# RAF Uxbridge Bird Hazard Management Plan

Vinci St Modwen

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Plan Design Enable

# Notice

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This document has 17 pages including the cover.

### **Document history**

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# **Executive summary**

The proposed development at RAF Uxbridge falls within 13km of two aerodromes, and therefore as a Planning Condition, the Local Planning Authority has requested that a Bird Hazard Management Plan (BHMP) is produced and adhered to.

This BHMP includes requirements to be incorporated into the design of the development and the ongoing site maintenance to deter hazardous birds, as well as a bird hazard monitoring scheme and potential control measures.

### Design

- Fruit-bearing trees will be in low numbers dispersed amongst other trees, as such trees have the potential to attract hazardous birds (such as large winter flocks);
- All trees will be planted at least 4 metres from any other trees;
- All flat roofs will be constructed in such a manner that all areas are safely accessible so that any nests and eggs can be cleared (under licence from Natural England) and any birds can be dispersed;
- Roof overhangs will be kept to a minimum, with ledges beneath overhangs and external protrusions being avoided where possible;
- Any exposed building ledges considered to have the potential to attract roosting birds will be fitted with bird spikes: at a density suitable to exclude feral pigeons and larger birds;
- Buildings will be fitted with self closing doors will be fitted to prevent access to birds;
- All waste disposal and storage containers will be self closing to prevent access for birds.

### Management

- As part of the future management of the SUDS, the swales will be monitored to ensure that they drain quickly and the grass will be regularly cut to ensure it is maintained as a short sward;
- A record will be kept by a person/company appointed by Vinci St Modwen of all waste imported onto site and all waste collected from site, including waste type and date/time of delivery/collection;
- All waste to be removed will be collected regularly, and no waste containers will be allowed to be overfilled. If waste build-up is considered to be an issue, then the waste collection regularity will need to be increased;
- All waste imported to site, either during construction or operation, will be stored in sealed containers with self-closing lids;
- Signs will be erected in public places informing the public that they should not feed the birds.

### Monitoring

- Monitoring will be undertaken by a suitable contractor commissioned by Vinci St Modwen;
- The Bird Hazard Management Plan will involve quarterly monitoring (January, April, July and September) of all habitats and flat roofs to detect if birds or congregations of birds, considered to be potentially hazardous, are establishing within the site, and , if necessary ensure their deterrence;
- Monthly checks will be made of the flat roofs during the breeding season (March to June) to monitor if birds are attempting to breed and if necessary take evasive action.

# 1. Introduction

The UK, as a signatory to the Convention on International Civil Aviation, Chicago 1944, has adopted many of the provisions specified in Annex 14 to the Convention. Annex 14, published by the International Civil Aviation Organisation (ICAO), includes standards and recommended practices that address the risk of a bird strike and a potential increase of the bird strike risk due to the presence or development of bird-attractant features on, or in the vicinity of an aerodrome. The term 'in the vicinity' is taken to be land or water within 13km of the aerodrome (as referenced in Civil Aviation Authority guidance CAP 722<sup>1</sup>).

This 13km radius forms the safeguarding zone when aircraft are on approach to land or at take-off. Within this zone aircraft are at lower altitudes and at an increased risk of bird strikes. Within the safeguarding zone consultation is required for potential bird attractant developments.

The RAF Uxbridge site (from here on referred to as 'the site') is situated approximately 7km from Heathrow Airport and approximately 3km from RAF Northolt and therefore falls within the 13km radius of two aerodromes. The proposed redevelopment of the site received several Planning Conditions, including Planning Condition 66, which outlines the requirement for a Bird Hazard Management Plan. The wording of the condition states:

#### **Condition 66 - NONSC Bird Hazard Management**

"Prior to commencement of each phase of the outline element of the development, or any of the elements of development for which full planning permission is hereby approved, detailed drawings and supporting documentation in relation to the relevant phase or component of the full planning element shall be submitted to and approved in writing by the Local Planning Authority, in respect of the following:

i) A Bird Hazard Management Plan which shall include the following details:

- Details of any water features,
- Monitoring of any standing water within the site,
- Drainage details including Sustainable Urban Drainage Schemes (SUDS). Such schemes must also comply with Advice Note 6 Potential Bird Hazards from SUDS which is available at www.aoa.org.uk/publications/safeguarding.asp
- Management of any flat roofs within the site which may be attractive to nesting, roosting or 'loafing' birds. The management plan shall comply with Advice Note 8 -Potential Bird Hazards from Building Design (www.aoa.org.uk/publications/safeguarding.asp),
- Any earthworks,
- The species, number and spacing of trees and shrubs,
- reinstatement of grass areas,
- maintenance of planted and landscaped areas, particularly in terms of the height and species of plants that are allowed to grow,
- which waste materials can be brought on to the site,
- monitoring of waste imports,
- physical arrangement for collection and storage of putrescible waste,
- signs deterring people from feeding birds.

Thereafter and prior to occupation of each relevant phase/relevant component of the full planning element, the scheme shall be completed in strict accordance with the approved details and thereafter maintained for the life of the development".

<sup>&</sup>lt;sup>1</sup> CAA (2008) CAP 772: Birdstrike Risk Management for Aerodromes. Civil Aviation Authority: London

# 2. Existing information

# 2.1. Bird baseline data

An Environmental Statement (ES) was produced for the proposed redevelopment of the RAF Uxbridge site by GVA Grimley in 2009<sup>2</sup>. This ES was updated in 2010 with an Addendum<sup>3</sup>; however, no alterations were made to the ecology chapter.

The site is considered to be of local nature conservation value for birds, with the desk study and incidental records during site visits to inform the Environmental Impact Assessment, producing a fairly limited list of 14 common bird species; blackbird, carrion crow, dunnock, green woodpecker, house sparrow, jay, kingfisher, mallard, moorhen, mistle thrush, robin, song thrush, starling and wren.

# 2.2. Existing site habitats

Currently, the site largely consists of buildings, hardstanding and amenity grassland. There are also small areas of semi-improved grassland (including wet grassland), scattered trees, broad-leaved woodland, ornamental shrub borders and scrub. The River Pinn runs through the site from north to south. See Figure 1 for a Phase 1 plan of the existing habitats.

At the time of the Environmental Impact Assessment, there was a pond (approximately 8m x 15m) within the south-east area of the site, adjacent to the river. This pond has now been removed, due to the need to manage health and safety risks from unexploded ordnance, and will not be replaced.

# 2.3. Site location

The site is approximately 46.6ha in size and is located next to Uxbridge Town Centre. Approximately 1km to the west of the site, running to the north and the south there is a large network of lakes along a canal system. To the south of these lakes and approximately 7km from the site are the Staines Reservoirs. This network of lakes, canals and reservoirs is likely to form a flyway approximately 1km to the west of the site. See Figure 2 for a map of the surrounding wetland habitat.

With such an extensive network of wetland habitats nearby, and the relative absence of such habitats on the site itself, the Uxbridge site is considered extremely unlikely to attract birds, especially wetland birds. This conclusion is supported by the limited list of birds recorded on site.

## 2.4. Proposed mitigation and residual impacts

The proposed mitigation for the redevelopment of the site, outlined in the Environmental Statement, focuses on maintaining the important habitats, or replacing lost habitats, rather than increasing the amount of habitat. The river will remain unaffected by the development.

It is considered that the residual impacts of the proposed redevelopment on birds, once mitigation measures have been incorporated will be not significant. Therefore the existing bird population at the site (and therefore the bird hazard risk) is not expected to change significantly as a result of the redevelopment.

<sup>&</sup>lt;sup>2</sup> GVA Grimley (2009) Environmental Statement: RAF Uxbridge, London Borough of Hillingdon. GVA Grimley: London

<sup>&</sup>lt;sup>3</sup> GVA Grimley (2010) RAF Uxbridge: Environmental Statement Addendum. GVA Grimley: London

### **Bird hazard guidance** 3.

Several sources of existing guidance are available on bird hazards and bird hazard management. These documents have been reviewed and the information within has been used to advise this Bird Hazard Management Plan.

