catalogues and all other records as well as details of the methods and selection strategies used in each case. Each separate data group will be cross-referenced to related data groups, to the final publication, and if necessary to a general context concordance. These will be supplemented by indices to allow users maximum accessibility to the contents. It will contain some, or all, of the following elements:

• context information: recording (on duplicate copies) any amendments to original field records resulting from analysis
• photographic catalogue: details of all photographs taken as part of analysis
• photographs: photographs taken as part of analysis
• stratigraphic drawings: any amended versions (on copies) of original site plans and sections cross-referred to earlier versions
object catalogues: details of items selected for analysis, publication and record drawings, and the location of objects

object drawings: object drawings undertaken as part of analysis either as record drawings or for publication

x-ray catalogue: details of all x-rays taken as part of analysis cross-referred to object catalogue

x-rays: x-rays taken as part of analysis, cross-referred to objects

conservation records: details of conservation undertaken during analysis. cross-referred to objects conserved

sample catalogues: details of samples selected for analysis

animal bone catalogues: details recorded for analysis

The archive will also include report text derived from the above material, and which will form the basic text from which the final publication will be prepared. This will comprise:-

i) site narrative: an interpretative structural and stratigraphic history of the site, illustrated by maps/plans/elevations and sections.

ii) artefact reports: the full text, accompanying data, and illustrations relating to those artefacts selected for analysis.

iii) environmental reports: the full text, accompanying data, and illustrations relating to environmental data selected for analysis.

2.1.2 Inclusion in the Sites and Monuments Register

This pipeline disturbed archaeological deposits in a randomly selected corridor through the hinterland of the City of York and evidence from a number of prehistoric and historic periods was recovered. It is important that this evidence is recorded in the appropriate Sites and Monuments Registers for both the City of York and the County of North Yorkshire.

It is therefore proposed that attention will be given to preparing and submitting a full entry to the appropriate Register for each of the locations described below.
2.1.3) Publication

It is proposed that the results of the analysis of this pipeline project should be published in an appropriate academic format. For the Roman material this is may be Britannia or the Yorkshire Archaeological Journal and for the Iron Age material, the Yorkshire Archaeological Journal, or the Archaeological Journal.

Recently excavated Iron Age material from the Easingwold By-Pass will be published in the Archaeological Journal. As this pipeline project also lies within the Vale of York it is likely that there will be many overlapping areas of study for the Iron Age material. In particular it is highly likely that there will be a comparison of the pottery. It is therefore recommended that publication should take place in the same journal and it is the intention therefore to pursue that course of action. It is likely that the nature of publication will consist of a series of short notes relating to the lesser sites and with more major reports being submitted for the major Iron Age site at Rawcliffe Moor (1996.390) and the Iron Age field system at Dunnington (1996.395). In all cases attention will be given to cross referencing the data with other sites of similar period in the region which are currently under academic scrutiny. The pottery in particular should be published with direct reference to the assemblage from Easingwold.

2.1.4) Popular publication

This pipeline has been only one of a number which have resulted in the discovery of numerous previously unknown archaeological sites in the region, all of which were sponsored by Yorkshire Water plc. An overall publication of the results of this work would be merited for a number of reasons. Firstly it is likely that publication in academic journals, whilst extremely worthwhile in its own right, will not lead to an understanding and an acknowledgement within the wider community of the role that was taken by Yorkshire Water, nor will it lead to the wider dissemination of the archaeological results to the general public. Furthermore it is felt that it is important to record in published form the fact that Yorkshire Water plc were able to allow for the detailed recording of certain sites after the pipe had been inserted into the ground. This approach to the archaeology associated with their operations clearly went beyond what would be considered to be the statutory minimum. It is worth recording this fact not only for its own sake but also because it was a very pragmatic approach to the technical aspect of the laying of the pipe and led to benefits to both the engineers in terms of time saving and to benefits to the archaeologists who were able to carry out what amounted to a fast track research excavation rather than limited salvage or research work. In two of the sites that were excavated as part of this project it was possible to fully excavate and recover all aspects of the data from those areas that lay within the pipeline corridor.
The type of format that this publication might take has not yet been considered in detail but the general intent should be the dissemination of the data to a wider lay audience. Attention should therefore be given to clarity, brevity and the use of quality colour illustrations and photographs. It is possible that it could be produced in a format which would enable it to be included within the current range of promotional literature that the company already produces or in a format that would be compatible with inclusion in the Annual Report of Yorkshire Water.
2.2 Location 1: Field to the south of Prospect Cottage, Dunnington, York.  
(Site Records: Field 28A) Figure 2

Accession Code: YORYM:1996.395

National Grid Reference: SE 509676

2.2.1 Site Description: This site consisted of a complex of medium sized shallow V shaped ditches covering much of the area within the pipeline corridor in this field. The most important elements were two successive phases of ditches running approximately parallel to one another and with one 90 degree turn within the stripped area. There were also a number of other ditches in association with the apparently major elements. The only possible structural feature found was a single irregularly shaped pit.

Date: The pottery indicates that this site is of the Late Iron Age.

Interpretation: The lack of a domestic element suggests that this site forms part of an Iron Age field system showing at least one major change in layout and orientation. The location of any associated settlement is unknown.

2.2.2 DATA

Introduction: This site was excavated prior to the arrival of the pipe laying team. An overall survey of the main site features was undertaken with a Total Station Theodolite. Thereafter a number of sample sections were excavated through individual cut features in order to record their general profile and to obtain material for dating and environmental purposes.

Stratigraphic Data: 23 contexts were identified and recorded. These comprised the cuts and fills of seven separate sections excavated through the main ditches and in addition the cut and single fill of a small isolated pit.

Environmental Data: eight environmental samples were taken from these deposits. One of these was a bulk sample, five were for general biological analysis and two were spot samples.

Pottery: Fifteen sherds of Iron Age tradition pottery were recovered, characteristically similar to that from elsewhere on the pipeline route, sites 1996.391 and 1996.389. Two items merit illustration for publication.

Artefacts: In addition to the pottery other artefacts were recovered. These comprised a single bone fragment, 38 iron objects, a single piece of slag and a stone object (pot-boiler). The iron objects have been x-rayed. In all cases these are either unrecognisable fragments or nails.
Statement of Potential: This site represents a hitherto unknown part of the prehistoric Iron Age landscape. Because of the complex nature of the drift geology of the Vale of York few sites such as this have been identified previously. It therefore has considerable potential significance. Its potential for analysis is reduced because any settlement that may have existed in association with the field system was not within the pipeline corridor and because the amount of material that it was possible to recover was limited in scope. It is unlikely that the evidence that is available will be sufficient to indicate the type and nature of the settlement and the type of land-use that the field system represents, other than in the most broad terms.

Proposals: Despite the limitations of the evidence it is proposed that analysis is carried out in three specific areas:

1) The raw survey data that was collected during fieldwork requires plotting so that the precise layout of the site can be illustrated. Consideration of the nature and extent of the whole system and its relationship with the surrounding landscape can be undertaken. This may allow comparison of this layout with other field systems of the same period from elsewhere in the region.

2) Examination of the environmental samples may yield some broad understanding of the nature of the immediate environment of the site.

3) A study of the pottery, in particular in comparison with other larger assemblages that are currently in the process of study as a result of this pipeline work and other recent projects, notably at Easingwold (Whyman ???) will provide a broad date range for the period of utilisation of the site.

Recommendations for future action.

1) Preparation of the Archive
   See above Section 2.1.1 and below tasks 1-5

2) Inclusion in the Sites and Monuments Register
   See above Section 2.1.2 and below Task 6

3) Academic publication
   It is proposed that the results of the analysis of this site should be published in the relevant Journal. (See above Section 2.1.3 and below Task 7).

4) Popular publication
   This site would merit inclusion in an overall publication of the recent activities sponsored by Yorkshire Water. (See above 2.1.4 and below Task 7).

5) Deposition of the Archive
2.2.5 Programme of Work

Task 1: Analysis of the pottery

Task 2: Analysis of the environmental samples

Task 3: Analysis of the other artefacts

Task 4: Preparation of detailed site plans from the original survey data. This is currently held in its original digital format. It requires downloading into a CAD package in order for the drawings to be generated.

Task 5: Preparation of an Archive Report. This will include an interpretative structural and stratigraphic history of the site. It will be illustrated with the drawings created in Task 4 and will make full use of the analysis of the material in Tasks 1 to 3.

Task 6: Preparation of the Sites and Monuments Register entry. This will be based upon the contents of the archive report.

Task 7: Preparation of the Publication Text. As with task 6 this will be based upon the contents of the Archive Report.

Task 8: The site archive will be sorted and prepared for deposition.
2.3 Location 2: Fir Tree Farm, Dunnington, York. (Site Records: Field 27)

Figure 3

Accession Code: YORYM:1996.389

National Grid Reference: (SE 674511)

2.3.1 Site Description:

This site was identified in the Desk-top evaluation as having archaeological potential. A number of crop marks were visible on aerial photographs in an adjacent field and it was suggested that these were Romano-British in date (SMR No. 5779). Topsoil stripping was therefore undertaken using a machine specifically dedicated to the archaeologicla team. In the event two features were recorded. The first consisted of the brick footings of a large structure. The second feature comprised a medium sized hollow in the generally level natural sand. It was filled with a series of sedimentary deposits which were sealed by interwoven wicker-work and twigs. At the time of excavation the presence of the apparently deliberately laid wicker-work gave rise to the suggestion that this feature may have been a trackway of possible prehistoric date and therefore of some considerable importance. A radio carbon sample was collected and sent for immediate analysis in order to determine any future archaeological response at the site. In the event the date showed this to be a modern feature (see below).

**Date:** Radiocarbon Laboratory Number: Beta 94923
Conventional radiocarbon age: 190+/-60 BP
Calibrated results: cal AD 1640 to 1950

A limited amount of pottery corroborated the early modern date given by the radio-carbon sample.

**Interpretation:** The fact that these two features both contained early modern dating evidence and were in close proximity to one another would tend to indicate that they were related. The brick footings clearly represent the foundations of a large barn. The hollow in the natural has been interpreted as a pond. The presence of what were apparently collapsed but deliberately constructed wicker panels may indicate that it had been carefully maintained, perhaps as a fish pond. Local records indicate that the area was known for the extraction of marl. This may have been the reason for its original excavation.

2.3.2 Statement of Potential:

An early modern site of minor local significance.
2.3.3 Recommendations for future action.

1) Inclusion in the Sites and Monuments Register
   See above Section 2.1.2 and below Task 6

2.3.4 Programme of Works

   Task 9: Preparation of site location plans from the original survey data. This is currently held in its original digital form. It requires downloading into a CAD package for the drawings to be generated.

   Task 10: Preparation of the Sites and Monuments Register entry. This will be based upon original site records.

   Task 11: The site archive will be sorted and prepared for deposition.

2.4 Location 3: Field at Thorntree Hill, Dunnington, York.

(Site Records: Field 20) Figure 4

Accession Code: YORYM:1996.393

National Grid Reference: SE 66075247

2.4.1 Site Description:

This site was located on the crest of Thorntree Hill to the south west of Dunnington village. The topsoil strip revealed a surface scatter of Roman pottery in association with a large area of cobbles of varying sizes. A machine cut section through this deposit showed it to be the partially ploughed out remains of a road. Ploughing had spread the uppermost metalling to either side of the in-situ make up of the road and this disturbed material sealed two V shaped ditches to either side of the road. The ditch on the south-eastern side was cut slightly deeper than that on the north-west and contained a series of fills which were rich in organic material as well as containing a considerable amount of pottery. The poorly preserved remains of a leather shoe were present in the lower fill of this ditch. The road was aligned in a south-westerly / north-easterly direction.

