

## QUEEN'S WOOD NATURAL FLOOD MANAGEMENT SCHEME

### INTRODUCTION

This document represents the formal response of the Friends of Queen's Wood to the statutory notification of 22 February 2021 from the Head of Highways and Parking at the London Borough of Haringey of its proposal for a flood management scheme in Queen's Wood.

### EXECUTIVE SUMMARY

Queen's Wood, as an ancient woodland in an urban setting, is an important open space, well used and loved not only by local residents but visitors from further afield in Haringey and North London. It has protected status by virtue of the act of Parliament setting it up and its designation as a statutory Local Nature Reserve and a site of Metropolitan Importance for Nature Conservation. It needs careful management and any changes or development should only be introduced after very careful consideration.

The Friends of Queen's Wood, as a voluntary body set up over 30 years ago to help protect the Wood, has a unique knowledge of the Wood and has studied the Council's proposals in depth. It has concluded that they are unacceptable and rejects them outright. Its principal reasons are as follows:

- Under the scheme wide channels would be dug along existing stream and large wooden structures installed which would be visually intrusive and upset the fragile of eco-system of the Wood
- The scheme risks spreading pollution and invasive species
- The Wood has many plants that are rare in London that could be lost for ever
- There are no identifiable benefits to the Wood from the scheme in terms of its biodiversity and amenity value
- The scheme is not compatible with the legal status of the Wood
- Even if it were acceptable - which we dispute - it would be quite wrong to carry out such a scheme at a time when the Wood is already under great stress given the heavy footfall and adverse climatic conditions of the last year.

### BACKGROUND

#### About the Wood

Queen's Wood is an ancient woodland that was purchased in 1898 by Hornsey Council using an Act of Parliament that requires the Council to preserve it as an open space for the benefit of the residents and to preserve the natural conditions and aspects of the wood. Since then the Wood has been further

protected with classifications including becoming a 'Local Nature Reserve' and as a 'Site of Metropolitan Importance for Nature Conservation'.

The Wood enjoys a wide range of visitors and is much loved not only by residents in the immediate neighbourhood but many from farther afield in Haringey and North London. It is used not simply as an open space for exercise but as a connection to nature. It is also used for adventure and play, particularly by the young.

Overall the condition of the wood can be described at best as moderate. Public use of the Wood had been increasing before the pandemic restrictions were imposed and since then has risen hugely. Many more people have left the surfaced paths and enjoy walking within the woodland itself, but unfortunately this increased trampling has been damaging the ecology. This high usage is expected to continue leading to yet further stress to the Wood, which will arguably take years to remediate anyway. Any further damage done by the project cannot be easily reversed.

### Who we are

The Friends of Queen's Wood started as an informal group of local residents together in 1989 but in 2000 it evolved into a formally constituted voluntary organisation with elected officers and over 200 households as members. The mission of the Friends is to preserve and maintain the Wood, and we work with the Council's officers to this end. Together we undertake projects; some are designed to enhance the value of the Wood as a nature reserve, such as coppicing to help the regeneration of the Wood over time; and others, like improvements to the paths and installation of benches, are intended to make the Wood safer and more accessible and a place of rest and contemplation. More active members can join in our monthly working party sessions. We also act as the Wood's 'eyes and ears' and we respond to all proposals from the Council that affect the Wood. We interact closely with our membership issuing regular newsletters and bulletins and responding to both their and others' queries and concerns.

We have a diverse range of membership from naturalists and ecologists interested in the wildlife of the Wood, to those who place great store on the educational and recreational value of the Wood, to those who love walking in the Wood and to those who simply value the peace and quiet that the Wood has to offer and the vistas it provides.

### Our knowledge, expertise and experience

Over the 30 or so years of our existence we have accumulated a substantial corpus of knowledge of the Wood.

We have commissioned a number of surveys of various aspects of the Wood, which inter alia include its flora, birds, bryophytes, invertebrates and fungi. In addition to having the reports from these surveys to hand we are able to get ad hoc advice from their authors on issues and problems as they arise. Of particular value has been the advice of the Nature Conservation Officer of the Council from 1989 to 2005, David Bevan, who has a unique knowledge of natural characteristics of the Wood, especially its flora.

We also have in our managing committee a qualified civil engineer and two members who have qualifications in environmental matters, with one of the latter taking on the responsibility for monitoring the 2010 management plan for the Wood and preparing for the next due in 2021.

There is little hard statistical information on the usage of the Wood. However, acting as the eyes and ears of the Wood and through interaction with users, we have built up an understanding of the patterns of usage, which has stood us in good stead in identifying and implementing actions needed to safeguard the Wood.

Within the limitations of the information provided our collective knowledge and experience enable us to give an accurate and detailed response to the proposed scheme.

