APPENDIX A ARCHAEOLOGICAL SPECIFICATION
Mike Griffiths and Associates

1.0 PLANNING BACKGROUND

An outline planning permission was granted by Wakefield Metropolitan District Council on 2 September 1997 to Bellway Homes and the Warmfield Group for residential development of some 25 hectares at Normanton, West Yorkshire. The site forms part of the Normanton Golf Course and an adjacent area of arable land. The development will be phased.

The following constitutes a scheme of work as defined under the terms of PPG 16 and is submitted in support of the planning condition (12) attached to the decision notice. It will constitute the basis for any future detailed specification for a phased scheme of archaeological works

2.0 DEVELOPMENT METHODOLOGY - refer to Drawing No. 97.2056.01/arch

For reference purposes the development phases referred to below relate to those provisionally identified on drawing No. 97.2056.01/arch, they do not necessarily indicate the sequence of development or exact boundaries of the individual phases.

Development will commence with the construction of the sewers and the access from Church Lane into Phase 1 at its boundary with Phase 3. Over the remainder of the site, the system of sewers will be constructed first, along with some sections of the internal system of roads. The phased development of the various areas of housing will be dependent upon the granting of detailed planning permission for the individual areas.

3.0 THE SITE

The site is bounded on the north by Wein Dyke Beck, on the east by Sewerbridge Beck, on the south by the line of the proposed Normanton By-Pass, and to the west by Church Lane and Meadow Brook Close.

Part of the site is occupied by the Normanton Golf Course. This includes the whole of phases 6, 7 and 8, and parts of phases 2 and 5. These areas are mainly laid down to grass with small areas of shrubs and bushes. They contain the earthwork remains of a system of medieval ridge and furrow cultivation, which has been the subject of a topographical survey, October 1997. The remainder of the site is in arable cultivation.

4.0 THE ARCHAEOLOGICAL BACKGROUND

A preliminary enquiry was made to the West Yorkshire Archaeology Service (WYAS) in late 1995. This identified an area of cropmarks, located to the south of Whin Beck in an area of arable, as the only known archaeological feature on the proposed site. A subsequent examination, in mid 1997, of the records held by WYAS and the County Archive, combined with a walk-over survey, confirmed this. It also identified the presence of a well-preserved area of ridge and furrow extending over the greater part of the golf course.

In discussions with WYAS it was agreed to undertake a geophysical survey of phase I of the development, which included the known cropmarks. This was carried out in October 1997. It confirmed the linear features identified in the aerial photography south of Whin Beck and also identified an apparent ditched enclosure to the north of the beck, which was not visible on the aerial photographs. A possible second ditched enclosure extending from phase 1 east into the golf course was also noted.

It was agreed to extend the geophysical survey to the remaining areas of arable cultivation to the north and south of Whin beck, phases 1, 2, 3, 4 and part of phase 5. This was carried out in November 1997. A number of other linear features and magnetic anomalies were identified, along with evidence of the former extent of the ridge and furrow. The majority of the features are considered to be of recent or non-archaeological origin. An area of the ridge and furrow within the golf course, covering the suggested second enclosure, was also tested for its susceptibility. This failed to identify the second ditched

feature.

An area of approximately 80 by 50 metres, encompassing the ditched enclosure identified in the geophysical survey, has been topsoil stripped as part of a physical evaluation of the site — November 1997. The topsoil overlying the archaeological remains has proved to be very shallow, less than 20 cms. in some places. The subsoil and the surviving archaeological features are cut by the bases of the medieval furrows and a system of land drains.

Both ditched enclosures identified by the geophysical survey have been confirmed. The external ditch of the most westerly enclosure is between 3 and 5 metres wide, at the surface, and encloses an area some 45 by 40 metres. The surface evidence suggests that the entrance probably lies on the east side of the enclosure. Two ditches, forming a funnel, link the entrance to a centrally placed ring ditch, approximately 7 metres in diameter. Part of another, larger ring ditch lies to the north of this central feature. None of these internal features was specifically identified by the geophysical survey. To date no dating evidence has come to light and severe weather conditions have prevented further examination of the archaeological features so far revealed - 11 December 1997.