#### 3.1. British Aviation Authority (BAA) Advice Notes

Although considered by the Civil Aviation Authority (CAA) to be outdated (Allison Phillips, CAA, pers, comm, 13/09/11), the BAA produced 3 Advice Notes that are potentially relevant to this proposed redevlopment and will be considered in this Management Plan, along with the latest CAA advice;

- Advice Note 3: Potential Bird Hazards from Amenity Landscaping and Building Design;
- Advice Note 6: Potential Bird Hazards from Sustainable Urban Drainage Schemes (SUDS);
- Advice Note 8: Potential Bird Hazards from Building Design.

#### 3.1.1. Advice Note 3: Potential bird hazards from amenity landscaping and building design<sup>4</sup>

This advice note outlines the need to minimise bird attractant features when designing amenity landscape or buildings in the vicinity of an aerodrome.

Landscaping may attract birds by providing feeding, nesting and roosting habitat. Significant hazards associated with landscaping schemes include their potential to:

- Create dense vegetation that may provide roosting and nesting habitats for starlings, rooks, woodpigeons and other aviation-hazard species;
- Provide abundant winter food supply in the form of fruits and berries for large flocks of starlings, fieldfares and redwings, which may also move onto an adjacent aerodrome to feed on soil invertebrates;
- Create standing water or watercourses that attract gulls and waterfowl, and cause increased bird movements between existing waters and the new site, over and around the aerodrome.

Buildings may be used by birds depending on the design and use of the building and the availability of food in the nearby environment. Pigeons and starlings are the most common birds to be found in and around builidngs, whilst gulls may nest on flat roofs.

The advice note offers suggestions of how to minimise the attractiveness of landscaping and builidings to these birds and this advice will be considered later in this document.

#### Advice Note 6: Potential bird hazards from sustainable urban 3.1.2. drainage schemes (SUDS)<sup>5</sup>

This advice note discusses the different SUDS options, their potential for causing bird hazards and possible mitigation measures to manage their bird attraction.

#### Advice Note 8: Potential bird hazards from building design<sup>6</sup> 3.1.3.

This note advises on design principles to reduce the attractiveness of buildings for birds, thereby reducing the risk of bird hazards. This advice will be considered later in this document.

<sup>&</sup>lt;sup>4</sup> BAA (2006) Safeguarding of Aerodromes Advice Note 3: Potential Bird Hazards from Amenity Landscaping and Building Design. (http://www.aoa.org.uk/documents/AN03%20-%20Birds%20-%20Landscaping.pdf; accessed 11 October 2011)

BAA (2006) Safeguarding of Aerodromes Advice Note 6: Potential Bird Hazards from Sustainable Urban Drainage Schemes (SUDS).

<sup>(</sup>http://www.aoa.org.uk/documents/AN06%20-%20Birds%20-%20SUDS.pdf; accessed 11 October 2011) <sup>6</sup> BAA (2007) Safeguarding of Aerodromes Advice Note 8: Potential Bird Hazards from Building Design.

<sup>(</sup>http://www.aoa.org.uk/documents/AN08%20-%20Birds%20-%20Building%20Design.pdf; accessed 11 October 2011)

# 3.2. Civil Aviation Authority (CAA)

# 3.2.1. CAP 738: Safeguarding of aerodromes<sup>7</sup>

This document offers guidance to those responsible for the safe operation of an aerodrome, to enable them to assess what impact a proposed development might have on that operation. Although this document mainly focuses on the design of developments, it does contain limited details in relation to birdstrike hazards, referring to CAP 680 (now superseeded by CAP 772).

### 3.2.2. CAP 772: Birdstrike risk management for aerodromes<sup>8</sup>

Although this document mainly focuses on the aerodrome itself, it provides useful information on Bird Control Management Plans, identifying birdstrike risks and reducing these risks. CAP 772 builds on some of the ideas outlined in the BAA Advice Notes and is considered to be the most up-to-date UK guidance (Allison Phillips, CAA, pers. comm. 13/09/11).