Date: The pottery indicates that this site is primarily Roman although some of the pottery may be of post-Roman date.

Interpretation: It is quite clear that this is a well constructed and important road of the Roman period, apparently linking York to the west, with Stamford Bridge to the east. The considerable amount of pottery and well preserved environmental deposits in the ditch fills may indicate that a settlement site lies
close by. There was, however, no structural evidence other than the road metalling itself within the pipeline corridor.

2.4.2 DATA

Introduction: This site was one where salvage excavation took place prior to the arrival of the pipe laying team. Several machine cut trenches were excavated through the ploughed out remains of the road metalling into the natural beneath. These revealed the presence of the ditches to either side of the road surface. Hand excavation took place within limited areas of the machine trenches and one long section was cleaned for photography and the profiles of the features were drawn. The site was surveyed using an total station theodolite to establish the precise alignment of the road.

Contextual Data: A total of nineteen archaeological contexts were identified and recorded. These comprised the ploughed out remains of the road metalling and the cuts and fills of the ditches to either side of the road. In addition there was a surface spread of material to either side of the road which represents plough debris.

Pottery: 27 pottery sherds were recovered from four stratified contexts. In addition a further 88 sherds were found in the surface plough debris.

This assemblage appears to be of later Roman date. The great majority of sherds are unstratified, however, several factors suggest that the group warrants some attention. It includes Roman wheel and hand-made vessels, some of which are certainly late Roman, and study of the chronology and typology of the group may be of interest. In addition, the unstratified sherds include a proportion of comparatively large fragments. This combination of large fragments and approximate association with a specific feature and a later Roman date mitigate the nominally unstratified status of much of this material. A rim sherd from a late Fourth Century AD ‘Huntcliff type' jar of atypically massive proportion should be illustrated and it may be that detailed study will suggest further sherds (possibly amongst the hand-made items) which might be usefully illustrated.

Artefacts: 31 brick and tile fragments were recovered from stratified contexts as well as a single fragment of flint and a nail. 30 fragments of preserved wood and a fragment but apparently complete leather shoe were present in the lower fill of the ditch on the southern side of the road. Single fragments of flint and glass were also found in the surface plough debris.

2.4.3 Statement of Potential:
This site has potential at two levels:-
1) It locates precisely the hitherto uncertain alignment of the Roman road from York to Stamford Bridge.

2) The pottery from this site is worth close examination, despite the fact that much of it is unstratified, because of its association with a known feature and because of its late Roman date. Our understanding of the mechanisms of change in the period spanning what is referred to as the end of the Roman period is poor. The possible presence in the vicinity of a site of this late Roman / post Roman period is of great importance. Such a site in a rural setting close to the important urban centre of York has a potentially national significance.

**Research Proposals:** Despite the limited nature of the evidence from this site and the fact that much of the pottery was unstratified it is proposed that analysis is carried out in the following specific areas:-

1) The raw survey data that was collected during the fieldwork phase will be plotted so that the precise position of the road and its alignment can be ascertained.

2) A study of the pottery is required despite its largely unstratified nature in order to more fully understand its late or post Roman attributes.

### 2.4.4 Recommendations for future action.

1) **Preparation of the Archive**
   See above Section 2.1.1 and below tasks 12-15

2) **Inclusion in the Sites and Monuments Register**
   See above Section 2.1.2 and below Task 16

3) **Academic publication**
   It is proposed that the results of the analysis of this site should be published in the relevant Journal. (See above Section 2.1.3 and below Task 17).

4) **Popular publication**
   This site would merit inclusion in an overall publication of the recent activities sponsored by Yorkshire Water. (See above 2.1.4 and below Task 17).

5) **Deposition of the Archive**
   See below Task 18.

### 2.4.5 Programme of Works

**Task 12:** Analysis of the pottery
Task 13: Analysis and conservation of the other artefacts

Task 14: Preparation of detailed site plans from the original survey data. This is currently held in its original digital format. It requires downloading into a CAD package for the drawings to be generated.

Task 15: Preparation of an Archive Report. This will include an interpretative structural and stratigraphic history of the site. It will be illustrated with the drawings created in Task 14 and will make full use of the analysis of the material in Tasks 12 and 13.

Task 16: Preparation of the Sites and Monuments Register entry. This will be based upon the contents of the archive report.

Task 17: Preparation of the Publication Text. As with task 16 this will be based upon the contents of the Archive Report.

Task 18: The site archive will be sorted and prepared for deposition.

2.5 Location 4: Field to the north-west of the A166 and to the south west of Vengeance Lane. (Site Records: Field 19) Figure 5

Accession Code: General accession code YORYM: 1996.???

National Grid Reference: SE 658 529

2.5.1 Site Description: Linear ditch with square ended terminal

Date: Single sherd of Romano-British pottery

Interpretation: Possible evidence for Romano-British field system

2.5.2 Statement of Potential: None.

2.5.3 Recommendations for future action.

1) Inclusion in the Sites and Monuments Register
See above Section 2.1.2 and below Task 19-21.

2.5.4 Programme of Works

Task 19: Preparation of site location plans from the original survey data. This is currently held in its original digital format. It requires downloading into a CAD package for the drawings to be generated.
Task 20: Preparation of the Sites and Monuments Register entry. This will be based upon original site records.

Task 21: The site archive will be sorted and prepared for deposition.
2.6 Location 5: Field to the north-west of the A166 and to the south west of Vengeance Lane. (Site Records: Field 19) Figure 5

Accession Code: General Accession code YORYM: 1996.???

National Grid Reference: SE 658 529

2.6.1 Site Description: Series of linear depressions measuring up to 3m. in width but with little depth.

Date: Modern pottery and glass

Interpretation: Possible night soil dumping, material having been brought from the city of York

2.6.2 Statement of Potential: None.

2.6.3 Recommendations for future action.

1) Inclusion in the Sites and Monuments Register
See above Section 2.1.2 and below Task 19-21.

2.6.4 Programme of Works

Task 19: Preparation of a site location plan from the original survey data. This is currently held in its original digital format. It requires downloading into a CAD package for the drawings to be generated.

Task 20: Preparation of the Sites and Monuments Register entry. This will be based upon original site records.

Task 21: The site archive will be sorted and prepared for deposition.
2.7 Location 6: Field at Murton Moor (Site Records: Field 16) Figure 6

Accession Code: General Accession Code YORYM: 1996.???

National Grid Reference: SE 654 536

2.7.1 Site Description: Two linear ditches aligned north-west/south-east spanning the full width of the pipeline corridor.

Date: Romano-British

Interpretation: Possible Romano-British field boundaries.

2.7.2 Statement of Potential: None.

2.7.3 Recommendations for future action.

1) Inclusion in the Sites and Monuments Register
See above Section 2.1.2 and below Tasks 22-24.

2.7.4 Programme of Works

Task 22: Preparation of a site location plan from the original survey data. This is currently held in its original digital format. It requires downloading into a CAD package for the drawings to be generated.

Task 23: Preparation of the Sites and Monuments Register entry. This will be based upon original site records.

Task 24: The site archive will be sorted and prepared for deposition.
2.8 Location 7: Field to the south-west of Willow Grove Farm (Site Records: Field 14) Figure 6

Accession Code: General Accession Code YORYM: 1996.???

National Grid Reference: SE 649 540

2.8.1 Site Description: Single V shaped ditch.

Date: Unknown

Interpretation: Undated field boundary

2.8.2 Statement of Potential: None.

2.8.3 Recommendations for future action.

1) Inclusion in the Sites and Monuments Register
See above Section 2.1.2 and below Tasks 25-27.

2.8.4 Programme of Works

Task 25: Preparation of a site location plan from the original survey data. This is currently held in its original digital format. It requires downloading into a CAD package in order for the drawings to be generated.

Task 26: Preparation of the Sites and Monuments Register entry. This will be based upon original site records.

Task 27: The site archive will be sorted and prepared for deposition.
2.9 Location 8: Field at Stockton Moor West (Site Records: Fields 10 and 11) Figure 6

Accession Code: YORYM: 1996.390

National Grid Reference: SE 648545

2.9.1 Site Description: This was one of the two sites along the pipeline route where a considerable amount of archaeological excavation took place. Archaeological deposits were observed in the topsoil strip across the full width of the corridor for a distance of just in excess of 100 metres. The remains were most dense and well preserved over a distance of about 50 metres. It was agreed that half of the width of the pipeline corridor should be fenced off for this 50 metre stretch. Archaeological recording took place on a salvage basis over a number of days on those deposits which were outside the fenced area. The pipes were subsequently inserted into the narrower working width once this salvage work had taken place. Following the topsoil strip archaeological excavation took place within the fenced off area for several weeks, during which time it was possible to excavate the archaeological features completely.

A large rectangular enclosure, which was only partially within the pipeline corridor, was delineated by medium sized V shaped ditches. It appeared to be in association with a series of further ditches which extended to the north. Within the enclosure were traces of a number of crudely constructed post-built structures. The north west quadrant of the enclosure was divided from the remainder by two shallow curving ditches. Immediately to the north of the large enclosure were the remains of sill beam trenches for a small rectangular structure and further to the north were a number of smaller ditches and several ephemeral circular enclosures. It was only possible to record these latter features in a salvage manner.

To the south of the major part of the site was a large deep sub-rectangular feature containing a multiplicity of thinly interleaved fills. The steep edges of the feature were stepped on one side.

Date: Romano British with a possible subsidiary Iron Age element.

Interpretation: It is clear that the major element at this site, the large rectangular ditched compound represents part of a farmstead of the Romano-British period. Immediately to the east of the area that was excavated there is a slight mound, which lies within the area which would be enclosed by projections of the ditches found within the pipeline corridor. If there is a major building associated with the enclosure it seems reasonable to infer that it is located there. The number of tile fragments and fragments of limestone roof tile from stratified contexts indicates the presence of a well constructed
building nearby. Within the actual area that was excavated the major elements present comprised a number of crudely constructed post-built structures within the compound and a single sill beam structure immediately to the north of the main perimeter ditch. Initial interpretation of these features indicates that they may have functioned as outhouses, sheds or insubstantial farm buildings.

The north-west quadrant of the compound, delineated by the two curving ditches, is an enigmatic feature. The best explanation that can be offered at this stage is that it represents some form of stock enclosure.

The area to the north of the main compound is dominated by a single V shaped ditch and a further shallower example. These are perhaps best interpreted as part of the field system attached to the farm. Several ephemeral curving features were found in association with these ditches. At the time of excavation these were interpreted as enclosures of possible Iron Age date, on the basis of their shape. The lack of any Iron Age pottery indicates that this may not be the case and that these features were part of the Romano-British farmstead, perhaps representing eaves-drips associated with haystacks.

The deep feature to the south is believed to have been a watering hole, into the edge of which steps had been cut into the natural clay.

2.9.2 DATA

Introduction: This was one of the two major sites found during the project which were fenced off and left for detailed controlled archaeological excavation. A team of twelve excavators spent the month of July 1996 at the site. As a result the excavated data forms a large percentage of that recovered from the whole pipeline project.

Contextual Data: A total of 205 individual archaeological contexts were excavated in their entirety and recorded according to the procedures detailed in the York Archaeological Trust Context Recording Manual. Recording sheets were completed in full for each context and each context was planned separately. A Harris Matrix was compiled at the time of excavation. One interesting aspect of the recording procedure at this site was that as a result of the pressure and lack of time no site survey grid was installed. Planning took place initially using traditional techniques involving the use of a planning frame. Thereafter however the planning frame was located by the use of a total station theodolite. Overall site plans were created by digitising the resultant plans into an overall CAD drawing.