The extent of the second enclosure has yet to be defined but from the limited observations made to date it is likely to be of similar proportions to the first.

5.0 ARCHAEOLOGICAL IMPLICATIONS

The geophysical surveys have shown that features can be detected by this means but only where the topsoil is shallow and the masking effects of the ridge and furrow are considerably lessened. Even under these conditions the technique has only identified the most substantial features, namely the broad enclosing ditches. These favourable ground conditions only appear to apply over a relatively small area of the development, namely part of phase 1. It is possible, therefore, that the geophysical results obtained from phases 3,4 and part of phase 5 are misleading, only detecting features cutting the ridge and furrow.

Within the area of the golf course it is clear that the ridge and furrow is too pronounced to permit accurate identification of even very substantial features using geophysical techniques.

Despite the effects of medieval and modern cultivation in the arable area, combined with a very closely spaced system of field drains, there is relatively good survival of archaeological deposits in the form of cut features. It is probable that the degree of preservation within the golf course, where modern cultivation is absent, will be very good under the ridges. There is some possibility that in these 5 metre wide strips horizontally stratified deposits, such as floor levels and working surfaces, may survive.

The nature of the archaeology remains to be determined and it will only become clear as the site is stripped of topsoil and the underlying subsoil is examined. On the limited evidence available to date it is clear that at least part of the site is occupied by a series of contiguous ditched enclosures, one of which contains a hut circle. These would not have existed in isolation but probably had some form of agricultural, and possibly communication, system attached to them. Assuming that the enclosures identified to date form part of a broadly linear system, it is possible that the development might contain as many as four more similar sized enclosures within the grassed areas to the north of the Whin Beck.

The development will involve the removal of topsoil from much of the site preparatory to construction. When combined with the construction of roads, services and individual house plots it will result in almost total destruction of any surviving archaeological remains or deposits. Observations during recent months when ground conditions have been poor owing to heavy rains, suggests that even the tracking of heavy plant across the site could cause severe damage to some deposits.

The nature of the archaeological remains noted to date conforms to a type that includes single and multiple enclosures, some

containing hut circles and working areas, found elsewhere during pre-development excavation in West Yorkshire. The sites are often lacking in dateable ceramic sequences but appear to represent Iron Age or Romano-British farms. Aerial photography shows that these enclosures, a mixture of farms and probable animal compounds, are part of a once extensive agricultural landscape.

6.0 MITIGATION STRATEGY

It is proposed, where known archaeological sites exist or are identified by future work, and will be destroyed or damaged by the proposed development, that they will be fully investigated, recorded, analysed, and reported. This will be done under the terms of a programme of archaeological excavation that reflects the progressive nature of the development and the archaeological importance of the individual remains. See below for a detailed statement.

Areas of archaeological potential will be topsoil stripped in advance of their development under strict archaeological supervision and a period of four weeks allocated, prior to any other development commencing, to carry out any necessary archaeological works. The nature of the archaeological works will be agreed in conjunction with the LPA's archaeological advisers. See below for a detailed statement.

During the course of the archaeological site investigations provision will be made in the structure of the archaeological team to maintain archaeological watching briefs on any works not directly related to the main development phases. This may include provision of site services and construction of some sections of site roads. See below for a detailed statement.

7.0 THE SCHEME OF ARCHAEOLOGICAL WORKS

7.1 SITE INVESTIGATION — PHASE 1

This area contains the remains of a ditched enclosure, possible traces of a contemporary field system, and ploughed down medieval cultivation. Work has already commenced on the excavation and recording of one of the enclosures identified by the geophysical survey of October 1997 and two further evaluation trenches are to be opened to the south of Whin Beck to establish the nature of the deposits in this area.

