



QUEEN ELIZABETH PARK, FARNBOROUGH
Management Plan,
2023-2028



RUSHMOOR
BOROUGH COUNCIL

Report for Rushmoor Borough
Council

January 2023

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Location	Farnborough, Hampshire. SU867 571
Size	9.5 hectares
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Management plan created	December 2022

Cover photo. View of central area dominated by Beech

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I INTRODUCTION

1.1 Purpose of Site

The site is part of Rushmoor Borough Councils greenspace estate, acquired in 1950's to provide access to the woodland for residents. Since then, the surrounding residential population has increased considerably and is continuing to do so. The site is well used, with importance of easy access to greenspace for health and quality of life now being recognised.

More recently duties have been imposed on local authorities to promote biodiversity and careful management of Queen Elizabeth Park can help Rushmoor BC meet this requirement.

2 SITE DESCRIPTION

2.1 Location

The site lies in the north-east of Hampshire within the urban area of Farnborough. This is predominantly residential area of low-level housing although the town centre is only about half kilometre to the south with high rise flats, offices and industrial units. The Blackwater Valley with its chain of lakes lies a similar distance to the east. The surrounding residential areas does have number of open greenspaces mainly school grounds and other playing fields. Some are identified as wildlife-rich sites although none of these have a woodland habitat as at Queen Elizabeth Park.

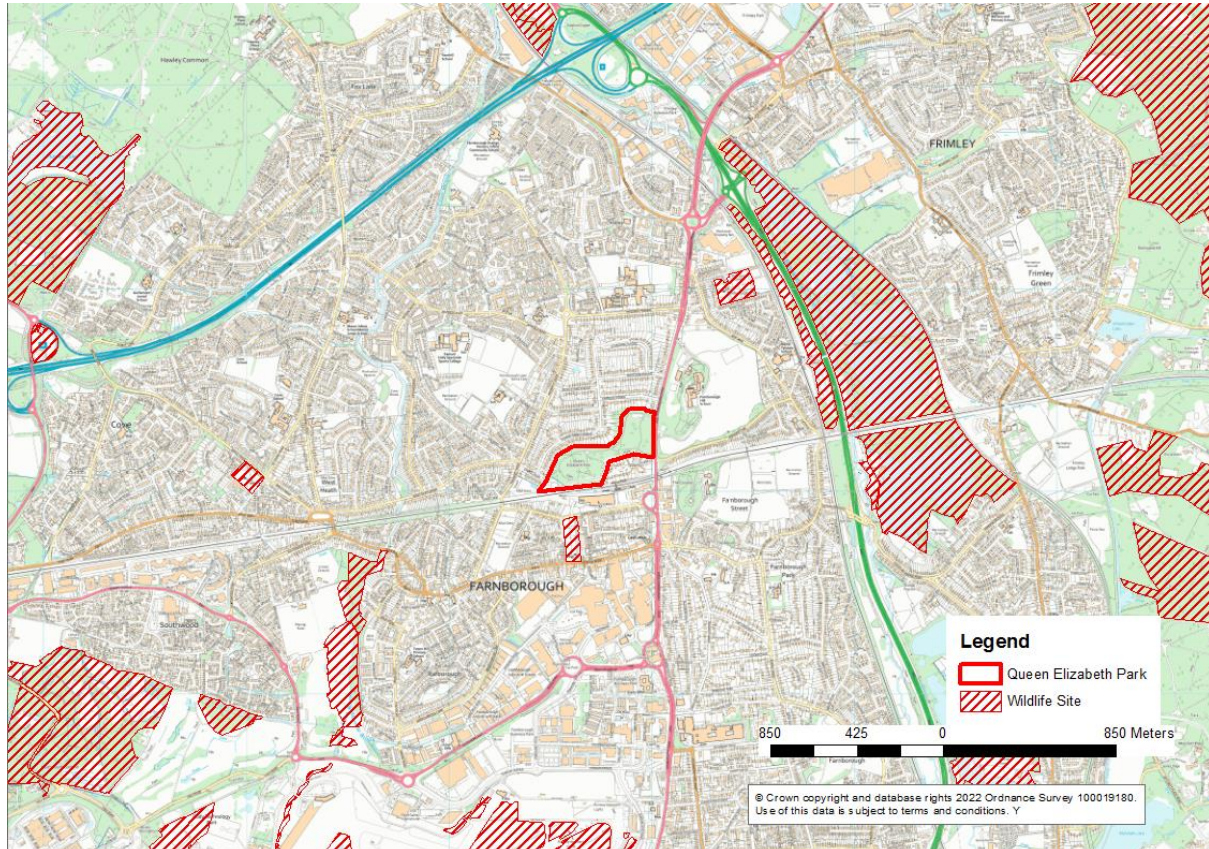


Figure 1. Landscape setting of the site

Residential development lies immediately to the northern and part of the southern boundary. Farnborough Railway station with the mainline railway forms the rest of the southern boundary with the busy A325 Farnborough Road to the east. On the far side of the A325 lies woodland and grassland in the grounds of Farnborough Hill School and Farnborough Abbey.

