

**BULL MOTORS AND CELESTION SITE
FOXHALL ROAD
IPSWICH
SUFFOLK**

**ARCHAEOLOGICAL IMPACT ASSESSMENT
AND PROPOSED MITIGATION STRATEGY**



Essex County Council

Field Archaeology Unit
March 2005

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AND PROPOSED MITIGATION STRATEGY**

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**FORMER BULL MOTORS AND CELESTION SITE
FOXHALL ROAD
IPSWICH
SUFFOLK**

**ARCHAEOLOGICAL IMPACT ASSESSMENT
AND PROPOSED MITIGATION STRATEGY**

Client: Barratt Eastern Counties

FAU Project No: 1476

NGR: TM 1855 4385

Local Authority: Ipswich Borough Council

Planning Ref: Planning Application not yet submitted

Date of Report: 23 March 2005

SUMMARY

This report presents an assessment of the archaeological impact of a proposed housing development at the former Bull Motors and Celestion Site, Foxhall Road, Ipswich, and sets out proposals for archaeological mitigation before development. It supplements a previous archaeological desk-based assessment by the Colchester Archaeological Trust (August 2004).

Lower Palaeolithic (Old Stone Age) remains of high regional importance, dating to 400,000 to 360,000 Before Present, were discovered between 1902 and 1923 when the south and east of the site was occupied by a brick pit. These remains have been destroyed in the area of the brick pit itself, but it is uncertain whether or not they survive across the north and west of the site, beyond the limits of the pit. The present ground level has been reduced as a result of the construction of the Bull Motors and Celestion Works after the brick pit had been abandoned and infilled. The impact of the proposed development is unlikely to be greater than that of brick pit and the former works buildings, except for deep piling, although the piling density is low. Overall, a negligible to slight adverse impact is expected.

However, the level of the Palaeolithic remains in comparison to past and proposed developments is not precisely known, so it is proposed that the first stage of archaeological mitigation should be a trial trenching evaluation to establish whether or not any Palaeolithic deposits survive. If surviving remains are identified, this will enable more detailed mitigation measures to be worked out.

1.0 INTRODUCTION

1.1 Archaeological Assessment Aims and Planning Background

- 1.1.1 This report provides an assessment of the impact on archaeological remains of a proposed housing development on the site of the former Bull Motors and Celestion Site, Foxhall Road, Ipswich, and concludes with an outline strategy for archaeological investigation prior to development. The report has been prepared to support a full planning application to the local planning authority, Ipswich Borough Council Planning Department, who are being advised on the archaeological implications of the development by Suffolk County Council Archaeological Service. The report has been prepared in accordance with the *Institute of Field Archaeologists (IFA) Standards and Guidance for Archaeological Desk-Based Assessments*.
- 1.1.2 This report supplements an archaeological desk-based assessment submitted in August 2004 (Colchester Archaeological Trust (CAT) 2004) in support of an application for outline planning permission. The desk-based assessment identified previous discoveries on site of Palaeolithic (Old Stone Age) remains “of high regional significance”. On the advice of the Suffolk CC Archaeological Service, Ipswich Borough Council Planning Department have placed a condition on outline planning permission requiring a programme of archaeological work to be submitted as part of the application for full planning permission.
- 1.1.3 The aim of the present report is not to duplicate the results of the earlier archaeological desk-based assessment, but to build on them to present proposals for archaeological mitigation. The desk-based assessment was prepared before detailed development plans were drawn up, and only now that these are available is it possible to provide a full assessment of the impact of the proposed development on archaeological remains. The results of a trial pit and borehole survey carried out in September and October 2004 (Knight Environmental 2004) have also been studied to assess the archaeological impact of the Bull Motors and Celestion Works and, before them, the Valley Brickworks brick pit. The present report completes the desk-based archaeological assessment of the site, making use of the most up-to-date information on both previous and proposed developments.
- 1.1.4 The report will provide a basis for further consultation with Suffolk CC Archaeological Service to discuss and agree appropriate mitigation measures in more detail before development takes place.

2.0 BACKGROUND

2.1 Location and Site Description (Fig. 1)

- 2.1.1 The site comprises an area of approximately 5.7ha, and is situated to the north of the River Orwell c. 2km to the east of Ipswich town centre (TM 1855 4385). It fronts onto Foxhall Road to the north, extends back as far as the Ipswich-Felixstowe railway to the south, and is bounded to the east and west by housing fronting onto Camden Road and Orwell Road.
- 2.1.2 The buildings of the former Bull Motors and Celestion Works have now been demolished. The main works buildings occupied the northern half of the site, with access from Foxhall Road. Ancillary buildings lay to their rear, across the south of the site, and fuel storage tanks and an electricity sub-station were located behind the Bull Motors Works. Roadways and yard areas are surfaced with concrete hardstanding and tarmac. The south-east of the site is overgrown with trees and bushes, and trees line the site's eastern perimeter.
- 2.1.3 The land surface in the general area of the site slopes gently down from north to south, from 39 to 37m OD, with a shallow depression 2-3m deep running from north to south down the centre of the site. The most recent land survey (Knight Environmental, January 2005) shows the site to be almost level at between 35.0 and 35.5m OD, although the ground surface rises to around 36m OD at its limits. The modern site level is visibly lower than the surrounding area: it is almost 1m below the level of Foxhall Road at the site entrance, and around 3m below the level of Camden and Orwell Roads to the east and west. This depression may partly be natural, reflecting an underlying glacial lake or channel (see 2.2 below). However, it is partly also a result of a brickearth pit dug in the late 19th and early 20th century (see 2.3 below), and later ground reduction for the construction of the Bull Motors and Celestion Works.

