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1.1 LANDSCAPE INTRODUCTION

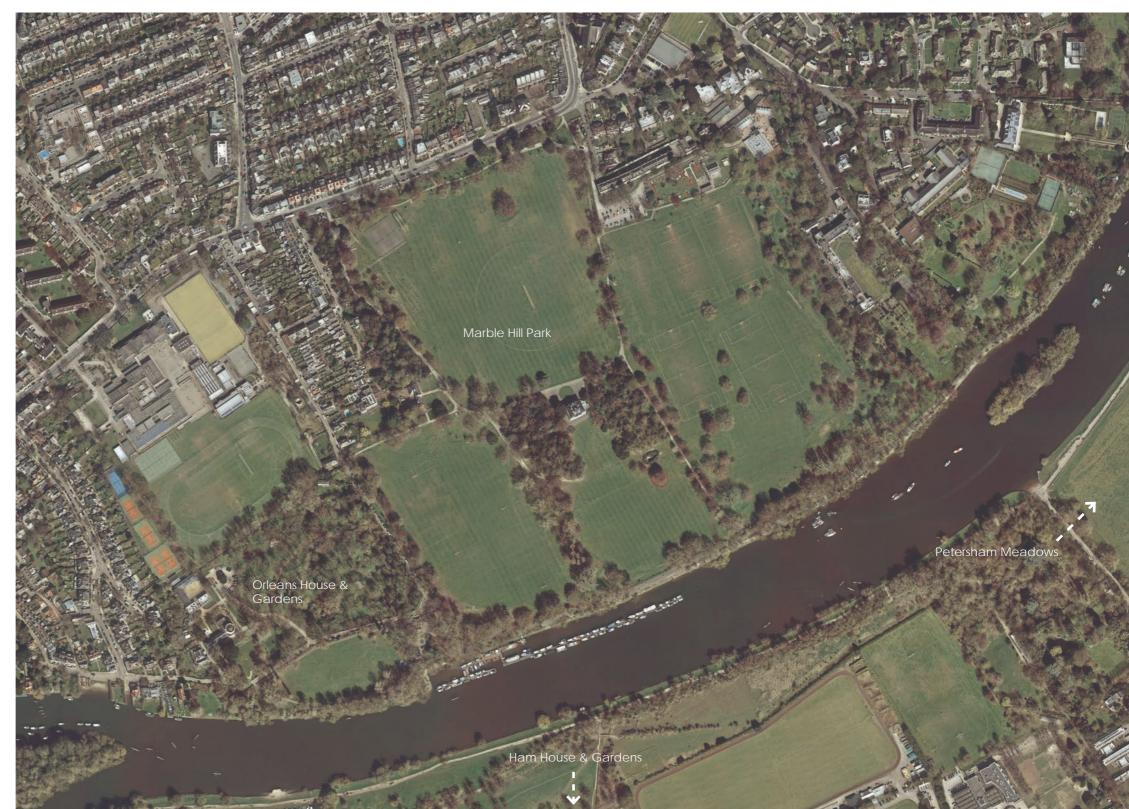
Marble Hill Park is a 26.7 hectare public park, designated Grade II* in the Historic England Register of Historic Parks and Gardens. Within the park sits Marble Hill House, a Grade I listed Neo-Palladian villa built as the residence of Henrietta Howard, Countess of Suffolk during the 18th century. The house and grounds are owned and managed by English Heritage.

Marble Hill Park is located within the East Twickenham area of the London Borough of Richmond upon Thames. Located on the north bank of the River Thames it is one of a string of gardens that collectively form London's Arcadian landscape. Marble Hill Park is part of the Thames Landscape Strategy, Ham Reach and provides some of the formal landscape structure as seen from the view from Richmond Hill, which is the only landscape view in England to be protected by an Act of Parliament.

The public have enjoyed the use of the grounds as a park for over 100 years, following a successful public campaign in 1902 to save the land from development. The park provides an important recreational open space, including sports pitches for hire, used by local residents, schools and sports clubs. Other facilities include a café, public toilets, adventure playground, One O'clock Club and a Heritage Lottery Funded community food production garden.

The aerial view of Marble Hill shows its connection to a series of green spaces along the River Thames, from Richmond Hill in the east to Ham Lands in the south-west. Directly opposite on the south bank of the Thames is Ham House and Gardens and Petersham Meadows, connected by Hammerton's ferry service. To the west of Marble Hill is Orleans House, where the 18th century baroque Octagon room, designed by architect James Gibbs, still stands. Although the original Neo-Palladian villa which also occupied the site is no longer there, the Octagon room and outbuildings have been open to the public as an art gallery since 1972.

The area to the north and east of Marble Hill Park is made of predominantly low rise, 19th century residential streets. Immediately along the western boundary is Montpelier Row, comprising several listed dwellings, notably two Grade II* listed early 18th century terraces and Grade II* listed South End House whose grounds share a boundary to the rear of the Stable Block. The Grade II listed 'Woodside' is a detached dwelling which shares a boundary along the western edge of the park.



Marble Hill Park in the local open space context

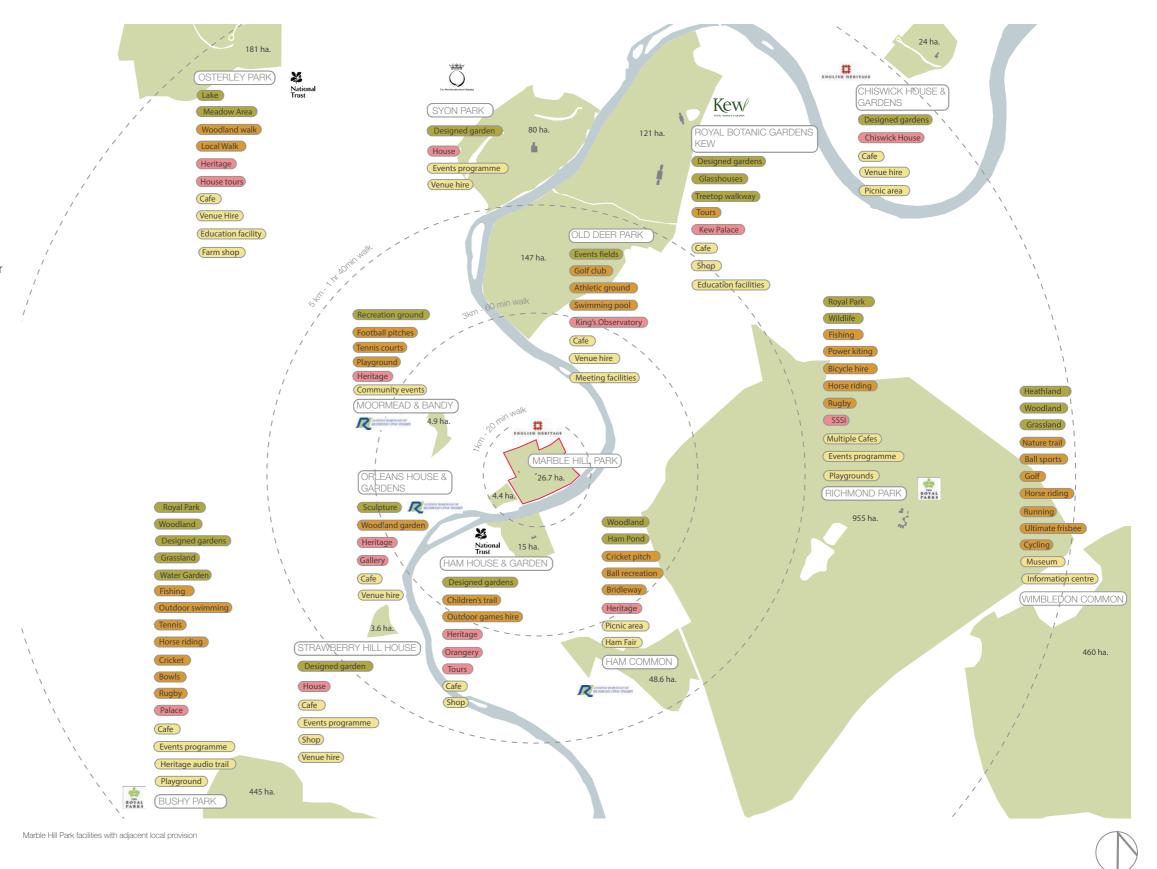
1.2 OPEN SPACE CONTEXT

Marble Hill Park lies within 'St Margarets and East Twickenham', one of fourteen villages identified by London Borough of Richmond to reflect the way in which borough residents live, work and enjoy their local area.

Marble Hill Park is the largest free-to-enter public open space within the St Margarets and East Twickenham area, making it an important resource for local residents. The nearest alternative large open space is to the west of the village, the Moormead and Bandy Recreation Ground, managed by London Borough of Richmond. This provides play facilities for under 7's up to 13+ as well as tennis courts and full size football pitches.

The residents of the London Borough of Richmond have access to 2000 hectares of open space, more than any other London borough. One quarter of this space is maintained by the Council Park services and the rest by various other authorities, including English Heritage, The Royal Parks, and the National Trust.

Marble Hill Park is unique in English Heritage's portfolio as it is their only property to provide pitches and sports facilities. This also differentiates it from other parks in the borough by combining significant heritage features with sports. This provides a unique opportunity to enhance the existing sports facilities to create a park with the principles of healthy living at its core and to reveal the lost Georgian Landscape which will provide spaces for quieter passive recreation and relaxation.



1.3 GREEN TRANSPORT CONNECTIONS

The diagram opposite shows the proximity of Marble Hill Park to various rail, cycle and walking networks. The closest train station is St. Margarets, a 7 minute walk away with frequent connections to central London (Waterloo) in around 30 minutes. The nearest London Underground station is in Richmond, a 20 minute walk or 10 minute bus journey from Marble Hill Park. The Thames Path runs along the southern edge of the park, connecting it to 184 miles of National Trail. Hammerton's ferry service connects Marble Hill on the north bank of the Thames to Ham House on the south bank in just a few minutes, putting the park in easy reach of the Capital Ring route around London and National Cycle Route 4.

These excellent green and public transport links have the potential to be exploited to a greater extent to encourage a more diverse audience to visit Marble Hill Park. When considered within the context of the Thames Landscape Strategy, it helps define a clear vision for the site that is both unique and complements neighbouring parks and open spaces.





2.1 EXISTING CONDITIONS

Marble Hill House

Marble Hill House is a Grade I listed Neo-Palladian villa built between 1724-1729, by the builder-architect Roger Morris. It is open to the public for guided tours on Saturday and Sunday from March to November. The Ice House and Grotto still remain in-situ and evidence of the structure of the original landscape design, believed to be by Charles Bridgeman and Alexander Pope, exists in part.

Sports & Recreation

Marble Hill Park provides an important outdoor open space for both formal and informal recreation. Bookings for football, rugby and cricket pitches, artificial tennis courts and practice cricket nets are managed by the Park Ranger Team, based on site. Changing room facilities are also available for use, which are located in the north-east corner of the park. Currently the changing rooms can only accommodate single sex teams as there is no division of male and female facilities. The park is also used for informal recreation such as jogging and cycling and by many dog-walkers. The area between Marble Hill House and the River Thames is popular for relaxation and picnics with views across to the south bank and enclosure provided by the avenues of trees either side.

Play

The Marble Hill Playcentre provides play for 0-5 years at their One O'clock Club and 5-15 years in their Adventure Playground, both are paid entry. The play area and buildings, located along the north-east boundary of the park, are leased from English Heritage. A separate 'dog-free' fenced area is located to the west of the House and is popular with parents of young children, as an area where they can run or crawl around safely.

The Coach House Café and public toilets
The Grade II listed Stable Block is home to the Coach House
Café and public toilets. The cafe currently occupies the
ground floor of the southern wing of the Stable Block and
provides a small indoor and outdoor seating area. Male,
female and accessible toilet facilities, located in the ground
floor of the northern wing are open to the public for the
duration of park opening hours.





Existing landscape plan



2.2 DESIGNATIONS & LISTINGS

Marble Hill Park is included in Historic England's Register of Historic Parks and Gardens, designated Grade II*. The park lies within the Twickenham Riverside Conservation area of London Borough of Richmond. The park is also designated Metropolitan Open Land and Public Open Space.

There are several listed buildings within the park, most notably Grade I listed Marble Hill House. The Stable Block, Ice House and White Lodge are all Grade II listed. The setting of these features can be greatly improved through subtle and sensitively integrated interventions in the landscape of the park.

Immediately along the western boundary is Montpelier Row, comprising several listed dwellings, notably two Grade II* listed early 18th century terraces and Grade II* listed South End House whose grounds share a boundary to the rear of the Stable Block. The Grade II listed 'Woodside' is a detached dwelling which shares a boundary along the western edge of the park.

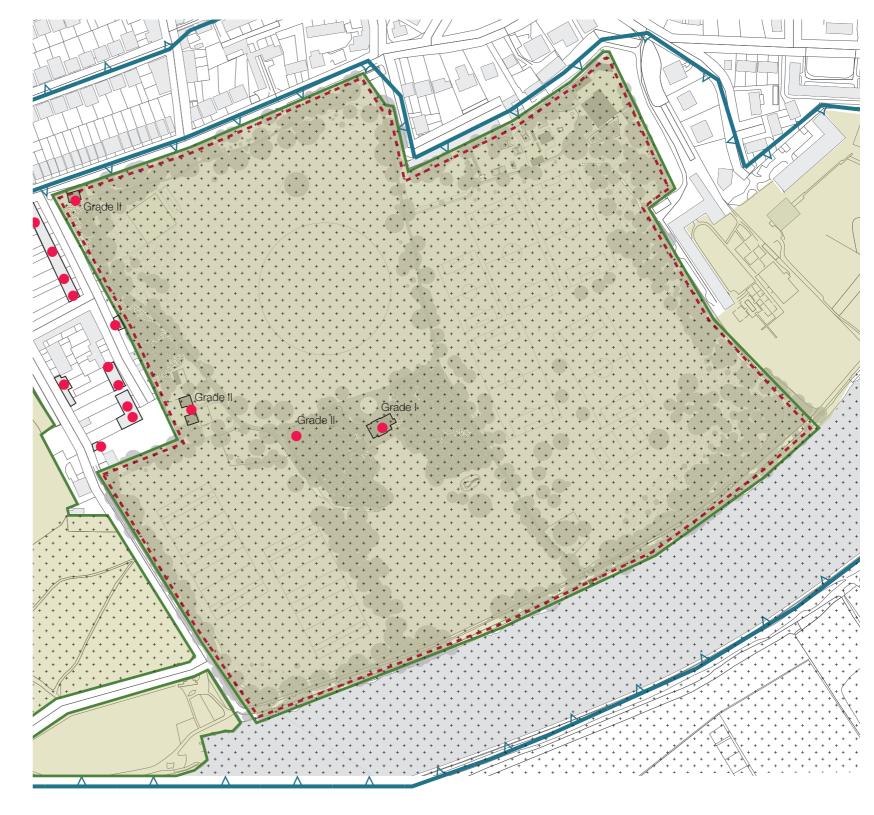




Marble Hill House - Grade I listed



The Ice House - Grade II listed



Designations and listings plan

2.3 CHARACTER AREAS

The character areas at Marble Hill Park have been identified through analysis of the existing park layout and uses, in conjunction with historic research and review of nomenclature used on the c.1749 plan. Seven areas of different character exist within the park. The principal area, The Pleasure Grounds, is further subdivided to describe more specific features. The character areas enable the articulation of feasibility proposals and help to focus on areas where the greatest intervention is required to maximise the benefit for park users and to preserve features of heritage significance.

Much of the original landscape design believed to be by Alexander Pope and Charles Bridgeman in the 1720's is still evident, although eroded. Interrogation of the c.1749 plan of Marble Hill has helped to further understand the landscape and fill the gaps of understanding in areas that are now missing. Subsequent research by Magnus Alexander et al of Historic England, Mark Laird and Dr. Jan Woudstra for English Heritage have provided further clarity in these areas. Please refer to subsequent sections of the report for further information.

Note that areas have been variously referred to by other names which may appear within the various reports cross referenced in this document. As our understanding of the history of the park is refined so will the names used to describe each area.

Notably the Woodland Quarters which are variously referred to as Woodland Compartments or by the constituent parts of each quarter such as Thickets, Groves (NW Quarter), Orchard (NE Quarter), Wilderness, Ninepin Alley (SW Quarter) and Flower Garden, Grotto (SE quarter).



Character areas



1.1 Carriage Circle, Southern Terrace & House Representation

This area concerns the land immediately surrounding Marble Hill House; the carriage turning circle to the north and the paved terrace to the south. The north elevation of the House is flanked by two curved white walls.

The carriage turning circle is asphalt surfaced with a lawn circle in the centre. At the foot of the two flanking walls is a graveled strip, each containing 4 freestanding white timber planters with clipped Bay trees. This is the main entrance to the House and the entry point for guided tours. Legibility and orientation is not clear for visitors wishing to enter the House, who may walk away unaware of tour timetables.

