temple

Creating sustainable futures

9 Nestles Avenue, Hayes, London

Bird Hazard Management Plan

Report for Charles Edward Ltd

Job Number	7071			
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1 Introduction

BACKGROUND TO COMMISSION

1.1 Temple was commissioned by Charles Edward Ltd in March 2022 to produce a Bird Hazard Management Plan (BHMP) for the development at 9 Nestles Avenue, Hayes, London. The BHMP is required to assist with the discharging of Planning Condition 11 (planning application no. 51175/APP/2020/2543) for site clearance and building of a mixed commercial and residential development.

1.2 Condition 11 of the Planning Permission states that:

Prior to above ground works, a Bird Hazard Management Plan shall be submitted to and approved in writing by the Local Planning Authority in consultation with the Heathrow Airport Limited and the MoD. The submitted plan shall include details of:

- management of any flat/shallow pitched on buildings within the site which may be attractive to nesting, roosting and "loafing" birds. The management plan shall comply with Advice Note 8 'Potential Bird Hazards from Building Design'.

The Bird Hazard Management Plan shall be implemented as approved on completion of the development and shall remain in force for the life of the building. No subsequent alterations to the plan are to take place unless first submitted to and approved in writing by the Local Planning Authority.

REASON

In the interests of aircraft safety in compliance with Policy DMAV 1 of the London Borough of Hillingdon Local Plan Part 2 - Development Management Policies (January 2020).

1.3 The plan must demonstrate that the safe movement of aircraft and the operation of Heathrow Airport (LHR) is not affected by any bird activity generated by the proposed development of 9 Nestles Avenue, Hayes. In particular, the assessment considers bird species that might find the flat roof areas of the proposed buildings

attractive for roosting/nesting and/or loafing (behaviour not connected with feeding or breeding).

1.4 The plan will focus on the design, monitoring and management of the landscaping and roof area that may be attractive to nesting, roosting and loafing birds. Additionally, it will demonstrate that the management of the site complies with all relevant Civil Aviation Authority (CAA) policies.

DEVELOPMENT PROPOSALS

1.5 The proposals include the demolition of the existing building and the development of an 11-storey residential building to provide 103 residential units with associated landscape, access and car and cycle parking.

DESK STUDY

1.6 In addition, a search was made of the on-line mapping service (Magic[1]) to ascertain the presence of any statutory designated sites that may provide suitable nearby habitat for bird species.

1.7 Relevant literature was also consulted to identify target bird species and assess the risk they present.

[1] Magic Map Application (defra.gov.uk)

2 Site Context

SITE COMPOSITION AND CONTEXT

2.1 The proposed development site is approximately 0.23 hectares (ha) and is centred on Ordnance Survey National Grid reference TQ 09851 79226. The site is situated in an urban setting and is bound by commercial properties to the north and west, Nestles Avenue to the south and a cleared site currently under development to the east.

2.2 The site is situated approximately 5km east from several large waterbodies at Thorney Country Park and fishing lakes immediately to the north of the airport, as well as the River Colne and the Grand Union Canal. The Staines Reservoirs are located approximately 7km south-west of the site.

HEATHROW AIRPORT

2.3 The site is situated approximately 2.5km north of Heathrow Airport and therefore falls within the limits of the 13km Statutory Safeguarding Zone of this aerodrome (The Town and Country Planning Direction, 2002).

2.4 The Statutory Safeguarding Zone operates to ensure public and passenger safety during the arrival and departure of aircraft, on the basis that 99% of bird strike occurs during these manoeuvres, at altitudes below 2000ft. The 13km safeguarding zone comprises a circular zone around the aerodrome reference point and identifies the need for consultation on any development that may attract birds that falls within it.

2.5 The CAA, in compliance with their statutory responsibilities under the Transport Act (2000), require that a BHMP is produced and implemented. This is to ensure that the proposed development does not cause an increased risk of bird strike and thereby threaten the safe and efficient integration of arrival and departure routes from Heathrow Airport.