<sup>&</sup>lt;sup>7</sup> CAA (2006) CAP 738: Safeguarding of Aerodromes. Civil Aviation Authority: London

<sup>&</sup>lt;sup>8</sup> CAA (2008) CAP 772: Birdstrike Risk Management for Aerodromes. Civil Aviation Authority: London

# 4. Bird risk at RAF Uxbridge

Different bird species pose different risks to aircraft. Birds that weigh below 100g (smaller than a starling) damage aircraft in only 2.5% of all incidents, whereas birds over 1kg in weight (larger than a herring gull) cause damage in 22% of incidents (taken from Allan, 2008<sup>9</sup>).

Birds that habitually live in flocks pose a greater risk than solitary species, because a multiple birdstrike increases the chance that a bird will hit a vulnerable part of an aircraft.

Allan (2008) has calculated the probability of damaging an aircraft for different species, based on their weight. The most damaging bird is the mute swan, followed by geese. Gulls are considered to have quite a varied range of damage probabilities, based on their weights, ranging from great black-backed gulls with 23.7% probability of causing damage, to black-headed gulls with 3.9% probability of causing damage.

Studies by the CAA have shown that gulls cause the greatest number of birdstrikes in the UK (CAA, 2009<sup>10</sup> and CAA, 2010<sup>11</sup>). This is in keeping with the USA wildlife strike database (Cleary and Dolbeer, 2005<sup>12</sup>), which estimated gulls were the most frequently struck bird group (25% of strikes), followed by doves (14%), raptors (12%) and waterfowl (10%). Of these groups, waterfowl caused the greatest percentage of damage per strike (32%) followed closely by gulls (28%).

The only species recorded at the site considered to have a significant potential birdstrike risk are mallard (considered to have a 15.1% probability of causing damage in a strike, Allan 2008) and starlings (considered to have a 1.1% chance of causing damage in a strike (Allen, 2008) but potentially hazardous if they were to occur in large flocks). These birds are not considered to pose a significant bird hazard risk at their current levels.

The proposed mitigation for the redevlopment is not expected to significantly alter the current habitats within the site (apart from reducing the amount of grassland). Therefore a negligible change in the number of birds and the assemblage of bird species is expected as a result of the proposed development and associated mitigation. However, there will be an increase in flat roofs from the exisiting buildings and therefore there is some potential for an increase in the risk of nesting/loafing gulls.

A Bird Hazard Management Plan will be implemented post-construction for the life of the development to ensure that the site does not pose a bird hazard risk.

<sup>&</sup>lt;sup>9</sup> Allan, J. (2008) Taking account of aviation hazards in the development of a Wetland Vision for England. This document is an Annex within Hume, C. (2008). Wetland Vision Technical Document: overview and reporting of project philosophy and technical approach. The Wetland Vision Partnership.

<sup>&</sup>lt;sup>10</sup> CAA (2009) CAA UK Birdstrike Statistics: Top Species 2009. Civil Aviation Authority: West Sussex.

<sup>&</sup>lt;sup>11</sup> CAA (2010) CAA UK Birdstrike Statistics: Top Species 2010. Civil Aviation Authority: West Sussex.

<sup>&</sup>lt;sup>12</sup> Cleary, E.C. and Dolbeer, R.A. (2005) Wildlife Hazard Management at Airports: A Manual for Airport Personnel. University of Nebraska: Lincoln.

# 5. Bird Hazard Management Plan

Bird numbers are not expected to significantly change as a result of the development, and therefore it is not considered that the development will cause a significant bird hazard risk. However the measures described in the Bird Hazard Management Plan (BHMP) below will be implemented into the site design and management to ensure that a bird hazard risk is kept to a minimum at the site, and that any bird hazard would be detected and dealt with swiftly if it was to occur.

Vinci St Modwen are developing the site and are currently responsible for the ongoing implementation of the BHMP. Responsibility will be passed to the site management company and other relevant parties. These would be likely to include the building management companies for any flat roof buildings and the Local Planning Authority, if they take over management of the parkland area.

## 5.1. Design

The following features will be incorporated into the design to ensure that hazardous birds and bird congregations are not attracted to the site as a result of the proposed development.

## 5.1.1. Landscaping

### Grassland

Some semi-improved grassland will be lost during site clearance and construction. Compensation was agreed to be provided through creation of larger areas of species-rich grassland.