1.2 Terraces

The c.1749 plan shows a series of terraced lawns stepping south of Marble Hill House down to the Thames. These terraces can still be seen today. The Terraces are enclosed on three sides by the House and two avenues of trees either side. The southern view is open towards the Thames, which is partially obscured by encroaching scrub and tree planting. Due to the elevation of the Thames Path and flood embankment it is not always possible to view the water. The terraced lawns are a popular place for picnics, relaxation and as an open space for informal games.

1.3 Avenues

Running north-south either side of the Terraces are avenues of trees running down to the Thames, comprising a mix of species including Lime and Horse Chestnut. The c.1749 plan shows clear double avenues of trees and groves flanking the lowest terrace, today a lot of the definition has been lost. The Avenues provide division between the Pleasure Grounds and the East and West Meadows. Within the eastern avenue is a black walnut tree, *Juglans nigra*, which is a significant specimen of its type in the UK and a remnant of the landscape works carried out in the mid to late 18th century by Henrietta Howard's nephew, the 2nd Earl of Buckinghamshire. The black walnut is enclosed by timber post and wire fencing for protection.

1.4 The Woodland Quarters

The Woodland Quarters are densely canopied with a large number of self-seeded species such as Sycamore, Holly and Yew. The groundcover is sparse due to lack of sunlight and poor in biodiversity. These areas are not open to the public and enclosed by timber post and rail fencing creating a municipal appearance. A couple of features still remain, such as the Grade II listed Ice House and Grotto. Visually the Woodland Quarters appear as solid blocks and permit limited views in and out of the Pleasure Grounds. According to the c.1749 plan, the Woodland Quarters would have had four very distinct characters. The north-west quarter, containing the Ice House was formally planted with a grove of trees and a thicket to the north, likewise the north-east quarter which housed the, now demolished, servant's wing was planted with an orchard and was the location of the Green House. The south-west quarter contained a ninepin bowling alley and paths through a wilderness of trees and shrub planting. In the south-east guarter was a flower garden and winding paths through tree and shrub planting leading to two grottoes, of which one remains today albeit lacking its original woodland setting.

1.5 Planted Palisade and Oval Lawn

This area occupies one of the middle terraces sitting below the House and has a distinct character. Surviving of the c.1749 plan is the oval shaped lawn although the palisade enclosing no longer exists. The lower Woodland Quarters provide an enclosing sense to the space and a backdrop to several benches that edge the lawn. The lawn is flat and a popular place for relaxation and picnics, enjoying views down to the Thames.

2.1 Great Lawn

This area provides the foreground and setting to the House upon entry from Richmond Road. It is mostly devoid of trees with the exception of a large Turkey Oak. The lawn is bounded by the East Meadow and Sweet Walk to the west. Benches are located intermittently around the perimeter of the lawn, offering view across the park. The lawn contains the cricket pitch, which is available for hire.



1.1 Carriage Circle, Southern Terrace & House Representation



1.3 Avenues



1.5 Palisade and Oval Lawn



.2 Terraces



1.4 The Woodland Quarters



2.1 Great Lawn

2.2 Sweet Walk & Stable Block

This area bounds the north and west edges of the Great Lawn. The area along the north boundary has moderate tree cover but remains open in feeling and has an understorey of improved grassland. A narrow asphalt path connects the pedestrian entrances on Richmond Road until it reaches the wider vehicular road. Along the western boundary tree cover is more dense and understorey predominant in self-seeded holly and yew make it dark and overshadowed. This is the primary vehiclular route for deliveries to the café and House. The Grade II listed Stable Block houses the café and public toilets. The café is located in the south wing of the Stables and has a small paved terrace facing south with views to the Thames.

3.0 West Meadow

This area is predominantly short cut grass with margins around the south and west managed as meadow. There are two entrances along the western boundary from Orleans Road. This is part of the lower lying areas of the park and suffers from intermittent flooding. Two rugby pitches are marked out for hire in this area which can become unusable following flooding. Towards the Stable Block is a fenced dog-free area containing benches and is used by parents with young children.

4.0 East Meadow & Woodland Walk

This area is also predominantly short cut grass with meadow margins and trees to the perimeter, however, due to its more elevated position, it has an open character. It is bounded to the north by the car park, playground and works areas. The area is marked out with four senior sized pitches, one junior and one five-a-side pitch.

4.1 Woodland Walk

Bounding the south and east edges of the East Meadow is an area of mature woodland trees with meadow understorey and informal paths. A relaxed mowing regime to the edge of the sports pitches has encouraged a more biodiverse ground flora.

5.0 Car Park, Playground & Works Areas

This area is municipal in appearance, comprising the car park and works yard occupied by the Park Rangers Team. The car park provides the entry point for visitors arriving by car. The playground is managed by the Marble Hill Playcentre and contains colourful timber play structures. The works area comprises a concrete paved yard used by the incumbent landscape contractor, with storage buildings, the park ranger offices and the sport changing block. This area is not open to the public, with the exception of managed entry into the changing facility.

6.0 River Terrace

The stretch of Thames Path running south of Marble Hill Park is owned by English Heritage and maintained by the London Borough of Richmond upon Thames. This route, also known as the Warren Path, is a pedestrian path with permissive cycling. Tree cover and understorey is quite dense along both sides of the path with breaks along the boundary at the Pleasure Grounds, offering a view to Marble Hill House. The park has an access gate from the lime avenue path, east of the House, onto the Warren Path.

7.0 Marble Hill House

Grade I listed Marble Hill House is an 18th century Neo-Palladian Villa, sitting centrally to the grounds of the Park. This area is described further within section 7.



5.0 Car Park, Playground & Works Areas



2.2 Sweet Walk & Stables



4.0 East Meadow



6.0 River Terrace



3.0 West Meadow



4.1 Woodland Walk



7.0 Marble Hill House

Below is the view from Richmond Hill, the only landscape view in England to be protected by an Act of Parliament, the Richmond, Ham and Petersham Open Spaces Act 1902. Marble Hill sits to the centre of the view, identifiable by a row of Lombardy Poplars within the western avenue running from the House to the Thames.





2.4 PRELIMINARY ECOLOGICAL APPRAISAL

An extended Phase 1 Habitat survey was conducted on 31st July 2018 to update the results from the Preliminary Ecological Appraisal completed in June 2015. The purpose of the assessment was to identify existing habitats, carry out a protected species risk assessment and to make recommendations for enhancing the nature conservation value of the site.

PROPOSED HABITAT IMPROVEMENTS

Broadleaved woodland currently covers approximately 3.7 ha. (14%) of the Park. Much of the canopy cover is very dense and as a result shrub and ground layers are limited. Proposals include to diversify 40% of the woodland areas within the park by clearing many self-seeded species to allow more light into the understorey and encourage a more diverse field and shrub layer to support a larger variety of wildlife. Existing fallen and standing deadwood will be retained in situ within less accessible areas of woodland providing opportunities for fungi and deadwood invertebrates such as the Species of Principal Importance stag beetle. Areas of amenity and semi-improved grassland within the Sweet Walk will see an additional 900m² of shrub and field layer improvements with a palette of flowering and berry producing shrubs of known value to wildlife to provide foraging opportunities to pollinating insects, birds and small mammals. Fruiting shrubs will be chosen to target particular declining bird species, such as song thrush.

Semi-improved grassland makes up 2.2 ha. (8%) of the Park. By relaxing the mowing regime in areas of amenity grassland to encourage a more diverse ground flora, a further 1.3 ha. of semi-improved grassland can be contributed. This is proposed mainly along the northern boundary of the Park, in belts across the East Meadow and to the perimeter of the proposed dog-free area extension in the West Meadow. New areas of semi-improved grassland will be seeded with a locally sourced species mix collected from nearby grassland to ensure local provenance and encourage ecological connectivity. The grassland would be managed by infrequent hay cuts in a similar way to existing semi-improved grassland at the site, allowing for a longer flowering season and encouraging pollinating insects, including bees, butterflies and flies. A healthy invertebrate fauna would also provide a prey resource for birds and bats.

New tree planting is proposed within the Pleasure Grounds, in the form of avenues, groves and orchards, occurring in currently open areas of amenity grassland and as part of the broadleaved woodland diversification. The orchards will

include a mixture of cherry, plum, apple and pears known to have historic relevance. The grassland beneath will have a relaxed management regime, allowing this habitat to mature as a traditional orchard (a Habitat of Principal Importance). New trees will predominantly comprise native species or those with known wildlife value. Elms, including wych elm, English elm and the Dutch Elm Disease-resistant variety of Ulmus japonica, will be utilised to support the Priority Species of butterfly the white-letter hairstreak, whose caterpillars feed on elms. The new tree avenues running north-south in the Pleasure Grounds will encourage new bat flight lines and sheltered foraging opportunities. Further tree planting is proposed within the extended bands of semi-improved grassland in the East Meadow.

Note: Further specific survey work has been undertaken in relation to bats and badgers, refer to the subsequent sections.

Please refer to the full Preliminary Ecological Appraisal report, The Ecology Consultancy, August 2018.

Legend

Tall ruderal vegetation

Amenity grassland (A)



Surveyed habitat areas



2.5 BAT SURVEY

The following bat survey work was carried out by FOA Ecology between September 2016 and August 2018 to inform the project proposals:

- Collation of bat records
- Buildings inspection (internal and external)
- Bat detector surveys of buildings
- Ground-level tree assessment
- Bat detector surveys of trees
- Bat activity surveys (walking transects and static detector deployment)

The full survey report can be found in the appendices accompanying this application.

The main findings of the building survey work are:

- Marble Hill House no evidence of use by bats from internal and external inspection
- Coach House no evidence of maternity roosts, nonbreeding summer roosts or mating roosts
- Ticket Office no evidence of maternity roosts, nonbreeding summer roosts or mating roosts
- Disused Toilet Block no evidence of maternity roosts, non-breeding summer roosts or mating roosts

Six trees were identified to have potential for roosting bats, T12, G8.31, G8.53, G9.7, G9.10 and G9.17 as surveyed. The main findings of tree survey work are:

- G8.31 had been removed between the 2017 and 2018 inspection for health and safety reasons by English Heritage.
- No direct evidence of any of the trees being used by roosting bats identified during survey
- Tree G9.10 is assessed to have moderate maternity and day/transitional roost potential
- All other trees assessed to have low maternity/hibernation and moderate day/transitional roost potential

The main findings of the walking transect bat activity survey are:

- Evidence of several bat species forage within and traverse the park
- Most common bats detected are soprano and common pipistrelles and 'big bat' species such as noctule, Leislers and serotine
- Bat activity is encountered in all areas of the park, along wooded edges, the woodland quarters surrounding Marble Hill House and above open spaces such as the Great Lawn

The main findings of the static bat survey work are:

- The majority of bat activity is dominated by pipistrelle species
- The highest volume of bat activity is concentrated along the southern boundary of the park adjacent to the River Thames
- The bat activity detected in each of the woodland quarters was varied but evidenced that, collectively, along with the western avenue leading down to the Thames, they are an important foraging resource and commuting route for bats

The following mitigation and enhancements are suggested as part of the project proposals:

- A staged plan of tree removals and coppicing works
- The use of mature shrub and tree specimens as part of replacement planting
- Provision of tree and building mounted bat boxes
- Light spillage minimisation controls to be employed both in proposals and throughout the construction phase
- Inclusion of bat-friendly plant species such as nightscented plants to encourage flying insects
- Provision of bat access to the existing Ice House
- Provision of crevice features in existing Grotto structure
- Provision of bat access to areas of the Marble Hill House
 basement
- Increased habitat connectivity across east meadow through additional tree/shrub planting with wildflower-rich grassland understorey

The majority of the mitigation and enhancement recommendations can be achieved within the landscape proposals. The proposed new understorey shrub planting will include night-scented species to attract flying insects for bat foraging and the tree belt in the east meadow will be bolstered by new tree planting and a relaxed mowing regime to encourage a more biodiverse grassland. Working alongside an ecologist bat boxes will be provided in suitable locations and no additional lighting is proposed within the landscape, above current provision (the park will remain closed to the public at night). A programme of tree works would be developed in collaboration with the contractor to ensure staged operations. Further exploration will need to be carried out to establish opportunities for bat-friendly features within the Ice House and Grotto, whilst respecting their heritage significance. Bat mitigation and enhancement measures in relation to the Stables and Marble Hill House are not covered in this landscape chapter of the Design & Access Statement.

Of the trees identified to have but roost potential, the following works are proposed as part of the project works:

- T12 Cat B. tree to be retained
- G8.31 (already removed for health and safety reasons)
- G8.53 Cat. U tree proposed for removal for health and saftey reasons
- G9.7 Cat. U tree to be retained as standing dead wood for ecological reasons
- G9.10 Cat. U tree to be retained as standing dead wood for ecological reasons
- G9.17 Cat. U tree to be removed for health and safety reasons (tree has major decay at the base)

All works to the bat potential trees will be carried out under supervision of a qualified bat worker and suitable bat features will be retained where possible, whilst meeting health and safety requirements.



2.6 BADGER SURVEY

The following badger survey work was carried out by FOA Ecology between October 2017 and July 2018 to inform the project proposals:

- Initial badger walkover survey
- Badger sett camera trapping (2017 and 2018)
- Formal badger sett and latrine survey
- Badger bait marking survey

The full survey report can be found in the appendices accompanying this application.

During the initial badger walkover survey, six sets of holes were identified within the woodland quarters surrounding Marble Hill House, that could be charateristic of badger. This enabled the scope of the first camera trap survey to be determined.

The main findings of the 2017 camera trap survey are:

- Badger movement was captured at hole H1, located in the south-east woodland quarter, and is deemed to be an outlier sett
- Badger movement was captured at hole H2, located in the north-east woodland quarter, and is deemed to be an outlier sett
- No further badger footage was captured at holes H3-H6

The following year, in 2018, a formal badger sett survey was carried out. Approximately 30no. badger setts were identified within Marble Hill Park and the immediately surrounding area. The setts were categorised by location; Marble Hill Park, Meadowside, Cambridge Park and Orleans House Gallery (woodland). This survey, along with a latrine survey, informed the scope of the badger bait marking work which was carried out to establish the presence of one or more badger social setts.

The colour-coded bait pellets were distributed at 3no. sett locations; the main sett located at Meadowside, a large sett located n the garden of a property in Cambridge Park and an outlier sett in the north-east woodland quarter in Marble Hill Park. The results of the survey inferred that the badgers present at Marble Hill belong to a single social group which make use of numerous different setts within their territory.

Expanded camera trap survey work was carried out in June and July 2018 to include the sett to the eastern boundary of Marble Hill Park, as well as the woodland quarters. The following is a summary of the findings:

- NE woodland quarter badger footage captured and deemed consistent with use as an outlier sett
- SE woodland quarter badger footage captured and

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- deemed consistent with use as an outlier sett
- SW woodland quarter (at tree root) badger footage captured and deemed consistent with use as an outlier sett
- SW woodland quarter (at side of path) no badger footage captured, deemd not in current use
- East park boundary badger footage captured f both adult and young, and deemed consistent with use as cub rearing sett (annexe)

The following mitigation and enhancements are suggested as part of the project proposals:

- Pre-works sett monitoring prior to any construction works
- Licensed sett closure where required for implementation of landscape design proposals
- Provision of small artificial sett
- Provision of widened tall grassland and new tree planting
- Provision of badger gaps in new fence lines
- External light spillage reduction
- Standard construction stage precautionary mitigation measures
- Increased habitat connectivity across east meadow through additional tree/shrub planting with wildflower-rich grassland understorey
- Provision of new native shrubs and hedgerows to south and east sections of park boundary

The majority of the mitigation and enhancement recommendations can be achieved within the landscape proposals. Further badger monitoring work will be carried out and all necessary licenses will be obtained prior to construction works commencing.

The tree belt in the east meadow will be bolstered by new tree planting and a relaxed mowing regime to encourage a more biodiverse grassland, which will not only provide inceased movement corridors and foraging areas for badgers, but will also benefit bat habitats as mentioned in the previous section. The proposed new avenues and grove tree planting to the east and west of the Pleasure Grounds will have an understorey of tall grassland, encouraged by a relaxed mowing regime, which will also increase badger movement corridors. Where new sections of hedge and fencing are proposed around the woodland quarters, the team will work closely with an ecologist to establish badger movement corridors and provide suitable gaps in fencing to allow access to existing setts and potential habitats.

Provision of a small artificial badger sett will be further explored, working with an ecologist to establish the most suitable location. Provision of native shrubs and hedgerows to the south and east park boundaries of the park will be delivered as part of long-term management and on-going planting in the park, undertaken by the head gardener and apprentices, and has the potential to be a volunteer engagement activity.