3 Bird Strike Risk Evaluation

GENERAL

3.1 Details of the bird strike risk and the species relevant for control measures on the site are outlined below. In accordance with CAA policies CAP738 (Civil Aviation Authority, 2020) and CAP772 (Civil Aviation Authority, 2017), the risk of bird strike to aircraft requires active management by the aerodrome operator. This can be achieved through development control, and consultation on developments that have the potential to attract birds in significant numbers. It may comprise on-site habitat management and bird scaring techniques, as and when required.

3.2 In exercising its duty as a statutory consultee, the CAA require an active BHMP to be submitted and approved prior to any development that has potential to impact the safe passage of aircraft within the Statutory Safeguarding Zone.

INCIDENCE OF BIRD STRIKES

3.3 Statistics indicate that registered aircraft strike a bird approximately once in every thousand flights and that 15-20% of these strikes cause damage to the aircraft (CAA, 2009).

3.4 The European Aviation Safety Agency's Annual Safety Review recorded approximately 30,000 incidences of bird strike in Europe in 2012. The majority of bird strikes occur at altitudes below 500ft from ground level and research indicates that approximately 70% of bird strikes occur at altitudes less than 200ft, 15% occur between 200 and 800 ft, and 15% of bird strikes occur above 800ft (European Aviation Safety Agency, 2012).

3.5 Aircraft arriving or departing Heathrow, when passing over the site at 9 Nestles Avenue, will be at an altitude of between 500ft and 1000ft, at which incidences of bird strikes do occur.

TARGET BIRD SPECIES

3.6 Large birds and/or species that aggregate in large flocks are considered to be a threat to the safe passage of aircraft. Careful consideration and investigation was therefore given to determining which of these 'target' bird species may utilise the site and in what numbers. The following species or groups of species are described to guide the owner/operators in assessing bird strike risk from species that may be encountered at the site.

Starling *Sturnus vulgaris*

3.7 Starlings are a common (although declining) breeding resident, overwintering visitor and passage migrant in the UK . Although a small species of bird, their flocks in the spring and summer breeding season and winter murmurations can number in the thousands. 'Huge breeding roosts aggregate in central London' (Nicholson, 2002).

3.8 The site provides limited foraging habitat for this species. Tree planting proposed for the site could provide suitable roost/aggregation sites and are within the typical range of birds using the western reservoirs for foraging, and lie within the Statutory Safeguarding Zone of LHR. However, the trees proposed have naturally small canopies when mature and will likely be too small to support large murmurations or breeding flocks. The roof spaces may also provide foraging and roosting habitat. Therefore, it would be necessary to provide control measures to account for this species.

Black-headed Gull *Chroicocephalus ridibundus*

3.9 Black-headed gulls are a very common overwintering visitor, passage migrant and breeder in the UK. They are abundant in London, with flocks of up to 20,000 birds having been recorded roosting in the city (Nicholson, 2002). The breeding population at Staines Reservoir (7.4km south from the application site) was recorded to have increased from 81 to 121 individuals between 2010 and 2011 (Lambert, 2011).

3.10 The proposals may offer attractive habitat for these species and, should they aggregate on or near the site in large numbers, have potential to impact the safe

passage of aircraft at low altitudes within the Statutory Safeguarding Zone. It is recommended that control measures for this species are provided. It is further recommended that the bird control operator be vigilant for this species.

Other gull species *Larus spp*.

3.11 Additional gull species, such as lesser black-backed gull *Larus fuscus*, herring gull *Larus argentatus* and Mediterranean gull *Larus melanocephalus* have been recorded at the reservoirs, but in significantly fewer numbers than the black-headed gull. While these species have been recorded in increasing numbers, particularly during the summer months, their breeding grounds are limited to the central London and docklands areas, where fish supplies and scavenging provide the majority of their foraging. Owing to a preference for breeding on roof tops these species may, however, be under-recorded. It is therefore recommended that the bird control operator be vigilant for these species and include them in the monitoring schedule, with suitable control measures in place should their presence be identified.

Pigeon and Doves

3.12 Pigeons and doves including feral pigeon *Columba livia domestica*, woodpigeon *Columba palumbus* and collared dove *Streptopelia decaocto* are common throughout south-east England and are known to be responsible for approximately 8% of bird strike incidents from 2012 to 2016 (CAA, 2016). These species typically forage in public areas and nest on building ledges. Building design should therefore focus on minimising the availability of suitable ledges for nesting and areas where flocks could congregate on the roof.