Environmental Data: A total of 46 environmental samples were collected. 28 of these were ‘general biological analysis’ (GBA), of about 10 litres. 17 were for ‘bulk sieving’ (BS) of about 30 litres and a single spot sample was taken for
identification purposes. Of these samples four BS samples and five GBA samples have already been submitted for an assessment of their bio-archaeological potential, (Carrot et al 1996).

Many of the samples contained abundant rootlets, probably or certainly modern. Apart from these, biological remains other than (often unidentifiable) charcoal fragments were rare. Some samples yielded charred 'seeds' including cereal grains. Material preserved anoxicly was recovered from only a few samples and in some cases the remains, charred or waterlogged, were clearly modern, presumably having moved down through sediments as a result of biological activity or ploughing. Some of the charred material may have been re-deposited, bearing in mind the nature of the deposits. Only the waterhole feature produced more than a trace of invertebrates preserved by 'waterlogging' and although the assemblage was nondescript, processing of further material might produce a useful quantity of remains. For a fuller discussion of the environmental material from this site see below, 2.9.3 - Statement of Potential.

The Animal Bone: 167 fragments of animal bone were hand collected from eight separate contexts. All were in a poor state of preservation being partially mineralised and burnt. Most of the identifiable fragments were from teeth, including horse and cattle. The bulk sieved contexts produced no bone. The limited value of this material in determining agricultural or pastoral regimes at the site is discussed below in 2.9.3 - Statement of Potential.

Pottery: This assemblage comprised c. 551 sherds in good condition, with sizeable sherds being well represented. Though the majority of the pottery is wheel-made, a number of handmade forms, especially jars, are present. Although aspects of their manufacture follow Iron Age tradition, their rim forms and association with Roman forms indicates that they are of Roman date. Hence the group appears to lie entirely within the Roman period. With one or two exceptions the group appears to broadly conform to what one might expect, in terms of forms and fabric types, of a northern rural site in the vicinity of a major settlement; however, the true picture will only be revealed by proper study. Unoxidized grey wares, especially jars, bowls and dishes are strongly represented; these include Yorkshire and likely extra-regional wares. A range of fine wares is present, though apparently in small numbers, including a little Samian and Nene Valley Colour-Coated Ware. Mortaria are also present. The proportion of Eboracum wares present seems comparatively low, which is surprising given the proximity of the source; this impression should be investigated by research. Amphorae are represented by the Spanish Dressel 20 type, and the number of sherds and the fact that they come from a number of separate contexts suggests that they might be from several vessels. Amphorae are generally rare on rural sites in the midlands and north of England, and so the comparatively strong presence at this site is curious and may be significant for its wider understanding; proximity to York is presumably relevant in this connection. Provisional examination suggests the date range of the group to be long. There are one or two pieces of First century A.D. fine ware, but these
probably represent vessels still circulating / in use in the Second century. Some Fourth Century material also occurs. A dating bracket of c.AD 150-325 might be suggested for the main floruit but this end date is as yet far from firm and dating requires proper consideration. Specific spot-dates for context groups are hindered by the fact that they are, on the whole, small.

Full academic publication will require c.25 drawings, mainly of rim fragments. Drawings will require checking by the specialist at the pencil stage.

The two Samian base stamps will require a Samian specialists' report.

**Artefacts:** Apart from the pottery there were other finds from stratified contexts. These comprised coal, fired clay fragments, flint fragments, glass, iron objects, slag and stone artefacts.

The quantification of material is:

<table>
<thead>
<tr>
<th>Material</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coal</td>
<td>23</td>
</tr>
<tr>
<td>Fired clay</td>
<td>153</td>
</tr>
<tr>
<td>Flint</td>
<td>3</td>
</tr>
<tr>
<td>Glass</td>
<td>4</td>
</tr>
<tr>
<td>Iron</td>
<td>46</td>
</tr>
<tr>
<td>Slag</td>
<td>23</td>
</tr>
<tr>
<td>Stone</td>
<td>41</td>
</tr>
</tbody>
</table>

The iron artefacts consisted mainly of nails including hobnails, although there was one iron pricker (SF247) and a knife blade (SF243). The glass was all modern apart from a fragment from a bangle of Roman date.

The flint objects were all fragments and as with all but one piece of glass may have been introduced into the site as a result of animal burrowing or ploughing.

The fired clay consisted largely of brick and tile fragments. As with the glass and flint some of this may have been brought in by outside agencies but the material is nonetheless worth further analysis as it may have resulted from the collapse or demolition of any major building which may have stood within the main compound albeit outside the area that was excavated.

Two stone objects from the site are of interest. These are a pot lid (SF197) and a quern fragment (SF206).

All the ironwork and a selection of the slag was X-rayed. The plates have been packaged in acid free archival envelopes. The glass from the site is in good condition, dry and suitable for storage. The condition of the ironwork varies but the majority of finds are in poor condition with extensive corrosion. This has resulted in complete mineralisation of the metal core, formation of bulky
corrosion crusts and loss of some detail. All finds have been packaged appropriately for long term storage. The materials used were archive stable and acid free. Micro climates have been created for objects requiring more specific environmental needs. Provided the silica gel system is maintained correctly, it will ensure long term protection against active corrosion.

2.9.3  

**Statement of Potential:** This site represents a hitherto unknown part of the rural landscape during the Roman period in the hinterland of the city. The complex nature of the drift geology in the Vale of York has resulted in sites such as this being rarely recognised in the region. Its location close to the important Roman city coupled with the fact that it was possible to excavate all archaeological deposits within the pipeline corridor give it regional significance.

**Proposals:** It is proposed that analysis is undertaken in a number of specific areas:-

1) The data in the site archive in written, drawn and photographic form will be collated and analysed to allow a fuller understanding of the nature of settlement at the site. A full examination of published sources from similar sites will be undertaken for comparative analysis and specifically in relation to the waterhole feature and the two curving ditches in the north-west area of the main enclosure, which are not fully understood at this stage. A full correlation of contextual data with the evidence from the pottery, artefacts and environmental samples will be required.

2) A detailed examination of the pottery is necessary for two reasons. Firstly to elucidate as firmly as possible dates for the initial settlement at the site and for its abandonment. A comparative examination of the pottery from the site with that from the City of York will, it is hoped, shed a considerable degree of light on the nature of the relationship between the city and its rural hinterland during the central part of the Roman occupation of the region.

3) As stated above, an initial assessment of the environmental samples and the animal bone has already taken place and it is clear that little more can be done with the bulk of this material. However, the assessment did indicate that the deep waterhole feature within the main compound area from which a number of samples were taken may be worth further examination. Should this feature prove to have well preserved environmental deposits within its fills these may give an insight into the natural environment of the area and offer some evidence for the types of agricultural and/or domestic activities that were being undertaken at the site.

4) The other classes of artefact will require analysis to fully assess all relevant data from the site. Given the relative paucity of this material both in terms of quantity and range, these will require a minimum allocation of resources.
2.9.4 Research Proposals

When the above specific areas of study have been completed it is proposed that the following questions should be addressed in the text for final publication.

Site Specific

What was the nature of the settlement?

1) What was the overall size of the main enclosure?

2) Where would the main buildings have been positioned?

3) How did the curving ditches in the north-east quadrant function?
   - Can it be implied that they were stock enclosures?

4) What was the function of the large sunken feature?
   - Is there sufficient evidence to imply that it was for the storage of water?

5) What was the function of the other internal ditches within the main enclosure?
   - Were these ditches simple cut features?
   - Were they in association with any structures, such as a fence line delineating space?
   - How did the resultant enclosed spaces function?
     - Were they domestic?
     - Were they industrial?
     - Were they for storage?
     - Were they agricultural?

6) Was the large ditch at the perimeter of the rectangular enclosure the boundary of the settlement?
   - Was there a superstructure associated with this ditch?
   - Did it control the movement of livestock?
Can any defensive function be implied for this ditch?

7) Can any related field system be associated with the settlement?

8) Is there sufficient evidence to determine the nature of the agricultural regime that was practised at the site?

9) Is there any clear and direct evidence for any industrial activity at the site?

The Date of Occupation

10) When was the initial date of settlement of the site?

11) When did the site go out of use?

The Regional Importance of the Site

12) How does the site compare on a regional basis with other sites of the same period?

13) What does the evidence at this site tell us about the relationship between this site and the Roman City of York?

14) Is it possible to infer on the basis of the evidence from this site how the Vale of York was exploited during the Roman period?

15) Does the evidence from this site support or refute the hypothesis that there was a breakdown in social order and the economy at what is traditionally referred to as the end of the Roman Period?

1.9.5 Recommendations for future action.

1) Preparation of the Archive
See above Section 2.1.1 and below tasks 28-37.

2) Inclusion in the Sites and Monuments Register
See above Section 2.1.2 and below Task 38.

3) Academic Publication
It is proposed that the results of the analysis of this site should be published in the relevant Journal. (See above Section 2.1.3 and below Task 39).

4) Popular Publication
This site would merit inclusion in an overall publication of the recent activities sponsored by Yorkshire Water. (See above 2.1.4 and below Task 39).
5) Deposition of the Archive
See below Task 40.

2.9.6 Programme of Works

Task 28: Analysis of the pottery

Task 29: Analysis of a selection of the environmental samples.

Tasks 30-35: Analysis of the other artefacts: (Iron; glass; slag; fired clay; flint; stone.

Task 36: Preparation of detailed site plans from the original survey data. This is currently held in its original digital format. It requires downloading into a CAD package in order for the drawings to be generated.

Task 37: Preparation of an Archive Report. This will include an interpretative structural and stratigraphic history of the site. It will be illustrated with the drawings created in Task 4 and will make full use of the analysis of the material in Tasks 1 to 3.

Task 38: Preparation of the Sites and Monuments Register entry. This will be based upon the contents of the archive report.

Task 39: Preparation of the Publication Text. As with task 6 this will be based upon the contents of the Archive Report.

Task 40: The site archive will be sorted and prepared for deposition.

2.10 Location 9: Field to the north of Hopgrove Farm adjacent to the A1237. (Site Records: Field 35) Figure 7

Accession Code: None given

National Grid Reference: SE 638 553

2.10.1 Site Description: Single apparently isolated circular ditch measuring 2.5m. in diameter.

Date: Unknown

Interpretation: Possible hut circle
2.10.2 Statement of Potential: None

2.10.3 Recommendations for future action.

1) Inclusion in the Sites and Monuments Register
See above Section 2.1.2 and below Task 41-43.

2.10.4 Programme of Works

Task 41: Preparation of a site location plan from the original survey data. This is currently held in its original digital format. It requires downloading into a CAD package in order for the drawings to be generated.

Task 42: Preparation of the Sites and Monuments Register entry. This will be based upon original site records.

Task 43: The site archive will be sorted and prepared for deposition.

2.11 Location 10: Field to the north-east of new Earswick on the south side of the A1237 (Site Records: Field 44) Figure 8

Accession Code: None given

National Grid Reference: SE 624 566

2.11.1 Site Description: Area of Ridge and Furrow

Date: Medieval

Interpretation: Medieval field system

2.11.2 Statement of Potential: None

2.11.3 Recommendations for future action.

1) Inclusion in the Sites and Monuments Register
See above Section 2.1.2 and below Tasks 44-46.

2.11.4 Programme of Works

Task 44: Preparation of a site location plan from the original survey data. This is currently held in its original digital format. It requires downloading into a CAD package in order for the drawings to be generated.
Task 45: Preparation of the Sites and Monuments Register entry. This will be based upon original site records.

