



## Croome Park Worcestershire

### Archaeological excavations and landscape assessment of Parkland Landscape features



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## LIST OF CONTENTS

<b>INTRODUCTION .....</b>	<b>1</b>
1 THE OVERALL PROJECT .....	2
1.1 Background .....	2
1.2 Acknowledgements .....	2
1.3 Summary of Works .....	2
2 THE PARKLAND LANDSCAPE AND ITS DEVELOPMENT .....	3
2.1 Introduction .....	3
2.2 The Major Components of the Parkland Landscape .....	3
2.3 Outline Chronology of the Development .....	4
3 GEOLOGY AND TOPOGRAPHY .....	5
3.1 Topography .....	5
3.2 Geology .....	5
4 LANDSCAPE FEATURES REPORT .....	6
4.1 Aims and Objectives .....	6
4.2 Summary of Works .....	6
<b>THE WEST DRIVE .....</b>	<b>8</b>
1 BACKGROUND INFORMATION .....	9
1.1 Summary of work undertaken .....	9
1.2 Outline of Prior Work .....	9
1.3 Aims and Objectives of Works .....	9
1.4 Basic History .....	9
1.5 Current Condition .....	10
2 RESULTS .....	10
2.1 Excavation .....	10
2.2 Discussion and Interpretation .....	11
3 MANAGEMENT AND CONSERVATION RECOMMENDATIONS .....	12
3.1 Restoration Issues and Recommendations .....	12
<b>TEMPLE GREENHOUSE SHRUBBERY .....</b>	<b>14</b>
1 BACKGROUND INFORMATION .....	15
1.1 Summary of work undertaken .....	15
1.2 Outline of Prior Work .....	15
1.3 Aims and Objectives of works .....	15
1.4 Basic History .....	15
1.5 Current Condition .....	16
2 RESULTS .....	16
2.1 Plunge Bank .....	16
2.2 Paths .....	16
2.3 Discussion and Interpretation .....	16
3 MANAGEMENT AND CONSERVATION RECOMMENDATIONS .....	17
3.1 Restoration Issues and Recommendations .....	17
<b>THE EVERGREEN SHRUBBERY .....</b>	<b>19</b>
1 BACKGROUND INFORMATION .....	20
1.1 Summary of work undertaken .....	20
1.2 Outline of Prior Work .....	20
1.3 Aims and Objectives of works .....	20
1.4 Basic History .....	20
1.5 Current Condition .....	21
2 RESULTS .....	21
2.1 Excavation of Gates and Palings .....	21
2.2 Excavations between Church Hill Clump and Evergreen Shrubbery .....	21

2.3	<i>Boundary Assessment</i> .....	22
2.4	<i>Discussion and Interpretation</i> .....	23
3	MANAGEMENT AND CONSERVATION RECOMMENDATIONS .....	24
3.1	<i>Restoration Issues and Recommendations</i> .....	24
	<b>BIBLIOGRAPHY</b> .....	27
	<b>APPENDIX A - TRENCH DESCRIPTIONS</b> .....	29

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## LIST OF FIGURES

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### Main Report

Figure 1	Location of Landscape Areas
Figure 2	Trench 17 plan and section
Figure 3	Boundary Assessment
Figure 4:	Trench 23 plan
Figure 5:	Trench 24 plan
Figure 6:	John Broome's map of the Manor of Croome D'Abitot (1768)
Figure 7:	Thomas Hopcraft's map of 1810
Figure 8:	OS 1 <sup>st</sup> Edition 6":1 mile (1884)

### Appendix

#### Trench Location Plan

Trench 06  
Trench 07  
Trench 08  
Trench 09  
Trench 10  
Trench 15  
Trench 16  
Trench 17  
Trench 18  
Trench 19  
Trench 23  
Trench 24

### List of Photographs

Plate 1	Excavated Gate at top of Church Hill Clump
Plate 2	Boundary features in Church Hill Clump

# INTRODUCTION

## **1 THE OVERALL PROJECT**

### **1.1 Background**

- 1.1.1 In April 2001 the Oxford Archaeological Unit (OAU) was commissioned by the National Trust, with funding from the Heritage Lottery Fund (HLF), to undertake a programme of archaeological investigations at Croome Park, Worcestershire.
- 1.1.2 Croome Park was the first complete landscape designed by Lancelot 'Capability' Brown, who began work at the site in c.1751 and maintained a level of involvement until 1782. The landscape contains numerous architecturally significant buildings and structures including the Temple Greenhouse by Robert Adam (Grade I listed), the Park Seat by Robert Adam (Grade II\* Listed), the Dry Arch Bridge by James Wyatt (Grade II Listed) and the Grotto by Capability Brown (Grade II Listed). The landscape design has survived relatively intact primarily due to the absence of any reworking of the parkland landscape since its completion in the early 19th century.
- 1.1.3 As stated in the project brief "*The National Trust is seeking to re-establish the landscape park to its condition described in the Croome Guide Book of 1824, and has adopted a policy of informing the restoration process through archaeological investigation and research.*" (National Trust 2001).
- 1.1.4 The archaeological programme was begun in May 2001 and the initial draft reports, as presented here, were completed in early August 2001. The final reports will be completed by October 2001, after a further stage of limited archaeological works in early September 2001.

### **1.2 Acknowledgements**

- 1.2.1 The authors, and all the staff at OAU involved with the project, would like to thank Tom Oliver, Rob Woodside, Garry Webb and everyone at Croome park for their generous support and assistance throughout the project.

### **1.3 Summary of Works**

- 1.3.1 OAU, in line with the original brief, undertook a series of nine tasks targeted at particular areas or features within the parkland landscape. These tasks are detailed in the Project Design (OAU 2001). The following is intended as a guide to enable the results presented in this report to be placed within the wider context of the project.
- Task 1 - Water Supply to the Grotto. This involved excavating a substantial trench to the rear of the grotto with supporting survey and desk-based analysis.
  - Task 2 - Temple Greenhouse. This involved the analysis of the building accompanied by excavation of landscape features adjacent to and in the general vicinity of the structure.
  - Task 3 - Dry Arch Bridge. The assessment of this feature involved substantial excavation supported by an analysis of the standing fabric and desk-based analysis.
  - Task 4 - Evergreen Shrubbery Ha-Ha. The 650m long ha-ha was subject to a program of photographic recording and analysis, supported by archaeological excavation.
  - Task 5 - Evergreen Shrubbery Paths and Features. This task was focussed on locating the lost paths and boundaries linking the Church Hill Clump and the Evergreen Shrubbery. This involved excavation and desk-based analysis (Fieldwork to be completed September 2001).

- Task 6 - Evergreen Shrubbery Boundaries and Features. This work was concentrated on the Church Hill Clump and involved excavation, survey and desk-based analysis.
- Task 7 - Punch Bowl Gates and Carriageway. The gates were subject to rapid building assessment and small excavations were undertaken at their base. A single trench was also cut across the carriageway.
- Task 8 - Park Seat. This feature was subject to a program of building assessment accompanied by archaeological excavation.
- Task 9 - South Park Ha-Ha. This short length of ha-ha was subject to photographic recording and analysis.

1.3.2 These nine tasks were divided into four reports, as outlined in the Project Design (OAU 2001). The contents of the four reports are outlined below;

- The Landscape Features Report contains information pertaining to the Main Carriageway, the area around the Temple Greenhouse and the Evergreen Shrubbery, which includes the Church Hill Clump and the Four Seasons Gap. Elements of Tasks 2, 3 and 5 and the whole of Tasks 6 and 7 are covered by this report
- The Grotto Report (as presented here) outlines the findings of the excavation and recording work undertaken during Task 1 of the project. This work was primarily focussed on investigating the water supply to the rear of the Grotto.
- The Building Assessment Report outlines the results of the work undertaken on the Temple Greenhouse, Dry Arch Bridge, Park Seat, Privy Block and Punch Bowl Gates. Elements of Tasks 2, 3 and 7 and the whole of Task 8 are covered by this report.
- The Ha-Ha Report covers the survey, excavation and analysis of the two Ha-Has. The report is presented in two volumes, with Volume 1 containing the text and analysis, whilst Volume 2 consists of the printed copies of the photographic record with overlain management and analysis information.

## **2 THE PARKLAND LANDSCAPE AND ITS DEVELOPMENT**

### **2.1 Introduction**

2.1.1 The history and development of the Croome Park landscape has already been covered by the Conservation Plan (National Trust 1998) and the Historic Landscape Survey (Phoenix Consulting 1997). It is therefore unnecessary to repeat this in any depth here, although it is necessary to outline the broad historical picture to give some context for this report.

2.1.2 Individual sections of this report will deal in more depth with elements of the historical record that particularly relate to the features being analysed.

### **2.2 The Major Components of the Parkland Landscape**

2.2.1 Prior to beginning the analysis it is necessary to standardise names for areas and features within the park. These names have been developed through consideration of the Conservation Plan (National Trust 1998) and the Historic Landscape Survey (Phoenix Consulting 1997).

2.2.2 Figure 1 shows the location of the main areas of the estate referred to within the report. The work undertaken by OAU was concentrated within the bounds of the Evergreen Shrubbery, Greenhouse Shrubbery and the Lakeside Garden, although additional work was carried out at the South Park Ha-Ha and the Park Seat



(sometimes known as the Owl house). These terms will be utilised throughout the report.

## 2.3 *Outline Chronology of the Development*

- 2.3.1 The primary period of interest for this project covers the time span from 1747 to 1809 and to a lesser degree from 1809 to the present day. 1747 marks the year in which the 6th Earl of Coventry (then Lord Deerhurst) took full control of the estate and began the programme of works that was to result in the development of one of the finest late 18th century parkland landscapes in Britain, ending in 1809 upon his death (Phoenix Consulting 1997, 28).
- 2.3.2 Prior to this date the estate had already undergone extensive development including the creation of two deer parks, formal gardens and at least three phases of pre-Croome Court houses (Phoenix Consulting 1997, 28-29). These earlier remains have been largely removed or extensively remodelled by the post-1747 developments and are now virtually untraceable.
- 2.3.3 The period 1747 to 1809 has been divided into six phases based on the different landscape architects working on the site (Phoenix Consulting 1997, 29). These phases are outlined below, with key events highlighted in each one;

Dates	Architects	Key Events
1747-1752	John Phipps Sanderson Miller	Making the Serpentine 'New' River. Large-scale drainage work and extensive planting in the parks
1751-1758	Lancelot Brown Sanderson Miller(?)	Croome Court built, The four shrubberies, (Evergreen Shrubbery, Church Shrubbery, Greenhouse Shrubbery and Home Shrubbery) were laid out on earthwork terraces The River was lengthened Construction of the Church began The lake may have been laid out in this phase or in the early 1760s
1760-1765	Lancelot Brown Robert Adam	Church was completed Further work was carried out on the belts, shrubberies The Lake Pleasure Grounds were established Grotto construction began Dry Arch Bridge constructed Temple Greenhouse built Owl House (Park Seat) built The lake may have been laid out in this phase or in the previous phase
1770s	Lancelot Brown Robert Adam Henry Holland	Pier Gates (Punch Bowl Gates) were built at the entrance to the park from the Worcester entrance Island Pavilion was built on the Island
1780s	Robert Adam Barbara, Countess of Coventry	The Grotto was decorated with spars and shells and Sabrina the Nymph was put in place Further drainage works were carried out to increase the supply of water to the lake
1792-c1801+	James Wyatt Coade & Sealy	Dry Arch Bridge rebuilt; Pier Gates altered to the Punchbowl Gates Wooden bridges to the island replaced with the Iron Bridges The Druid and other statues and urns were added Further drainage works were carried out to drain

Dates	Architects	Key Events
		the land and increase the supply of water to the lake and river

(Adapted from Phoenix Consulting 1997, 28-29)

- 2.3.4 After the death of the 6th Earl in 1809 the estate remained largely unchanged until c.1940. Although alterations were made these were largely aimed at maintaining the park whilst satisfying personal taste and minor changes in garden design fashions.
- 2.3.5 With the death of the 10th Earl in 1940 the estate entered into the latter half of the 20th century without a clear direction or focus. This resulted in Croome Court being sold, with 38 acres of land, to The Sisters of the Order of St. Vincent de Paul in 1948. The remaining areas of the estate were gradually dispersed over the next 30 or so years with Royal Sun Alliance eventually acquiring a significant portion of the estate.
- 2.3.6 Croome Court was sold again in 1979 to the International Society for Krishna Consciousness and underwent limited renovation and redecoration in “an unforgettable style”. (National Trust 1998, 44). The Court changed hands again 1986 and again in 1998, when the present owners, Montange Ltd, purchased the property.
- 2.3.7 The majority of land within the park was gradually denuded of its original planting schemes and converted from pasture to arable cultivation. Some of the shelter belts and shrubberies also suffered limited commercial forestry planting. A major impact on the estate occurred in 1962 when the western edge of the park was separated by the construction of M5 motorway.
- 2.3.8 A programme of stabilisation and renovation was begun in the 1970's by the agent for the Croome Estate. This and later work included;
- The building of an Iron Bridge to replace the original ferry next to the Dry Arch Bridge in 1972
  - Repair to the other Iron Bridges (1970's)
  - The 'Brown' casket being rebuilt in 1983
  - Extensive rebuilding and repairs to the Park Seat in 1986
- 2.3.9 The National Trust acquired the majority of the estate land in 1996 and acquisition of other areas continues at present. The National Trust is currently in the process of restoring the site to a condition similar to that described in the 1824 Guide Book (Dean 1824). This programme has involved the writing of a Conservation Plan (National Trust 1998) and a Management Plan (National Trust 1999) which provide the overall context for the archaeological works being reported here.
- 2.3.10 Croome Court remains in the hands of private developers and its future remains uncertain.

### **3 GEOLOGY AND TOPOGRAPHY**

#### **3.1 Topography**

- 3.1.1 Croome Park can be divided into three broad topographical zones; the central low lying belt, the eastern scarp slope and the more gentle western hill slopes. The central area consists of low-lying (15-20m OD) relatively flat ground running roughly north-south. The eastern scarp slopes are relatively steep and rise to c. 33m OD and define the eastern horizon for the core of the park. The scarp slope then curves towards the west along the northern boundary of the park. The western hill slopes are gentler in form and rather less well defined than the eastern scarp slopes, the western hills rise to a gentle summit at c. 50m OD on Knights Hill.

#### **3.2 Geology**

- 3.2.1 The geology is broadly related to the topography, with each topographic zone being defined by a dominant geological-type. The central valley area is based on mudstones overlain with occasional drift deposits of alluvium, gravel and clay. The eastern scarp slopes mark the extent of the limestone plateau, this plateau also includes significant strata of shale and clay. Finally the western hills slopes are based on sandstone deposits.
- 3.2.2 The soils also vary across the site in approximate accordance with the geological areas. The central area is primarily covered with heavy clay soils although the gravel terrace areas contain lighter soils. The eastern slopes contain limey clayey shales whilst within the eastern area there are fine silty loams (National Trust 1999).

## **4 LANDSCAPE FEATURES REPORT**

### **4.1 *Aims and Objectives***

- 4.1.1 The Landscape Features report addresses a series of what could be viewed as relatively minor aspects of the parkland landscape. The features examined, such as the West Drive, The Plunge Bank and the Paths and boundaries of the Shrubberies, are not focal points for the restoration of the parkland. They are however important structural elements of the landscape and play an vital role in redeveloping the experience that Brown designed for Croome.
- 4.1.2 The aim of the work was to develop more detailed understandings about the development, character and originality of many of these features and to determine whether documentary references to their usage and construction were in fact accurate. Each of the individual sections outlines the specific aims and objectives in more detail.

### **4.2 *Summary of Works***

- 4.2.1 The works covered in this report include;
- Excavations along the West Drive between the Punch Bowl Gates and the Dry Arch Bridge
  - Excavations in the front of the Temple Greenhouse, aimed at examining the pathways in the area.
  - Excavations on the Plunge Bank east of the Temple Greenhouse
  - Excavation in the Church Hill Clump, aimed at recovering an 18<sup>th</sup> century gate and recording original paling bases.
  - A programme of boundary assessment along the entirety of the rear of the Shrubberies.
- 4.2.2 All of these works have been supported by documentary analysis involving the main secondary sources and historical map sources.