2.2 Geology

- 2.2.1 The geology underlying the site is mapped on British Geological Survey map sheet 207, 'Ipswich', solid and drift edition, at 1:50,000, and this record is supplemented by a series of borehole surveys (see 4.0 below). To summarise, the site is underlain by a range of Quaternary Glacial Sand and Clay deposits, probably glacial outwash, above Boulder Clay, Red Crag, and finally London Clay at a depth of 15m. Localised Brickearth deposits, consisting of several strata, are known to exist over much of the site, and are interpreted as silting of a post-glacial freshwater lake or channel as a result of repeated flooding episodes. The brickearth is phased within the Hoxnian interglacial, a temperate period following the

Anglian glaciation. The brickearth has been recorded to a depth of 5m (from the 1923 ground surface) and is capped with a thin layer of Sandy Gravel. Wymer (1995, 220) argues that this geological feature was primarily responsible for the depression in the land surface in the immediate site area.

2.3 History and Archaeology (Figs 2, 3)

- 2.3.1 Full details of the historical and archaeological background to the site can be found in the archaeological desk-based assessment (CAT 2004), and only the most relevant information is summarised here.
- 2.3.2 The history of the site's development is relevant to assessing the disturbance of below ground deposits. The Tithe Map of 1844 shows the site as open fields, but from 1881 to 1927 the site was occupied by the Valley Brick Works, which quarried the local brickearth deposits over a large area of the east and centre of the site (Fig. 2). The brick pit was initially excavated in the south of the site, but was later extended to the north. A smaller pit for sand and gravel was also dug in the extreme north of the site. The site was the main source of materials for building the surrounding suburban housing in the late 19th century. Allotments occupied the southern end of the site, alongside the railway line.
- 2.3.3 By 1928 the brick pit had been abandoned, although it remained largely open, and a glass foundry was built in the south-west of the site. The Bull Motors Works was built in the north-west of the site in 1938, almost entirely on land that had not been disturbed by the brick pit. At about the same time the Foxhall Works was constructed in the centre-east of the site and the brick pit had become largely infilled. The Celestion Works was built over the east and south of the site in 1972, and again the works buildings avoided the main area of the former brick pit.
- 2.3.4 Several investigations of Palaeolithic (Old Stone Age) remains exposed in the Valley Brick Works brick pit were carried out between 1902 and 1923. The most important discoveries were Acheulian flint tools and mammal bones on an undisturbed land surface sealed below the brickearth deposits, at a depth of around 5m (Fig. 3, Layer 7). The results of this work are summarised in the archaeological desk-based assessment (CAT 2004) and by Wymer (1995, 220-4). A summary of the significance of these remains is presented in section 5.1 below.

3.0 DEVELOPMENT PROPOSAL

3.1 The proposed development is residential, comprising around 300 houses and flats, with access roads, car parking spaces, gardens, and service connections. The houses will consist of terraced houses built in blocks, interspersed with semi-detached houses, all with rear gardens and parking. The flats are arranged around parking areas. A retaining wall is proposed for much of the site perimeter, while a strip of land along the southern limit of the site is planned as an open space, with a screen of trees alongside the railway line.

4.0 METHOD

4.1 The archaeological desk-based assessment (CAT 2004) already provides a comprehensive survey of the archaeological remains known from the site itself and within a surrounding area of 500m, and assesses their significance. This report summarises the results of the earlier assessment report where relevant, but the earlier report should be consulted to address any archaeological questions in detail.

4.2 This report has made use of trial pit and borehole records in site investigation reports to assess the impact of previous ground disturbance, and design drawings provided by Brand Leonard, Consulting Engineers, to assess the impact of the proposed development. The following sources were used (full titles and references of reports are given in the Bibliography):

Reports

- Archaeological desk-based assessment (Colchester Archaeological Trust 2004)
- Interim site investigation, Celestion and Bull Works (Knight Environmental 2004)
- Phase I and II environmental assessment, Celestion Works (WSP Environmental 2004)
- Environmental Site Investigation, Bull Works (ENSR International 2001)

Drawings

- Exploratory hole location plan (Knight Environmental, drawing 500170/001)
- Site plan (Stanley Bragg Architects, drawing 5678/001 Rev C)
- Typical piled foundation layout and detail (Brand Leonard Consulting Engineers, drawing 10255/SK17/03/01)

