

Havant Thicket Reservoir

Historic Interpretation Plan

Main Reservoir Works

08/08/24 | P01

Document Reference : HTR-FUW-RZ-CL-PL-W-1500





Version Control Register

Version	Date	Author	Reviewed By	Approved By	Notes
Draft	20/05/2024	James Hanson	Geraint Lloyd	Geraint Lloyd	
P01	17/07/2024	James Hanson	Geraint Lloyd	Geraint Lloyd	

Revisions Made

Section	Details

Historic Interpretation Plan

Contents

1. Introduction & Aims	5
2. Site Details.....	6
3. Scope of Construction Activities.....	7
3.1 Scope.....	7
4. Programme and Sequence of Works	8
4.1 Sequence	8
5. History of Reservoir Site.....	9
5.1 Historical Background	9
6. Pre-Construction Condition of the Site	11
6.1 Investigation of The Avenue	11
6.2 Investigation of Canning's Monument	11
6.2.1 The location of Canning's Monument, originally a 50' obelisk with plinth, was marked out during a field survey in March 2023.....	11
6.2.2 During subsequent soil stripping in the area in August 2023, a watching brief undertaken by Simon Walton and ECUS archaeology identified evidence of the Plinth along with a large debris field to the southwest of the monument.....	11
7. Proposed Work to Integrate the Reservoir with The Avenue.....	12
7.1 The Appraisal of The Historic Environment	12
7.2 Sensitive Design	12
7.3 The Avenue staircase	12
7.4 Impacts.....	13
8. Interpretation Board.....	14
Appendices –.....	16
Appendix A – Drawings	17
Appendix B – Timeline for Implementation.....	18
Appendix C – Excavation Photo's.....	19
Appendix D – Written Scheme of Investigation for– Canning's Monument.....	21
Appendix E – Level 3 Earthwork Survey of The Avenue.....	22

1. Introduction & Aims

- a) Historic Interpretation Plan has been prepared by Future Water MJJV for the works at Havant Thicket Reservoir. The plan outlines the strategy for discharging planning Condition 25 by proposing a mechanism to interpret the role of The Avenue in the understanding of value of the Leigh Park RPG and Sir George Staunton Conservation Area in order to offset the harm caused by its partial removal (this meets the requirements of Condition 25 i.)
 - Condition 25 ii ,recording of The Avenue prior to truncation is recoded in Level 3 Earthwork Survey of The Avenue, Leigh Park (Staunton Country Park) HTR-FUW-SU-AV-SU-W-0001 – See Appendix E
 - Condition 25 iii, Drawings detailing the a detailed Scheme of Soft and Hard Landscape can be found in Appendix B
 - Condition 25 iv - timetable for implementation can be found in Appendix B
- b) This plan summarises the pre-construction condition, role and historic importance of The Avenue and details how this is conveyed to the new reservoir, post construction (this meets the requirements of Condition 25 ii).
- c) The designs have been developed and informed alongside engagement with Historic England, the Local Authority Heritage Manager and the Hampshire County Council Archaeologist.

2. Site Details

- a) The site is located to the north of Havant in Hampshire
- b) To the north, the site is bounded by a mixture of private land and forestry land owned by Forestry England
- c) To the east, the site is bounded by forestry land and the B2149
- d) To the south, the site is bounded by a mixture of amenity land (Staunton Country Park) and residential properties forming part of the Leigh Park estate.
- e) To the west, the site is bounded by further residential properties on Swanmore Road and amenity land made up of heath and wooded land.

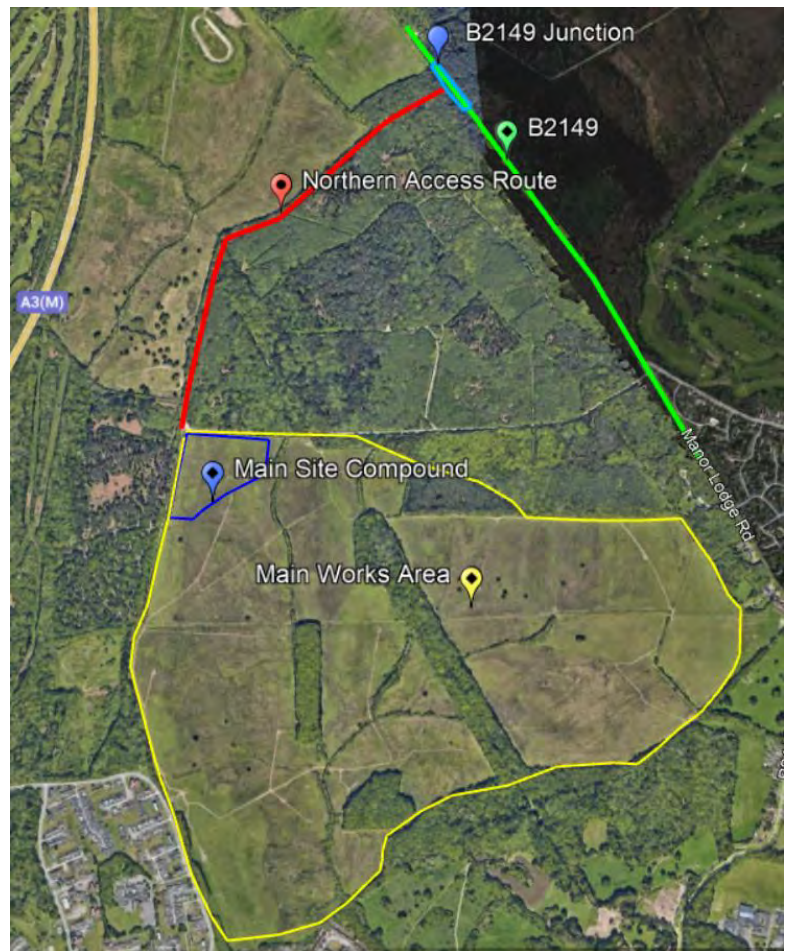


Fig 1. Site location

3. Scope of Construction Activities

3.1 Scope

The scope of the works to be undertaken during the main reservoir construction phase is as follows:

- Construction of new access road into the site from the new B2149 junction, henceforth referred to as the Northern Access Route (NAR)
- Establishment of site compound in north west corner of the site
- Construction of new junction onto Swanmore Road to connect the Southern Access Route with the existing highway network
- Construction of new earth embankments
- Construction of new control structures
- Installation of MEICA and associated fit out
- Construction of new access roads and footpaths
- Raising of existing Forestry England track & construction of 2nr new culverts (to allow new top water level of the reservoir to span the track without being submerged).
- Hard and soft landscaping – including the construction of The Avenue Staircase and Viewing Platform