2.7 TREE SURVEY REPORT

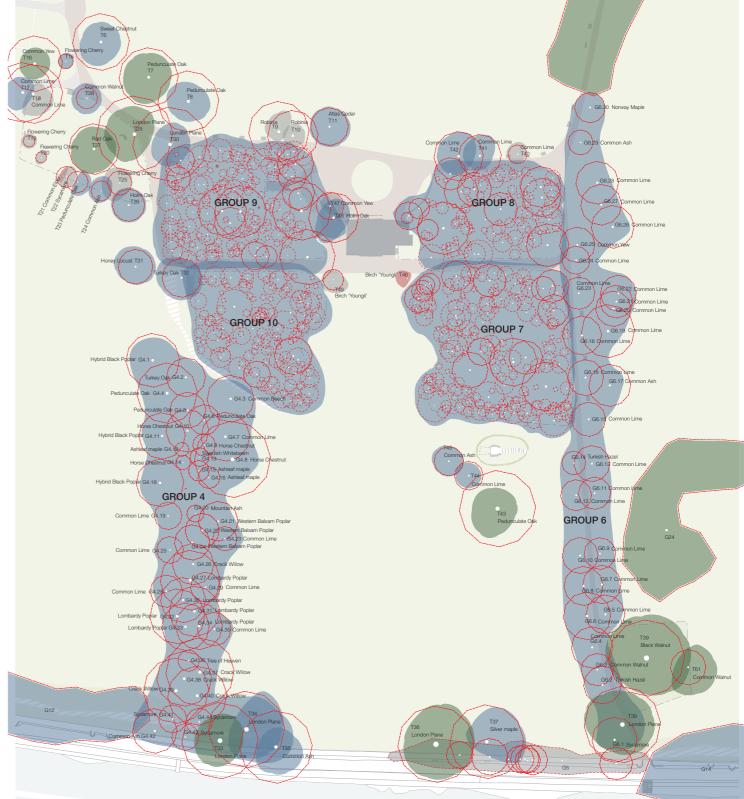
The following is a summary of the Arboricultural Development Statement, August 2018, Ref CBA 10677 V7.

The tree survey exercise identified 66 (sixty six) individual trees and 24 (twenty four) groups of trees. Within these groups, 234 (two hundred and thirty four) trees were considered worthy of note.

NOTE: The term 'group' is intended to identify trees that form cohesive arboricultural features either aerodynamically (e.g. trees that provide companion shelter), visually (e.g. avenues or screens) or culturally, including for biodiversity (e.g. parkland or wood pasture), in respect of each of the three subcategories.

For details of tree works proposals and new tree planting refer to section 3.6





Tree analysis of the Pleasure Grounds based on the Arboricultural Development Statement, Aug 2018



2.8 SOIL RESOURCE SURVEY

The following is a summary of the Soil Resource Survey Report, December 2016, by TOHA, Ref- TOHA/16/3995/CS

TOHA evaluated the nature of the soils by firstly conducting a desk study review of available information (soil and ecological maps). This was followed by assessing a number of key chemical and physical soil properties by a combination of on-site investigation and laboratory analysis.

The site assessment found the soils to be variable in texture over the site, with 3 typical soil profiles encountered, as outlined below (refer to plan opposite):

- Profile 1 Light to Medium Textured Soils. Sandy loam topsoil over sandy loam or sandy clay loam subsoil. This was the most commonly recorded profile and was found at TH1 – TH4, TH19 and TH21 – TH32.
- Profile 2 Woodland Soils. Similar to Profile 1, including a distinct surface humic layer. Observed within the areas of woodland at TH5 – TH8 and TH15 – TH18.
- Profile 3 Heavy Textured Soils. Clay loam topsoil over clay loam or clay subsoil. Recorded within the southern part of the site towards the River Thames at TH9 – TH11 and TH20.

CONCLUSIONS FOR THE RE-USE OF THE SITE SOILS

Considerations of Profile 1 and 2 Soils:

- Prone to structural degradation
- Care to be taken with soil handling
- Sufficient soil structure to enable satisfactory drainage and aeration
- Texture is suitable for most general landscape applications, including shrub planting, native transplants and grass establishment
- Suitable for smaller sized rootballed tree planting
- Imported topsoil recommended for larger rootballed trees
- Glass found in profile 2 samples appropriate safety precautions would need to be adhered to during any vegetation clearance and subsequent cultivation/ planting works
- Strongly acid to slightly acid (occasionally slightly alkaline) soil reaction (topsoil and subsoil) means that the species selected should ideally have a wide pH tolerance, or have a preference for acidic soils. If it is desired to plant species that prefer or require alkaline soils, a suitable application of lime may be required in the locality of these specimens. However, it would not be practical to amend the pH of the subsoil and therefore, the planting

of species that specifically demand alkaline soil is not recommended within the majority of the Park.

Considerations of Profile 3 Soils:

- Prone to seasonal waterlogging following periods of prolonged or heavy rainfall
- Prone to structural degradation during landscape preparation and planting works which will further reduce their permeability
- Require careful handling and sensitive soil management to ensure they are fit for planting or seeding.
- Suitable for a range of planting types, provided species tolerant of moisture retentive soils are selected
- The heavy texture is not ideal for large rootballed tree planting and as such, suitable imported soils are recommended for this purpose
- Soils were alkaline to strongly alkaline in reaction and, as such, specimens planted in the locality of these soils should be tolerant of alkaline soil conditions.

Fertility Status:

- Topsoils across the site contained sufficient reserves of organic matter and as such, no applications of organic ameliorant (e.g. compost) would be required.
- The samples contained sufficient levels of total nitrogen and magnesium, with significant deficiencies in extractable phosphorus and potassium recorded within the majority of the samples.

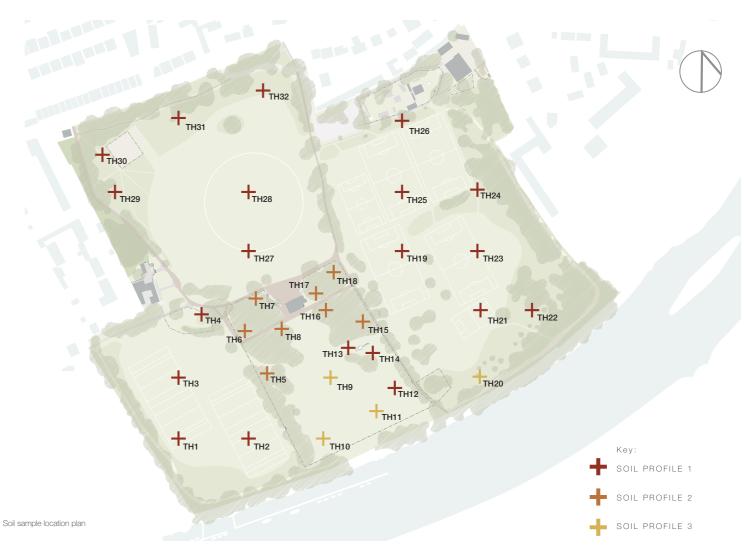
Further work recommended:

- Soakage tests are recommended for any zones of new tree planting to determine any necessary drainage requirements, particularly if large semi-mature specimens or demanding species are to be selected.
- An additional soil investigation is recommended for the grass areas that are used for events to identify what measures can be taken to improve the physical properties and wear tolerance of the soils. This could also provide input into a grass management plan for these areas.

UXO

Marble Hill Park has been identified as a site requiring a UXO threat mitigation strategy in place following the report prepared by CET, Explosive Ordnance Threat Assessment (EOTA) January 2017.

Generic Human Health Assessment In December 2016 CET were instructed to undertake an



assessment of shallow soils located beneath two portions of the Marble Hill House study site. The aim of the investigation was to ascertain whether soils exposed by proposed construction works could be impacted by contamination and have the potential to pose a significant risk to human receptors including construction workers and future visitors to Marble Hill House. The portion of the site adjacent to Marble Hill House within which TP06 to TP08 were formed is earmarked for landscaping inclusive of the cultivation of edible plants.

In this instance the assessment criteria that consider a sensitive 'residential with home grown produce' (RwHP) end use have been selected to perform a screen of the data. The recorded concentrations of the various determinants tested were relatively low in all instances and did not exceed the corresponding threshold criteria for either of the end use

scenarios considered. Furthermore, asbestos was not encountered in any of the eight samples of Made Ground scheduled for laboratory inspection. Based on the results obtained it is judged that the tested soils are unlikely to pose significant risk to future site users.

Notwithstanding the above it should be noted that a fragment of asbestos was encountered by others in an archaeological trench formed to the immediate east of Marble Hill House. This asbestos is judged to have the potential to pose a risk to future site users by the dust inhalation exposure pathway. In order to provide a better understanding of the risks posed by asbestos in soils we would recommend a supplementary phase of targeted ground investigation to enable to recovery of additional soil samples within the affected area to the east of Marble Hill House.

2.9 SPORTS PITCH AGRONOMY SURVEY

Football pitches

The football pitches are currently hired by around 17 different teams, ranging from under 8's up to senior age groups, with varying frequency throughout the year. Four senior sized pitches, one junior and one 5-a-side pitch are currently marked out for hire in the east meadow. The pitches do not suffer from flooding problems, however would benefit from pitch leveling and grass sward improvements. A complementary summer sports programme would enable an extended period of activity and revenue generation on these fields. This programme will be worked up in the development phase.

Rugby pitches

The rugby pitches are hired regularly by three senior teams. There are two rugby league pitches marked out in the west meadow. The pitches do suffer from flooding, making them unusable in some cases. The pitches would benefit from field drainage, decompaction and grass sward improvements.

Cricket pitch

The cricket pitch is currently hired by twelve teams with varying frequency. One pitch is marked out on the Great Lawn to the north of the House and has a synthetic wicket. The pitch would benefit from decompaction and grass sward improvements.

Hard tennis courts (x2)

Two tennis courts are located in the north-west corner of the park. They can be hired on a casual basis, but are also frequently used by private tennis coaches. The synthetic court surface is beginning to deteriorate and would benefit from improvements.

Cricket nets (x2)

Two practice cricket nets are available for hire. The wickets and nets are in need of refurbishment. The nets like the tennis enclosure are visually intrusive and require screening to more sensitivity integrate them into the park landscape.



Sport pitch studies, winter configuration option one - existing



Sports fields in the east meadow

The following is a summary of the Sports Pitch Agronomy Survey Report, December 2016, by TOHA.

In December 2016, TOHA carried out an agronomic assessment to ascertain the current condition of the existing pitches and cricket field in line with Sport England guidelines to assess surface evenness, rooting depths, ground cover, weeds, pests and disease.

The survey included a reinterpretation of the findings from the existing Soil Resource Survey (ref. TOHA/16/3995/CS, dated 03/11/2016), to provide information on soil fertility, soil depths and types, compaction and aeration. In-situ topsoil infiltration tests have also been carried out as part of the site work.

RECOMMENDATIONS

Levels and Microrelief

- Major modifications to the overall levels of the pitches are not required
- Selective re-grading is recommended, particularly across the football pitches

Flooding

- South-western part of the site is susceptible to flooding which can disrupt use of the rugby pitches
- If a drainage system is to be installed in this zone, it would be sensible to allow for the re-installation of secondary drainage (e.g. sand grooves) following flooding events to maintain the surface connection with the primary drains.

Shade

- The rugby pitches and many of the football pitches may be susceptible to shade and leaf fall.
- Selection of additional seed mixes and maintenance operations would need to take this into account

Pitch Orientation

 The current orientation of Pitch 6 (Junior 7 v 7 pitch) would fall outside the recommended range, however, nearby mature trees to the south alongside the river and to the west may mitigate the effects of low sun in the west.

Soil Quality

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- Soils typically have low structural strength and are prone to structural degradation and compaction
- These conditions affect the function and usage of the sports pitch
- The overall proportions of stone should not constitute a

- limitation for the sports pitches, provided the soil profile remains undisturbed and good grass cover is maintained. If any regrading is proposed in future, it may be prudent to carry out a stone reduction exercise during the works.
- The chemical composition of the soils is generally acceptable for sports pitch grass cultivars, provided the nutrient levels are supplemented by an appropriate annual fertiliser regime
- The soil pH in the cricket outfield area was found to be strongly acid (pH 5.0) and as such, application of agricultural grade lime could be beneficial. Perennial ryegrass typically prefers a slightly acid to slightly alkaline pH range (pH 5.5 – 7.5).

Turf Quality

- The overall quality of the turf is moderately high in relation to use for the sports catered for
- Evidence of wear was observed in play 'hotspots', such as football goal mouths and centre circles.
- Significant surface undulations were recorded within these hotspots and as such, localised infilling and regrading may be necessary here
- The existing maintenance schedule is fairly comprehensive and includes important operations such as aeration, overseeding, localised topdressing and a fertiliser regime.
- A more intensive maintenance programme may be considered to further improve the resilience of the sward and complement any new drainage infrastructure
- The overall condition and quality of the existing sports pitches was good, with satisfactory overall ground cover, soil depths, root development and grass species.

In summary recommendations include:

- Selective regrading of football pitches to include stone reduction.
- Drainage to south west pitches and ongoing maintenance of connections to primary drainage.
- Overseed with shade tolerant seed mixes.
- Manage tree canopy to avoid shade issues.
- Fertilize soils.
- Intensify maintenance regime to supplement existing good practice.

Please refer to section 4.6 for sports pitch proposals.



Sport pitch studies, pitch study numbering and infiltration locations



Plate 13: Slight wear in goal mouth - Pitch 4



Plate 15: Minor undulation <5 mm



Plate 14: Undulation > 25mm depth - centre circle



Plate 16: Patchy grass colour - cricket outfield

Pitch analysis

2.10 TOPOGRAPHY AND FLOOD RISK ASSESSMENT

Marble Hill Park sits on a plateau of land above 7m AOD, terracing quickly down towards the Thames in the southern Pleasure Grounds and West Meadow to around 4m AOD. The Great Lawn and Sweet Walk to the north is in the main level. In the East Meadow, the land dips into a bowl to around 6m AOD, making the football pitches un-level in places. Accessibility throughout the park is largely unimpeded with regard to landform, the main north south path to the east of Pleasure Grounds with the steepest gradient within the park is DDA compliant. Access to the Grotto is currently only possible via steps.

The original Flood Risk Assessment was carried out by Peter Brett Associates, on behalf of Land Use Consultants in October 2006 for English Heritage. Below is a summary of the report findings.

The Flood Risk Assessment found that the lower southern areas of the park frequently flood, reportedly up to 20 times per year. The report suggests that flooding occurs in four ways, outlined below:

- Increase of surface water run-off flowing intense rainfall events; the water then becomes trapped within the park due to lack of drainage
- Assumed overland flow originating from the lower land along Orleans Road
- Seepage path through the embankment when the river level rises above 4m AOD
- Over-topping of the embankment, which initially occurs at the low point of the embankment near the Warren Path gated entrance.

Peter Brett Associates have revised their Flood Risk Assessment in 2018, to take into account the project proposals and updated Environment Agency data.

SUMMARY

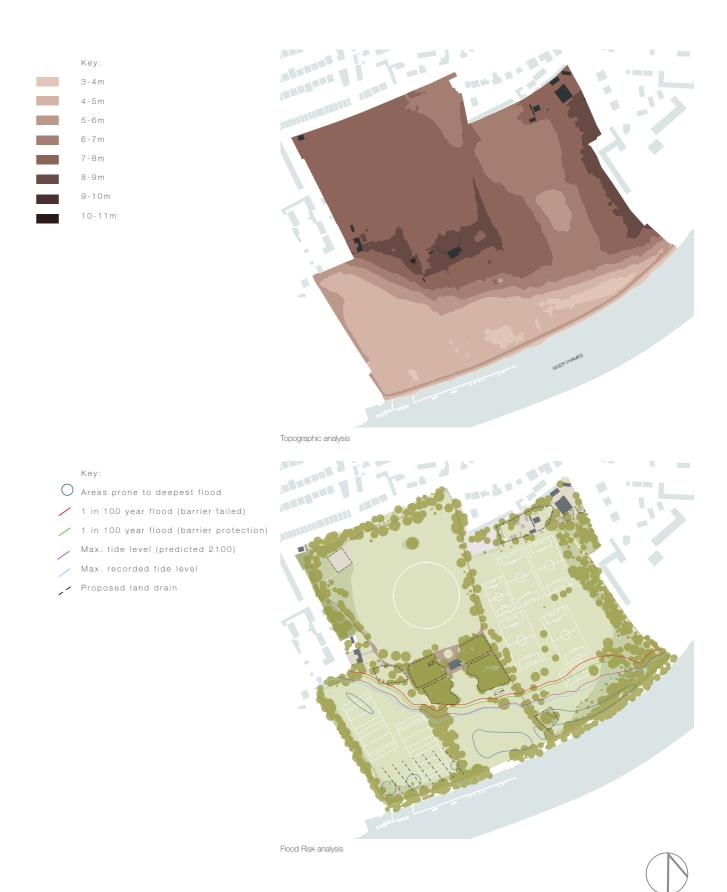
The Revised Floord Risk Assessment concludes that:

- The majority of the site is in Flood Zone 1. The south and southwest of the site are within Flood Zone 3. This has been confirmed by the EA modelling and the SFRA.
- In the modelled MLWL 2100 flood event, the majority of the site is not impacted, however the south and southwest is impacted by flood water depths up to a maximum of 2.3 m.
- Continuous dry safe access from the site is provided at the 1 in 100 annual probability plus climate change flood level via Richmond Road.
- The additional impermeable area associated with the café extension will drain via infiltration (subject to soakaway tests) into the adjacent ground.