5.0 SUMMARY OF ASSESSMENT OF ARCHAEOLOGICAL SIGNIFICANCE

5.1 Lower Palaeolithic (Early Old Stone Age)

- 5.1.1 The archaeological desk-based assessment describes Acheulian flint tools in good condition, including at least 134 hand-axes, with occasional mammoth, deer, ox and rhinoceros bones, found on a buried land surface at the base of the brickearth deposits. The system of classification of these Palaeolithic deposits is that published by Boswell and Moir (1923), and a generalised section summarising the sequence is reproduced as Fig. 3.
- 5.1.2 The significant finds were found in Layer 7, at a depth of 5m below the 1923 ground level. They are dated by their stratigraphic position to the Hoxnian interglacial, a temperate period following the Anglian glaciation, dated to c. 400,000 to c. 360,000 Before Present (Oxygen Isotope Stage 11) (Wymer 1999, 31). Layer 7 is interpreted as a land surface at the edge of a glacial lake, with the overlying brickearth representing flood silts as the lake expanded. Flint artefacts recovered from secondary contexts in the overlying brickearth in Layers 6, 5 and 4 had almost certainly been disturbed from the primary Layer 7.
- 5.1.3 The Palaeolithic remains from Layer 7 are highly significant as they represent one of the best examples of Acheulian flint tools in a primary context in East Anglia (Wymer 1985, 224), with associated mammal bones. There is also a possibility of other palaeo-environmental remains that might enable the contemporary plant life and climatic conditions to be reconstructed. Such evidence from Palaeolithic lake-related deposits is regarded as an important research topic in the Archaeological Research Framework for the Eastern Counties (Austin 1997, 6).

5.2 Later Archaeological Periods

- 5.2.1 The archaeological desk-based assessment describes prehistoric worked flint flakes and a sherd of Early Bronze Age Beaker pottery as coming from the uppermost Gravel deposit (Fig. 3, Layer 2), immediately below topsoil. This is the only material other than the Palaeolithic finds to have come from within the site itself, although other finds have been made nearby. These include Neolithic (New Stone Age) flint hand-axes, a hoard of Late Bronze Age socketed axes, and four Roman coins and one Saxon coin. The site lay some distance from the Saxon and medieval town, and no medieval or post-medieval settlement is known in the immediate vicinity of the site until it became incorporated as a suburb of Ipswich in the late 19th century. Nevertheless, the potential for archaeology of the later prehistoric, and perhaps later periods as well, should not be discounted.

6.0 ASSESSMENT OF IMPACT ON ARCHAEOLOGICAL REMAINS

6.1 Extent and Depth of Archaeological Deposits (Fig. 3)

- 6.1.1 Palaeolithic (Old Stone Age) deposits and finds are known to have existed below and within the brickearth deposits quarried by the Valley Brick Works, which are thought to extend north-south up the main axis of the site. The precise locations of the Palaeolithic finds within the brick pit are not known, but Layard's finds of 1902-5 are thought to have been made around the south-western edge of the brick pit, while Moir and Boswell's generalised section of 1923 probably relates to the brick pit's northern extension. Since the brickearth deposits are thought to extend over most, or possibly all, of the site, it should be assumed that there is potential for finding Palaeolithic remains over the whole site.
- 6.1.2 Moir and Boswell's 1923 section (Fig. 3) shows Layer 7, where the significant Palaeolithic finds were made, at a depth of 5m from the ground level at that time. The section relates the Palaeolithic levels to Ordnance Datum. Taken at face value, the 1923 section records Layer 7 at 34.8 to 35.1m OD, with the overlying brickearth deposits up to 38.8m OD, and ground level at 40m OD. However, the vertical scale is annotated "approx. m OD", so these levels should be treated as rough estimates. The contemporary ground surface, given as 40m OD, is 1-2m higher than that of the adjacent Camden Road (Fig. 1), and it may well be a round figure estimate based on a local bench mark. It is likely that the OD values given on the section are 1-2m too high. Nevertheless, the section does suggest an approximate zone within which significant Palaeolithic remains might be encountered, between 33 and 35m OD.
- 6.1.3 Later prehistoric artefacts are known to be stratified in the upper gravel layer, immediately below topsoil, within 1m of the early 20th century ground level.

6.2 Impact from Previous Developments (Figs 1, 2 and 4; Appendix 1)

6.2.1 Valley Brick Works Brick and Gravel Pits

- 6.2.1.1 The precise limits of the brick pit are not known, especially along its western edge (Fig. 2). The Ordnance Survey maps of 1884 and 1904 appear to show the deepest area of the brick pit in the south and east of the site, but some areas to the west and north of the brick pit may also have been reduced in level. Trial pits and boreholes (Appendix 1, TP13-15 and BH9) show a considerable depth of disturbed ground over the south-east of the site, to a depth of between 32.2 and 30.1m OD, consistent with the backfill of the brick pit after its

abandonment. It can be assumed that all archaeological deposits in the main part of the brick pit have been destroyed (Fig. 4).

6.2.1.2 Trial pits across the west of the site (Appendix 1, TP1-12 and 16-17) suggest that if the brick pit did extend that far, it would have been shallower, apparently not penetrating below 34.2m OD. Only trial pit 11 shows deeper disturbance (to below 31.7m OD) that is not related to the later works buildings. This corresponds with the evidence of the Ordnance Survey maps that show the main part of the brick pit in the east of the site. It is possible that Palaeolithic deposits in the north and west of the site may have survived destruction by quarrying, although the impact of the later Bull Motor and Celestion Works should also be considered (6.2.2 and 6.2.3 below).

6.2.1.3 Some deep disturbances are recorded in trial pits to the south, alongside the railway (Appendix 1, TP18-20), to a maximum depth of around 30m OD. These are to the south of the brick pit, in the area of former allotments, and were probably related to construction of the adjacent railway embankment, which may have required a borrow pit.