These grass areas are not expected to cause a significant increase in current bird use, nor a significant increase in bird hazard risk. However, as part of the BHMP, the grassland areas will be monitored and if the grassland areas are observed to be attracting potentially hazardous congregations of birds, then deterrent action will take place (See Section 5.3). Monitoring will be the responsibility of the site management company/park manager.

### Trees

As part of the mitigation to compensate for the trees lost as part of the development, replacement tree planting will be undertaken in the built development areas of the site to create new tree-lined routes, in accordance with the Landscape and Open Space Strategy Report. In order to minimise the potential bird hazard risk, the following precautions will be incorporated into the design:

- The compensatory trees may include a low number of berry-bearing trees, but in accordance with BAA Advice Note 3, these will be dispersed amongst other tree species to reduce the total food supply for birds and thus avoiding potentially attracting large flocks of birds;
- All trees will be planted at least 4 metres from other trees. The open effect this will create reduces the potential for attracting large flocks of roosting birds, such as woodpigeons or starlings.

The trees will be monitored as part of the BHMP. If a significant bird roost becomes established, the BAA will be consulted and if deemed necessary, the roost will be dispersed (See Section 5.3). Monitoring and dispersal will be the responsibility of the site management company/park manager.

### Woodland

The areas of woodland are not expected to be affected significantly by the proposed works and therefore no compensatory planting is proposed. The woodland areas do not currently appear to attract large numbers of birds and are not thought to pose any significant bird hazard risks.

The wooded areas will be monitored as part of the BHMP. If a significant bird roost becomes established, the BAA will be consulted and if deemed necessary, the roost will be dispersed (See Section 5.3). Monitoring and dispersal will be the responsibility of the site management company/park manager.

It is understood that the Local Planning Authority intends to plant a Jubilee Wood within the parkland area, with a view to establishing 100 mature trees. This would not be part of the site development scheme, and the planning conditions are therefore not directly relevant to it. Nevertheless, it would be included in any bird monitoring programme.

### Waterbodies

The River Pinn runs through the site from north to south. There was a pond (approximately 8m x 15m) within the south-east area of the site, adjacent to the river, but this has been removed and will not be replaced.

The river does not currently pose a significant bird hazard risk, because it only attracts low numbers of waterfowl. However it will be monitored as part of the BHMP (See Section 5.3). Monitoring will be the responsibility of the site management company/park manager.

### 5.1.2. Buildings

#### Flat roofs

Flat and shallow-pitched roofs have the potential to attract nesting birds such as gulls, whilst pigeons can roost on buildings ledges and starlings can roost on and in buildings in vast numbers (BAA Advice Note 8).

Some of the buildings proposed for the development will contain flat roofs. Although the building designs have not been finalised, it is assumed that buildings of 4 stories or more will have a flat roof, equating to at least 11 buildings having flat roofs (see Figure 3 for a plan of the proposed buildings).

These flat roofs may appeal to nesting, roosting or loafing birds, such as gulls. Therefore the roofs will be constructed in such a manner that all areas are safely accessible so that any nests and eggs can be cleared and any birds can be dispersed.

#### **Building features**

The following practical options will be integrated into the building designs to avoid attracting nesting, loafing and roosting birds.

- Roof overhangs will be kept to a minimum, with ledges beneath overhangs and external protrusions being avoided where possible.
- Any exposed ledges will be fitted with bird spikes at a density suitable to exclude feral pigeons and larger birds.
- Self closing doors will be fitted to prevent access to birds.

## 5.2. Management

### 5.2.1. Sustainable Urban Drainage Schemes (SUDS)

The planned SUDS for the development will include 16 swales and 2 basins.

#### Swales

Swales are grassed depressions which lead surface water overland from the drained surface to a storage or discharge system. Wet or overgrown swales can provide feeding and nesting habitat for birds (BAA Advice Note 6).

As part of the ongoing management of the SUDS, the swales will be monitored to ensure that they are quick draining and the grass will be regularly cut to ensure it is maintained as a short sward. This will minimise their attractiveness to birds. Monitoring of the swales and grass management will be the responsibility of the site management company/park manager.