Swans, Ducks and Geese

3.13 Swan and geese species can cause airstrike incidents due to their large size and tendency to fly in flocks at high altitude; however, these species only accounted for approximately 1.25% of bird strike incidents between 2012 and 2016 (CAA, 2016). Waterfowl are numerous in the surrounding reservoirs and wetlands, although the nearest significant breeding ground is the London Wetland Centre 11.8km east of the site. There are also several waterbodies at Thorney Country Park approximately

4.7km west of the site. As the site landscaping plans do not include the creation of any waterbodies, the risk of these species using the site is considered negligible.

Other species

3.14 Large flocks of winter thrushes comprising redwing *Turdus iliacus* and fieldfare *Turdus pilaris*, could be attracted to the site for foraging, if food sources are present. However, the planting scheme (LT Studio Landscape Architects, 2022) has been designed to exclude the use of berry bearing species within areas of hedgerow. The risk from these species is therefore considered minimal. Swift *Apus apus* can also pose a bird strike threat, as such swift bricks will not be included in biodiversity enhancement plan for the site.

4 Bird Hazard Management Plan

INTRODUCTION

4.1 The following BHMP is provided to guide the current, and any future, tenants, owners or leaseholders of the proposed development at 9 Nestles Avenue, Hayes, in managing the distribution of identified target bird species at the site.

4.2 A declaration is provided in Section 5 and this must be copied and signed by the operator upon uptake of the building.

4.3 The main target species are starling, gulls (particularly black-headed gull) and pigeons/doves. There is potential for these species to aggregate on the green roof on the proposed development and ground level landscaping. This must be avoided by implementing thorough, year-round monitoring, the use of deterrents and, where necessary, control measures.

4.4 The BHMP comprises 1) building design, 2) a schedule for monitoring, 3) deterrence and dispersal methods used to control any other aggregation of birds that may utilise the site, 4) control measures if deterrence and dispersal methods prove ineffective and 5) review and long-term management .

4.5 Effective building design should prevent aggregations of birds increasing at the site. Consistent monitoring and implementation of appropriate and proportional deterrence and control measures will ensure that the site remains free of target bird species.

4.6 The following information is taken from Advice Note 3: Wildlife Hazards Around Aerodromes (Airport Operators Association, 2016), and other sources.

Building and Landscape Design

4.7 The biodiversity enhancement plan (Temple, 2022) for the proposed development includes the addition of bird boxes; however, these are of a specific design to be used by house sparrow *Passer domesticus*, which do not represent a bird strike risk.

4.8 Trees species will be small fastigate trees with narrow canopies of 2-3m such as field maple *Acer campestre.* If other species are used then the canopies will need to be managed to these specifications.

4.9 Where small areas of hedgerows are included the species will comprise European beech *Fagus sylvatica*, which will not provide significant food sources, such as berries, which could attract large flocks of birds.

4.10 The building design will avoid the use of sheltered ledges and alcoves where possible. Bird spikes will be included where appropriate. These measures will restrict the ability for starlings and pigeons to roost on the building.

4.11 The rooftop terraces with gardens will be subject to large amounts of disturbance so are less likely to support large numbers of nesting or roosting birds but will still be monitored and measures put in place where required.

4.12 The green roof will be planted with a diverse wildflower mix, ensuring a range of vegetation heights across the year, which should be less desirable for nesting gulls. However, the monitoring schedule and further measures, if required, will ensure this area is appropriately covered.

4.13 The landscape immediately surrounding the building does not provide areas of significant habitat that would attract large numbers of birds.

Monitoring Schedule

4.14 The following monitoring measures are to be built into the maintenance schedule and be carried out at the site:

- Inspections of the roof tops and the ground level vegetation will be carried out weekly, or more frequently if bird activity dictates, during the breeding season, which for gulls typically runs from March to June. This is to ensure that any of the target bird species found nesting, roosting and loafing are dispersed and any nests and/or eggs are removed, subject to receiving the appropriate licenses.