A Sequential approach has been followed for the proposed works at Marble Hill Park; the proposed 'Less vulnerable' café development has been allocated within Flood Zone 1 and the proposed 'Water Compatible' landscaping works have been allocated within Flood Zones 1, 2 and 3.

In conclusion, the future users of the proposed development will be safe from flooding and there will be no detrimental impact on third parties. The proposal complies with the National Planning Policy Framework (NPPF) and local planning policy with respect to flood risk and is an appropriate development at this location.

The full Flood Risk Assessment can be found in the appendices accompanying this application.



2.11 MARBLE HILL HOUSE LANDSCAPE INVESTIGATIONS

The following is a summary and extracts from the Marble Hill House Landscape Investigations, November 2015 to Feb 2017, by Historic England, authored by: Magnus Alexander and Edward Carpenter with Matthew Bristow, Gill Campbell, Matt Canti, Zoë Hazell, Neil Linford, Paul Linford, Andrew Payne, Cara Pearce Nicky Smith, and Sharon Soutar. Ref - ISSN 2059-4453.

The report provides a synthesis of the story of Marble Hill.

The research topics included:

- Lidar survey and analysis
- Analytical Earthwork Survey
- Coring
- Survey and identification of tree stumps within the quarters
- Geophysics

The report is structured to focus on the history and development of the park.

Conclusions of the research are presented in a narrative form and geographically, historically referenced to background information, including details of underpinning research.

Main points for consideration that expand on previously understood information specifically with reference to the Pleasure Grounds and Sweet Walk and notable commonalities between the design attributed to Pope (c.1724) and the c.1749 plan are summarised below.

The main common elements include:

- The approach from the east to an approximately semicircular area in front of the house.
- The east-west walk south of the house.
- The north-south walk at its eastern end.
- The central lawn to the south of the house.
- The symmetrical curving features to either side of this (although on the c.1724 plan they appear to comprise a crescent shaped parterre bed with a path outside this and a wall beyond, there appears to be an arcade running around outside this; note what appear to be arches at the entrances off the lawn to north and south of the parterres).
- The general arrangement of quarters to either side of the house and to either side of the lawn.
- The presence of sinuous paths within the main eastern quarter.
- The extension south of this same quarter relative to that to the west.

 All of the above appear to be of a very similar scale to the c.1749 plan.

Lidar Survey and analysis

• Refer to report illustrative material.

Analytical Earthwork Survey

 Refer to report for detailed descriptions relating to scarps, ridges and topographic anomalies.

Coring

 Coring was carried out in December 2015 to determine the origin of the large, rectangular, sunken area to the east of the house.

Tree stumps

North West Quarter -

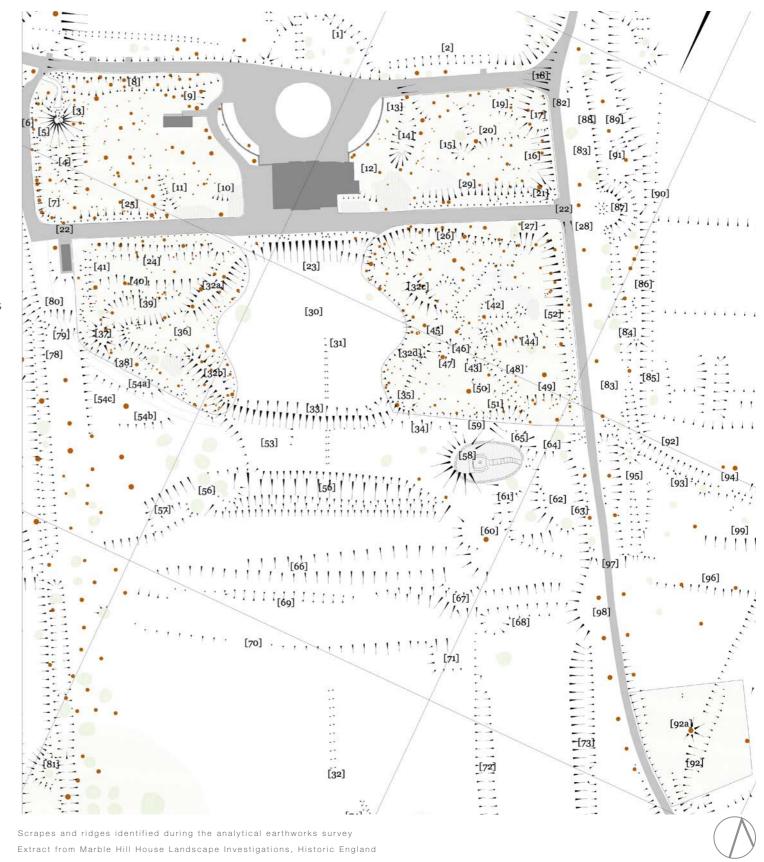
- Evidence of yew stumps throughout often under planted with butchers broom. The arrangement of which suggests that it was formally an evergreen screen or hedge.
- Box of considerable age was also recorded.
- Italian lords and ladies to the north and large lilac.
- Further evidence of evergreen screening to the eastern edge.
- Large specimen deciduous oak stump recorded.
- Small elm stumps observed with some self regeneration.

North East Quarter -

- Dominated by evergreen planting including yew and holly.
- Deciduous oak and elm stumps recorded suggesting former larger specimen tree species.
- False Acacia and Horse Chestnut also recorded to the edge of the quarter.
- Regenerated Holm Oak noted from older parent material.
- Former woodland planting evidenced with a single Italian lords and ladies surviving along with a comfrey and elder seedling. This suggests that woodland once extended beyond the current fencing since Italian lords and ladies tends to spread vegetatively by short creeping rhizomes.

West Quarter -

- Yew and holly under-planted with butcher's broom lining the eastern side and laurel predominate.
- Saplings and small dead elms were identified on the eastern side of the planting.
- Three oak stumps were also identified within the interior of the area, along with a single dead ash and a recently removed hornbeam (tree 1534).



HLF PARKS FOR PEOPLE - DESIGN & ACCESS STATEMENT

 Around the Ice House mound were several stumps of probable sycamore, reflecting current management of the planting to ensure that this species does not take over.

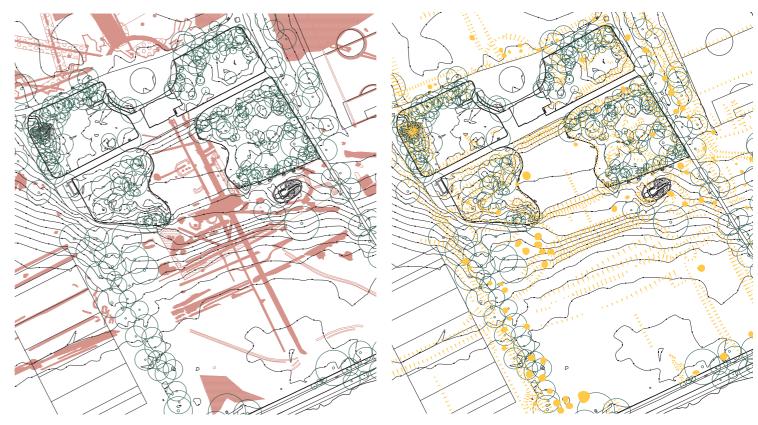
South West Quarter -

- Evidence of evergreen planting of yew.
- Within the interior of the area, are the remains of two large elms, two possible horse chestnuts and one large, dead lime.
- Clump of winter aconites and periwinkle are also present.

Geophysics results summary

- Three geophysical techniques were tested at Marble Hill Park and between them all accessible parts of the park (about 20 ha) were surveyed.
- Magnetometer survey performed as anticipated responding mainly to ferrous and thermoremanent materials deriving from structures likely to have been constructed in the last two centuries. For this reason, it was abandoned in favour of the other techniques.
- GPR performed better than anticipated detecting a wealth of superimposed anomalies reflecting the changing land use of the park through time.
- Earth resistance survey also performed well and over Area 3 a strong correlation with the GPR results gives confidence that both revealed the primary subsurface remains likely to be present. As the GPR provided more detail, it proved the most rapid and effective method for surveying the open areas of the site.
- However, while slower, earth resistance survey provided the only means of surveying between closely spaced trees and bushes and was used to extend the survey area to the edges of the park.
- The survey results have revealed a palimpsest of anomalies distributed across Marble Hill Park many of which can be correlated with features visible on historic maps reflecting the changing use of the landscape over time. There are, however, also anomalies suggesting additional features not recorded by any mapping and these will need to be verified by comparison with other forms of research.

NOTE: The full Marble Hill House Landscape Investigations report can be found within the appendices accompanying this application.



Interpretation of the geophysical investigations detailing Pleasure Grounds

Interpretation of the topographic investigations detailing Pleasure Grounds



Marble Hill Park WWII aerial plan (summer) with allotments and existing aerial (winter) zoom of Pleasure Grounds



2.12 HISTORIC PLANTING ANALYSIS

The following is a summary and extracts from the Historic Planting Analysis Report, November 2016, by Mark Laird.

The position as stated by Mark Laird:

"Because an analysis of site specific and analogous data for ornamental plantings at Marble Hill contends with such speculative frameworks, it proves impossible to reach a conclusive 'design intent'. The search for analogies needs to be framed more broadly. Rather than confining the search to the 1720s as part of the effort 'to reinterpret and rediscover the lost landscape designs of Charles Bridgeman and Alexander Pope' it makes sense to go beyond the 1720s and beyond these two designers as agents.

By making the overall strategy focus on 'the layout created by Henrietta Howard between 1724 and 1767' (and with the addition of the Sweet Walk of much later), the project has latitude to draw upon other analogies, e.g., from Joseph Spence's work. It becomes 'evocation' in lieu of restoration. It also shifts attention to Henrietta and her 'habitation' at Marble Hill. Indeed, along with the ongoing restoration of the Great Garden of Jemima, Marchioness Grey, at Wrest Park, this project offers a chance to present an interpretation of the 'inhabited' grove with its 'diversity of spatial character and habitats'. By developing an innovative approach to conjectural replanting, one may tackle the renewal of Marble Hill as a closer alignment of natural and cultural heritages."

Extract from the poem by Anna Chamber, Countess Temple, which was published in 1764 and entitled 'Marble Hill' (London: Strawberry Hill Press, 1764):

To tune their notes to fragrant May, And joyous hop from spray to spray. The grotto is the place, they cry, The fittest for our melody: The orange trees sweet odours send, With flowers their loaded branches bend; The scatter'd blossoms friendly meet. To make a carpet for the feet: The myrtle and the laurel green With roses beautify the scene; The jasmin and the lilac too Deserve, and justly claim, their due; In delicacy never beat, They make the charming scene compleat: Flow'rs of each hue in knots around Diversify th' enamel'd ground: The rustic grot, tho' nam'd the last,

Adds beauty by the fine contrast:
Huge trees, and rocks conjunctive rise,
To hide this spot from vulgar eyes.
The Songsters here, with cheerful notes,
Extend their emulating throats,
In extasy devoutly pay
Their duty to delightful May.

Conclusions:

- A strict 'restoration' is not an option, since even a 'conjectural reconstruction' of original plantings seems elusive
- Opportunity to pair nature conservation with the conservation of cultural heritage, due to lack of written evidence of what was planted at the time
- RSPB trees for wildlife list or the 'RHS' plants for bugs provides a good source reference
- Cross referencing the later part of the life of Henrietta
 Howard with the emerging art of G. D. Ehret and Thomas
 Robins the Elder provides clues to some of the plants that
 may have been used.
- The tree stump survey conducted provides a clue to what may have been planted but not a comprehensive planting palette
- There is also opportunity to use a woodland ground flora that supports wildlife: such as primrose and violets to bluebells and ferns. Grass seed intermixed with the seed of Violets, Cowslips, Primroses & Wild Strawberries'. Snowdrops to create winter interest. The wild daffodil (Narcissus pseudonarcissus) would be a welcome addition in spring, and naturalized wild cyclamen (Cyclamen hederifolium) could be added for autumn flowering.
- The one feature of Henrietta Howard's pleasure ground that is better approached by a synthetic 'period list' is the Flower Garden. Being small – assumed around 12 metres or 40 feet across – it need not have implications for wildlife. Rather, it is more a matter of trying to use the biodiversity of horticultural heritage: the old varieties and cultivars fashionable in the 1720s/1730s that are still available today.
- Opportunity to evoke the style of planting appropriate for Henrietta Howard's pleasure ground – a reflection of the work of Bridgeman, Pope, Spence
- The Sweet Walk would have included forest trees with dense thickets of planting to provide screening to include holly, blackthorn and hawthorn.
- The sunnier aspect of the Sweet Walk to the east and south would have contained the plants with the greatest scent.



Three interpretations of planting in the Grotto area of the Marble Hill wilderness. One scale applies to all three elevations/sections. From Historic Planting Analysis Report, November 2016, by Mark Laird.



Rose Hips and Euonymus or Spindle Tree' by Thomas Robins the Elder, 1760s, folio 10 of the flower album in The Fitzwilliam Museum, Cambridge. From Historic Planting Analysis Report, November 2016, by Mark Laird



The Large Tortoiseshell, plate 55 of A Natural History of English Insects by Eleazar Albin, published in London in 1720. From Historic Planting Analysis Report, November 2016, by Mark Laird.



3.1 SITE DEMOLITIONS AND REMOVALS

The demolition and removal strategy for Marble Hill Park aims to simplify the furniture and paving palette across the site, remove inappropriate and dilapidated structures in the context of the listed buildings, improve the setting of landscape features and increase access across the park.

Benches & Bins

A variety of bench types are currently present in the Park, in differing states of repair, the majority of which are memorial benches. Any non-memorial benches, like the one shown opposite, will be removed and replaced with a higher quality bench. A record will be made of all memorial benches to ensure these remain, or given the option to be replaced if they are in a poor state of repair. The location of benches will be rationalised and given new paved plinths. A strategy will be devised to accommodate requests for new memorial benches.

Currently separate litter and dog-foul bins are provided at Marble Hill Park, many of which are in poor condition. In line with revised waste collection policy, these bins will be replaced with single litter bins and located at strategic points near entrance/exits.

Fencing

The timber palisade fencing will be removed from the perimeter of the Woodland Quarters and replaced with a mix of estate railings and post and wire fencing set within hedges with gates for access to the public. The two northern quarters will be fully open to the public. The two southern quarters will mostly be accessible but will have two areas that are enclosed for nature conservation to allow longer term management.

Structures

The Chinese style shelter overlooking the west meadow is in poor state of repair and is not appropriate to the setting of Marble Hill House, so will be removed. The disused toilet block within the north-west Woodland Quarter will be removed to open up the area and improve the setting of the Ice House.

The two raised lawns in front of the Stable Block will be removed to improve the setting and open up views of the listed stables building.



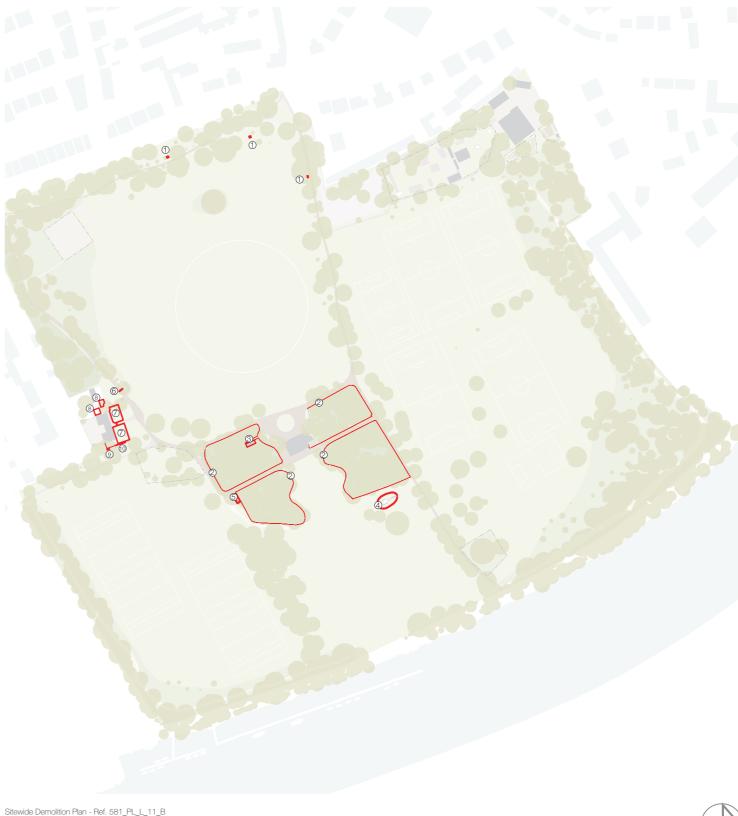








- 1. Removal of non-memorial bench. Replacement with new bench as per Funiture Plan 581_
- 2. Remove timber palisade fencing and replace with estate railings and post and wire fencing
- 3. Demolition of former toilet block in Woodland Quarter
- 4. Removal of clipped hedge and fence around Grotto new planting to improve setting as per drawing 581_PL_L_01 (Illustrative Landscape Plan)
- 5. Demolition of Chinese style
- 6. Removal of speed restriction hump to enable access to new service yard entrance
- 7. Demolition of raised lawns in front of the Stable Block to
- 3. Removal of existing patches of hard standing
- 9. Removal of 3no. cycle stands. Replacements as per 581_
- 10. Removal of picket fence around existing cafe terrace





3.2 SITE CONSTRUCTION MANAGEMENT

Site access will be from the north, from Richmond Road at White Lodge, along the western drive. This gate will be closed to park users throughout construction to avoid conflict between pedestrians, visitor cars and site traffic. Timed deliveries and banksmen will be required to ensure flow of site traffic is maintained and the site access is safe and secured. Consideration will be given to the size of delivery vehicles that can safely enter through the Richmond Road gate. A vehicle holding area will be designated inside the entrance gate so that vehicles are not held on Richmond Road and traffic flow is maintained. This will also be the wheel washing area for site traffic before exiting onto Richmond Road. The suspension of pavements, roadspace and bus stops will not be required. A designated parking area for construction workers will be provided within the secure site hoarding line, to the north of Marble Hill House. This will ensure visitor parking and surrounding roads will not be affected. Protective track matting will be placed on the lawn for parking, keeping the roads clear for site traffic. The lawn will be reinstated as part of the contractor's making good works of the site compound. The Stable Block and cafe works will have a dedicated storage area to the east of the Stables. The storage area for Main House and landscape works will be located east of the House in the north-east woodland quarter. Material storage will be outside of tree root protection areas and access routes which pass over RPA will be adequately protected in accordance with BS 5837:2012. Any skips required by the contractor will also be located in these storage areas. A solid 2m high hoarding will enclose two main work sites, including laydown and site welfare facilities; one at the Stable Block and the second around Marble Hill House, including the two northern woodland quarters. The boundary of the work site may change to accommodate site activities, particularly site services connections and renovations to the sports pitches. Heras fencing will be used to create safe enclosure on a short-term basis, or where a solid hoarding would be inappropriate.