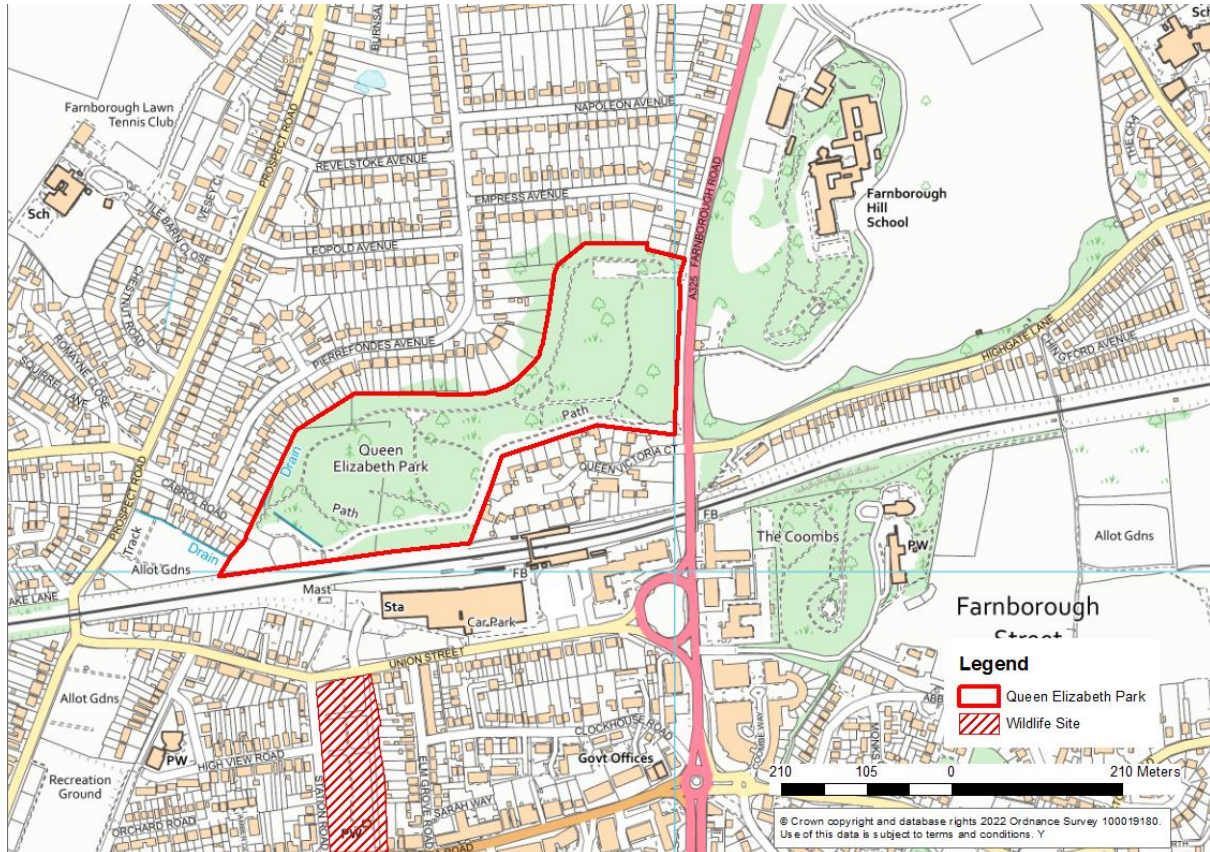


Figure 2. Detailed setting of the site

2.2 Geology and Soils

The bedrock geology is the Camberley Sand Formation that form the upper deposits of the Bracklesham Group. This comprises fine-grained sand, or sandy silt, with some ironstone concretions and masses of white sandstone. Sporadic flint gravel or gravel bed occur near the base layers of the formation. (British Geological Society, 2022).

2.3 Hydrology

The site has a slight and even slope falling from the 75m contour in the north-east corner to 62m in the south-west where the only water feature on site is found. This is a small ephemeral pond that dries for long periods of the year. It has a large content of silt and woody debris from surrounding trees. There is no obvious inlet, but an outlet is in the north-east corner. Water levels in the pond may be more controlled by groundwater than surface runoff. It is thought the pond may have been dug to intercept runoff from the woodland and so prevent flooding of the car park, play area and surrounding properties.

2.4 Access

The main access for maintenance vehicles is via Cabrol Road, through the car park although this is currently (December 2022) blocked by the ESSO works compound. An alternative maintenance vehicle access is via the Farnborough Road car park, both require a Rushmoor standard key to open gates. Once on site the lack of understorey and its usually dry nature allows vehicle access through the centre of the site for authorised vehicle undertaking site management only.

The lack of understorey in large areas, together with a network of unsurfaced footpaths through the Rhododendron and the general flat nature of the site gives easy access for pedestrians and a choice of routes throughout.

A surfaced footpath, also used by cyclists, follows the southern boundary, but is currently blocked by the ESSO works, it will be restored before they leave.

The site is well used by local residents and groups such as the scouts. The Friends of Queen Elizabeth Park are very active organising monthly health walks, litter picks and regular events such as picnics, woodland activities and work parties.

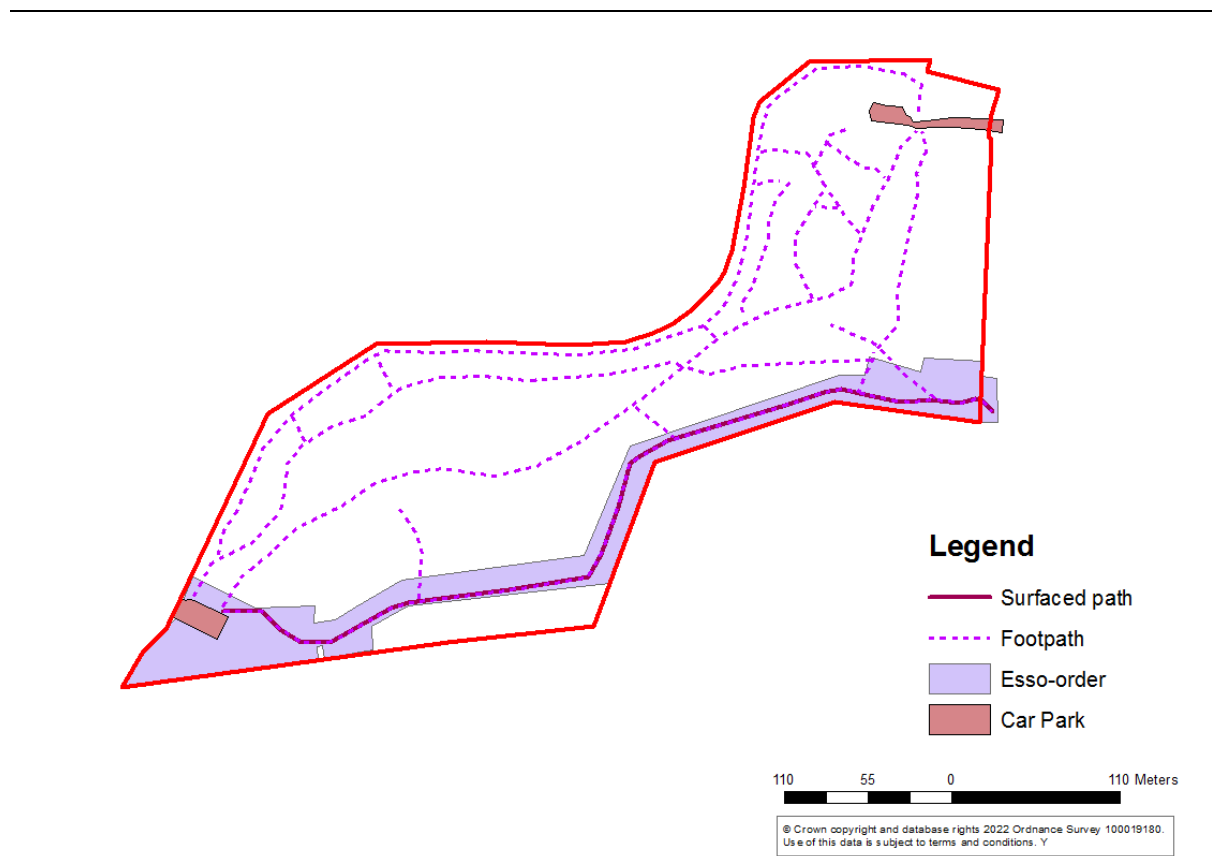


Figure 3. Access and ESSO order limit

2.5 Infrastructure, Utilities and Wayleaves

The site has two car parks, although currently the Cabrol Road car park is closed as it is being used as a works compound during the installation of the ESSO pipeline. The children's play area that was here has been temporarily relocated into the glade within the woodland.