4. Programme and Sequence of Works

4.1 Sequence

4.1.1 The construction activities listed in section 3 have been packaged into delivery phases. These phases and timings are captured in the Contract Programme as well as the Construction Method Statement (HTR-FUW-RZ-RE-MS-W-0505) and the Phasing Plan (HTR-FUW-RZ-RE-DP-W-0507). The sequence of works are generally as per the below summary:

Timeline	Construction activities
2024	Wetlands Earthworks & structures Culvert – Works Commence
2025	Main Embankment Earthworks Reservoir Pipe Culvert & Valve shaft Control House – Works Commence Southern Access Road
2026	Main Embankment Earthworks Control House Hard Landscaping
2027	Main Embankment Earthworks
2028	Main Embankment Earthworks Hard Landscaping
2029	Wet Commissioning Hard Landscaping Soft Landscaping
2030	Wet Commissioning Soft Landscaping Forestry England track raising & culverts
2031	Wet Commissioning

Fig 2. Sequence of Works

5. History of Reservoir Site

5.1 Historical Background

5.1.1 The Site was located within the medieval Forest of Bere, although it is unclear as to whether or not it was incorporated into the Forest boundaries or lay just outside of it. Havant Chase (HER 34198), the Bishop of Winchester's hunting grounds within the Forest of Bere, is recorded as having included an area known as 'Havant Thicket', suggesting that at least this part of the Site may have been within the Royal Forest.

5.1.2 The Forest of Bere continued to be used as a hunting ground into the post-medieval period. The most noticeable change to the landscape was the creation of Leigh Park (NHLE 1000112) by Sir George Staunton, which is now a Grade II* Registered Park and Garden (RPG). The estate was bought in 1820 by Sir George Staunton, a great authority on China and friend of Sir Joseph Banks. Sir George greatly extended the existing house and developed and planted the gardens around it, incorporating many new introductions from China. He also created further pleasure grounds to the north, which he embellished with a lake, follies, and garden buildings. The Tithe map of 1842 shows Staunton's development of Leigh Park, with the Site depicted as open land with scattered trees of Havant Thicket.

5.1.3 Following his death in 1859, the estate was bought in 1861 by William Stone who built a new mansion overlooking the lake, demolishing Sir George's house over a period of some fourteen years. The creation of the Upper Lake and a new entrance drive from the north (The Avenue) are attributed to Stone:

Clearly shown on the OS 6" first edition of 1870 (fig 2) it was also mentioned in Stone's 1874 sales particulars (Rushworth et al., 1874) where it was described as 'another lake with waterfall and bathing house' (Fig 3). (Walton, 2024)



Fig 2: Map detail (Ordnance Survey, 1870)
 al., 1874)

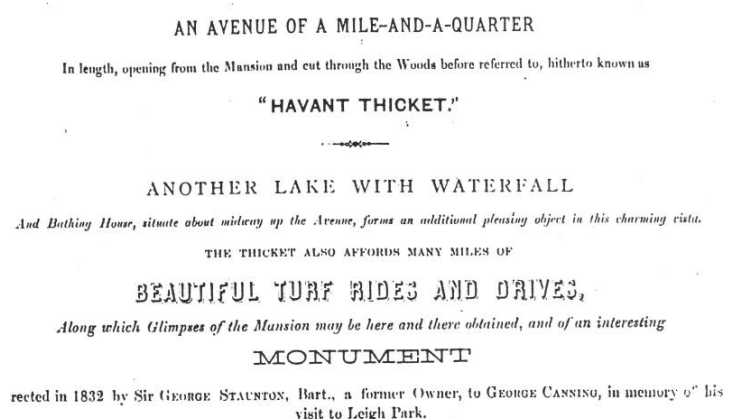


Fig 3: 1874 Sales Particulars (Rushworth et

Further Ordnance Survey mapping shows the location of The Avenue & the Upper Lake fully formed in the 1890s, by which time the estate had been sold in 1874 to Major General Sir

Frederick Wellington Fitzwygram. The estate then passed to his son, Frederick Lofthouse Fitzwygram in 1904

5.1.4 The 1895 map (Appendix E, Figure 4) shows the alignment of The Avenue being disrupted by the creation of the Upper Lake with a sluice recorded near the centre of the dam. A small island is recorded on the eastern edge of the lake. Near the southeast edge of the lake a small building is recorded as a Bathing House. A footpath leads from the original alignment of The Avenue around the eastern edge of the lake before re-joining the routeway to the north.

5.1.5 There are no changes recorded on the 1909 map although, by the 1932 map, the sluice had been moved to the southeast corner of the dam. By 1972, a new sluice and weir had been created in the centre of the dam slightly to the east of the original sluice. By the time of this map the island on the eastern edge and the Bathing House are no longer marked upon the map.

6. Pre-Construction Condition of the Site

6.1 Investigation of The Avenue

6.1.1 A Level 3 survey of The Avenue was undertaken to record the condition of The Avenue prior to its truncation. The report of this survey can be found in **Appendix E**.

6.1.2 During topsoil removal, watching briefs were undertaken to identify any evidence of the Bathing House and Boating House. No obvious remains were observed possibly indicating that they had either been removed previously or were made of materials unlikely to survive

6.2 Investigation of Canning's Monument

6.2.1 The location of Canning's Monument, originally a 50' obelisk with plinth, was marked out during a field survey in March 2023

6.2.2 During subsequent soil stripping in the area in August 2023, a watching brief undertaken by Simon Walton and ECUS archaeology identified evidence of the Plinth along with a large debris field to the southwest of the monument.

6.2.3 The excavation of Canning's Monument was undertaken on the week of 9th October 2023. This work was in tandem with Simon Walton and a group of volunteers from Staunton County Park supported by ECUS archaeology. The excavation showed that the monument was thoroughly demolished, and the majority of the rubble was pushed to the southwest, with only some of the plinth walls and obelisk foundation remaining in situ (see plan below). These foundations were surveyed and photographed, whilst the rubble filled hole was excavated with a excavator and Simon Walton hand-picked architectural pieces of the monument to study further and possibly display for an exhibit.