## EVALUATION OF THE PROPOSAL

### Our approach and criteria

The Wood itself has no flooding problem. We have not attempted to evaluate the scheme against any other options that may be available to improve flood protection elsewhere. Instead we have evaluated it purely in terms of the risks and benefits to the Wood, particularly in its status as a nature reserve and its value or otherwise to users.

### The process

We have only been able to consider the scheme on the basis of information available to us.

After some initial, informal contact by the Council in 2019 we were not involved in the formative stage of the project at all until December 2020, when as a major stakeholder we were informed of the Council's plan and the timeline for its implementation. At that point it became clear the project was a firm one, with funding approved. Despite this, little detail was available at that time. It would have been reasonable, for such a large and complex scheme in a location like Queen's Wood, to have had at that time a full Environmental Impact Statement, detailing the specific ecological effects in each of the many construction sites, and a Construction Management Plan, setting out how access to the many work sites could affect the ecology and soil structure over wide areas as well as amenity for many users of the Wood. Neither had been drawn up. Our ability to help identify and resolve problems through joint site visits was hampered by constraints imposed by the Covid restrictions and our proposal to hold remote meetings instead was not taken up. Detailed drawings of the plans were only made available in early February and these gave rise to a large number of questions which have not yet been fully answered.

A vital part of the process has been public consultation. Right from the start we argued that relying on statutory notification process was totally inappropriate for a scheme of this sort and it should be a more meaningful procedure. This was accepted, with the consultation period being extended to six weeks. Unfortunately the documentation issued by the Council was poor and did not describe adequately the real dimensions of the project. We pressed the Council to hold a public meeting but this was turned down. Instead we ourselves held a meeting of our membership, which was attended by 42 people. In the light of this, and the many views relayed to us by individual members, we firmly believe that our conclusions reflect the clear balance of opinion in the membership. Indeed there is no evidence of any support for the scheme amongst the membership; rather it is clear that the overwhelming feeling is one of strong opposition to it.

More work is required to identify risks at the micro level, but overall we are now confident that we have sufficient information to be able to make a robust enough assessment of the project as a whole to take a definitive stance on it.

## OUR VIEWS

### **Concept.**

We are not in principle against the concept of daylighting existing drainage sewers and the use of other natural flood mitigation features but in its application under the proposed scheme it is simply not suitable to a site like Queen's Wood, as an area of ancient woodland, its status as a nature reserve and the disproportionately heavy footfall it experiences for such a small area.

### **The physical works**

The scheme consists of bringing to the surface the water currently flowing in the surface water sewer under the Wood and running along the route of an existing stream; then slowing down this water and also that in another existing stream. To do all this requires works throughout the wood in 30 or so separate locations. Each of these locations needs specific detailed consideration, but this is not possible with present information.

The work is principally

- new and widened channels.
- New clay berms (dams) covered with topsoil.
- Manholes, entry grills etc.

The new and widened channels will be about 2-3 m wide and about half a metre deep. To be dug in four different locations they will have a total length of about 270m and so would entail exposing the subsoil in a large area of the wood. They will most often be dug into clay, and this will be the exposed surface of the bottom and sloping sides of the channels.

The new berms will be constructed by scraping away the limited and fragile topsoil, building dams of clay, and covering them with topsoil. It is not known how much imported material this will include. The ten or so berms will vary, but appear to come to a total of about 250m with widths between 1m and 5m.

There will be 3 new concrete manholes to be dug, with permanent access required. Also 9 or 10 concrete or stone headwalls will be created where new channels cross paths or the flow of water enters or leaves the pipes.

To do this work requires access for workers and machinery. In some cases this can be by way of using existing hard surfaced paths, but in many cases it will require temporary access across the delicate surface of the wood. It seems quite probable that this will involve an area similar to that of the works themselves. No information is available on this and the description of the scheme is seriously deficient in not providing any details of how these will be constructed. It is hard to believe that the area of the Wood disturbed, even with temporary cover, will be less than the area of the works themselves, so would comprise perhaps 1000 to 1500 sq. m. In total this suggests that about 2,500-3,000 sq.m of the Wood will be directly affected by the construction of this scheme – a huge area – and the works will be highly intrusive.

## **Amenity Issues**

The Wood has been dedicated as a public open space. Consideration of the impact on visitors is a vital part of the evaluation of the scheme.

### *During the works*

As stated above, a very large area will be needed for the construction. Most of it will need to be fenced off. We are told that paths will need to be closed, but there is no information as to which ones or for how long. The location of the works includes several of the major junctions in the path system, which means that the disruption will be widespread, with considerable confusion and annoyance. It cannot be assumed that people will keep to the remaining paths. Many will divert through the Wood itself causing damage to the soil and vegetation. Such trampling is already a major problem in the Wood.

