



# CHIGWELL & EPPING FOREST ORIENTEERING CLUB



## Proposal to City of London Corporation for the Design and Implementation of a Permanent Orienteering Course in Wanstead Park

14<sup>th</sup> July 2019

Prepared by Ray Weekes on behalf of Chigwell and Epping Forest Orienteering Club



## Table of Contents

1.	Background to Orienteering.....	3
1.1	Orienteering Maps.....	3
1.2	Schools Orienteering.....	3
2.	Chigwell and Epping Forest Orienteering Club (CHIG).....	3
3.	Permanent Orienteering Courses.....	3
4.	Wanstead Park.....	4
5.	Setting up a Permanent Orienteering Course.....	4
5.1	Cartography.....	5
5.2	Designing the Permanent Control Points.....	5
5.3	Control Markers.....	5
5.4	Control Posts.....	5
5.5	Installation of Posts & Plates.....	6
5.6	Printing Maps.....	6
5.7	Managing the Course.....	6
5.8	Marketing and Publicity.....	6
5.9	Launch Event.....	6
6.	Estimated Costs.....	6
7.	Appendices.....	7

## 1. Background to Orienteering

Orienteering is an exciting and challenging outdoor sport that exercises mind and body. The aim is to navigate between control points marked on a large scale specially drawn orienteering map. Orienteering takes place in forests and woodlands, open countryside, urban city parks and streets.

The sport is open to everyone with courses for all ages and abilities. Courses are graded by ability so that people of any age can progress as they gain confidence in their map reading and navigation skills. Choosing your route between the control points is enjoyable. Participants can walk, jog or run and compare the time they take to complete the course with other people.

At a more advanced level orienteering is a highly competitive sport requiring fitness, speed and endurance as well as technical map reading skills.

### 1.1 Orienteering Maps

Orienteering maps are somewhat different to traditional maps such as those published by the Ordnance Survey. They are characterised by being:

- very large scale, typically 1:10,000 ratio
- very detailed, showing major and minor paths, water features, contours, and different types of vegetation
- in 5 colours to emphasise different features and vegetation cover

### 1.2 Schools Orienteering

Many schools practise orienteering, sometimes by having maps made of their school grounds. Orienteering can be an element of the National Curriculum in GCSE Physical Education. It can also be an ideal way to teach navigation for Duke of Edinburgh Award scheme expeditions. Schools can orienteer as an extra-curricular activity at special schools orienteering events. There is a *British Schools Orienteering Association* (BSOA) which co-ordinates activities and provides information. <http://www.bsoa.org/>

## 2. Chigwell and Epping Forest Orienteering Club (CHIG)

Chigwell and Epping Forest O.C. (CHIG) is the main orienteering club for NE London and SW Essex. [www.chig.org.uk](http://www.chig.org.uk) We have been established for over 50 years and currently have about 60 members of all ages and abilities. The club is affiliated to *British Orienteering* (BO), the UK governing body for the sport. [www.britishorienteering.org.uk](http://www.britishorienteering.org.uk)

The club holds orienteering events in places like Epping Forest and Hainault Forest, as well as local parks like Lee Valley and Harlow Town Park. Some events are aimed at beginners and those new to the sport while others also cater for more experienced orienteers. The club helps to promote the sport in various ways, one of which is through Permanent Orienteering Courses.

## 3. Permanent Orienteering Courses

On a permanent orienteering course (POC) fixed stakes mark the control points to be found. Each point is identified by a red and white plate affixed to some sort of permanent feature, usually a wooden post.

Anyone can pick up a map with the courses already marked and then go off in their own time. The main advantage of a permanent course is that there is no requirement for any organised activity. Individuals, or groups such as schools or scouts, can come along whenever they want. It's an ideal way to introduce children and adults alike to the sport, for teaching orienteering, or for training to improve existing orienteering skills.