A public information board will be located on the solid hoarding, adjacent to the north-south footpath. This will include details of the project, contractor, programme of works and emergency contact information. A phased construction programme will be developed with the chosen contractor. This will seek to maximise the area of usable park available to the public throughout construction and limit the impact of construction works on the enjoyment of the park.

The contractor will need to ensure they adhere to BS5288:2009 in relation to emission of noise, vibration, dust and working hours. They will also need to demonstrate that light spillage minimisation techniques are employed to ensure minimal distrurbance to bats is incurred.



3.3 SITE DRAINAGE & LEVELS

The site wide landscape proposals seek to improve the infiltration of surface water across the park.

The following measures have been used to make these improvements:

- New path networks constructed from permeable paving materials
- New areas of non-permeable hard standing drain into soft landscape
- Pitch surface water infiltration improved by sand slitting (see Chapter 2.9)

Please refer to chapter 2.10 for a summary of the Flood Risk Assessment which concludes the future users of the proposed development will be safe from flooding and there will be no detrimental impact on third parties.



3.4 HARD LANDSCAPE AND FURNITURE STRATEGY

The majority of the existing paths will be repaired to match the existing black asphalt surfacing to remove trip hazards or obstacles to accessibility. The 'wiggly paths' within the Pleasure Grounds, including the Ninepin Alley will be of an inert porous self binding gravel. All new paths will be constructed in line with the methodologies described in the Arboricultural Development Statement where required.

The strategy for furniture in Marble Hill Park has a two tier hierarchy. The general principles of the strategy apply to each tier:

- Creation of a simple and uniform palette
- Minimise clutter
- Highly functional and robust
- A coordinating colour for all metalwork
- Integration with wayfinding and interpretation

Tier one includes the Pleasure Grounds. In these areas the focus is on fixtures and fittings that are sensitive to the heritage setting and are part of the reinterpretation of the historic landscape.

Tier two is the remainder of the wider park. In these areas a standard English Heritage park bench and bin will be used. Any furniture that does not meet these standards will be removed and replaced.









Existing surfaces within Marble Hill Park







3.5 LANDSCAPE INTERPRETATION STRATEGY

The story of Marble Hill and Henrietta Howard will be interpreted in a unified scheme across both landscape and the interior of the house, using multiple methods to appeal to the widest variety of users.

Interpretation in the landscape will include:

Maps of the park

At each of the four main entrances, there will be a large map, to orient visitors, with additional interpretation on a key area of historical or biodiversity interest. One map will also include an updatable noticeboard for community notices.

Illustrated Frames

To recreate scenes from Henrietta's day, frames will be positioned in key locations, showing 'look through' illustrations of how the gardens were used in the eighteenth century, and caption information explaining the scene. The frames will be of a height that works for families and wheelchair users and will be carefully placed so as not to interrupt key historic vistas.

Feature Interpretation

Illustrated panels will interpret other important areas: the grotto, the icehouse, the black walnut tree and associated biodiversity stories and the market garden.

Embedded Interpretation

Playful quotes from Henrietta and her contemporaries will be embedded in surprising places, including within the grotto and 'play incidents' such as the beehive and icehouse seat and even the nine pin bowls themselves

Hand Cart

We will create a family friendly mobile hand cart, which will be manned by volunteers. It will tell the stories of the gardeners at Marble Hill, and the games played there, and will store the nine pins and other Georgian era games which will be available for all visitors to enjoy.

Sports Block

There will be a community noticeboard inside the Sports Block, which will also include information about the history of sport at Marble Hill, featuring memories from park users today gathered as part of our Contemporary Resonance Projects

Trail

A take around resource will be created for families to engage them in activities across both landscape and house. It will be developed in close consultation with our user groups.



3.6 TREE MANAGEMENT AND WOODLAND OUARTER MANAGEMENT STRATEGY

Across the majority of the park trees define circulation routes and reinforce the historic parkland boundary structure. The approach promoted in these areas is to maintain all trees as healthy and safe specimens within the context of other design and park uses.

A priority is to protect and prolong the longevity of trees of heritage significance. The longer term strategy is to provide for tree succession through new planting and review of tree species to move towards a treescape that is diverse, references the 18th century landscape design and acknowledges that climate change and issues of biosecurity will influence species selection.

The trees in the Woodland Quarters are a significant landscape feature of the park. However they suffer from a lack of proactive management and successional planting to maintain healthy diverse habitats of varied ages. These trees require a different management approach to the other parts of the park in the context of the lost 18th century landscape design and intended reinterpretation of this plan.

The are several key considerations:

- Recreate the verdant enclosure, evergreen screening and hedging to the Woodland Quarters
- Removal of poor quality self seeded species
- Pro-actively manage species that would have been understorey plantings notably yew and holly through selective thinning and coppicing
- Snowberry, a London Invasive Species Initiative plant species, will be removed from the understorey, providing further space for light to reach the woodland floor and encourage ground flora
- Use tree planting to frame views to and from Marble Hill House
- Develop and commence a successional management and planting strategy for the avenues
- Reinstate the avenues
- Diversify the tree species planting with reference to the research undertaken by Mark Laird (see chapter 2.12)
- Reinstate understorey and ground level planting consistent with the historic design intent

As part of the woodland management proposals, 277no. trees are proposed for removal within the Woodland Quarters and 45no. coppiced. These tree works will allow more light to reach the woodland floor, enabling a wider range of understorey and ground flora to establish, providing a richer source for wildlife. To compensate for tree losses, the project proposes a 20% increase in tree numbers across the whole park, with 342no. new trees to be planted.



3.7 PLANTING FOR BIODIVERSITY

The following pages illustrate the proposed planting typologies within Marble Hill Park. These typologies combine to create a planting composition that; pairs nature conservation with the conservation of cultural heritage, reinterprets heritage planting features such as the Flower Garden, Grove, Thicket, Orchard, Wilderness, Avenues and Sweet Walk. It aims to enhance biodiversity, improve wildlife habitats, diversify plant species through specific selection for the character areas within which they are located, and introduce alternative maintenance regimes to promote seasonal variation and new planting mixes for changing environmental conditions such as warmer temperatures and drought conditions.

Sweet Walk

The current wooded area to the west of the path will remain as it is, retaining an important habitat for low and ground nesting species such as song thrush, which are known to be present. Additional, more diverse planting is proposed to the east of the path, including deciduous and evergreen shrubs and groundcover, prized for their scent and areas of new tree planting with tall grassland understorey, to improve the setting of the tennis courts.

Habitat Edges

The existing woodland edges and belts of trees with tall grassland understorey will be extended with new tree planting and expanded zones of relaxed mowing. This will improve movement corridors for mammals such as badgers and encourage more flying insects along bat foraging routes.

Avenues and Groves

Proposed avenue and grove tree planting will increase tree canopy cover within the park, providing larger commuting and foraging routes for bats. The mowing regime below will be relaxed to encourage taller grassland species, expanding cover for mammal movement routes and attracting insects for bird and bat foraging.

Woodland Quarters

Two areas of the woodland quarters will remain untouched as part of the proposals, and will undergo a slower pace of woodland management to allow existing resident species to adapt. Currently the woodland quarters are closely canopied with limited understorey and ground flora predominantly of ivy. Whilst this is good habitat for a few species, the proposals aim to diversify the habitat typologies to encourage a greater range of wildlife in the park. New areas of orchard, flower garden, dense thicket, and flowering shrub understorey will provide a rich source of nectar and foraging opportunities



Diagram of proposed planting typologies

Habitat Network

The proposed planting aims to make connections between and enhance existing wildlife habitats whilst being mindful of retaining habitats that currently work well for important species, such as song thrush. The woodland area to the northwest of the site adjacent to the Sweet Walk will be retained and managed as song thrush habitat. Similarly, two areas of the southern Woodland Quarters surrounding Marble Hill House will be protected with new fences and hedging to preserve the internal area of habitat, as noted in item 4 on the opposite diagram. These areas will under-go a longer term process of woodland management to ensure habitats are retained and undisturbed so wildlife can adapt whilst other areas of new tree and understorey planting establishes.

The expanded areas of tree planting and understorey tall grassland to the perimeter of the park and between the Pleasure Ground avenues will provide wider and better connected flight paths for commuting bats. The species-rich grassland below will also attract a greater number of insects, providing enhanced foraging potential for bats and birds. This will also benefit mammals such as badgers, hedgehogs and mice, the latter of which will attract larger birds of prey to the park, such as tawny owl, known to nest in Marble Hill Park.

In the northern Woodland Quarters the habitat will be diversified with the re-introduction of shrub understorey and nectar-rich ground flora into the areas of thicket and providing new areas of grove trees with meadow understorey. The flower-rich meadows will attract a wider range of pollinating insects such as bees, butterflies and hoverflies, providing a food source for birds which can seek cover in the adjacent dense thicket.

The dense nature of the thickets also offer the opportunity to include dead wood habitats where they are less likely to be disturbed; an important habitat for attracting stag beetles.

KEY.

Existing Woodland and inear

Proposed thicket planting below existing trees

Areas of Woodland Quarter with no works proposed as part of this application



New Orchard and Grove trees with meadow understorey

(01)

Expanded tree planting and tall grassland understorey to provide connected bat foraging routes and larger areas of cover for wildlife commuting and foraging



New avenue tree planting to connect bat foraging routes



Existing area of woodland and known song thrush habitat to remain unchanged



Area of Woodland Quarter to remain unchanged to retain existing habitats and undergo a longer-term programme of woodland management



Proposed areas of understorey shrub and groundcover planting below existing trees, with new tree inter-planting



Proposed areas of new grove tree planting with meadow understorey



Proposed area of new orchard tree planting with meadow understorey



Proposed Flower Garden with shrub and herbaceous perennial planting



3.8 TREE PLANTING PALETTE

New tree planting and species selection aims to re-interpret the historic structure of the c.1749 plan, although where once it is thought avenues of Horse Chestnut would have been planted, the proposals are mindful of contemporary biosecurity issues and climate change adaptation. More appropriate species have been selected which, although may not be true to what was planted historically, still invoke the spirit and structure of the historic landscape design.

Many of the propsed tree species comprise native species or those with known wildlife value producing a variety of fruits and flowers. Elms, including wych elm, english elm and the Dutch Elm Disease-resistant varieties of Ulmus hybrids, will be utilised to support the Priority Species of butterfly the whiteletter hairstreak, who's caterpillars feed on elms. The new tree avenues running north-south in the Pleasure Grounds will encourage new bat flight lines and sheltered foraging opportunities. Further tree planting is proposed within the extended bands of semi-improved grassland in the East Meadow.



Malus spp

Apple

Yew

Evergreen

HE

WQ



Black birch

Malus sylvestris

Crab apple

WQ

wo



Silver birch

Pinus sylvestris

Scots pine

Evergreen

wo

wo

Hornbeam



wo

Hazel

Populus tremula

Aspen



wo



Fagus sylvatica

Beech



Apple sub family

HE

wo

Prunus padus WQ Bird cherry



Prunus avium Wild cherry





WO

Swedish whitebeam

Site location key

- av Avenues
- не Habitat edges
- sw Sweet Walk
- wa Woodland Quarters (Orchard, Palisade & Specimen trees)
- **GR** Groves



WQ



Tilia x europaea

Common lime

ΑV

SW





GR

wo



Platanus x hispanica

London plane

Bay willow







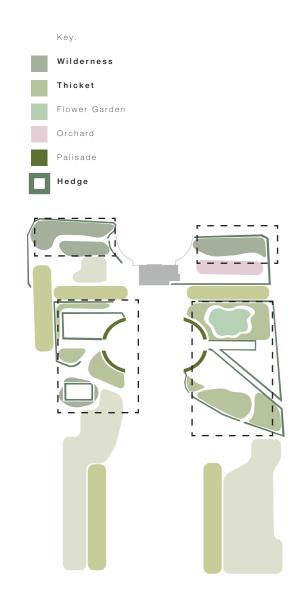




Small leafed lime

3.9 PLEASURE GROUNDS - WILDERNESS, THICKET & HEDGES

One of the primary aims of the proposals for the woodland quarters is to re-introduce a diverse understorey layer of shrubs and ground cover. Many of the species which would have been planted contemporary with the c.1749 plan are still relevant today, offering a wide range of fruiting and flowering shrubs to provide foraging habitat for birds and small mammals and a long source of nectar for insects. Early spring bulbs proposed at the gradated woodland edges provide a nectar source for emergent insects. The thickets and wildernesses contain a mix of deciduous and evergreen shrubs, such as Viburnum tinus which flowers through the winter to provide a food source for hibernating insects that wake up unseasonably early.



SHRUBS



sempervirens



Calycanthus floridus Carolina allspice



Crateagus monogyna Hawthornn



Cytisus x spachianus



Daphne mezereum February daphne



Elaeagnus ebbir



llex aquifolium



Prunus laurocerasus Laurel



Prunus lusitanica Portuguese laurel



Ruscus aculeatus Butcher's broom



Taxus baccata Yew Evergreen



Viburnum tinus Laurustinus

GROUNDCOVER & PERENNIALS



Dryopteris filix-mas Male fern



Geranium sanguineum Geranium



Hedera helix lvy Evergreen



Lonicera japonica Halliana Honeysuckle



Lonicera periclymenum Honeysuckle



Primula veris Cowslip



Arum italicum Italian Lords and Ladies



Cyclamen spp.



Eranthis hyemalis Winter aconite



Hyacinthoides non-scripta Bluebells

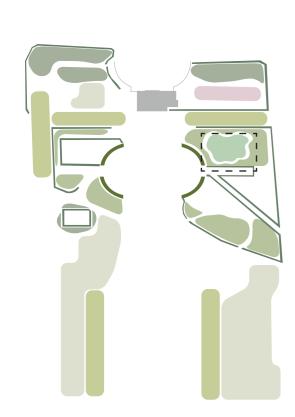


Narcissus pseudonarcissus Daffodil

3.10 PLEASURE GROUNDS - FLOWER GARDEN

The flower garden is an opportunity to create an entirely new habitat typology in Marble Hill Park which references the c.1749 plan and benefits wildlife. The flower garden is intended to be a bright seasonal display of bulbs, herbaceous perennials and annuals with a structure of flowering shrubs. Spring bulbs provide a good early nectar source for emerging insects. Leaving the seed heads on herbaceous perennials well into the autumn will provide a late source of seed for birds. The garden will create an ever changing display for visitors and rich foraging source for wildlife all year round.

Wilderness Flower Garden Orchard Palisade



SHRUBS





GROUNDCOVER & PERENNIALS









































Asphodelus albus White asphodel

Grape hyacinth

The Garden star of Bethlehem

3.11 WIDER PARK - SWEET WALK

Pockets of new planting are proposed along the eastern edge of the Sweet Walk path, with framed views maintained across the Great Lawn. The aim is to reintroduce the highly scented shrubbery planting which gave the walk its name. The existing mature trees lining the walk will be retained and new shrubs and groundcover planted below. The species selected are a variety of deciduous and evergreen varieties, with a long flowering period. This provides additional cover and habitat for wildlife and a rich source or nectar and fruits for insects, bird and small mammals.





