

Witley Court

The Excavations

1996

1.1 Introduction

The remains at Witley Court today are a shattered reflection of the splendour which was once in existence. At the height of their glory the house, the gardens and the parkland were a testament to the single mindedness of the Victorian nobility and the wonders that could be achieved with virtually unlimited wealth.

The form of the house and the garden today is very much the legacy of the first Earl of Dudley, William Humble Ward. He acquired the court and its surrounding parkland, via his trustees, in 1837. However, he did not live in the house at that time, he had not come into his full inheritance, and would not until he was twenty eight years old.

It was some eight years after he moved into Witley Court that the works commissioned by Ward were begun. These works transformed the building itself into a highly fashionable Italianate Palace, designed and executed by the architect Samuel Whitfield Daukes.

The gardens were transformed by William Andrews Nesfield, in what he described himself as his 'monster work', with the laying out of formal, highly intricate parterres and two magnificent fountains, which Nesfield had also designed.

Changes in ownership saw the decline of the property from its 19th century splendour as the costs of maintaining such a large house spiralled.

The death blow to Witley Court as a magnificent country mansion came on the 7th of September 1937. A fire started which fatally damaged the building. At a time when war was looming and there was insufficient insurance cover for rebuilding, the fate of the court was sealed.

The contents of the house and most of the garden ornaments were auctioned in 1938. The following year the house was sold for a paltry £4000 and the surrounding park was sold as agricultural land. In 1954 the house was sold once more, this time to a salvage dealer who proceeded to strip anything of value from the remains of the house, turning it into a ruin.

1972 saw the house taken into guardianship by the D.O.E. since when consolidation and repair has taken place, initially under the auspices of the D.O.E. and later by English Heritage.

Now that the house and its immediate environs are within guardianship and are safe from further deterioration a major project of restoration is under way.

English Heritage have committed themselves to enhancing the setting of the remains of the court and have set in motion a multi-million pound programme of work, of which the following excavation is a small, but vital, part.

The Design Brief

The work carried out during September and October of 1996 was based upon a comprehensive design brief supplied by English Heritage, the aims of which are summarised below:

To locate, as far as is possible, buried structures that may be affected by the proposed works and whose approximate positions are known and, where necessary, establish by minor evaluation excavations the depth and condition of any such remains.

To provide the basic information that is needed to restore and reconstruct selected parts of the Nesfield garden including the parterres and the perimeter balustrade.

To provide a fully documented archive together with appropriate recommendations for any post-excavation analyses that may be considered necessary.

To carry out the stated aims of the design brief a four part programme of archaeology was proposed, this to be integrated into the overall site experience of visiting members of the general public, thus requiring excavators with good communication skills and an overall understanding of the work and its consequences.

The archaeological programme was as follows:

Excavations within the Garden Area

The main area of excavation proposed was the eastern half of the Eastern Parterre. The purpose of this was to allow the recovery of the planting design and pattern of decorative gravels lost due to neglect and unrestricted growth of box hedging and other intrusive shrubs in this area.

Three other trenches, T1, T2 and T3 were also to be laid out to discover the nature of the gravel path on each side of the East parterre and to investigate the grassed area between the eastern edge of the parterre and the Flora Fountain. The revelations provided by T3 prompted another trench, T4, to be laid out during excavation.

Also included within this part of the programme was the investigation of any anomalies turned up by geophysical survey of the area where the 18th century service wing is known to have stood. Unfortunately it was not possible to carry out this survey prior to or during our presence on site, therefore this part of the programme was put on hold.

Excavations associated with the Perimeter

A series of eleven trenches around the perimeter of the garden were proposed. These all cut across the balustrade wall at ninety degrees and were designed to examine the construction of the balustrade wall and the relationship between this wall, the metalled path within it and the integral drainage system.

Other individual areas of interest were also to be excavated as part of this series of trenches, these to include the steps in J-K, M-N and R-S, the area

of the Golden Gates and an area to the south of the East Pavillion.

The trench across the viewing platform, Trench I, could not be excavated as the many trees in this area had not been removed.

Clearance work around the Perimeter Balustrade

This involved the exposing of the balustrade wall to 19th century ground level to allow its condition to be fully evaluated. This also involved the careful exposure and recovery of any masonry that had fallen into the 'ha-ha', to be recorded and catalogued.

The clearing and cleaning of the remains of the viewing platform to the north of the main entrance was also to be carried out.

Recording of the Balustrade and associated Features

This involved the planning, at 1:20, of the entire length of the wall top of the perimeter Balustrade. The outside elevation of the balustrade wall was to be photographed for its entire length, so producing a complete photographic record of the wall prior to restoration, which would be used in the restoration process.

Work began on site on the 3rd September 1996 with a team consisting of:

Christine McGee and Simon Heald (Directors)

Les Capon and Dave Hollos (Supervisors)

Jill Hummerstone (Planning Supervisor)

Fourteen experienced Excavators

Thirteen Students

Excavations within the Garden Area

The excavation of the Eastern Parterre was a delicate operation, and one that was of intense interest to the general public.

It was uncertain as to what would be found within the boundaries of the parterre. There was no available documentary evidence to suggest the form of Nesfield's intended design for this part of the gardens, although there are surviving examples of his designs for other gardens which clearly exhibit the Nesfieldian style.

This style can be summarised as a passion for intricate swooping, spiralling curvilinear symmetrical shapes, these shapes being defined, enclosed and restricted within lines of box hedging and rigid stone kerbing. He used decorative gravels to produce, in combination with bedding plants, a symphony of colour which must have drawn the eye from the formal lawns and trees.

Prior to excavation it was thought that little, if any, of the characteristic Nesfield features would have survived, apart from the stone boundaries of the parterre. Changing fashions in garden design in the second half of the 19th and early 20th century would, it was thought, have inevitably led to the digging out of Nesfield's design. It would have been perfectly normal for the owner of a high status residence such as Witley Court to have had the earlier design removed and replaced with something more fashionable.

Work began after contractors had cut down the wildly overgrown box hedge which had survived the abandonment of the house. These were cut down to existing ground level, the contractors having been instructed to make no attempt to remove the roots as this would have caused untold damage to any surviving features.

After a grid was laid out the northern half of the area to be excavated, designated EPA, was de-turfed carefully and given an initial cleaning. The northern half was opened first to allow an assessment of the survival of features within the parterre and thus allow a change of methodology for the southern half if necessary. This meant that if we made a mis-

take to the north we could redeem ourselves to the south, and still discover the entire design as the parterre design would be symmetrical along its east-west axis.

The parterre is bounded by 0.14m wide lengths of cut stone, 006 in EPA and 019 in EPB. At ground level very little of any deliberate design could be seen. A dark band of soil could be made out which respected the line of the outer kerbing. Some other curving bands of darker soil could also be seen, but their relationship was unclear.

To resolve these difficulties the Heald Photographic Tower was erected some six metres to the south of the southern edge of the parterre. This piece of equipment will take a medium format camera and video camera up to a height of 45 feet. Once at the desired height the camera assembly can be tilted and panned remotely, a monitor on the ground relaying what can be seen to the operator. This revealed the first indications of a pattern, which could not be seen clearly at ground level, Figure One.

Having confirmed the survival of a design the southern half of the parterre was then de-turfed, designated EPB, revealing the other half of the pattern in a similar condition, Figure Two and Figure Three.