6.2.4 Written Scheme of investigation (WSI) for Cannings Monument can be found in **Appendix D**.



Figure 3. Survey of remnants of Canning's Monument

7. Proposed Work to Integrate the Reservoir with The Avenue

7.1 The Appraisal of The Historic Environment

7.1.1 Appraisal of the historic environment within the Scheme has been undertaken by means of a desk-based study of the historic environment, including an assessment of significance of heritage assets within study areas defined for designated and non-designated heritage assets.

7.1.2 A Statement of Heritage Significance for the Grade II* Registered Park and Garden (RPG) at Leigh Park and the George Staunton Conservation Area was prepared or submitted as part of the planning application. This examined the significance (value) of the two assets, including both designated and non-designated assets within their boundaries, to provide an overview of the heritage significance of the Registered Park and Garden (RPG) and Conservation Area and evaluate how the Scheme would impact the ability of the assets to express their heritage significance.

7.1.3 An assessment of aerial photography completed for an earlier phase of the Scheme, which aids in the identification of potential archaeological remains within the Site. These documents provide the baseline for the assessment of impacts to the historic environment, which are summarised in the Environmental Statement. The Scheme would remove part of the Grade II* RPG at Leigh Park, as well as a portion of the George Staunton Conservation Area. The removal of a portion of The Avenue landscape feature is required for the construction of the embankment and reservoir. Part of the George Staunton Conservation Area (an area of open space near High Thicket Lawn) is required for the construction of the embankment. No listed buildings or built heritage contributing to the Conservation Area would be removed.

7.2 Sensitive Design

7.2.1 The Statement of Heritage Significance for the Grade II* RPG and George Staunton Conservation Area evaluated the significance of these assets in terms of their ability to contribute to their historic, aesthetic, archaeological, and communal values. The assessment concluded that the removal of The Avenue would have an impact on the significance of the RPG and Conservation Area, however, that impact would not result in substantial harm to their significance in that the associated values would remain intact and readily discernible.

7.3 The Avenue staircase

7.3.1 The fundamental design for the reservoir reflects the history of the landscape and pays tribute to the 'lost' part of The Avenue. A staircase leading from Staunton Country Park to the top of the embankment is seen as a key opportunity to celebrate the interface between the reservoir and the RPG; visually, providing a focal point at the end of The Avenue. The sunken tiered staircase precession will split at the top to offer 360 degree look out, with views across the water to the visitor center and wetlands, as well as looking back above the tree line of The Avenue. The grassed tiered slopes reflect the historic alignment of The Avenue and provide relaxation spots on the south facing slopes. A formal hedgerow will line the steps to offer a sense of grandeur and to reflect the historic design of The Avenue as a woodland

Historic Interpretation Plan

ride. The sunken steps do not detract from the rural setting and will utilise local materials, flint cladding on the internal walls, compacted gravel on the landings and limestone steps to signify the importance.

7.3.2 The viewpoint from the top of the staircase provides an opportunity to incorporate public art reflecting the historic landscape associated with the RPG, connecting The Avenue with the Grade II Listed Mansion Terrace within the RPG and to the aspects of The Avenue that will be lost to the Scheme, including Upper Lake.

7.3.3 While the inclusion of the open space north of Thicket Lawn into the embankment of the Reservoir would not result in substantial harm to the Conservation Area, there would be a less- than-substantial level of harm at a relatively high degree. The outline design for the control house is in line with the guidance in the Sir George Staunton Conservation Area Character Appraisal and aims to ensure the building is in keeping with the character and appearance of the Conservation Area. Detailed design of the building will be submitted to the HBC/EHDC Conservation Officer as part of a Reserved Matters application to allow for continued consultation on appropriate designs. The communal value of the open space within the Conservation Area is of historic significance, public access being a defining character of the property during the ownerships of both George Staunton and William Stone. It is expected that, while this access will be temporarily disrupted during construction of the embankment and reservoir, it will be re-established and continue during the operation of the Scheme.

7.3.4 We explored making parts of the embankment slightly steeper, to reduce the amount of land we need to build the embankment and reduce the number of trees we need to remove (see Section 4). The outside slope is predominantly 1:7 with local variations to 1:5 close to Round Wood and The Avenue woodland. The variation in slope gradient and planting proposed will also give the embankment a more natural appearance in keeping with Staunton Country Park.

7.4 Impacts

7.4.1 Overall, the Scheme will have limited impacts to the historic landscape. The historically significant views within the RPG and Conservation Area will be preserved and where impacts are had, sensitive design and opportunities for interpretation and enhancement will maintain the significant connection between the historic and current landscapes.

8. Interpretation Board

8.1 Purpose

8.1.1 To provide a mechanism to interpret the role of the Avenue in the understanding of Leigh Park RPG and Sir George Staunton Country Park, it is proposed to provide a Historical Interpretation Board to give visitors to the reservoir information on the historic significance of the area and some background of Staunton Park and its features that have been developed as part of the reservoir construction. The board will outline how features from historical and existing park have been incorporated into the design philosophy of the reservoir. Alongside historic information on the area, a map showing the location of current and historic features will be included as well as details on the reservoir function and construction.



Figure 4. Example interpretation board

8.2 Location

8.2.1 Figure 5 shows proposed location of the interpretation board. The location provided at the viewing platform, would offer visitors a guide to the views that are in front of them and what historical features can be seen from the vantage point.

8.2.2 It is considered that the location on the viewing platform provides an ideal opportunity to view the historical features from a raised vantage point and is therefore the preferred location of the interpretation board. The raised viewing position at the viewing platform, along with a restoration of the line of the ride, would allow the visitor to look back into the park along an original vista of Staunton.

Historic Interpretation Plan

8.2.3 Views to the East from the proposed position would look towards the location of the Cannings Monument. Being 50' tall and standing on a ridge originating at the Chinese bridge offers opportunities for interpretation and display.