#### Basins

There will also be 2 basins. The basins are designed to retain enough water to encourage the colonisation of wetland plants, such as reeds, in some areas but will not contain open water bodies. Any open water will only be present briefly after major storm events.

As the basins will not hold open standing water, they are not expected to attract hazardous birds such as ducks and geese. As part of the BHMP the basins will be monitored quarterly (or outside these checks if concerns are raised by a resident, worker or BAA staff member) to assess their bird usage. If the basins are observed to be attracting hazardous birds, then measures will be taken to deter these birds from the area (see Section 5.3). In such an event the BAA will be consulted to agree the appropriate action, which may involve the cutting back of vegetation or the installation of deterents, such as 'bird balls' (see BAA Advice Note 6).

### 5.2.2. Waste

The following proposals take into consideration the advisory documents; CAP 772 and BAA Advice Note 3: Potential Bird Hazards from Amenity Landscaping and Building Design.

Waste, especially from food production, can attract birds and potentially cause bird collision hazards. The following precautions will be implemented during construction and operation to minimise bird attraction.

- All waste disposal and storage containers will be self closing to prevent access for birds;
- A record will be kept by a person/company appointed by Vinci St Modwen of all waste imported onto site and all waste collected from site, including waste type and date/time of delivery/collection;
- All waste to be removed will be collected regularly, and no waste containers will be allowed to be overfilled. If waste build-up is considered to be an issue, then the regularity of waste collection regularity will be increased;
- Any waste imported to site will be stored in sealed containers with self-closing lids;
- Signs will be erected in public places informing the public that they should not feed the birds. This situation will be monitored quarterly as part of the BHMP (or outside these checks if concerns are raised by a resident, worker or BAA staff member) and if it is considered to be an issue, then further steps will be taken to inform the public, for example by distributing informative leaflets. N.B. this does not refer to the use of traditional bird feeders, which would not be expected to pose any risk, but rather to the public feeding of flocking birds such as feral pigeons and gulls.

## 5.3. Monitoring and dispersal

## 5.3.1. Quarterly monitoring

The BHMP will involve quarterly monitoring (January, April, July and September) to detect if birds or congregations of birds, considered to be potentially hazardous, are establishing within the site. A specialist person/company nominated by Vinci St Modwen will be employed to visit the site and conduct brief bird surveys of the habitats to monitor bird numbers. If potentially hazardous bird species or bird congregations are encountered, actions will be undertaken to remove these birds.

These monitoring visits will involve walking a transect route through the site that covers all of the habitats (including the river) and buildings present. Several of the buildings will have flat roofs and these can be used by nesting or loafing birds, such as gulls, therefore these flat roofs will be surveyed as part of the monitoring visit. Surveying of flat roofs may be possible from the ground, but if sufficient coverage is not considered to have been achieved, access to the roof should the sought.

Two monitoring visits will be carried out each quarter, one at dawn (when birds are most active) and one at dusk (to detect any roost congregations).

During each survey, all birds seen or heard, the number of birds and the location will be recorded on a map. This data will be summarised on an electronic recording form for each habitat within the site and presented in a log to Vinci St Modwen. These records will also be provided to the Northolt Airbase and BAA Airfield Operations Staff, who will assess the bird assemblages recorded and determine if they pose a potential bird hazard risk.

In addition to the quarterly monitoring visits, the buildings with flat roofs will be checked monthly during the breeding season (March to July) to monitor if birds are attempting to nest on the flat roofs (see Section 5.3.2 below).

The BAA will also be able to independently verify that the objectives of the BHMP are being met, and an inspection of the site can be made with 24 hours notice to the applicant.

If the bird assemblages on site are considered to pose a potential bird hazard risk then measures will be implemented to deter and disperse these birds. The BAA will be consulted to determine the most approportiate methods of dispersal, but these may include the manipulation of habitats, the use of bird scarers (such as audio alarm calls) or the netting of roofs or waterbodies.

## 5.3.2. Flat roof monitoring

Some of the buildings proposed for the development will contain flat roofs. Although the building designs have not been finalised, it is assumed that buildings of 4 stories or more will have a flat roof, equating to at least 11 buildings having flat roofs (see Figure 3). These flat roofs may appeal to nesting, roosting or loafing birds, such as gulls (BAA Advice Note 8).