The first evidence of the decorative gravels typical of Nesfield's work was revealed directly below the removed turf. Scatters of white quartz were found which associated directly with ornamental features, EPA 002, 003, 004, 005, 011; EPB 011, 012, 013, 014. Also found were small amounts of evenly crushed brick, EPA 052 and 068, the nature of which suggests that they represent a spill from EPA 082, the band of reddish soil that lies directly within the stone surround of the parterre, see Figure Four. At the eastern end of the parterre were found four drains, each with a cast iron grille in situ. These were located at the junctions of the curves at this end, see figure four, and were within the band of soil EPA 082 and its southern equivalent EPB 023. The two drains to the extreme north and south, EPA 018 and EPB 020, are deeper than those located



Figure One: East Parterre, tower shot of EPA after deturfing and initial cleaning



Figure Two: East Parterre, EPA and EPB after deturfing and cleaning

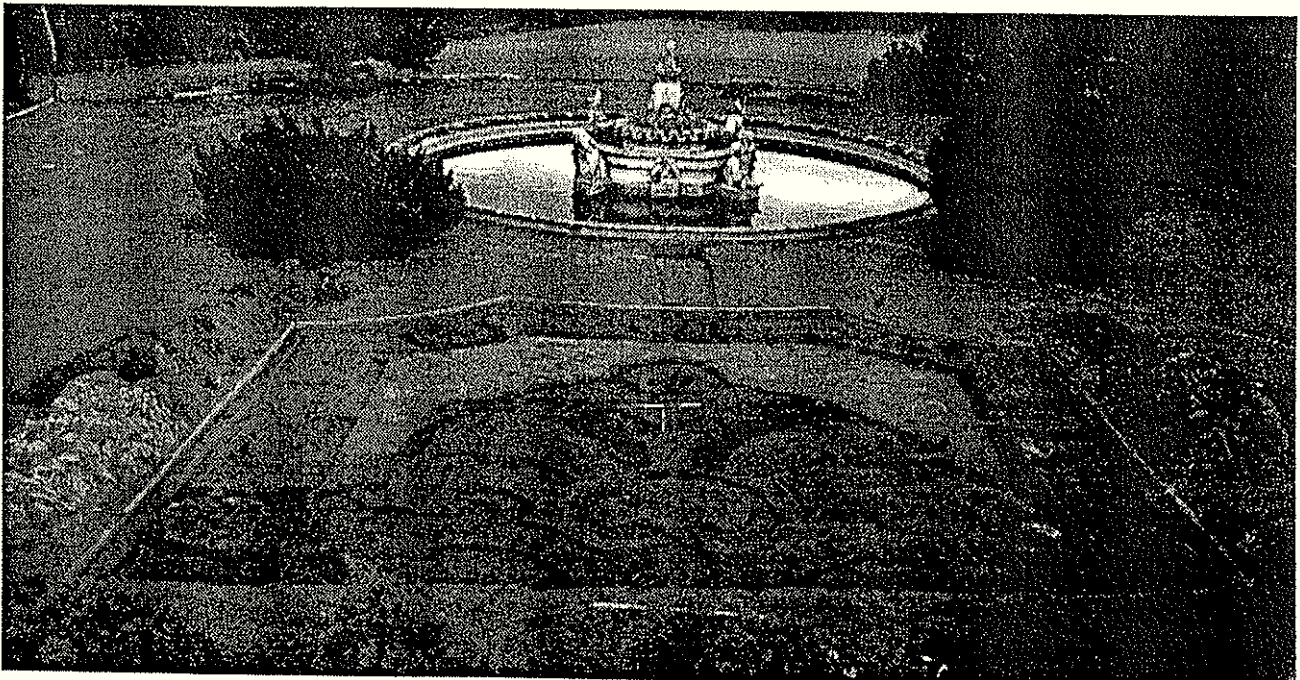


Figure Three: Completed excavation of East Parterre showing all features

towards the centre, EPA 081 and EPB 021. The construction cut for these drains was found in the very northern edge of a planting trench, EPA 069, where a layer of crushed sandstone was evident. This was reminiscent of the backfill over a drain found in trench F.

The band of reddish soil, EPA 082 and EPB 023, stretched around the entire perimeter of the excavated area of the parterre and was cut, on its inner edge, by EPA 069/EPB 046. This feature respects the curve of the outer stonework and had a surviving example of box hedge contained within it. The fill was a dark brown soil sealing a layer of charcoal and coal and fragments of pottery.

Parallel to this feature, towards the interior of the parterre, is another slightly wider planting trench, EPA 035/EPB 031. Again this trench respects the outer stonework and had a dark brown fill sealing a layer of coal, charcoal and crushed pot. Associated with this feature were three scatters of quartz, EPA 004, 005 and EPB 014 and some very occa-

sional remnants of box hedging. The combination of the quartz, surviving box and width of the feature suggests that a single row of box hedging was planted here with a decorative layer of quartz within.

The two planting trenches EPA 069/EPB 046 and EPA 035/EPB 031 are linked by pairs of curved trenches orientated in such a fashion as to form sub-circular designs. There are seven pairs forming these features which are evenly spaced, three at the eastern end of the parterre and two each along the north and south sides.

The fill of the pairs of curved trenches was once again dark brown, sealing a layer of coal and charcoal beneath. Most still had surviving box hedge within them.

These features were cut into a very mixed dark brown soil, EPA 007, 022 and EPB 002, which was probably planted with bedding as evidenced by the many fragments of flowerpot found here.