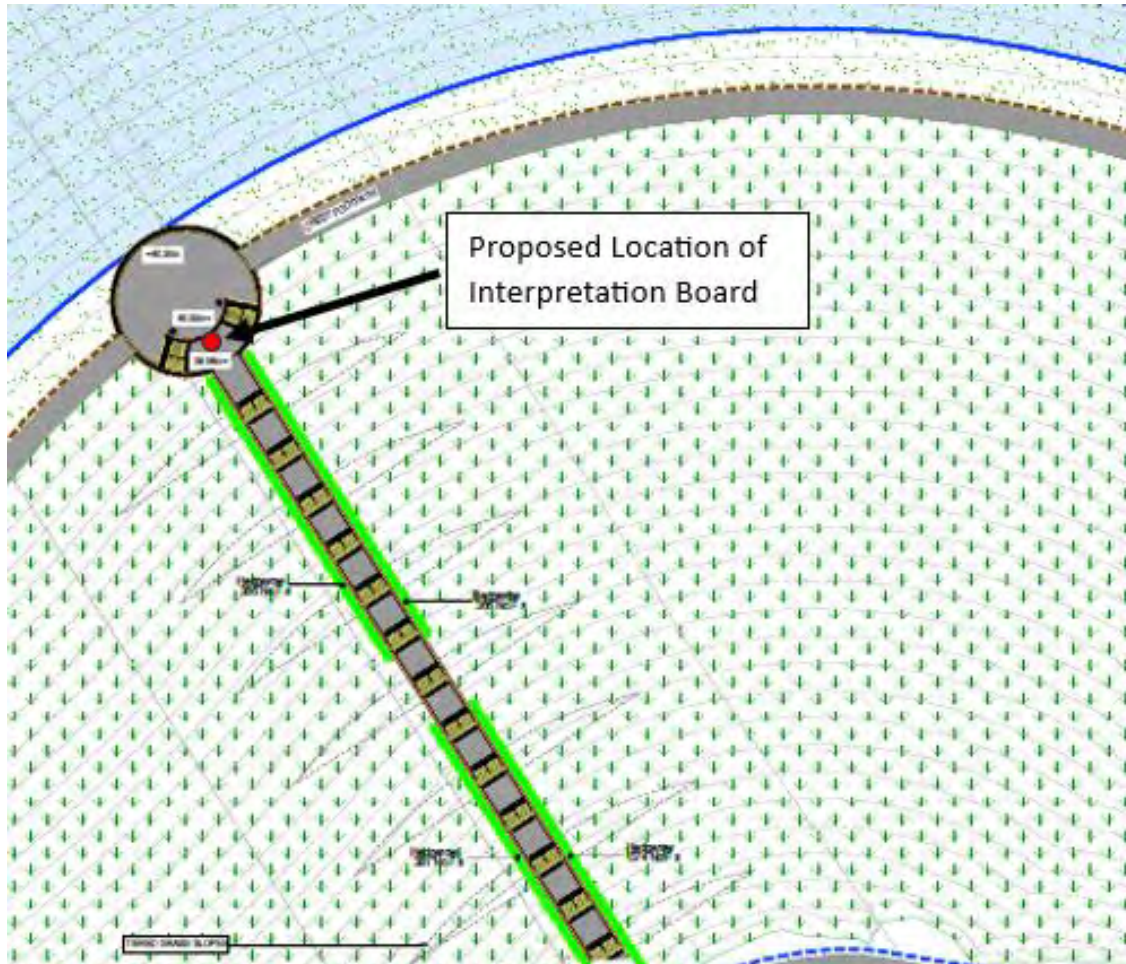


Figure 5. Proposed locations for interpretation board

Appendices –

Appendix A – Drawings

OUTLINE SPECIFICATION

SOFTWORKS
GENERAL

ALL OPERATIONS WILL BE CARRIED OUT BY A COMPETENT AND QUALIFIED LANDSCAPE CONTRACTOR IN LINE WITH BEST PRACTICE METHODS SUITABLE FOR THE WORKS AS OUTLINED BELOW:

IN ADDITIONAL TO THOSE STANDARDS LISTED WITHIN THE SPECIFICATION, ALL WORKS TO CONFORM TO THE FOLLOWING BRITISH STANDARDS:-
BS 3882 - SPECIFICATION FOR TOPSOIL
BS 3969 - RECOMMENDATIONS FOR TURF FOR GENERAL PURPOSES
BS 3969 - RECOMMENDATIONS FOR TREE WORK
BS 4428:1989 - GENERAL LANDSCAPE OPERATIONS EXCLUDING HARD SURFACES
BS 5837 - TREES IN RELATION TO CONSTRUCTION - RECOMMENDATIONS

ALL PLANTING SHALL COMPLY WITH THE SPECIFICATION AND THE RELEVANT PARTS OF BS 3936 AND SHALL BE THE HEIGHT, DENSITY, SPREAD AS DETAILED.
DOCUMENTARY EVIDENCE OF THE USE OF PEAT FREE SOIL MATERIALS MUST BE SUPPLIED FROM NURSERY GROWERS AND SUPPLIERS FOR PLANTS THAT ARE NOT SOIL GROWN. ORGANIC COMPOSTED MATERIAL MUST BE GRADED 25MM AND FREE FROM BIODEGRADABLE MATERIAL.

VEGETATION PROTECTION

ALL EXISTING VEGETATION TO BE RETAINED IN LINE WITH THE RECOMMENDATIONS OF BS 5837. THE POSITION OF THE FENCING WILL BE AS SET OUT WITH SUBMITTED ARBORICULTURAL ASSESSMENT AND METHOD STATEMENT AND REMAIN IN PLACE UNTIL ALL SITE WORKS ARE COMPLETE.

SITE PREPARATION

SOILS
EXISTING SOIL TO BE UTILISED ON SITE WHERE POSSIBLE AND SHOULD BE TO THE FOLLOWING MINIMUM DEPTHS:-
TREES - 1M (400MM TOPSOIL)
SHRUBS & ORNAMENTAL PLANTING - 600MM (300MM TOPSOIL)
GRASS AREA - 300MM (150MM TOPSOIL)
WILDFLOWER GRASSLAND MEADOW AREA- 150MM TOPSOIL/ SUBSOIL 50:50 MIXTURE TO PROVIDE A LOW FERTILITY SEED BED.

MANAGEMENT OF SOILS WITHIN THE SITE, MAINTAINING THE QUALITY OF THE DIFFERENT SOIL RESOURCE AND SUITABILITY FOR RE-USE WITHIN THE PROJECT IS COVERED WITHIN THE SOIL MANAGEMENT PLAN DOC REF:HTR-FUW-P2-RE-RM-W-0006. AS SET OUT WITH PARA 1.0.4 & 1.0.5. SOIL RE-USE REQUIREMENTS AND RESOURCE ARE COVERED IN SECTION 5 AND TABLE 2. PROCEDURES FOR STRIPPING, STORING AND REPLACING SOILS SEE SECTION 6.

THE TOP 300MM LAYER OF COMPACTED TOPSOIL IN PLANTING AREA SHALL BE BROKEN UP PRIOR TO PLANTING. NO DIGGING OR SOIL CULTIVATION SHALL BE CARRIED OUT WITHIN THE ROOT SPREAD OF TREES AND SHRUBS TO BE RETAINED.

