

APPENDIX 1

Model Farm Management Work Plan

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Model farm compartment

1.0. Site description



1.1 Location

The model farm compartment is located south east of Kenwood nursery staff yard near the north easterly extent of Hampstead Heath. The site is located in an area adjacent to Athlone gardens with lower Cohens fields to the west and the privately owned Athlone house land bordering along the north and west. Along the immediate southern border of this compartment is also land privately owned. The centre of the Model farm compartment is at grid reference 527,516; 187,389 and it covers an area of approximately 0.25 hectares.

The compartment boundaries can be seen in figure 4. The compartment is a new acquisition to the Heath's area after been transferred into Heath management in 2007 along with the adjacent Athlone gardens adjoining the compartment.

The area is fenced and has access only through a gate at the south eastern corner. A private land owner has an access point to the west leading out onto Cohen's field but there is no barrier between the land owned by this owner and that managed by the Heath.

For management purposes the compartment has been further subdivided into 3 distinct sections as shown in Figure 7. These being the southernmost farm section, a central section and a top meadow.

1.2 Geology, Soils, Hydrology

The model farm compartment is located on an area of Claygate beds. The compartment is on reasonably level ground although the ground rises up from the farm section towards the top meadow. The top meadow is raised on a terraced piece of land approximately 1-2 metres higher than the adjacent middle section. Along the western perimeter of the compartment the land falls away towards Cohens field and a small stream runs outside, but alongside the compartment. The surface in the farm section is mixture of made ground consisting of hardcore from old farm buildings as well as some remaining ornamental tiles and some areas of spoil. Several sections of bricked wall also exist in this section forming a number of 3 sided 'rooms' which were previously stables and outbuildings. Three ponds can be found just outside of the compartment. One is to the north, in the privately owned Athlone house land, and there are 2 scrapes dug in 2009 to the east, which are on City land.

1.3 Ecology

The site consists of 3 main areas running in a linear fashion in a north/south direction (Figure 7). The land to the south of these areas is not under City of London management. This land consists of open rough grassland dotted with small trees including apple trees and a hedgerow running along the southern border, part of which is in City managed land.

A description of the different sections is given below.

Farm Section

At the southern edge is the farm section. This consists of partial old farm building walls surrounding open scrub with saplings and a variety of herbaceous species. The walls are largely damaged and have some remaining partitions with tiled floors still present. Bramble, nettle, thistle, buddleja, pendulous sedge and Himalayan balsam are reasonably widespread throughout the area. Other plants found that are uncommon on the wider Heath include white bryony, hemlock and teasel.

Figure 1: Model farm compartment, lower farm section, January 2013.



Sapling trees of elder, willow, ash and poplar grow throughout the compartment and 2 young sycamores grow in the north-west corner. A number of tall shrub specimens of a species of *Prunus* grow alongside the metal railings separating this area from the central section. Himalayan balsam is also present here.

Central Section

The central section has as its eastern and western boundaries metal railings separating it from the Athlone house land and the main body of the Heath respectively. Beyond the western boundary fence a line of mature and semi-mature trees grows, consisting largely of ivy covered Lombardy poplar. The eastern boundary has 3 large cotoneaster bushes spreading over much of the boundary. A lichen covered dead apple tree grows alongside it and forms an attractive feature.

The area in the middle consists of scrubby relatively open ground with ivy and bramble being the main constituents. The large remnant trunk of an Italian black poplar lies on the floor along with other logs and a dead wood pile. The southern boundary of this section has metal railings along its length and leads to the farm section via a gate in the south west corner. The northern boundary consists of an ivy covered embankment leading up to the top meadow 1-2 metres above. Tree saplings of false acacia, ash and cherry are also present.

Top meadow

The top meadow is largely open grassland bordered by a scrubby fringe of raspberry and bramble with metal railings surrounding the north, east and west of the meadow. A hedgerow recently planted along the eastern fringe mainly consists of guelder-rose, spindle, hawthorn and climbing rose species. This hedgeline provides a buffer in front of the metal railings of the Athlone land.

The grassland consists of finer leaved grasses such as red fescue and common bent. Occasional ragwort and rosebay willowherb also invade this grassland. Japanese knotweed is present to the west of the section.