6.2.1.4 The sand and gravel pit in the north of the site was very shallow in comparison with the brick pit, and all traces of it appear to have been removed by later ground reduction.

6.2.2 Bull Motors Works

6.2.2.1 Trial pits and boreholes in the area of the main works, the office building in front of it, and the yard behind all show a consistent picture of ground disturbance down to 34.2m OD right across the area (Appendix 1, TP1-9 and 16-17, and BH 5, 7 and 9). There are occasional areas of deeper disturbance, including a small basement in the east of the main works building, but the levels are so consistent that there must have been a general ground reduction when the Bull Works was constructed in the late 1930s. There is a localised area immediately to the rear of the main works building that has been less severely disturbed, although this area may be contaminated by seepage of fuel oil (ENSR 2001, photo 11).

6.2.2.2 The level of this ground reduction appears to be below the level of the significant Palaeolithic remains as shown on the 1923 section (Fig. 4). However, the estimated OD values in the vertical scale of the section, or even a relatively small variation in levels across site, might mean that the significant Palaeolithic levels survive beneath the disturbance from the Bull Motors Works. The general ground levelling would certainly have destroyed archaeological remains at or immediately below the former ground surface, but

disturbance of the Palaeolithic deposits should not be assumed until the relative levels have been verified by further trial work.

6.2.3 Celestion Works

6.2.3.1 Assessment of the impact of the Celestion Works is difficult because has not been possible to gain access to the main building in the north-east of the site to sink trial pits or boreholes. However, some assessment can be made on the basis of boreholes close to the building (Appendix 1, BH 6 and 9). Borehole 6 to the north suggests a general ground reduction similar to that for the Bull Motors Works, while Borehole 9 suggests that the south end of the building was constructed over the infilled brick pit. As with the area of the Bull Motors Works, disturbance of Palaeolithic deposits should not be assumed until the relative levels have been verified by trial work.

6.3 Impact from the Proposed Development (Figs 1 and 4)

6.3.1 House Foundations and Piling

6.3.1.1 It is proposed to build the houses from existing ground level, with major walls and internal concrete slabs supported on continuous concrete ground beam foundations resting on piles. The foundation and piling design is similar for all houses across the site, but the drawing for the foundations of Nos 23-27, a block of four terraced houses, was examined in detail to provide a typical example. The base of the ground beams will be 1.05m below present ground level, at around 34.0 to 34.5m OD.

6.3.1.2 Over most of the site the ground beams are likely to penetrate no further than the existing depth of disturbance already caused by the construction of the former Bull Motors and Celestion Works. In the area of the main Celestion Works building in the north-east of the site the impact is as yet unknown as no trial work has been done there, but the house foundations are unlikely to penetrate deeper than the foundations of the former works. Over much of the east of the site the ground beams will merely penetrate the infill of the Valley Brick Works brick pit. The impact of the house foundations above the piling level is therefore considered to be negligible.

6.3.1.3 If Palaeolithic deposits do in fact survive beneath the former works buildings and below the level of the proposed house foundations, there would still be an impact from deep piling. The piles will be set at intervals of between 2.5m and 4.5m along major wall lines, will be of 350mm diameter, and will penetrate 15m down to London Clay. It is estimated that the

piles will directly affect 1.25% of the ground area of each house (as calculated by Brand Leonard). Typically, the houses are arranged in rows, which means that the impact of the piling would be concentrated in strips across the site, with the majority of the site, occupied by roads, car parking and gardens, not affected by piling at all. Piling would have an impact on any surviving Palaeolithic remains, although it could be argued that the degree of impact is low.

6.3.2 Areas and Service Trenches

6.3.2.1 The depth of construction of the proposed roads and car parking areas is not known, but is unlikely to be greater than the disturbance already caused by construction of the Bull Motors and Celestion Works. The deepest services, such as sewers, storm drains and inspection chambers, may be as deep as 1.5m (verbal information from Brand Leonard), but most service trenches are likely to be shallower.

6.3.3 Retaining Walls

6.3.3.1 The proposed retaining walls around the perimeter of the site may have an impact on archaeological deposits if they are cut back into upstanding soil deposits. Observation of such works may provide a useful record of the nature and significance of Palaeolithic deposits that may have been destroyed elsewhere.

6.4 Summary of Likely Impact

6.4.1 Comparison of ground levels suggests the site has already undergone extensive ground reduction to the modern ground level of 35.0-35.5m OD. Analysis of trial pit and borehole records indicates that here is on average 1m of disturbance below this level over most areas of site, down to around 34.2m OD, as a result of construction of the Bull Motors and Celestion Works. In the south and east of the site the level of disturbance is much deeper in the area of the former Valley Brick Works brick pit, while there are deep disturbances along the site's southern boundary, probably as a result of railway construction.

6.4.2 The majority of the groundworks for the proposed development are unlikely to penetrate any deeper than the previous disturbances caused by the Valley Brick Pit or the Bull Motors and Celestion Works. However, deep piling for the houses will penetrate to a depth of 15m, and the deepest services such as sewers will also penetrate deeper than the previous disturbance. Although the piling will undoubtedly have an adverse impact on any surviving Palaeolithic remains, the impact would be concentrated on limited areas of the site, and the density of piling within any single house unit is very low.