Task 46: The site archive will be sorted and prepared for deposition.

2.12 Location 11: Field to the north of new Earswick on the south side of the A1237 (Site Records: Field 47) Figure 8

Accession Code:

National Grid Reference: SE 621 568

2.12.1 Site Description: Area of Ridge and Furrow

Date: Medieval

Interpretation: Medieval field system

2.12.2 Statement of Potential: None

2.12.3 Recommendations for future action.

1) Inclusion in the Sites and Monuments Register
See above Section 2.1.2 and below Tasks 47-49.

2.12.4 Programme of Works

Task 47: Preparation of a site location plan from the original survey data. This is currently held in its original digital format. It requires downloading into a CAD package in order for the drawings to be generated.

Task 48: Preparation of the Sites and Monuments Register entry. This will be based upon original site records.
Task 49: The site archive will be sorted and prepared for deposition.

2.13 Location 12: Field to the north of New Earswick, south of the A 1237, adjacent to the River Foss (Site Records: Field 49). Figure 9

Accession Code: None given

National Grid Reference: SE 619 569

2.13.1 Site Description: Area of Ridge and Furrow

Date: Medieval

Interpretation: Medieval field system

2.13.2 Statement of Potential: None

2.13.3 Recommendations for future action.

1) Inclusion in the Sites and Monuments Register
See above Section 2.1.2 and below Tasks 50-52.

2.13.4 Programme of Works

Task 50: Preparation of a site location plan from the original survey data. This is currently held in its original digital format. It requires downloading into a CAD package in order for the drawings to be generated.

Task 51: Preparation of the Sites and Monuments Register entry. This will be based upon original site records.

Task 52: The site archive will be sorted and prepared for deposition.

2.14 Location 13: Rawcliffe Moor, York (Site Records Field 63). Figure 10

Accession Code: YORYM: 1996.391

National Grid Reference: SE 592563

2.14.1 Site Description: This was the second of the two sites along the pipeline route where a considerable amount of archaeological excavation took place. Archaeological deposits were observed in the topsoil strip across the fill width of the corridor for a distance of approximately 50 metres. As with 1996.390 an agreement was made with the engineers to fence of half of the width of the
pipeline corridor for this 50 metre stretch. Archaeological recording took place on a salvage basis over a number of days of those deposits which were not within the fenced area. The pipe was subsequently inserted into the narrower working width once this salvage work had taken place. Once the topsoil strip was completed the archaeological team were able to concentrate on the fenced area for several weeks, during which time it was possible to fully excavate the area.

Archaeological features present consisted of several circular enclosures, two of which were of considerable diameter. The ditches which delineated them were medium sized and V or U shaped in profile. The enclosures appeared to have been recut on at least two occasions in slightly different positions. The largest of these enclosures was not entirely within the pipeline corridor and it is clear that a considerable amount of the original site lies to the north of the disturbed area. The ditches which formed these enclosures were cut into the heavy yellow/brown clay which forms the natural at this point in the Vale. Their fills were very dark and quite distinct from the surrounding natural deposits. There were however few if any surviving archaeological deposits above the level of the natural. This was as a result of recent deep ploughing, the scars from which were evident across much of the site. This piece of land is also clearly very susceptible to ponding during rainfall and as a result there have been several interventions during which ceramic land drains have been inserted into the natural. In some cases this was to the considerable detriment of the archaeological deposits and further exacerbated the problems that had been caused by the ploughing.

The remainder of the cut features were archaeological in nature and comprised a number of linear V and U shaped ditches which were present across the site. These linear ditches can be divided into four broad categories. The first of these were the largest and deepest cut features on the site and appeared to form a physical boundary to the whole settlement. The second category were smaller in dimension and appeared to show a relationship with the circular enclosures. There was one cut feature which was unlike the remainder. It was U shaped in profile, approximately 10 metres in length with a slight curve to it. Equidistant along its length were two internal steps which divided it into three distinct and nearly equal parts. Finally there was one ditch which cut through many of the other features and had a 90 degree turn to it. That is considered to be later in date, than the other features.

**Date:** Iron age

**Interpretation:** On the basis of its spatial appearance and on an appraisal of the pottery this site can be interpreted as a settlement of Iron Age date.

The large circular enclosures have been interpreted as hut circles, on the basis of their shape and similarity to many other features of this type from other sites
of the same period. The larger ditches which delineate the settlement are seen as physical boundaries, dividing the exterior from the interior and also perhaps dividing the domestic element from the field systems.

The status of the enclosures is unclear. The smaller examples may have been granaries or small stock pens and the larger are likely to have had a domestic function. The largest of these is of such considerable dimensions that the suggestion has arisen that this site as a whole may have been of rather more significance than a simple farming hamlet. This remains an open question at this stage although the presence of the strange curving ditch with the internal divisions which may represent an upstanding feature slightly different to the norm, has fuelled the discussion. A possible ceremonial function for this feature is one possible explanation for its presence. Such an interpretation clearly prompts debate as to the nature and status of the settlement.

The curving ditches at the heart of the site are important as they clearly delineate areas associated with individual hut circles. In some cases they bulge out in order to accommodate a circle and in other cases cut through the centre of an enclosure clearly post-dating it. Their presence indicates that the site went through a number of phases of rebuilding.

The later ditch which cuts through all of the earlier features is, as with all of the evidence from the site, of Iron Age date. It does not appear to have a domestic element at this particular location and perhaps forms part of a field system, relating to a settlement elsewhere. Its presence does however appear to suggest that the life of the hut circle settlement which predating it was entirely within the Iron Age. Indeed the lack of features or artefacts of later Roman date from this site would tend to corroborate this interpretation. A number of important issues are indeed raised by a consideration of this site. Its date, period of occupancy, function and status are all of considerable importance and require further analysis, (See below, Statement of Potential).

2.14.2 Data

Contextual Data: A total of 220 individual archaeological contexts were recorded at this site. These were all excavated in their entirety and were recorded according to the procedures laid down by the York Archaeological Trust for controlled excavation. Recording sheets were completed in full for each context and single context planning was undertaken as the preferred means of carrying out the drawn record. A Harris Matrix was compiled at the time of excavation. The single context plans were converted into digital format during the fieldwork phase and overall site plans were created using a CAD system.

At this stage in the analysis the contextual data has been grouped into 7 preliminary phases, of which 3 have further sub-divisions. These divisions are
based on the specific inter-relationship of individual features at the point of intercutting and do not represent 7 site wide chronological episodes. They should be seen as the basic interpretative building blocks from which a history of the site will eventually be reconstructed. This will require full correlation of the contextual data with the other strands of evidence, in particular the use of the various dating techniques which are available to us at this site, (see below Statement of Potential).

Environmental Data: A total of 176 environmental samples were collected at this site. 86 of these were ‘general biological analysis’ (GBA), of about 10 litres. 37 were for ‘bulk sieving’ (BS) of about 50 litres. 14 spot samples were taken for identification purposes. In addition 39 samples were taken specifically for the purposes of attempting to obtain Carbon 14 dates.

Of these samples 11 bulk sieve samples and 9 general biological analysis samples have already been submitted for an assessment of their bioarchaeological potential, (Carrot et al 1996). In addition all of the samples that were collected for the purposes of Carbon 14 dating have been checked to see if they are in fact suitable for that purpose.

The sediment samples contained abundant rootlets, probably or certainly modern. Apart from this, biological remains other than (often unidentifiable) charcoal were rare. Some samples yielded charred 'seeds' including cereal grains. Material preserved by anoxic preservation was recovered from only a few samples and in some cases the remains, charred or waterlogged, were clearly modern, presumably having moved down through sediments as a result of biological activity or ploughing. Some of the charred material may have been redeposited, bearing in mind the nature of the deposits.

As stated above the 39 samples from the site that were collected or carbon 14 dating purposes have been assessed. As with the sediment deposits there are problems of contamination with modern material and in some cases there is simply not sufficient material for a proper analysis to take place. In the event only 17 of the samples are useable for dating purposes.

For a fuller discussion of all of the environmental material from this site see below, Assessment of Potential.

The Animal Bone: The hand collected bone from this site was very fragmentary and in view of this, quantification, using numbers of fragments or total weights was not undertaken. The residues from the nine bulk-sieved contexts yielded very little bone; a total of 218 fragments, weighing approximately 53g. Much of he material was burnt, and consisted of slivers of cattle and sheep sized tooth enamel. Preservation was extremely poor, with most fragments being battered and rounded in appearance. For further discussion of this material see below, (the Statement of Potential).
Pottery: This assemblage consists of c. 1497 sherds, entirely of Iron Age tradition and of Iron Age date. The material is in good condition and sherds, on the whole, are comparatively unfragmented. The large size of the group is pertinent. It enables particular types of analysis involving quantifiable variables within the group (such as rim diameter, rim type, presence of carbonised residues, etc.) to be undertaken which are not possible with smaller groups. In other words the size of the group offers a rare chance to better understand such questions as how this pottery was made and used. The most significant evidence and value of the assemblage though will only be extracted from detailed study and comparison with other groups from the region of similar size. Nonetheless, its general character can be outlined here:

The potting fabrics are varied but tempering inclusions conform to the known range and pattern previously identified in pottery of this type from Yorkshire and the North East of England (Willis 1993; Evans 1995). The fabrics have an affinity to material from Stanwick (Willis forthcoming A), Thorpe Thewles (Swain 1987) and other smaller excavations in the region, though they are closest to those of examples recovered from the Easingwold Bypass site (Gwilt, in preparation). The predominant form present is the jar, with some sherds probably coming from bowls. Again this pattern is consistent with that of other groups of such material from the region. Formal details, such as rim type can also, on the whole, be paralleled. Establishing the date of the group is not straightforward. Pottery of this tradition is notoriously difficult to closely date, independent of other types of evidence, since it is long lived, changing little in detail over many centuries. On a provisional assessment, and without other evidence to hand, there are some grounds for suggesting the group to be later Iron Age (c. 300 BC - AD 50), and possibly to be later within this bracket.

Several unusual items should be noted:

a. There are four fragments from one context which appear to be from a briquetage salt container. The Iron Age trade in this commodity in the region has only recently been identified (Willis 1996; forthcoming B) and the presence of this ceramic at this location would be particularly significant.

b. A ceramic fragment with a perforation and vitreous residue is evidently from a furnace (or similar) structure. Items of this type have been recorded from the Iron Age and Roman settlement at Catcote near Hartlepool, though they are rare finds.

c. A large section of the rim and body of a decorated bowl is present. This is a particularly fine and exceptional item, with incised cut marks on the rim and in bands around the body.

d. A complete Iron Age tradition jar was recovered from context 2015. The fabric and form of this vessel do not appear to be unusual, however, the discovery of a whole pot of this date in this region (away from the Wolds) is
most exceptional and its context and potential contents warrant special attention.

e. Another remarkable group of sherds come from a highly decorated vessel with everted rim, without obvious regional Iron Age parallel. The first impression is that this has an affinity to certain Bronze Age vessel types. However, its fabric lies within the range of the Iron Age tradition types of this assemblage and it is firmly associated with Iron Age pottery. The vessel will need further research to establish its proper dating.

The good condition of the pottery and the fact that specific forms can be recognised mean that residue analysis can be undertaken to establish the particular use of individual pots. This exciting new area of research is highly informative since it indicates fairly unequivocally how this pottery was used. Such work is being undertaken at Bradford University on the nearest other large group of such material, namely from Easingwold and hence the study of samples from the current assemblage is highly desirable for purposes of comparison. A further possibility is that this pottery could be dated more firmly if it were submitted for Thermo luminescence dating, for instance at Durham University, where a specific project dating British Iron Age pottery is underway. (Sherds from Easingwold are, for instance, currently being processed at Durham).