Towards the eastern end of the parterre and bounded

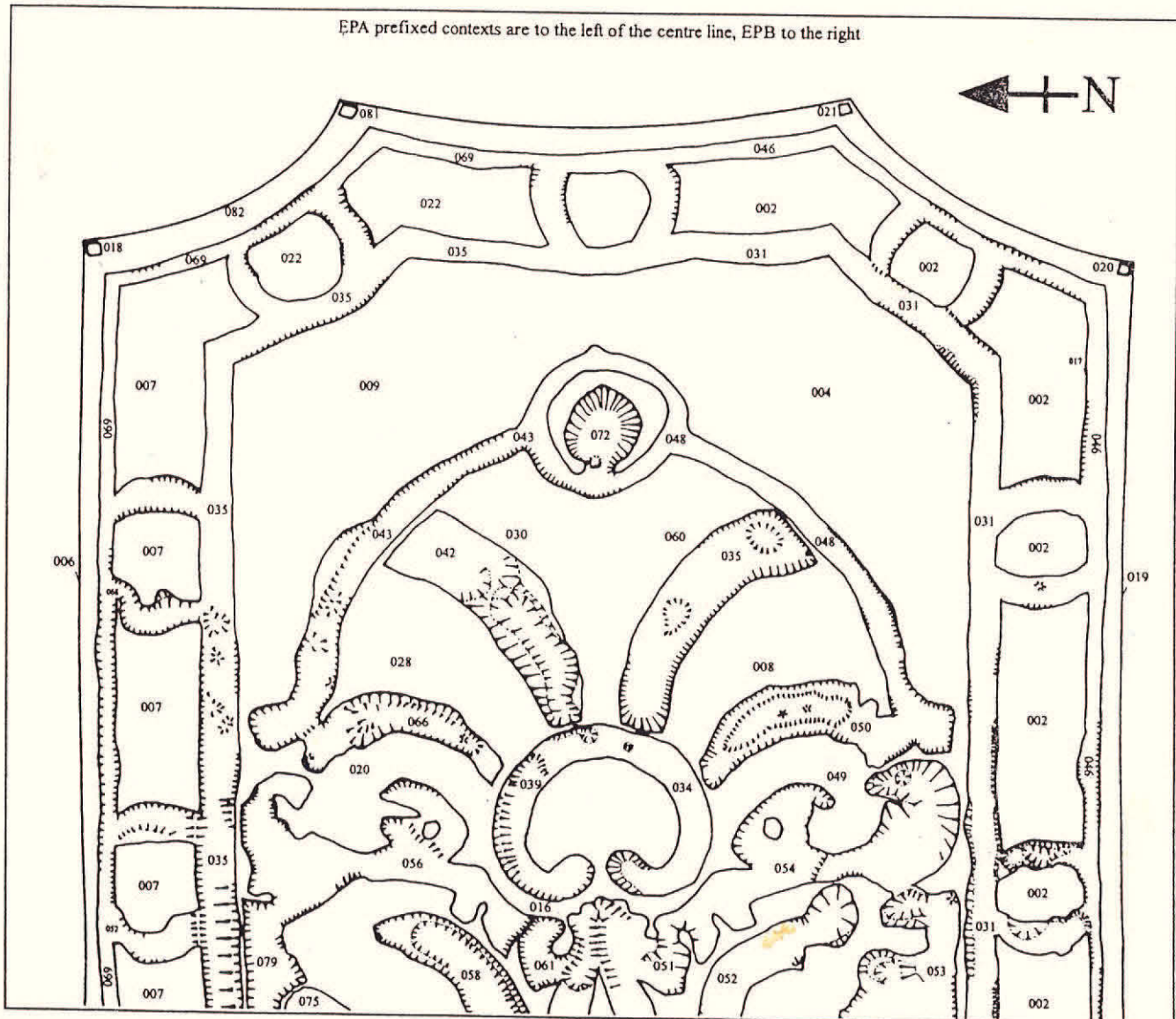


Figure Four: Excavated Feature Plan of the Eastern Parterre

by EPA035/EPB 031 was an area of light reddish brown soil, EPA009/EPB 004. This was so undisturbed by any activity that it has been interpreted as a grassed area, surrounding the eastern end of the intricate cutwork forming the central area of the parterre design.

Towards the western end of the excavated area and located centrally was a feature resembling a penannular ring, EPA 039/EPB 034. This was filled with a dark brown soil sealing a layer of charcoal and coal. The upper dark brown layer contained quartz and a relatively high proportion of crushed brick. This may indicate that this feature was once filled with a decorative gravel giving a pink effect. The area surrounded by this central motif, EPA 013 and EPB 008, was probably filled with bedding plants.

Radiating from this central 'brooch' were four cut features, EPA 066, 042 and EPB 050, 035, exhibiting a symmetry along the central east-west axis. The easternmost of these curving features, EPA 042 and EPB 035, were filled with a quartz rich soil, sealing the usual layer of charcoal and coal. In the north of both of these cuts was a conglomeration of purple stone, probably the remnants of a hardcore layer for the removed decorative quartz.

The soil within the central area between these features to the east, EPA 030 and EPB 060, was typical of that previously interpreted as being filled with bedding plants.

The westernmost features radiating from the 'brooch', EPA 066 and EPB 050, also exhibited quartz rich fill overlying a layer of purple hardcore, all sealing a charcoal and coal layer. To the east of these features, in EPA 028 and EPB 008, bedding plants were once again used as they were in EPA 020 and EPB 049. To the west in EPA 016 there was some more evidence of decorative gravels in the form of crushed slate, perhaps to give a blue colour.

EPB 042, 066 and EPB 035, 050 are bounded at their outer ends by two long curved trenches, EPA 043 and EPB 047. These were filled with dark soil overlying charcoal and coal and represent a line of box hedging.

Located centrally to the east is a circular feature which joins with EPA 043 and EPB 047. This cir-

cular feature encloses a layer of firm soil with what appears to be a central planting hole. The fill of all of these features again consists of a dark soil above charcoal and coal.

To the west of EPA 066 and EPB 050 and level with the north-south axis of the 'brooch' feature are two intricately cut designs, EPA 056 and EPB 054. These were once decorated with quartz and had the now expected layer of charcoal and coal at their base. Both features had been disturbed by root action and mole activity and initially looked very different from each other. However, careful excavation soon showed them to be identical, thus preserving the symmetry of the parterre design. These complex shapes were bounded by box hedging, with the 'eye' of each being a small circular area of box. To the west, on the east-west axis of the parterre, another ornate feature linked the inner extremes of EPA 056 and EPB 054. The top layer of this feature, EPA 061/EPB 051, contained sufficient quartz to suggest a decorative fill, and was once more sealing a layer of charcoal and coal. The total size and shape of this feature is unknown as it disappeared into the western section of the excavation.

To the north and south of this central feature were two more cut shapes, EPA 058 and EPB 052. The southern most of these features had been disturbed by root activity and only one fill was found, containing a small amount of quartz. That to the north was in better condition, having more clearly defined edges. The fill was of a dark soil mixed with quartz over a layer of purple composite sealing charcoal and coal. These features have been interpreted as containing decorative quartz, over a purple hardcore, probably bounded by box hedging.

To the north and south of EPA 058 and EPB 052 are two more features, EPA 079 and EPB 053 which disappear into the western edge of the excavation. Root disturbance has blurred the distinction between EPB 053 and what is the tip of another feature which runs into the western section. This distinction is clearer to the north where there is a definite edge between EPA 079 and 075.

All of these features have been interpreted as containing quartz decoration bounded by box hedging.

Reconstruction of the Parterre Design

The evidence provided by excavation has allowed a partial reconstruction of the form of the design and the methodology of construction of the features contained within the parterre.

The parterre was constructed by levelling and compacting the soil in the required area. The outer stone kerbing, preferred by Nesfield for its low maintenance requirement, would then have been laid down. Within this boundary the trenches for the box hedging and decorative features were cut. At the base of these trenches a layer of charcoal and coal, with occasional crushed pot, was laid down. The purpose of this layer was to prevent worm activity, annelids are unwilling to pass through soil containing high percentages of charcoal and coal. Comparisons can be drawn with the gravel paths excavated in the gardens of the Officers Terrace at Chatham Dockyard, where a layer of clinker was laid beneath it for the same purpose.

Having cut the design into the compacted soil within the parterre the grassed area to the east would have been laid and the box hedging would have been planted. After this the hardcore and decorative quartz would have been placed within its designated areas. Some small areas between cuts may have had coloured gravels rather than bedding plants, but insufficient evidence was found for this. The reconstruction shown in Figure Six is based, at the eastern end, upon the evidence recovered by excavation, the features at the west end of the par-

terre having been reconstructed from photographic evidence. The interior of the design at the western end could not be reproduced, although photographs do show a series of complex, interlinking spirals. There can be no doubt that the design revealed through excavation is that laid down by Nesfield. Comparisons with designs he produced for Worsley Hall and Eaton Hall show marked similarities to the Witley design, Figure Five.

Where archaeological evidence has been ambiguous or unclear as to the form of design represented in a specific area of the parterre then common motifs employed by Nesfield have been inserted.

It is unlikely that the colour scheme for the flower beds used in figure two reflects the reality of the original design. Nesfield clearly stated the type of planting to be used in his designs, as can be seen in the plan for Worsley Hall below, these tending to have one type of bedding plant within an area of the parterre. The reconstruction has been given multi-coloured beds just to give a general feel of the design.

In truth it must be admitted that there are undoubtedly differences and mis-interpretations in the reconstruction, which can only be identified by examining Nesfield's original drawings for Witley Court. However, excavation has proved that the Nesfield Parterre appears to have survived virtually unchanged, and has also provided enough information to allow a fairly accurate replanting.