ALL PLANTS IN CONTAINERS WILL BE WATERED PRIOR TO PLANTING.

ALL PLANTING AREAS WILL BE HAND STONE PICKED BEFORE PLANTING COMMENCES.

STORAGE OF SOIL

SITE WON TOPSOIL WILL BE STORED IN LOCATIONS AS AGREED BY THE SITE MANAGER AND IN LINE WITH THE SOIL MANAGEMENT PLAN DOC REF: HTR-FUW-P2-RE-RM-W-0006

FORMAL HEDGEROW PLANTING

PLANTED AT 6 PER LINEAR METRE, 300MM CENTRES AT 500MM ROWS APART. TRANSPLANTS TO INCLUDE SHELTERS, STAKES AND TIES. WEEDS TO BE CONTROLLED USING MULCHED MATS.
FORMAL HEDGEROW TO BE REGULARLY CLIPPED AT THE REQUIRED HEIGHT.

MARGINALS-AQUATIC PLANTING

POSITION MARGINAL PLANTING/ SEEDING ALONG THE BOUNDARY OF THE WETLAND AT WATERS EDGE (BETWEEN 38.5 AND THE 39.5 CONTOUR LEVEL).
PLANTS SHOULD BE PLANTED TO THE SAME DEPTH AS IN THE ORIGINAL CONTAINER.

WATERING

ALL PLANTED AREAS WILL BE WATERED AS APPROPRIATE AFTER PLANTING.

PLANT PROTECTION

CONTRACTOR TO REVIEW THE SITE AND CONTEXT TO INFORM PLANT PROTECTION STRATEGY.
SHELTERS INCLUDED ON ALL HEDGEROW PLANTING.

TIMING OF SEEDING

SEEDING WORK WILL BE CARRIED OUT IN THE APPROPRIATE GROWING SEASON AND WHEN WEATHER CONDITIONS ARE SUITABLE.
SEED MIX IN ACCORDANCE WITH SUPPLIER'S RECOMMENDATION.

PREPARATION FOR SEEDING

THE CONTRACTOR SHALL ENSURE THAT ALL GRASS SEEDED AREAS DEVELOP INTO A HEALTHY, VIGOROUS GRASS SWARD, FREE FROM THE VISIBLE EFFECTS OF PESTS, WEEDS AND DISEASE. THEY SHALL FORM A CLOSELY KNIT, CONTINUOUS GROUND COVER OF EVEN DENSITY, HEIGHT AND COLOUR.

ALL SOILED AREAS WILL BE ROTARY CULTIVATED TO AT LEAST 300MM. STONE PICKED AND PROFILED LEVEL PRIOR TO SEEDING/ TURFING. ANY AREAS WHERE MACHINERY CANNOT GAIN ACCESS WILL BE PREPARED BY HAND. NO DIGGING OR SOIL CULTIVATION SHALL BE CARRIED OUT WITHIN THE ROOT SPREAD OF TREES AND SHRUBS TO BE RETAINED.

MOWING

REGULAR MOWING OF THE AMENITY GRASSLAND AREAS. MOWING ALL OR SOME OF THE MARGINAL AREAS ANNUALLY MAY BE REQUIRED.
ANNUAL HAY / GRASSLAND CUT OF MEADOW HABITAT AREAS, ALLOWING FOR SEEDING BEFORE COLLECTING CUTTINGS.
THE DOWNSLOPE OF THE EMBANKMENT SHALL BE SEEDDED WITH WILDFLOWER AND CUT TO 100MM.

WATERING

ALL GRASS AREAS WILL BE WATERED AS NECESSARY UNTIL ESTABLISHED.

WEED CONTROL

THE USE OF MULCH MATS AND BARK MULCH SHOULD BE CONSIDERED WITH HAND WEEDING DUE TO ECOLOGICAL SENSITIVITY. HERBICIDE USE SUBJECT TO AGREEMENT WITH LANDSCAPE ARCHITECT.

HARDWORKS

ACCESS ROADS

EMBANKMENT CREST TRACK COMPACTED GRAVEL SURFACE (DUST TO 20MM).

RESERVOIR EMBANKMENT

FENCING ALONG THE RESERVOIR SIDE OF THE EMBANKMENT CREST TO HAVE GAPS AT ACCESS POINTS AND VIEWING PLATFORMS.
POST AND RAIL FENCING SHALL BE TIMBER FILLED WITH A MESH OF A SPACING TO PREVENT ACCESS TO THE RESERVOIR, WITH A MINIMUM HEIGHT OF 1.1M.

THE VIEWING AREA

VIEWING AREA TO HAVE A COMPACTED GRAVEL SURFACE (DUST TO 20MM).
1100MM HIGH BALUSTRADE ALONG THE RESERVOIR'S EDGE.
TIMBER POST AND STOCK PROOF FENCE TO BE LOCATED ALONG THE EMBANKMENT CREST TO PREVENT ACCESS TO THE RESERVOIR.
BINS TO BE MADE FROM RECYCLED PLASTIC, 595 X 485 X 485MM SUPPLIED BY NBB RECYCLED FURNITURE OR SIMILAR APPROVED

PLANTING SCHEDULE - EMBANKMENT AREA

NATIVE HEDGEROW:

FAGUS SYLVATICA (COMMON BEECH)

PLANTING SCHEDULE - EMBANKMENT AREA

TREES:

CARPINUS BETULUS (COMMON HORNBEAM)
QUERCUS ROBUR (COMMON OAK)
TILIA X EUROPAEA (COMMON LIME)

NATIVE HEDGEROW:

FAGUS SYLVATICA (COMMON BEECH)

PLANTING BED MIX:

ACHILLEA MILLEFOLIUM (MILFOIL 'PAPRIKA')
CALAMAGROSTIS X ACUTIFLORA 'KARL FOERSTER' (FEATHER REED GRASS)
CORNUS ALBA 'ELEGANTISSIMA' (SILVER DOGWOOD)
MAHONIA AQUIFOLIUM 'APOLLO' (OREGON GRAPE 'APOLLO')
MOLINIA CAERULEA ARUNDINACEA 'POUL PETERSON' (PURPLE MOOR GRASS)
SAMBUCUS NIGRA BLACK LACE (ELDER BLACK LACE)
SANTOLINA CHAMAECYPARISSUS (COTTON LAVENDER)
STIPA TENUISSIMA (MEXICAN FEATHER GRASS)

NATIVE RUSH AND SEDGE PLUGS:

CAREX ACUTIFORMIS (LESSER POND SEDGE)
JUNCUS CONGLOMERATUS (COMPACT RUSH)
JUNCUS EFFUSUS (SOFT RUSH)
PHRAGMITES AUSTRALIS (COMMON REED)

SEEDING:

EMBANKMENT GRASS MIX 'MEADOW MIX' - EM5 MIX
SEE: WWW.EMORSGATE.CO.UK OR SIMILAR

20% WILDFLOWERS -

1.6% ACHILLEA MILLEFOLIUM - YARROW
0.4% AGRIMONIA EUPATORIA - AGRIMONY
0.2% BETONICA OFFICINALIS - BETONY
2.4% CENTAUREA NIGRA - COMMON KNAPWEED
0.2% DACTYLIS CAROTA - WILD CARROT
1.2% GALIUM VERUM - LADY'S BEDSTRAW
0.4% LATHYRUS PRAESENS - MEADOW VETCHLING
1.4% KNAUTIA ARVENSIS - FIELD SCABIOUS
0.1% LEONTODON HISPIDUS - ROUGH HAWKBIT
1.2% LEUCANTHEMUM VULGARE - OXEYE DAISY
0.2% LOTUS CORNICULATUS - BIRDSFOOT TREFOIL
3.4% MALVA MOSCHATA - MUSK MALLOW
3% PLANTAGO LANCEOLATA - RIBWORT PLANTAIN
0.2% PRIMULA VERIS - COWSLIP
0.4% RANUNCULUS ACRIS - MEADOW BUTTERCUP
0.6% RANUNCULUS BULBOSUS - BULBOS BUTTERCUP
1.4% RHINANTHUS MINOR - YELLOW RATTLE
1% RUMEX ACETOSA - COMMON SORREL
0.3% SILENE VULGARIS - BLADDER CAMPION
0.4% VICIA CRACCA - TUFTED VETCH

80% GRASSES -

1.6% ANTHOXANTHUM ODORATUM - SWEET VERNAL-GRASS (W)
8% AGROSTIS CAPILLARIS - COMMON BENT
3.2% BRIZA MEDIA - QUAKING GRASS (W)
56% CYNOSURUS CRISTATUS - CRESTED DOGSTAIL
10.4% FESTUCA RUBRA - RED FESCUE
0.8% TRISTETUM FLAVESCENS - YELLOW OAT-GRASS (W)

SEED IS BEST SOWN IN THE AUTUMN OR SPRING BUT CAN BE SOWN AT OTHER TIMES OF THE YEAR IF THERE IS SUFFICIENT WARMTH AND MOISTURE. THE SEED MUST BE SURFACE SOWN AND CAN BE APPLIED BY MACHINE OR BROADCAST BY HAND. TO GET AN EVEN DISTRIBUTION AND AVOID RUNNING OUT DIVIDE THE SEED INTO TWO OR MORE PARTS AND SOW IN OVERLAPPING SECTIONS. DO NOT INCORPORATE OR COVER THE SEED, BUT FIRM IN WITH A ROLL, OR BY TREADING, TO GIVE GOOD SOIL/SEED CONTACT.
WILDFLOWERS - WETLAND & WATER EDGE
SEE: WWW.BARENBRUG.CO.UK OR SIMILAR

80% GRASSES -

3.5% AGROSTIS CAPILLARIS - BROWNTOP BENT
1.4% ANTHOXANTHUM ODORATUM - SWEET VERNAL-GRASS
1.4% ALOPECURUS PRATENSIS - MEADOW FOXTAIL
12% FESTUCA RUBRA COMMUTATA - RED FESCUE
11.2% CYNOSURUS CRISTATUS - CRESTED DOGSTAIL
5% DESCHAMPSIA CESPITOSA - TUFTED HAIRGRASS
21% FESTUCA RUBRA SPP. LITORALIS - SLENDER CREEPING RED FESCUE
21% FESTUCA BREVIPIILA - HARD FESCUE
3.5% PHLEUM BERTOLONII 'SMALLER CATSTAIL'- SMALL LEAF TIMOTHY

20% WILDFLOWERS -

0.4% ACHILLEA PTARMICA - SNEEZEWORT
1.8% ANGELICA SYLVESTRIS - WILD ANGELICA
0.2% CAREX PENDULA - PENDULOUS SEDGE
1.6% CENTAUREA NIGRA - COMMON KNAPWEED
0.4% EUPATORIUM CANNABINUM - HEMP AGRIMONY
1% FILIPENDULA ULMARIA - MEADOWSWEET
0.6% GEUM RIVALE - WATER AVENS
0.4% HYPERICUM PERFORATUM - SQUARE STEMMED ST JOHN'S WORT
2.8% IRIS PSEUDACORUS - YELLOW IRIS
0.8% JUNCUS EFFUSUS - SOFT RUSH
0.8% JUNCUS INFLEXUS - HARD RUSH
0.6% LOTUS PEDUNCULATUS - GREATER BIRDSFOOT TREFOIL
0.8% LEUCANTHEMUM VULGARE - OXEYE DAISY
0.4% SILENE FLOS-CUCULI - RAGGED ROBIN
0.4% LYCOPUS EUROPAEUS - GYPSYWORT
0.2% LYTHRUM SALICARIA - PURPLE LOOSESTRIPE
1.2% PRUNELLA VULGARIS - SELF HEAL
0.2% PULICARIA DYSENTERICA - FLEABANE
1.6% RANUNCULUS ACRIS - MEADOW BUTTERCUP
2% RHINANTHUS MINOR - YELLOW RATTLE
0.8% SILENE DIOICA - RED CAMPION
0.4% BETONICA OFFICINALIS - BETONY
0.6% VICIA CRACCA - TUFTED VETCH

SOWING TIME

SPRING: MARCH TO MAY
SUMMER: JUNE TO JULY, AVOIDING EXCESSIVELY HOT AND DRY CONDITIONS
LATE SUMMER/AUTUMN: AUGUST TO OCTOBER



Planting Schedule

Formal Hedgerow

Abbreviation	Common Name	Species	Specification	Density	Number of Plants
F s	Common Beech	Fagus sylvatica	1+2: Transplant - seed raised: 3 brks: C	0.3Ct Double Staggered at 0.5m offset	1487
					Total :1487