**Artefacts:** Apart from the pottery there were other finds from stratified contexts. These comprised fired clay fragments, loom weights and a single tuyere fragment, flint objects, iron objects, slag and stone artefacts.

The quantification of material is:

<table>
<thead>
<tr>
<th>Material</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fried clay fragments</td>
<td>53</td>
</tr>
<tr>
<td>Loom Weights</td>
<td>2 (fragmented)</td>
</tr>
<tr>
<td>Thatch weights</td>
<td>1</td>
</tr>
<tr>
<td>Tuyere fragment</td>
<td>1</td>
</tr>
<tr>
<td>Flint</td>
<td>4</td>
</tr>
<tr>
<td>Iron</td>
<td>8</td>
</tr>
<tr>
<td>Slag</td>
<td>47</td>
</tr>
<tr>
<td>Stone</td>
<td>12</td>
</tr>
</tbody>
</table>

The iron artefacts consisted of fragments or nails including hobnails and a single blade fragment (SF292).

The condition of the ironwork varies but the majority of finds are in poor condition with extensive corrosion. This has resulted in complete mineralisation of the metal core, formation of bulky corrosion crusts and loss of source detail.

The flint objects were all unworked apart from a single scraper (SF344). Other stone materials from the site include the upper part of a rotary quern, (SF296), a saddle quern (SF373), a possible hone (SF298) and two burnishing stones, (SF299 and 300).
The fired clay objects are of particular interest. In addition to the fragments there are 2 loom weights, a thatch weight and a fragment which has been interpreted as part of a tuyere.

All the ironwork and a selection of the slag were X-rayed. The plates have been packaged in acid free archival envelopes. All finds have been packaged appropriately for long term storage. The materials used were archive stable and acid free. Micro climates have been created for objects requiring more specific environmental needs. Provided the silica gel system is maintained correctly, it will ensure long term protection against active corrosion.

2.14.3 Statement of Potential:

This site represents a hitherto unknown part of the rural landscape during the Iron Age. Because of the complex nature of the drift geology in the Vale of York, sites such as this are lacking in the region. Its location within the Vale, coupled to the fact that it was possible to excavate all archaeological deposits within the pipeline corridor give it great significance. The presence of the large stratified assemblage of pottery at this site, coupled with the opportunity for a range of scientific dating techniques make this a site of National Importance.

Proposals: It is proposed that analysis is undertaken in a number of specific areas:

1) The Site Archive

1) The data in the site archive in written, drawn and photographic form needs to be collated and analysed in order to more fully understand the nature of settlement at the site. A full examination of published sources from similar sites is required for comparative analysis and specifically in relation to the curving feature towards the northern end of the site which has apparent internal divisions within the cut and would clearly have supported an enigmatic above ground structure. This feature is not fully understood at this stage. A full correlation of contextual data with the evidence from the pottery, artefacts and environmental samples will be required.

There are a number of specific areas of research which will be required within the framework of the work which are critical to our understanding of this site.

2) The Date:

As stated above one of the keys to our understanding of this site is its date both in terms of its initial occupancy, its length of usage and the date of its final decline. Currently our assessment of the date of the site is based upon the pottery assemblage, which is one of the largest group from the region and has
added importance in that it comes from a well stratified and well documented site. (See below pottery analysis).

It is therefore extremely important that all avenues are pursued in order to undertake a full examination of the date of this site. This is not only because it is vital to our understanding of this site and how it functioned but also because if this large pottery assemblage can be securely dated then its significance to our understanding of the Iron Age in the north of England will be significantly enhanced.

For the above reasons it is therefore proposed that a considerable amount of work is undertaken in order to date the site. Specifically Carbon 14 samples will be sent for determination as will samples for thermo-luminescence dating.

**Carbon 14 Dating:** The presence of a considerable amount of charcoal from many of the key contexts will enable a number of radio-carbon dates to be obtained. This will serve to pin down the period of occupancy of the site within a fixed and secure time span.

As stated above 17 of the samples that were collected on site are useable for Carbon 14 dating purposes. These have been found within seven of the provisional phases that have been identified at the site. It is therefore proposed that the best potential samples in terms of content of dateable material from each phase should be sent for determination. Seven Carbon 14 dates will therefore be forthcoming from this site.

**Thermo-Luminescence dating**

In addition to the Carbon 14 dating the pottery from this site is suitable for thermo-luminescence dating. This technique relies on the principle that any material placed in an ionising radiation field receives a radiation dose. A luminescent material stores the energy received and can be used to measure the radiation dose. Radiation causes ionisation of atoms or molecules in the material, creating ions and electrons. These charged particles diffuse through the material until they become trapped in defects in the crystal lattice. Electrons can be released from these traps either by heating the material or by the action of light and the recombination of electrons and ions in the lattice results in the emission of a photon. The intensity of the light emitted, luminescence is proportional to the radiation dose received and therefore to the time since heating or bleaching.

Naturally occurring luminescent materials include quartz and feldspar which are present in soils and sediments. The luminescent crystals will have accumulated stored energy from the radiation field since their formation.
This is removed by either firing or by exposure to light; sediments can therefore be dated to their last exposure to light and ceramics can be dated to the last firing.

Using this technique therefore it is proposed to obtain a series of dates for the firing of the pottery from this site, which will add a corroborative source of dating to that obtained from the Carbon 14 dating of the organic material. Although a final decision will be made on the basis of a choice of suitable pottery sherds and their relationship with the stratigraphic sequence and site phasing, it is intended that the same number of dates will be obtained as with the Carbon 14 samples.

3) The Biological Materials

Sediment Samples

At the time of excavation the dark and apparently highly humic appearance of the environmental samples led to the hope that they would yield a considerable amount of valuable information concerning the environment of this site and the nature of activity at the site, both domestic, agricultural and perhaps industrial. In the event, as stated above, an assessment of the sediment samples has shown that the quality of environmental preservation is poor and that further work on them would not yield worthwhile assemblages of plant and invertebrate macrofossils. It is therefore proposed that no further research is conducted with this material and that the samples should be discarded during the post-excavation programme.

Carbon 14 Samples

As stated above, an assessment of the samples that were taken for Carbon 14 determination showed that 17 were indeed suitable for that purpose. It is proposed therefore that a programme of Carbon 14 dating is initiated for the site.

The animal bone

As with the sediment samples from this site an assessment of the vertebrate material has shown the quality of preservation to be poor and of limited interpretative value. Whilst this material is unlikely to offer any contribution to an overall interpretation of the site it may add an insight into the interpretation of some of the individual deposits. It is therefore proposed that a basic archive of the vertebrate material should be produced from the existing assessment records.

4) The Pottery
The presence of a considerable amount of stratified pottery from a securely
dated site will add to our understanding of the region’s Iron Age ceramic
typologies.

This assemblage is of regional importance and special significance,
representing an opportunity to study an unusually large quantity of this type of
pottery. With the exception of the Yorkshire Wolds, only 3 other sites in
Northern England have yielded comparable amounts of this material, namely
Stanwick, North Yorkshire, Thorpe Thewles, Cleveland, and the Easingwold
Bypass. Moreover, the Easingwold site apart, there is very little Iron Age
pottery known from the Vale of York. The academic study for publication of
the pottery from the Yorkshire Water Pipeline would be timely since it would
benefit from the knowledge gained from these other sites, all of which have
been subject to recent examination.

In the light of the above considerations it is proposed that the pottery from the
site is subjected to a full programme of academic analysis and scrutiny. In
addition to a study of the assemblage in its own right and by comparison with
other groups from the period the pottery will also form the basis for a
programme of Thermo-Luminescence dating, for residue analysis and for
Petrological analysis, (see below)

Petrological Analysis

This procedure has been used at the recently excavated and comparable
assemblage of Iron Age pottery from Easingwold. Microscopic analysis of a
thin section through the fabric of the pottery enables the clay and other
inclusions to be identified with certainty. This procedure can be used only to
identify the source of the clay but also the types of inclusion present may give
some indication as to the industrial and agrarian regimes that were in place at
the site of production. Comparison on a regional basis may also give some
indicators as to patterns of trade and economic contacts with other related sites.
Given the success of the procedure with the Easingwold assemblage it is
proposed that this material should be subjected to similar analysis.

5) The other artefacts

Further analysis of the other artefacts is required in three main areas, all of
which it is hoped will assist in the interpretation of the types of activities that
took place at the site. The fired clay artefacts which have been provisionally
interpreted as loom and thatch weights require analysis, as do the quern and
quern fragments. These may give an insight into the type of domestic and craft
activities that were taking place.

The slag has not yet been the subject of an assessment. This material is
however often of use in determining the type and range of industrial activities
that may have been present. The limited amount of this material that was
present does not suggest that results are likely to be dramatic. The presence however of a single fragment of fired clay that has been interpreted as a tuyere fragment (furnace bellows attachment) may however indicate that smelting or forging was an activity that the residents of the site were conversant with. Analysis of the slag may help to clarify this point.

2.14.4 Research Proposals

When the above specific areas of study have been completed it is proposed that the following questions should be addressed in the text for final publication.

Site Specific

What was the nature of the settlement?

1) How did the individual circular enclosures function?
   - Were they domestic?
   - Were they industrial?
   - Were they for storage?
   - Were they agricultural?

2) The larger enclosure, if it represents a hut circle would imply a structure of considerable size.
   - Can a status be ascribed to the circular enclosures on the basis of their size?
   - Does the large size of this feature imply the site as a whole has a more significant status than that of a simple agricultural hamlet?

3) Does the presence of the 10 metre long curving cut feature with its internal steps imply that the settlement has a specific function?
   - Can this function be construed as implying special status for the site or indicating ceremonial or ritual functions?
   - What would have been the size and appearance of the above ground structure that was supported by the curving cut feature?

4) What was the function of the ditches internal to the site that appeared to form compounds associated with the hut circles?
   - Were these ditches simple cut features?
Yorkshire Water Pipeline, Moor Monkton to Elvington

- Were they in association with any structures, such as a fence line delineating space?

- How did the resultant enclosed spaces function?
  - Were they domestic?
  - Were they industrial?
  - Were they for storage?
  - Were they agricultural?

5) Were the large ditches at the perimeter of the site the boundary of the settlement?

- Was there a superstructure associated with these ditches?

- Did they control the movement of livestock?

- Can any defensive function be implied for these ditches?

6) Can any related field system be associated with the settlement?

7) Is it possible to predict on the basis of the evidence the size of the overall settlement?

8) Is there sufficient evidence to determine the nature of the agricultural regime that was practised at the site?

9) Is there any clear and direct evidence for any industrial activity at the site?

The Date of Occupation

10) When was the initial date of settlement of the site?

11) Is there a possible Bronze Age overlap as some of the pottery decoration implies?

12) When did the site go out of use?

13) Was there an overlap in terms of occupation of the site with the establishment of the nearby urban and military centre of *Eboracum*?

The Regional Importance of the Site

14) How does the site compare on a regional basis with other sites of the same period?
15) Is there a case for implying a hierarchy of sites on the basis of the internal mechanisms of this site in comparison with those others that have been studied, the nearest local example being the site at Easingwold?

16) Does a study of the pottery and the other artefacts give us any understanding of regional trade connections and routes in the Iron Age?

17) If the dating evidence indicates that the site did overlap with the establishment of the Roman site of Eboracum, given the lack of Roman artefactual material at this site, what does that tell us of the structure of the resultant society and the relationship between the communities?