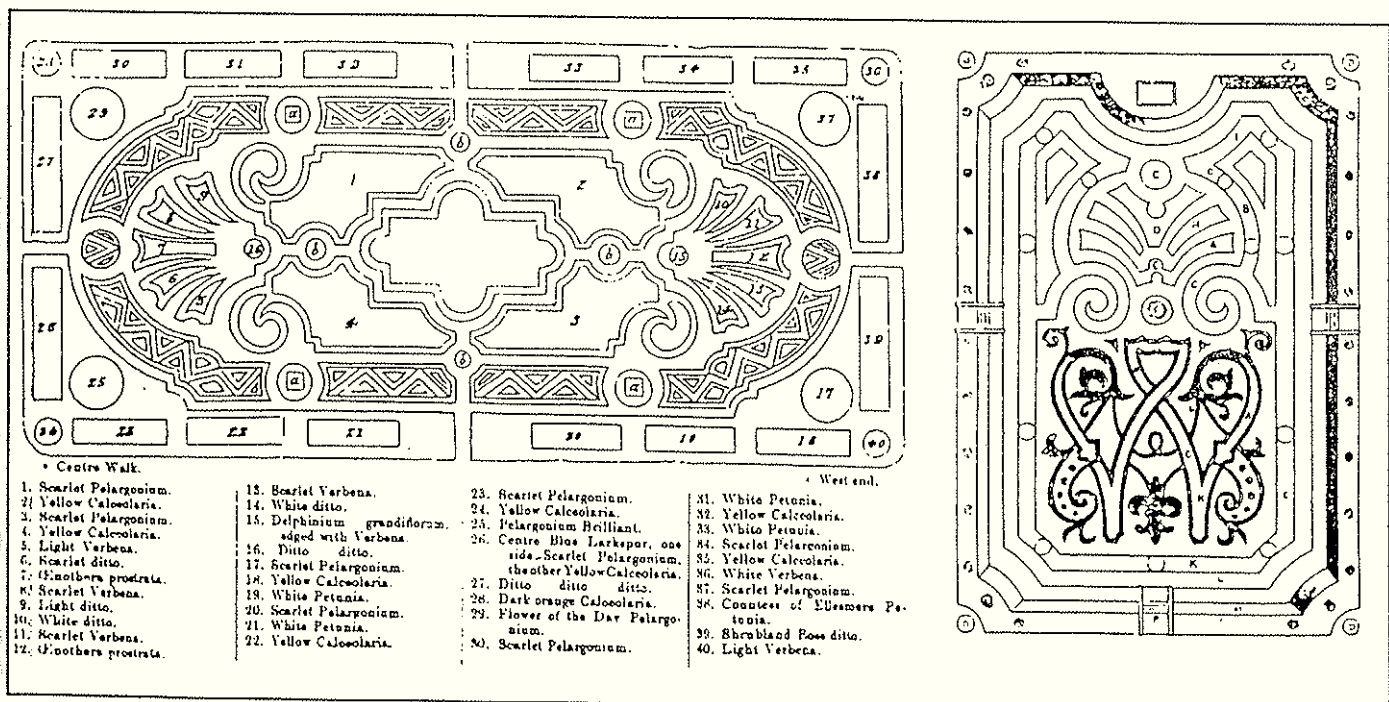


Figure Five: Nesfield's parterre designs for Worsley Hall (left) and Eaton Hall

Trenches T1 to T4

These excavations were associated with the eastern parterre and its relationship to the pathway and features which ran either side of it to the north and south, and the Flora fountain to the east.

The design brief required three trenches to be excavated, T1, T2 and T3, to allow the nature of the pathway to be explored. Photographic evidence also showed that the grassed terrace area between the pathways and the parterre contained an evenly spaced line of alternate urns and decorative trees running east-west, the positions of which needed

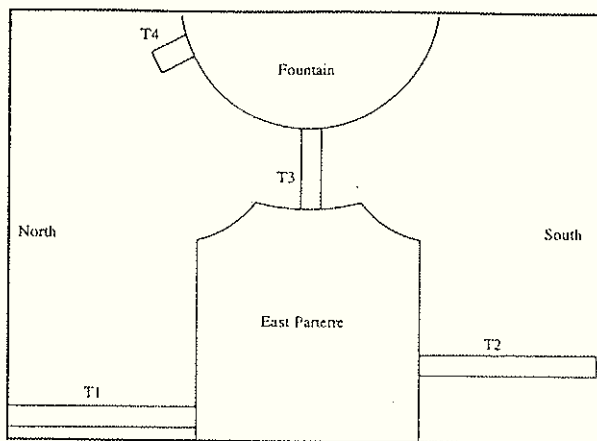


Figure Seven: Location Plan of Trenches T1-T4

to be established to allow their replacement.

Therefore trenches T1 and T2 were laid out in a staggered fashion, T1 to the north and T2 to the south, in an attempt to find a tree-pit and an urn base, one on each side, thus giving the spacing of these features, Figure Seven.

T1

T1 was 17.7m by 2m running north from the outside kerbing of the eastern parterre.

On removal of the topsoil, 001, a tree-pit was found, 006, Figure Eight. This was filled with a dark soil, 003, and represents the position of one of the trees shown in 19th century photographs. This tree had been planted into the terrace soil, 004, which was a very soily layer over a harder slightly bricky layer, 013.

Also revealed by the removal of the topsoil were the remains of the northern gravel path, which ran down the centre of the northern terrace.

This terrace was constructed using brick rubble, 010, derived from the demolition of an unknown structure. Above this layer of rubble, soils 013 and 011 were laid down.

The gravel path had been constructed by spreading a layer of gravel, 008, presumably for levelling purposes, over the rubble, 010. Above this was a

layer of sand, 009, also for levelling purposes, which was sealed by a layer of purple hardcore, similar to that found within the eastern parterre.

All of the above were sealed by 002, a layer of pea gravel representing the remnants of the top surface of the pathway.

The pathway had been sealed by layers 004 and 005 prior to turfing, presumably work carried out to make the gardens more presentable prior to their opening to the public.

T2

This trench was the twin of T1, running south from the edge of the eastern parterre.

Removal of the topsoil immediately revealed the remains of a gravel path, 003, Figure Eight, some 5m in width. The makeup of the top of this path was the same as that to the north in T1. The path was not fully excavated due to insufficient time. However, a small trial section was dug which revealed a yellow gravel base, with no evidence of brick rubble such as that found below the path in T1.

To the north of this path a small circular plinth was found, 002. This was made of mortared brick and would have been supported one of the urns between the path and the parterre.

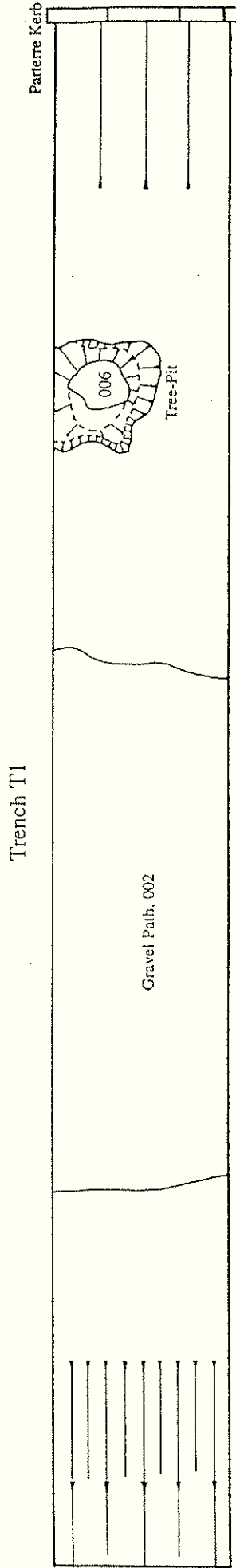
T3

This trench ran east-west from the edge of the eastern parterre to the edge of the Flora Fountain. The purpose of this trench was to investigate the grassed area east of the parterre.

A trench 8.03m by 2m was dug and initially appeared barren, there being no features visible after the removal of the topsoil, 001.

Layer 002, beneath the topsoil, was removed and revealed natural soil, 009, to the west and two rather firmer soils, 004 and 008, to the east up to the fountain. Removal of these soils revealed part of a brick built structure and a further soil layer, 005, and rubble layer, 010. After 005 and 010 were removed it became obvious that the structure that had been revealed was the bowl of a larger fountain, Figure Nine, which would have had a diameter some 5m larger than the current fountain, the construction being identical to the existing bowl of the Flora Fountain, which had been built on top of this larger bowl.

The construction of this larger bowl consisted of a brick built outer wall, some 0.7m thick, which had been demolished to well below ground level. The exterior course had been laid headers outwards, as had the next inner course. The two inner courses of brick were laid as stretchers.