The site has small interpretation panels at both entrances, and a few benches and seats close to the pond and along the central areas. Bins are sited in the car parks and also two bins are within the site next to seats. Most seats and both internal bins are in a poor state of repair (two dilapidated seats were discovered completely engulfed within Rhododendron during clearance of the latter in 2022).

The Esso high pressure pipeline runs through the site adjacent to the surfaced footpath route along the southern boundary and creates a restraint to work as no digging or fires are permitted close to it. It is believed other sewers and water mains are adjacent to this pipeline as well electric cables serving the lighting along the surfaced path.



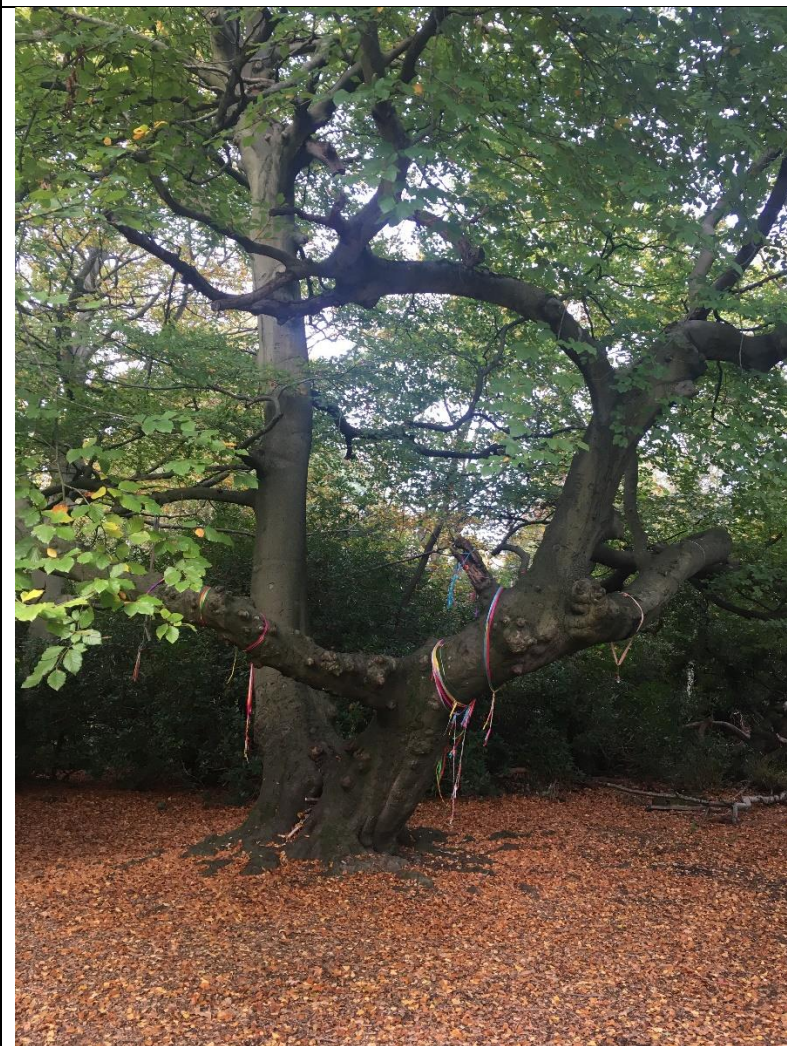
View from
Farnborough Road car
park entrance.

Typical view of Beech
dominated central
areas with minimal
understorey.



Typical peripheral
vegetation.

Rhododendron
dominated shrub layer



Fairy Tree.

Veteran Beech,
decorated by locals.

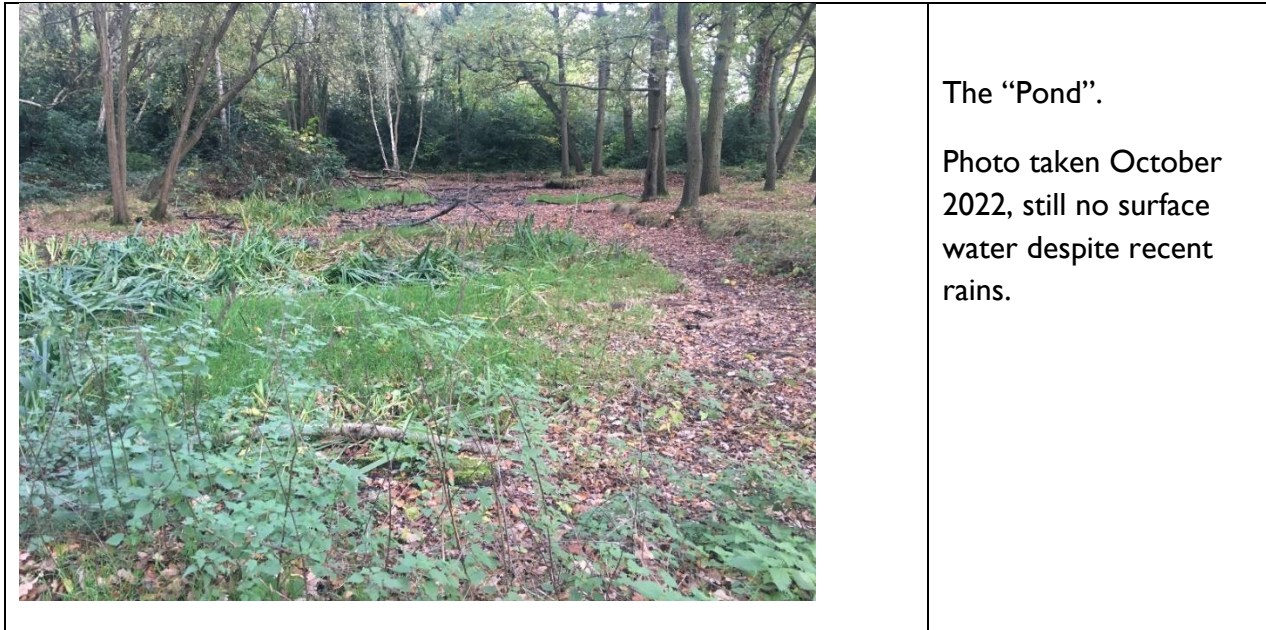


Figure 4. Site photographs

2.6 Landscape & Ecology

2.6.1 Historic use

In the early 1800’s land west of Farnborough Road was purchased by the Grant family and then planted to woodland, to add to their estate on the east of Farnborough Road.