- Did the two communities live mutually exclusive lives in the same landscape?
- Did the Romans impose a political regime on the Iron Age population?

2.14.5 Recommendations for future action

1) Preparation of the Archive
See above Section 2.1.1 and below tasks 53-63.

2) Inclusion in the Sites and Monuments Register
See above Section 2.1.2 and below Task 64

3) Academic publication
It is proposed that the results of the analysis of this site should be published in the relevant Journal. (See above Section 2.1.3 and below Task 65).

4) Popular publication
This site would merit inclusion in an overall publication of the recent activities sponsored by Yorkshire Water. (See above 2.1.4 and below Task 65).

5) Deposition of the Archive
See below Tasks 66 and 67.

2.14.6 Programme of Works

Task 53: Analysis of the pottery, including comparative study in relation to other assemblages.
Task 54: Undertaking a programme of thermo-luminescence dating from selected pottery sherds.

Task 55: Undertaking a programme of petrological analysis of selected pottery sherds.

Task 56: Undertaking a programme of Carbon 14 dating from selected samples.

Tasks 57-61: Analysis of the other artefacts. (Fired clay; flint; iron; slag; stone.

Task 62: Preparation of detailed site plans from the original survey data and site single context plans. This is currently held in its original site format. It requires downloading into a CAD package for the drawings to be generated.

Task 63: Preparation of an Archive Report. This will include an interpretative, structural and stratigraphic history of the site. It will be illustrated with the drawings created in Task 62 and will make full use of the analysis of the material in Tasks 54-61.

Task 64: Preparation of the Sites and Monuments Register entry. This will be based upon the contents of the archive report.

Task 65: Preparation of the Publication Text. As with task 64 this will be based upon the contents of the Archive Report.

Task 66: The environmental samples which are currently stored at the Y.A.T finds storage facility at Clifton Moor, York, will be discarded.

Task 67: The site archive will be sorted and prepared for deposition.

Location 14: North Field to the north of Skelton village. (Site Records: Field 71) Figure 11

Accession Code: None given

National Grid Reference: SE 575 568
2.15.1 **Site Description:** This was an isolated feature comprising a rough circle of stones enclosing an area of ash, burnt soil and charcoal, with several large fragments of slag. The cut for this feature measured 0.70m x 0.50m with a maximum depth of 0.25m. Shattered and heat cracked rocks were found throughout the fill and embedded in the sides of the cut.

**Date:** No dating evidence was present.

**Interpretation:** This feature has been interpreted as a forge. The three large pieces of slag at its base are reminiscent of the residue from a hearth rather than a furnace. The lack of any other evidence in the vicinity may indicate intensive use for a single firing or perhaps a single day.

2.15.2 **Data:** This site was located only as it was in the process of destruction. It was not possible to obtain any material for dating purposes or for other analytical procedures. Site records took the form of field notes and photography.

2.15.3 **Statement of Potential:** Although this feature may represent an iron working hearth of some antiquity the lack of dating evidence, related material or the presence of other features in the vicinity severely reduce its potential for analysis. It is therefore proposed that future actions are limited to the following:-

2.15.4 **Recommendations for future action.**

1) **Inclusion in the Sites and Monuments Register**
   See above Section 2.1.2 and below Tasks 68, 69 and 71.

2) **Academic Publication**
   It is proposed that the results of the analysis of this site should be published in the Archaeological Journal alongside that from site 1996.391 at Rawcliffe Moor. However publication in this case should be no more than in note form. (See above Section 2.1.3 and below Task 70).

2.15.5 **Programme of Works**

**Task 68:** Preparation of a site location plan from the original survey data. This is currently held in its original digital format. It requires downloading into a CAD package in order for the drawings to be generated.

**Task 69:** Preparation of the Sites and Monuments Register entry. This will be based upon original site records.

**Task 70:** Preparation of the Publication Text. As with task 69 this will be based upon original site records.
Task 71: The site archive will be sorted and prepared for deposition.

2.16 Location 15: Fields to the north of Skelton Village (Site Records: Fields 72, 73) Figure 12

Accession Code: None given

National Grid Reference: SE 567 568

2.16.1 Site Description: Poorly preserved ridge and furrow was present in each of these fields. It was not clear at the surface, where ploughing had removed the distinct patterning. It was visible as banded changes in the colour of the subsoil after the removal of the topsoil. The ridge and furrow may have been part of the field system relating to the Skelton Manorial complex which is located just to the south.

Date: Medieval

Interpretation: Medieval field system.

2.16.2 Statement of Potential: None

2.16.3 Recommendations for future action.

1) Inclusion in the Sites and Monuments Register
See above Section 2.1.2 and below Tasks 72-74.

2.16.4 Programme of Works

Task 72: Preparation of a site location plan from the original survey data. This is currently held in its original digital format. It requires downloading into a CAD package in order for the drawings to be generated.

Task 73: Preparation of the Sites and Monuments Register entry. This will be based upon original site records.

Task 74: The site archive will be sorted and prepared for deposition.
Yorkshire Water Pipeline, Moor Monkton to Elvington

2.17 Location 16: Field near Hurns Bridge, Skelton Moor, York. (Site Records: Field 75) Figure 12

Accession Code: YORYM: 1996.392

National Grid Reference: SE 56125733

2.17.1 Site Description: An isolated feature comprising a circular ditch enclosing an area measuring up to 9m. in diameter was recorded. The ditch itself had been partially ploughed out but was up to a metre in width. Two terminals on the eastern side delineated an entrance. Some pottery and iron objects were found in association with it, particularly in the fill of the ditch at the terminals. The natural deposits consisted of a heavy clay. Any surface archaeological deposits which may have related to the ditch had been lost due to ploughing.

Date: The pottery suggests an Iron Age date.

Interpretation: This feature has been interpreted as an isolated hut circle of the Iron Age period. The terminals forming the entrance in association with the artefactual evidence would indicate that it had a domestic function.

2.17.2 DATA

Introduction: Salvage excavation prior to the arrival of the pipe laying team was concluded to be the appropriate response in this case. The site was surveyed using a Total Station Theodolite. Thereafter a number of sample sections were excavated through the ditch in order to record its general profile and to obtain material for dating and environmental analysis.

Stratigraphic Data: A total of five contexts were identified and recorded. These comprised the cut and various fills of the ditch where it was sectioned.

Pottery: 15 Sherds of Iron Age tradition pottery were recovered, characteristically similar to that from sites 1996.389 and 1996.391. Two items merit illustration for publication.

Artefacts: In addition to the pottery a single iron object was recovered. This comprised an iron eyed bar/lynch pin, of the type which is characteristically associated with the attachment of a wooden wheel to an axle. This artefact requires complete removal of corrosion products for illustration.

2.17.3 Statement of Potential:

This site is part of the prehistoric Iron Age landscape. Because of the complex nature of the drift geology of the Vale of York sites such as this have only rarely been recognised in the region. It therefore has potential significance. Its potential for analysis is minimised because it was an isolated feature and because the amount of material that was recovered was limited in scope. It is
unlikely that the evidence that is available will be sufficient to indicate the type and nature of the settlement, other than in the most broad of terms. The lack of related features in association with it reduce the amount of analysis that can be undertaken.

**Proposals:** Despite the limitations of the evidence it is proposed that analysis is carried out in three specific areas:-

1) The raw survey data that was collected during the fieldwork phase needs to be plotted so that the site can be accurately plotted and located within the landscape.

2) The iron artefact requires conservation and illustration and should be published with the other site data.

3) A study of the pottery, in particular in comparison with other larger assemblages that are currently in the process of study as a result of this pipeline work and other recent projects, notably at Easingwold will at least provide a broad date range for the period of utilisation of the site.

**2.17.4 Recommendations for future action.**

1) **Preparation of the Archive**
See above Section 2.1.1 and below tasks 75-78.

2) **Inclusion in the Sites and Monuments Register**
See above Section 2.1.2 and below Task 79.

3) **Academic Publication**

It is proposed that the results of the analysis of this site should be published in the relevant Journal alongside that from site 1996.391 at Rawcliffe Moor. However publication in this case should be no more than in note form. (See above Section 2.1.3 and below Task 80).

**2.15.5 Programme of Works**

**Task 75:** Analysis of the pottery, including comparative study in relation to other assemblages.

**Task 76:** Conservation and analysis of the iron object.

**Task 77:** Preparation of detailed site plans from the original survey data. This is currently held in its original site format. It requires downloading into a CAD package for the drawings to be generated.
Task 78: Preparation of an Archive Report. This will include an interpretative, structural and stratigraphic history of the site. It will be illustrated with the drawings created in Task 77 and will make full use of the analysis of the material in Tasks 75 and 76.

Task 79: Preparation of the Sites and Monuments Register entry. This will be based upon the site archive.

Task 80: Preparation of the Publication Text. As with task 79 this will be based upon the site archive.

Task 81: The site archive will be sorted and prepared for deposition.

2.18 Location 17: Field to the north of Overton Wood (Site Records: Field 78)

Figure 13

Accession Code: None given

National Grid Reference: SE 548 575

2.18.1 Site Description: Two parallel ditches approximately 1.30m wide were visible after the removal of the topsoil as indistinct features with a slightly darker fill than the surrounding natural clay. They spanned the full width of the pipeline corridor and formed a continuation to the north of the current ditched boundary of the eastern side of Overton Wood.

Date: No dating evidence present.

Interpretation: Overton Wood was mentioned in the Desktop evaluation as being the vestiges of a larger area of ancient woodland. The presence of these two ditches continuing to the north of the current boundary corroborates the suggestion that the present limits of the wooded area are less than they previously were. The monitoring exercise did not reveal any evidence which would indicate when this change had taken place.

2.18.2 Statement of Potential: None

2.18.3 Recommendations for future action.

1) Inclusion in the Sites and Monuments Register
See above Section 2.1.2 and below Tasks 81-83.

2.18.4 Programme of Works
Task 82: Preparation of a site location plan from the original survey data. This is currently held in its original digital format. It requires downloading into a CAD package in order for the drawings to be generated.

Task 83: Preparation of the Sites and Monuments Register entry. This will be based upon original site records.

Task 84: The site archive will be sorted and prepared for deposition.

2.19 Location 18: Field to the north of Overton Wood (Site Records: Field 78)
Figure 13

Accession Code: None given

National Grid Reference: SE 545 577

2.19.1 Site Description: This feature consisted of a single oval pit filled with blackened and burnt soil and some burnt stones (pot boilers).

Date: No dating evidence was present.

Interpretation: This feature has been interpreted as a single fire pit. The presence of the pot boilers might suggest that it is of prehistoric date and it may represent a single event.

2.19.2 Statement of Potential: None

2.19.3 Recommendations for future action.

1) Inclusion in the Sites and Monuments Register
See above Section 2.1.2 and below Tasks 85-87.

2.19.4 Programme of Works

Task 85: Preparation of a site location plan from the original survey data. This is currently held in its original digital format. It requires downloading into a CAD package in order for the drawings to be generated.

Task 86: Preparation of the Sites and Monuments Register entry. This will be based upon original site records.

Task 87: The site archive will be sorted and prepared for deposition.
2.20 Location 19: Field to the east of Overton Wood, Overton, North Yorkshire
(Site Records: Field 78) Figure 13

Accession Code: YORYM:1996.396

National Grid Reference: SE 552 576

2.20.1 Site Description: This site comprised a sub circular area approximately ten metres in diameter, within which there was a dense scatter of burnt stones or pot boilers. Within this general area were several distinct but irregularly shaped cut features filled with burnt material.