There are a large number of permanent orienteering courses around the UK. CHIG has established 5 local POCs:

- Hainault Forest Country Park, near Chigwell Row

- Fairlop Waters Country Park, near Barkingside
- River Lee Country Park, between Waltham Abbey and Broxbourne
- Harlow Town Park, Essex
- Queen Elizabeth Olympic Park (QEOP) at Stratford

There are other POCs around London, including Hampstead Heath which is also run by the City of London Corporation.

Appendix A shows a copy of the Hainault Forest Permanent Orienteering Course with control points in red, and also showing a description of control positions and suggested courses.

Permanent Orienteering Courses are normally on land belonging to or administered by Forestry Commission, Woodland Trust, County Councils or Local Authorities etc. In most cases the same body will also administer and publicise the courses, usually selling map packs at visitor or information centres or local shops. Details of Permanent Orienteering Courses across the country are listed on the *British Orienteering* website, <https://www.britishorienteering.org.uk/pocs> and in some cases maps can be downloaded.

Here is a link to a short Utube video about Permanent Orienteering Courses: <https://youtu.be/JRUvSWiDgc8>

## 4. Wanstead Park

Wanstead Park and Wanstead Flats have been mapped and used for orienteering events by CHIG for over 40 years. The earliest map of the park dates from 1975 and the most recent survey and mapping update was in 2016. See Appendix B. The area proposed to be used for the Permanent Course is Wanstead Park, but excluding Bush Wood.

Although Wanstead Park is relatively small compared to some other countryside parks, we feel that it would be suitable for a permanent orienteering course. It has both a formal and informal aspect, it has a path network, some small hills and various changes in vegetation/tree cover. All of which make for an interesting and varied area. Also, an orienteering course is one way of encouraging local people to explore the park and visit parts that they might otherwise ignore.

Being in an urban area it is an opportunity to make orienteering accessible to those who might not normally be able to travel to more outer London or rural areas. As an enclosed area it is relatively safe for those who might fear “getting lost”.

Other local parts of Epping Forest, such as Walthamstow and Highams Park, have been considered but at this time we feel that Wanstead offers the best opportunity as it’s a focal point for visitors and is a contiguous area not split-up by roads.

The club hopes to be working with the Field Studies Council on the introduction to orienteering sessions in Wanstead Park which are planned for October 2019 and which the City of London Corporation is grant funding.

## 5. Setting up a Permanent Orienteering Course

There are a number of steps involved in establishing a POC:

1. Cartography - surveying and mapping of the area.
2. Designing the Permanent Course by choosing and agreeing suitable control sites.
3. Procurement of control markers.
4. Identifying existing posts or acquiring new post with which to display control markers.
5. Installing posts and attaching the control markers.
6. Printing maps with control points marked.
7. Establishing a means to operate the course on an ongoing basis
8. Setting up some marketing and publicity for the new course.

These steps are described in more detail below:

## **5.1 Cartography**

Since Wanstead Park has already been mapped then it will only require some small updating to reflect recent changes, such as to the path network and vegetation.

The mapping details are stored on a computer using specialised orienteering mapping software. It is anticipated that final map size will fit onto a single A4 sheet. The map scale will remain at 1:10,000. (i.e. one kilometre = ten centimetres on the map)

Copyright of the final map and ownership of the electronic data files holding the map details will remain with Chigwell and Epping Forest Orienteering Club (CHIG). This is because the map uses *Ordnance Survey* (OS) base data which requires copyright royalty fees. *British Orienteering* (BO) has a national agreement with OS whereby any orienteering map registered with BO is automatically covered for licence fees. But this is on the understanding that the map is only used for orienteering purposes and not for general public use. A record of the number of POC maps distributed needs to be recorded for annual return to OS.

## **5.2 Designing the Permanent Control Points**

Choosing the best sites for the permanent course control points is an art and must take into account the different skill levels that might need to use the course. Our current design has 20 control sites which seems appropriate for an area the size of Wanstead Park. There will also be two start/finish points, one from Warren Road and one from Northumberland Avenue.