Topsoil has been removed mechanically from the site of the enclosure, an area measuring approximately 80 by 50 metres. This was done using a vehicle with a broad, smooth bladed ditching buckets. The removal of the topsoil was done as an archaeological operation under strict archaeological supervision. The topsoil was removed down to the top of the natural and the top of in-situ archaeological deposits. Approximately 50% of the area of the site is relatively well preserved, though no evidence of horizontal stratification has been identified. Adverse weather conditions have delayed commencement of the cleaning of the site.

The remains are deemed to be significant and the method of excavation will be as outlined immediately below, 7.2.

7.2 SITE INVESTIGATION — REMAINDER OF PHASE 1

Topsoil will be removed mechanically from the site. This will be done using vehicles with broad, smooth bladed ditching buckets. The removal of the topsoil will be done as an archaeological operation under strict archaeological supervision. The topsoil will be removed down to the top of the natural or top of in-situ archaeological deposits, whichever is the higher. A minimum period of four weeks, prior to any other form of development commencing, will then be allowed to carry out any necessary archaeological investigation.

The area that has been stripped will then be examined to identify, and where necessary clarify, visible features. Prior to further archaeological investigation of the area discussions will be held, on site, with LPA's archaeological advisers to determine the nature of any further archaeological investigation. Where minor archaeological features such as agricultural boundary ditches are identified, they will be planned and minimally sampled. Where more substantial or significant deposits

are identified they will be treated, subject to the time constraints identified above, as follows:

Excavation of any potential medieval or earlier features will involve a minimum of 10% up to 100% hand and machine sampling of individual features to achieve the objectives of determining the chronology and function of the sites and their various components. Sampling and recording strategies will take account of and reflect any potentially multi-phased nature of the occupation.

A minimum of 10% of the deposits within linear features such as boundary ditches or drainage features associated with domestic, agricultural, industrial or funerary enclosures, or fields, or thoroughfares, will be removed and examined. The deposits at the junctions of or interruptions in linear features such as boundary ditches, house enclosures etc. will be totally removed over a sufficient area to determine the nature of the relationship between the components.

Other cut features such as post holes, pits, or isolated trenches will be normally half sectioned to determine and record their form. The exception will be potential sunken floored buildings, wall settings, bell pits, kilns, burials, storage pits or other identifiable domestic, industrial, or funerary structures or buildings.

Domestic, industrial, agricultural and funerary structures or buildings such as huts, barns, kilns, gateways, causeways, working hollows, floor levels hearths and cut features as identified above will be excavated in total or to a degree whereby their extent, nature, form, chronology, function and relationship can be determined.

If burials are identified the coroner will be immediately informed and a Home Office Licence acquired. The remains will be totally excavated and carefully removed according to the instructions issued by the Home Office.

Built structures such as walls will be examined to destruction and sampled to a degree whereby their extent, nature, form, chronology, function and relationship to other features or deposits can be determined.

All excavated features will be recorded textually graphically and photographically. The record system will be an integrated one, see below.

Sampling for environmental purposes will allow for the collection bulk samples from each site.

Every reasonable effort will be made to preserve the archaeological integrity of the sites against unrecorded damage or loss during excavation. This will apply to working techniques and site securing

Appropriate safety standards will be maintained during the archaeological site works.

The work will be professionally monitored on a regular basis.

7.3 SITE INVESTIGATION — Remainder of Part of Phases 2 and 5, and whole of 3 and 4

The working methods outlined immediately above, 7.2, will applied to the remaining areas of arable cultivation that form part, or the whole, of phases 2, 3, 4 and 5.

7.4 SITE INVESTIGATION —Part of Phases 2 and 5, and whole of 6, 7 and 8

These areas include the whole of the golf course. They are currently under grass and contain the well-preserved remains of a system of ridge and furrow cultivation. It will only be possible to determine the extent, character and degree of archaeological preservation by the application of intrusive techniques. It is proposed that this investigation will commence at the earliest possible opportunity and well in advance of proposed development of the particular phases.