Date: No dating evidence was present.

Interpretation: This site appears to represent a series of fire pits, perhaps of prehistoric date, associated with one another but isolated from any other settlement evidence. The lack of a habitation element, combined with the fact that these fire pits seem unlikely to have been in use at the same time, implies that this site functioned as a camp, visited occasionally perhaps during seasonal migration or transhumance.

2.20.2 DATA

Introduction: Salvage excavation prior to the arrival of the pipe laying team was deemed the appropriate response in this case. The site was surveyed using a Total Station Theodolite. Thereafter limited excavation took place in order to define the limits of the site and in order to obtain material for dating and environmental purposes.

Stratigraphic Data: A total of nine contexts were identified and recorded. These comprised the limits of the area of burning and the discrete cut features with burning within them, inside the general area.

Artefacts: In addition to the environmental samples a single fragment of slag was found at the site and a number of the burnt stones (pot-boilers) were recovered.
2.20.3 **Statement of Potential:** This site represents an enigmatic and potentially important site. Its potential for analysis is minimised because it was an isolated feature and the amount of material that was recovered is limited in scope. It is unlikely that the evidence that is available will be sufficient to indicate the type and nature of the settlement, other than in the most broad of terms. The lack of related features in association with it reduce the amount of analysis that can be undertaken.

2.20.4 **Recommendations for future action.**

1) **Inclusion in the Sites and Monuments Register**
   See above Section 2.1.2 and below Tasks 88-90.

2.20.5 **Programme of Works**

**Task 88:** Preparation of a site location plan from the original survey data. This is currently held in its original digital format. It requires downloading into a CAD package in order for the drawings to be generated.

**Task 89:** Preparation of the Sites and Monuments Register entry. This will be based upon original site records.

**Task 90:** The site archive will be sorted and prepared for deposition.

2.21 **Location 20: Field to the east of Beningbrough marked as Bell Ground on the O.S. map. (Site Records: Field 79) Figure 14**

**Accession Code:** None Given

**National Grid Reference:** SE 535 575

2.21.1 **Site Description:** A large U shaped ditch, approximately 1.60m wide, aligned north-west/south-east spanned the full width of the pipeline corridor. It was only visible cutting into the natural after removal of the topsoil. It aligned, to the north with an existing field boundary and to the south, with a pond and copse.

**Date:** No dating evidence was available.

**Interpretation:** The way in which this feature aligned with an existing field boundary indicates that the field layout at this location had been altered at some point in the past and this part of the boundary had been infilled. No dating evidence was available to determine when this had taken place.
2.21.2 Statement of Potential: None

2.21.3 Recommendations for future action.

1) Inclusion in the Sites and Monuments Register
See above Section 2.1.2 and below Tasks 91-93.

2.21.4 Programme of Works

Task 91: Preparation of a site location plan from the original survey data. This is currently held in its original digital format. It requires downloading into a CAD package in order for the drawings to be generated.

Task 92: Preparation of the Sites and Monuments Register entry. This will be based upon original site records.

Task 93: The site archive will be sorted and prepared for deposition.

2.22 Location 21: Field to the south of Beningbrough Village where the pipeline crosses the River Ouse (Site Records: Field 81) Figure 14

Accession Code: None given

National Grid Reference: SE 532 573

2.22.1 Site Description: Poorly preserved ridge and furrow was present in each of these fields. It was not clear at the surface, where ploughing had removed the distinct patterning. It was visible as 3 metre wide banded changes in the colour of the subsoil after the removal of the topsoil.

Date: Medieval

Interpretation: Medieval field system.

2.22.2 Statement of Potential: None.

2.22.3 Recommendations for future action.

1) Inclusion in the Sites and Monuments Register
See above Section 2.1.2 and below Tasks 94-96.

2.22.4 Programme of Works
Task 94: Preparation of a site location plan from the original survey data. This is currently held in its original digital format. It requires downloading into a CAD package in order for the drawings to be generated.

Task 95: Preparation of the Sites and Monuments Register entry. This will be based upon original site records.

Task 96: The site archive will be sorted and prepared for deposition.

2.23 Location 22: Redhouse Ings, Moor Monkton, North Yorkshire. Figure 14

Accession Code: YORYM:1996.400

National Grid Reference: SE 5292 5735

2.23.1 Site Description: This site was located on the west bank of the River Ouse, isolated by the river from the remainder of the project. At this point a short length of pipe was laid, cutting around the side of a pre-existing lagoon. This led from the river crossing to the new pumping station which was under construction to feed the pipeline. Much of the area had already been disturbed during the construction of the flood water lagoon earlier in the 1990’s. However the presence of a medieval moated manor site immediately adjacent to the pipeline cut meant that it was essential that the topsoil strip should be monitored.

In the event it became clear that any archaeological deposits which may have related to the manorial site were either not present along the line of the topsoil strip or had already been removed during the construction of the lagoon.

Careful observation of the natural deposits as they were removed revealed a large feature which was recorded and sampled.

This feature was located at the southern end of the lagoon, close to the point at which the pipeline runs under the River Ouse. It measured 25 metres in width with a depth of up to two metres. It was filled with a series of silty clays with inclusions of gravel and cobbles.

Date: No dating evidence was present.

Interpretation: The location of this feature adjacent to the present course of the River Ouse, coupled with its width, depth and apparently water sorted fills indicates that it is related to the river. It may represent an earlier river channel or perhaps a cut-off meander channel.
2.23.2 DATA

Introduction: The circumstances at this particular location dictated that salvage work took place as the pipe was actually inserted into the ground. It was impossible to do more than clean one long section of the pipe trench as far as it was safe to do so. Thereafter deposits in the section were sampled appropriately and a measured section was drawn. An overall survey of the main site features was undertaken with a Total Station Theodolite.

Stratigraphic Data: A total of 11 contexts were identified and recorded. These comprised the sequence of deposition through the putative river bed feature. They comprised a series of sands, clays and silts.

Environmental Data: A column sample was taken through the above sequence of deposition. A sample was taken from each deposit so in all 11 samples were collected. These were all for general biological analysis and were 10 litres in size. In addition a single sample was taken for the purposes of obtaining a carbon 14 date.

2.23.3 Statement of Potential:

It is only very rarely that naturally occurring river lain deposits such as these are observed and available for sampling. The site has considerable potential for an analysis of the nature and development of the river systems. A specialist team from the University of Leeds, who are currently conducting an extensive sampling exercise from rivers in the North of England were consulted. They sampled this feature extensively and the following report has been submitted by Mark Taylor:-

A comprehensive study of Holocene river sedimentation and erosion in the Yorkshire Ouse basin is currently being undertaken (1994-1997) as part of the LOESS Special Topics programme at the School of Geography, University of Leeds, directed by Mark G. Macklin. This special topic programme is integrating data from short and long-term flood and sedimentary histories with provenance and geochemical studies to identify the mechanisms for sediment erosion and deposition during the Holocene. River development in the Yorkshire Ouse basin has been little researched and the data being collected as part of this special topic represents the first systematic study of Holocene fluvial sedimentary sequences in the catchment.

An additional piece of research looking at the impacts of environmental change on remobilisation of sediment-associated contaminants in floodplains in the Ouse and Tees basin will run from October 1996 - September 1999. This Ph.D. research project will be undertaken by Claire Sedgwick with supervision from Professor A. McDonald and Dr. M.G. Macklin at the School of Geography,
University of Leeds. Rivers draining the Pennines are known to have had a long history of metalliferous mining dating back to at least the Roman period. Work currently ongoing in the department has shown that significant amounts of contaminant are stored within the floodplains of the Ouse basin. A variety of floodplain reaches from the Ouse and Tees river basins will be sediment sampled for their surface and subsurface sediment metal concentrations, as well as their chemical and physical speciation to determine metal storage volumes and patterns and their susceptibility to remobilisation. The samples collected from Moor Monkton on the Ouse will form part of the database which will be used to assess the extent of the environmental risk posed by heavy metal contaminants across the basin.

**Proposals:** It is proposed that analysis should be carried out in four specific areas:

1) The Leeds University team should be provided with all relevant details so that they can pursue enquiries into the site through their own independent project.

2) The environmental samples should be assessed for the bioarchaeological content by the Environmental Archaeology Unit at the University of York.

3) The carbon 14 sample should be submitted for dating purposes.

4) The raw survey data that was collected during fieldwork requires plotting so that the precise position and alignment of the feature can be properly shown and so that a consideration can be made as to the relationship between the feature and the present course of the river Ouse.

2.23.4 **Recommendations for future action.**

1) **Preparation of the Archive**
   See above Section 2.1.1 and below tasks 97-101.

2) **Inclusion in the Sites and Monuments Register**
   See above Section 2.1.2 and below Task 102.

3) **Academic Publication**
   It is proposed that after consultation with the Leeds University team an appropriate outlet should be chosen for publication of the results. Depending on the outcome of the work this may be in either note or fuller form and will
depend on the publication strategy of the Leeds team. (See above Section 2.1.3 and below Task 103).

### 2.23.5 Programme of Works

**Task 97:** Assessment of the sediment samples.

**Task 98:** Depending on the results of Task 97 a fuller analysis of the samples should be undertaken with the objective of obtaining a full understanding of the nature and environment of this feature.

**Task 99:** A carbon 14 date should be obtained from the single sample that was taken for this purpose.

**Task 100:** Preparation of detailed site plans including the main section drawing from the original survey data. This is currently held in its original site format. It requires downloading into a CAD package in order for the drawings to be generated.

**Task 101:** Preparation of an Archive Report. This will include an interpretative, structural and stratigraphic history of the site. It will be illustrated with the drawings created in Task 100 and will make full use of the analysis of the material in Tasks 97-99.

**Task 102:** Preparation of the Sites and Monuments Register entry. This will be based upon the site archive.

**Task 103:** Preparation of the Publication Text. As with task 102 this will be based upon the site archive.

**Task 104:** The site archive will be sorted and prepared for deposition.
3 Post Excavation Research Design

3.1 Introduction
The post excavation programme will have three separate agendas as determined by the Statement of Potential laid out for each location in Section 2 above. At the lower level this will comprise an entry in the Sites and Monuments Record for each location. At an intermediary level the programme will involve the preparation of an archive and publication text for those locations where the data recovered has been deemed worthy of publication. At each of those locations there are a number of research proposals which are specific to that site and which have been discussed above in the relevant section for that location.

3.2 Overall Research Themes
The fact that this project involved a ribbon development measuring 30 metres in width for a distance of 24 kilometres through the Vale of York has given it an importance beyond that of the specific archaeological sites that were encountered along its length.

On the basis of this one piece of fieldwork it is now possible to address a number of issues relating to land use throughout period of prehistory, in particular the Iron Age and its transition with the Roman Period. The following questions arise:-

1) How suitable was the Vale of York for settlement in later prehistory.
   - How do the types of sites that are present in the Vale relate to the underlying geology and the river systems.
   - Can it be seen that settlement of a permanent nature would be more likely at particular locations and those of a temporary nature are to be seen elsewhere.

2) Is it possible on the basis of the available evidence to come to an understanding of the nature of the change in settlement that took place in the Vale of York after the arrival of the Romans.
   - Why is it there a lack of Iron Age pottery at the Roman sites that were observed along the route.
   - Did the Romans arrivals move into a relatively deserted landscape and develop what had previously been relatively under utilised.
- Did the Romans force out those who were already on the land and exploit it for themselves and using their own techniques.

- Alternatively did the Romans co-exist with the indigenous people but subsume their culture to the extent that it is not evident in the archaeological record.