In choosing the sites we have specifically avoided the bluebell area as well as any features which might have environmental or historical considerations. The suggested sites are presented for approval as they may be other practical or safety reasons why some sites may not be appropriate. Conversely there may be some parts of the park where there is a need to encourage people to explore. Control sites can be adjusted to meet these needs. The proposed draft design is shown in appendix B.

In addition, a series of recommended courses (not shown here) will be designed for different skill levels by combining together different sites. Typically: Short Easy; Medium; Long Hard. Courses will mainly be focused on the path network.

## **5.3 Control Markers**

Each control point is identified by a red & white metal (aluminium composite) plate, about 10cm square. This will display a number matching the number shown on the map, plus another alphabetic code which the participant can record to prove they have found the correct control.

CHIG have names of suppliers that manufacture control markers and have been used for other permanent courses. Our cost estimate from previous experience is expected to be about £8-£10 each with vandal proof fitting.

Some POCs now use control point markers with QR codes. A mobile phone can download a copy of the map and can read the QR codes using an app. Personal performance timing around the course may be uploaded to a central repository for comparison with others. Examples of courses using this style include the Queen Elizabeth Olympic Park and Hampstead Heath. Both use an app called MOBO (Mobile Orienteering). But this approach will have additional cost and revenue implications.

## **5.4 Control Posts**

The control plates are usually attached to wooden posts, usually about 1 metre tall, or attached to some other permanent feature, like a wall, a fence or a building. There may be existing posts that can be reused, otherwise new posts will need to be acquired. The posts may have a concrete base to prevent vandalism.

There are various design approaches, depending upon aesthetic, cost and vandalism considerations. Appendix C shows a selection of posts used in other local POCs.

## 5.5 Installation of Posts & Plates

The permanent posts need to be installed and the orienteering plates attached with galvanised security screws. This is perhaps the most intensive and costly step in the whole process. Land owners typically choose to use either their own in-house resources or to sub-contract to outside agencies.

## 5.6 Printing Maps

Once the agreed control sites are installed then the final map art work can be updated with the position of the control points, ready for printing. There are a number of options concerning the final design of the map and the presentation of recommended courses. These can be discussed nearer the time. Also, at that stage a decision must be made as to how many maps to initially print, taking into account the expected distribution channels. Both the quantity and paper quality will have a bearing on final costs. The printed maps will cost approximately 50p each.

## 5.7 Managing the Course

A decision would need to be made as to where the map stock would be held and the distribution methods to be used. Ideally maps should be available for 'walk-in' sales to the general public. For Wanstead Park this might be from the 'Tea Hut/Kiosk' or from 'The Temple' when open. Other possible arrangements may be made with Wanstead Sports Centre or Wanstead library. There may also be an option to download maps from the *British Orienteering* POC website.

Specific groups may be identified as potential uses of the course, e.g. schools, youth groups, community groups, and they could be offered the opportunity to buy some maps in bulk.

Fees for map sales needs to be considered based upon financial costs and objectives. As a point of reference orienteering maps or map packs are commonly sold by some authorities to the general public for between £1 and £2. Others, such as QEOP, make them available free of charge.

## 5.8 Marketing and Publicity

Once the course is established then there should be some means to publicise its existence. This may take various forms, publicity leaflets, posters within the park, references on various websites. It will also be added to the *British Orienteering* POC website mentioned above, with details about where maps can be obtained and if they are downloadable.

## 5.9 Launch Event

It is envisaged that some sort of launch event would be held to publicise the event within the local area. CHIG will be able to offer help or support in setting up such an activity with orienteering instruction provided.