Fauna

Grass snakes are present in quite large numbers throughout the compartment with up to 15 individuals having been observed within a 20 minute period. Observation of these snakes is made easier by the placement of snake refugia (bitumen sheets) which form part of Hampstead Heath's snake monitoring scheme. The snakes in the compartment are of a varied age range, from large adults to recently hatched juveniles, showing the importance of the site as a snake habitat. Grass snakes are a United Kingdom Biodiversity Action Plan priority species largely due to declining habitat. Grass snakes have been recorded over a wide area in the southern part of Hampstead Heath, but are found in greater numbers in the enclosed sections of the Heath, principally here and the Bird Sanctuary.

Figure 2: Adult grass snake under refuge sheet in the lower farm section.



Fox adults and cubs are regularly seen in the compartment particularly in and around the top meadow and frequently use the reptile refuge sheets to mark their territory.

Three bee hives are present in the southern farm section which are maintained and managed by the North London Beekeeper Group.

Large numbers of spiders' webs have been observed on the shorter scrub surrounding the top meadow.

Figure 3: Spiders webs adorning low growing bramble on the top meadow fringes.



The site receives sun for large parts of the day with some shade provided by a number of mature trees growing along the western border.

Bats have been seen to forage throughout the compartment and along the adjacent western band of trees.

Smooth newts have been found resident in adjacent ponds and thus may be using the site for overwintering.

Butterflies species recorded visiting the top meadow in 2013 were gatekeeper, meadow brown, small and large skipper, small and large white, green veined white and common blue.

1.4 Public and educational uses

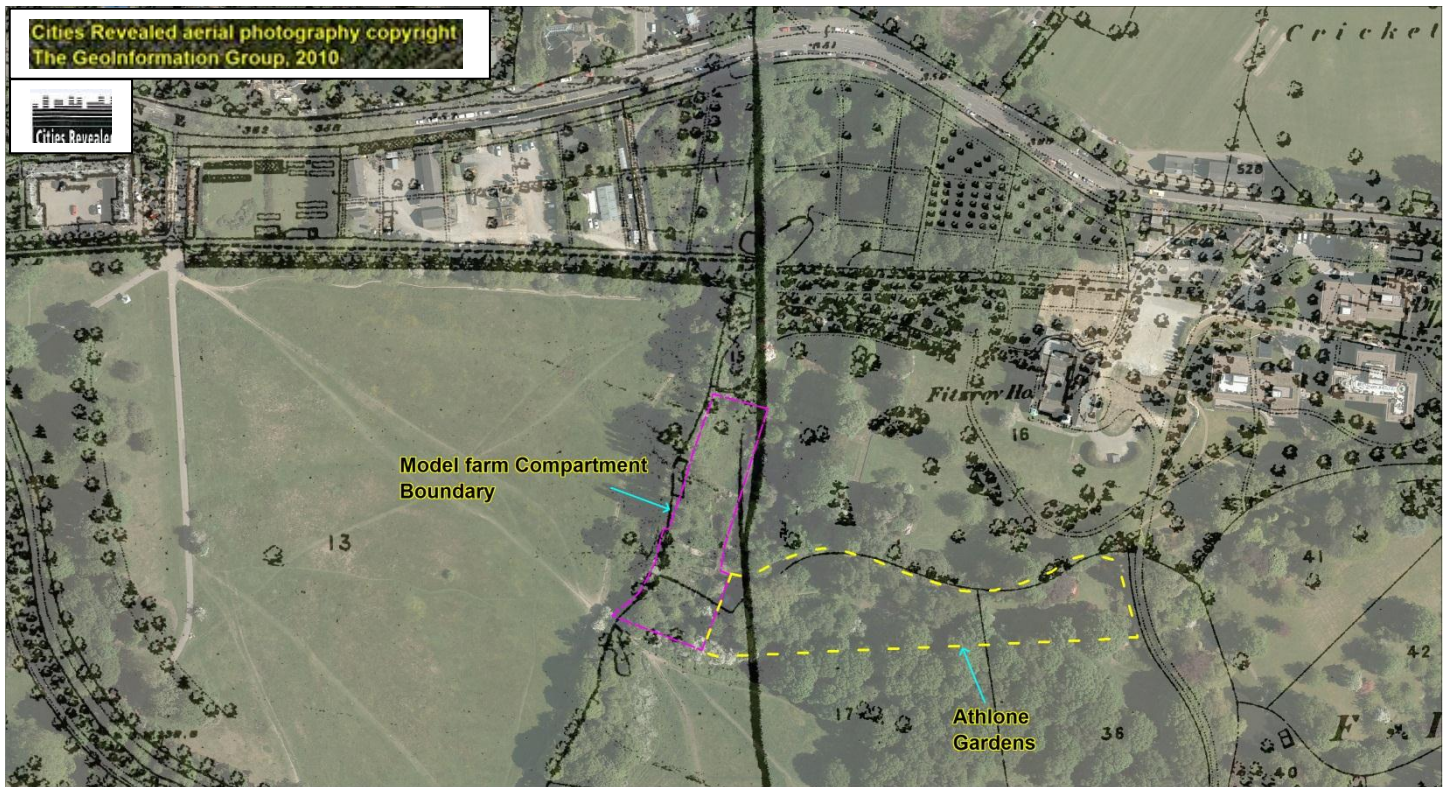
There is no public access to the compartment. One entrance exists from the publicly accessible Athlone Gardens area of the Heath, but this is kept padlocked. A private land owner has an access route via a separate gate to the west of the compartment. However there is no physical barrier preventing his access to the compartment. The compartment has been used for guided walks previously.