Initially it is proposed to sample a small area of the extant ridge and furrow within the assumed boundaries of the second ditched enclosure, at its assumed centre, by means of a 5 by 5 metre hand excavated trench. This will situated on one of the ridges. The objective will to be establish the potential for the preservation, under the ridges, of horizontally stratified deposits. Such preservation would represent a rare feature on sites of this period in West Yorkshire.

If horizontally stratified deposits are identified, topsoil will be carefully removed by machine, along the line of the ridges, over an area of some 100 by 80 metres to encompass the assumed extent of the enclosure and an area surrounding it. The fill of the medieval furrows will be initially left in situ.

Any horizontally stratified deposits will then be planned, recorded and 100% hand excavated. Cut features will be sampled according to the strategies outlined in above 7.2 above

Subject to discussions with the archaeological representatives of LPA the areas of the furrows may be carefully removed by machine to reveal the full plan of the enclosure and permit additional sampling of major cut features such as the enclosing ditch.

If the 5 by 5 metre hand excavation shows, however, that the disturbance associated with the medieval cultivation extends down to the top of natural, then the area of 100 by 80 metres will be completely stripped of topsoil by machine according to the technique identified in 7.2 above. The site will then be excavated and sampled in a like manner.

A similar approach, sequential topsoil stripping of areas of 100 by 80 metres, will then be adopted to the areas of ridge and furrow immediately adjacent to the second enclosure on its north, east and south sides to determine if other enclosures or similar features exists. If such features are identified they will be examined in accordance with the methodologies identified above in 7.2.

This method of sequential topsoil stripping of areas of 100 by 80 metres will be further extended until the remainder of the development site is shown to be free of significant archaeological deposits. Thereafter any remaining areas will be examined in accordance with the method identified in 7.2., namely topsoil stripping at least four weeks in advance of development and an appropriate level of recording as to be agreed with representatives of the LPA after completion of the topsoil stripping.

7.5 WATCHING BRIEF

Where remains or deposits are identified during ancillary works such as the provision of site services, the scale and detail of the recording will be determined by the nature of the deposits, their perceived importance and the timetable of the operation which has revealed them.

Evidence of prehistoric or Romano-British domestic, industrial or funerary structures will for example be deemed to of high archaeological importance, whereas agricultural features such as ditches and boundaries of any period will be deemed to be of minor importance.

7.6 SITE RECORDING

A site grid will be established and corrected to the British National Grid. Site coordinates will be recorded and reported in National Grid format.

The sites will be accurately tied into to a detailed local topographical survey.

The sites will be recorded using an approved standard system of context and other record forms or an on-site computer based system or an amalgam of both. Any form based system will be transferred to a computer based system prior to completion of the Post Excavation Assessment.

Planning of features will be at scales of 1:10, 1:20 or 1:100; sections will be recorded at a scale of 1:10.

All finds will be recorded before they are removed from the sites and an inventory maintained on site of the nature and location of all artefactual or ecofactual material and environmental or other samples.

A series of indexes, capable of interrogation, will be maintained for all site records along with a working site matrix.

Appropriate treatment and storage methods will be employed on site to ensure that the finds and site records are maintained in the optimum conditions. These arrangements will be discussed and agreed with the proposed recipient museum before site works commence. An accession number will be obtained from the proposed recipient museum and used as part of the site recording scheme.

The archaeological works will be professionally monitored, and audited, on a regular basis. See below for specific arrangements.

7.7 SPECIALIST ADVICE

Specialist consultancy services will be secured, as necessary, to advise on any Prehistoric, Roman, Anglian and Medieval material from the site, scientific dating techniques, environmental matters, and the conservation of artefacts.

7.8 SITE ARCHIVE

After completion of the field investigation of individual development phases, all records will be indexed, ordered, quantified and checked for consistency.

Context, finds, sample and other paper-based records will be transferred to an integrated computer based system. The system will be capable of maintaining an audit track of all records and finds in the system, including those being analysed by external specialists. It will also be able to produce data files that can be handled by a DBase type relational database.

The drawn record will be digitised in an appropriate format that will permit the output of standard ACAD type DXF files.