The OS Epoch One map, (surveyed 1845-1855) shows the site being the southern section of a block of mixed broadleaf and coniferous woodland. A boundary within the woodland follows a similar line to the park’s northern boundary. In the SE corner, (now outside the site) Farnborough Lodge is shown and it appears the site formed its curtilage with tracks within the woodland laid out to give various circuits. It is possible that the Rhododendrons were planted during this period as part of an extensive woodland garden.

Banks that still exist in the western end of the site are shown on the Epoch One map and mark field boundaries that predate the woodland and garden plantings.

Princess Eugenie purchased Farnborough Hill estate in 1880’s, after her death various sections were sold off piecemeal, with Farnborough Urban District Council acquiring the area to form Queen Elizabeth Park in the 1950’s (Hampshire Gardens Trust, 2022).

Proposals by Rushmoor in 1997 describe very similar proposals as this plan, including reduction of Rhododendron, pond restoration, more seating and signage, and improvements to play areas and car parks (Edwards, 1997).

2.6.2 Landscape Character.

The Rushmoor Landscape Study 2009 placed the site within character area “Residential Type A”, but rather oddly describes “significant vegetation is found within private gardens but little or non in public areas”.

It may be better placed with the adjacent Farnborough Green Character area that lies east of the Farnborough Road having a “parkland landscape” with “mature woodland blocks, hedgerows with trees and ornamental specimen trees”. This would reflect its historic associations as well as its woodland character and habitat connectivity.

2.6.3 Survey History

A fungi survey in 1972 found 70 species (Minett, 1972). This survey described the site in the 1960’s having “all available space filled with Rhododendron” but with subsequent clearance of some areas and import of soil and grass seeding. The survey map shows large areas of grassland especially in the northern end of the site.

A HBIC survey was carried out in 2006, this describes the central area of the site having “a parkland landscape with an open canopy of mature trees over improved grassland” with a shrub layer “denser under the trees” and a field layer of grasses having “much bare ground”. The peripheral areas are identified as broadleaf plantation. Six invasive species are recorded, including Rhododendron which is described as “locally abundant with some clearance”. Only one species of interest is recorded, Holly, as the sole ancient woodland indicator. The pond is identified with aquatic species present.

ESSO carried out surveys in 2019 prior to construction of the pipeline. This described the site as broadleaf semi-natural woodland with two small clearings, an understorey dominated by dense Rhododendron with four other invasive species recorded. Five ancient woodland indicators were identified although three were considered garden escapes. One other species of interest was picked out, Heath Speedwell an acid grassland species in the clearing now partly built on by the temporary play area.

The most recent survey of the site was carried out by HBIC (2022) concentrating on the pond. It was dry at the time with a few swamp species present.

2.6.4 Habitats and Flora

The site now is a broadleaf woodland with full canopy across the vast majority of the site. Beech is the most abundant with Turkey Oak, Sweet Chestnut and Scots Pine, all are of a similar age, probably from the 1800’s plantings. There are only a few sub-canopy stage trees, although some younger Birch are probably self-set and, with semi-mature Pin Oak from more recent plantings, are closing the canopy above previously open glades. There are self set saplings of Beech and plantings in 2022 of whips of a variety of species.

ESSO identified four veteran trees, one of these, a Beech, is well known to locals as the Fairy Tree. All are very close to, or within the ESSO work area so potentially vulnerable. A further 88 notable trees are recorded on the Woodland Trust Ancient Tree Inventory.

The central area has little understorey whilst Rhododendron and some Cherry Laurel form a dense shrub layer that dominate the peripheries. Despite removal of extensive patches in winter 2021/22 these two species are present in over c. 50% of the woodland. (It is intended to keep the Rhododendron and Cherry Laurel as an evergreen screen to adjacent residential area and the Farnborough Road, as well as along one internal footpath to retain the link with the historic garden use). Native shrubs are restricted in species and quantity, there are a few patches only of Bracken, Bramble and Gorse.



Figure 5. Habitats

The field layer is largely lacking due to shading of the Beech, Rhododendron and lack of glades although numbers of Broad-leaved Helleborine did appear after Rhododendron clearance. A number of garden species are present some of which are invasive including Garden Bluebell, Snowberry, Montbretia and Variegated Yellow Archangel (see fig. 6).

The western grassland identified by ESSO now includes a temporary child's play area. whilst the eastern one is only identifiable as non-woodland grasses under canopy. The area of amenity grassland next to the Cabrol Road car park currently forms part of ESSO's compound.

The pond is ephemeral with long periods dry in Summer, but holding water in Winter, it is heavily influenced by the changing weather patterns now experienced. This feature is a pond in name as without management it would return to woodland, it's present condition being more this than pond.