Daphne mezereum February daphne



Balm of the warriors wounds



llex aquifolium Common holly



Laburnum × waterer





Juniperus communis Juniper





Osmanthus fragans Sweet olive



Philadelphus 'Belle étoile' Mock orange



Prunus spinosa Blackthorn



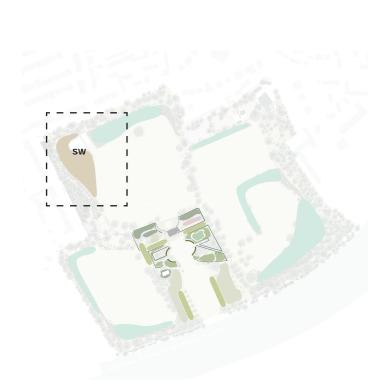
Rosa rubiginosa Sweet briar



Rubus odoratus Purple floweing raspberry



Syringa vulgaris Lilac



Viburnum tinus Laurustinus





Convallaria majalis Lily of the Valley



Snowdrop



Dianthus plumarius Pink

Muscari armeniacum Grape Hyacinth



Malva moschata



Primula vulgaris Common Primrose



Vinca major Greater periwinkle



Narcissus pseudonarcissus Daffodil (UK native)



Tulipa clusiana Lady tulip

3.12 WIDER PARK - HABITAT EDGES

The existing woodland edges and belts of trees with tall grassland understorey will be extended with significant new tree planting and expanded zones of relaxed mowing. This will improve movement corridors for mammals such as badgers and encourage more flying insects along bat foraging routes. The zones to the south of the site which are prone to flooding will be overseeded with wildflowers which are suited to the wetter conditions to encourage a more diverse flowering meadow sward. Improvements to the habitat edges to the park will be an on-going management operation, carried out by the Head Gardener, potentially as a volunteer engagement activity.





Achillea millefolium - Yarrow Flowering period: summer



Agrimonia eupatoria -Agrimony Flowering period: summer / autumn



Campanula rotundifolia -Harebell Flowering period: spring / summer / autumn



Centaurea nigra - Lesser knapweed Flowering period: summer / autumn



Galium verum - Lady's bed straw Flowering period: summer



Geranium pratense Meadow Cranesbill Flowering period: summer



Hypochaeris radicata Common Catsear Flowering period: summer / autumn



Lathyrus pratensis -Meadow Vetchling Flowering period: spring / summer



Leontodon hispidus - Rough Hawkbit Flowering period: summer / autumn



Linaria vulgaris - Yellow Toadflax Flowering period: summer / autumn



Lotus corniculatus - Bird's Foot Trefoil Flowering period: summer / autumn



Plantago lanceolata Ribwort Plantain Flowering period: spring / summer



Rhinanthus minor - Yellow rattle Flowering period: summer / autumn



Sanguisorba officinalis -Great Burnet Flowering period:



Scabiosa columbaria - Small scabious Flowering period:



Trifolium pratense - Red clover Flowering period: summer / autumn

3.13 FENCING STRATEGY

One of the key aims of the Pleasure Ground proposals is to open up the Woodland Quarters to increase public access. Currently each woodland compartment is enclosed by dilapidated timber palisade fencing. This would be removed and replaced with a combination of estate railings and timber post and wire fencing with double gates to provide access to the public.

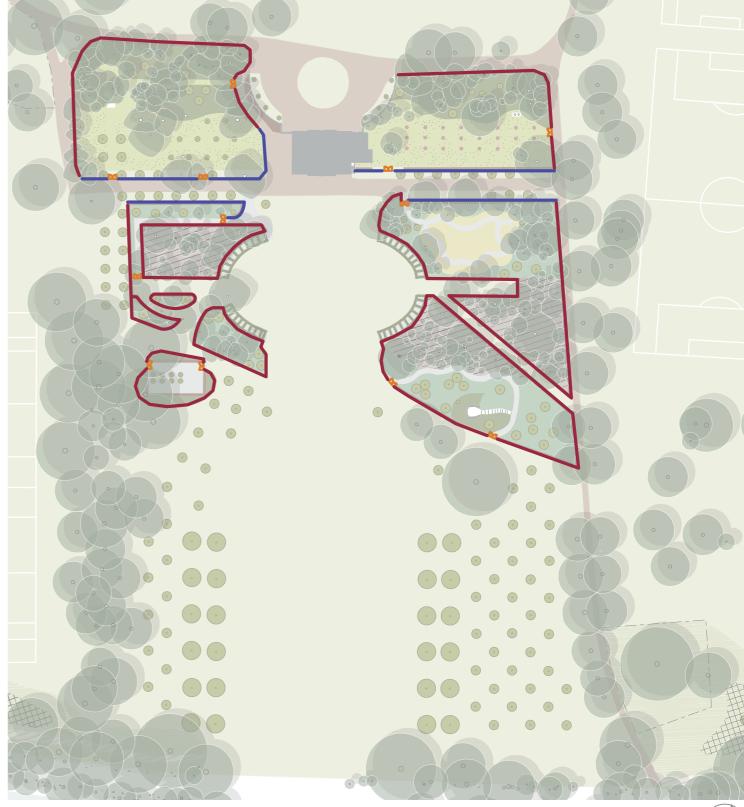
The gated entry to the Woodland Quarters will help to manage entry and exit, allowing the new planting to establish and to create a safe environment for everyone to enjoy. The fencing also aims to protect existing and new wildlife habitats, particularly low and ground nesting birds.

Black metal estate railings and gates are proposed along the main east-west avenue, in keeping with the setting of Marble Hill House. Elsewhere, timber post and wire fencing is proposed, with hedge planting behind, which will eventually grow to obscure the fencing.

Working alongside an ecologist, strategic gaps will be provided in the fencing to ensure established badger movement routes are maintained and they are provided access to new foraging habitat.

Please refer to the next page for details of the proposed fencing.



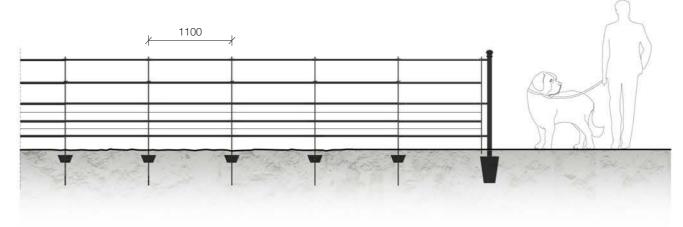


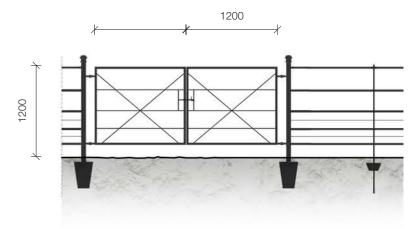
Estate Railings

Black metal estate railings are proposed for the main east-west avenue in front of Marble Hill House. The railings are proposed 1.2m high with five horizontal bars. The lower section is proposed to have intermediate metal wires to prevent unmanaged access of dogs into the Woodland Quarters. Double leaf gates provide public access into each area.

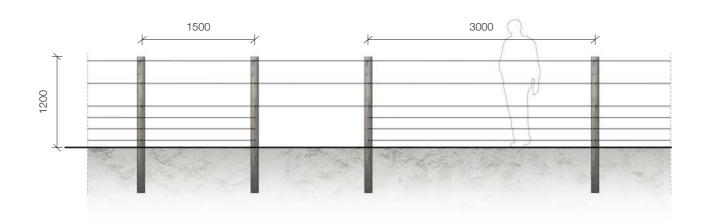
Post and Wire Fencing

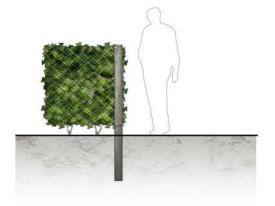
Timber post and wire fencing is proposed around the remainder of the Woodland Quarters. This is proposed to be 1.2m high with horizontal tensioned wires. The lower section of wires are closely spaced to prevent unmanaged access of dogs into the Woodland Quarters. Gaps in the fencing will be provided to allow free movement of badgers along established corridors and to access new forgaing habitats. New hedging will be planted tightly to the post and wires so that in time this will grow to obscure the fencing.





Estate Railing details - Ref. 581_PL_L_22_A





Timber post and wire fence details - Ref. 581_PL_L_22_A



4.1 VISION

The Vision

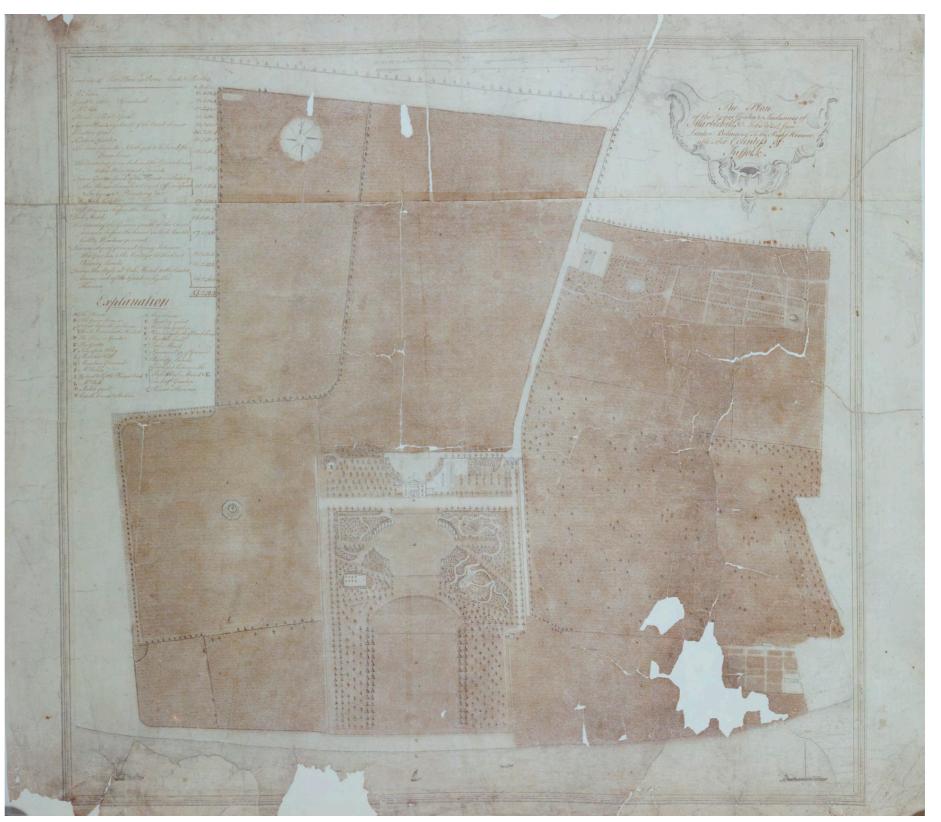
44

Henrietta Howard, a remarkable woman, overcame personal adversity to build an outstanding 18th-century house and garden at Marble Hill as a retreat for herself, her family and friends. Through this project English Heritage will rejuvenate her creation, transforming it into a vibrant public park, enabling everyone to experience the pleasure Henrietta and her circle found there.

We will restore and interpret significant elements of the c.1749 and later 18th century landscape, providing within it enhanced sports facilities for everyone.

We will conserve and reinterpret the house, opening it free of charge on an increased opening regime and restore the historic stables as a visitor hub, providing commercial sustainability through a café opening daily.

We will work in partnership with local organisations to deliver outstanding events, education and training programmes. These, with our new volunteer programme, will deliver a welcoming and inclusive environment, sustainable well beyond the funded lifecycle of the project.



Survey Plan c.1749

HLF PARKS FOR PEOPLE - DESIGN & ACCESS STATEMENT MARBLE HILL REVIVED

4.2 MARBLE HILL REVIVED MASTERPLAN

The proposals for the Marble Hill Revived Project aim to balance the historic significance of the site, with the environmental potential of the park and an enhanced offer for broader audience of park users. Together these themes will enable a sustainable future for Marble Hill Park to be developed.

Marble Hill Park has the potential to reconnect the house and landscape through a considered programme of repair, restoration and enhancement works and increase the understanding and enjoyment of the park for all. Work will focus on the restoration, reinterpretation and development of the park's core attributes: the Grade II* registered landscape; the public amenities of the wider park; and the Grade I listed House.

Proposals for the park include:

- Develop the relationship between features of heritage significance and healthy living through sport and recreation.
- Interpret the layers of landscape history with emphasis on the time of Henrietta Howard.
- Integration of a new play offer for young children.
- Consideration of climate change adaptation with new planting programmes and management strategies.
- Develop management strategies that are proactive.
- Promote the importance of Marble Hill in the context of the Thames Landscape Strategy and adjacent parks and open spaces.
- Develop tree and woodland management strategies that restore the character of these areas and introduce a comprehensive planting programme to ensure the growth of a successional landscape for future generations
- Protect the existing semi-natural habitats of elevated ecological value, including the woodland and veteran trees which are features for which the park qualifies as a Site of Importance for Nature Conservation (SINC).
- Enhance over 4 hectares of improved biodiversity including, new wetland habitat, meadow grassland and improved woodland margins
- Acknowledge the need to develop proposals with biosecurity in mind. This is particularly pertinent in the context of the former Horse Chestnut Avenues.
- Consider opportunities of sustainable urban drainage across the park to respond to tidal flooding.
- Maintain and enhance park boundaries to create more welcoming entrance to the park.
- Improve accessibility of path network
- Rationalise site furniture across the park.

- Decompact and improve grass sward across the park.
- The restoration of the lost 18th century Arcadian landscape and Sweet Walk.
- Refurbish the existing café
- Introduce a lift platform to the House.
- Represent and install new interpretation to the House.
- Provide training opportunities in catering, horticulture, early learning and heritage management.
- Refurbish the existing Sports Block.









1. Planted palisade
2. Ice House seat
3. Ninepin alley
4. Enhanced Grotto setting
5. Grove planting
6. Flower garden
7. Enhanced cafe and shop
8. Play area
9. Improved habitat edges
10. Enhanced Sweet Walk planting
11. Cafe yard access
12. Interpretative play feature
13. Natural play stops - indicative location
14. Path upgrade between gates
15. Cycle parking - indicative locations

A. Pleasure Grounds
B. Great Lawn
C. Sweet Walk & Stable Block
D. East Meadow
E. West Meadow
F. Car Park, Playground & Works Area
G. River Terrace
H. Marble Hill House
I. Sports Block

Section Line



4.3 PLEASURE GROUNDS PROPOSALS

The Pleasure Grounds represent the most significant opportunity to reinterpret and rediscover the lost landscape design influenced by the ideas of Alexander Pope, with advice from Charles Bridgeman. These proposals seek to reintegrate the design of House and Landscape conserving the integrity of important key elements of the core historic landscape. It will restore and reframe important views and vistas between the house and River Thames.

The overall strategy for this area is to restore the Pleasure Grounds to the layout created by Henrietta Howard between 1724 and 1767. The reintroduction of heritage features will create a diversity of spatial character and habitats within the park which it currently does not offer. The existing timber palisade fencing will be removed to promote access into the Woodland Quarters.

The Pleasure Grounds are subdivided into five areas each with their own special character and landscape features.

1.1 Carriage Circle, Southern Terrace and House Representation

Key considerations and opportunities for this area:

- Restore the formal planting along the curved walls to the north of Marble Hill House according to the historic pattern to enhance the presentation of the house.
- As part of long term tree management strategy remove the Holm Oak encroaching on the house to the north west.

1.2 Avenues

Key considerations and opportunities for this area:

- Restore the avenues to follow quincunx arrangement shown on the c.1749 plan, review species mix to avoid a mono-culture that may be susceptible to biosecurity risks. Plant large species trees.
- Deliver opportunities for managed extensive volunteer tree planting projects.
- Avenues will provide sheltered flight lines for bats, linking the Woodland Quarters with the River Thames.

1.3 The Woodland Quarters
Refer to the following pages for more information

1.4 Planted Palisade and Oval Lawn Key considerations and opportunities for this area:

- Restore the palisade cut into an arcade on the oval lawn in front of the villa on the c.1749 plan. Accommodate existing tree species of note where appropriate.
- Enhance views and vistas to and from the House and the River Thames.

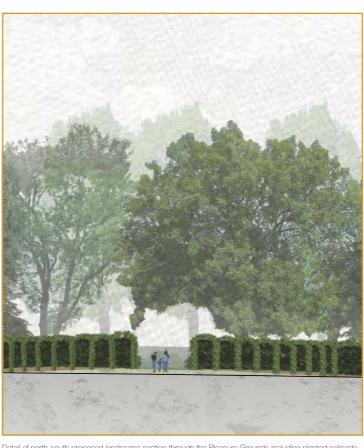


Planometric of the proposed Pleasure Grounds reinterpretation - Ref. 581_PL_L_03_E



Key

- O1) Carriage drive
- 02 Marble Hill House
- 03 Planted palisade
- 04) Woodland Quarters with proposed planting
- 05) Pleasure Grounds
- 06) Oval lawn
- 07 Terraces
- 08) Avenue enhancement
- 09) Riverside walkway
- 10 River Thames
- A' A' North South proposed landscape section through the Pleasure Grounds Ref. 581_PL_L_05_B



Detail of north-south proposed landscape section through the Pleasure Grounds including planted palisade



Detail of north-south proposed landscape section through the Pleasure Grounds



Key

01) Marble Hill House

02 Woodland Quarters with proposed planting
03 Pleasure Grounds
04 Oval lawn
05 Terraces
06 Grotto



Detail of East West proposed landscape section through the Pleasure Grounds

B' - B' East West proposed landscape section through the Pleasure Grounds Ref. 581_PL_L_06_B

The north-west quarter, containing the Ice House was formally planted with a grove of trees and a thicket to the north.