The archival record will include all material relating to the sites and their excavation including correspondence, written, drawn and computerized records. The site archive will be curated to allow transfer to an approved and appropriate museum on completion of the publication programme.

As part of the preparation for the Post Excavation Assessment, the artefactual, ecofactual and samples will be quantified and described. In addition the stratigraphic matrices and a site summary will be prepared.

7.9 POST EXCAVATION ASSESSMENT

The Post Excavation Assessment will summarise the results of the excavation, the results of specialists work and quantify the archive.

It will assess the success of the excavation in meeting the terms and objectives of the specification. See above.

It will identify any additional research objectives which could reasonably be met from the archive.

It will describe the programme of post excavation work required to meet and publish the research objectives, including any additions to the objectives identified during the assessment.

It will contain adequate detail and discussion to permit critical examination by the monitors, other specialists and academic

referees.

It will be provided in a written form and include a proposal and timetable for completion of the archive to MAP 2 standards, deposition of the completed archive and submission for publication of a final report.

7.10 POST EXCAVATION PROCESSING

The results of the excavation will be processed and researched according to an agreed programme identified by the approved Post Excavation Assessment.

A full artefactual, ecofactual, written, graphical, photographic and computerized archive will be prepared to approved standards as agreed with the recipient museum.

Assessment and analysis of unpublished information and the results of related work in the immediate area will be included in the post excavation programme for incorporation in the final site report.

The final report will include a full account of the excavation and the outcome of research into those results and associated data.

The report will be subject to external academic refereeing.

7.11 TRANSFER AND DEPOSITION OF THE ARCHIVE

The transfer and deposition of the complete archive of the sites will be in accordance with current West Yorkshire guidelines, subject to confirmation by the owner.

Copies of selected textual, graphical, digitized and photographic material will be deposited with the West Yorkshire SMR and the National Monument Record.

7.12 PUBLICATION

The results of the excavations will be published in an appropriate national or local academic journal (or journals) dependent upon the results of the work.

7.13 MONITORING

The phased nature of the archaeological works will be such that decisions on matters such as sampling strategies will have to be developed as the archaeological site work progresses. The Local Planning Authority (LPA) will wish, through its archaeological advisers, to be involved in this process. Facilities will therefore be afforded to their nominated archaeological representative to be directly involved in the discussions on such matters as they arise during the course of the archaeological works.

Professional monitoring will be maintained during the course of the excavation, assessment, post excavation, publication and other related works until final transfer of the completed site archive into the care of an agreed and approved museum. This monitoring will be undertaken in conjunction with a designated representative of the West Yorkshire SMR.

Bellway Homes or its representative will undertake audits of both the excavation and post excavation processes and report their results.

Regular monitoring meetings will be held by Bellway Homes, their Nominated Representative (CNR), and the archaeological Contractor in order to provide an opportunity to review progress of site works and the post excavation programme. Representatives of the LPA and recipient museum will be formally invited to attend and contribute to the meetings.

An initial meeting will be held on the first day of the site works and at regular intervals during the course of the excavation. A meeting will be held on or close to the final day of site working. Subsequent meetings will include at least one to examine the results and proposals of the Post Excavation Assessment, and at least one other to monitor progress on the archiving and publication.

Additional spot checks by Bellway Homes, the CNR, or designated representatives of the LPA will take place after notice has been served on the Archaeological Contractor.

8.0 CONCLUSION

The provisions outlined above will provide for a controlled and professional archaeological record to be made of all archaeological deposits that will be affected or revealed in the course of the development. As such it will satisfy the terms of the archaeological planning condition (12).