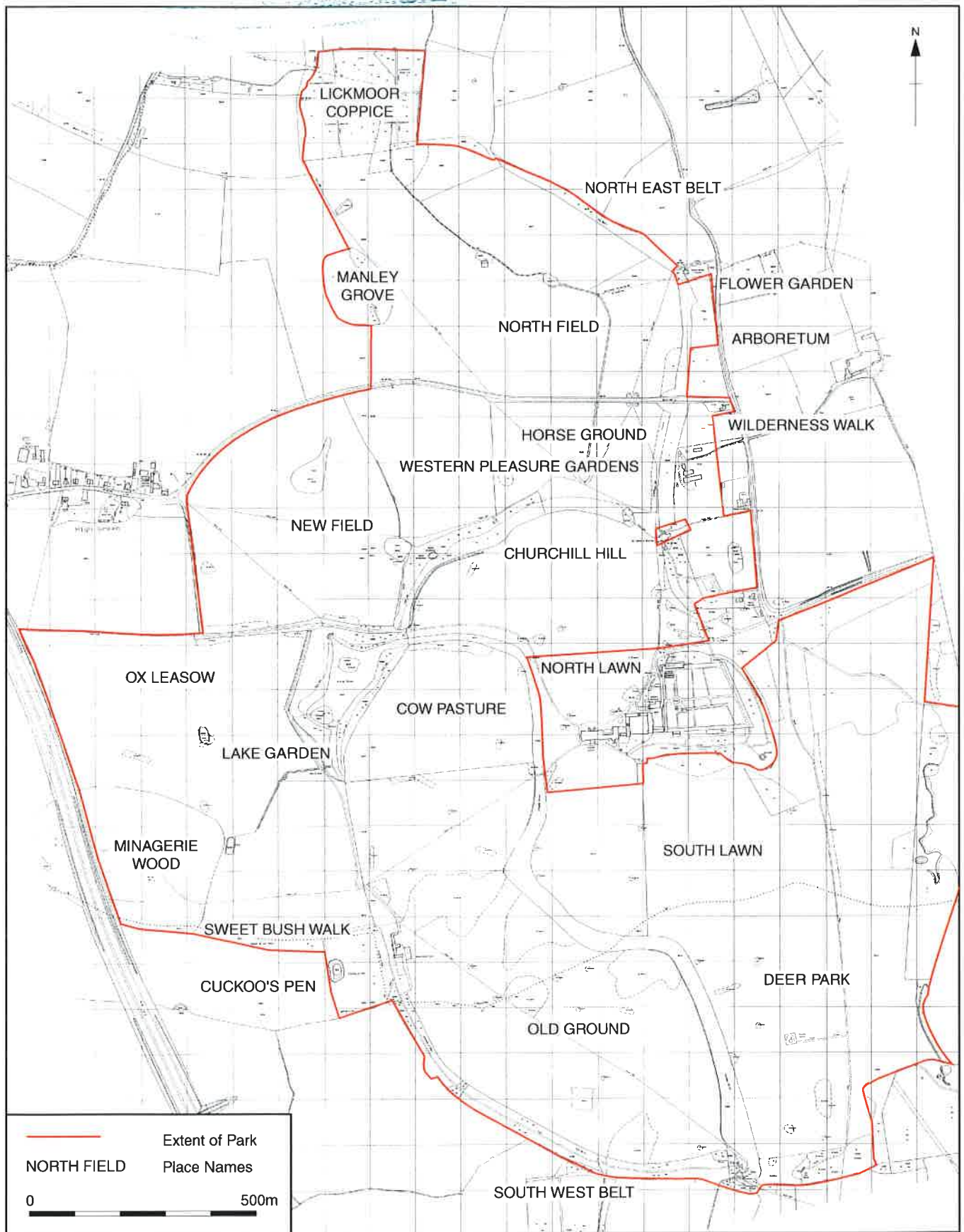


Figure 1: Location of landscape areas.

# THE WEST DRIVE

## **1 BACKGROUND INFORMATION**

### **1.1 Summary of work undertaken**

1.1.1 The section of West Drive examined during these works runs from the Punch Bowl Gates to the eastern side of the Dry Arch Bridge. This section of drive and some related features have been examined in five trenches;

- Trench 2 - Small trenches at the base of the Punch Bowl Gates
- Trench 15 - Large trench east of the Dry Arch Bridge
- Trench 16 - Large Shallow trench west of the Dry Arch Bridge
- Trench 17 - Large deep trench sectioning the Carriageway
- Trench 18 - Two Shallow trenches just south of the Carriageway near the Punch Bowl Gates

1.1.2 Details of these trenches can be found in Appendix A.

1.1.3 Excavation works were complemented by desk-based analysis of historical maps and secondary sources including the Conservation Plan (National Trust 1998) and the Croome Park Historic Landscape Survey (Phoenix Consulting 1997).

### **1.2 Outline of Prior Work**

1.2.1 No work, seen by the authors of this report, has previously been undertaken that purely focussed on the West Drive. The drive has been reported upon in the Conservation Plan (National Trust 1998), the Croome Park Historic Landscape Survey (Phoenix Consulting 1997) and is also recorded in the National Trust Sites and Monuments Record (NTSMR), number 73291.

### **1.3 Aims and Objectives of Works**

- To identify the nature and style of construction
- To identify and record any phasing or variance in construction techniques
- To ascertain the accuracy of the current line
- To identify and record and associated features, i.e. paths, fences, hedge lines etc.
- To analyse the results of the ground work in light of known historical information

### **1.4 Basic History**

1.4.1 The West Drive runs from the Worcester Lodge to Croome Court. The drive was formerly one of the two major access routes to the main house until it was cut by the construction of the M5 in 1962. This has now separated the original entrance at the Worcester Lodges from the main park.

1.4.2 The 1751 Doherty Plan (reproduced in Haycock Associates 2001) marks the line of a road in a similar location to the section of drive examined here. However, the line to the east of the Dry Arch Bridge alongside the river is very different, perhaps indicating that the mapped road line is part of an earlier agricultural road network and not directly related to the embryonic development of the landscape park.

1.4.3 Later maps of the site, i.e. the Broome Map of 1763 and the Snape map of 1796 (reproduced in Haycock Associates 2001) all show the current line for the West Drive and it seems likely that this was established in its current form during the period 1751 to 1763, which would correspond with Lancelot Brown's first two phases of activity on the site, as defined in the introduction. The nature of the works carried out in the period 1751 to 1758 (Brown's first phase), namely the construction

of the shrubberies, the lengthening of the river, and the building of Croome Court, would seem to indicate that the West Drive was probably established during this period.

- 1.4.4 The later building of the Dry-Arch Bridge in the 1760's would have necessitated the rebuilding of part of the West Drive to accommodate this new feature.

- 1.4.5 According to Dean (1824) in his description of the Park, the best approach to the house was "...from Worcester Lodge. Hence, then, pursuing his course along a good gravel road, the Stranger is carried, by a gentle winding, through a tract of luxuriant pastures, clothed with some of the finest cattle, particularly Holderness and Alderney cows...and interspersed everywhere with noble trees of the forest, sometimes detached, and sometimes formed into groves or clusters. Passing through the Pier Gates (Punchbowl Gates), he will then find himself shut in, by thick shades of large plantations till he reaches an elegant Bridge, thrown over a subterraneous passage, uniting the two sides of the pleasure-ground...(then opening into view) appears a scene of rural beauty and grandeur, rarely surpassed...On the right of this charming view, appears a river, gently flowing, of considerable breadth and volume of water."

## 1.5 **Current Condition**

- 1.5.1 The present carriageway is in an average state of repair. Its line remains well defined although its character and fabric have been severely compromised by the materials used to form its current surface, namely limestone blocks and chippings.
- 1.5.2 The edges of the carriageway are not precisely defined but the absence of significant extents of kerb, expect in Trench 16 (see above), would perhaps indicate that the carriageways were never originally designed to have solid and defined edges.

## 2 **RESULTS**

### 2.1 **Excavation**

- 2.1.1 Trenches 2, 15, 16 and 17 directly impacted upon the carriageway, Trench 18 was located just south of its line, full details of all these trenches can be found in Appendix A.
- 2.1.2 Trench 17 is perhaps the most important of these five as it involved sectioning the carriageway to determine its construction, makeup and phasing. Figure 2 shows this section. As can be seen the construction of the carriageway (at this point along its length) is relatively simple. There are two substantial makeup layers (1704 and 1703) over which a relatively thin layer (1702) (c. 0.16m deep) of rounded pebbles has been constructed. These pebbles are the same as others found on pathways and roads encountered in other trenches (Trenches 2, 6, 7, 15 and 16).
- 2.1.3 The modern road surface, (1701, loose crushed limestone chippings) as with other trenches (Trenches 2, 15 and 16), has had a detrimental impact on the physical survival and character of the carriageway:
- 2.1.4 Two soak-aways (1706 and 1707) are located under the carriageway and relate to the construction of the carriageway. Interestingly no evidence for an earlier road was identified beneath the carriageway perhaps indicating that the road marked on the 1751 Doherty map was removed during construction or perhaps that this carriageway is in fact the road marked on Doherty's map.
- 2.1.5 Trench 16 is also of interest when compared to the other trenches. Firstly the edge of the carriageway is defined, especially on its northern edge, by a crude limestone kerb. This kerbing was not revealed in any of the other trench excavation areas nor along any of the other paths examined during this project. Secondly, a layer (1603) of

pebbles to the north of the carriageway was recorded that could potentially be the remains of a path leading to the northern side of the Dry Arch Bridge. The depth and make up of the layer was not examined during the excavation and it is currently felt that this layer could just be an area of displaced road pebbles. Once again the modern road surface materials on the surface of the carriageway within Trench 16 have degraded the character and fabric of the carriageway.

- 2.1.6 Trench 2 was primarily focussed on understanding the Punch Bowl Gates (see *Building Assessment Report* - OAU 2001b for further details). The small trenches cut at this location revealed a highly disturbed early carriageway layer overlain by a modern road surface of limestone, rounded pebbles and red brick. It was possible however to discern the original carriageway make up layer (203) which was comprised of the same brown silty clay as identified in Trench 17 (1703).
- 2.1.7 Trench 15 was primarily focussed on the relationship of the Ha-Ha with the slope at its southern terminus. The trench did however also reveal the main carriageway and associated path just east of the Dry Arch Bridge. The carriageway and path are both comprised of the classic pebble surface (1501 and 1503 respectively) overlying a makeup foundation layer (1502 and 1504) of brown silty clay. The path (1503) is approximately half the width of the carriageway (1501) and is also narrower than similar paths identified in Trenches 6 and 7 near the Temple Greenhouse.
- 2.1.8 Finally, Trench 18 comprised two machine cut trenches just south of the carriageway. These had originally been intended to explore the possible location of the Punch Bowl Gates, as indicated on historical maps. The excavation failed to reveal any conclusive evidence about their former location but did reveal the line of an iron fence (1802). This fence line also appears in the southern extent of Trench 17 but does not occur in Trench 15 or 16.
- 2.1.9 Excavation away from the carriageway in these latter two trenches failed to reveal any former fence or hedge lines, although a possible area of root disturbance that could be interpreted as the line of a hedge was identified in the southern part of Trench 17.

## 2.2 *Discussion and Interpretation*

- 2.2.1 The excavations along the Main Carriageway have revealed a surprising diversity in elements of the character and make-up of the drive. The uniform upper surface of the carriageway with its mix of 20<sup>th</sup> century and 18<sup>th</sup> century material disguises a more complex story.
- 2.2.2 It seems likely that the current carriageway was constructed during a number of different phases. The first phase is perhaps best represented in Trench 17. Here the line and level of carriageway, probably represent the original line and level, maybe date to the first phase of Brown's work in c.1751 to 1758. The carriageway lies on an area of relatively marshy ground and the surface has been built on two artificial makeup layers, one of mudstone (1704) and one of the ubiquitous brown silty clay (1703). The actual 18<sup>th</sup> century road surface is relatively thin (c.0.16m) and comprised of the rounded pebbles common to the whole of the site.
- 2.2.3 When one reaches the area adjacent to the Dry Arch Bridge the character of the carriageway changes. The Dry Arch bridge was constructed in its original form in the 1760's, possibly by 1765 (Phoenix Consulting 1997, 29) or maybe by 1768 (National Trust 1998, 54). This would have necessitated a complete restructuring of the carriageway to accommodate the subterranean passage. Although the width (c. 3.8m) of the carriageway in Trenches 17, 16 and 15 is broadly the same and the pebble surface is the same, the actual construction technique differs slightly. Trench



15 and 16 revealed only one make-up layer above the 'natural' mudstone, whereas Trench 17 revealed two layers.

- 2.2.4 The most significant difference is the kerb stones found in Trench 16. This kerb was probably built to prevent continued spread of the gravel surface, however we cannot assume that this was carried out at the time of the construction of the Dry Arch Bridge as records show that "*In 1829 John Lyall was paid £95 for a road across Cubsmoor 'lifting road at Dry Arch and levelling ditto at Worcester Lodge Gate (CEA: Bound Account for 1827-1829).'*" (Phoenix consulting 1997, 103). It is therefore entirely possible that these alterations were made at this time. This is perhaps supported by the lack of kerbs alongside the drive in Trench 15 which would have been originally constructed at the same time as the section in Trench 16.
- 2.2.5 Another aspect of the study involved examining the edges of the carriageway for evidence of hedges and fences. Clear evidence was located in Trenches 18 and 17 for a probably 19<sup>th</sup> century iron fence alongside the carriageway but apart from an ambiguous area of root disturbance in Trench 17, no evidence of hedging was noted. This is perhaps supported by the Broome survey of 1768 which indicates that the flanking hedges stopped just west of the Punch Bowl Gates. The Dean account of 1824 also fails to mention hedges in this area although it does comment on the '*good gravel road*'.
- 2.2.6 Overall the main carriageway is a relatively homogenous monument. It forms a major component of the landscape park and its line may be based on features established prior back to Brown's involvement with the landscape. The varying methods of construction, particularly below surface, probably reflect the differing ground conditions along its length and to a lesser degree the varying periods of construction.

### **3 MANAGEMENT AND CONSERVATION RECOMMENDATIONS**

#### **3.1 Restoration Issues and Recommendations**

1. The current modern surface material on the carriageway should be removed and replaced with a historically valid material, in keeping with the material revealed during the excavations.
2. The edges of the carriageway should be explored by means of limited controlled excavation to determine the true extent of the kerb identified in Trench 16.
3. The results of the Recommendation 2 should be used to determine the nature of the edging for the carriageway utilised during its restoration.
4. No direct physical evidence was located for the hedging alongside the carriageway. It therefore felt unwise to plant a hedge without further investigation.

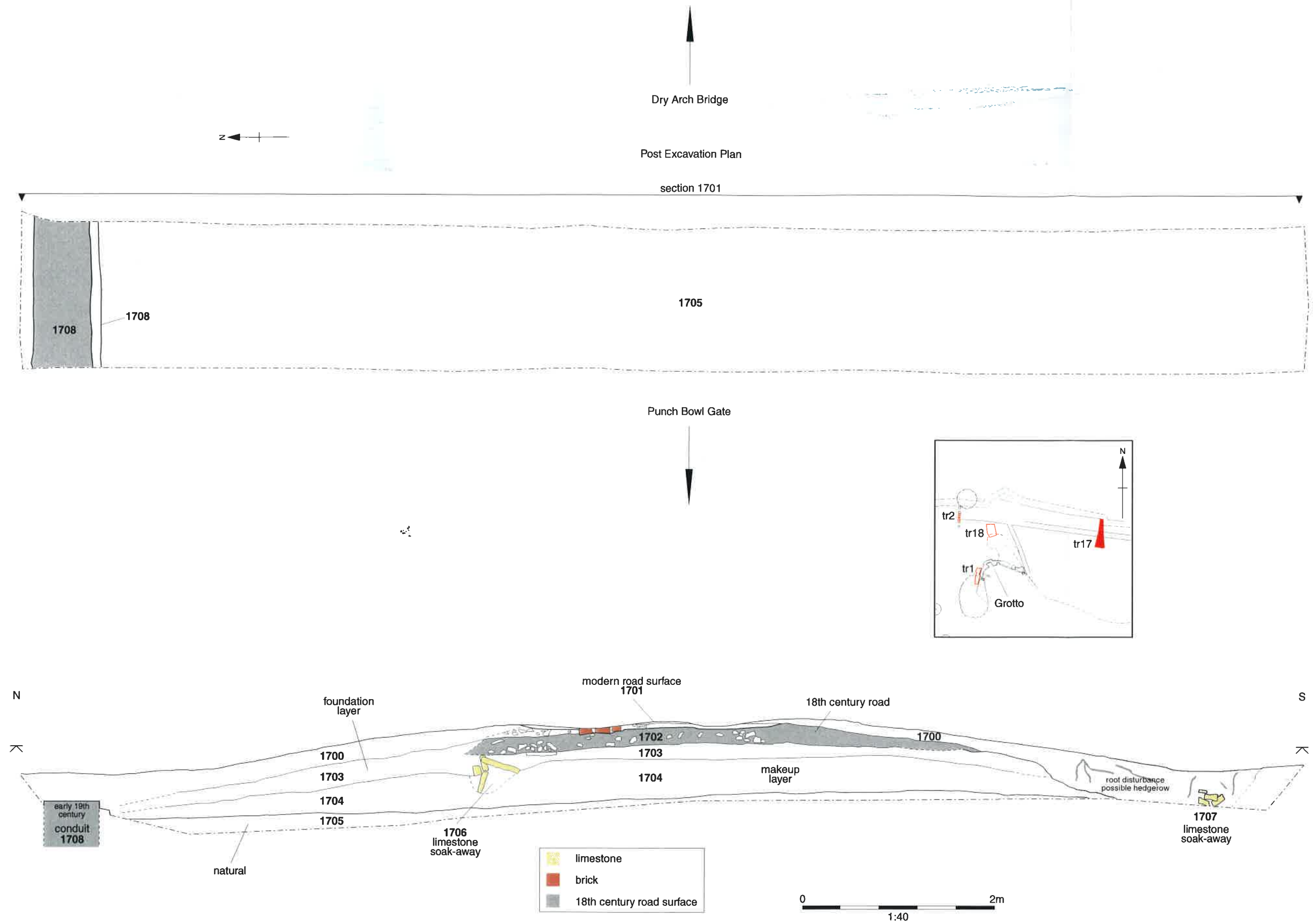


Figure 2: Trench 17 plan and section

# TEMPLE GREENHOUSE SHRUBBERY

## **1 BACKGROUND INFORMATION**

### **1.1 Summary of work undertaken**

1.1.1 The area under discussion here centres on the Temple Greenhouse and discusses the path to the front of the building and the possible Plunge Bank to the east. These features were examined by excavated five trenches;

- Trench 6 - Machine cut trench just south-west of the Temple Greenhouse
- Trench 7 - Machine cut trench just south-east of the Temple Greenhouse
- Trench 8 - Machine cut trench on potential Plunge Bank
- Trench 9 - Machine cut trench on potential Plunge Bank
- Trench 10 - Machine cut trench on potential Plunge Bank

1.1.2 Details of these trenches can be found in Appendix A.

1.1.3 Excavation works were complemented by desk-based analysis of historical maps and secondary sources including the Conservation Plan (National Trust 1998) and the Croome Park Historic Landscape Survey (Phoenix Consulting 1997).