- 6.4.3 Due to the extensive previous disturbance across the site, it is almost certain that any archaeological deposits at or near the former surface will already have been destroyed.
- 6.4.4 The significant Palaeolithic levels have also been destroyed in the main area of the Valley Brick Pit, but there is a possibility they may survive over other areas of the site, especially the north and western areas beyond the brick pit. The generalised section published by Boswell and Moir in 1923 (Figs 3, 4) presents the Palaeolithic sequence relative to levels reduced to metres OD, although these levels are only approximate. Taking the section at face value, it is possible that the significant Palaeolithic levels may already have been extensively disturbed or even destroyed altogether. However, over the north and west of the site the levels of both previous and proposed disturbance are only just below the significant Palaeolithic level, given as 34.8m OD in the 1923 section. Given the possibility of error in the OD levels in the 1923 section of an estimated 1-2m, it should be assumed that Palaeolithic remains survive in these marginal areas until the relative levels have been verified by trial work.

7.0 PROPOSED ARCHAEOLOGICAL MITIGATION STRATEGY

- 7.1 An archaeological mitigation strategy for the proposed development cannot be satisfactorily determined until it is established whether archaeological deposits survive on site, and the character, depth and extent of any surviving deposits is also defined. The present report has been able to define the impact of both past and proposed developments of the site in more detail than in the archaeological desk-based assessment, but there is still some uncertainty over the levels at which the significant Palaeolithic deposits might be encountered.
- 7.2 Given the high significance of the previously recorded Palaeolithic remains, it would be prudent to carry out targeted trial trenching to refine the results of desk-based assessment work that has already been carried out. Once the relative levels of surviving archaeological deposits (if any), previous and proposed disturbance have been established, it should be possible to project likely levels of archaeological survival across site, more accurately predict impacts, and determine an appropriate mitigation strategy.

- 7.3 Further trial pit investigation was recommended by Knight Environmental Ltd (2004) to define the limits of the Valley Brick Works brick pit in more detail, and to take further soil samples. An archaeological evaluation of the survival or otherwise of Palaeolithic deposits could be usefully carried out in conjunction with this work. If Palaeolithic deposits were identified by this work, recording and sampling would be carried out sufficient to evaluate the significance and extent of the remains, and whether further investigation is justified. Alternatively, archaeological trial work may demonstrate that Palaeolithic remains had been extensively disturbed or destroyed. Either way, a report should be issued and the results discussed with Suffolk CC Archaeological Service, as the archaeological advisor to the local planning authority.
- 7.4 If trial trenching demonstrates that significant Palaeolithic remains survive on site, a range of possible mitigation options would need to be considered. Some level of detailed recording of Palaeolithic remains cannot be ruled out at this stage, but options other than detailed fieldwork would also be considered. Further analysis of the extent of the remains against the development impacts could narrow down the areas affected, while the low density of the piling may in itself argue against intrusive archaeological investigation.

Acknowledgements

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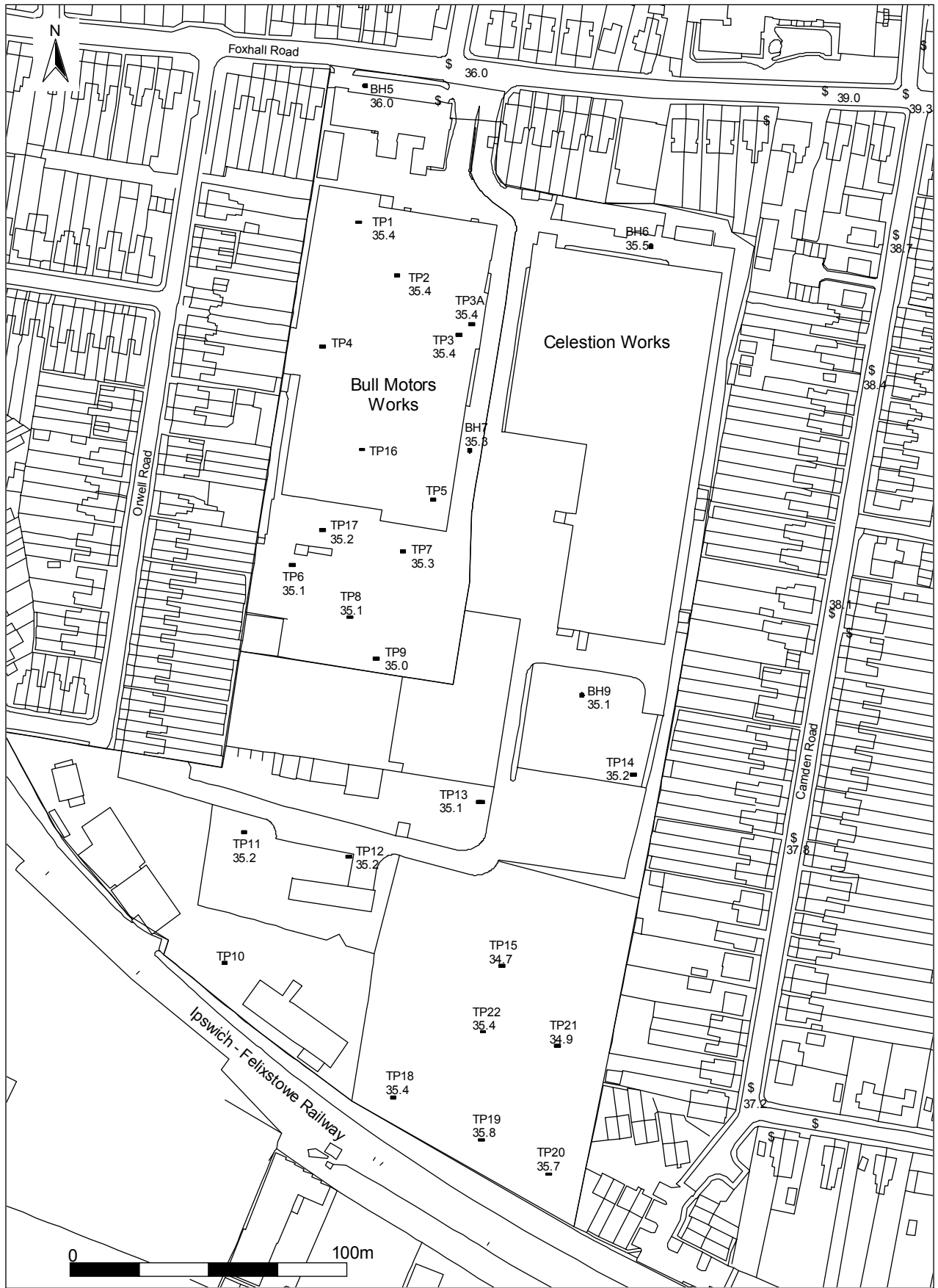
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APPENDIX 1.