- Regular inspections dictated by bird activity (at least weekly) will also be carried out outside of the breeding season and any birds should be dispersed.

- A log will be kept, detailing the dates and times of inspections, the name of the operative who carried out the inspections, bird numbers and species seen and details of any dispersal action taken along with details of any nests/eggs removed and as required by licence. An example and blank copy of this log is provided in Appendix 3.

- Upon request, the log will be made available to the Bird Control Co-ordinator at Heathrow airport and the Civil Aviation Authority.

- Heathrow Airport Limited or their nominated representatives will be allowed access to the site by prior arrangement, to evaluate the success of the management plan and to review any remaining bird strike hazard.

4.15 A bird strike hazard management flow chart, intended to guide actions on site throughout the course of the building's life, is provided in Appendix 1 and a contact sheet, to be completed with relevant parties, is provided in Appendix 2.

Bird Deterrent Techniques

4.16 The following deterrence measure can be used to deter/disperse hazardous birds from nesting, roosting and loafing on and in the building:

- ***Bio-acoustic deterrents*** – Bio-acoustic bird scaring is a widely used deterrent and often used as part of airport bird control to prevent bird strike incidents. Most

timid bird species, including pigeon, will leave the area immediately upon hearing a predatory bird call. Larger species, such as gulls will take flight and try to identify the source of the call, in order to drive away the perceived threat. In either case, this has proven to be an effective and humane deterrent method.

- ***Falconry*** – A trained bird of prey can be used to deter nesting or loafing birds, particularly gulls. A suitably qualified company should be identified and contacted where required to provide this service, which can also be used alongside control measures the removal of nests and eggs under licence.

Control Measures

4.17 If the design and deterrence measures used are not effective and monitoring reveals an increase in target bird species using the site, the following control measure can be used to deter/disperse hazardous birds from nesting on and in the building:

- ***Removal of Nests and/or Eggs*** – It is an offence to damage or remove nests and/or eggs without first obtaining the appropriate licences from Natural England www.naturalengland.gov.uk. These licences can be issued for preserving air safety. However, birds listed on Schedule 1 of the Wildlife and Countryside Act (as amended) such as peregrine falcon *Falco peregrinus* may not be recklessly or intentionally disturbed. If a nest is found, it should not be disturbed and a suitably experienced ecologist should be contacted immediately. They should then identify the species responsible and provide further advice on how to proceed.

Review and Long-Term Management

4.18 This management plan shall be subject to review to reflect changes in habitat or populations of bird species. Should the airport deem it necessary, a meeting between Heathrow Airport Limited, the applicant and/or Hillingdon Council will be convened at the earliest opportunity to discuss and agree any changes that may be necessary.

4.19 This management plan shall remain enforceable by Heathrow Airport Limited, Hillingdon Council and the CAA, or any successor to these bodies through the existence of the buildings. These obligations will be passed onto any future owners/operators of these buildings and land.

5 Declaration

As the owner/operator of 9 Nestles Avenue, Hayes, I/We hereby confirm agreement to fulfil the obligations Bird Control Operator and to perform the duties requiring of this position, including:

a) Maintain surveillance of bird activity at the site at 9 Nestles Avenue;

b) Implement active bird control measures in accordance with the BHMP to monitor, deter and, where necessary, counter any detected bird strike risk;

c) Record bird and bird control activity;

d) Provide the Heathrow Safeguarding Manager, where applicable, with details of a potential bird strike risk; and,

e) Advise senior personnel on improvements to the bird control task.

Signed: G. [signature]

Date: 9/11/2022

On Behalf of: SHEPHERDS BUSH HOUSING GROUP

References

Airport Operators Association (2016) *Advice Note 3: Wildlife Hazards Around Aerodromes.*

Arbeco (2020) *9 Nestles Avenue, Hayes* - Arboricultural Impact Assessment Report.

Civil Aviation Authority (2020). *CAP 738: Safeguarding of Aerodromes*. Safety Regulation Group. London.

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HMSO (1981). *The Wildlife and Countryside Act* (WCA) (as amended).

HMSO (2010) *The Conservation of Habitats and Species Regulations 2010*.