North-west Quarter

Key considerations and opportunities for this area:

- Restore the grove planting to the west of the house to its early 18th century pattern allowing for significant existing specimens of note such as the English Oaks to be retained.
- Retention of standing dead wood for ecological reasons
- Enhance the setting of the Ice House with new shrub and understorey planting.
- Remove features which detract from the setting of the House including the old toilet block.
- Remove dilapidated timber palisade fencing and install estate railings or post and wire fencing with gates for access.
- Improve habitats and biodiversity and promote access to nature via informal grass paths within the grove.
- Reinterpret the Ice House seat as an incidental play moment.
- Tree thinning and coppicing to promote healthier, more biodiverse understorey and ground flora.
- Explore opportunities for managed extensive volunteer tree planting projects.
- Create a woodland edge gradient from a dense understorey in the north, through to a more open canopy and a mix of long sward grass in the south. Woodland edge habitats are important for a range of wildlife including invertebrates such as speckled wood butterflies and small mammals, which in turn will support wildlife higher in the food chain including birds such as tawny
- New tree planting in avenues, groves and within thickets.
- Additional shrub understorey planting in thickets.
- New meadow understorey to grove tree planting with mown paths.
- New hedge planting.



Visualisation - view towards proposed Ice House seat in north-west Woodland Quarter. For viewpoint location refer to plan opposite.





Existing retained tree and approximate canopy cover



Proposed Specimen Tree Removal



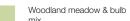
Proposed new large-specie tree planting (size shown at time of planting)

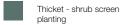


Tree canopy projection - 10 years post planting



Lawn





'Wilderness' - shrub and herbaceous planting



Self-binding gravel paths



Existing asphalt surface



Area of Woodland Quarters set aside with no works proposed



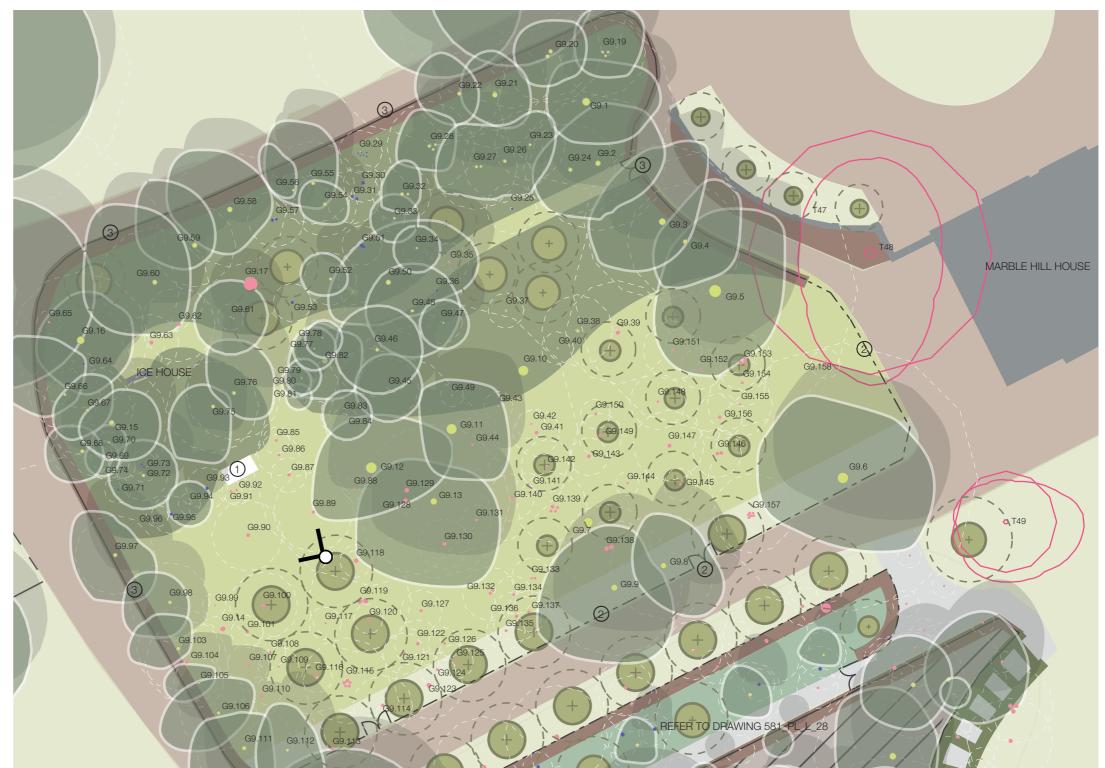
Tree Root Protection Area

TREE WORKS PROPOSALS:

Woodland Quarter Group Works:

- Retain tree
- Retain and coppice
- Remove
- 1. Ice House Seat
- 2. Estate railings and gates
- 3. Post & wire fence set within hedge





North-west Woodland Quarter proposal plan. Ref. 581_PL_L_26_E



The north-east quarter which housed the, now demolished, servant's wing was planted with an orchard and was next to the location of the Green House.

North-east Quarter

Key considerations and opportunities for this area:

- Improve habitats and biodiversity and promote access to nature via informal grass paths within the orchard. Fallen orchard fruit would provide a foraging opportunity to invertebrates, birds and badgers.
- Reinterpret the former bee hives as an incidental play moment and incorporate bug boxes / invertebrate hotel features
- Create evergreen enclosures and hedging providing year-round cover for woodland birds.
- Remove dilapidated timber palisade fencing and install estate railings or post and wire fencing with gates for access.
- Explore opportunities for managed extensive volunteer tree planting projects.
- Tree thinning and coppicing to promote healthier, more biodiverse understorey and ground flora.
- Create a woodland edge gradient from a dense understorey in the north, through to a more open canopy and a mix of long sward grass in the south. Woodland edge habitats are important for a range of wildlife including invertebrates such as speckled wood butterflies and small mammals, which in turn will support wildlife higher in the food chain including birds such as tawny owl.
- New tree planting in avenues, orchard and within thickets.
- Additional shrub understorey planting in thickets.
- New meadow understorey to grove tree planting with mown paths.
- New hedge planting.



visualisation - view through proposed orchard in north-east Woodland Quarter. For viewpoint location refer to plan opposite

Existing retained tree and approximate canopy cover Proposed Specimen Tree

Removal

Proposed new large-specie tree planting (size shown at

time of planting)

Proposed orchard tree planting



Woodland meadow & bulb mix

Thicket - shrub screen

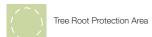
'Wilderness' - shrub and herbaceous planting

Hedges

Self-binding gravel paths

Existing asphalt surface

Area of Woodland Quarters set aside with no works proposed



TREE WORKS PROPOSALS:

Woodland Quarter Group Works:

- Retain tree
- Retain and coppice
- Remove
- 1. Beehive interpretative play
- Estate railings and gates
- 3. Post & wire fence set within hedge



North-east Woodland Quarter proposal plan. Ref. 581_PL_L_27_E





The south-west quarter contained a ninepin bowling alley and paths through a wilderness of trees and shrub planting.

South-west Quarter

Key considerations and opportunities for this area:

- Restore the ninepin alley in the western compartment of the middle terrace, to reference the Pope and Bridgeman landscape of the early 18th century.
- Improve habitats and biodiversity promote access to nature.
- Reintroduce gravel path network within the wilderness.
- Tree thinning and coppicing to promote healthier, more biodiverse understorey and ground flora.
- Create evergreen enclosures and hedging.
- Remove dilapidated timber palisade fencing and install estate railings or post and wire fencing with gates for access
- Explore opportunities for managed extensive volunteer tree planting projects.
- Recreate the planted palisade.
- New tree planting in avenues and within thickets
- Additional shrub understorey planting in thickets
- Reserve an area for nature conservation to undergo a longer-term management regime.



Detail of B' - B' east-west proposed landscape section through south-west Woodland Quarter

Key

- 1. Reinstated nine pin alley
- 2. Evergreen screening and hedging
- 3. Existing specimen trees retained
- 4. Field layer and understorey planting in the Wilderness





Existing retained tree and approximate canopy cover



Proposed Specimen Tree Removal



Proposed new large-specie tree planting (size shown at time of planting)



Tree canopy projection - 10







'Wilderness' - shrub and herbaceous planting



Self-binding gravel paths



Existing asphalt surface



Area of Woodland Quarters set aside with no works proposed

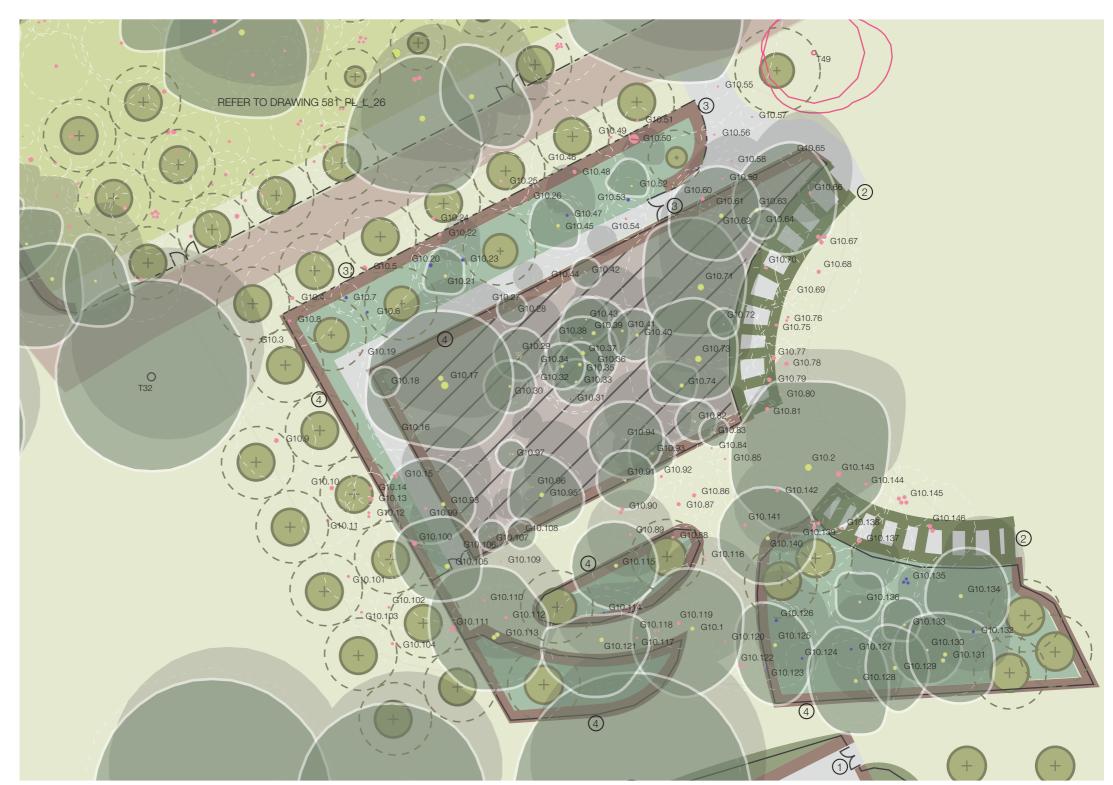


Tree Root Protection Area

TREE WORKS PROPOSALS:

Woodland Quarter Group Works:

- Retain tree
- Retain and coppice
- Remove
- Ninepin alley
 Planted palisade 3. Estate railings and gates
 4. Post & wire fence set within hedge



South-west Woodland Quarter proposal plan. Ref. 581_PL_L_28_E



In the south-east quarter was a flower garden and winding paths through tree and shrub planting leading to two grottoes, of which one remains today albeit now lacking its woodland setting.

South-east Quarter

Key considerations and opportunities for this area:

- Improve landscape setting of the grotto.
- Restore flower garden in the upper section of this quarter
- Improve habitats and biodiversity to promote access to nature. The planting mix will provide year-round flowering providing value in all seasons for park visitors and pollinating insects
- Reintroduce gravel path network within the Flower Garden.
- Reinterpret the Flower Garden.
- Tree thinning and coppicing to promote healthier, more biodiverse understorey and ground flora.
- Create evergreen enclosures and hedging.
- Remove dilapidated timber palisade fencing and install estate railings or post and wire fencing with gates for access.
- Explore opportunities for managed extensive volunteer tree planting projects.
- New tree planting in avenues and within thickets.
- Additional shrub understorey planting in thickets.
- Reserve an area for nature conservation to undergo a longer-term management regime.

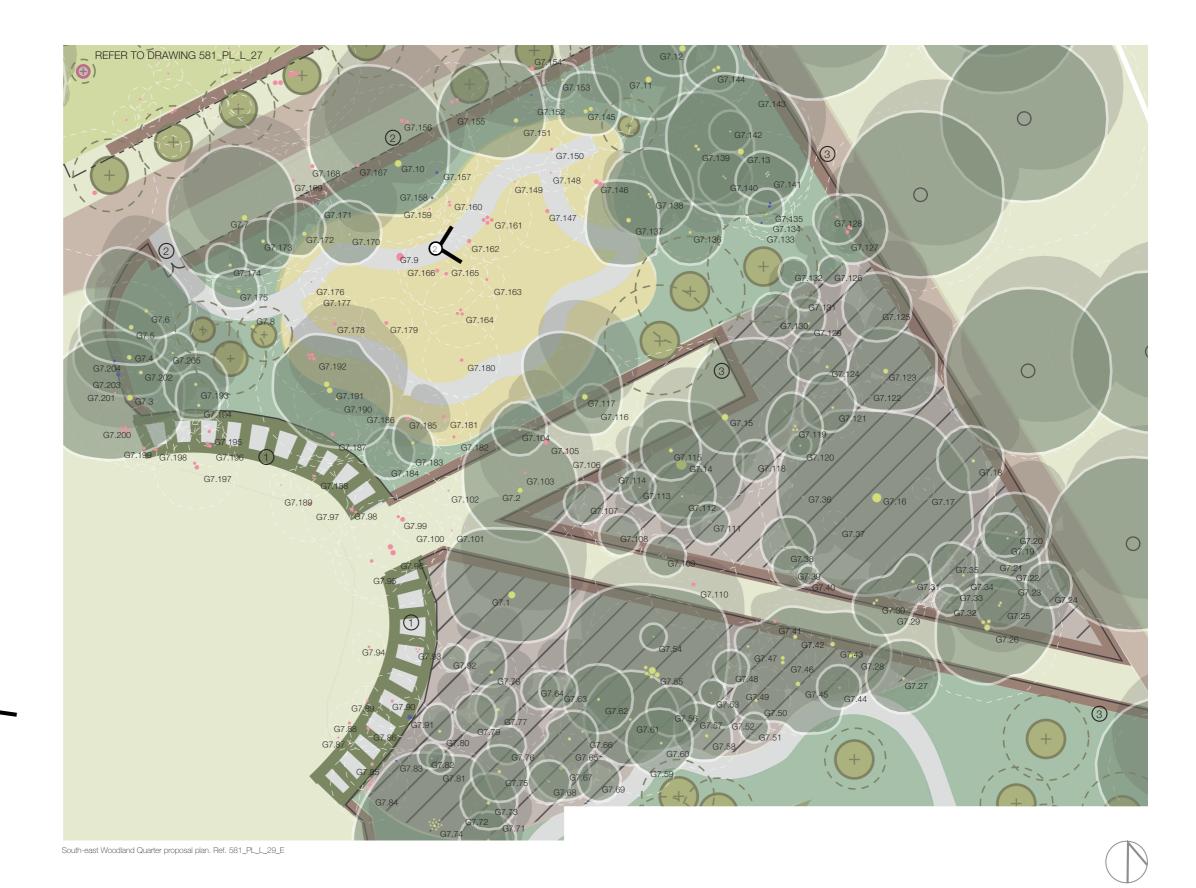


Visualisation - view towards proposed planted palisade in south-east Woodland Quarter. For viewpoint 1 location refer to plan opposite



Visualisation - view through the proposed flower garden in the south-east Woodland Quarter. For viewpoint 2 location refer to plan opposite.





4.4 SWEET WALK PROPOSALS

This area encompasses the entrances from the north on Richmond Road and winds along the western boundary until it reaches the Stable Block. The area along the north boundary has moderate tree cover but remains open in feeling and has an understorey of improved grassland. A narrow asphalt path connects the pedestrian entrances along this edge until it reaches the wider vehicular road. Along the western boundary tree cover is more dense and understorey predominant in self-seeded holly and yew making it dark and overshadowed. This is also the primary vehicle route for deliveries to the café and House.