### *After completion*

The new and widened channels will have exposed clay bottoms and sides. This will be unsightly and change the character of the Wood. The berms will be bare earth mounds. Visitors will include children and others for whom a visit is for play and adventure. They could see these channels and berms as new features to be used. This would damage them, and make it even harder for any possible vegetation regrowth. There might also be safety risks, particularly in wet slippery channels. It could be many years before these scars in the fabric of the Wood fade away.

## **Water quality**

The introduced water will be from the Muswell Hill Road surface water sewer. As such, some of the water will be run-off from housing roofs and garden paths, but most will be the run-off from the roads themselves, with some from the adjacent builder's yard and workshops. As such it will be polluted, with a wide range of contaminants. No tests have been done of the water quality, and no data is available, so it is unclear as to the extent that this could damage the delicate ecology of the Wood, or be a risk to users. However, since the consultation document specifically refers to the ditches promoting pollutant removal, it must be a real risk. As much of the new water flow will be run-off from Muswell Hill Road and other roads, this will definitely include deposits from traffic – mainly tyre wear, which includes microparticles of plastics. As a hilly main road Muswell Hill Road is also regularly treated with salt in the winter, all of which will run through the Wood, with some of it being absorbed into the soil.

## **Ecological risks**

This ancient woodland has a fragile ecosystem with very shallow soils and is therefore vulnerable to any disturbance. This ecosystem has been further damaged by extra use during the last year of lockdown periods in addition to harsh weather. Tree roots have been trampled, and soil eroded round the bases. Exposed bare earth, where paths have been widened, means that some sensitive ancient woodland species may not recover.

Any form of rehabilitation may take a considerable time – a matter of years, if ever. If use of the Wood remains at a high level, which it is likely to do, the only option would be to close off significant areas for

rehabilitation. In a wood of this size, closing off would simply put more pressure on other parts of the Wood.

More specific concerns are:

- The work now proposed is excessive and, as stated above, will lead to more areas of bare clay which could take years to regrow. Ancient woodland soils will be dug up and disturbed. If, as is planned, new soil is introduced this may alter the pH of the existing soil and not favour existing plants. Woodland soil is built up over long periods – in ancient woodland, centuries. Introducing any new soil in the process of restoring the area affected by the works is a risk if it is of a different pH and composition from the existing woodland floor. This could compromise Ancient Woodland Indicator Species (AWIS). If the underlying solid clay is exposed on banks, experience suggests that they will not be covered with vegetation for many years, if ever, especially in heavily shaded or trampled areas. Light levels may remain too low to encourage regrowth of vegetation. In the meantime, the danger of further trampling remains.
- The creation of new stream beds and stilling pools will damage and eventually rot the roots of old valuable and veteran trees. The roots of large/ancient trees, could be disturbed/cut off/waterlogged/flooded in leaky dams/streams, leading to their death. This is a particular concern for mature and veteran oaks and other ancient trees in a number of specific areas. In addition these will accumulate the sediments and salts from road runoff causing pollution of water courses.
- Wood introduced to create the leaky dams is from an unknown source and could impact on the ecology of the wood by introducing invasive species into the Wood. Any new species or variants introduced will change the ecology of the Wood and may outcompete slow growing Ancient Woodland Indicator Species (AWIS).
- If the new stream from the storm sewer is diverted through the Frogpool, as proposed, this will mean that polluting sediments and salts from road runoff could accumulate in the pool affecting wildlife. The greatly increased flow of water that will be experienced from time to time would disturb the ecology of the pool. More particularly the invasive floating pennywort which has rooted in the pool could be swept downstream and grow in the stream beds lower down.
- One proposal in the scheme is to introduce new plants to the wood. These, if not carefully sourced, could outcompete existing Ancient Woodland Indicator Species and change the flora of the Wood.

### **Geo-archaeological impact**

If the scheme is implemented as proposed, the construction work and the remodelling of the land surfaces will remove, destroy and obscure the evidence of the underlying geology. In particular it risks destroying at one point an area of organic-rich sandy silt up to 4 metres deep, which provides a record of environmental change in the Wood spanning 1000 years.

### **Ongoing maintenance issues**

To remain fit purpose the scheme requires proper monitoring and maintenance work. The new features are vulnerable to damage, accidental or deliberate, also natural events such as falling trees. Keeping this infrastructure in good condition is not optional and there has to be a firm schedule and budget to cover it. The longer into the life of the scheme the greater the maintenance required. The Council should not rely on volunteers, though they can be used if available to do the work. The willingness of volunteers to contribute cannot anyway be taken for granted if they see no positive value in the scheme in the first place.