Lambert, P (2011). *London Bird Report 2011*. London Natural History Society. London

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Nicholson, E. M. (2002). *The Breeding Birds of the London Area*. London Natural History Society. London.

Temple (2022) *9 Nestles Avenue, Hayes – Biodiversity Enhancement Plan*.

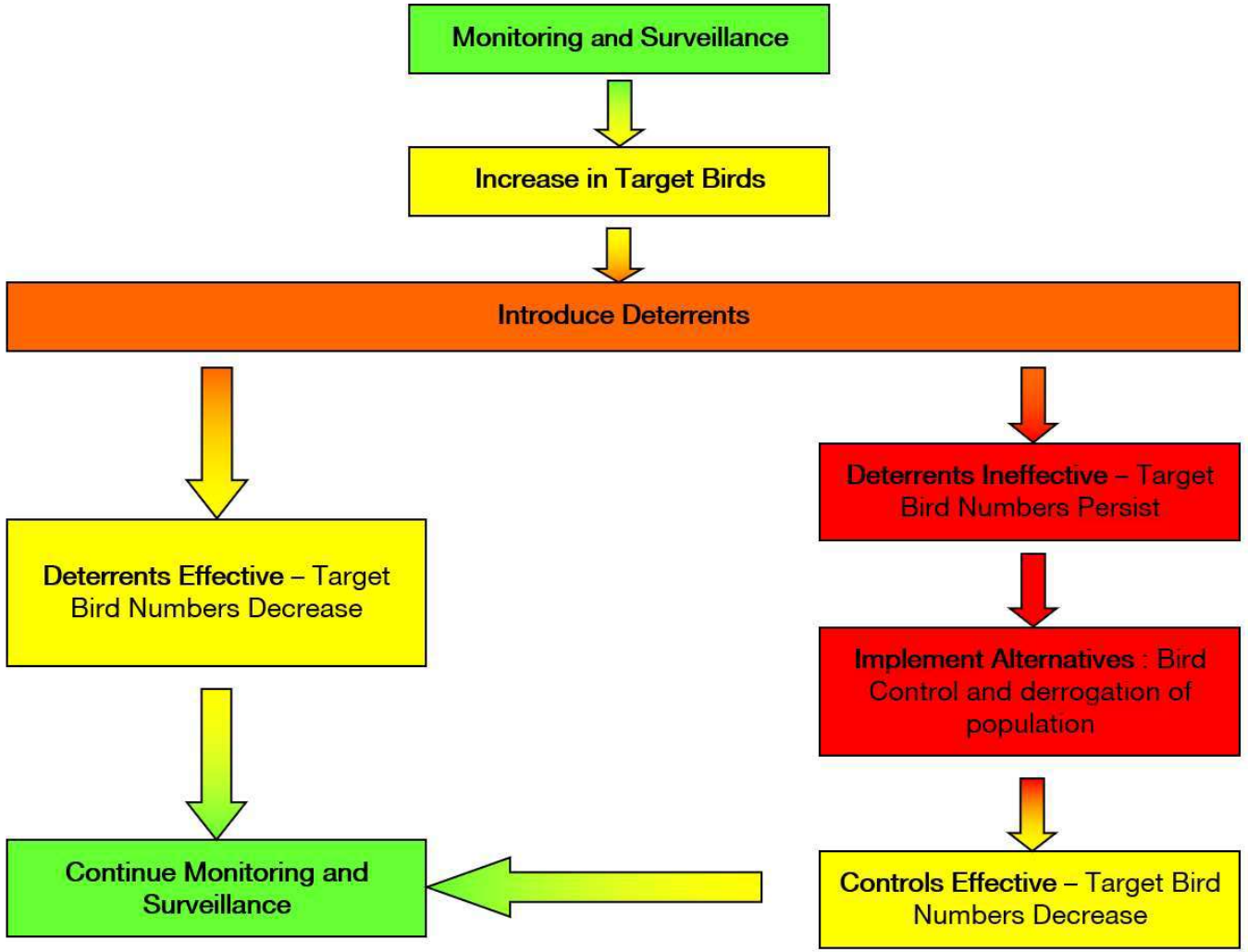
The Ecology Consultancy (2020) *9 Nestles Avenue, Hayes - Preliminary Ecological Appraisal Report*.