North London beekeepers currently have access to the site to tend to the beehives present there. The site is part of a grass snake monitoring route and so volunteers access the site weekly in the spring and summer months.

1.5 History

The compartment is within a newly acquired part of Hampstead Heath when approximately 1 hectare of land was donated from the grounds of Athlone house, which was being developed for private residences. Athlone house was until 2000 an NHS hospital nursing home and was formerly the grounds of Caen Wood Towers, whose last private resident up until 1942 was Sir Robert Waley Cohen, giving rise to the name of the adjacent Cohens fields. Caen Wood Towers was built in 1872 by Edward Brooke on the site of what were previously Fitzroy Farm and Dufferin Lodge¹. One of Brooke's roles amongst others was Justice of the Peace for the City of London and one of her majesty's commissioners for the Lieutenancy of the City of London. The building then became an RAF intelligence training centre. Although the date of its building is unclear, a 'model farm' was built in the south east corner of the Caen towers grounds, which is now remnant within the compartment. This section had prior to the City taking over management been used as storage for garden waste, but had mostly been cleared prior to takeover. The landscape surrounding the present Athlone house has been associated with several estates and has been a designed landscape since the late C18.

Figure 4: C.1870's map with current aerial photograph overlay.



The above figure shows the boundary of the compartment along with the modern aerial photographs of the area and c.1870's maps superimposed.

Figure 5: Postcard of model farm area looking across Cohens field near Kenwood to Highgate village. Courtesy of Michael Hammerson.



The above postcard is believed to be a view looking from Cohens Field near Kenwood to the east towards Highgate and shows the model farm area in the centre of the picture and what is now Athlone Gardens in the background. The postcard has no date but is believed to be from early in the 20th Century. The image below shows the location as it is today. Witanhurst mansion and St Michael church can still be seen in the background with the oak in front of and just to the left of the farm also surviving. The main tree to the right of the postcard is also still present but obscured in the photo below.

Figure 6: Photograph of the model farm area as it looked in August 2013.



The top meadow was previously thought to be an infrequently managed croquet lawn

A hedgeline was planted as a screen in the top meadow by the housing developers prior to the City taking over management of the area. Since 2007 the top meadow and the central section have been cut once a year to prevent scrub encroachment. The farm section has received selected cuts yearly and the wall kept free of tree and plant growth.

1.6 Natural and human-induced trends

The walls of the farm section are in a state of disrepair and trees should be prevented from growing on the walls. Invasive species such as Himalayan balsam and Japanese knotweed may well seed or spread from or into adjacent land.

1.7 External influences

The private landowner erected a tent to the east of the southern section in 2009 and this may be in the Heath's managed land. This land owner often uses the farm section for exercise purposes and storage of items.

The adjacent residents and landscapers of the Athlone house development may have an influence on the management and aesthetics of the area dependent on any work or planting that they may carry out on the boundary land.

2.0. Evaluation

2.1 Natural landscape

The compartment provides an enclosed and relatively undisturbed habitat for a variety of species including the UKBAP priority species the grass snake. Snakes of all age ranges have been recorded in the site, showing its importance as a grass snake refuge and possibly breeding site.

The site has a mixture of fine leaved grassland, rough grassland and scrub, with nearby ponds providing a food source in the form of amphibians. This mosaic of habitats along with its undisturbed nature provides an ideal habitat for grass snakes to thrive.