North

South

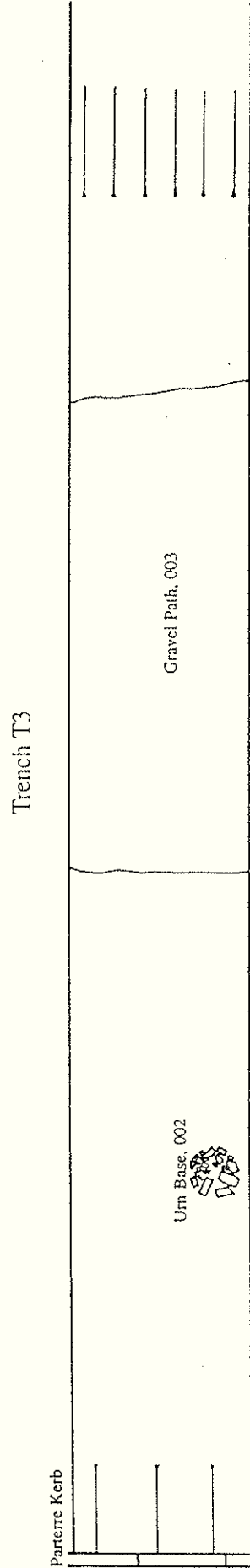


Figure Eight: Feature Plans of Trenches T1 and T3

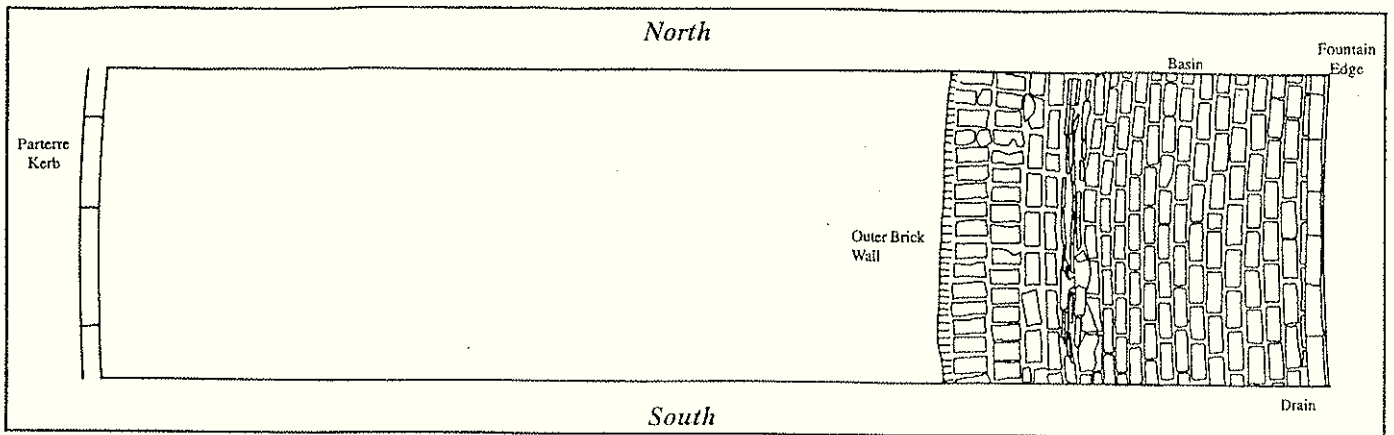


Figure Nine: Plan of T3 showing demolished fountain basin, 1:50



Figure Ten: Bowl of Fountain showing Ceramic Drain

This wall would originally have been capped with masonry, probably as exhibited on Flora. Within this wall, and mortared to it, were three vertical layers of tile, presumably acting as waterproofing for the curved surface of decorative bricks making up the bowl of the feature.

At the junction of the base of the current fountain and the larger bowl beneath there was a round ceramic drain mortared into position, Figure Ten, presumably this drain must break out of the larger bowl at some point and is intended to prevent soil becoming waterlogged around the fountain perimeter. The existence of this fountain bowl was unknown prior to excavation and raises some questions as to why it is there. To date there has been no documentary evidence to suggest that there was an ear-

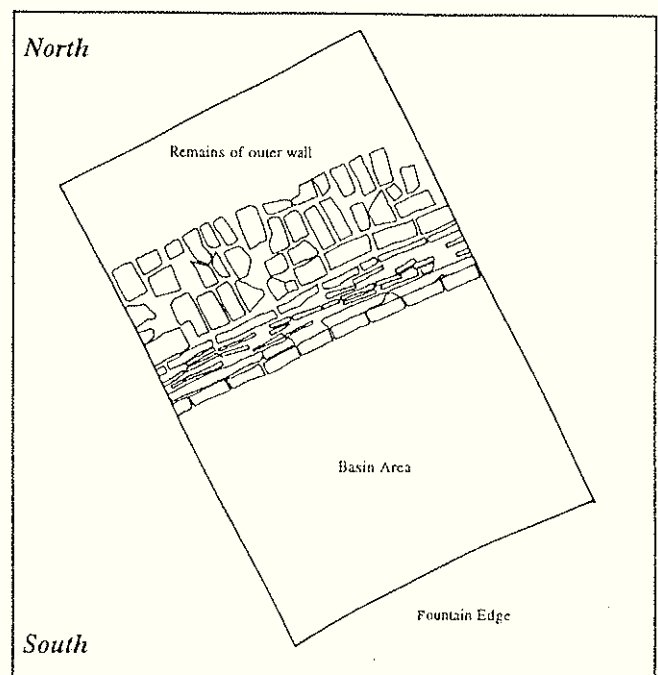


Figure Eleven: Plan of T4, 1:50

lier, larger fountain in this position, which raises the possibility that what was uncovered was a mistake. That is to say that this is the original bowl of the Flora Fountain which after construction was found to be too large, possibly spoiling the perspective of the Eastern Parterre and its associated features, and so had to be demolished

T4

This trench was excavated to check that the larger fountain bowl carried around the diameter of Flora. The larger bowl was quickly found, but was not fully excavated. Only enough was revealed to confirm that the constructional technique was the same as that seen in T3, Figure Eleven. The condition of the outer wall was comparatively poor here.

Excavations Associated with the Perimeter

The series of trenches around the perimeter of the gardens, see Fig 10, were laid out with a number of purposes in mind, dependant upon their location, these can be summarised as follows:

Trench A: to investigate the levels within the garden area to discover the degree and nature of landscaping carried out during the creation of the Nesfield gardens. Also to be looked at were the levels outside the perimeter wall to identify the nature of the "haha". This trench was also designed to reveal the relationship of the perimeter balustrade to the gardens

Trench B: As above

Trench C: Located upon, and running down, the bank to the west of the Posiedon Fountain, the primary purpose of this trench was to investigate the bank and discover the nature of landscaping carried out in the central area of the garden.

Trench D: A path is known to have run within the perimeter here, leading up to the Golden Gates. This trench was designed to accurately locate the position of this path, discover the nature of its construction and investigate any associated drainage.

Golden Gates: The area around the Golden Gates was investigated to record all surviving details of the fittings for the gates and the associated gravelled area.

Trench HP: This was an extra, not included in the original design brief, whose purpose was to examine the area just south of the east pavillion to discover whether this was a paved or gravelled surface and to further investigate the structure of the balustrade wall.

Landscaping

The evidence for landscaping carried out throughout the area of the south garden was found in trenches A, B, C, D, and E.

Trenches A, B and E showed a large amount of dumping of soil and rubble inside the balustrade wall, undoubtedly done to raise the ground level within the garden area.

This was represented by the following contexts: Trench A: 005, 007 and 008; Trench B: 005 and 006; Trench E: 002, 004, 005, 006, 007 and 008.

In trench B, and to a lesser extent in trench A, a distinct drop in the level of natural was noted, thus resulting in the dumping of over 1m of soil and rubble to achieve the desired levels within the garden. Trench E also displayed over 1m of soil/rubble above

The steps at J-K: Cleaned and recorded to allow analysis of construction

Trench E: This trench was opposite Trench C, to the east of the fountain, and was designed to investigate any internal path at this point.