The Town and Country Planning Direction (2002) *DfT/ODPM Circular 01/2003 Safeguarded Aerodromes, Technical Sites and Military Explosive Storage Areas*. Department for Transport, London.

Appendix 1 : Bird Hazard Management Flow Chart

Figure 1: Bird Hazard Management Flow Chart (taken from Sydney Ports Corporation, 2006)

Monitoring is required to identify increases in target bird numbers. If target bird numbers show a sustained increase, deterrent measures, as outlined in Section 3 of the BHMP, will be introduced. If deterrents are not effective, options to relocate or euthanase target birds will be investigated. This process is outlined in the following diagram.



Appendix 2 : Contact Details

Table 1: Contact details for all relevant parties (Local Authority and additional Heathrow Airport contacts to be confirmed at a later stage)

Position / Role	Name	Organisation	Contact Details
Safeguarding Manager	Simon Vince	Heathrow Airport / Civil Aviation Authority	e: simon_vince@heathrow.com t:: +44 (0)20 8757 0887 m: +44 (0)7808115927
Local Authority			
Appointed Avian Ecologist	Tamzin Davis	Temple	e: tamzin@templegroup.co.uk t: +44 (0)207 378 1914 m: +44 (0)7989 933 642
Wildlife Crime Unit		Metropolitan Police Service	e: wildlife@met.police.uk t: +44 (0)20 7230 8898
Bird Control Technician			
Bird Control Technician			
Bird Control Technician			
Heathrow Bird Control Co-ordinator			
Heathrow Bird Control Operator			
Environmental Manager			

Appendix 3 : Monitoring Log

Table 1: Monitoring log (March – July = weekly monitoring minimum, August – February = monthly monitoring minimum).

Date, time and purpose of visit	Operative details (name & number)	Birds observed loafing (species and number)	Birds observed nesting (species and number)	Actions taken
Example				
##:## *DD/MM/YYYY* *Weekly monitoring*	*John Doe – Maintenance contractor* *0770 ### ###*	*Herring gull x 3* *Feral pigeon x 5*	*One suspected feral pigeon nest on roof of Block D*	*Loafing birds scared off.* *An ecologist contacted to attend site and identify species responsible for eggs* *Building manager informed of need to escalate bird deterrent measures, due to failure of existing measures*
##:## *DD/MM/YYYY* *Confirmation of nesting species*	*Jo Smith – Ecologist* *0770 ### ###*	*Herring gull x 2* *Feral pigeon x 4*	*Feral pigeon confirmed nesting*	*Loafing birds scared off.* *Nest checked by ecologist and confirmed as feral pigeon* *Relevant person informed of the need to attain egg removal licence for pest species.* *(DD/MM/YYYY): Licence to remove eggs granted*
##:## *DD/MM/YYYY* *Removal of eggs*	*John Doe – Maintenance contractor* *0770 ### ###*	*Herring gull x 3* *Feral pigeon x 6*	*Feral pigeon confirmed nesting*	*Loafing birds scared off.* *Eggs destroyed under licence*

- London: 3rd floor, The Clove Building, 4 Maguire Street, London,SE1 2NQ. T: +44 (0)20 7394 3700
- Haywards Heath: Unit 6 Basepoint; John De Mierre House, 20 Bridge Road, Haywards Heath, RH16 1UA. T: +44 (0)20 7394 3700
- Lewes: 3 Upper Stalls, Ilford, Lewes, East Sussex, BN7 3EJ. T: +44 (0) 1273 813739
- Lichfield: 1-2 Trent Park, Eastern Avenue, Lichfield, Staffordshire, WS13 6RN. T: +44 (0)1543 229049
- Manchester: Express Building, 3 George Leigh Street, Manchester, M4 5AD. T: +44 (0)161 509 4900
- Norwich: 60 Thorpe Road, Norwich, Norfolk, NR1 1RY. T: +44 (0)1603 628408
- Wakefield: The Paine Suite, Nostell Business Park, Doncaster Road, Wakefield, WF4 1AB. T: +44 (0)1924 921900