Flat roofs will be surveyed as part of the quarterly monitoring described in Section 5.2.1. In addition to the quarterly monitoring, the following additional monitoring will be carried out during the breeding season (March to July) to prevent nesting birds:

- Checks for nesting birds on the flat roofs will be made monthly (or sooner if bird activity dictates) during the breeding season (March to June) by the appointed building managers. This data will be presented in a log to Vinci St Modwen and, subsequently, the site management company. If the building managers fail to carry out the nest checks, then the site management company maintain the right to appoint a specialist and gain access to the roofs;
- These records will also be made available, upon request, to the Northolt Airbase and BAA Airfield Operations.
- Any birds found nesting and/or roosting and/or loafing during the breeding season will be dispersed when detected and/or when requested by BAA Airfield Operations staff.
- Any nests or eggs found will be removed and the appropriate licenses will be obtained from Natural England beforehand<sup>13</sup>. See BAA Advice Note 8 for further details.
- Checks will be made at regular intervals outside of the breeding season for loafing/roosting birds by a specialist person/company nominated by Vinci St Modwen (the frequency of checks will be determined by bird activity; however it is proposed that these will initially be carried out during the quarterly checks).
- Any birds found nesting and/or roosting and/or loafing outside of the breeding season will be dispersed when detected and /or when requested by BAA Airfield Operations staff. Dispersal techniques may include manual and audio methods of dispersal (playback of distress calls). The specialist bird control person/company will also remove any nests and/or eggs under a Natural England Licence.

## 5.3.3. Deterrents and dispersal

Should potentially hazardous bird species or bird congregations be recorded at the site, then it will be necessary to disperse and deter these birds. In such a situation, the BAA would be consulted to determine the most appropriate form of action to undertake.

The table below lists some potential dispersal/deterrent options that are proposed in the existing BAA Advice Notes and CAA CAP guidance.

### Table 1. Potential dispersal options for hazardous birds and bird congregations

<sup>&</sup>lt;sup>13</sup> Under the Wildlife and Countryside Act 1981 (as amended) it is an offence to to intentionally kill, injure, or take any wild bird or their eggs or nests. However it is possible to get a licence to remove nests and/or eggs to preserve air safety. The appropriate license(s) will be obtained from Natural England before any nests and/or eggs are removed.

Feature	Potential Hazard	Dispersal/deterrent options	
Site wide	Presence of potentially hazardous birds or congregations of birds	Physical dispersal, such as scaring by human presence or using audio distress signals (see CAP 772)	
Grassland	Attracting hazardous congregations of foraging birds	Managing sward length to reduce attractiveness to birds (see CAP 722).	
Trees	Hazardous bird roosts	Thinning, topping or removal of roost trees (see BAA Advice Note 3)	
Waterbodies	Attracting hazardous birds	Active dispersal of birds (see BAA Advice Note 3)	
Buildings – flat roofs	Attracting nesting, loafing or roosting birds	Physical and audio deterrence (using distress calls) Physical removal of nests and eggs (under a Natura England licence – see BAA Advice Note 8)	
SUDS - basins	Attracting hazardous birds	Cutting back of vegetation. The installation of deterents, such as 'bird balls' (see BAA Advice Note 6).	

# 6. Conclusions

The site in its current state does not pose a significant bird risk and does not require a Bird Hazard Management Plan. There is not considered to be a significant bird hazard risk as a result of the proposed development at the former RAF Uxbridge site. However several site design, management and monitoring options will be employed to prevent the attraction of potentially hazardous birds and bird congregations to the site.

The design features will be implemented at the construction phase and during any relevant replacement/improvement works.

Vinci St Modwen will be responsible for implementing the BHMP during the construction phase, with responsibility passing to the site management company or equivalents at the end of construction. The site management and monitoring will be ongoing throughout the life of the development, as long as there are still operational aerodromes within 13km of the site. However it is proposed that the level of monitoring is reassessed after 3 years to determine if the monitoring efforts may be reduced to reflect the absence of bird risk.



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