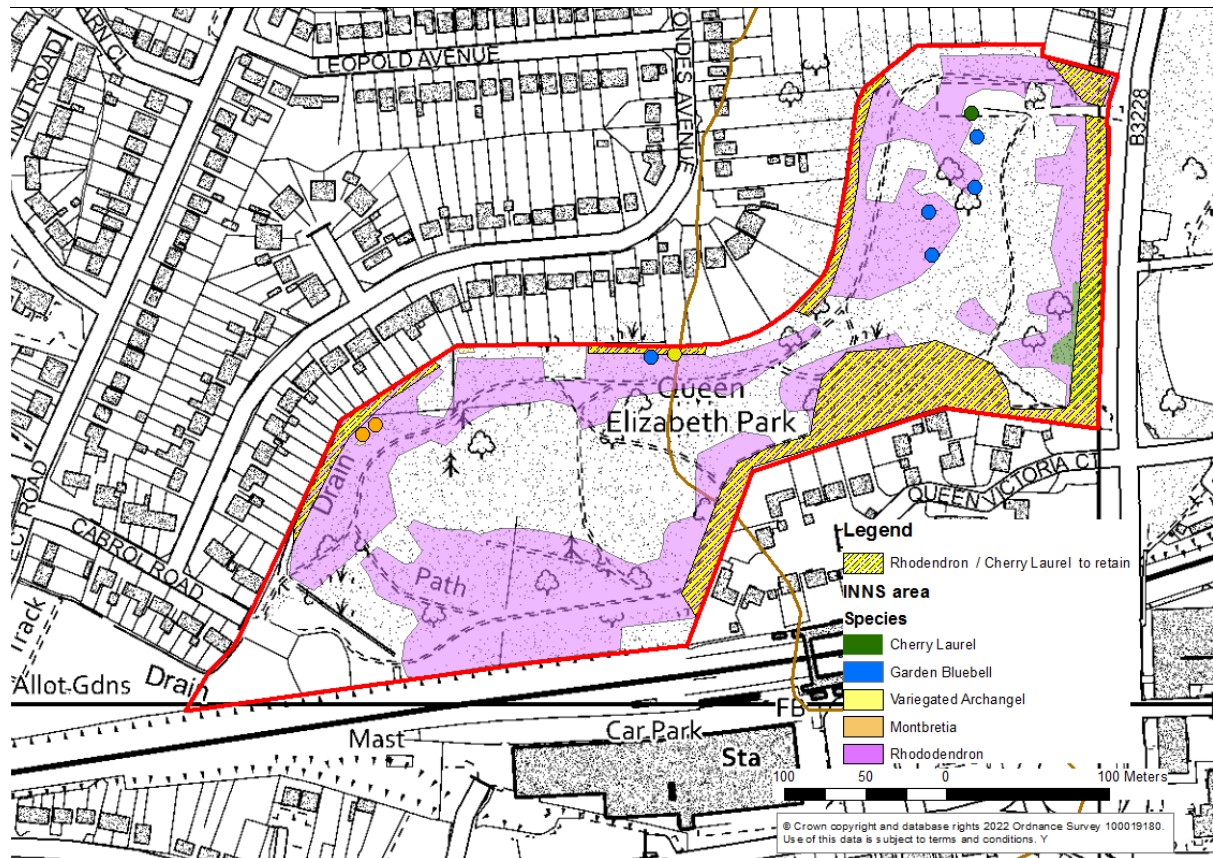


Figure 6. Invasive species

2.6.5 Fauna

No systematic surveys have been carried out on fauna. A few common woodland bird species have been recorded e.g. Nuthatch, Great Tit, Blue Tit, and no doubt these and other species use the site for feeding and nesting.

Mammals seem restricted, bats were observed during a public walk and some will almost certainly forage on the site in small numbers, and the many mature trees on site provide many potential roosting features. Grey Squirrel are present, Brown Rat populations spike due to human influence from neighbouring gardens and the Farnborough Road frontage littering including food waste. Roe Deer have occasionally been seen.

Common Toads, Frogs and Newts have potential to breed in the pond, all being suited by its ephemeral nature.

There are no records for invertebrates. There is need for better recording and surveys for all fauna groups.

3 SITE APPRAISAL

3.1 Overall Value

In association with the grounds of Farnborough Hill School and Farnborough Abbey, the site is part of an important landscape feature in an otherwise urban environment. The link to Princess Eugenie gives it a cultural value. It provides public access to greenspace and is well used and highly valued by local residents.

Although not ancient, the trees on site are starting to develop the character of native broadleaf woodland. The uniformity of age, with few sub-mature trees may create a problem for future succession as the current stock of mature trees age.

Woodland Rapid Assessment in Spring 2022 scored the site 14.7 out of 30 with low scores for presence of invasive species, and little shrub layer, ground flora or deadwood habitats. The site thus has high potential for improvement to increase its value for wildlife.

In its present state the pond has limited ecological and amenity value. A recent report from the Hampshire and Biodiversity Records Centre (HBIC) (*Queen Elizabeth Park Pond Habitat Survey*, dated 23rd June 2022), made a series of recommendations that may be implemented to restore and enhance the ecological value of the pond.

3.2 Identification of Important Features

In order to make the most of the site's potential value, the features that are most important to meet its main aims have been identified as a priority for their management.

Feature	Reason for selection as priority
Access	The primary purpose of the site is to provide access to a woodland greenspace for the local community.
Broadleaf woodland	The major habitat on site and a noted landscape feature in an otherwise urban area, helping to meet climate mitigation.
Veteran trees	The site contains four veteran trees. One of which the "Fairy Tree" is a valued local landmark.
ESSO pipeline	The ESSO high pressure pipeline is classed as national infrastructure so a priority to ensure it is not damaged.

Table 1. Identification of important features

4 FACTORS INFLUENCING

4.1 Owners Priorities and Policies

Whilst the primary purpose of the site is to provide access to greenspace for local residents Rushmoor BC are keen it helps meet other priorities.

The Natural Environment and Rural Communities Act (NERC) places a duty on the Local Planning Authority to conserve biodiversity, whereby 'conserve' is clarified as meaning 'restoring or enhancing a habitat'. The Park has been identified by Natural England's mapping as being 'Deciduous Woodland' a Habitat of Principal Importance for the purpose of conserving biodiversity. The nature of the site being a maturing woodland but with many issues provides plenty of opportunities to increase its value for biodiversity.

Rhododendron, Variegated Yellow Archangel and Montbretia are all listed on Part II of Schedule 9 of the Wildlife and Countryside Act 1981 as Invasive Non Native Species that landowners have a statutory obligation under Section 14 of the Act to take 'all reasonable steps and exercised due diligence' to avoid committing the offence of causing to grow in the wild.

Removal of all non-native invasive species, (including those not mentioned in the Wildlife and Countryside Act) will help Rushmoor meet its statutory obligations of the NERC Act to promote biodiversity, with reduction of Rhododendron being a key activity as it presently covers such a significant ground area within the woodland.

Rushmoor Council acknowledge the sensitivities of Rhododendron removal in particular its role in screening to surrounding properties and its historic role on site. The Council will work with neighbours and all interested parties to formulate long term action plans for the Rhododendron to include replacement screening by native species.

Figure 7. shows a phased removal plan for Rhododendron with areas to be retained. Plots show order of removal rather than annual targets. It is unlikely all plots shown for removal will be treated in the 5 years this plan covers and the scheme may be amended following consultation.