9.0 RELATED INFORMATION

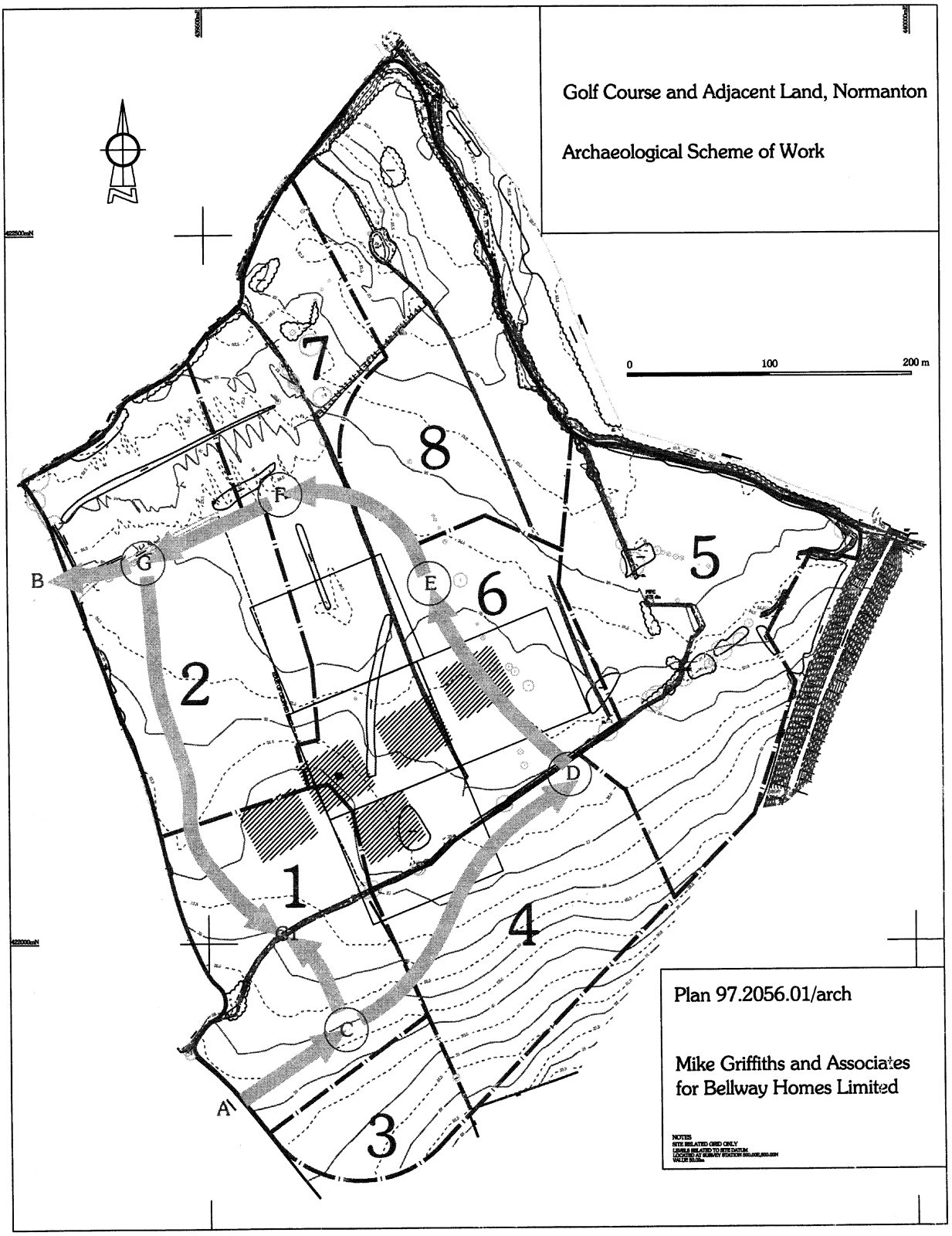
WYAS Geophysical Survey - October 1997

WYAS Geophysical Survey - November 1997

Headland Archaeology Topographical Survey — October 1997

Copies of these reports have already been deposited with WYAS.

Mike Griffiths for Mike Griffiths and Associates on behalf of Bellway Homes and the Warmfield Group


Golf Course and Adjacent Land, Normanton
Archaeological Scheme of Work
0
100
200 m
1
2
3
4
5
6
7
8
A
B
C
D
E
F
G
Plan 97.2056.01/arch
Mike Griffiths and Associates
for Bellway Homes Limited