### **1.2 Outline of Prior Work**

1.2.1 Although work has been carried out on tracing the courses of paths in the Greenhouse Shrubbery by previous archaeological investigators no finalised report was available to the project team for analysis. However, on-site discussion with the Archaeological Advisor for the National Trust (Robert Woodside) and the Project Manager (Tom Oliver) supplied extremely useful information in respect of this prior work.

1.2.2 No work is known to have been carried out in regard to the Plunge Bank in the past.

### **1.3 Aims and Objectives of works**

- To determine the course of the Path in front of the Temple Greenhouse
- To determine the character and make up of the path in front of the Greenhouse
- To locate and record evidence that may indicate whether the bank to the east of the greenhouse was used as a Plunge Bank.

### **1.4 Basic History**

1.4.1 The Temple Greenhouse, around which this area is centred, is one of Croome's most important park buildings and was constructed in the early 1760s to the designs of Robert Adam. It was Adam's first building at Croome and forms part of the third main phase in the development of the Croome Park landscape.

1.4.2 The paths running past the structure formed an integral part of the landscape and are mentioned as part of the 1824 three mile circuit (Dean 1824). These paths guided the views and experience of visitor and would have been laid out by Brown, who also probably played a significant role in siting the Temple greenhouse.

1.4.3 The Plunge Bank is also mentioned in Dean's 1824 account; "*Within the Greenhouse Shrubbery was a sloping bank on which a collection of greenhouse plants was arranged during the summer. The visitor then reached the Temple.*" (the quote should be read bearing in mind that the visitor would have been approaching from the east and hence the bank in question would be located to the east of the Temple Greenhouse). This is the only known documentary reference to the bank.

## 1.5 *Current Condition*

- 1.5.1 The paths are currently, for the most part, under either topsoil cover or bark chippings. It is difficult to assess their condition but the two excavated trenches have indicated that the paths will probably generally survive as relatively discrete and obvious features throughout the Greenhouse Shrubbery. Some minor tree root disturbance will be encountered.
- 1.5.2 The Plunge Bank is currently under scrub woodland which will be disturbing any buried archaeological deposits. The lack of features in the excavated trenches does seemingly indicate that this is not a major conservation issue. The material recovered from the trenches is, in its own right, not of any particular cultural heritage significance although it has been useful in informing the discussion about the role of the bank.

## 2 **RESULTS**

### 2.1 *Plunge Bank*

- 2.1.1 Three trenches numbers 8, 9 and 10 (see Appendix A) were opened on the Plunge Bank. These were sited to avoid potential impacts on established tree roots. The trenches revealed no archaeological features that could be related to the bank's probable function as a Plunge Bank. The topsoil did however produce numerous sherds of pottery, probably plantpots, which would support the conclusion that the site was used to display potted plants.
- 2.1.2 It is likely therefore, given the relatively high sample area covered during the trenching, that the pots, if they were placed into the surface of the bank, were only placed in shallow cuts, primarily topsoil depth, and hence left no archaeological trace.

### 2.2 *Paths*

- 2.2.1 Two trenches, 6 and 7, were excavated to trace the continuation of the path already revealed during previous works in the front of the Temple Greenhouse. Trench 6 and Trench 7 both revealed the path continuing on a course that broadly corresponded with depressions and bark chippings that mark the supposed locations of the path running through the Greenhouse Shrubbery (see Figure 3). Conversations with Robert Woodside and Tom Oliver indicated that the excavated paths related well in terms of their course and style of construction with previous excavated lengths of path in the shrubbery.
- 2.2.2 The paths were both made of rounded pebbles as so commonly found across the site, e.g. Trenches 2, 15 and 16. Both of the paths in Trench 6 and 7 had a foundation layer of brown silty clay, which was also identified under the West Drive and another paths associated with the drive in Trench 15. The paths were both relatively shallow being c. 0.15m in depth.
- 2.2.3 Initial thoughts by the project team that the area in front of the Temple Greenhouse may have acted as a carriage turning point were dispelled when the trenches failed to reveal any evidence for activity further out from the Temple Greenhouse. This was also confirmed by informal trenching undertaken by Tom Oliver in the vicinity of the statue bases south of the greenhouse.

### 2.3 *Discussion and Interpretation*

- 2.3.1 Overall the trenches did not reveal any particularly intriguing archaeological deposits. They did however confirm the expected line of the path through the Temple

Greenhouse Shrubbery and hence confirmed the validity of the bark chipping path currently in use.

- 2.3.2 The bank named as the 'Plunge Bank' has not been conclusively proved to be so, but the presence of relatively significant quantities of plant pot sherds in the topsoil would indicate that the bank was utilised as display area during the 19<sup>th</sup> century, as indicated in Dean's 1824 account, and maybe even earlier.

### **3 MANAGEMENT AND CONSERVATION RECOMMENDATIONS**

#### **3.1 *Restoration Issues and Recommendations***

1. The paths in the Greenhouse Shrubbery should be cleared of overlying soil and other material and re-laid with suitable materials that reflect the material revealed during the excavation.
2. The uncovering of the paths should be undertaken in an archaeologically sensitive manner.
3. The Plunge Bank should, where appropriate, be cleared of scrub woodland.
4. The Plunge Bank should be reused to display plants during the summer once a range of suitable plants is available. This will enhance visitor understanding of the landscape.

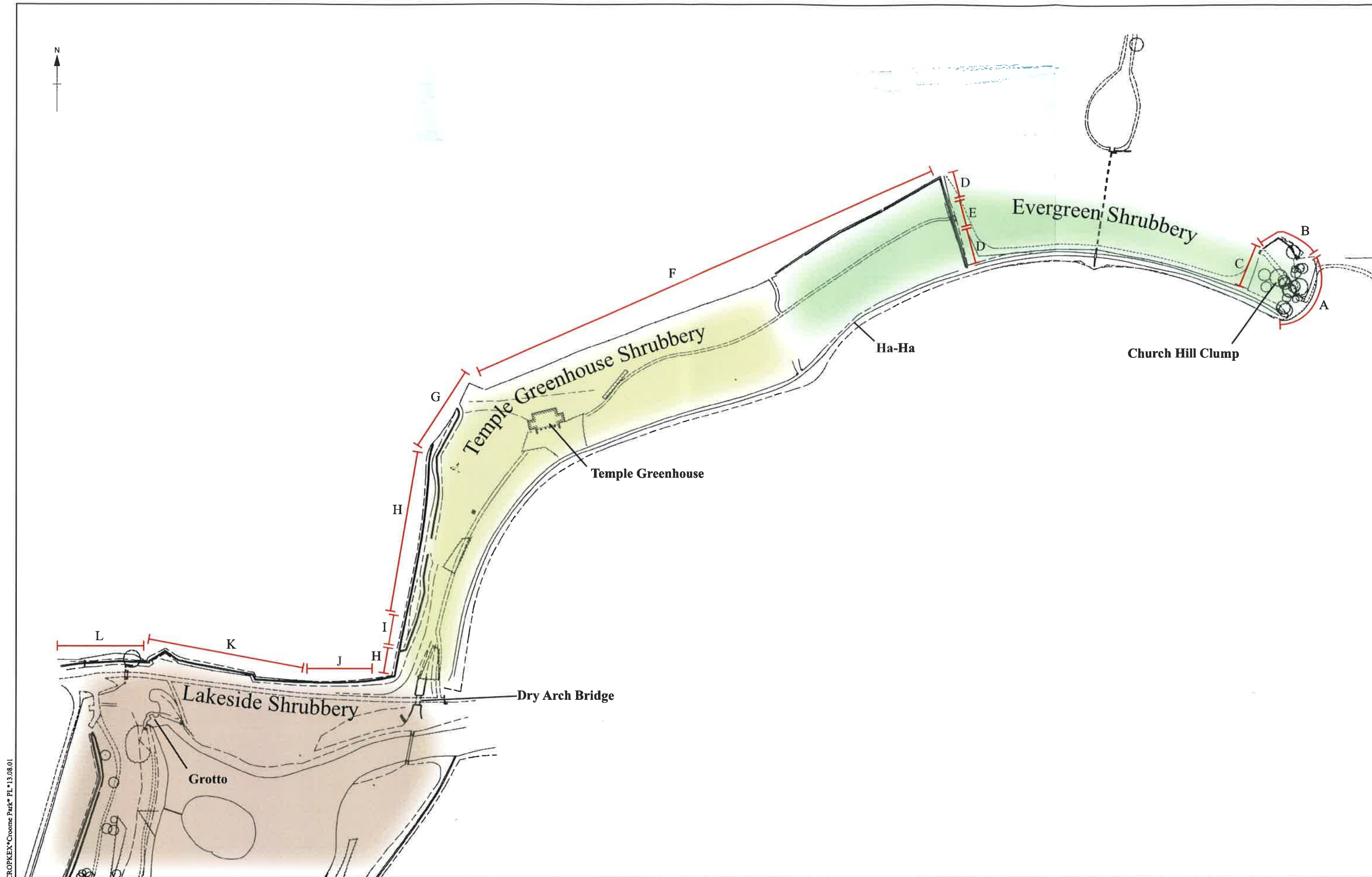


Figure 3: Boundary Assessment. (Not to Scale)

# **THE EVERGREEN SHRUBBERY**



## **1 BACKGROUND INFORMATION**

### **1.1 Summary of work undertaken**

- 1.1.1 The work reported here includes excavation within the Church Hill Clump, excavation over the line of a former boundary and path near the Four Seasons Gap and visual analysis of the boundary features of the Evergreen and Greenhouse Shrubbery.
- 1.1.2 The following trenches are referred to in this section,
- Trench 19 - Gate and Palings at the top of the Church Hill Clump
  - Trench 23 - Boundary feature in ploughed area between Church Hill Clump and current terminus of Evergreen Shrubbery
  - Trench 24 - Line of path in ploughed area between Church Hill Clump and current terminus of Evergreen Shrubbery
- 1.1.3 Details of these trenches can be found in Appendix A.
- 1.1.4 This work was complemented by desk-based analysis of historical maps and secondary sources including the Conservation Plan (National Trust 1998) and the Croome Park Historic
- 1.1.5 Landscape Survey (Phoenix Consulting 1997).

### **1.2 Outline of Prior Work**

- 1.2.1 Documentary research into the Labour Accounts and other estate records has been undertaken in connection with the development of the Shrubberies (National Trust 1998 and Phoenix Consulting 1997) but no previous field work is known to have taken place which was focussed on the features explored here.

### **1.3 Aims and Objectives of works**

- To determine the nature of the boundary features along the rear of the Evergreen and Temple Greenhouse Shrubberies
- To develop an understanding about the potential dates for the said boundary features
- To recover the buried gates at the top of the Church hill Clump
- To reveal and record the paling bases at the top of the Church Hill Clump
- To examine the evidence for paths and boundaries in the ploughed area between the Church Hill Clump and the current terminus of the Evergreen Shrubbery

### **1.4 Basic History**

- 1.4.1 The Evergreen and Temple Greenhouse Shrubberies were probably laid out by Brown in the 1750's during his first phase of work on the site (Phoenix Consulting 1997). As the name suggest the Evergreen shrubbery was primarily planted with evergreen species to give a continuous canopy throughout the year. This area would have served as a shaded walk during the summer and a sheltered walk during the winter months, as well as adding permanent botanical and floral interest to the landscape.
- 1.4.2 The Shrubberies were subject to numerous changes during their lifetime, especially in terms of changing planting schemes and minor boundary revisions. Particularly significant alterations include the cutting of the Fours Seasons Gap and the associated construction of the statues between 1797 and 1810, and the removal of the eastern part of the Evergreen Shrubbery between 1847 and 1862 (National Trust 1998, 49).

## 1.5 *Current Condition*

- 1.5.1 The boundary features alongside the Evergreen and Temple Greenhouse Shrubberies are in a mixed state of repair and represent a variety of periods within the site's development.

## 2 **RESULTS**

### 2.1 *Excavation of Gates and Palings*

- 2.1.1 The results of the excavation of the iron gates at the top of Church Hill Clump and the uncovering of a representative sample of the associated paling bases can be found in Trench 19, Appendix A.
- 2.1.2 One of the gates was found to be relatively intact and in a reasonable state of repair, considering the manner of its burial. The other gate was in a very poor and fragmented condition with only 3 whole vertical bars and one horizontal bar surviving (see Plate 1).
- 2.1.3 The best preserved gate was comprised of 12/13 vertical iron bars mounted in two horizontal flat bars. Features such as hinges and the chain that held the two gates together were found to still be *in-situ*. The gate sockets and central locking hole are still intact. The base of the gateway is comprised of worn dressed limestone blocks. The well preserved gate was compared with another gate in front of the church, but no stylistic correlation was observed.
- 2.1.4 The gates were also still attached to the collapsed iron palings associated with the boundary running down to the terminus of the *Ha-Ha*. Subsequently the gates were left in-situ, pending National Trust advice, to prevent damage during their removal.
- 2.1.5 The paling footings consisted of dressed limestone blocks with regularly spaced iron paling stubs. The palings were set approximately 0.1m apart (4"), with an iron rod, now cut off, set in a lead filled hole. They are likely to have been similar in character to the remaining section of iron paling located to the north of the revealed paling bases. This short length of paling is discussed in more detail in the following section and its relationship with other lengths of boundary features in the park is also covered.

### 2.2 *Excavations between Church Hill Clump and Evergreen Shrubbery*

- 2.2.1 Trench 23 was aimed at locating and investigating the line of the boundary that formerly marked the rear of the Evergreen Shrubbery. The trench's location had been determined by studying early maps of the locality, in this instance primarily Snape's 1796 plan, and using these to lay out its location in respect to surviving features. The trench, fortunately, was sited directly over the boundary which consisted of an infilled ditch (2302) similar in character to surviving sections of ditch further west (marked as Section F in the following section).
- 2.2.2 The presence of the ditch confirms the relative accuracy of the Snape Plan and further supports the conclusion that the entirety of the evergreen shrubbery was marked by a relatively small, probably hedged, ditch, in keeping with its agricultural nature.
- 2.2.3 Interestingly the ditch had been subjected to a number of deliberate infilling episodes (2303, 2304 and 2305), all of which included material seemingly derived from a stone structure. The nature and former location of this structure has not yet been determined but it could possibly be the remains of the Four Season's Statue bases, removed during the conversion of the area from shrubbery into open land in the period 1847 to 1862 (National Trust 1998, 49).

- 2.2.4 Trench 24 was similarly located using the 1796 Snape pan as a primary guide to locate the former course of the path across the now ploughed field. During an initial site visit prior to commencement of the project gravel scatters had been noted in the approximate location of Trench 24 which seemed to indicate that a pathway of some form survived beneath the plough soil.
- 2.2.5 The trench revealed the course of the gravel path in the location indicated by the Snape Plan. The path (2408) consisted of a gravel spread of rounded stones identical to other paths located, during this project and earlier works, across the park. The trench also revealed a number of interesting features seemingly sealed beneath this path.
- 2.2.6 The first of these was a trench (2406) filled with a single course of bricks (2407). This ran on a line slightly different to that of the path (2408) and seems to have perhaps served as a drainage feature. Running parallel to this on the other side of the path was another linear cut (2405) filled with two layers of ceramic drainage pipe (2403 and 2404). The pipes interlock (see Figure 5) and their location sealed beneath the main path perhaps indicates an 18<sup>th</sup> century date for their construction.

### 2.3 *Boundary Assessment*

- 2.3.1 The boundary assessment consisted of a visual inspection of the boundary line running from the gates at the top of the Church Hill Clump down to the fence line adjacent to the Punch Bowl Gates. This visual assessment was accompanied by examination of the available secondary sources to gain some insight into the potential dates and phasing of the varying boundary styles. The results of the boundary assessment are presented on Figure 3 and discussed here.
- 2.3.2 The visual assessment divided the areas of the boundary into 14 different sections which are classed under 12 different groups. These groupings represent the different types, characters and conditions of the surviving boundary features. These groups are presented below and form the basis for the discussion.

Section	Type	Description
<b>a</b>	<i>Paling Base</i>	Dressed limestone paling bases revealed during excavations in Trench 19. The palings bases were set in lead approximately 0.1m apart and had a square profile. A small section of upstanding palings in very poor condition survives at the junction of <b>a</b> and <b>b</b> . The section consists of upright iron palings, with a square profile, held together by a flat horizontal top bar with raised spikes.
<b>b</b>	<i>Iron Railing</i>	Five bar iron railings. Round top bar and four flat horizontal bars below. Bars threaded through regular vertical uprights. Section in mixed condition but relatively complete, if somewhat dilapidated.
<b>c</b>	<i>Iron Railing</i>	Same style as <b>b</b> but in very poor condition, generally collapsed and difficult to trace.
<b>d</b>	<i>Iron Railing</i>	Same style as <b>b</b> and in generally good condition. Some damage and dilapidation but mostly upright.
<b>e</b>	<i>Modern Wood</i>	Modern wood paling fence with large, vehicle sized, gates in centre. In good condition.
<b>f</b>	<i>Hedge and Ditch</i>	Mixed boundary, with modern wire and post fencing dominating and earlier and partially grown out hawthorn hedge. The external face of the boundary is marked by a ditch.
<b>g</b>	<i>No Data</i>	Area inaccessible due high ground cover and water
<b>h</b>	<i>Iron Railing</i>	Same style as <b>b</b> and in average condition. Some damage

Section	Type	Description
		and dilapidation but generally upright.
<b>i</b>	<i>Iron Railing</i>	Removed section of Iron Railings, were same style as <b>b</b> now stacked in field
<b>j</b>	<i>Iron Railing</i>	Same style as <b>b</b> but in poor condition, partially collapsed although still traceable. The junction between <b>j</b> and <b>h</b> is very poor with no direct physical linkage observed. It is unlikely that any junction was ever present between the two sections.
<b>k</b>	<i>Iron Railing</i>	Same style as <b>b</b> and in average condition. Some damage and dilapidation but generally upright.
<b>l</b>	<i>Iron Railing</i>	Similar style to <b>b</b> but with different vertical uprights and slightly different horizontal bars. This section seems to be more recent in date.