## 6. Estimated Costs

Task	Action	<----- Cost ----->		Comments
		Estimate	Responsibility	
Survey & Mapping	CHIG	£100	CHIG	Base map exists, just needs updating
Design of Control Points	CHIG			Draft design done
Agree position of Control Points	CoL			practical, environmental, safety issues
Agree design of post/plates	CHIG/CoL			
Purchase control plates	CHIG	£250	CHIG	22 x £10 + delivery + security screws
Procurement of Posts	CoL	£500		rough guess: 22 x £20 + delivery
Installation of Posts & Plates	tba	tba	tba	
Update map artwork for controls	CHIG	£50	CHIG	

Printing Maps	CHIG	£500	tba	1000 x 50p
Agree on map distribution	tba			
Agree/Produce publicity material	tba	tba	tba	
Launch event	CHIG/CoL			

## 7. Appendices

- A - Permanent Orienteering Course map of Hainault Country Park
- B – Draft Permanent Orienteering Course map of Wanstead Park
- C - Examples of posts and plates used in other permanent orienteering courses

# Hainault Forest Country Park

Scale 1:10000  
Contour interval 5m

Magnetic North 2009

- |                              |                           |
|------------------------------|---------------------------|
| Forest: run                  | Road                      |
| slow run                     | Vehicle tracks            |
| walk                         | Footpaths: major          |
| fight                        | minor                     |
| Undergrowth: slow run        | unclear                   |
| thick                        | high/gate                 |
| Open land                    | Fences: low               |
| Rough open land              | ruined                    |
| Open with scattered trees    | Low earth wall            |
| Distinct vegetation boundary | Prominent tree, rootstock |
| Settlement (out of bounds)   | Man-made object, hide     |
| Out of bounds                | Building                  |
- Contours/Form line  
Lake, marshes  
Stream, ditch, footbridge  
Linear marsh  
Shallow gully or dry ditch  
Depressions, pits  
Knolls

Vegetation is very seasonal, and small paths may change. Fences and ditches beside paths have often been omitted.