Steps at M-N: Cleaned and recorded

Trench F: This trench was to the east of the Flora Fountain and ran up onto the terrace of the fountain, its purpose being to investigate the nature of the terrace and the relationship of the balustrade to the garden at this point.

Trench G: To investigate any features within the garden at this point.

Steps at R-S: Cleaned and recorded

Trench H: To investigate the relationship of the balustrade to the interior and exterior at this point.

Trench I: Not Excavated

Trenches J, K, and L: These are grouped together as they were laid out in a relatively small area. Their purpose was to investigate the complex area in the balustrade length W-X.

All of the trenches above were also used to examine the drainage system associated with the balustrade wall and garden and the construction of the balustrade wall itself.

Rather than describing each trench and its results individually the following text will deal with the individual topics of interest that were the purpose for the excavations and the associated evidence/trench. The topics are: Landscaping, Paths, Drainage and Wall Construction, and Other Features.

natural.

Trench C had extensive dumping on the inside of the balustrade wall, 006, forming the bank to the west of the fountain. When this is taken in conjunction with the information derived from A, B, and E, a clear picture of the landscaping activities in this area is formed.

The natural landscape slopes from the south and west towards the north and east. These natural levels have been drastically reduced in the area surrounding the Poseidon Fountain, some of the resulting surplus soil being used to construct a bank against the inside face of balustrade length C-D to the west of the fountain area. The ground level to the north of the fountain, approaching the house, has also been raised

forming the existing terraces in this area, the evidence for which can be seen in the build up of dump in trenches A and B. To the east of the fountain the soil level was originally lower than its current level, the dump found in trench E representing the raising of ground levels to give a large level area surrounding the fountain.

Trench D is included in this landscaping section not for any evidence of landscaping but for the lack of evidence of landscaping. Excavation here showed that the current ground level had not been altered, thus leading to the conclusion that the slope northwards to the central fountain area had remained unchanged.

In the eastern part of the garden, between the Flora Fountain and the balustrade wall, trench F was excavated. This trench ran east-west from the balustrade towards the fountain, at the western end running up the terrace that surrounds the fountain.

The eastern end of the trench revealed a large tree-pit, the fill of which was rich in charcoal indicating that it had been burnt out or struck by lightning. Below the tree-pit, and partially disturbed by the tree root system were two layers of post wall construction levelling, 005 and 023.

Excavation at the western end of this trench revealed the technique employed for the construction of the terrace.

The position of the terrace was initially marked out by the cutting of a trench, 024, which sloped sharply to the west with a gentler slope to the east. This was done to provide an outline for the terrace and to help support the weight of the soil and prevent slippage. Mounded within this cut was the first of the layers making up the terrace, 014. This was a compact clayey soil which contained evidence for a supporting beam, running north-south, which appears to have revetted the slope. This evidence took the form of a beam slot, 020, filled with a dark, charcoal rich soil,

Paths

The evidence for paths around the gardens was found in trenches D, E, F, G, T1, T2 and the Golden Gates. Trench D revealed the remains of a gravel path, 002, that ran from the Western Pavillion around the south-west curve of the balustrade wall up to the Golden Gates. The remains consisted of compacted gravel, the upper surface being brown, below which was a cleaner, yellow gravel.

This path was 2m wide and ran parallel to the balustrade wall, its western edge being some 0.3m from the inner edge of the wall. There was no evidence for drainage of the path at this point.

The area around the Golden Gates was stripped and

Plate ????. This in turn was sealed by another layer of firm clayey soil making up the slope of the terrace.

Still in the eastern part of the garden and to the north of the Flora Fountain trench G was excavated, running east-west across the balustrade wall. This trench revealed little in the way of levelling as it was only excavated to natural against the inner edge of the balustrade wall. This revealed a layer of sand, 018, against the back of the balustrade wall, sealed by a layer of sandstone rich clayey silt, 010.

Trench T1 also revealed details of the construction of the terraces on the north side of the Eastern Par

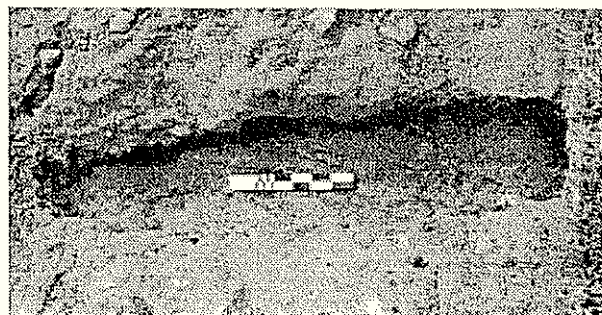


Figure Twelve: Beam slot in terrace, western end of Trench F

terre. This has been described in a previous section. To the north of the house trench H revealed several layers of soil and rubble, deliberately raising the ground level behind the northern balustrade wall. The bank leading down to the road on the north side of the balustrade wall would also appear to have been altered from its natural state at some point. It may have been lowered to the north to allow the east-west driveway, the excess from this being used to steepen the slope leading from the balustrade wall to the driveway.

To the north-west of the house trench L showed the start of dumping to create the slope leading up to the church. The trenches just north of L, J and K, showed no real evidence of landscaping.

cleaned revealing a compacted surface which was interpreted as hardcore for a gravel surface, 003, 005 and 008. A small area of what appeared to be the original gravel surface had survived. This consisted of a small amount of gravel contained within a matrix of yellow sand.

Trench E also revealed the remains of a gravel path, however, this was found outside the balustrade wall in the "ha-ha". Further remains of this path was found in the "ha-ha" to the north of trench E. The remains consisted of concentrated scatters of gravel.

It has been suggested that this path ran from the steps at M-N around the exterior of the balustrade and may

have provided access for workmen to enter the tunnels beneath the Poseidon Fountain without having to walk across the main body of the southern garden. In trench F, east of the Flora fountain, at the top of the terrace evidence for a pathway was found. A strip of gravel, 011, at the western end of the path represented the eastern edge of a pathway around the fountain. This path had been created by making a sharp edged cut, 013, into the top, level surface of the terrace into which the gravel had been placed.

Associated with this path was a drain, to be discussed in the next section.

Trench G contained the remains of a path directly below topsoil. These took the form of a layer of gravel, 012, sealing a cambered, highly compacted hardcore layer, 004, 1.5m wide. Between this path and the balustrade wall a disturbed layer of gravel was found, which has been interpreted as wash from the path.

The paths found in T1 and T2 have been described in the section dealing with the Eastern Parterre, the path found in trench F being part of the same walkway.

This would have run down the northern side of the parterre, around the back of the Flora Fountain and back along the southern side of the parterre.

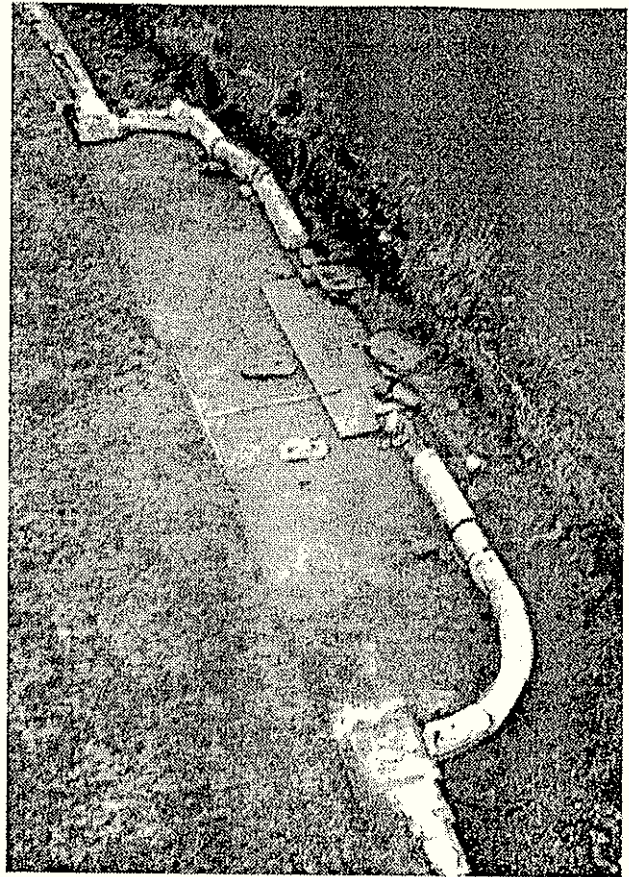


Figure Thirteen: Tower shot of Golden Gate area

Wall Construction and Drainage

These two topics will be discussed together as they are, to an extent, interlinked.