- 2.3.3 The analysis of the boundaries, complemented by the study of the secondary sources and historical maps has enabled the author to draw a number of conclusions.
- 2.3.4 Firstly, the stretch of limestone paling bases associated with the gates at the top of the Church Hill Clump (Section **a**) (Trench 19), and the very short section of surviving palings (also in Section **a**), are probably original and date to the 18<sup>th</sup> century development of the Evergreen Shrubbery (see Plate 2). Their unique character, in comparison with other sections along the shrubbery and their similarity to palings in the vicinity of the church would all support this theory. Also reference is made in the accounts of 1773 to 1784 to “*iron palisades and gates at top of Greenhouse Shrubbery 1780*” (Phoenix Consulting 1997, 79) which may directly relate to these particular palings with their associated gates as excavated in Trench 19.
- 2.3.5 The remnant hawthorn hedging encountered in Section **f** is also likely to be an original 18<sup>th</sup> century element of the park. References in the Labour Bills (1788-1830) include mention of “...cutting the quick hedges at Croome 1790...on the north side of the Greenhouse Shrubbery” (National Trust 1998).
- 2.3.6 All the sections of iron railings, bar Section **l**, but including Sections **b**, **c**, **d**, **h**, **i**, **j** and **k** and likely to date to the period 1847-1862 (National Trust 1998, 110) when the Evergreen Shrubbery was cleared between its current terminus at the end of Section **f** and the Church Hill Clump. This clearance lead to the opening up of previously enclosed areas, this would have required some form of fencing to protect the Shrubbery and Clump. The use of iron railing fences would not be out of character for this period and it seem likely that Sections **b**, **c** and **d** were built as a direct result of this clearance activity. Whether **h**, **i** and **j** and **k** are also related to this particular phase of activity is somewhat uncertain.
- 2.3.7 The external boundary of the Temple Greenhouse Shrubbery (Sections **g**, **h**, and **i**) does not seem to have been hedged or bounded in the same way as the external boundary of the Evergreen Shrubbery (Section **f**). A ditch is still present in the southern sections but there are few hawthorn trees that would support the idea of these sections being hedged. Examination of early paintings, i.e. E.F and T.F Burney’s *Entrance at the Park at Cromb 1784*, show that wooden paling and railing fences were used on the site and it may be that such as fence was used along Sections **h** and **i** prior to the arrival of the 19<sup>th</sup> century iron railings.

## 2.4 Discussion and Interpretation

- 2.4.1 The work has so far revealed a diverse approach by the various estate owners and managers to the marking of the essentially non-public boundaries of the Shrubberies.

- 2.4.2 In the one area where public/guest access to the boundary features would have occurred (Section **a**), special attention was made in the preparation of a substantial and relatively ostentatious iron paling and gate, although the work itself it is on a rather informal scale and has a non-decorative style.
- 2.4.3 Other less accessible and more functional boundary lines tend to be marked by simple 'ditch and hedge' or perhaps 'ditch and wooden railing/paling' arrangements.

### **3 MANAGEMENT AND CONSERVATION RECOMMENDATIONS**

#### **3.1 Restoration Issues and Recommendations**

1. The gates excavated in Trench 19 and the short length of iron palings identified in Section **a** should be conserved
2. The boundary line of the eastern end of the Evergreen Shrubbery, running from the terminus of the Ha-Ha to the gateway and on to the junction of Section **a** and **b**, should be reinstated.
3. As an initial stage in achieving Recommendation 2 the boundary line of Section **a**, in the form of the limestone bases, should be cleared and revealed along its entire length.
4. As part of Recommendation 2 the iron palings identified in Section **a** should be used as a stylistic template for the replacement of the palings
5. As part of Recommendation 2 the gateway identified in Trench 19 should be reinstated. The gate excavated in Trench 19 should be used as a template for the replacement gate. It may be possible to repair and restore the excavated gate and use this as one half of the new gate, although for conservation reasons this may not be desirable.
6. Although the iron railings in Sections **h**, **i**, **j**, and **k** are not original their non-intrusive nature would allow them to be maintained *in-situ* without lessening the 'realism' of the restoration.
7. Hawthorn hedging should be reinstated in Section **f**, where it has been demonstrated that this form of boundary is most appropriate.
8. Further work is required in Sections **h** and **I** to determine the original nature of the boundary features.
9. The boundary line running across the currently ploughed area between the Evergreen Shrubbery and Church Hill Clump should be reinstated using the course of the boundary marked on the Snape 1796 plan.
10. The line of the former path leading across the ploughed area should also be reinstated using the line indicated on the 1796 plan. The path has been identified during excavation and it should be possible to follow its course for most its length, however if necessary a new line will have to be constructed.

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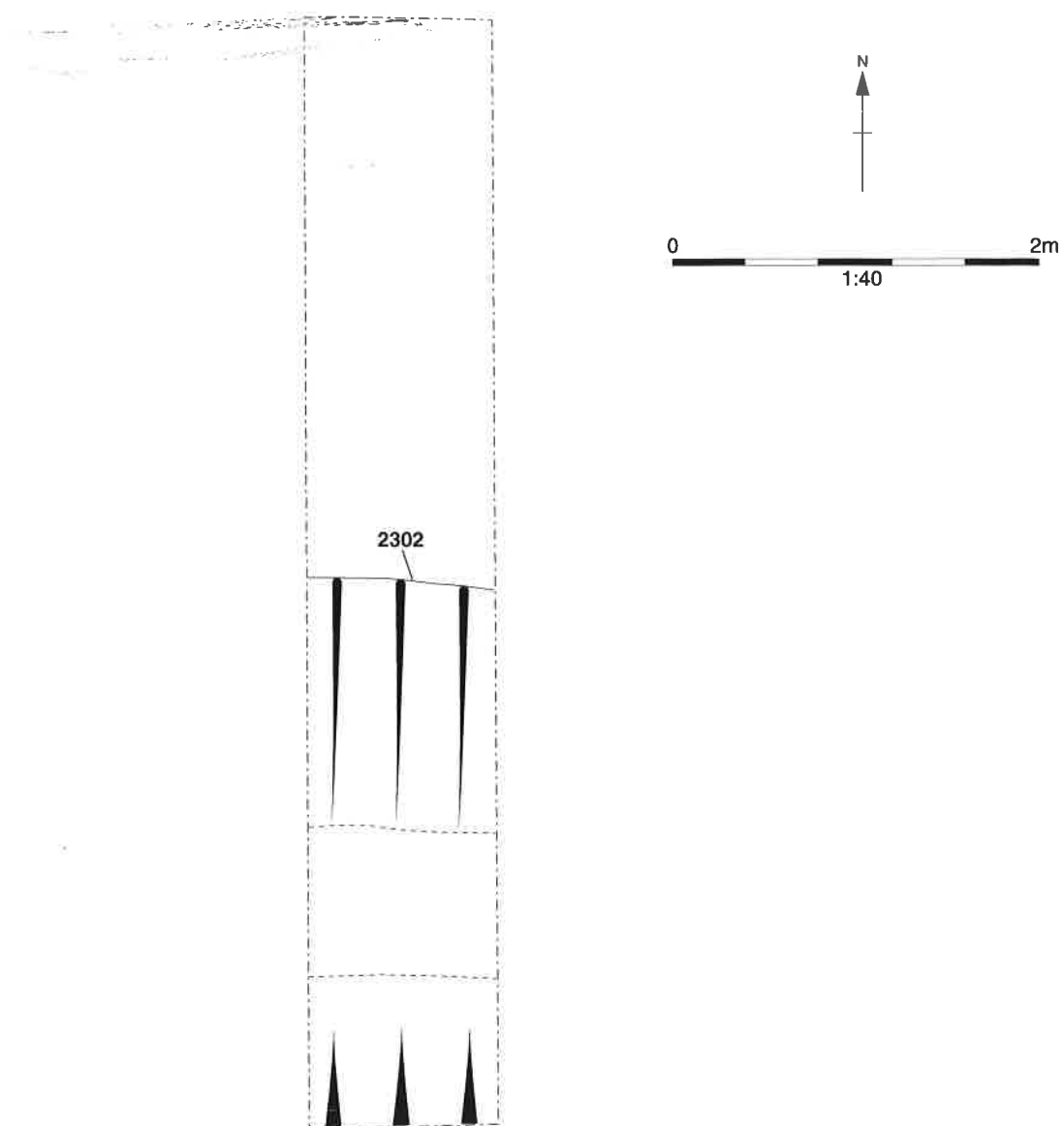


Figure 4: Trench 23 plan



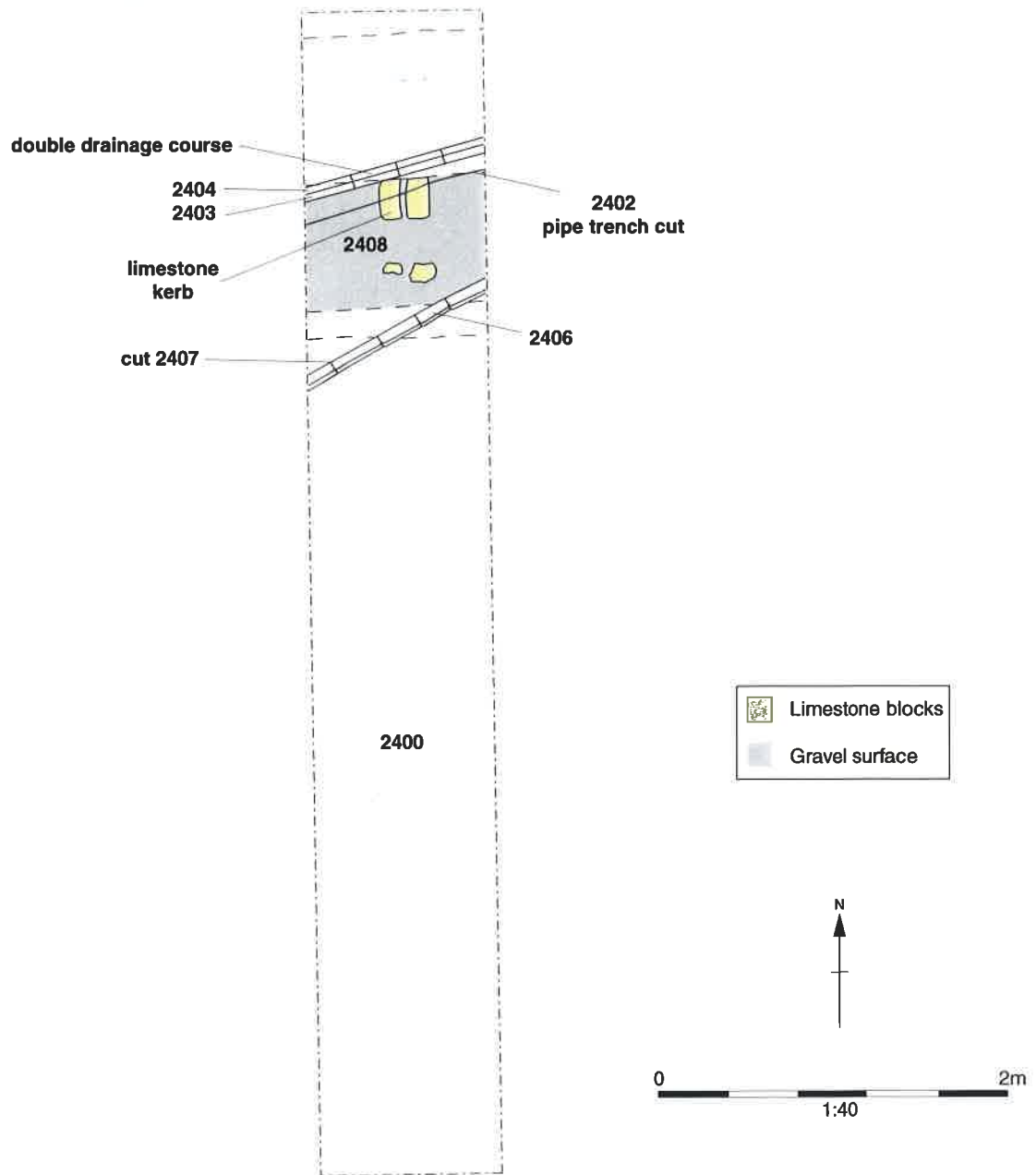


Figure 5: Trench 24 plan





Figure 6: John Broome's map of the Manor of Croome D'Abitot, 1768





Figure 7: Thomas Hopcraft: Map of the Parish of Croome D'Abitot, Part of the Parish of Severn Stoke and Estates in the Parishes of Defford, Earls Croome and Croome, 1810



Figure 8: Ordnance Survey, 1st Edition 6":1 mile, 1884 (not to scale)



CROPKEX-Croome Park\* PL\*13.08.01

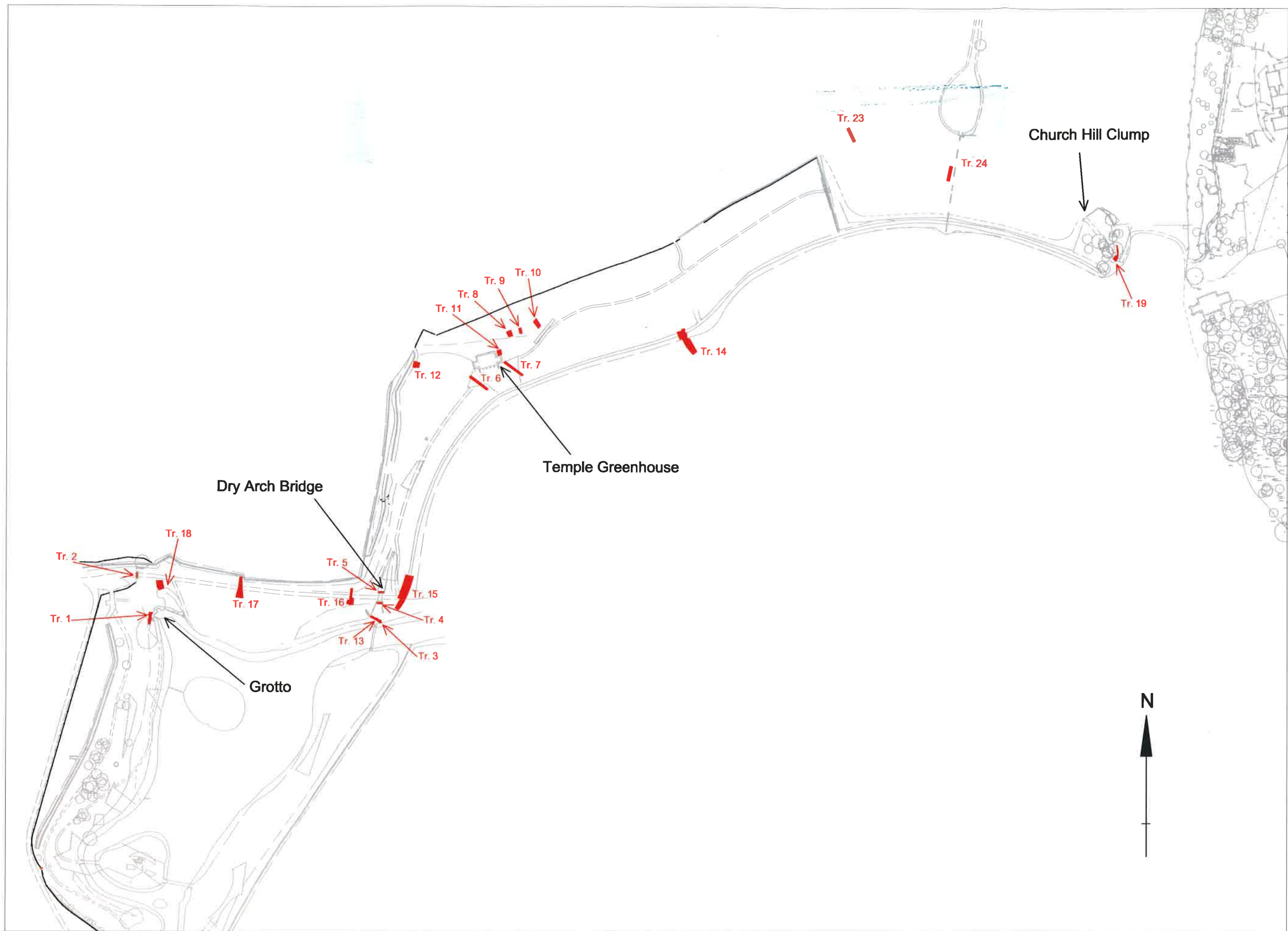
Plate 1: Excavated Gate at top of Church Hill Clump





Plate 2: Boundary features in Church Hill Clump

## **APPENDIX A - TRENCH DESCRIPTIONS**



0 100m  
Scale at A3 1:2500

Trench Location Plan



## 1 METHODOLOGY

### 1.1 *Presentation of results*

- 1.1.1 The soil and ground conditions for this trench are described below, followed by a brief description of the distribution of deposits.
- 1.1.2 Trenches are described according to their stratigraphic sequence from the earliest deposits reached in the trench upwards.
- 1.1.3 This is followed by a description of the finds and an interpretation and summary discussion of the results, a fuller discussion of the results in the context of the wider parklands landscape can be found within the main reports.
- 1.1.4 A table describing individual contexts can be found at the end of this section.