Rushmoor have secured s106 funding to help further their aims at the Park.

4.2 ESSO pipeline

ESSO are currently (November 2022) on site installing a high pressure pipeline along the Southern boundary of the site with their works compound on the site of the Cabrol Road car park and playground. A temporary playground has been constructed in the one glade within the woodland. There is an option for this to be retained if deemed appropriate by the Council.

Although the majority of work within Queen Elizabeth Park is planned to be completed by January / February 2023 works to a narrow section of the Park at the west, is due to take longer – until approximately end of 2023. This is expected to require retention of the Cabrol Road works compound. Work has involved clearance of vegetation and loss of

trees, 30 trees being initially earmarked for felling, but more have been removed. An agreed Landscape and Ecological Management Plan (LEMP) details restoration work they have to complete within their order limits, this includes restoring Cabrol Road car park and play area, repairing footpaths and replacing trees lost one for one, (see appendix C). ESSO have also agreed via their Environmental Investment Programme (EIP) to pay Rushmoor to carry out site improvements outside the formal order limits of the Development Consent Order, and by a separate agreement to fund resurfacing of Farnborough Road car park.

	Value
Localised Rhododendron control outside order limits, EIP.	£10,000
Signage and interpretation boards, EIP.	£5,000
Pond Restoration, EIP.	£7,500
Resurface Farnborough Road car park	£5,000

Table 2. Funds from ESSO for Non LEAP projects

4.3 Management Considerations and Constraints

Good practice management will include the following principles:-

- Minimise use of chemicals. Where possible use alternative solutions to chemicals such as mulch or physical removal to reduce the spread of invasive plants.
- Ensure tree and scrub management work takes place outside the bird-breeding season other than for urgent health and safety reasons. Check for possible bat roosts.
- Consider small mammals and reptiles when strimming or mowing.
- Source materials from local or national environmental suppliers to minimise carbon footprints from travel and where possible use local contractors.
- Reduce virgin plastic use.
- Aim to constantly improve knowledge and skills of all who work on site, staff and volunteers, and also have access to specialists able to advise.
- Establish a programme of survey and monitoring against key objectives to facilitate site management.

4.4 Threats and Opportunities

Feature	Threats	Opportunities
Access	<p>Pipeline construction has felled many trees, closed the surface path and Cabrol Road car park and moved the play area.</p> <p>Seats, bins, signage and Farnborough Road car park in poor state.</p> <p>Over growth of footpaths.</p> <p>Anti-social behaviour, wild camps, arson.</p>	<p>Continued activity of Friends of Queen Elizabeth Park.</p> <p>Restored car parks and play area.</p> <p>SI06 funds for improvements.</p>
Broadleaf woodland	<p>Rhododendron and Cherry Laurel spreading.</p> <p>Garden flytip introducing invasive species.</p> <p>Low number of open spaces.</p> <p>Few sub-mature trees for succession.</p>	<p>Reduction of invasives.</p> <p>Introduction of native understorey and ground flora.</p> <p>Expansion of glades and rides.</p> <p>Retention of deadwood.</p>
Veteran trees	<p>Root damage during pipeline construction.</p> <p>Natural ageing, unsympathetic safety work.</p>	<p>Care of existing veterans.</p> <p>Identify and protect future veterans.</p> <p>Feature for interpretation.</p>
ESSO pipeline	<p>Work has removed many trees.</p> <p>A constraint to work as no digging or fires allowed nearby.</p>	<p>Mitigation payments from ESSO available for agreed work.</p>

Table 3. Identification of threats and opportunities

4.5 Main Work Objectives

4.5.1 Access

- Maintain users safety through inspections and removal of hazards, e.g. dangerous trees, flytipping, damaged seating etc.
- Improve Farnborough Road car park surface.
- Improve quality of infrastructure, signs, seating, bins etc.
- Restore pond as attractive habitat feature, but recognizing its ephemeral nature.
- Maintain community involvement through Friends of QEP.

4.5.2 Broadleaf woodland

- Remove invasive species, (but keep some Rhododendron as screening to residential properties and one historic Rhododendron walk (see fig. 7).
- Increase diversity of age structure through planting and protection of self-sown, including ensuring ESSO replanting takes place.
- Increase quantity and species diversity of ground and shrub layer flora through introductions.
- Retain glades and rides to allow more light into woodland.
- Improve ecological knowledge through surveys.

4.5.3 Veteran trees

- Monitor health and protect identified veteran trees.
- Identify and protect future veterans.

4.5.4 Esso Pipeline

- Ensure restoration conditions are met to a high standard including tree planting, replacement of Cabrol Road car park, replace main play area and reseed amenity grassland.
- Manage surfaced path as a ride to allow light in and keep pipe free of major tree roots.
- Ensure workers on site are aware of pipelines location and limitations on digging and fires to protect pipe from damage.