The balustrade wall around the perimeter is, on the whole, well constructed and is in generally good condition despite the vast majority of the balusters and their capping stones having been forcibly removed. The only exception to this is to be found in length F-G where root action has effectively dismantled a section of the wall.

The wall was built by digging a foundation trench, in places cutting into bedrock, Figure Fourteen. Within this cut the brick footings supporting the wall were laid, these footings being slightly wider than the wall itself. The number of courses of bricks constituting the footings varies around the perimeter, depending upon the nature of the foundation cut. Those cutting into bedrock having only one course of brickwork in places. The inner face of the wall is of brick and is concealed by the landscaping of the garden. The outer face is of masonry, consisting of a plinth resting on the footings, normally with two courses of masonry above. Where the difference in levels between the garden and the ha-ha decreases this is reduced to one course of masonry.

This is all capped by a masonry slab with a rounded

nose, which supported the balusters etc. These slabs were joined together using slate ties.

The perimeter wall was divided into bays of balustrading around its entire length. These bays were separated by masonry plinths, the plinths being made of two slabs of masonry tied together. These were then capped with another masonry slab.

The positioning and spacing of missing balusters can be clearly seen on the top of the surviving wall, the mortar bedding having survived. Together with evidence found on surviving but displaced masonry which had fallen or been pushed into the ha-ha, the method used to construct the balustrading was discovered.

After the construction of the wall, the plinths dividing the bays would have been built, the end baluster pieces being put into position against them. Balusters would then have been placed along the length of the bay to correspond with the joints of the top rail, these balusters being mortared into position. Molten lead was then poured into holes where the rails joined, filling the specifically carved grooves at the end of each rail. When cooled this would have resulted in an extremely strong and yet slightly flexible joint. The remaining balusters would then have

been mortared into position.

There was evidence around much of the perimeter for the re-use of stone within the fabric of the wall, some possibly being derived from surplus material from the works on the house.

The most unusual feature exhibited in the construction of the wall is the system of slots and grilles which are built into it, Figure Fifteen.

These slots are found at regular intervals around the perimeter and paired with each slot is a cast iron grille. These grilles are located at the base of the outside wall face, being built into the masonry plinth at historic 'ha-ha' ground level.

Initially it was thought that these features were part of the drainage system for the garden and paths.

What was thought to happen was that surplus water inside the garden would be drained away via the rec

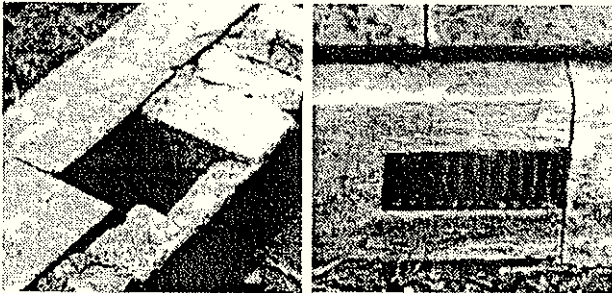


Figure Thirteen: Left; Slot in wall top, Right; Grille at base of outer wall face

tangular slots and grilles into the "ha-ha".

Unfortunately there were several flaws in this ingenious explanation of the garden drainage. For the slots to be able to drain water away the garden and paths would have to have become heavily waterlogged before any surface water would have been at a high enough level to actually drain away in the suggested fashion. Also a constant flow of water through the interior of the wall would have caused severe damage to the structure which would have undoubtedly have led to its eventual destruction.

The evidence for the true method of drainage for the gardens and paths was revealed in trenches B, C, E, F, G and T3.

At the bottom of trench B, against the base of the wall inside the garden, several lengths of circular ceramic drain were found in situ, O11. These ran east-west and disappeared into the section on either side of the cut, Figure Sixteen.

In trench C two separate drains were found. The first was a vertical U shaped drain mortared to the inner surface of the balustrade wall, Figure Seventeen, which ran down to the base of the wall, at which point there was a hole in the wall into which the drain ran. On the outside of the wall, in the "ha-ha", there was no continuation of this drain. However, there were several lengths of U shaped drain which were

inverted and ran at an angle to wards the south west. It may be that these lengths of drain originally joined with the vertical pipe, via the wall, and have since been disturbed.

Trench E, and the "ha-ha" from J to L, provided the best surviving evidence for the method of drainage employed throughout the site.

As in trench C, trench E revealed another vertical U shaped drain pipe mortared to the inner wall face, Figure Eighteen. Again this passed through the base of the wall, going east out into the "ha-ha", where it ran into a junction box. Out of this junction box, going north and south, was a further run of drain, parallel to the balustrade wall.

This drain continued north to the corner K, where it turned and followed the balustrade wall east, Figure Nineteen.

In trench F, at its western end by the eastern edge of the gravel path, there was found another U shaped ceramic drain. This would have been part of a system which drained the pathway around the Flora Fountain.

At the eastern end of the trench, on the outside of the balustrade wall, was found another length of U shaped drain. This was positioned within a trench cut into sandstone bedrock and ran parallel with the balustrade wall. There was no evidence at this point of a vertical drain pipe inside the balustrade leading through the wall to this pipe, although it has to be assumed that somewhere along the curved length of the balustrade wall around Flora there should be a couple of vertical pipes.

Evidence for a vertical pipe was found against the wall in trench G. This took the form of an almost vertical cut, O21, which had a quite compact fill but which clearly represented the position of a since removed vertical pipe, Figure Twenty. This pipe would have fed into the run of pipe found on the outside of the balustrade wall at this point, which is probably a continuation of the pipe found on the outside of the balustrade in trench F.

Having discovered the drainage system for the garden the purpose of the slots and grilles built into the wall remained a mystery.

By using a digger with particularly skinny arms it was possible to determine that what had been presumed to be a passageway from the slots to the grilles was in fact a void in the centre of the wall which stretched in both directions as far as could be reached. This showed that the wall itself was, in effect, hollow, Figure Twenty One. Unfortunately it was not possible to see if the void continued from bay to bay around the perimeter, although when the damaged stretch in F-G is rebuilt this may be revealed.

Confirmation of this curious construction was pos-

sible just south of the eastern pavillion. An area was excavated here to determine the nature of the original surface within the garden. This also revealed the back of the balustrade wall which had suffered some damage, resulting in part of the brickwork being lost allowing the void to be seen.

Excavation throughout the area of the gardens and within the 'ha-ha' have therefore revealed a complex drainage system which was laid when the Nesfield gardens were created.

This was designed to keep the pathways and interior of the garden well drained, not just to prevent waterlogging, but also to protect the balustrade wall. For the entirety of the perimeter the levels within the garden are higher than outside the wall. This would inevitably lead to water attacking the brickwork construction of the back of the wall, the drainage system helping to prevent this.