## 2 RESULTS: GENERAL

### 2.1 *Location*

- 2.1.1 A single 15m long machine cut trench situated just south-west of the Temple Greenhouse

### 2.2 *Soils and ground conditions*

- 2.2.1 The underlying geology in this part of the site was a layer of reddish brown mudstone.
- 2.2.2 Ground conditions were compact throughout which hampered machine excavation.

## 3 RESULTS: DESCRIPTIONS OF DEPOSITS: TRENCH 6

### 3.1 *Features and deposits*

- 3.1.1 The earliest deposit located within the trench was a layer of reddish brown mudstone, (604). Layer 604 was overlain by a layer of brown silt clay foundation, (603). Layer 603 was overlain by a surface of well sorted pebbles, size 2mm-10mm, (602). The surface 602 was directly overlain by modern topsoil layer (601).

### 3.2 *Finds*

- 3.2.1 No finds were recovered from the trench.

## 4 DISCUSSION AND INTERPRETATION

### 4.1 *Reliability of field investigation*

- 4.1.1 No factors effected the reliability of the field investigation.

### 4.2 *Summary interpretation*

- 4.2.1 The trench revealed one path of well sorted pebbles (604) at the north-western end of the trench. The path (604) overlaid a foundation layer of brown silt clay (603), which was deposited directly over the natural reddish brown mud-stone. The path has been attributed to the 18<sup>th</sup> century Brownian landscape and is contemporary with the Temple Greenhouse.
- 4.2.2 No other archaeological featured were noted within the trench.

## TRENCH 06

5

### ARCHAEOLOGICAL CONTEXT INVENTORY

Context	Type	Description	Depth (m)	Width (m)	Finds	Date
601	Layer	Modern topsoil	0.23	-	No	
602	Layer	18th century path	0.36	3.04	No	
603	Layer	Foundation for path	0.16	4.14	No	
604	Layer	Natural mudstone	-	-	No	

## 1 METHODOLOGY

### 1.1 *Presentation of results*

- 1.1.1 The soil and ground conditions for this trench are described below, followed by a brief description of the distribution of deposits.
- 1.1.2 Trenches are described according to their stratigraphic sequence from the earliest deposits reached in the trench upwards.
- 1.1.3 This is followed by a description of the finds and an interpretation and summary discussion of the results, a fuller discussion of the results in the context of the wider parklands landscape can be found within the main reports.
- 1.1.4 A table describing individual contexts can be found at the end of this section.

## 2 RESULTS: GENERAL

### 2.1 *Location*

- 2.1.1 A single 15m long machine cut trench situated just south-east of the Temple Greenhouse

### 2.2 *Soils and ground conditions*

- 2.2.1 The underlying geology in this part of the site was a layer of reddish brown mudstone.
- 2.2.2 Ground conditions were compact throughout which hampered machine excavation.

## 3 RESULTS: DESCRIPTIONS OF DEPOSITS: TRENCH 7

### 3.1 *Features and deposits*

- 3.1.1 The earliest deposit located within the trench was a layer of reddish brown mud-stone (704). Layer 704 was overlain by a layer of brown silt clay foundation (703). Layer 703 was overlain by a surface of well sorted pebbles, size 2mm-10mm, (702). The surface 702 was directly overlain by modern topsoil layer (701).

### 3.2 *Finds*

- 3.2.1 No finds were recovered from the trench.

## 4 DISCUSSION AND INTERPRETATION

### 4.1 *Reliability of field investigation*

- 4.1.1 No factors effected the reliability of the field investigation.

### 4.2 *Analysis*

- 4.2.1 The trench revealed one path of well sorted pebbles at the north-western end of the trench (704). The path (704) overlaid a foundation layer of brown silt clay (703), which was deposited directly over the natural reddish brown mud-stone. The path has been attributed to the Brownian 18<sup>th</sup> century landscape and was contemporary with the Temple Greenhouse.
- 4.2.2 No other archaeological featured were noted within the trench.

# TRENCH 07

## 5 ARCHAEOLOGICAL CONTEXT INVENTORY

Context	Type	Description	Depth (m)	Width (m)	Finds	Date
701	Layer	Modern topsoil	0.23	-	No	
702	Layer	18th century path	0.18	2.8	No	
703	Layer	Foundation for path	0.16	0.3-0.8	No	
704	Layer	Natural mudstone	-	-	No	

Temple Greenhouse

foundation  
layer

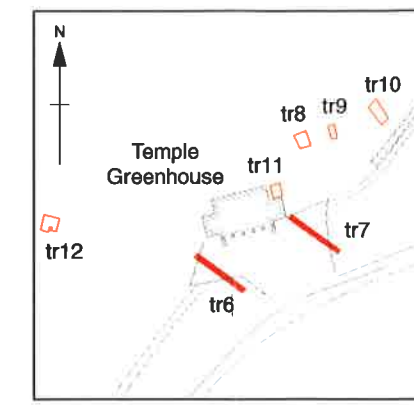
Trench 6

601

602  
carriageway

603

604  
natural



foundation  
layer

Trench 7

701

704

703

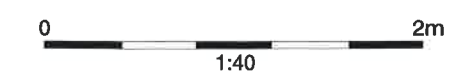
702  
carriageway

703

704  
natural



Temple Greenhouse



## 1 METHODOLOGY

### 1.1 *Presentation of results*

- 1.1.1 The soil and ground conditions for this trench are described below, followed by a brief description of the distribution of deposits.
- 1.1.2 Trenches are described according to their stratigraphic sequence from the earliest deposits reached in the trench upwards.
- 1.1.3 This is followed by a description of the finds and an interpretation and summary discussion of the results, a fuller discussion of the results in the context of the wider parklands landscape can be found within the main reports.
- 1.1.4 A table describing individual contexts can be found at the end of this section.

## 2 RESULTS: GENERAL

### 2.1 *Location*

- 2.1.1 A single machine cut trench situated on the potential plunge bank east of the Temple Greenhouse

### 2.2 *Soils and ground conditions*

- 2.2.1 The underlying geology in this part of the site was a layer of reddish brown mudstone.
- 2.2.2 Ground conditions were compact throughout which hampered machine excavation.

## 3 RESULTS: DESCRIPTIONS OF DEPOSITS: TRENCH 8

### 3.1 *Features and deposits*

- 3.1.1 The earliest deposit located within the trench was a layer of reddish brown mudstone, (802). A layer of brown clay loam topsoil (801) overlay layer 802.

### 3.2 *Finds*

- 3.2.1 Frequent amounts of ceramic plant-pot sherds were recovered throughout the topsoil layer 801.

## 4 DISCUSSION AND INTERPRETATION

### 4.1 *Reliability of field investigation*

- 4.1.1 Tree root action has substantially disturbed both the topsoil and the natural mudstone.

### 4.2 *Analysis*

- 4.2.1 The trench revealed no archaeological features of any nature. The absence of any features potentially relating to the location's usage as a 'Plunge Bank' could either be due to their truncation by later tree root action, or because the pots were only inserted in shallow holes and hence left little or any trace.
- 4.2.2 Frequent amounts of ceramic plantpot sherds were recovered throughout the topsoil layer 801, although none were located in-situ. The amount of ceramic plantpot

## TRENCH 08

sherds recovered from layer 801, could suggest that the bank to the north of the Temple Greenhouse was used as a 'Plunge Bank.'

### 5 ARCHAEOLOGICAL CONTEXT INVENTORY

Context	Type	Description	Depth (m)	Width (m)	Finds	Date
801	Layer	Modern topsoil	0.23	-	Yes	19 <sup>th</sup> & 20 <sup>th</sup> century
802	Layer	Natural Mud-stone	-	-	No	

## 1 METHODOLOGY

### 1.1 *Presentation of results*

- 1.1.1 The soil and ground conditions for this trench are described below, followed by a brief description of the distribution of deposits.
- 1.1.2 Trenches are described according to their stratigraphic sequence from the earliest deposits reached in the trench upwards.
- 1.1.3 This is followed by a description of the finds and an interpretation and summary discussion of the results, a fuller discussion of the results in the context of the wider parklands landscape can be found within the main reports.
- 1.1.4 A table describing individual contexts can be found at the end of this section.

## 2 RESULTS: GENERAL

### 2.1 *Location*

- 2.1.1 A single machine cut trench situated on the potential plunge bank east of the Temple Greenhouse

### 2.2 *Soils and ground conditions*

- 2.2.1 The underlying geology in this part of the site was a layer of reddish brown mudstone.
- 2.2.2 Ground conditions were compact throughout which hampered machine excavation.

## 3 RESULTS: DESCRIPTIONS OF DEPOSITS: TRENCH 09

### 3.1 *Features and deposits*

- 3.1.1 The earliest deposit located within the trench was a layer of reddish brown mudstone (902). A layer of brown clay loam topsoil (901) overlay layer 902.

### 3.2 *Finds*

- 3.2.1 Frequent amounts of ceramic plantpot sherds were recovered throughout the topsoil (layer 901).

## 4 DISCUSSION AND INTERPRETATION

### 4.1 *Reliability of field investigation*

- 4.1.1 Tree root action has substantially disturbed both the topsoil and the natural mudstone.

### 4.2 *Analysis*

- 4.2.1 The trench revealed no archaeological features of any nature. The absence of any features potentially relating to the location's usage as a 'Plunge Bank' could either be due to their truncation by later tree root action, or because the pots were only inserted in shallow holes and hence left little or any trace.
- 4.2.2 Frequent amounts of ceramic plantpot sherds were recovered throughout the topsoil layer 901, although none were located in-situ. The amount of ceramic plantpot



## TRENCH 09

sherds recovered from layer 901, could suggest that the bank to the north of the Temple Greenhouse was used as a 'Plunge bank.'

### 5 ARCHAEOLOGICAL CONTEXT INVENTORY

Context	Type	Description	Depth (m)	Width (m)	Finds	Date
901	Layer	Modern topsoil	0.27	-	Yes	19 <sup>th</sup> & 20 <sup>th</sup> century
902	Layer	Natural mudstone	-	-	No	

## 1 METHODOLOGY

### 1.1 *Presentation of results*

- 1.1.1 The soil and ground conditions for this trench are described below, followed by a brief description of the distribution of deposits.
- 1.1.2 Trenches are described according to their stratigraphic sequence from the earliest deposits reached in the trench upwards.
- 1.1.3 This is followed by a description of the finds and an interpretation and summary discussion of the results, a fuller discussion of the results in the context of the wider parklands landscape can be found within the main reports.
- 1.1.4 A table describing individual contexts can be found at the end of this section.

## 2 RESULTS: GENERAL

### 2.1 *Location*

- 2.1.1 A single long machine cut trench situated on the potential plunge bank east of the Temple Greenhouse

### 2.2 *Soils and ground conditions*

- 2.2.1 The underlying geology in this part of the site was a layer of reddish brown mudstone.
- 2.2.2 Ground conditions were compact throughout which hampered machine excavation.

## 3 RESULTS: DESCRIPTIONS OF DEPOSITS: TRENCH 10

### 3.1 *Features and deposits*

- 3.1.1 The earliest deposit located within the trench was a layer of reddish brown mudstone, (1002). A layer of brown clay loam topsoil (1001) overlay layer 1002.

### 3.2 *Finds*

- 3.2.1 Frequent amounts of ceramic plantpot sherds were recovered throughout the topsoil layer 1001.

## 4 DISCUSSION AND INTERPRETATION

### 4.1 *Reliability of field investigation*

- 4.1.1 Tree root action has substantially disturbed both the topsoil and the natural mudstone.

### 4.2 *Analysis*

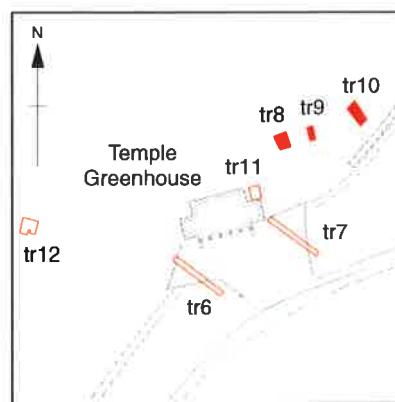
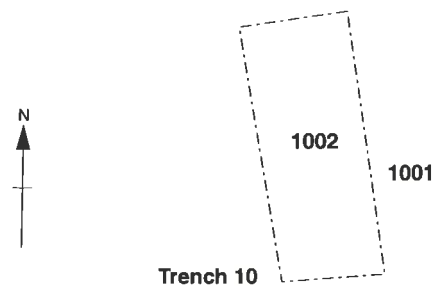
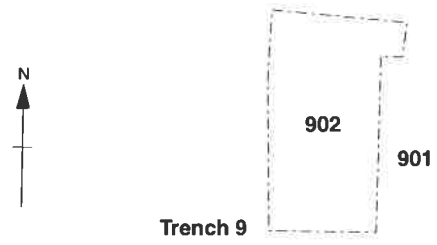
- 4.2.1 The trench revealed no archaeological features of any nature. The absence of any features potentially relating to the location's usage as a 'Plunge Bank' could either be due to their truncation by later tree root action, or because the pots were only inserted in shallow holes and hence left little or any trace.
- 4.2.2 Frequent amounts of ceramic plantpot sherds were recovered throughout the topsoil layer 1001, although none were located in-situ. The amount of ceramic plant-pot

## TRENCH 10

sherds recovered from layer 1001, could suggest that the bank to the north of the Temple Greenhouse was used as a 'Plunge bank.'

### 5 ARCHAEOLOGICAL CONTEXT INVENTORY

Context	Type	Description	Depth (m)	Width (m)	Finds	Date
1001	Layer	Modern topsoil	0.26	-	Yes	19 <sup>th</sup> & 20 <sup>th</sup> century
1002	Layer	Natural mudstone	-	-	No	



## 1 METHODOLOGY

### 1.1 *Presentation of results*

- 1.1.1 The soil and ground conditions for this trench are described below, followed by a brief description of the distribution of deposits.
- 1.1.2 Trenches are described according to their stratigraphic sequence from the earliest deposits reached in the trench upwards.
- 1.1.3 This is followed by a description of the finds and an interpretation and summary discussion of the results, a fuller discussion of the results in the context of the wider parklands landscape can be found within the main reports.
- 1.1.4 A table describing individual contexts can be found at the end of this section.

## 2 RESULTS: GENERAL

### 2.1 *Location*

- 2.1.1 The trench is located just east of the Dry Arch Bridge and extended from the base of the Ha-Ha Ditch, up over the main carriageway and slightly onto the verge to the south of the main carriageway.

### 2.2 *Soils and ground conditions*

- 2.2.1 The underlying geology in this part of the site was a layer of reddish brown mudstone.
- 2.2.2 Ground conditions were soft and no problems were encountered.

## 3 RESULTS: DESCRIPTIONS OF DEPOSITS: TRENCH 15

### 3.1 *Features and deposits*

- 3.1.1 The earliest deposit located within the trench was a layer of reddish brown mudstone, (1515). This layer was cut by the linear construction trench for the *Ha Ha* wall, (1514). The *Ha Ha* wall (1513) was constructed of red brick, 235mm x 110mm x 70mm. The wall, constructed using a English Garden Wall pattern, had a compact, white lime mortar, and stone foundation (1513). The pointing was flush with the face of the wall. The trench also contained a dark greyish brown silt loam fill (1512).
- 3.1.2 Layer 1515 was also cut by construction trenches 1508 and 1510. The construction cut 1508 contains a poorly built limestone and red brick drain (1507), size 235mm x 110mm x 70mm. A deposit of reddish brown mudstone,(1506), also filled the cut.
- 3.1.3 The construction cut 1510 contains a red brick wall (1509), 235mm x 110mm x 70mm. The wall face was constructed, using a stretcher bond pattern and bonded with a compact, white, lime mortar. The wall 1509 was founded on one course of roughly hewn limestone.
- 3.1.4 The structure located at the northern end of the trench was a limestone drain, bonded with a pinkish white lime mortar (1516). A deposit of reddish brown, silt clay, (1505), contained within the *Ha Ha* ditch, has overlain the limestone drain 1516. Layer 1505 has also sealed the construction fills 1506, 1511 and 1512.

## TRENCH 15

- 3.1.5 Within the centre of the trench, a path of well-sorted, rounded pebbles has been exposed (1503). The path has been constructed upon a foundation layer of brown silt clay (1504).
- 3.1.6 At the southern end of the trench, a carriageway (1501), constructed of rounded pebbles and larger pieces of flat limestone was also built upon a layer of brown, silt clay (1502). Both foundation layers directly overlie the natural mudstone layer 1515. A layer of clay loam topsoil seals the path (1503), carriageway (1501) and the *Ha Ha* ditch fill (1505).

### 3.2 *Finds*

- 3.2.1 No finds were recovered from the trench.

### 3.3 *Reliability of field investigation*

- 3.3.1 The drain structure 1516 was not fully exposed as the structure extended outside the area of investigation and consequently no stratigraphic relationships were established.
- 3.3.2 Extensive root action, attributable to a dead yew tree on the western limits of the trench, has truncated the sequence of deposits above and to the south of the drain structure 1507.