CLUB MARK

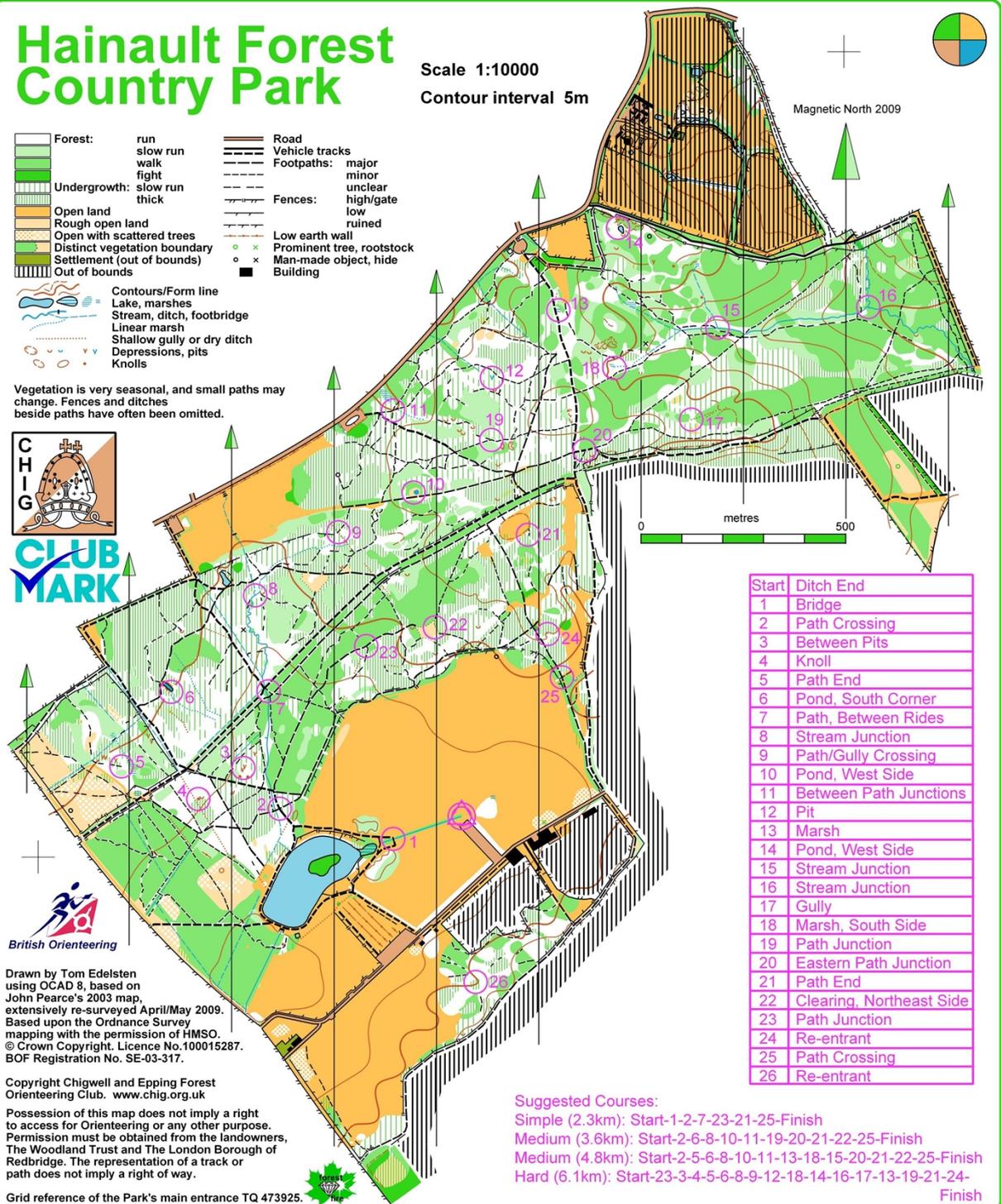


Drawn by Tom Edelsten using OCAD 8, based on John Pearce's 2003 map, extensively re-surveyed April/May 2009. Based upon the Ordnance Survey mapping with the permission of HMSO. © Crown Copyright. Licence No.100015287. BOF Registration No. SE-03-317.

Copyright Chigwell and Epping Forest Orienteering Club. www.chig.org.uk

Possession of this map does not imply a right to access for Orienteering or any other purpose. Permission must be obtained from the landowners, The Woodland Trust and The London Borough of Redbridge. The representation of a track or path does not imply a right of way.

Grid reference of the Park's main entrance TQ 473925.



Start	Ditch End
1	Bridge
2	Path Crossing
3	Between Pits
4	Knoll
5	Path End
6	Pond, South Corner
7	Path, Between Rides
8	Stream Junction
9	Path/Gully Crossing
10	Pond, West Side
11	Between Path Junctions
12	Pit
13	Marsh
14	Pond, West Side
15	Stream Junction
16	Stream Junction
17	Gully
18	Marsh, South Side
19	Path Junction
20	Eastern Path Junction
21	Path End
22	Clearing, Northeast Side
23	Path Junction
24	Re-entrant
25	Path Crossing
26	Re-entrant