The farm section with its old walls and tiled floors provides a unique habitat on the Heath with plants such as hemlock and white bryony rare on the wider Heath.

Invasive species such as Japanese knotweed and Himalayan balsam may spread into adjacent Heath or private land if not managed.

2.2 Public and educational uses

As the compartment is not accessible to the public the site provides good monitoring opportunities for grass snakes with its undisturbed conditions. Guided walks and a grass snake training event have made use of the secluded conditions. Public access should be restricted to these occasional events to ensure that the grass snake populations receive minimal disturbance. The conditions of the old farm walls mean that access should also be restricted on health and safety grounds.

2.3 History and built environment

The farm section provides a unique feature on the Heath and should be retained in a stable state. The tiled and paved areas should be prevented from scrubbing over to retain these features, which are also used as grass snake basking sites.

2.4 Overall vision

Maintain the compartment as a mixture of meadow and open scrubland primarily as a habitat for grass snakes

Maintain the top meadow as open grassland
Maintain the central section as relatively open scrubland
Prevent the growth of trees throughout the compartment.
Maintain the remnant farm section in a stable state.

2.5 Relevance to achieving the 2007-2017 Hampstead Heath Management Plan

Overriding Objectives, Essential Actions and Aspirational Goals from Part I of the Hampstead Heath Management Plan which are particularly relevant to the management of the Flagstaff and Sandy Heath gorse sites are as follows:

NL1: Retain and enhance the Heath's habitats and natural resources to enable continued quiet enjoyment and appreciation of the natural world by its visitors

The following policies from the Natural Landscape chapter of the Part II Management Plan for the Heath are particularly relevant to Harry's compartment

Policy 7: Mowing regimes will be adopted which maintain grassland and support and encourage desirable flora and fauna. Refuge areas will be left for invertebrates

Policy 30: Traditional methods such as hedge laying will be used where appropriate to maintain and manage the Heath's hedgerows

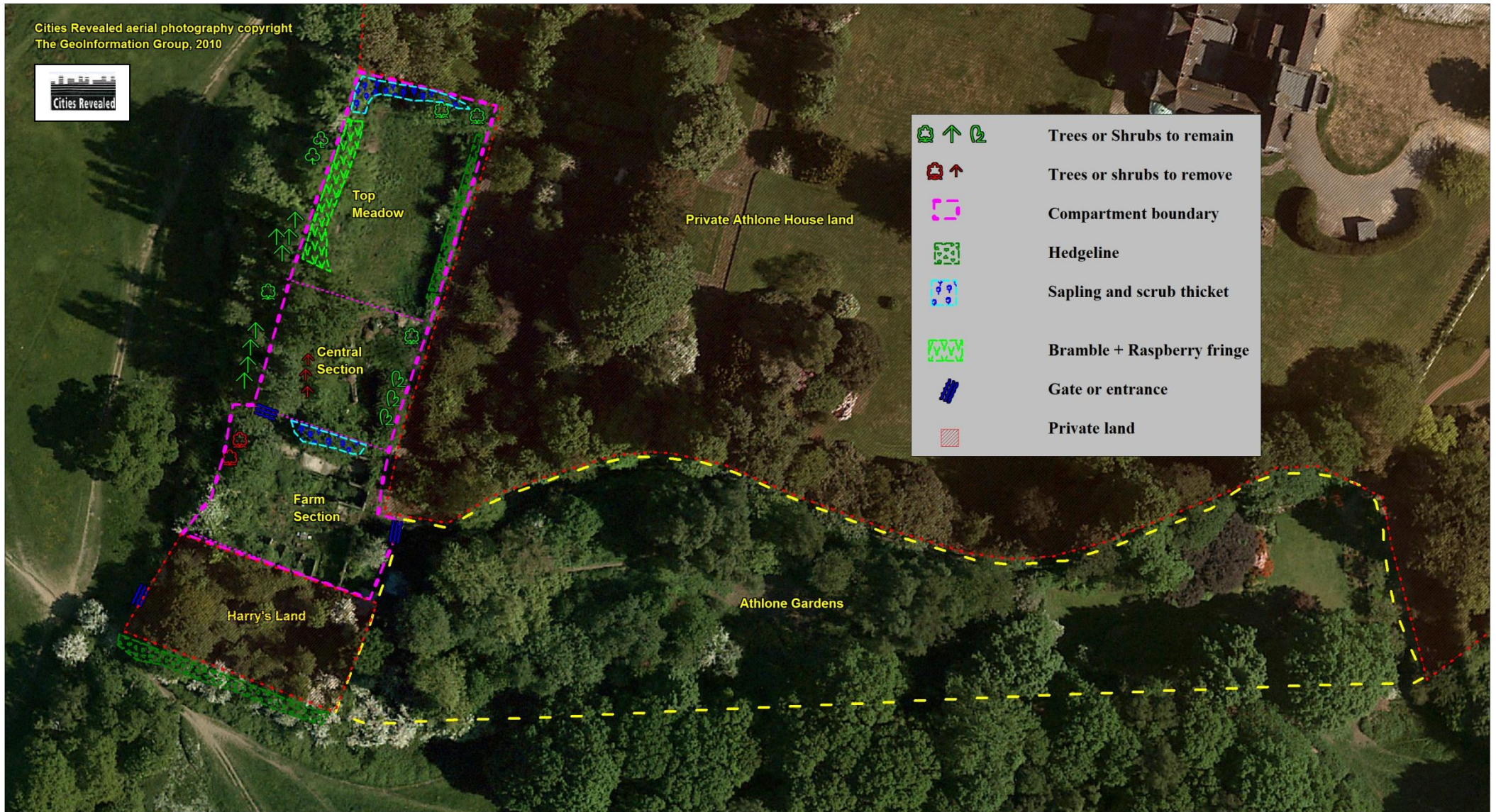
Policy 34: The spread of scrub will generally be limited and will be managed to prevent it becoming woodland