The aim is to restore the Sweet Walk to its 18th century character of trees, flowering and sweet smelling shrubs and ground cover, which will be enjoyed from a meandering walk running through it. The plantation will be thickened up to screen the traffic and form an attractive and effective boundary along the north of the park. Enhancing the Sweet Walk would re-introduce elements of the late 18th century landscape of the site enabling this era of the site's history to be explored and interpreted.

The existing wooded area to the west of the Sweet Walk road will remain as it is, retaining an important habitat for low and ground nesting species such as song thrush, which are known to be present.

Key considerations and opportunities for this area:

- Enhance the woodland of the Sweet Walk to restore historic character and increase biodiversity interest.
- New tree and shrub understorey planting.
- Improve habitats and biodiversity promote access to nature
- Explore opportunities for managed extensive volunteer tree planting projects.
- New tree planting around tennis courts and cricket nets for screening with a tall grassland understorey.



Enhanced cafe and shop
 Enhanced Sweet Walk planting
 Cafe service yard

. Great Lawn Sweet Walk & Stable Block Marble Hill House



HLF PARKS FOR PEOPLE - DESIGN & ACCESS STATEMENT

4.5 GREAT LAWN, EAST AND WEST MEADOW, CAR PARK AND RIVER TERRACE PROPOSALS

The Great Lawn provides the foreground to Marble Hill House when approaching from Richmond Road. The open informal character is an important part of conserving this vista.

The Great Lawn

Key considerations and opportunities for this area:

- Conserve the open, informal grassy space of the Great Lawn including its use for cricket.
- Sensitively integrate the existing tennis courts and cricket nets into their landscape setting with new planting as part of the Sweet Walk.
- Resurface tennis courts.
- Provide new nets and surfacing to Cricket nets.
- Improve habitats and biodiversity and promote access to nature.

The East Meadow is characterised by open grassy areas home to the football pitches at Marble Hill Park. The adventure play facility is a visual detractor from the setting of the House and in the context of the registered park framing and screening of views would help to better integrate this facility.

The East Meadow

Key considerations and opportunities for this area:

- Conserve and enhance the East Meadow as an open grassy area enclosed by tree belts through diversifying the mowing regime.
- New tree planting.
- Screening views of intrusive features to increase visual and biodiversity interest.
- Improve habitats and biodiversity and promote access to nature
- Expanding areas of tall grassland to provide wider movement corridors for wildlife.
- Create a year round sports provision acknowledging seasonal variations and the need for pitches to recover and regenerate.

The West Meadow is characterised by open grassy areas enclosed by tree belts. Detracting features such as the Chinese style pagoda will be removed.

The West Meadow

Key considerations and opportunities for this area:

- Conserve and enhance the West Meadow as an open grassy area enclosed by tree belts.
- Diversify the mowing regime and tree planting to increase visual and biodiversity interest.
- · Improve drainage to Rugby pitches.
- Create low-level play area adjacent to the cafe.
- Improve habitats and biodiversity and promote access to nature, particularly in flood zones.
- New tree planting.
- Formalise existing bark path along west meadow park boundary between gate entrances adjacent to Orleans Road with accessible surface.

The functional components of Marble Hill Park are generally contained within this area, a remnant of the historical separation of the kitchen garden from the House. The aim is to better integrate these facilities and where possible reduce their impact on the park as a whole.

The Car Park, Playground and Work Areas

Key considerations and opportunities for this area:

- Preserve the significance of the core landscape by focussing all functional operations to one area.
- Improve orientation and wayfinding to create a hub for visitors arriving by car or public transport links on Richmond Road.
- Expanding areas of tall grassland to provide wider movement corridors for wildlife.
- New tree planting.

The River Terrace provides an under utilised connection to adjacent parks and open spaces and the River Thames. The aim is to retain the iconic view between the house and the river and manage the terrace in line with its historic nature of Marble Hill.

The River Terrace

Key considerations and opportunities for this area: Improve boundary treatments to create a more welcoming entrance to Marble Hill Park.

- Promote the River Terrace as a wildlife corridor.
- Improve habitats and biodiversity and promote access to nature
- Improve orientation and wayfinding

4.6 SPORTS PITCH PROPOSALS

The sports pitch provision and arrangement of pitches will remain the same as it is at present. The following pitch proposals aim to improve the quality of the playing surfaces and address the issue of flooding, particularly to the rugby pitches. The proposals will not prevent flooding of the pitches, but aim to drain water more efficiently to allow pitches to be put back into use more quickly.

Pitch Improvements:

Tennis Courts (1)

• 2no. courts to be resufaced

Cricket Practice Netws (2)

Nets to be replaced

Cricket Pitch (3)

- Recently had false turf wicket replaced
- Lime and fertiliser application proposed

Rugby Pitches (4 & 5)

- Selective regrading to include stone reduction
- Installation of sand slit drainage with connection to drainage network
- Grass overseeding with shade tolerant species
- Fertiliser application
- Enhanced maintenance regime and on-going review of adjacent tree canopies for overshadowing

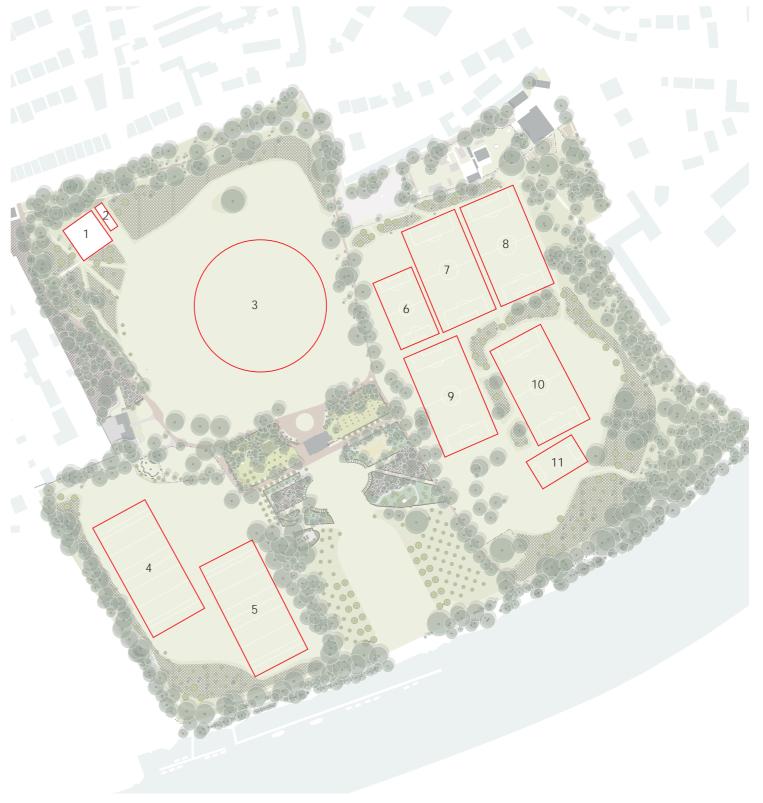
Football Pitches (7, 8 and 9)

- Selective regrading to include stone reduction
- Installation of sand slit drainage with connection to drainage network
- Grass overseeding with shade tolerant species
- Fertiliser application
- Enhanced maintenance regime and on-going review of adjacent tree canopies for overshadowing

Football Pitches (6, 10 and 11)

- No works proposed at this stage
- Ongoing increased maintenance regime to improve pitches

The proposed improvement works to the pitches would be carried out in phased operations, so that pitches are still available for club and community use. Upgrade works to the football and rugby pitches require one year to allow the new grass to establish, therefore only one pitch of each type will be taken out of action in any one playing season. Works to the cricket pitch will be able to be undertaken outside of the playing season and should not affect the pitch availability to local clubs.



Sports pitch proposal plan. Ref 581_PL_L_25_E

HLF PARKS FOR PEOPLE - DESIGN & ACCESS STATEMENT MARBLE HILL REVIVED

4.7 PLAY STRATEGY

The Marble Hill Playcentre provides play for 0-5 years at their One O'clock Club including indoor and outdoor facilities. The Adventure Playground is for ages 5-15 years and includes aerial runways, climbing frames and a skateboarding ramp. Both play facilities are paid entry. The play area and buildings, located along the north-east boundary of the park, are leased from English Heritage.

Adjacent to Marble Hill Park is a playground in Orleans Gardens. It provides play for both under 7's and 7-13 year olds and is very popular. There is also a small café and toilet facilities. The challenge for the proposed play at Marble Hill Park will be to ensure the offer is not duplicated and offers a complimentary but different play experience.

The play strategy for the project aims to:

- Keep the current fenced free-play area as it is.
- Compliment this with an adjacent low-level play area for small children.
- Explore opportunities for play throughout the park.
- Improve relationships with the Playcentre and adjacent play offers to be mutually beneficial and to avoid competition.

Brief

Activities and types of play:

- Locomotive -climb / physical / sit / crawl / jump / balance / teamwork
- Social role play / linguistic
- Active/sequential
- Socio-dramatic

Conditions:

- Minimal ground disturbance
- No high or densely massed structures
- No equipment that is overtly 'play equipment'
- Include seating provision for adults/parents



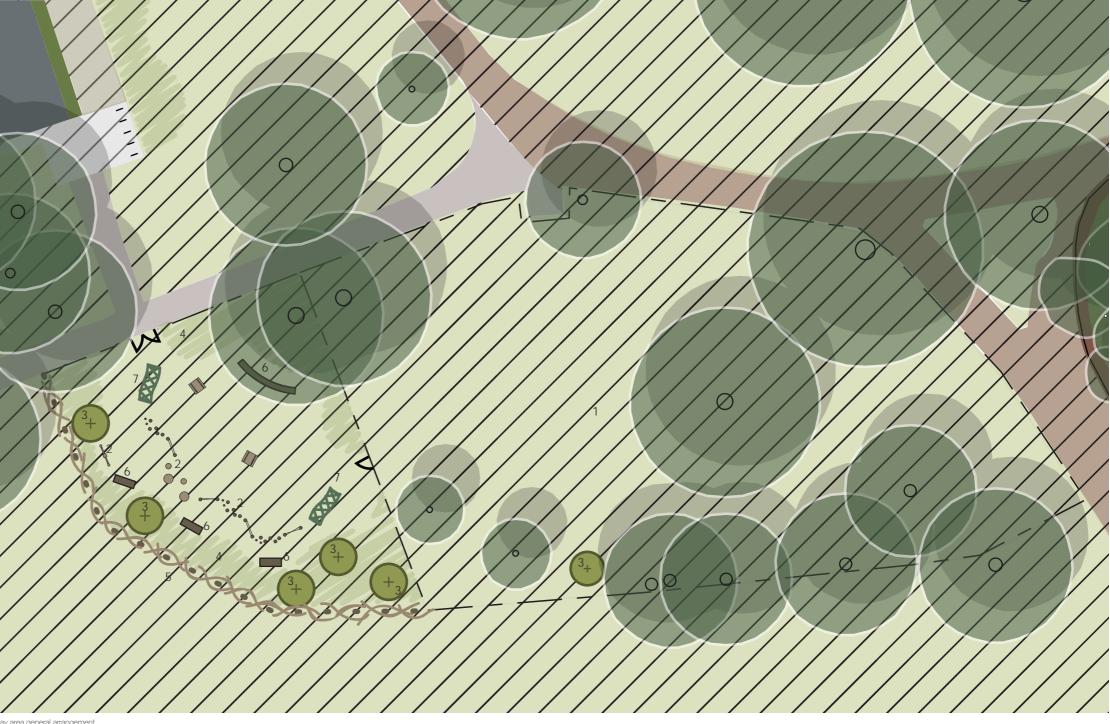
NEW PLAY AREA

The new play area is proposed as an extension to the existing fenced free-play or dog-free area at Marble Hill Park, opposite the Stables cafe. The existing area will remain unchanged. The new area adjacent will have its own separate gated entry with an additional gate connecting the two areas. A natural 'dead hedge' boundary is proposed around the perimeter of the new play area as a more sympathetic solution to a traditional fence. New play features will be low-lying and natural in style, such as stepping logs, low wobble boards and barefoot paths. New tree planting is proposed to provide shade with a meadow understorey to create enclosure. A long curved timber bench will sit below an existing tree and could be used for outdoor lessons and activities. Additional benches are provided to ensure plenty of places for parents and carers to sit.

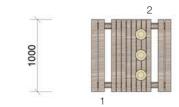
- 1. Existing dog-free area to remain unchanged
- 2. New low-level play equipment
- 3. New tree planting
- 4. Meadow grasses
- 5. Dead hedge boundary
- 6. Bench

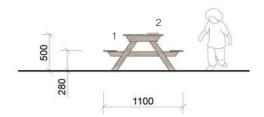
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7. Willow tunnel

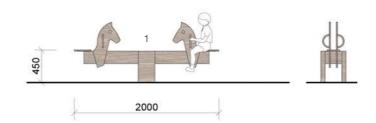


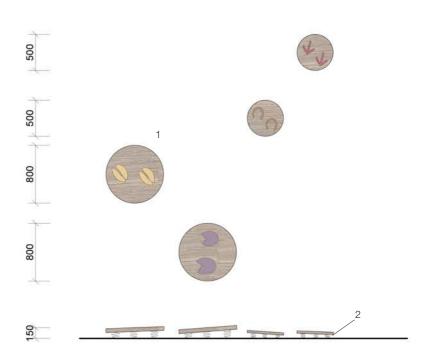












WORKERS REST STOP

- 1. Small child-size picnic table
- 2. Carved timber cups/plates, cooking tools, fixed to table

HORSE SEE-SAW

1. Wooden see-saw with carved horse seats

WOBBLE BOARDS

- 1. Low timber wobbling boards with animal footprints carved into the surface
- 2. Springs

Play equipment drawings - Ref. 581_PL_L_15_A

4.8 INTERACTIVE PLAY INCIDENT PROPOSALS

Brief

Activities and types of play:

Locomotive - balance / agility / weaving Social - role play

Features:

- Ice house seat
- Bee hives
- Grove play

Conditions:

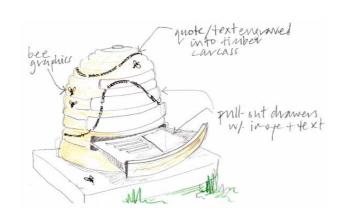
- Inspire curiosity and spark connection to the site
- Suitable for children up to 12 years
- Allow for ground surface to be retained wherever possible



Reference: Wrest Park seat

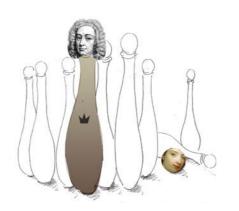


Ice House Seat: Timber frame structure containing a bench, taking reference from the c.1749 plan. Ref. 581_PL_L_18_B





Beehives: Two timber beehive sculptures with pull out drawers and carved text. Ref. $581_PL_L_20_A$





Ninepin Alley: The restored Ninepin alley will provide an opportunity for multiple games, such as quoits, skittles and petanque. Carved wooden skittles could provide interpretive elements in the form of characters in Henrietta's life. Ref. 581_PL_L_19_A

4.9 PARKLAND PLAY STOPS

An adaptive playable trail circuit around the park. Natural play elements that can be added to as and when trees are felled on site. A few basic structures could be introduced to the wooded edges to the south and east of Marble Hill, to encourage exploration of the more 'wild' areas of the park.

The play stop locations are indicative and will be finalised following the conclusion of pre-construction badger survey work. Final locations will be devloped alongside an ecologist to ensure any badgers present are not disturbed.

Elements to include:

- Stacks of logs to climb
- Staggered poles to weave in and out
- Stepping stumps
- Balancing beam logs
- Hollow log tunnels
- Carved logs arranged into musical features























5.1 SUMMARY OF LANDSCAPE PROPOSALS

The Marble Hill Revived project aims to once again connect the historic house with it's landscape, as was Henrietta Howard's vision and outlined on the c. 1749 plan.

The Park will retain its function as a well-used open green space with sports pitches, places to sit and relax and opportunites for play. The existing wildlife habitats will be retained and enhanced to encourage a more biodiverse range of species, creating a richer experience for all to enjoy.

The park offer will be complimented by the proposed upgrade to the Stables cafe and increased access to Marble Hill House. Please refer to the respective Design and Access Statements accompanying this application.

A summary of the landscape proposals is as follows:

- Planting 342no. new trees, in the form of new avenues, orchard, groves and woodland canopy extensions
- Re-introduction of understorey in the Woodland Quarters through shrub and ground cover planting and on-going management
- Removal of dilapidated palisade fencing around
 Woodland Quarters and replacement with estate railings and post and wire fencing with gates for public access
- Creation of a new ninepin skittles alley
- Sports pitch surface improvements
- An extension to the existing fenced free-play area to include low-level play equipment made from natural materials
- Creation of a new flower garden and planted palisade
- Provision of new bins and benches
- Enhanced habitats in the Woodland Quarters and wider movement corridors across the east meadow
- Provision of habitat boxes for birds, bats and insect hotels and retention of stumps and standing dead wood habitats
- New interpretation elements within the landscape and enhanced wayfinding
- Demolition of redundant structures
- Path upgrade to western park boundary between the gates on Orleans Road