## 4 DISCUSSION AND INTERPRETATION

### 4.1 *Analysis*

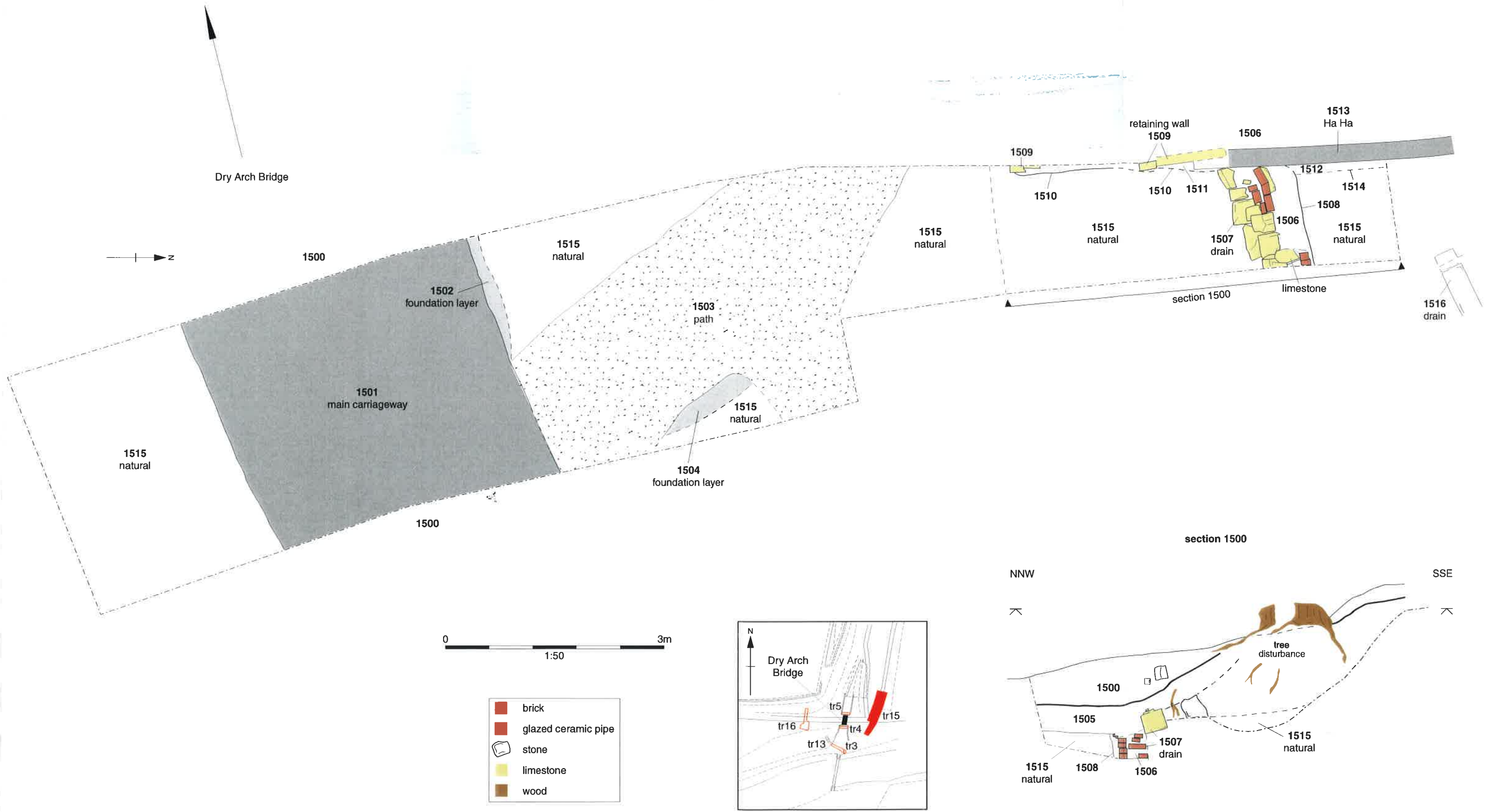
- 4.1.1 The investigation revealed the original depth and profile of the *Ha Ha* ditch. The ditch, in comparison with the deposition noted within Trench 14, contained a substantial depth of accumulated material. This may be attributable to the greater surface area of the bowl shaped terminal of the *Ha Ha* ditch and also to the close proximity of the carriageway and a greater erosion of materials.
- 4.1.2 The positioning of the poorly constructed, probably 18<sup>th</sup> century, drain structure 1507 suggests that the terminal end required drainage. This drainage problem could account for some of the accumulation of materials. The drain abutted the eastern face of the *Ha Ha* wall and was constructed with mid-eighteenth century red bricks and bonded with the same mortar bond as the *Ha Ha* wall (1513). The structure also served as a low retaining wall to the southern end of the *Ha Ha* ditch terminal.
- 4.1.3 Situated beyond the trench's southern limits, was a limestone drain (1516). The structure was bonded with a compact, pinkish-white lime mortar and has been attributed to the early 19<sup>th</sup> century on this evidence alone. The bond is similar, to the lime mortar used within conduit structure 1708 (Trench 17) and suggests the two structures are possibly contemporary.
- 4.1.4 The *Ha Ha* wall was exposed within the base of the trench and consisted of two foundation courses of limestone, on which the outer face of red brick was built. The structure survived to a height of eleven courses, with the pointing flush with the wall face. This suggests that the brick work exposed in the trench originally sat above the 18<sup>th</sup> century ground surface. The *Ha Ha* terminated, approximately five metres from the northern end of the carriageway, 1501.
- 4.1.5 Abutting the southern end of the *Ha Ha* was a contemporary, 18<sup>th</sup> century, brick retaining wall (1509). The wall consisted of nine courses of regular red brick with roughly finished jointing. The rough bedding joints would suggest that the wall face would not have been exposed above the 18<sup>th</sup> century ground surface. The purpose of the structure would have been to retain the ground surface above the southern end of the *Ha Ha*.

## TRENCH 15

- 4.1.6 The trench also examined the path (1503) and carriageway (1501) to the south of the *Ha Ha* terminus. Both of these features followed the standard pattern for routeways identified during the works. They were both built on the same brown silt clay foundation layer (1502), and were covered with the same mixed rounded pebble surface (1501). The difference in width between the features probably indicates that the path leading to the Temple Greenhouse area was not designed for vehicular access.

### 5 ARCHAEOLOGICAL CONTEXT INVENTORY

Context	Type	Description	Depth (m)	Width (m)	Finds	Date
1500	Layer	Topsoil	0.65	18.88	No	-
1501	Structure	18 <sup>th</sup> century carriageway	-	4.08	No	-
1502	Layer	Foundation layer of the 18 <sup>th</sup> century carriageway	-	0.50	-	-
1503	Structure	Gravel path	0.08	2.10	No	-
1504	Layer	Foundation of gravel path	0.10	4.20	No	-
1505	Fill	Fill of the <i>Ha Ha</i> ditch	0.44	3.0	No	-
1506	Fill	Fill of 18 <sup>th</sup> century drain	0.40	0.30	No	-
1507	Structure	18 <sup>th</sup> century drain	0.65	0.70	No	-
1508	Cut	Construction trench for 18 <sup>th</sup> century drain	0.34	0.26	No	-
1509	Structure	Brick wall at end of <i>Ha Ha</i>	0.88	-	-	-
1510	Cut	Construction trench for Brick wall at end of <i>Ha Ha</i>	0.14	0.18	No	-
1511	Fill	Fill of construction trench 1510	0.14	0.18	No	-
1512	Fill	Fill of construction trench 1514	-	0.14	No	-
1513	Structure	18 <sup>th</sup> century <i>Ha Ha</i> wall	1.03	-	-	-
1514	Cut	Construction trench for 18 <sup>th</sup> century <i>Ha Ha</i> wall	-	0.14	No	-
1515	Layer	Natural mudstone	-	-	-	-
1516	Structure	19 <sup>th</sup> century limestone drain	0.65	0.32	-	-



Trench 15: Plan and section



## 1 METHODOLOGY

### 1.1 *Presentation of results*

- 1.1.1 The soil and ground conditions for this trench are described below, followed by a brief description of the distribution of deposits.
- 1.1.2 Trenches are described according to their stratigraphic sequence from the earliest deposits reached in the trench upwards.
- 1.1.3 This is followed by a description of the finds and an interpretation and summary discussion of the results, a fuller discussion of the results in the context of the wider parklands landscape can be found within the main reports.
- 1.1.4 A table describing individual contexts can be found at the end of this section.

## 2 RESULTS: GENERAL

### 2.1 *Location*

- 2.1.1 The trench runs north-south over the carriageway just west of the Dry Arch Bridge.

### 2.2 *Soils and ground conditions*

- 2.2.1 The underlying geology in this part of the site was a layer of reddish brown mudstone.
- 2.2.2 Ground conditions were soft and no problems were encountered

## 3 RESULTS: DESCRIPTIONS OF DEPOSITS: TRENCH 16

### 3.1 *Features and deposits*

- 3.1.1 The earliest deposit located within the trench was a layer of reddish brown mudstone (1605). Layer 1605 was overlain by an 18<sup>th</sup> century carriageway (1602), consisting of well-sorted rounded pebbles, size 10mm-50mm, which had been partially covered by later repair of large pieces of limestone (1601). A layer of eroded pebbles lay on the northern edge of the carriageway (1603). A path of poorly -sorted pebbles, size 20mm- 60mm, was located on the southern limits of the carriageway (1604). Layers 1603 and 1604 have been directly overlain by a layer of clay loam modern topsoil (1600).

### 3.2 *Finds*

- 3.2.1 No finds were recovered from the trench.

## 4 DISCUSSION AND INTERPRETATION

### 4.1 *Reliability of field investigation*

- 4.1.1 No factors governed the reliability of the field investigation.

### 4.2 *Analysis*

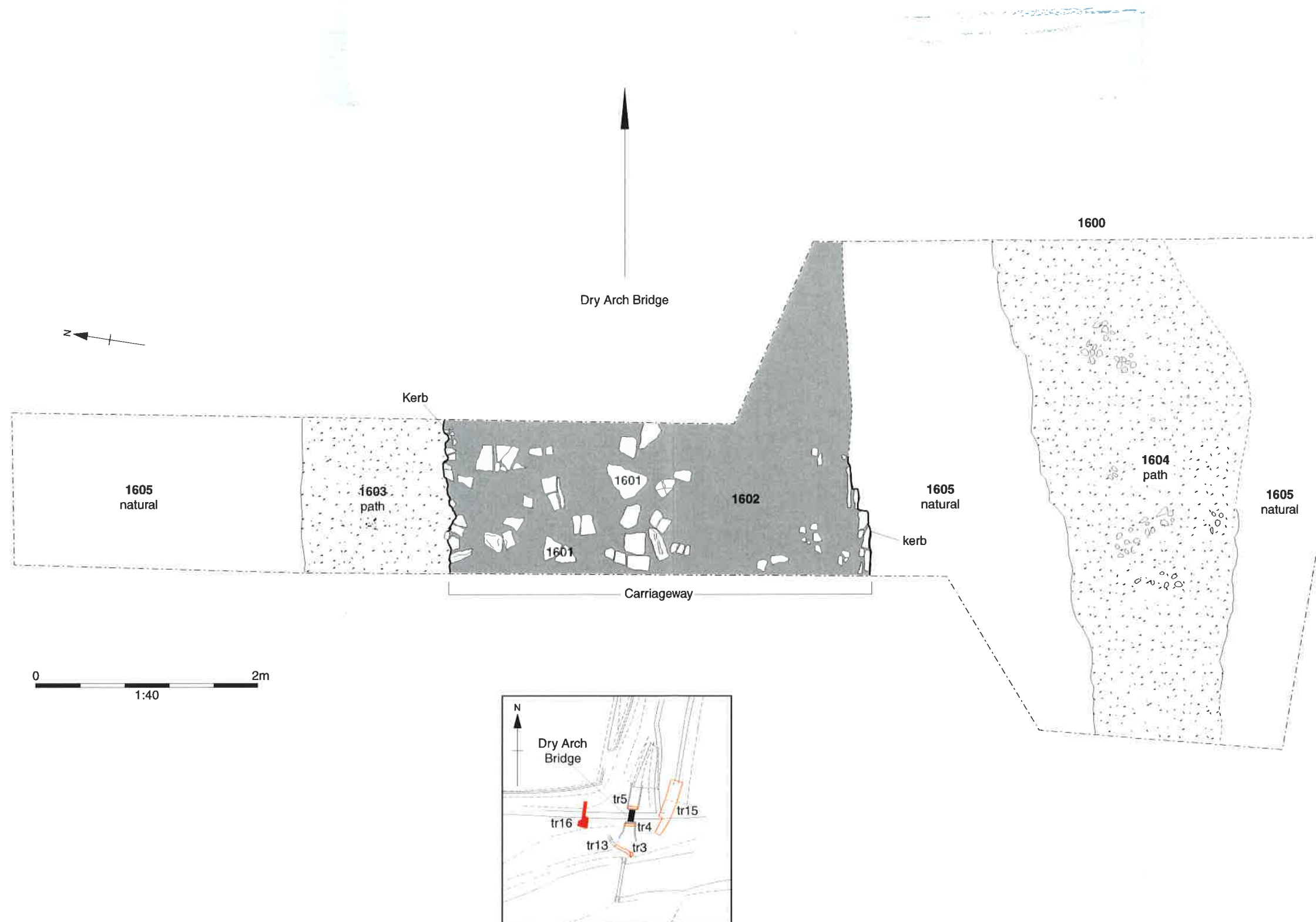
- 4.2.1 The trench revealed the extent and character of the 18<sup>th</sup> century carriageway (1602), including, some limited lengths of limestone curbing on the northern and southern extents.

## TRENCH 16

- 4.2.2 Randomly placed pieces of limestone laid directly upon the central part of the 18th century carriageway, represents a repair or re-surfacing within the 20th century.
- 4.2.3 The path revealed to the south of the carriageway represents a path constructed in 1972 to link the carriageway, via the wooden steps (Trench 13: 1314) to the bridge over the ornamental lake. The path has no obvious foundation and has been constructed with similar stones to those contained within layer 1304 (Trench 13).

### 5 ARCHAEOLOGICAL CONTEXT INVENTORY

Context	Type	Description	Depth (m)	Width (m)	Finds	Date
1600	Layer	Modern topsoil	0.22	15.0	No	-
1601	Layer	20 <sup>th</sup> century surface	0.08	2.20	No	-
1602	Layer	18 <sup>th</sup> century carriageway	0.18	3.78	No	-
1603	Layer	Layer of displaced pebbles	0.04	1.28	No	-
1604	Layer	1970's pebble path	0.12	0.40	No	-
1605	Layer	Natural clay	0.36	-	-	-



## 1 METHODOLOGY

### 1.1 *Presentation of results*

- 1.1.1 The soil and ground conditions for this trench are described below, followed by a brief description of the distribution of deposits.
- 1.1.2 Trenches are described according to their stratigraphic sequence from the earliest deposits reached in the trench upwards.
- 1.1.3 This is followed by a description of the finds and an interpretation and summary discussion of the results, a fuller discussion of the results in the context of the wider parklands landscape can be found within the main reports.
- 1.1.4 A table describing individual contexts can be found at the end of this section.

## 2 RESULTS: GENERAL

### 2.1 *Location*

- 2.1.1 The trench was cut through the carriageway approximately midway between the Punchbowl Gates and the Dry Arch Bridge.

### 2.2 *Soils and ground conditions*

- 2.2.1 Ground conditions were soft and no problems were encountered.
- 2.2.2 The underlying geology in this part of the site was not located.

## 3 RESULTS: DESCRIPTIONS OF DEPOSITS: TRENCH 17

### 3.1 *Features and deposits*

- 3.1.1 The earliest deposit located within the trench was a layer of brown silt clay (1705). Layer 1705 was overlain by a make-up layer of reddish brown mudstone (1704). Above layer 1704 were located two poorly constructed limestone drains (1706) and (1707) which are associated with the 18th century carriageway (1702). The drain structures are sealed by a foundation layer of brown silt clay (1703).
- 3.1.2 The 18th century carriageway overlies layer 1703 and consists of well-sorted rounded pebbles, size 10mm-50mm, and small pieces of limestone.
- 3.1.3 On the northern limits of the carriageway layer 1703 has been cut by a 19<sup>th</sup> century limestone conduit, bonded with a compact, pink lime mortar (1708). The carriageway (1702) has been partially covered by a 20<sup>th</sup> century road surface consisting of large pieces of limestone (1701). A layer of clay loam modern topsoil seals the 20<sup>th</sup> century road surface, layer (1700).

### 3.2 *Finds*

- 3.2.1 No finds were recovered from the trench.

## 4 DISCUSSION AND INTERPRETATION

### 4.1 *Reliability of field investigation*

- 4.1.1 Truncation by the later 20<sup>th</sup> century road surface (1701) would seem to have disturbed the 18<sup>th</sup> century carriageway deposits (1703) to such a degree, that the interpretation of the carriageway's northern and southern extents are tenuous.
- 4.1.2 Tree-disturbance on the southern limits has truncated the carriageway limits, the physical relationship with the drain structure 1707 and the early 19th century fence line.