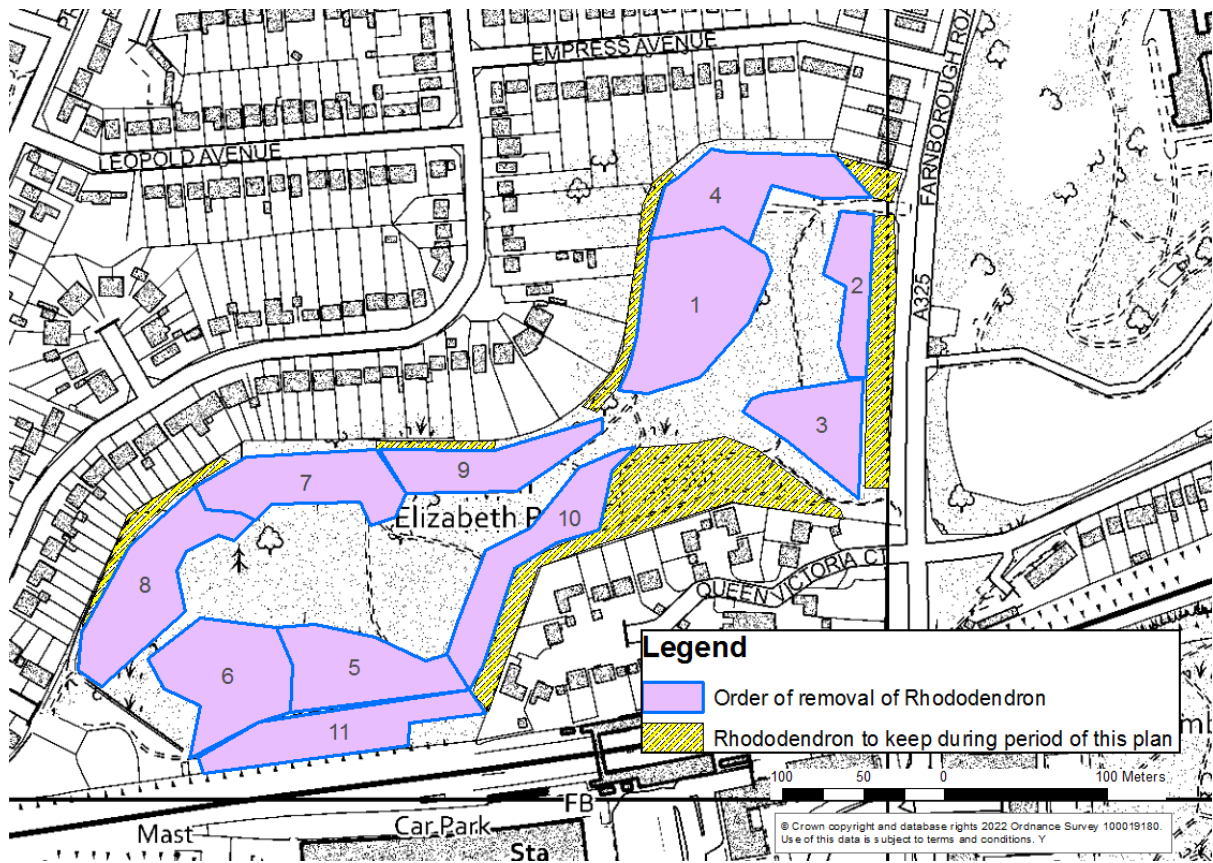


Figure 7. Rhododendron removal

5 WORK PLAN

5.1 Management Activities

These can be distinguished between **essential annual maintenance** and non annual projects, the latter have been classed as **essential projects** that are required for the site to fulfil its purpose or **desirable projects** that will improve the site should opportunity or resources allow. Only costs to be incurred by Rushmoor BC are included, either incurred direct or through BVCP.

5.2 Projects

Operational Objective	Essential project	Year / cost £1,000's						Lead	Fund Source
		2023	2024	2025	2026	2027	2028		
Access	Temporary patching of Farnborough Road car park	5						RBC	ESSO additional funding
	Full surfacing of Farnborough Road car park once Cabrol Road car park available			30				RBC	s106
	Design & install main entrance interpretive signs		10					RBC	ESSO EIP S106
	Remove remains of tapping rail- (trip hazard)	0.2						BVCP	S106
	Remove and dispose old benches seats and internal bins	0.3						BVCP	S106
	Extra bin in both car parks	0.5	1					RBC	S106
	New seating in woodland	1						BVCP	S106

Operational Objective	Essential project	Year / cost £1,000's						Lead	Fund Source
		2023	2024	2025	2026	2027	2028		
	Desilt pond (once Cabrol Road access available) inc. removal of smaller trees, silt placed onto ESSO disturbed ground		10					RBC	Esso EIP and s106
	New seating by restored pond			5				BVCP	S106
	Restore Cabrol car park, replace n main play area. Re-seed grass areas							ESSO	ESSO LEMP
	Set up means of monitoring visitors							BVCP	Within annual fee
	Re-opening, ceremony post ESSO							FQEP	voluntary
	Tree safety surveys & work	2		2		2		RBC	RBC
Woodland	Plant trees to replace losses to include canopy and shrub layer species							ESSO	ESSO LEMP
	Rhododendron and Cherry Laurel removal, employ contractor	10	5		5		5	BVCP	ESSO EIP S106
	Assess need for glade creation/ retention after Rhododendron clearance							FQEP	Voluntary
Veteran trees	Halo around Fairy Tree							FQEP	Voluntary

Operational Objective	Essential project	Year / cost £1,000's						Lead	Fund Source
		2023	2024	2025	2026	2027	2028		
Eso pipeline	Complete pipe installation and carry out LEMP restoration							ESSO	ESSO LEMP
General	Review Plan					2		BVCP	S106

Operational Objective	Desirable project	Year / RBC cost £1000's						Lead	Fund Source
		2023	2024	2025	2026	2027	2028		
Access	Only essential projects identified								
Woodland	Introduce native ground flora	2	2	2	2	2		FQEP	S106
	Introduce native understorey		1			1		FQEP	S106
	Ecological surveys, birds, mammals, invertebrates etc.							FQEP	voluntary
	Botanical survey HBIC 10 yrly					2		RBC	S106
	Woodland Rapid Assessment (to assess change over time)							BVCP	Within annual fee
	Erect bird and bat boxes	2						FQEP	S106
Veteran Trees	Interpretative signage			3				RBC	S106

5.3 Annual Work Plan

Operational Objective	Annual activity	Month												Lead	Fund source	Cost to RBC p.a. £1,000's	
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec				
Access	Site safety check, reactive maintenance / clean														BVCP	Annual management	
	Footpaths and car parks, vegetation control														FQEP	Time only	
	Litter picks														FQEP	Time only	0
	Litter bin empty / flytip removal														RBC	RBC central contract	2
	FQEP visitor engagement activities, events, publicity														FQEP	Grants to FQEP	
	Collect & review visitor data														BVCP	Annual management	
Woodland	Monitor tree health, carry out, safety works if identified													RBC	RBC tree works fund	2	
	Rhododendron, treat regrowth													BVCP	Within annual fee		

Operational Objective	Annual activity	Month												Lead	Fund source	Cost to RBC p.a. £1,000's	
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec				
Woodland (cont.)	Check and remove garden invasives														FQEP	Time only	
	Retain dead wood and log piles on site after tree felling, form stumperies														BVCP	Annual fee	
	Ecological recording, ad hoc sightings to Living Record	When seen												All	n/a		
ESSO pipeline	Ensure contractors, staff and volunteers are aware of location and avoid digging and fires	When on site												RBC	Time only		
General	Annual site meet																
	Clean, repair, replace tools and equipment.														FQEP	Grant to FQEP	
	Confirm annual work and funds, costs to include BVCP expenditure & annual report														BVCP	QEP Site maintenance fund	5