LEVELS OF GROUND DISTURBANCE RECORDED IN TRIAL PITS AND BOREHOLES

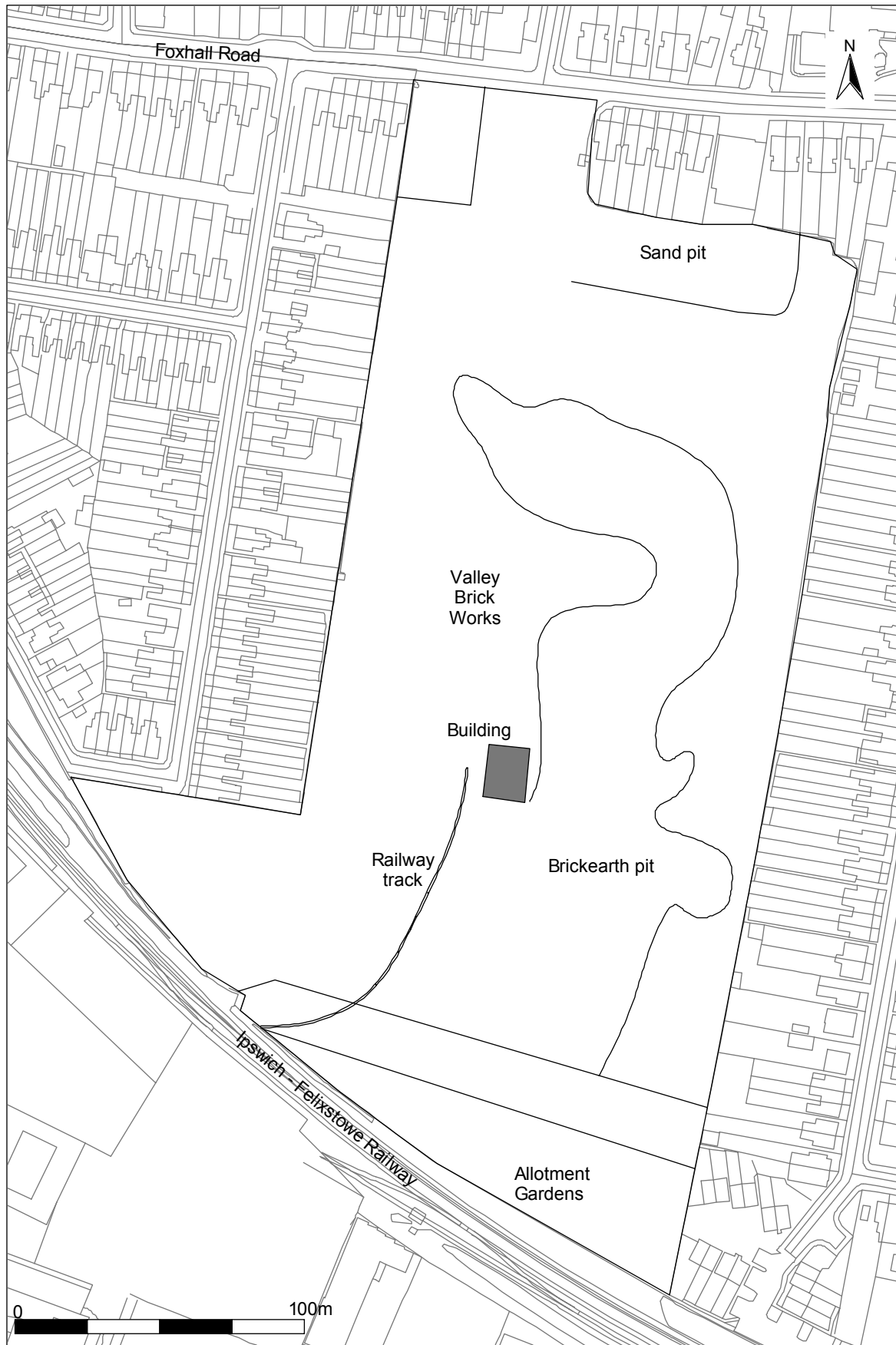
Records taken from Trial Pit and Borehole Logs in Knight Environmental report, November 2004