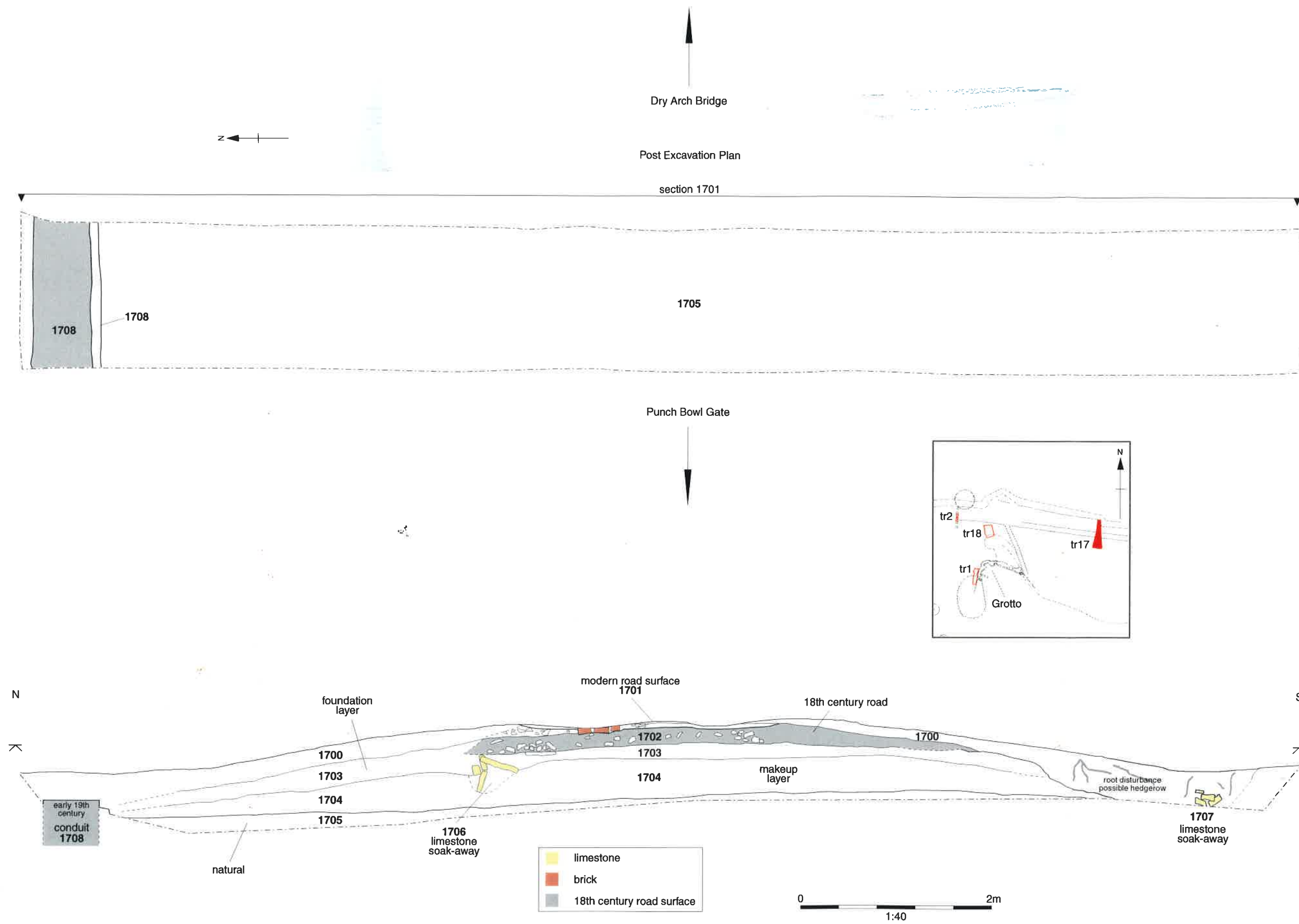
### 4.2 *Analysis*

- 4.2.1 The trench was designed to cut through the carriageway and record it in section, hence enabling the team to determine the make-up and development of the main carriageway. This has been achieved.
- 4.2.2 The 18th century carriageway surface (1703) is comprised of the standard rounded pebble mix found in other trenches such as Trench 15 and 16. It is built on two foundation layers. One, (1703), directly beneath the carriageway surface is comprised of the standard brown silty clay which is also common to other excavated sections of routeways. Beneath this layer exists a further make-up layer of reddish brown mudstone (1704) which seems to be redeposited natural. This layer was not noted in other trenches, but no other trenches cut deliberately though the routeways they were investigating and hence the possibility of encountering this layer under other sections of carriageway should not be dismissed.
- 4.2.3 Another interesting aspect was the location of two soak aways (1706 and 1707) located on top of the second make-up layer (1704) but under the final make-up layer (1703). These crudely built structures would have been established to enable the adequate drainage of the carriageway surface and are both 18<sup>th</sup> century in date.
- 4.2.4 A 20<sup>th</sup> century road surface (1701) consisting of randomly placed pieces of limestone has been directly upon the central part of the 18<sup>th</sup> century carriageway (1702). The surface has truncated the upper limits of the carriageway throughout, the greatest impact is situated within the central part of the carriageway.
- 4.2.5 Located at the northern limits of the trench was an 19<sup>th</sup> century conduit (1708), which extended beyond the limits of excavation. The northern end of the conduit was located to the north-east of the trench. A square cast iron grill that had been driven into the ground covered the end of the conduit. This lay outside the area of excavation and has been left *in-situ*.
- 4.2.6 A cast iron fence spike, with similar dimensions to the conduit grill, was recovered from the southern limits of the trench and represents the remnants of a fence line, that was first recorded in Trench 18 (1802). The fence has two pointed ends, by which the post would have been driven into the ground.

# TRENCH 17

## 5 ARCHAEOLOGICAL CONTEXT INVENTORY

Context	Type	Description	Depth (m)	Width (m)	Finds	Date
1700	Layer	Modern topsoil	0.30	15.0	No	-
1701	Structure	20 <sup>th</sup> century surface	0.20	2.72	No	-
1702	Structure	18 <sup>th</sup> Century carriageway	0.16	6.20	No	-
1703	Layer	18 <sup>th</sup> Century carriageway foundation	0.28	12.20	No	-
1704	Layer	Made-up ground	0.42	10.40	No	-
1705	Layer	Pre Brownian landsurface	0.22	10.40	No	-
1706	Structure	18 <sup>th</sup> Century carriageway drain	0.40	0.50	No	-
1707	Structure	18 <sup>th</sup> Century carriageway drain	0.16	0.28	No	-
1708	Structure	19 <sup>th</sup> Century conduit	0.70	0.60	No	-



Trench 17 plan and section

## 1 METHODOLOGY

### 1.1 *Presentation of results*

- 1.1.1 The soil and ground conditions for this trench are described below, followed by a brief description of the distribution of deposits.
- 1.1.2 Trenches are described according to their stratigraphic sequence from the earliest deposits reached in the trench upwards.
- 1.1.3 This is followed by a description of the finds and an interpretation and summary discussion of the results, a fuller discussion of the results in the context of the wider parklands landscape can be found within the main reports.
- 1.1.4 A table describing individual contexts can be found at the end of this section.

## 2 RESULTS: GENERAL

### 2.1 *Location*

- 2.1.1 These two machine cut trenches were located alongside the carriageway just east of the Punch Bowl Gates.

### 2.2 *Soils and ground conditions*

- 2.2.1 The underlying geology in this part of the site was a layer of reddish brown silt clay.
- 2.2.2 Ground conditions were compact throughout which hampered machine excavation.

## 3 RESULTS: DESCRIPTIONS OF DEPOSITS: TRENCH 18

### 3.1 *Features and deposits*

- 3.1.1 The earliest deposit located within the trench was a layer of natural reddish brown silt clay (1802). Layer 1802 was cut by a fenceline of cast iron spikes (1801). The fenceline was overlain by a layer of clay loam topsoil, (1800).

### 3.2 *Finds*

- 3.2.1 No finds were recovered from the trench, except for two cast iron fence spikes.

## 4 DISCUSSION AND INTERPRETATION

### 4.1 *Reliability of field investigation*

- 4.1.1 No factors governed the reliability of the field investigation.

### 4.2 *Analysis*

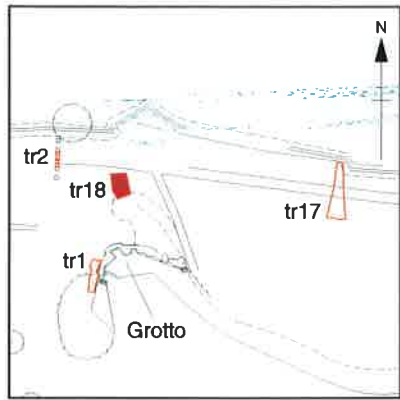
- 4.2.1 The trench consists of two parallel, closely positioned, machine excavated trenches. The trenches were excavated in order to determine the original location of the Punch Bowl gates. No evidence of a foundation, relating to the gate's original location, was located within the trench.
- 4.2.2 Two cast iron fence spikes (1801), were recovered from the centre of each trench and were aligned on an east-west axis. The fenceline relates to the fence alignment noted within Trench 17. Both represent a former fenceline, running parallel to the southern limits of the 18<sup>th</sup> century carriageway. The fenceline is probably 19<sup>th</sup> century in date.



# TRENCH 18

## 5 ARCHAEOLOGICAL CONTEXT INVENTORY

Context	Type	Description	Depth (m)	Width (m)	Finds	Date
1801	Layer	Modern topsoil	0.20	5.60	No	
1802	Layer	19th century fenceline	-	-	No	
1803	Layer	Natural reddish brown silt clay	0.30	5.60	No	



## 1 METHODOLOGY

### 1.1 *Presentation of results*

- 1.1.1 The soil and ground conditions for this trench are described below, followed by a brief description of the distribution of deposits.
- 1.1.2 Trenches are described according to their stratigraphic sequence from the earliest deposits reached in the trench upwards.
- 1.1.3 This is followed by a description of the finds and an interpretation and summary discussion of the results, a fuller discussion of the results in the context of the wider parklands landscape can be found within the main reports.
- 1.1.4 A table describing individual contexts can be found at the end of this section.

## 2 RESULTS: GENERAL

### 2.1 *Location*

- 2.1.1 The trench was located at the upslope entrance to the Church Hill Clump.

### 2.2 *Soils and ground conditions*

- 2.2.1 The underlying geology in this part of the site was not located.
- 2.2.2 Ground conditions were soft and no problems were encountered.

## 3 RESULTS: DESCRIPTIONS OF DEPOSITS: TRENCH 19

### 3.1 *Features and deposits*

- 3.1.1 The earliest deposit located within the trench was the line of oolitic limestone footings (1903). The footing blocks varied in length throughout the exposed structure but had a standard width of 0.24 m. At the southern end of the revealed footings, set into the limestone footings, was an iron socket on which the buried, cast iron gates were originally hung (1902).
- 3.1.2 The lower limits of the cast iron palings have been set into the entire length of the limestone footings; the upper limits have clearly been sawn off and removed.

### 3.2 *Finds*

- 3.2.1 No finds were recovered from the trench.

## 4 DISCUSSION AND INTERPRETATION

### 4.1 *Reliability of field investigation*

- 4.1.1 No factors effected the reliability of the field investigation.

### 4.2 *Analysis*

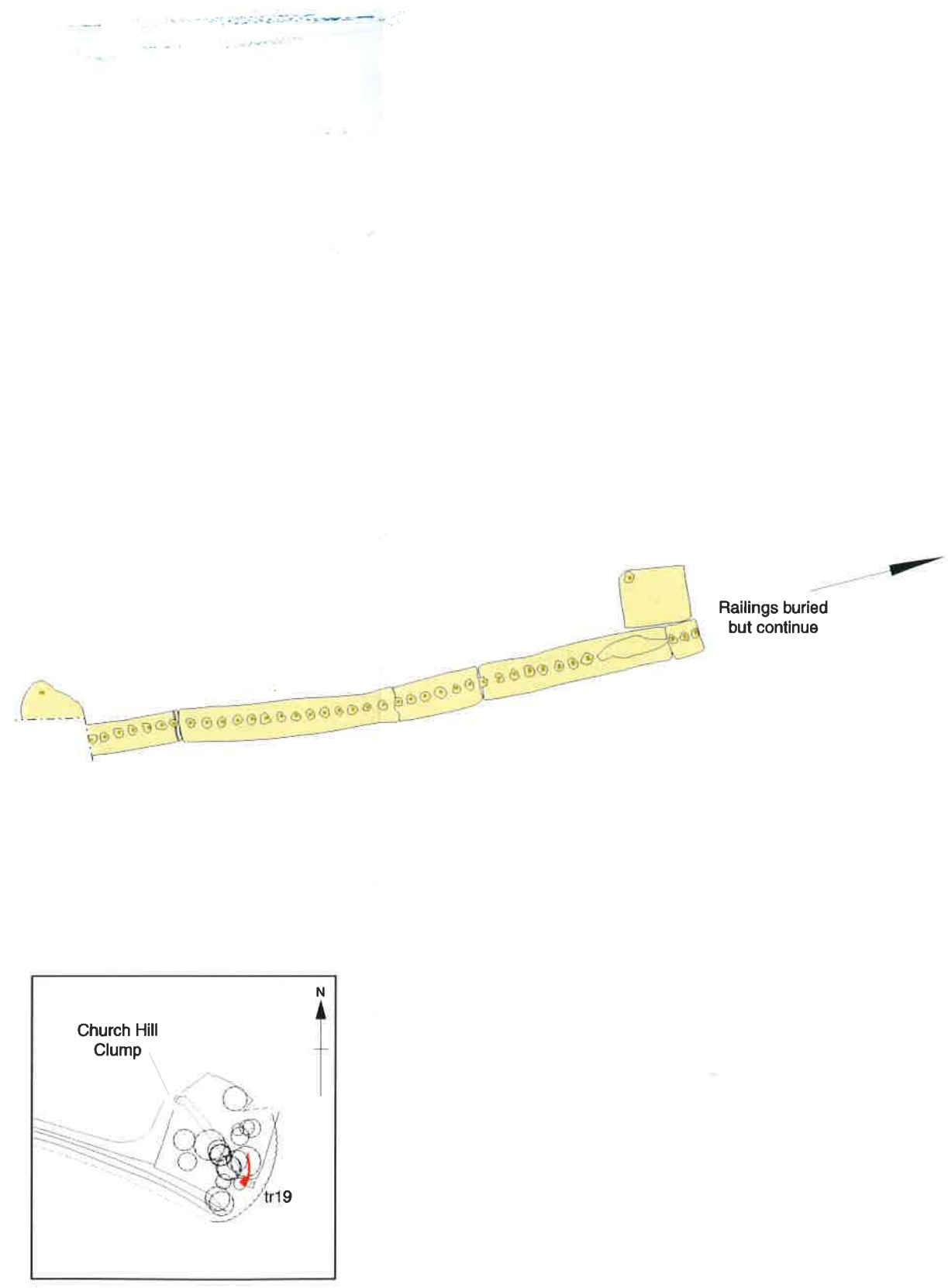
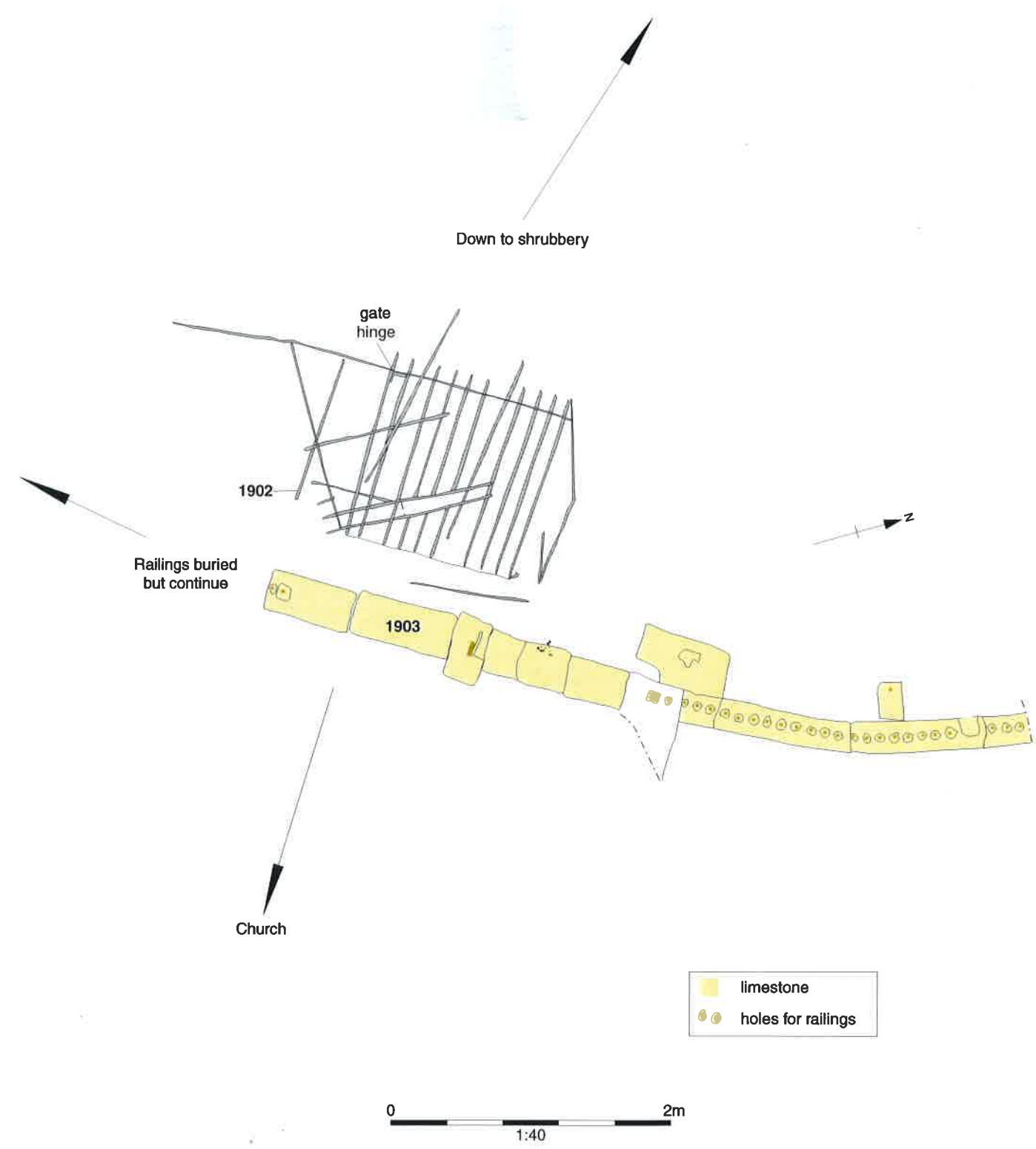
- 4.2.1 The excavation revealed the extent and character of the 18<sup>th</sup> century palings and gate. One of the gates was found to be relatively intact and in a reasonable state of repair. The other gate was in a very poor and fragmented condition with only 3 whole vertical bars and one horizontal bar surviving.