Expenditure timeline

	Planned expenditure £1,000's					
	2023	2024	2025	2026	2027	2028
Annual maintenance	9	9	9	9	9	9
Essential projects						
Patch Farnborough Road car park	5					
Re surface Farnborough Road car park			30			
New signage		10				
Remove old benches & Signs etc	0.5					
New bins	0.5	1				
New seating	1		5			
Desilt Pond		10				
Tree surveys	2		2		2	
Rhododendron removal by contractor	10	5		5		5
Review plan					2	
Essential work total	28	35	46	14	13	14
Desirable projects						
Planting	2	3	2	2	3	
HBIC resurvey					2	
Bird and bat boxes	2					
Interpretation signs			3			
All work total	32	38	51	16	18	14
With 10% contingency	35	42	56	18	20	15

Appendix A – Scientific Binomials of Species Mentioned

Flora

Beech, *Fagus sylvatica*

Birch, *Betula spp.*

Bracken, *Pteridium aquilinum*

Bramble, *Rubus fruticosus agg.*

Broad-leaved Helleborine, *Epipactis helleborine*

Cherry Laurel, *Prunus laurocerasus*

Garden Bluebell, *Hyacinthoides x massartiana*

Gorse, *Ulex europaeus*

Hazel, *Corylus avellana*

Fauna

Common Toad, *Bufo bufo*

Frog, *Rana temporaria*

Smooth Newt, *Lissotriton vulgaris*

Brown Rat, *Rattus norvegicus*

Grey Squirrel, *Sciurus carolinensis*

Roe Deer, *Capreolus capreolus*

Montbretia, *Crococsmia x crocosmiiflora*

Pedunculate Oak, *Quercus robur*

Pin Oak, *Quercus palustris*

Rhododendron, *Rhododendron ponticum*

Scots Pine, *Pinus sylvestris*

Snowberry, *Symphoricarpus albus*

Sweet Chestnut, *Castanea sativa*

Variegated Yellow Archangel, *Lamiaeastrum galeobdolon ssp. argentatum*

Appendix B. Relevant Legislation and Planning Policies

Protected Species

The Wildlife & Countryside Act 1981, and subsequent amendments inclusive of provisions in the Countryside & Rights of Way Act 2000 (CROW Act), provide the basic legislative protection for wildlife.

Among its provisions it makes it an offence to:

- Kill, injure, or take any wild bird or their eggs or nests.
- Intentionally kill, injure, or take, possess, or trade in any wild animal listed in Schedule 5 (including Otter, Water Vole and all bats and all reptiles).
- Uproot, trade in, or possess (for the purposes of trade) any wild plant listed in Schedule 8. (Re rare species).
- To plant, or otherwise cause to grow in the wild, any plant listed in Schedule 9 to the Act. (Re specified invasive species).

Conservation of Biodiversity

The Natural Environment and Rural Communities Act 2006 (NERC Act) created a duty for every public authority to conserve biodiversity. It states “every public authority must, in exercising its functions, have regards, ... to the purpose of conserving biodiversity”.

The Environment Act 2021 furthered this by adding biodiversity targets for Local Authorities and added duties including the requirement for Highway Authorities to consult before felling street trees and for each Local Authority to produce a Biodiversity report every 5 years.

Appendix C Extract from ESSO LEMP, Planting and seeding specifications

T4. Individual tree planting for Queen Elizabeth Park

Botanical name	Common name	Girth/ Stem Dia cm	Height cm	Root zone	Form and age/method of growth	Number
<i>Alnus glutinosa</i>	Alder	8-10	250-300	B	2x; Feathered; 5 breaks	1
<i>Betula pendula</i>	Silver birch	8-10	250-300	B	2x; Feathered; 5 breaks	14
<i>Betula pubescens</i>	Downy birch	8-10	250-300	B	2x; Feathered; 5 breaks	1
<i>Castanea sativa</i>	Sweet chestnut	8-10	250-300	B	2x; Standard; clear stem 175-200cm; 3 breaks	4
<i>Corylus avellana</i>	Hazel	N A	100-125	RB	Branched; 5 breaks	1
<i>Fagus sylvatica</i>	Beech	8-10	250-300	B	2x; Feathered; 5 breaks	1
<i>Ilex aquifolium</i>	Holly	N/A	200-250	70-90L	Leader with laterals	1
<i>Quercus robur</i>	Oak	8-10	250-300	B	2x; Feathered; 5 breaks	6
<i>Tilia tomentosa</i>	Silver lime	8-10	250-300	B	2x; Standard; clear stem; 175-200cm; 3 breaks	1

G6. Amenity grassland seed mix (general purpose)

Botanical name	Common name	Percentage	Density
<i>Agrostis capillaris</i>	Common bent	10%	40 g/m ²
<i>Festuca rubra litoralis</i>	Slender creeping red-fescue	20%	
<i>Festuca ovina</i>	Sheep's fescue	45%	
<i>Lolium perenne</i>	Perennial ryegrass	20%	
<i>Trifolium repens</i>	White clover	5%	

REFERENCES

- British Geological Society (2022) *Geology Viewer, 2020* [BGS Geology Viewer \(BETA\)](#) accessed 31/10/22.
- Edwards, C. (2006) *Managing and controlling invasive rhododendron*. Forestry Commission Practice Guide.
- Edwards, J.(1997) *Older Urban Area Regeneration – Queen Elizabeth Park*. Report No. 87/97 to Rushmoor Planning and Transportation Committee.
- ESSO (2019) *Southampton to London Pipeline Project Vol 6 Environmental Statement (Volume D) Appendix 7.1 Habitats and Botany Factual Report*.
- ESSO (2021) *Landscape and Ecological Management Plan*. Southampton to London Pipeline Project, Rushmoor Borough Council.
- Fry, R. and Lonsdale, D. (1991) *Habitat Conservation for Insects a Neglected Green Issue*. The Amateur Entomologist Society Vol 12.
- Hampshire Gardens Trust (2022) *Farnborough Hill School* [Farnborough Hill School | Hampshire Garden Trust Research \(hgt.org.uk\)](#) accessed 1/11/22.
- HBIC (2006) *Queen Elizabeth Park Survey*. Report for Rushmoor BC.
- HBIC (2022) *Queen Elizabeth Park Pond*. Report for Rushmoor BC.
- Minett,P (1972) *Fungi*. Student Study.
- Rushmoor Borough Council (2009) *Landscape Assessment of Rushmoor*.
- Woodland Trust (2022) *Ancient Tree Inventory* [Tree Search - Ancient Tree Inventory \(woodlandtrust.org.uk\)](#) accessed 13/12/22.