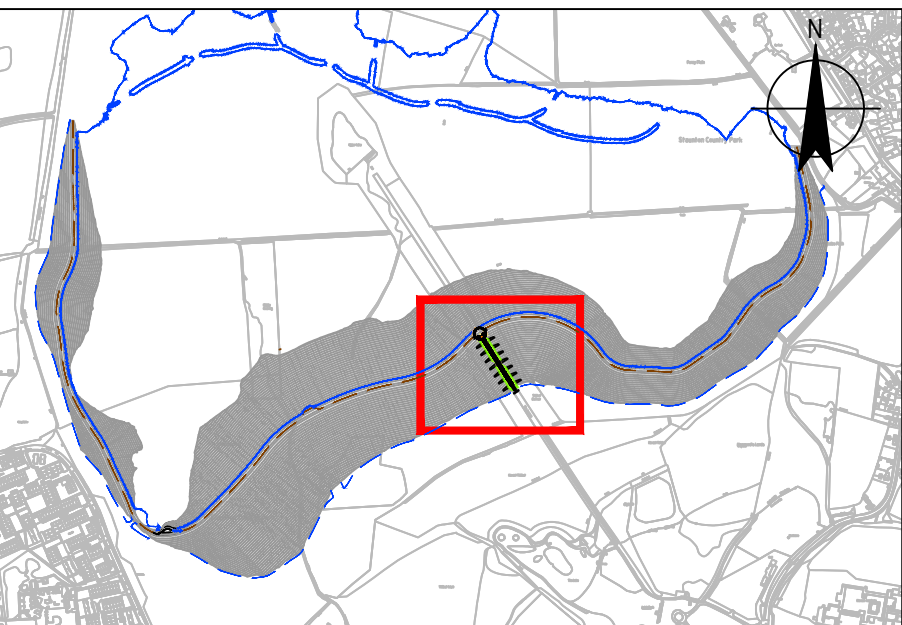
NOTES

- ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE (UNO).
- ALL LEVELS ARE IN METRES TO ORDNANCE DATUM UNO.
- TWL = TOP OF WATER LEVEL

Key

- Existing
- 39.5 contour - top water level for main reservoir
 - Woodland to be retained
 - Access to be retained
- Proposed
- Limestone walls
 - Limestone slab border
 - Limestone steps
 - Tactile paving (limestone)
 - Self binding gravel
 - Tiered grass banks
 - Formal Hedgerow
 - Wildflower Seeding Mix EM5
 - Grassland to be retained
 - +26.0 Levels
 - Wet and Water Edge Mix
 - 1100mm high balustrade with mesh panel
 - Stockproof Fencing
 - Timber Post and Rail Fencing
 - Bins
 - Interpretation sign / panel
 - +40.3 Levels

Atlas - Not to scale



REFERENCE DOCUMENTS AND DRAWINGS

PLEASE REFER TO THE BELOW DRAWINGS:
HTR-GHD-ZZ-ZZ-DR-T-0037 - AVENUE STEPS GENERAL ARRANGEMENT

P02	FOR COMMENT	SWG	SWG	08/08/2024
P01	FOR COMMENT	SWG	SWG	06/08/2024
Rev	Description	Checked	Approved	Date

Author	ST	Drafting Check	ST
Designer	SWG	Design Check	SWG

Telephone: Havant (023) 9249 9888
Fax: Havant (023) 9245 3632
Website: www.portsmouthwater.co.uk
Registered Office: PO Box 8 West Street
Havant Hampshire PO9 1LG
REGISTERED IN ENGLAND No. 2536455



Project No.
12547181

Client PORTSMOUTH WATER

Project HAVANT THICKET RESERVOIR

Status FOR COMMENT

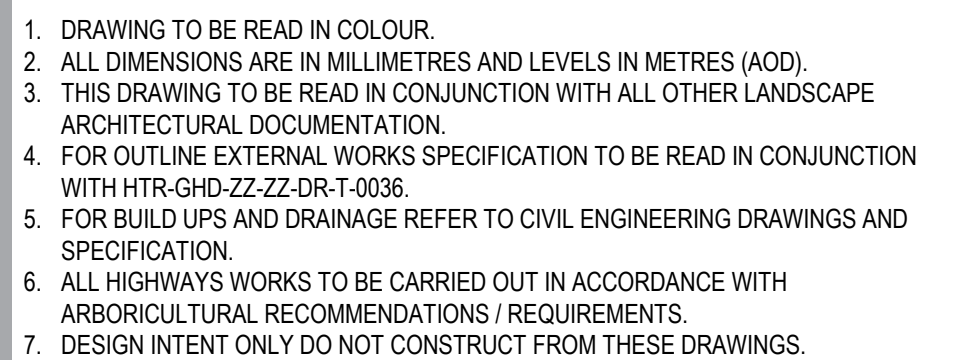
Status Code S3

Drawing Title
MAIN EMBANKMENT
AVENUE STEPS
LANDSCAPE HARDWORKS
AND SOFTWORKS

Size
A1

Drawing No.
HTR-GHD-ZZ-ZZ-DR-T-0036

Rev
P02



Telephone: Havant (023) 9249 9888
Fax: Havant (023) 9245 3632
Website: www.portsmouthwater.co.uk
Registered Office: PO Box 8 West Street
Havant Hampshire PO9 1LG
REGISTERED IN ENGLAND No. 2536455

Rev
P03

Appendix B – Timeline for Implementation

Condition 25 Programme

[illegible]

Appendix C – Excavation Photo's



Cannings Monument Remnants 001 – 2023



Cannings Monument Remnants 002 – 2023

Appendix D – Written Scheme of Investigation for– Canning’s Monument (Monument 42)– Simon Walton

Written Scheme of Investigation for Archaeological Monitoring (WSI) - Activity 23G

Staunton Country Park – Canning’s Monument (Monument 42)

1.1 Introduction

- 1.1.1 In agreement with Hampshire County Council (HCC) Archaeology and historic environment team the Staunton Country Park Community Archaeology & Heritage Group has been set up to research and investigate the archaeology and Heritage of the grade II* registered park and garden.
- 1.1.2 Aiming to investigate the archaeological, architectural, topographical and horticultural heritage in order to support the conservation and enjoyment of the Park’s historic environment, a project outline set out the aims, objectives and approach to be taken over three years. It also identified the need for a gazetteer to help target areas of work and listed an initial 12 principal and 10 supplementary site/areas worth investigation.
- 1.1.3 This WSI, a requisite prior to any activity, outlines the general methods for the archaeological investigation and reporting of Canning’s Monument (Gazetteer monument 42, Project outline; paragraph 6.4.1.11.)