The nature of the wall construction highlights the concern for the sustained integrity of the structure. The system of slots, grilles and void allowing for the

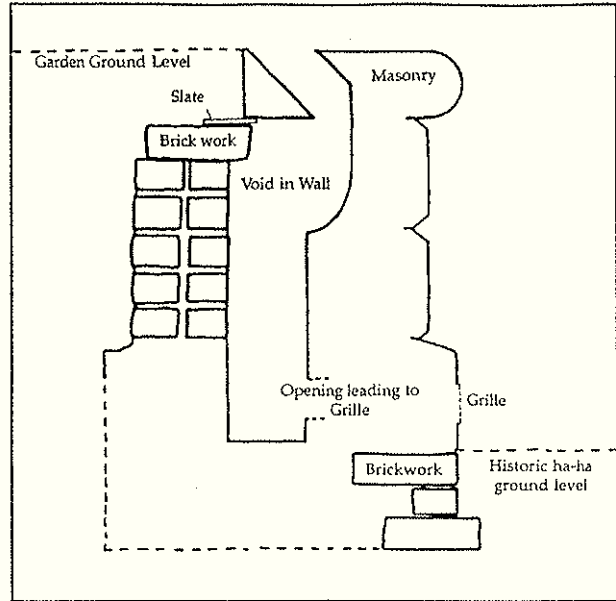


Figure Twenty One: Presumed cross-section through wall structure, not to scale

ventilation of the wall interior and helping to prevent any damage caused by the ingress of moisture.

Other Features

Clearance Works around the Perimeter

By far the largest task to be carried out during the excavations was the clearance of the 'ha-ha' and the top of the balustrade wall. This was to be carried out to allow the planning of the top of the wall and a photographic record of the outer face of the wall to be made.

A large amount of soil from the surrounding fields had been washed down against the outer face of the perimeter wall, particularly to the south and west. Elsewhere there were large amounts of undergrowth to be cleared.

Buried within the wash and hidden within undergrowth there were substantial amounts of the balustrade structure which had fallen or been pushed into the 'ha-ha'.

The task required the 'ha-ha' to be cleared by hand, mainly to ensure that any surviving pieces of the balustrade that could be re-used would be retrieved un-

damaged. Clearance was to be taken down to historic 'ha-ha' ground level, just below grille level, around the entire perimeter. This clearance also had to ensure that there was sufficient room to allow the photography of the outer wall face to be carried out. The entire excavating team spent three hours a day for the first six weeks removing the soil from the 'ha-ha' and clearing the top of the wall.

Any masonry retrieved was numbered according to the length of balustrade where it was found and the bay number within this length, resulting in a unique reference number such as F-G/1-25. This number indicates that this stone would have been the 25th retrieved from bay one in balustrade length F-G. Masonry which could be moved by hand was taken from the site, drawn and put into storage. The larger pieces were left on site, after having been removed from the 'ha-ha' by JCB, to be removed to storage at a later date.

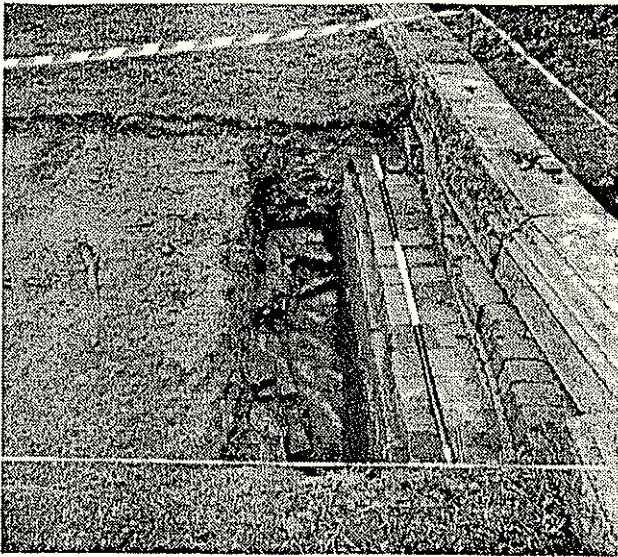


Figure Fourteen: Foundation cut into bedrock, Trench D



Figure Twenty: Hole showing position of removed vertical pipe in Trench G



Figure Sixteen: East-West drain in Trench B



Figure Seventeen: Top of vertical drain in Trench C

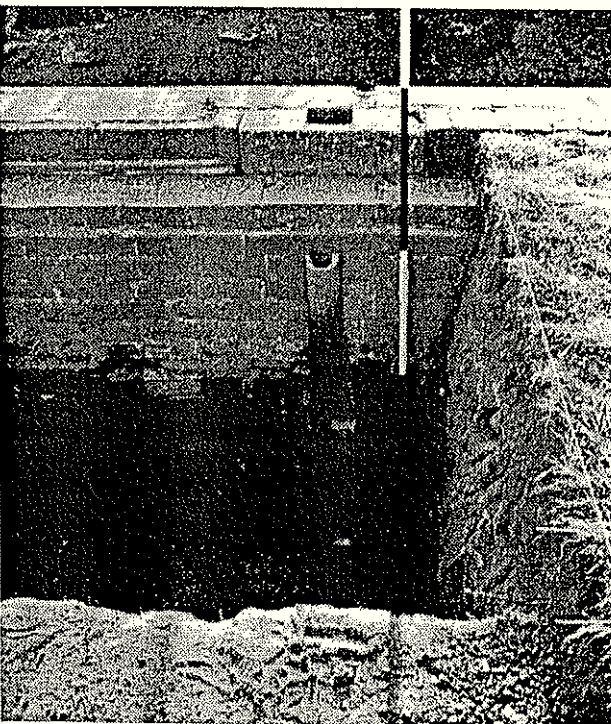


Figure Eighteen: Vertical drain pipe in Trench E

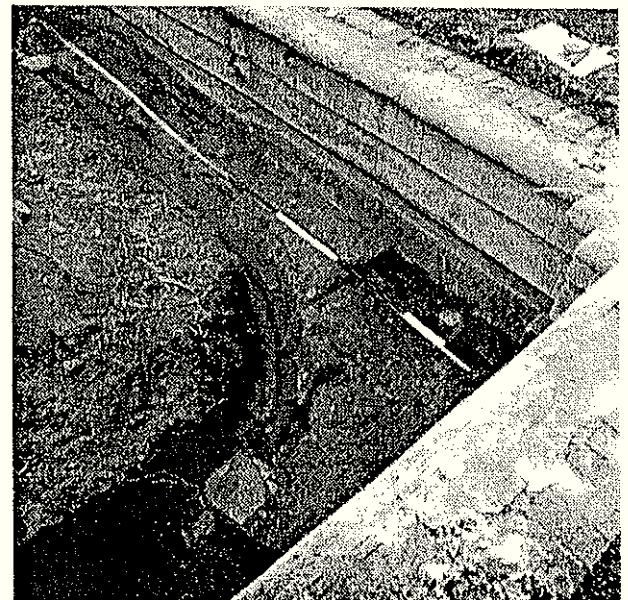


Figure Nineteen: Drain turning corner at K

Recording of the Balustrade

The wall top was planned by hand over a period of nine weeks, this included the top of the viewing platform to the north of the main entrance. The purpose of this was to provide a record of the condition of the wall top in its current state, this record then being available to help with the reconstruction process. It was drawn at 1:20, these field plans being mounted on A1 paper, copies of which have been given to E.H. as working drawings. These plans are now in the process of being inked for archive purposes.

The outer face of the balustrade wall had to be photographed along its entire length with the eventual aim being to produce a series of photographs which could be joined together, creating a mosaic elevation of the outer face of the wall.

To achieve this a medium format camera, a Hasselblad, was used. This was mounted upon a specially designed plate which could be levelled and

squared to the plane of the wall. The wall itself had targets attached to it which, when overlapping photographs were taken, would allow adjacent images to be joined together accurately.

The photographic process was quite a difficult one in some areas as there was little room for manoeuvre within the cleared 'ha-ha', mainly due to the proximity of the fencing surrounding the adjacent farmland. This was particularly true from length A-B to P-Q. The process of joining the photographs was not carried out in the darkroom, matching and pasting these photographs in such a fashion would have been almost impossible by hand.

Instead the pasting process was carried using a computer and scanner. The negatives were scanned at 600 dpi, then using a software package called Photoshop the images were adjusted and joined together. The completed lengths of bay were then printed out at 1:20.