Policy 46: Populations of plants and animals protected by law, identified as being Priority Species in national and local Biodiversity Action Plans, or subsequently identified as worthy of protection will be protected and enhanced

Policy 50: Selected invasive and inappropriate species will be controlled

3.0. Prescription and work programme

Figure 7: Model farm compartment 2013



3.1 Regular management tasks

Model farm site objectives

Objective	Prescription	frequency	Month(s)	Years	Who by	Priority : low, medium or high
Maintain top meadow as grassland	Cut grass once in autumn. Grass should be incorporated into compost piles at the fringes of the section. A 1m fringe of bramble + raspberry can be left uncut.	Once Yearly	Sept-Oct	Yearly	Cons team/ Volunteers	High
Lay hedge section to the east of the top meadow	Lay hedge every 7-10 years to maintain as thick hedge	Once Every 7-10 years		2016 + review in 2023	Cons Team	Medium
Prevent excess scrub encroachment in farm section	50% of the section should be cut yearly. Sapling trees should be removed. Bramble and other scrub should be removed from open tiled areas.	Once Yearly	Oct-Feb	Yearly	Cons team/ Volunteers	High
Coppice sapling + scrub thickets to prevent from maturing into woodland and maintain as thicket	Coppice shrub trees every 5-7 years along northern boundaries of the farm section and the top meadow section.	Every 5-7 years	Oct-Feb	2015 + review in 2020	Cons team	Medium
Remove tree growth from farm section walls	Cut or carefully ease out sapling growth from walls. Chemical treatment may be required for deep roots which are causing structural damage.	Every 2 years	Any	2014	Cons Team	Medium
Maintain central section as open scrubland	Cut or scythe central section. Leave a fringe of scrub vegetation but do not allow sapling trees to grow in the fringe.	Once Yearly	Oct-Feb	Yearly	Cons Team	High
Remove Himalayan balsam	Hand pull balsam yearly until eradicated	4-5 times Yearly until eradicated	June-Sept	2014+ 2015	Cons team/ Volunteers	High
Remove/treat Japanese knotweed	Treat knotweed	Twice over 2 years	Aug-Sept	2014 + 2015	Cons team	High

3.2 One-off tasks

Objective	Prescription	Month(s)	Year	Who by	Priority	Est. cost
Remove sycamores	Remove 2 sycamore trees from North western farm section	October-February	2014	Cons Team	Medium	Local Budget
Remove sapling trees from middle of central section	Remove and prevent regrowth of 4-5 small false acacia, cherry + ash trees.	October-February	2014	Cons Team	Medium	Local Budget

4.0 Review

Author	Date	Task	Observation, event or alteration to task

5.0 References

1. British history online: Available at [http://www.british-history.ac.uk/report.aspx?compid=45248&strquery=caen wood towers](http://www.british-history.ac.uk/report.aspx?compid=45248&strquery=caen%20wood%20towers)