1.2 Site Background

- 1.2.1 The Canning monument was located in Havant Thicket (SU7167409460) and was positioned in the centre of a natural ride originating at the Chinese Bridge (29) and approximately 320 metres North West of it (fig 1,2).



Fig 1: Location of Staunton Country Park and site (Ordnance Survey, 2022)

- 1.2.2 While changes over time affected the nature of the Havant Thicket, the monument having first appeared on the OS 25" first edition (fig 2) of 1865 (Ordnance Survey, 1938) was still present on OS maps of the 1930s (Ordnance Survey, 1938) and 1960s (Ordnance Survey, 1963) . While it was also noted in 2004 that a volunteer remembered its location (Dean, 2004, p. 35), no evidence exists of it on the ground today (Fig 3).



Fig 2: Map detail (Ordnance Survey, 1865) Fig 3: Current area March 2023

- 1.2.3 Apart from being located on various Ordnance Survey maps, Canning's monument is well documented in both written and pictorial terms. Designed by Vulliamy the Obelisk was commenced in August of 1832 (Staunton, 1858) and described as being 50 foot high, inscribed to the memory of Canning and an ornamental termination to a natural avenue in Havant thicket (Staunton, 1836). Is it also pictured in the background of paintings by both Gilbert (Fig 4) and Cotton (Fig 5).



Fig 4: Gilbert (detail)



Fig 5: Cotton (detail)

- 1.2.4 The paintings clearly show that the Obelisk is likely to be similar to examples in other parks both here and abroad. For example the Egyptian obelisk at Kingston Lacy along with Cleopatra's Needle set up beside the Thames in 1878. The nature of it would suggest that the supporting structure would need to be relatively substantial, something the mapping confirms by showing what looks like outer and inner plinth squares measuring circa 6 metres and 3 metres respectively. Therefore while nothing physical exists above ground, it would be surprising if no underground evidence of the plinth and/or its foundations were not present.



Fig 6: Obelisk at Kingston Lacy (National Trust, 2023)

- 1.2.5 Work by Portsmouth Water Company to create the new Thicket Reservoir will mean that the location of the Cannings monument will be lost under the bank of the reservoir.

1.3 Aim

- 1.3.1 Therefore this is an opportunity to investigate what is probably one of Staunton's original features to ascertain the extent and nature of the remains in order to recommend options for representation and/or display. This will be done as a collaboration between Portsmouth Water Company and their representatives, the contracted archaeological team, and, if feasible, the Staunton Country Park community Archaeology & Heritage group lead volunteer.

- 1.3.2 This will lead to the;

- Preparation of an archive of the results leading to post-excavation analysis and publication.
- The appropriate recording of the structure in the HCC Historic Environment Record (HER) and other information systems e.g. OASIS as appropriate.
- Development of a plan for its possible representation within the Reservoir structure.

1.4 Method

- 1.4.1 The key objectives will be to research, investigate and record the structure with a specific view to;

- Ascertaining the full extent and condition of the structure and/or remains.
- Identifying its form, how it was constructed and its probable history.

- 1.4.2 To do this it is expected that initially;



- Systematic removal of the overlying turf and topsoil will take place on and around the probably obelisk location. Using either an area or trench based strategy it is assumed that this will be done by a machine with an on-site archaeologist undertaking a watching brief to monitor any evidence being found.
- Any remains found will then investigated, cleaned and recorded ensuring that the full extent of any remains are identified.

1.4.3 Further work will involve;

- Excavation as appropriate and if needed due to the results from the initial excavation.
- Removal and retention of any building materials as appropriate for reuse and/or display purposes

1.4.4 Should any unexpectedly significant or complex deposits be found then the work will be paused to consider further action in association with Hampshire County Council (HCC) Archaeology and historic environment team.

1.4.5 The following exceptional situations will be dealt with as follows;

- Human burials if discovered will be left in situ and the appropriate authorities notified immediately and licenses obtained should removal be necessary
- Any valuable items such as gold and silver will be recorded in situ and removed to a safe place and reported to the appropriate authorities in line with existing legislation.

1.4.6 All investigations will be undertaken and recorded according to accepted professional standards and in enough detail to allow for further assessment and reporting. This will be those set out by BAJR and other bodies and will include; Site notes, Contextual recording, Plans and sections with nominal levels, and photographic records as appropriate.

1.5 Reporting

1.5.1 Following completion of site works a report will be produced within three months and a copy of report will be lodged with Staunton Country Park, HCC Archaeology and Historic Environment and the Spring Arts and Heritage Centre, Havant. The results will also be loaded into OASIS.

1.5.2 It will contain the minimum of; non-technical summary, introduction, intervention background, results, discussion, conclusion and bibliography. Any specialist reports will also be included where appropriate as appendices.

1.5.3 The site archive and/or copies will be deposited with appropriate bodies but is likely to include; Staunton Country Park, Hampshire Cultural Trust, and the Spring Arts & Heritage centre.

1.6 Health and Safety

1.6.1 The investigation will conform to all relevant health and safety guidelines especially those specific to the site itself. Each person working on site will be informed of the appropriate health and safety guidelines ahead of commencing work on site.

1.6.2 Prior to commencement of work each person will be provided a site specific risk-assessment and/or appraised of said risk assessment and comply with any requirements listed to reduce the risk of any hazards specified.

1.7 Programme



- 1.7.1 The proposed initial works as identified in 1.4.1 will be undertaken at some point between July and October 2023.
- 1.7.2 Fuller exploration will be planned for as appropriate.



Appendix 1: Bibliography

Dean, S. (2004). *Staunton Country Park Historic Study, volume 2* (11373.RO2/REVA; p. 46). Gifford & Partners.

National Trust. (2023, August 4). *Obelisk at Kingston Lacy*. The-Treasures-at-Kingston-Lacy.
<https://www.nationaltrust.org.uk/visit/dorset/kingston-lacy/the-treasures-at-kingston-lacy>

Ordnance Survey,. (1865). *Ordnance Survey 25" plan LXXVI.3* (1st edition) [Map]. Ordnance Survey.

Ordnance Survey,. (1938). *Ordnance Survey 6" plan LXXVI NE (1938)* [Map]. Ordnance Survey.

Ordnance Survey. (1963). *Ordnance Survey 1:10560" plan SU 70 NW (1963)* [Map]. Ordnance Survey.

Staunton, S. G. T. (1836). *Notices of the Leigh Park Estate, near Havant*. Private circulation only.

Staunton, S. G. T. (1858). *Staunton's unpublished Diary*.