- The range of dates that will be forthcoming from these sites are particularly important in this regard as they will show whether or not the Iron Age sites had ceased to function at the time of the Roman incursion or indeed if they continued on after that date. Given the lack of overlap of cultural material this will raise interesting questions as to the relationship between the indigenous community and the incomers.

3.3 Publication and Presentation

3.3.1 Introduction

It is proposed that the results of the analysis of this pipeline project should be published initially in the appropriate academic journal. For the Roman material this is likely to be Britannia or the Yorkshire Archaeological Journal and for the Iron Age material, the Yorkshire Archaeological Journal, or the Archaeological Journal.

In addition however it has been mooted that there should be an overall publication covering the results of all the archaeological work that Yorkshire Water plc has sponsored in 1996.

The type of format that this publication should take has not yet been considered in detail. Suffice it to say that the general intent should be the dissemination of the data to a wider lay audience. Attention should therefore be given to clarity, brevity and the use of quality colour illustrations and photographs. It is possible that it could be produced in a format which would enable it to be included within the current range of promotional literature that the company already produces and/or in a format that would be compatible with inclusion in the Annual Report of Yorkshire Water.

Preparation of a text for this putative publication will proceed in tandem with the work for the various academic journals.

In addition to this there are a number of popular archaeological magazines, such as Current Archaeology. It is proposed that a review of the work will be offered to the editor of that publication. The main intent behind this initiative will be in introducing the wider archaeological community to the working procedures that were employed at the project, which enabled the engineers to continue their work without undue disruption as a result of the archaeological
work and enabled archaeological work to be carried out in a relatively unhurried manner after the pipe had been inserted into the ground.

The preparation of a text for inclusion in the in-house journal of the York Archaeological Trust, *Interim*, will also be undertaken.

### 3.3.2 Report Format

The following is a provisional report format for the publication of the results of this work. At this stage it comprises a breakdown of the two major reports that will form the bulk of the research, namely those associated with the sites at Stockton West Moor (YORYM 1996.390) and Rawcliffe Moor (YORYM 1996.391).

### 3.3.3 STOCKTON WEST MOOR: YORYM (1996.390)

*Format: An article in Britannia (or Y.A.J).*

#### Structure and content

a) Introduction and background to the project.

b) Description of the stratigraphic sequence and the format and layout of the site.

c) Specialist reports on the pottery, environmental evidence and other finds.

d) A concluding discussion assessing the form of settlement at the site and relating it to its role within the landscape and in particular its position as it relates to the hinterland of the Roman City of *Eboracum*.

#### Layout of the report

1) **Introduction and background**

   Text: 1000 words
   Illustrations: 1 location plan
   1 half tone photographic plate

2. **Description of the stratigraphic sequence and the layout of the site.**

   Text: 5000 words
   Illustrations: 4 site plans
   2 half tone photographic plates

3) **Specialist reports**
a) Biological Remains

Text: 1000 words
Illustrations: 1 site plan

b) Roman Pottery (Including Samian)

Text: 4000 words
Illustrations: 25 Line Drawings

c) Other artefacts

Text: 2000 words
Illustrations: 5 line drawings

4) Concluding Discussion

Text: 5000 words

3.3.4 RAWCLIFFE MOOR: YORYM (1996.390)

Format: An article in The Archaeological Journal (or in Y.A.J).

Structure and content

a) Introduction and background to the project.

b) Description of the stratigraphic sequence and the form and layout of the site. Discussion of changes to the site on a phase by phase basis.

c) Specialist reports on the pottery, the other finds, the environmental evidence and the dating evidence.

d) A concluding discussion assessing the form of settlement at the site, its function, status and date of occupancy.

Layout of the report

1) Introduction and background

Text: 1000 words
Illustrations: 1 location plan
1 half tone photographic plate

2) Description of the stratigraphic sequence and the layout of the site
Yorkshire Water Pipeline, Moor Monkton to Elvington

Text: 7500 words
Illustrations: 7-10 site plans
2 half tone photographic plates

3) Specialist reports

a) Biological Remains

Text: 1000 words
Illustrations: 1 site plan

b) Iron Age Pottery

Text: 5000 words
Illustrations: 82 Line Drawings

c) Other artefacts

Text: 2000 words
Illustrations: 10 line drawings

d) Thermo-Luminescence dating

Text: 1000 words

e) Carbon 14 dating

Text: 1000 words

f) Petrological analysis of the pottery

Text: 1000 words

4) Concluding Discussion

Text: 7500 words
4 Resources and Programming

4.1 Staffing

Members of the project team who will be allocated to specific tasks in Section 4.2:-

1) Overall responsibility for project
   Nick Pearson, On-Site Archaeology

2) The Biological Remains
   Members of the Environmental Archaeology Unit, University of York

3) The Pottery
   Mark Whyman, Y.A.T.
   Stephen Willis, University of Durham

4) Thermo Luminescence Dating
   Sarah Barnett, University of Durham

5) Petrological Analysis of the pottery
   Alan Vince, Lincoln Archaeological Trust

6) Carbon 14 dating
   Beta-Analytic Laboratory, Miami, USA

7) Roman Glass
   Hillary Cool

8) The Ironwork
   Specialist to be appointed

9) Brick and Tile
   Sandra Garside-Neville

10) Fired Clay objects
    Specialist to be appointed

11) Slag
    Specialist to be appointed

12) Illustrations
    Y.A.T Drawing Office

13) Photographic Plates
    Y.A.T. Photographic Dept
14) Text Editing
   Y.A.T. Editorial Dept

15) Stone Artefacts and Consultant Geologist
   Dr. G.D Gaunt

16) Conservator
   Erica Paterson Y.A.T.

17) Finds Curation
   Y.A.T Finds Dept

18) Overall Project Supervision
   David Brinklow Y.A.T.
   Ailsa Mainman Y.A.T.

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Abbreviations

NFP  Nick Pearson
EAU  Environmental Archaeology Unit, University of York

No provision has been given in the above task listing for project management by senior members of the York Archaeological Trust.

4.3 Timetable:
Following a meeting between David Brinklow and Nick Pearson of the York Archaeological Trust and Steve Pace and Stephanie Walden of Yorkshire Water plc in York on Wednesday the 30th of October 1996, work has already commenced for the completion of this research in time for the publication
deadlines of the various journals where it is intended that the work will be submitted. i.e. the end of September 1997.

4.4 Budget
APPENDIX 1

1 Preliminary Fieldwalking Exercise (June 1996)

Introduction

The archaeological scheme of investigation provided by the Planning and Environment Group of the City of York Council requires the carrying out of an archaeological field walking survey along the full length of the pipeline.

It is furthermore proposed in the scheme of investigation that this exercise will take place across the working strip and an extra 25m. on each side and that the route corridor be divided into 10mx10m boxes and that all surface finds should be collected and recorded.

The purpose of the preliminary fieldwalking exercise is to determine the precise nature of land use at the current time with particular reference to the size and type of planted crops and the difficulty or otherwise of viewing the ground as a result of the presence of the crops. No surface collection of archaeological material will take place during this exercise.

2 Fieldwalking (29th-31st May 1996)

During the course of the above three days the route of the pipeline was walked from its terminus at the Elvington Water Treatment Works as far as a point to the north east of the village of Skelton where drawing M/C 1466/ A 0002 shows the route to kink. (National Grid Reference: SE 575 569). No fieldwalking was undertaken to the west of this point as a potential route alteration was being considered.

Fieldwalking did not take place along that part of the route through Kexby Stray where it was proposed that the pipeline will utilise the former track of the Derby Valley light railway.

3 Results

In all, 72 separate fields were covered. Not surprisingly at this time of the year in the Vale of York they were generally in cultivation. The predominant crops present were a variety of maturing cereals and grasses given over to either pasture or silage. There were also several areas of young tree plantations where the ground cover was overgrown with grass. There was also a single field of oil seed rape and a single field of strawberries.

It was not appropriate to undertake a detailed archaeological field walking survey of any of the above fields as there was no clear view to the ground. 66 of the fields that were walked are in this category.

The remaining six fields have been given over to a variety of types of legumes. These have been recently planted and there is a clear view to ground in each case.

Traces of ridge and furrow are evident in two of the fields which are given over to pasture.

4 Action

A detailed archaeological fieldwalking survey and surface collection was undertaken in the six fields where it was possible to do so. This work took place in the week commencing Monday the 3rd of June 1996. Those fields are located at the following National Grid references:-

SE 531 659
SE 665 516
Three areas of ridge and furrow were recorded.

These are located at:

- SE 611 569
- SE 624 566

5 Recommendations (June 1996)

Due to the state of cultivation in the majority of the fields it was not possible to carry out a detailed assessment of the archaeological potential of the route. It is therefore recommended that if such a survey is to be carried out it is essential for the crops to be removed and for the route corridor to be ploughed in advance of the topsoil stripping in order that a systematic archaeological survey can be implemented.

If such action were not to take place and archaeological monitoring only occurs during topsoil stripping and pipeline construction begins in earnest then it would be significantly more difficult to implement a full and proper programme of archaeological recording. It may be that this would not satisfy the requirements of phase 2 of the archaeological scheme of investigation as laid down by the City of York Council.

6 FIELDWALKING AND SURFACE COLLECTION -

SKELTON TO NUN MONKTON SECTION

Wednesday 12th - Friday 14th June 1966

Introduction

As stated in the report on the preliminary fieldwalking exercise, this section was not initially walked, as at that stage the precise route had not been determined. However detailed drawings were subsequently presented and the route as shown on drawings M/C 1466/A0001 and 2 (Rev A2) was therefore walked from National Grid reference SE 575 569 to the Nun Monkton end of the pipe.

A further 12 separate fields were monitored during this exercise. In all cases the crops present were either maturing grasses or cereals and there was no view to ground. In no case was it deemed appropriate to carry out detailed fieldwalking with associated surface collection of artefacts. There were however two separate areas which were studied in some detail.

Overton Wood (National Grid Reference SE 545 575): is shown on the County Sites and Monuments Record (SMR No ???) as being an area of ancient woodland. The SMR records that there are earthworks associated with this feature and that its current boundaries may not represent its original size.

Detailed walking revealed that the current perimeter of the wooded area is delineated by a shallow ditch up to a metre in depth with an associated low bank towards the outer perimeter of the woodland. This feature appears to respect the current perimeter of the wood and there are no other surface features in the fields beyond the current wooded area which might represent an earlier boundary to a larger area. The date of this bank and ditch is unknown.
On the west bank of the River Ouse the projected route of the pipeline, where it approaches the river, runs close to a moated site at National Grid Reference SE 509 571. This feature is on the grounds of Red House School.

Detailed walking at this location revealed that the monument is a moated site, rectilinear in shape with double ditches enclosing the central area and with other related ditches running in the direction of the river. It is located immediately adjacent to a lagoon and pump house complex owned by Yorkshire Water. The lagoon is droplet shaped and is positioned next to the river. A rectilinear embankment has been constructed around the lagoon, presumably to enclose flood water.

Although detailed working drawings were not available at the time of carrying out the field walking, discussions with the on-site engineers,(Birse), revealed that the pipeline will run from the pump house, through the lagoon area before entering under the River Ouse.

Without a drawing showing the precise position of the pipeline it was difficult to be certain, but it was thought likely that it would pass immediately adjacent to the outer ditch of the moated site. The effect of this may be mitigated by the fact that prior construction of the lagoon and its embankment may have already obliterated all archaeological deposits.

7 Recommendations (June 1996)

It was clear that when observation of the topsoil strip took place, that particular importance should be given to observing this activity at the above two locations.

Yorkshire Water Pipeline, Moor Monkton to Elvington
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