## TRENCH 19

- 4.2.2 The best preserved gate was comprised of 12/13 vertical iron bars mounted in two horizontal flat bars. Features such as hinges and the chain that held the two gates together were found to still be *in-situ*.
- 4.2.3 The gates were attached to collapsed iron palings, subsequently the gates were left *in-situ*, to prevent damage during their removal.
- 4.2.4 The gate sockets and central locking hole are still intact. The base of the gateway is comprised of worn dressed limestone blocks.
- 4.2.5 The paling footings consisted of dressed limestone blocks with regularly spaced iron paling footings. The palings were set approximately 0.1m apart (4"), with an iron rod, now cut off, set in a lead filled hole. They are likely to have been similar in character to still remaining section of iron paling located to the north of the revealed paling bases.

### 5 ARCHAEOLOGICAL CONTEXT INVENTORY

Context	Type	Description	Depth (m)	Width (m)	Finds	Date
1901	Layer	Topsoil	0.10	9.90	No	
1902	Structure	19 <sup>th</sup> century Iron gate and railings	0.02	2.70	No	
1903	Structure	19 <sup>th</sup> century Limestone paling footings	0.30	5.60	No	



## 1 METHODOLOGY

### 1.1 *Fieldwork methods and recording*

- 1.1.1 All archaeological features were planned and where excavated their sections drawn at scales of 1:20. All trenches and features were photographed using colour slide and black and white print film. Recording followed procedures laid down in the OAU Fieldwork Manual (ed D Wilkinson, 1992).

### 1.2 *Presentation of results*

- 1.2.1 The soil and ground conditions for this trench are described below, followed by a brief description of the distribution of deposits.
- 1.2.2 Trenches are described according to their stratigraphical sequence from the underlying natural soils upwards.
- 1.2.3 This is followed by a description of the finds and an interpretation and summary discussion of the results, a fuller discussion of the results in the context of the wider parklands landscape can be found within the main reports.
- 1.2.4 A table describing individual contexts is given in Appendix 1.

## 2 RESULTS: GENERAL

### 2.1 *Soils and ground conditions*

- 2.1.1 The underlying geology in this part of the site is compact silty clay.
- 2.1.2 Ground conditions were compact throughout, which inhibited hand excavation and cleaning.

## 3 RESULTS: DESCRIPTIONS OF DEPOSITS

### 3.1 *Features and deposits*

- 3.1.1 The earliest deposit observed within the trench was a orange-pink clay (2300).
- 3.1.2 An east-west orientated boundary ditch (2302) was the only feature found to have cut 2300. This contained several fills. The lowest of them was a orange-brown silty clay (2303). This was overlain by a greyish brown silty clay (2304) and a light whitish yellow silty sand (2305). All three deposits seem to have been tipped into the boundary ditch (2302) from the south.
- 3.1.3 Deposit 2305 is directly overlain by a orange-brown silty clay (2307). Again this material seems to have been tipped into the boundary ditch (2302) from the south.
- 3.1.4 A greyish brown silty clay (2306), overlies 2307. This in turn is overlain by the final ditch fill, a pinkish-orange silty clay (2308). This final ditch fill has been entirely sealed by modern topsoil (2301).

### 3.2 *Finds*

- 3.2.1 No finds were recovered from the contexts described above.

## 4 DISCUSSION AND INTERPRETATION

### 4.1 *Analysis*

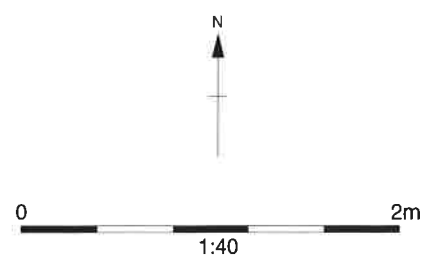
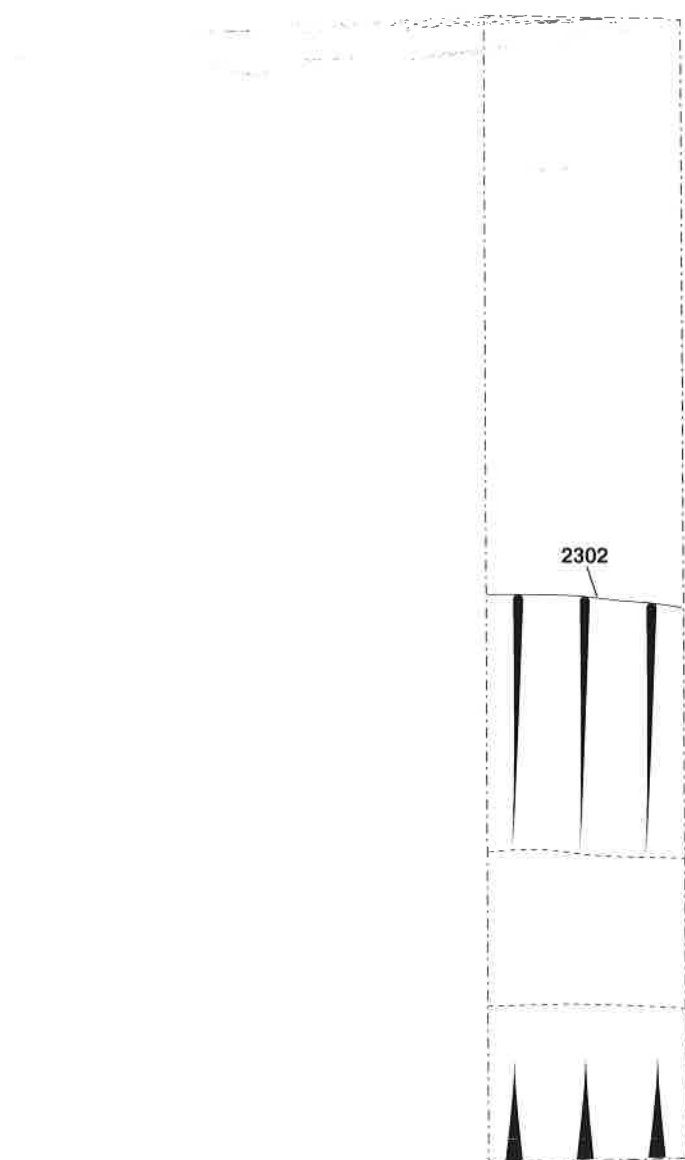
## TRENCH 23

- 4.1.1 The only intervention in the trench is the linear boundary ditch (2302).
- 4.1.2 Contexts 2303, 2304 and 2305 show similarities, in that they all appear to represent episodic deposits from the south of the boundary ditch (2302). Inclusions within these fills appear to have derived from the demolition of a stone structure. These fills show, importantly, that there had been a change in the function of the ditch at the time of their deposition. It was no longer necessary to keep the ditch clear of debris and in fact, it made a useful tip for material generated elsewhere.
- 4.1.3 This interpretation is given weight through fills 2307, 2306 and 2308. 2307 again represents a deliberate deposit made into the ditch (2302) from the south, as a brief episode, and has probably derived from landscaping work elsewhere on the park. Deposit 2306 represents a period when no debris deposits entered the ditch and the feature was allowed to accumulate soils naturally. Context 2308 provides clear evidence that the ditch had become obsolete, as it has been used to seal the feature and provide a flatter landscape for future use.

### 5 ARCHAEOLOGICAL CONTEXT INVENTORY

Context	Type	Description	Depth (m)	Width (m)	Finds	Date
2300	Layer	Natural Clay	-	-	No	
2301	Layer	Modern Topsoil	0.3	-	No	
2302	Cut	Boundary Ditch	1.5	4.4	No	
2303	Fill	Fill of ditch 2302	0.4	0.5	No	
2304	Fill	Fill of ditch 2302	0.3	1.3	No	
2305	Fill	Fill of ditch 2302	0.2	1.06	No	
2306	Fill	Fill of ditch 2302	0.3	2.2	No	
2307	Fill	Fill of ditch 2302	0.34	0.7	No	
2308	Fill	Fill of ditch 2302	0.4	3.3	No	





## 1 METHODOLOGY

### 1.1 *Fieldwork methods and recording*

- 1.1.1 All archaeological features were planned and where excavated their sections drawn at scales of 1:20. All trenches and features were photographed using colour slide and black and white print film. Recording followed procedures laid down in the OAU Fieldwork Manual (ed D Wilkinson, 1992).

### 1.2 *Presentation of results*

- 1.2.1 The soil and ground conditions for this trench are described below, followed by a brief description of the distribution of deposits.
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## 2 RESULTS: GENERAL

### 2.1 *Soils and ground conditions*

- 2.1.1 The underlying geology in this part of the site is compact silty clay.
- 2.1.2 Ground conditions were compact throughout, which inhibited hand excavation and cleaning.

## 3 RESULTS: DESCRIPTIONS OF DEPOSITS

### 3.1 *Features and deposits*

- 3.1.1 The earliest deposit observed within the trench was a light-mid buttery brown silty clay (2400).
- 3.1.2 Two features were found to have cut 2400. Cut 2402 consists of a linear shaped trench for a field drain. A lower course of square profile, interlocking, pipes (2403) were placed directly onto the cut (2402), followed by an upper course of the same pipes (2404). The rest of the trench was then backfilled with a greyish-brown silty clay (2405). The backfill is only partially covered by the gravel path (2408).
- 3.1.3 Cut 2406 was also made into the earliest deposit (2400). It consists of a linear trench into which, a single course of bricks, (2407) have been placed. This has been entirely sealed by the gravel path (2408).
- 3.1.4 Both 2405 and 2407 are overlain by a gravel spread (2408). This consists of rounded stones, between 20 and 40mm in diameter, varying in colour from reddish to orange to yellow. This layer is entirely sealed by modern topsoil (2401).

### 3.2 *Finds*

- 3.2.1 No finds were recovered from the contexts described above.

## 1 METHODOLOGY

### 1.1 *Fieldwork methods and recording*

- 1.1.1 All archaeological features were planned and where excavated their sections drawn at scales of 1:20. All trenches and features were photographed using colour slide and black and white print film. Recording followed procedures laid down in the OAU Fieldwork Manual (ed D Wilkinson, 1992).

### 1.2 *Presentation of results*

- 1.2.1 The soil and ground conditions for this trench are described below, followed by a brief description of the distribution of deposits.
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### 2.1 *Soils and ground conditions*

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## 3 RESULTS: DESCRIPTIONS OF DEPOSITS

### 3.1 *Features and deposits*

- 3.1.1 The earliest deposit observed within the trench was a light-mid buttery brown silty clay (2400).
- 3.1.2 Two features were found to have cut 2400. Cut 2402 consists of a linear shaped trench for a field drain. A lower course of square profile, interlocking, pipes (2403) were placed directly onto the cut (2402), followed by an upper course of the same pipes (2404). The rest of the trench was then backfilled with a greyish-brown silty clay (2405). The backfill is only partially covered by the gravel path (2408).
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- 3.1.4 Both 2405 and 2407 are overlain by a gravel spread (2408). This consists of rounded stones, between 20 and 40mm in diameter, varying in colour from reddish to orange to yellow. This layer is entirely sealed by modern topsoil (2401).

### 3.2 *Finds*

- 3.2.1 No finds were recovered from the contexts described above.

# TRENCH 24

## 4 DISCUSSION AND INTERPRETATION

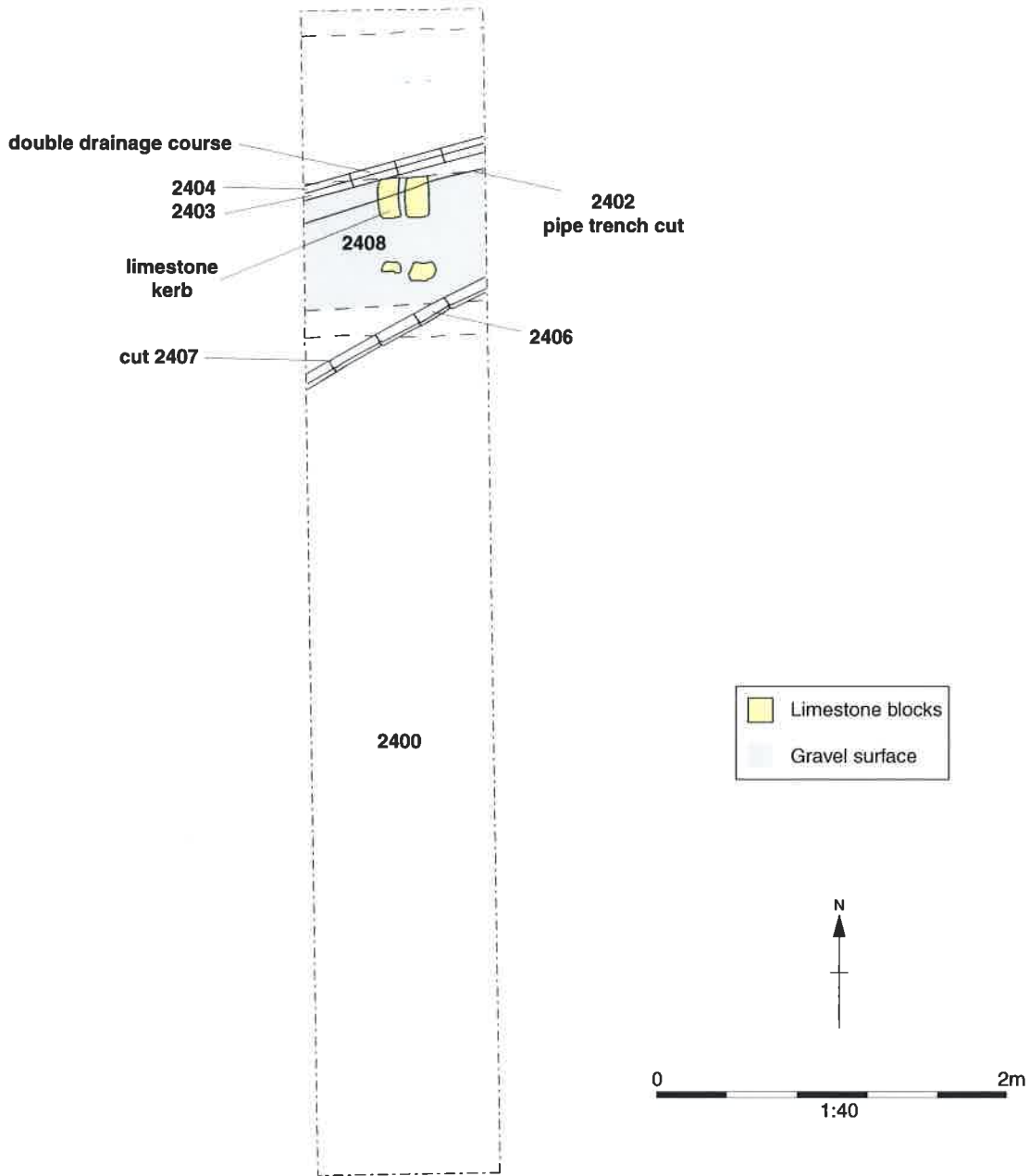
### 4.1 *Analysis*

4.1.1 Both 2402 and 2406 cut into the earliest layer 2400, so should be considered first. The pipe trench (2402) is aligned in the same direction as the overlying gravel path (2408). It contains interlocking drainage pipes and is thought, because of its stratigraphy and alignment, to have functioned as drainage for the path. Its' position at the northern most extent of the gravel spread may also have helped to contain the loosely packed stones.

4.1.1.1 There is no direct stratigraphic relationship between 2402 and 2406. However, they were both cut into 2400 and are both overlain by 2408. It is thought, because of its' orientation (discussed above) that the single course of bricks (2407) within the trench (2406) may have served the overlying gravel path, possible as added stability or as a kerb to the loosely packed stones.

## 5 ARCHAEOLOGICAL CONTEXT INVENTORY

Context	Type	Description	Depth (m)	Width (m)	Finds	Date
2400	Layer	Natural Clay	-	-	No	
2401	Layer	Modern Topsoil	0.26	-	No	
2402	Cut	Cut for drainage pipes	0.4	0.5	No	Pre-1793
2403	Fill	Lower course of pipes	0.15	0.15	No	Pre-1793
2404	Fill	Upper course of pipes	0.15	0.15	No	Pre-1793
2405	Fill	Backfill into cut 2402	0.4	0.5	No	Pre-1793
2406	Cut	Cut for single brick course	0.2	0.14	No	Pre-1793
2407	Fill	Brick course within 2406	0.1	0.16	No	Pre-1793
2408	Layer	Gravel path	0.12	1.32	No	1793



Trench 24 plan



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