Test Pit/ Borehole Number	2005 Ground Surface Level (m OD)	Disturbed Ground Depth (m)	Disturbance Base Level (m OD)	Comments
Bull Motors – Main Building				
BH5	36.0	1.8	34.2	Foxhall Road frontage
TP1	35.4	1.2	34.2	
TP2	35.4	0.8	34.6	
TP3	35.4	1.1 +	Below 34.3	Basement
TP3A	35.4	2.2	33.2	
TP4	35.4	3.4+	32.0	
TP5	35.4	1.2	34.2	
TP16	35.4	1.1	34.3	
Bull Motors - Yard to S				
TP6	35.1	0.2	34.9	
TP7	35.3	3.3+	Below 32.0	
TP8	35.1	0.9	34.2	
TP9	35.0	1.1	33.9	
TP17	35.2	0.4	34.8	Oil seepage?
Celestion – Yard to SW				
TP10	35.2?	1.0	34.2?	
TP11	35.2	3.5+	Below 31.7	
TP12	35.2	1.0	34.2	
Celestion – Main Building (boreholes around outside of building only)				
BH6	35.5	1.2	34.3	N of main building
BH7	35.3	0.7	34.6	W of main building
BH9	35.1	5.0	30.1	Valley brick pit
Celestion – Yard to S				
TP13	35.1	3.3+	Below 31.8	Valley brick pit
TP14	35.2	3.0	32.2	Valley brick pit
Celestion – Overgrown ground in SE				
TP15	34.7	3.0	31.7	Valley brick pit
TP18	35.4	1.6	33.8	
TP19	35.8	6.0	29.8	Railway disturbance?
TP20	35.7	3.8	31.8	Railway disturbance?
TP21	34.9	1.5	33.4	Edge of Valley pit?
TP22	35.4	2.4	33.0	Edge of Valley pit?



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Fig.1. Site location with trial pits (from Knight Environmental interim report Dec. 2004)



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Fig.2. The Site and the Valley Brick Works from Ordnance Survey 2nd Edition map (1904)