### **Potential benefits**

We have been at pains to identify the benefits of the project in terms of the opportunities it provides for improvements in its ecology and its amenity value to users. In the informal stage of the process of stakeholder engagement the Council intimated that there might be scope to undertake vital renovation of the path network in the Wood, which is in a dire state, but it has now explicitly ruled that out. In its consultation document the Council stated that the approach adopted entails inter alia 'improving amenity and biodiversity' in seeing 'that surface water is managed as close to source as possible and water flow is managed by natural means rather than pipework' but has not been specific in what way and has not cited any other benefits. We have asked the Council for fuller clarification of the benefits of the scheme - in these and other terms - but we have received no response.

We in our turn have not been able to identify any benefits of significance in terms of the ecology and the amenity value of the Wood.

### **Legal compliance**

We have considered the proposal against the some of the classifications and protections that have been given to the Wood in law. Essentially the Wood is to be used only as a public open space and its ecology protected. Hence any proposed changes must be consistent with that, and neither the use or the ecology of the Wood degraded. We believe that the project fails these tests. More detail on our view is given at Annex A.

### **Timing**

Even if the scheme were acceptable in principle a major problem is in timing, particularly in relation to the position on the Covid pandemic. As stated above, the increased scale of trampling and compaction both on and off paths is seriously damaging vegetation cover. This was a problem before the pandemic, but it is now more intense and widespread. Arguably the Wood will need a year or possibly several years to recover, even if footfall is reduced soon and the damage has not already led to loss of species. This is the worst time to be contemplating extensive works that will further damage sensitive areas. Going ahead now risks causing not just temporary disruption but long-term damage and loss of species that are only just hanging on in a challenging environment.

### **CONCLUSIONS**

The demonstrable risks of permanent damage by the scheme are substantial. There are no significant benefits to the ecology of the Wood and its users. The scheme in its present form is totally inappropriate

for this Wood, with its status as a nature reserve and a unique urban open space much loved by its visitors in its present form.

For all these reasons we strongly oppose the scheme.

Friends of Queen's Wood  
6 April 2021

## ANNEX A

The question arises whether the proposed scheme is fully compliant with the following legal instruments and other obligations governing its management and status:

### 1. The Highgate Wood Preservation Act 1897.

As a result of a wide ranging and well supported public campaign Queen's Wood was saved from housing development in the 19th century. The then Hornsey Borough Council was authorised to purchase the woods by Act of Parliament, the Highgate Wood Preservation Act of 1897. The preamble to the act makes provision for the lands to be acquired with a view to their being '...preserved for ever as an open space.'. Section 4 of the Act requires the Wood to be open to public use for purposes of exercise and recreation and the District Council shall thereafter '...preserve so far as practicable the natural conditions and aspects of the wood and protect the timber and other trees, shrubs plants and brushwood therein and keep the same open unaltered unenclosed and unbuilt on and prevent resist and abate encroachment or attempted encroachments on the wood.....'.

The present scheme involves the opening of a surface water sewer that drains a large section of Muswell Hill Road and the adjoining properties. The aim is to discharge water, which is polluted, into the wood. The scheme entails the construction of some twenty 'leaky dams' and associated earth berms and drainage ditches. The stated intention inter alia is to create settlement areas to promote pollution removal in the wood through sedimentation (Haringey information leaflet 22 February 2021).

The primary aim of the flood management scheme is to '..... mitigate the surface water flood risk to properties at Wood Vale and surrounding areas....'. The scheme does not have as its prime objective the preservation of the natural conditions of the Wood and indeed could well conflict with that.

2. Status as a Local Nature Reserve (LNR), declared by Haringey Council in 1990 under the provisions of the National Parks and access to the Countryside Act, of 1949. The declaration was made following detailed discussion and agreement with the Nature Conservancy Council (later to become English Nature and Natural England). Under the terms the Act, LNRs must be managed for the benefit of the wild plants and animals that they support. The current proposals will, among other consequences, affect the existing complex hydrology of the Wood, which will in turn have negative consequences for the flora and fauna. As a result, such proposals may well be unlawful.

3. Status as a Site of Metropolitan Importance for Nature Conservation (M116). This designation was approved by the Mayor of London in 2002. Such Sites are those which contain the best examples of London habitats, Sites which contain particularly rare species, or Sites which are of particular significance within otherwise heavily built-up areas of London. The draft London Plan stated that the Mayor expects Boroughs to give strong protection to such Sites in their Unitary Development Plans. It can be argued that the current proposals offer such strong protection to Queen's Wood.

### 4. Other classifications and protections

The Wood has been listed in the following categories by the Council. There is a need to consider whether the impacts of the scheme on the Wood affects the designation of the Wood under the following headings.

- Metropolitan Open Land
- Area of Archaeological Importance
- Local Historic Interest
- Borough Historic Park
- Ancient Woodland Inventory
- Green Flag
- UK Woodland Assurance Scheme