### Suggested Courses:

Simple (2.3km): Start-1-2-7-23-21-25-Finish

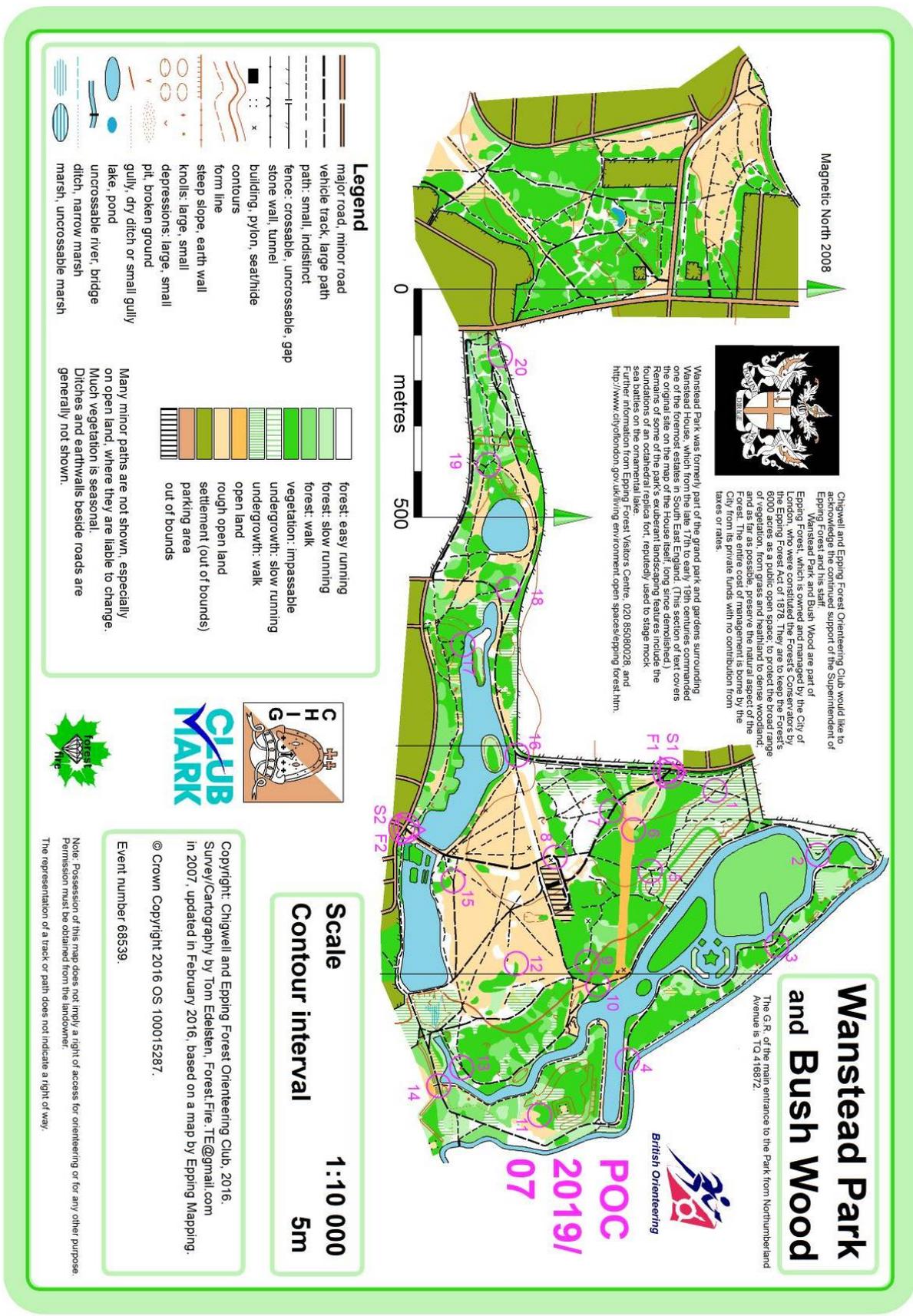
Medium (3.6km): Start-2-6-8-10-11-19-20-21-22-25-Finish

Medium (4.8km): Start-2-5-6-8-10-11-13-18-15-20-21-22-25-Finish

Hard (6.1km): Start-23-3-4-5-6-8-9-12-18-14-16-17-13-19-21-24-

Finish

## Appendix A: Hainault Forest Country Park POC



Appendix B: Wanstead Park draft POC showing suggested control points



Plate on top of post



Plate on side of post



Start Post - Hainault



QEOP with QR code

Appendix C: Examples of Permanent Orienteering Course control points.