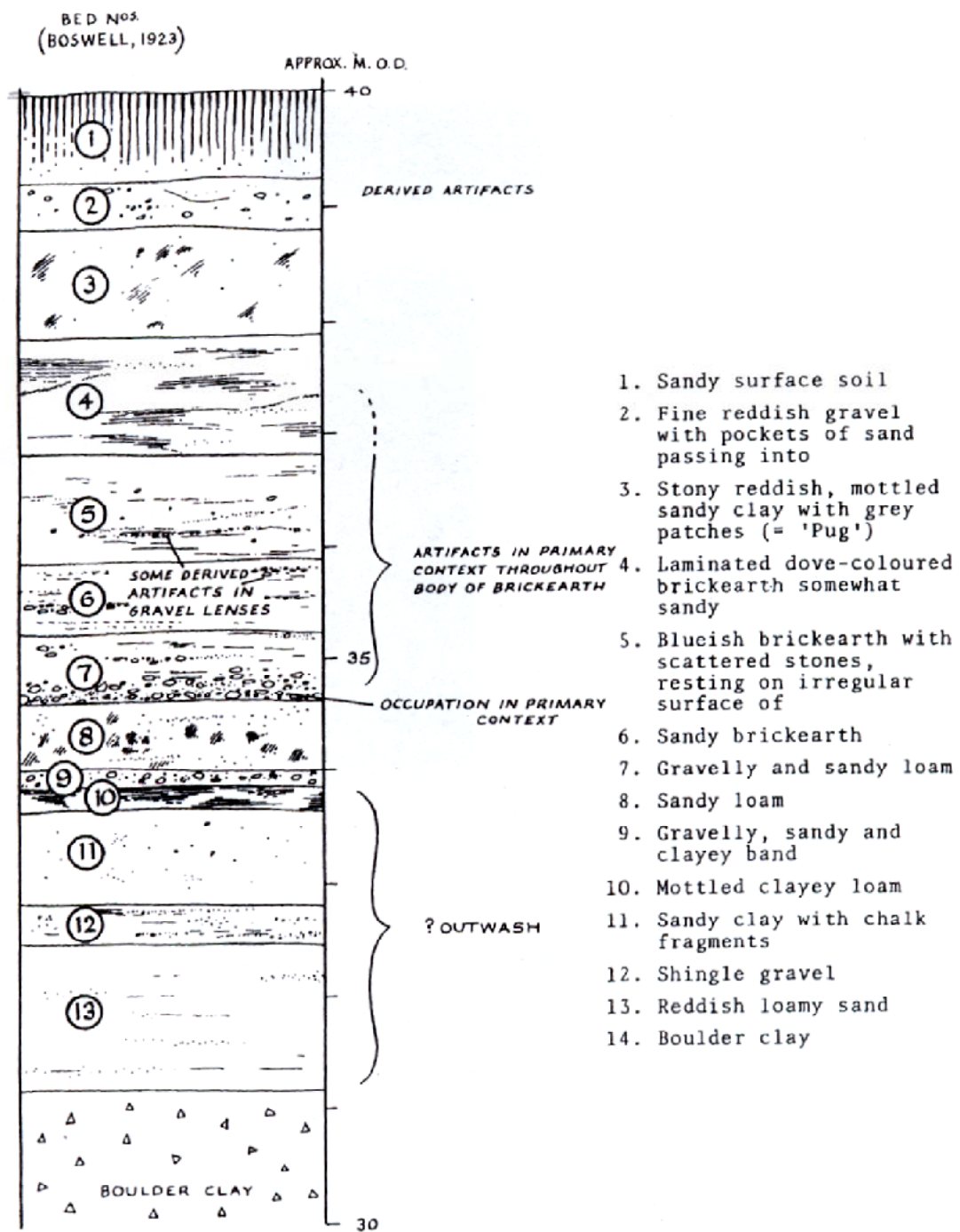


Fig.3. Generalised section at Foxhall Road, Ipswich, after Boswell & Moir 1923

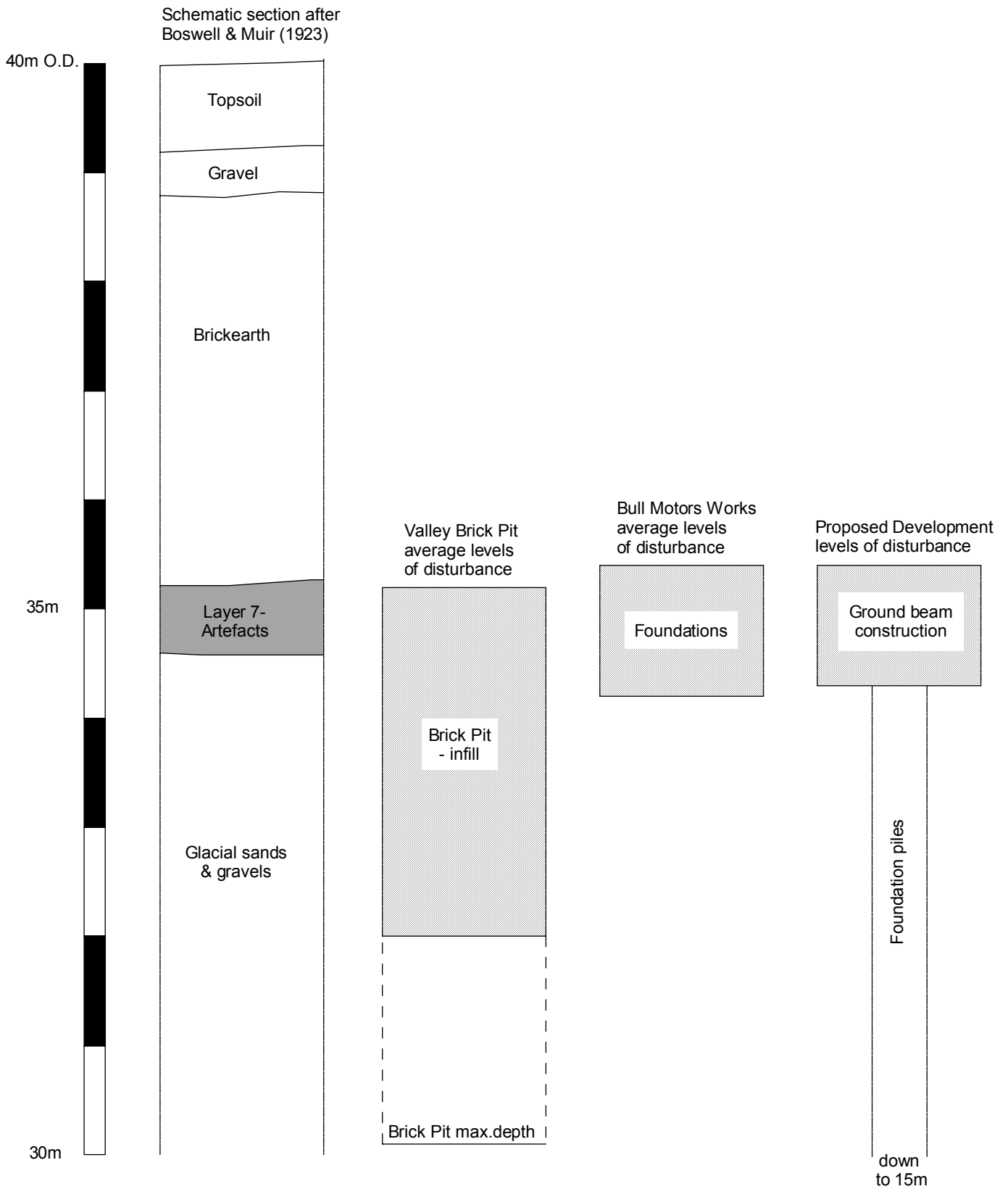


Fig.4. Comparative levels of the Palaeolithic sequence, together with previous and proposed developments